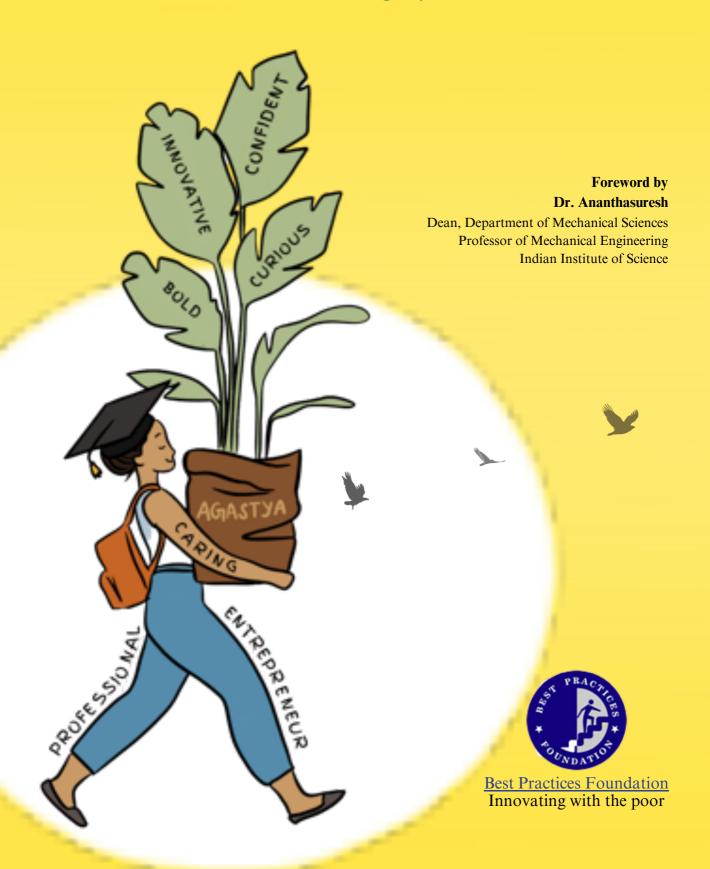


## TRANSFORMED LIVES

100 Remarkable stories of Agastya student alumni







Self confidence is a super power.

Once you start to believe in yourself, miracles happen.

- Dr A. P. J. Abdul Kalam

Words of

**Impact** 



## **Foreword**

## **Dr. Ananthasuresh**Dean, Department of Mechanical Sciences Professor of Mechanical Engineering Indian Institute of Science



A conventional school environment is useful but everyone around you experiences the same things, more or less. It does not necessarily inspire you to take a different path. You will not stand out among your peers unless you do something unusual. What will prompt you to take that unusual turn to discover your passion and know how to pursue it? We need a source of inspiration and a moment of awakening. It can be due to a person, a book, or an organization like Agastya.

I distinctly remember the book that awakened me to the joy of learning, the art of being curious, and the power of thinking. It was a Telugu edition of a book from Mir Publishers and written by Yakov Perelman. Its title was నిత్య జీవితంలో భౌతికశాస్త్రం (which translates to Physics in Daily Life). This book is still available in the market as are other books of Perelman. A book alone might not trigger one's interest. You need a person to awaken you. For me, it was Subhashanna as I fondly called him then. He, Dr. Subhash Ghatu, is now a professor at University of Florida. The moment for me was when he took me for a long walk one evening and asked me puzzle-like questions. "How can you tell apart a magnet and an iron piece that are of the same size, shape, weight, texture, etc., by just holding them with your hands and without using any other object?", he had asked me. After asking many more brain teasers like this and answering some, he had said that I can find the answers on my own by reading Perelman's book and better yet by simply thinking.

A person inspires a few. A book with the help of a person inspires many more. Just imagine how many more can be inspired if there is a concerted effort by an organization. The Agastya International Foundation is doing exactly that. We see the results of those efforts in this book of 100 stories. A carpenter's daughter got to know how to make a simple model of a stethoscope. A labourer's son got an opportunity to explain the function of the kidney to complete strangers in Agastya's Kuppam campus. A farmer's child got addicted to science! A timid lad now has a YouTube channel with more than four lakh subscribers listening to his stories. A schoolgirl from a village built up her confidence to become a doctor and also appeared in a music show on TV. Another discovered his hidden talent and became a TV anchor. And yet another transformed herself from a student who hated science to the one who graduated in style. There is a tagline about everyone and there is a story behind each of the Young Instructor Leaders (YILs) showcased in this book. They all have something in common: they were inspired and awakened by Agastya. Not all of them pursued careers in basic science or engineering. They chose different careers. But be assured that the scientific temper they imbibed will stay with them throughout their lives.

I have a small suggestion to the readers of this book: Read just one story every day, not more, not less. And each day, you reflect on what that boy or girl did - something special, set a goal, overcame obstacles, and accomplished something. You can look deeper into each life that sprouted anew in Agastya's lap. If you do this, in about three months you will have 100 inspirational stories that you can tell others. You can also become a career counsellor or a YIL or an OIL (Old Instructor Leader).





I want to end with a quote by Prof. Ashok Midha, the father of Compliant Mechanisms, which forms the core of my research. He said in a talk five years ago in Bengaluru:

"Conventional wisdom can be like concrete; it is good to walk on, and it gets you places fast. But nothing beautiful, rare, or worthwhile will grow in it. However, if it is formed to cup a seedling in a nurturing environment, growth is but certain and its fruits are sure to follow."

Unconventional approaches complement what one learns within the concrete walls of a school. The one hundred young achievers presented in this book are the fruits of rising trees that once sprouted in the nurturing environment of Agastya. They are well poised to inspire, awaken, and lead others.





## Introduction

22 states of India in 22 years since its inception, Agastya International Foundational has been expanding its mission to empower under-privileged children with experiential learning. Agastya is now a 'movement' growing each day to reach the last mile child at the remotest part of India. Registered as a non-profit educational trust in Bengaluru, Agastya Foundation has a 172-acre 'Creativity Campus' at Kuppam in Andhra Pradesh, with inbuilt infrastructure and facilities to encourage-practice, explorative and hands-on learning and teaching.

Despite the challenges imposed by global pandemic which severely impacted in deteriorated learning levels among students, Agastya with its student centric education through self-learning have introduced 'Home Lab Kits' and 'Acti-Learn Book' initiative to engage 2,00,000+ children in villages across India. With the help of technology to make education equitable and accessible for all, Agastya has introduced several digital platforms like 'We-Learn App' and 'myagastya.education' website to enrich learning experience in holistic and child-friendly approach. Agastya's other initiatives includes introduction of Jignyasa (National-Level Quiz Program), Design Thinking, Aviation Centre, Electronics and Robotics programs in schools alongside Science and Maths.

At present, with renewed rigour and reinvented delivery channels, Agastya operates a fleet of 150+ Mobile Science Labs (MSL), 60+ Lab-on-Bike (LOB) and a network of 85+ Science Centres (SC) to cater to curious learning needs of 17 million students through its physical, blended and digital intervention. Agastya's vision to channelize creativity and humaneness among children of present and future Indian generation, who are problem-solvers, solution-seekers and leaders of themselves, is being promoted with initiatives like Young Instructor Leader (YIL), Operation Vasantha (OV) and Eco-clubs in schools. Creating an enriched and holistic ecosystem of experiential learning, Agastya's Acharya Initiative (Teacher Training Programme), provides expandable and compounding opportunities of hands-on learning to undeserved students.

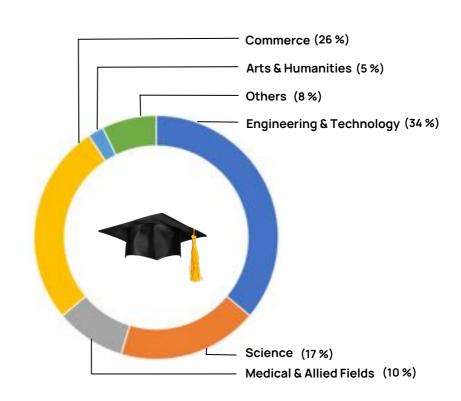
With an aim to reach 100 million children by 2032, Agastya continues to be the 'part of' along with capturing the transformational journeys of its benefactors according to the skills and behavioural change they have come to exhibit during their time with Agastya and in the later years of their life - evolving from 'Yes to Why', 'Looking to Observing', 'Passiveness to Exploring', 'Text-book to Hands-on' and 'Fear to Confidence'.

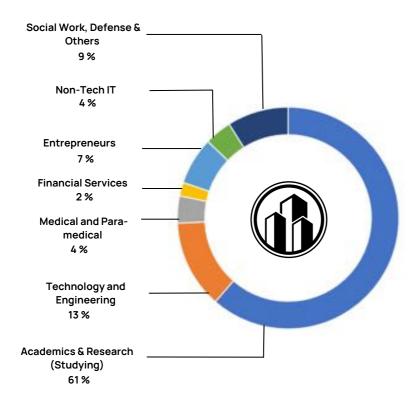
This book offers its readers to experience the transformational stories of 100 Agastya Alumni, whose voices gave life to this book and whose love upholds in them and among us, 'The Spirit of Agastya'.





## Higher Education Stream of Agastya Alumni

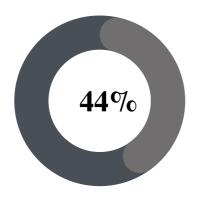




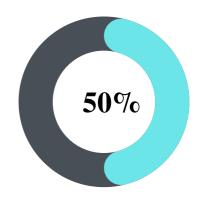
# Professional Sectors of Agastya Alumni







Females in Science & Technology



Males in Science & Technology

## Inter-Generational Profession Change between Agastya Alumni and their Parents



Most parents work in the informal sector which makes them prone to slipping into acute poverty due to lack of social security perks like provident funds, minimum wages, health insurance etc. However, majority of Agastya alumni work in skilled and formal sector, creating greater potential for inter-generation growth.

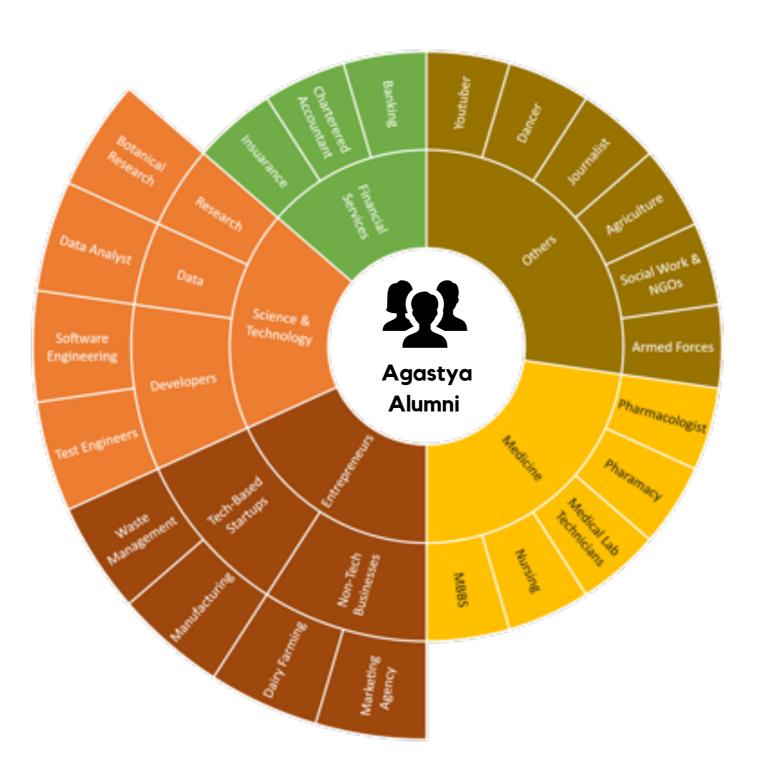
Private Job I - Jobs in private firms like office clerk, janitor, housekeeping, security guard etc.

Private Job II - Jobs in private firms like accountant, store in-charge, associate etc.





### Professional Roles of Agastya Alumni



The figure is just a symbolic representation of roles and domains in which Agastya Alumni are working/studying.







### G Pavan Kumar

Age: 21

Years spent with Agastya: 2008 - 2015

**Background:** 

Father: Farmer

Mother: Homemaker



# Be a job creator not a job seeker

White ith half a million followers in YouTube, G Pavan Kumar, an energetic 22-year-old, is a YouTube Educator. He completed his schooling from Andhra Pradesh Model School and his bachelor's degree in technology in Computer Science, from Yogananda Institute of Technology and Science in Tirupati.

Agastya instructors came to his school in vans and demonstrated solar and lunar eclipses, how the human heart pumps blood and how solar energy worked. During that time, the internet was not so easily available, so students had no sources to see new things. Hence seeing all these scientific models made them very excited and interested in science. Pavan reiterated that Agastya's teaching methods are completely different as they are practical while the school gave only theoretical knowledge.



I always enjoyed the visits, but once I started to come more frequently, my attachment towards Agastya and their instructors grew.



#### Visiting the campus was like festival time!

When Pavan was in the third standard of Mandal Parishad Primary School, a colourful bus arrived to transport them to Agastya's Campus Creativity Labs at Kuppam. Pavan was awe-struck on seeing Agastya's huge green Campus, and the welcoming attitude of the instructors! The science labs in the Campus were full of apparatus he had never seen before. From then, whenever they visited the Kuppam campus, Pavan felt like it was festival time! Between the fifth and tenth standards, he was regularly visiting the Campus. He exclaimed, "I always enjoyed the visits, but once I started to come more frequently, my attachment towards Agastya and their instructors grew."

Pavan had always treasured science and did not consider it tough like most of his friends. When Agastya showed him the heart and its mechanism, during the exam he easily recalled the details and clearly wrote about it. Ramji Raghavan, the founder of Agastya, strongly believes that 'we learn about 10% of what we read, 50% of what we see and hear, and 80% of what we experience'. Pavan's experience is proof of this notion.

Pavan was among three students selected as Young Instructor Leaders (YIL) and took part in numerous YIL activities. Earlier he was very shy and had stage fright, but Agastya instructors encouraged him to explain scientific concepts to his classmates. His confidence grew along with the ability to come up with solutions to problems. He declared, "Agastya gave me the outlook of





approaching a problem with a positive and logical thought process." With the encouragement of Agastya instructors, Pavan started teaching his junior students as well. He has been utilising his annual YIL scholarship of INR 3,000 from the eleventh standard till now (2023) for his educational purposes.

In the ninth standard, Pavan talked about solar panels in front of the Chief Minister of Andhra Pradesh, Chandra Babu Naidu, who was impressed with his performance and publicly praised him. At INSPIRE (Innovation in Science Pursuit for Inspired Research) where students prepare problem-solving science models, Pavan created an automatic irrigation system. He explained that a sensor installed in the irrigator detects dryness in field, and automatically fills up water. Similarly, if the is enough water in field, sensor would stop irrigating. Pavan explained, "When I discussed this with the Agastya instructors, they asked me to describe my initial thoughts and helped me fine-tune my model for the competition. This was very different from my school teachers, who just told me what was in their minds." He whole heartedly thanked Agastya for helping make his idea a reality. It won first place in a district level competition and received his medal from the then education minister Mr. Ganta Srinivasarao. Pavan candidly admits that the YIL programme had a huge impact on his character and attitude. He learnt to manage a team, clearly explain concepts to people and to lead science experiments. After his twelfth standard, Pavan sold onions in Kuppam market for daily wages.

Due to pandemic restrictions, Pavan unhappily said, "I can no longer teach and can only go to the Campus when a meet is organised for alumni." Worried about his future and career, he began to create science facts videos based on what he learnt at Agastya in Telugu and upload in YouTube. For the success, three things he kept in mind was consistency of videos, quality and patience! Pavan showed persistence as YouTube's algorithm takes least three to five months to rank a video for viewers.

Pavan handles his two YouTube channels on his own. His channel, Pavan Edition has 245,000 subscribers (as of June 2023) while Pavan Edition Facts has 430 lakh views for which he received two silver play buttons from YouTube. Almost 82% of his viewers are from India and the remaining are from United Arab Emirates and America. Struggles with a slow laptop, outdated equipment and the lack of a quiet space to record has not deterred his determination to succeed.

Pavan's motto in life is, "Do not be a job seeker, but become a job creator." Therefore, he took this risk of becoming an entrepreneur and has entered the digital marketing field also.

At an alumni meet, Agastya showcased Pavan's achievements to well-wishers from Delhi, Rajasthan and a few other states. He declared that he wants to help other YILs and would be happy if even 10% succeeded. The guests were impressed with Pavan's speech and many of them subscribed to his channel.



"Agastya gave me the outlook of approaching a problem with a positive and logical thought process."







### Abdulla R

Age: 22

Years spent with Agastya: 2012 - 2015

**Background:** 

Father: Owns a juice shop

Mother: Homemaker



# Creativity, passion, and fighting crime!

22 year-old Abdulla is in his final year of a Bachelor's Degree in Commerce at CVRM College, Venkatagirikota, Chittoor district. He credits Agastya International Foundation for much of the success he has experienced in life so far. His father owns a small juice shop in Santipuram village in Andhra Pradesh which provides sustenance for their large family of eight children and his mother looks after all of them. Abdulla admitted being scared and timid during his early school before Agastya introduced him to their methods in the sixth standard. In the seventh standard, he became a Young Instructor Leader (YIL) in 2012.

The instructors gave him opportunities to lead activities in small projects. This created the space for him to overcome his fears and find the confidence necessary to transform into a student-Instructor.



Agastya has played a major role in building important qualities in me, like self-awareness, courage and decision making.



Abdulla completed the responsibilities assigned to him with earnestness and precision. The foundation was thus laid for his personality to develop in the right direction and it enabled him to actively pursue teachers' training and take up self-awareness programmes. Being a YIL role model helped him to become a leader later.

#### Helping the less fortunate

The YIL program chooses the brightest and best students, so Abdulla considered himself lucky and wanted to give back to those less fortunate. Thus, he, along with some like-minded colleagues, helped underprivileged students with their studies at a tutorial centre with over 85 students. In his opinion, Agastya is one of the few institutions in the country that actually follow the 'Swachh Bharat Abhiyan philosophy. He enjoyed the emphasis on cleanliness, good health, and the clean environment which the scheme propagates. A naturally creative young man, Abdulla was fascinated when Agastya introduced him to the world of mimes, acting, drama and short films.

In April 2021, during the Covid-19 pandemic lockdown, Abdulla decided to use his extra time productively and created a YouTube Channel, which he called MC Creation. With finances and resources from his friends, he directed three short films - Jai Bharat, Donkumanupalli and Corona Kastam to showcase his talent. As a new-age content creator, his take on romance, factionalism and corruption in the country has resonated with over a thousand subscribers on his





YouTube channel. "The art of storytelling requires poise, passion, and intellect," he said and as of April 2023 more than 3,99,000 people who viewed his channel seem to agree with him. However, Abdulla was very clear that creating content is only a hobby as he has larger ambitions! He confided that his true passion lies in erasing crime and corruption.

However, Abdulla was clear that creating content is only a hobby as he has larger ambitions! He confided that his true passion lies in erasing crime and corruption from the country. Hence, he is preparing for the Group 2 exams in 2023, which will qualify him to join the

Central Bureau of Investigation. Abdulla is grateful to his schoolteachers for introducing him to Agastya and their way of teaching. Their support and motivation, along with the scholarship and career guidance proved to be priceless in the decisions he took on his life's direction. His love for Agastya remains strong, so much so, that even though he is no longer in school, he continues to talk to his instructors and engage with students on his visits to the Campus.

Finally, Abdulla said, "Agastya has played a major role in building important qualities in me, like selfawareness, courage and decision making."



"Support and motivation, along with the scholarship and career guidance proved to be priceless in the decisions I took in life."

### **Mobile Science Lab - Science on wheels**

Agastya ensures that if a child cannot come to their facility, Agastya will bring their resources directly to the child. This is the motto behind the Mobile Science Lab. Vans equipped with science models & equipment, visit underresourced schools. Every van is accompanied by two experienced instructors, and children under their guidance get to do experiments and learn science hands-on.





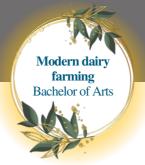


### Lokesh S

Age: 21

Years spent with Agastya: 2012 - 2015 **Background:** 

Parents: Traditional dairy farmers



# Bigger dreams through teams

okesh is a young man, who likes to play volley ✓ ball, read novels, listen to music, and prepare competitive exams. He was never interested in or curious about science. However, when he visited the Agastya Campus located in Kuppam along with his fourth standard classmates, he was mesmerised by the beautiful grounds and amazing science labs. Here, instructors used models to give his group, practical hands-on learning of concepts in Physics, Chemistry, Mathematics, Biology, Astronomy and Arts. Concepts such as acids and bases intrigued Lokesh enough to learn more and this experimental pedagogy developed his interest in science. Lokesh observed that there was a huge difference in the teaching styles used by the instructors in Agastya and his teachers in school. Agastya instructors would physically show the students how to do activities and would guide and help the

I want to get justice for them. I want people from all backgrounds to receive fair treatment, and to feel safe and secure.

children when ever needed. This approach encouraged students to explore more, increased their creativity and in the process, brought about better intellectual growth. With a sound understanding, he was able to present and justify the concepts well in his exams. The teachers in his school did the science experiments themselves and just explained the concept. Their way of teaching did not leave the children much scope to grasp the topic or introduce any new ideas, as they were stuck with what the books imparted.

The Agastya science labs exposed him to many handson experiments which were not available in his school. The first solid-liquid and gas molecular arrangement model inspired him to make his own for an exhibition at his school. His school chemistry teacher helped him by explaining why molecular features vary in different states. His efforts earned him praise from the Agastya instructors.

Lokesh was one of the students who scored high marks on a 20-question test and was selected for Agastya's Young Instructor Leader (YIL) programme! Becoming a YIL was a turning point in his life. YILs saw videos about how important it was for society to have young people who are socially responsible. The programme was also able to inculcate qualities like empathy, respect for elders, helping the needy and unity, and to share knowledge with other children through peer-to-peer learning. Lokesh was able to demonstrate some experiments to village with the help of Agastya's





Science Lab at home initiative.

#### The importance of working in a group

By taking part in multiple group activities at Agastya, Lokesh understood group cohesiveness and learnt that teamwork was important when solving problems. A vivid memory is a skit that he did along with his friends showing the importance of 'Saving Water.' When asked why he chose this topic, he said, "I have seen many women fighting for water and would like to stop its wastage. People must be made aware that the prudent and economic use of water can make a huge difference." An Agastya instructor Transformed Lives d Mahesh guided their group and encouraged them to make the skit more impactful. Despite the passage of time, Lokesh said that performing this skit was still one of his favourite memories.

Coming from a poor rural farming family, Lokesh was very happy to receive a YIL scholarship of INR 2,000 annually for three years. He used the funds to pay his college fees and received an additional amount of INR 3,500 for college admission. His parents too were very proud of him and grateful to Agastya for this support.

Lokesh is studying for his final year degree at Sri Venkateswara Arts College, Tirupati, where, as part of the Swachh Bharat Mission, Agastya arranged a programme where the students cleaned the college surroundings and conducted an awareness campaign on the importance of keeping surroundings clean, elimination of open defecation and the improving solid waste management. Lokesh loved participating in the alumni meetings where he could network with other YILs, senior members of Agastya including the founder Ramji Raghavan.

It was a special day, two years ago, when he performed a performed a skit and interacted with his juniors as an alumnus. Lokesh continues to be in touch with his Agastya instructors, Muniaraj sir and Venkatswami sir. Their constant support motivated him to believe in himself and to pursue a bachelor's degree in Arts. Lokesh admitted that he did not know what career to choose after completing tenth standard but Agastya's career guidance counsellors provided him with various options.

They encouraged him to go forward with his dream of becoming a police officer. "After growing up in an area with a lot of land issues, I understand the emotional distress that people in these situations experience. I want to get justice for them. I want people from all backgrounds to receive fair treatment, and to feel safe and secure." He also said that Agastya is the main reason he became socially responsible and decided to serve the people.

Lokesh did his schooling at Thummsi Model School, Chittoor Andhra Pradesh, after which he went on to do his pre-university at AP Model School, Shantipuram. He believes that the values inculcated in him by Agastya played a crucial role in shaping him as a person. They taught him discipline, and manners to promote healthy socialising. He credits Agastya for his high level of confidence and self-awareness which will help him succeed in his life. He sincerely wishes that all children should get a chance to learn from Agastya International Foundation's pedagogy and fully utilise such a development opportunity.



''I sincerely wish that all children should get a chance to learn from Agastya International Foundation's pedagogy.''







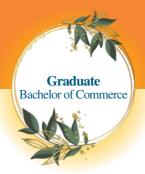
#### **Anand Mokashi**

Age: 24

Years spent with Agastya: 2012 - 2015

**Background:** 

Father: Motor mechanic Mother: Homemaker



# Science in everything!

nand strongly believes that his one and half a years association with Agastya transformed him completely! He was in the eighth standard at S J R High School, Nulvi village of Hubli, when he and his class first visited the Agastya International Foundation's Science Centre, where they taught science in an immersive and experimental manner. "For one and a half years, every week, I was lucky enough to attend classes in Agastya. Those were the most enjoyable times of my life. In every class, there would be over 30 students, all relishing the class. The teaching was first class and not even once were we bored," recalled Anand.

One of his fondest memories was teaching at a science fair at the Nehru grounds in Hubballi, students from his



Agastya Foundation is a boon for all poor people. I strongly urge all students to make the best use of its education programmes to improve themselves.



school and college students from across Karnataka attended the four-day event. He recalled, "I created awareness about the importance of gas cylinders which we use daily. I studied the working of a gas cylinder and practically demonstrated it with a cylinder and a stove. I explained the standard weight of a gas cylinder and urged students and visitors to measure the weight of a cylinder at the time of purchase to ensure that the agency was delivering the stipulated weight of gas." Anand was only 14 years of age when he made that presentation, and even now, he remembers it with great pride.

Anand recollected, "On the first day, I was so nervous when I stood in front of the crowd to present. But by the second and third day, I gained confidence and fluency." Anand felt so proud that he could share knowledge and educate people. All his teachers and friends too appreciated him. In his circle of friends, he was the only one who could speak a little English, and it was because of Agastya's classes. He would voluntarily ask the instructors to teach him various concepts in science, and later he would teach his friends what he had learnt.

#### **Relating Science to Everyday Life**

Anand loved the innovative methods used by Agastya instructors. "Here science was related to the outside world. That is when I got to know that science was not confined only to textbooks and theory." Anand explained that in Agastya sessions, they would learn the science behind everything and learn how to relate





to relate science to daily activities and the environment. He added, "Every time I saw something in nature, I understood that there was science behind it."

He said, "I never used to study and in fact, had no plans of studying after my tenth standard. However, Agastya's classes inspired me and instilled in me an urge to learn more." Because of Agastya, he was able to complete his twelfth standard and then in 2020, he did his Bachelor of Commerce from IBMR Degree College, Hubballi. He proudly announced, "I am gratified to say that I was awarded the best outgoing student for my overall performance in academics." Anand also did modelling and received a lot of appreciation for walking the ramp in college. Even though it has been more than two years since he left college, he still gets respect and admiration from his juniors and teachers when he visits there.

Anand is 24 years of age and hails from Nulvi village of Hubballi, Karnataka. His father is a motor mechanic at Kirloskar Limited, his mother is a homemaker and he has an elder and a younger brother. Anand worked as a supervisor in Coempt Eduteck in the exam scanning centre. His role was to help conduct exams for MBBS and Pharmacy college students in Gadag, Hubballi, and Dharwad regions as part of Rajiv Gandhi University. Currently, he is searching for another job, and also aims to follow his passion which is nature photography and fashion design. During fashion shows in college, he developed a fascination for the clothes and even designed them.

With a deep sense of gratitude Anand said, "Agastya Foundation is a boon for all poor people. I strongly urge all students to make the best use of its education programmes to improve themselves." He suggested that all children should try attending Agastya classes at least once as it will certainly change the way they think.

Finally, Anand professed, 'My overall experience in Agastya has given me the potential to further my studies and become confident. Now I can go on the stage and talk to people without any hesitation. A big thank you to Agastya International Foundation."



"Agastya International Foundation is a boon for all poor people."







### Ramabrahmam Jairaj

Age: 22
Years spent with Agastya: 2013 - 2016 **Background:**Mother: Homemaker



# Of logic and reasoning

rom the second to the seventh standard, Ramabrahmam Jairaj was lucky enough to participate in the summer camps of Agastya International Foundation, even though his private school was not part of their hugely transformative science and art education programme for rural school children. However, when he joined AP Model School Nadimur, Kuppam, Chittoor District, Andhra Pradesh in the eighth standard, he was able to regularly visit the Campus Creativity Labs in Kuppam with one of the Agastya instructors, Dr Mahadev, who also happened to be his neighbour. The instructors there not only introduced the 20 different labs but also encouraged the diffident students to experiment and play with the models there. In the Mathematics and Physics labs, they created paper crafts, learnt mathematic formulas by folding papers into

different shapes and participated in other fun activities. In the Music lab, the trainer showed them various musical instruments and demonstrated each one's sounds. All in all, those were fantastic days for Jairaj!

Based on his school teacher's reviews and his performance, Jairaj became a Young Instructor Leader (YIL). In the ninth standard, the YILs started identifying problems that they faced in their daily lives. Jairaj and his fellow YILs decided to focus on finding a solution for unclean toilets and came up with an ingenious idea! Their prototype of a 'smart toilet cleaning system' used sensors and auto-locking systems that prevented the door of the toilet from opening if the toilet had not been flushed properly.

Jairaj found that he could not concentrate on the purely theoretical lessons taught in school. Though he understood everything during class, he found it difficult to study from the textbook. When his teachers completed teaching one unit in a subject and went to the next, he used to forget the last taught concepts. However, thanks to Agastya, he acquired the ability to link one concept with another even though they were from different units. This made it easier for him to remember everything. He also learnt to be methodical and complete one process in an experiment before moving to the next as Agastya taught him that each step was important. Jairaj found a huge difference between the way his teachers and the instructors at Agastya taught subjects; the approach in his school was 'teacher-



Through logical reasoning and improving my communication skills, I was able to clear the aptitude rounds during the interview process because of the methods that I learnt at the mathematics lab.







student' whereas in Agastya it was 'friend-friend.' The typical lecture mode in school was a stark contrast to the constant exchange of knowledge at Agastya; where both the instructors and the children shared what they knew. Jairaj and his friends also had a lot of freedom to explore, experiment and express themselves when they were at the Agastya Campus, compared to the restrictions at school.

#### Discovering endless possibilities

Agastya was all about innovation and creativity where the instructors encouraged the children to 'look beyond textual knowledge and establish critical thinking. Jairaj and his friends used their minds to come up with solutions to the problems around them — such as misplaced dusters or the lack of chalk. They made a cloth duster in the form of a cylindrical roll and fixed it vertically to a rod which cleaned the board when moved horizontally. They even attached an iron mesh on one side to remove chalk dust from the used duster.

Jairaj also enjoyed peer-to-peer teaching while at Agastya. Whenever a teacher was absent, Jairaj took over the class and taught the concept that he had learnt in the sessions. When Jairaj was in the tenth standard, the instructors asked all children to speak only in

English while on Campus and told them that if children conversed in their regional language, others must not respond. This forced the children to converse in English, even if they spoke it wrong. Jairaj realised that they did this so that the children's communication skills would improve, and they would be prepared for future language barriers. "My ability to speak English improved only after my tenth standard and now I'm perfectly confident about communicating in English," Jairaj proudly declared.

Jairaj was shy and afraid of trying new things or initiating conversations with people. This changed when he started volunteering in various exhibitions and camps conducted by Agastya. He interacted with children and teachers from different schools while organising events and overseeing different projects. With motivation and encouragement from their instructors, curiosity to know what the unknown future held, replaced his fear.

Jairaj's innate interest in smartphones and laptops made him choose software engineer as a career. He successfully completed his Bachelor's degree in Computer science engineering from Kuppam Engineering College, and is now working as a software engineer at Mindtree Ltd.



"My ability to speak English improved only after my tenth standard and now I'm perfectly confident about communicating in English."







### Parameshkumar Hosamani

Age: 22

Years spent with Agastya: 2008 - 2011 **Background:** 

Father: Retired army servicemen Mother: Homemaker



# The difference between a leader and a boss

P arameshkumar is 22 years old and in the final year of a degree in Mechanical Engineering from BVN College, Hubballi, Karnataka. His father is a retired serviceman, while his mother is a home maker. His two older brothers are currently working and his younger sister is still studying. In his free time, Parameshkumar likes to read books and play games.

Parameshkumar became a Young Instructor Leader (YIL) while he was studying in the sixth standard at GHPS, Ananda Nagar. The vivid memories of his first day at the Agastya Campus still remain with him. He was pleasantly surprised to find he could understand complex scientific concepts much better when he experimented with models. He acknowledged that, "I saw labs with science models and equipment which I

66

Because of Agastya I understood that economic status is not important to prosper in life, but commitment and devotion are vital.



had never seen before in my life. It felt like a different world." It was definitely a day to remember at the Agastya centre.

#### **About chemical reactions**

On visits to the Campus once a month, he entered a fascinating world with so many practical experiments. With only a slight interest in science earlier, he found himself captivated by chemical reactions, such as the burning of potassium permanganate and glycerol. Parameshkumar said, "I had not seen any chemicals that could make this kind of magic. Initially, I was afraid to touch the chemicals thinking they were dangerous but developed courage after Agastya instructors taught us how to use them safely. By doing hands-on experiments, I understood the use of chemicals better, and this was thrilling for me." Being a YIL was a great opportunity in life and the training benefitted him many times.

He was a boy who sat quietly in the classroom and asked very few questions because he did not want others to laugh at him. The Agastya instructors helped him overcome this fear. He said, "As a YIL I developed leadership qualities, and it helped me become the class representative in my eighth standard and even in my third year of Diploma. Everything that I learnt then is now helping me." During the lockdown imposed due to the pandemic, Parameshkumar took sessions for students without mobile phones or who had problems with network connectivity.



#### TRANSFORMED LIVES



Parameshkumar fondly recalled the experiment that got him excited about science. "I observed three beakers with vertical pipes and magnets dipped in different liquids. However, the movement and speed of the magnets were not the same in all three beakers - this viscosity experiment gave me a 'wow' moment," he exclaimed. The YIL sessions enhanced his academic performance and helped him acquire many additional skills. Parameshkumar recalled that engaging in group activities helped him understand how to be a team player and how to communicate with a team. Agastya's instructors also taught him the difference between being a leader and a boss.

They showed him how to master problem solving skills by finding different ways to resolve them.

Parameshkumar wisely said, "Because of Agastya I understood that economic status is not important to prosper in life, but commitment and devotion are vital." Agastya enhanced his positive attitude, inculcated leadership qualities, taught him how to be a responsible student and speak confidently in public. With their guidance, he was able to decide on his career as an engineer. Someday, Parameshkumar hopes to change society as a police Sub Inspector.



"Everything that I learnt then is now helping me."







### **K M Sudharshan**

Age: 19

Years spent with Agastya: 2016 - 2019

**Background:** 

Father: Farmer



## Life without Agastya is like life without a friend

udharshan was chosen for Agastya's Young Instructor Leader (YIL) programme when he was in the ninth standard at AP Model School in Santipuram. He revealed, "Agastya instructors coached us on unfamiliar topics. They treated us as capable and adept people, and not as children. I started questioning them about various topics and technology they had shown us on the laptop." As a YIL, Sudharshan visited the Agastya science centre once in three months. He involved himself deeply in experimenting, solving puzzles and learning to handle different instruments and equipment. He said, "The immense joy and enthusiasm that I experienced in that first session is the reason I began to attend every session. I still remember the experiments on refraction of light, formation of a rainbow when light passes through a prism and finding

starch in leaves. Like a firecracker, Agastya ignited my interest in science."

#### **Experiencing new modes of learning**

Sudharshan found the YIL programme enhanced his academic growth and built his leadership qualities, problem solving abilities, critical thinking and problemsolving skills. He proclaimed, "Before attending Agastya I would learn only to get marks and grades. Agastya taught me to experiment and experience new modes of learning. Being a YIL transformed me and changed my whole outlook on life. My attitude changed and the urge for a sustainable, successful future grew in me." As a YIL he learned to observe, think and then do. Even today, he always tries to find a solution to a problem whether it is big or small. Sudharshan decided, "After completing my degree I would like to be selfemployed and lead a team independently rather than work under somebody." He developed this ambition as a young teenager in Agastya. He dreams of, "Implementing my learning as a YIL to improve society and enhance the quality of life for people. I would love to create a lush green environment without pollution, where everyone follows the principles of Reuse, Reduce, Recycle." Sudharshan has already engaged in organic farming, and sustainable agriculture as part of his initiatives to develop the community he lives in. Currently, in the first year of a bachelor's degree in technology (computer science) from Rajiv Gandhi. University of Knowledge and Technologies, RK Valley, he helps his younger sister with her intermediate



Friend is one who teaches us about the world and guides us without any inhibitions. Agastya has supported me like that friend. Without that championship, I cannot imagine how my life would have turned out.





#### TRANSFORMED LIVES



studies. His hobbies include gaming, playing chess, cricket, kabaddi, surfing the internet and reading stories. Sudharshan declared "Life without Agastya is like life without a friend. A friend is one who teaches us about the world and guides us without any inhibitions. Agastya has supported me like that friend. Without that championship, I cannot imagine how my life would have turned out."

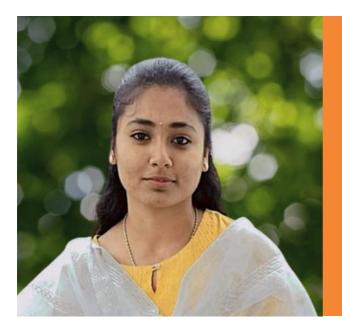
Sudharshan wants to be an entrepreneur and open his own. He also plans to pursue a master's degree in technology from a renowned university outside India. Not bad for a 19-year-old son of a farmer and a homemaker!



"Agastya has supported me like that friend. Without that championship, I cannot imagine how my life would have turned out."







### M C Bhavya Rani

Age: 20

Years spent with Agastya: 2014 -2017 **Background:** 

Father: Farmer



## My mother's dream!

B havya Rani was in the sixth standard when the colourful Agastya bus approached the Zilla Parishad High School (ZPHS) Krishnadasanapalli, Kuppam, Chittoor District, Andhra Pradesh. Bhavya really enjoyed that introductory session because the people from the bus were interested in what the students felt and thought about science. She found them unique and looked forward to more sessions with them.

#### An amazing Agastya day

Bhavya's wish was granted when she and her excited classmates visited the Agastya campus. Her 'Day of Amazement' started as they gazed in complete awe at the beautiful grounds and buildings. A blue potato in the Science Lab startled her and she understood how Ian odine solution turned the potato blue due to the presence of starch.



To become an engineer as it is my mother's dream and the basic foundation for this has been laid by Agastya during my school days.



Though her school had taught this and many other concepts, she was able to grasp them better through Agastya's experiential learning 'See, Do and then Learn' method. She still cherishes the memory of the first hands-on science experiment she ever witnessed.

They next visited the 'Guru Gruha' where Bhavya was thrilled to see "The Solar System come to life right in front of my eyes." The explanation, through a combination of audio and video, kept her riveted. Though Bhavya had learnt about it in school using books and diagrams, she preferred the teaching methodology used by Agastya to introduce her to scientific concepts. "From that day onwards, I kept looking forward to visiting the Campus" Bhavya revealed.

Bhavya and her entire class would wait in anticipation to hear from their schoolteachers about their next visit. Initially they visited the Campus once every three months and were ecstatic when it became once a month. Her schoolteachers played a major role in ensuring that Bhavya and her classmates remained connected and benefitted from Agastya's science sessions. The increased number of visits helped her retain information and science concepts became simple and easy due to the hands-on learning experience practised by Agastya Bhavya was fascinated by the friendly behaviour and attitude of the Agastya instructors. They always encouraged her to ask questions and clarify her doubts. She found that every visit to the Campus relaxed her mind because it was a green and clean place to learn.



#### TRANSFORMED LIVES



One momentous day, the Agastya instructors informed her that she had been selected for the Young Instructor Leader (YIL) programme. They had keenly observed Bhavya and analysed her communication, participation, and interpersonal skills. They also consulted with her class teacher, who endorsed her too. The YIL sessions always began with meditation followed by some motivational/thought-provoking videos. Different groups of students went to various labs for activities.

Bhavya said that the hands-on learning experience along with the leadership aspects helped her 'to think, observe, be curious' and most importantly 'to question.' The instructor asked the students to specify the colour of a leaf, and everyone in the group said 'green.' To their surprise, the instructor said the answer was wrong! They stepped out of the classroom to find the answer. Bhavya said that this activity made her group realise that leaves came in so many different colours, shapes, and sizes. That day she learnt the difference between Looking and Observing. Like small drops of water make a mighty ocean, Bhavya felt that all the activities and sessions with Agastya helped her, and her classmates become

socially responsible. There was an elderly person in their community who fell ill and did not have anyone to take care of her. She and the other YILs together contributed some money to take her to hospital for treatment. This experience motivated the group to discuss issues in the community and provide solutions. Once they identified an issue, the Agastya instructor enabled them to think it through and come up with a solution. Making a difference in society was something that made her and her group very proud. Bhavya is grateful as the Agastya's sessions helped in her final school exams. There were a few questions in science that she had learnt during sessions with Agastya, and she had retained these in her memory. So, she was able to answer the questions appropriately.

The hands-on learning in science, given to her by Agastya, enabled Bhavya to choose, "To become an engineer as it is my mother's dream and the basic foundation for this has been laid by Agastya during my school days." Her farmer father and housewife mother are proud that she is currently pursuing her third year degree in Computer Engineering at Kuppam Engineering College, Andhra Pradesh.



"Hands-on learning experience along with the leadership aspects helped me 'to think, observe, be curious' and most importantly 'to question"







### Ramya R

Age: 23

Years spent with Agastya: 2013 - 2016

**Background:** 

Father: Vegetable vendor

Mother: Homemaker



## Thinking out of the box!

Ramya graduated in Electrical and Electronics Engineering from Shri Venkateswara College of Engineering, Bengaluru, Karnataka with the full support of her father who sells vegetables and her mother who is a homemaker. She now works as a Technical Career Counsellor at Emertix, MG Road Bengaluru. Her two younger sisters are doing their computer engineering.

Ramya distinctly remembers how Agastya instructors conducted an unusual quiz, at the Government Girls High School in Yelahanka. She along with her other eighth standard classmates, had to think creatively for a few days to find answers. Those who got it right, were selected for the Young Instructor Leader (YIL) programme, and she was one of them. This was the start of her challenging and exciting seven-year journey with Agastya International Foundation.



Agastya has a remarkable pedagogy which should be available to all students and believes that everyone who experiences proactive, experiential learning will achieve excellence.



#### Thinking out of the box

Agastya taught her how to solve problems through activities like puzzles and maths. Putting puzzle pieces in their rightful place to complete a picture forced Ramya to think out of the box to find a solution. In the past when Ramya had to take decisions, she was unsure and unable to make up her mind, but after attending Agastya she was able to take decisions effectively. She will forever be grateful that Agastya gave her the opportunity to meet the former President of India, Dr A P J Abdul Kalam. After this meeting, she came to realise that whatever background we come from, if we have the determination, we can also reach the same heights that Dr Kalam did. It was his passion for science that made Ramya pursue engineering.

After completing her tenth standard, Ramya did not know what profession to choose. Agastya held classes on career guidance, which gave her the clarity to choose science. Ramya received a scholarship of INR 3,000 annually which enabled her to complete her degree.

By participating in Agastya's many camps, experiments and science projects, she built self-confidence. Through their innovation fairs, Ramya got a platform to exhibit her knowledge and passion. Interactions with her peers helped her overcome stage fear. Ramya uses all these skills and qualities in her present job as a counsellor. She now finds it easy to communicate and interact with people.



#### TRANSFORMED LIVES



Ramya said her greatest takeaway from Agastya was the way they taught her to think resourcefully with their exploratory teaching methods. "In today's marketing world, it is important to think out of the box," she declared. Ramya applies innovative thinking in her job, to tackle modern marketing problems and provide return on investment oriented solutions to clients.

Ramya still misses her regular visits to Agastya after her engineering course started. She did, however, attend their webinars and now, wants to pursue an M.Tech

in Embedded Systems. She thanks Agastya with all her heart for firing her drive to continue her education and become a success. Ramya is a great cook and loves to spend her free time cooking, reading, and crafting new things from waste material.

Ramya thinks that Agastya has a remarkable pedagogy which should be available to all students and believes that everyone who experiences proactive, experiential learning will achieve excellence.



"In today's marketing world, it is important to think out of the box."







### Jeevitha N

Age: 21

Years spent with Agastya: 2013 - 2017

**Background:** 

Father: Mason

Mother: House maid



## Learning and making a difference!

hen Jeevita first saw a skeleton at the biology lab, she was scared! She relaxed when the instructors explained that it was just a model and enjoyed learning more about her own body. She also saw many other models with her second standard classmates. She recalled, "It was a day well spent in a good and peaceful environment." Further it also felt like an enjoyable and happy trip, where she and her friends played and had lunch together.

Jeevita next visited the campus in the fifth standard at Vijayavani High School, Kuppam. She was excited to board the big Agastya bus to that fun place she had visited a long time ago! In the chemistry lab, they observed experiments on acids and bases, mixing everyday items like lemon, tamarind and hibiscus which changed colour in the presence of acid.

It was a very big achievement in my life as I got a silver medal and the details were even published in the local newspaper. "When I was in the sixth standard, I visited the ecology lab, where the instructors explained about the different kinds of butterflies," she said. Jeevita and her classmates were lucky enough to visit Agastya's Kuppam Campus three to four times a year, between her fifth and sixth standards.

In her seventh standard at Zilla Parishad High School, Chinnagollapalli, Andhra Pradesh, two Agastya instructors, Mahesh sir and Kiran sir asked the students questions based on logic, reasoning, problem solving, and general knowledge. Whoever answered confidently and correctly became a YIL (Young Instructor Leader). At the end of the test, the Agastya instructors selected just two and a thrilled Jeevitha was one of them! She shared her joy with her parents who congratulated their daughter on successfully competing with 30 students.

#### **Adult literacy**

She was interested in participating in everything -dances, speeches and extracurricular activities, whereas the other students just wanted to attend regular classes and then go back home. Jeevitha declared, "I had the urge to always learn and be good at whatever I did." Her father who is a mason, motivated her to be that kind of a girl and her mother who handles the house, encouraged her.

As a YIL, Jeevitha was involved in various activities to improve her village and solve the problems people faced.





Many adults used thumb impressions as a signature on important documents and did not know how to write their Transformed Lives s. Therefore, the YILs used their peer-to-peer teaching skills and taught adults once a week how to read and write their Transformed Lives s. This helped the adults a lot, especially when they went to open bank accounts and get identity or ration cards. She and her friends realised that their village faced water problems at times and came up with the idea of planting more trees. Jeevitha carried out these interventions with the help of her instructors at Agastya International Foundation.

Jeevitha and her sister were part of Agastya's 'Operation Vasantha' - the evening school programme in their village. The IPS officer at that time, Mr Praveen Kumar participated in a programme at the centre. During this visit, he visited Jeevitha's house and interacted with her parents – this was the most memorable day in the life of Jeevitha's and her parents!

After understanding the ill effects of open drains, which were a breeding ground for mosquitoes, Jeevitha and her friends wanted to come up with a solution. With the help of their YIL instructors, they searched for a solution by reading and studying. Eventually they found that boilingEucalyptus and Neem leaves

in water and spraying it on the drains, was effective in curbing the mosquitoes. Jeevitha loved nature and was concerned about pollution-creating fuels. While learning about the uses of different trees she came upon Jatropha Curcas locally known in Telugu as Eryamidhi, whose leaves could produce ethanol. In temples, milk that anointed the statues of the Gods just flowed out as waste. Jeevitha, aided by Agastya instructors, came up with a solution to convert the wasted milk into ethanol. She started on a small level by taking milk from the Subramani Swamy temple at Gudivanka. She presented this project at the IRIS (Initiative for Research & Innovation in Science) fair held at Vagdevi Vilas School, Bengaluru with the help of Dr Mahadev, an Agastya instructor. "It was a very big achievement in my life as I got a silver medal and the details were even published in the local newspaper," Jeevitha exclaimed.

She attended a three-day programme on how to make art from waste. She and her friends made a collage of a scenery, which was the best art that she had ever made. Her journey with Agastya International Foundation lasted for six years. Jeevitha is interested in a career in Accounts and is completing her final year of a Bachelor's Degree in Commerce from IRM Degree College.



"I had the urge to always learn and be good at whatever I did."





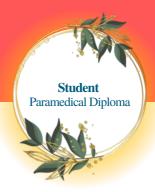


### Vijayalaxmi Agasar

Age: 19

Years spent with Agastya: 2016 - 2020 **Background:** 

Father: Employed in a private company Mother: Homemaker



## A proud Agastya alumnus!

Vijayalaxmi is 19 years old and is currently in the second year of a Paramedical Diploma in Medical Laboratory Technology (DMLT) from District Hospital, Dharwad, Karnataka. Her father is employed in a private company, her mother is a housewife, and her older brother is studying for a commerce degree. In her free time, Vijayalaxmi loves to read books.

Selected as a Young Instructor Leader (YIL) in the eighth standard in SJR School in Nulvi taluk, Hubballi, Dharwad, she vividly recalled her first day, "The instructors divided us into different groups and asked us to make towers with straw pipes. It was the first time I had talked with other strangers and our group made the tallest tower that won the challenge." Vijayalaxmi loved doing group activities and declared, "In Agastya, I

66

I am proud to be a YIL alumnus and I would like the new YILs to make the best use of this opportunity, especially the rural students.



liked collective action the most because I learnt so much more while working in a team and I was also able to share my ideas with the group. I got the chance to interact and understand others, something which was new for me." She learnt that through teamwork, a group could achieve anything.

Vijayalaxmi's schoolteachers supported and encouraged her to participate in the activities and programmes conducted by Agastya. She was enthralled and curious about the life cycle of the butterfly. The Agastya instructors patiently answered her many questions on what caterpillars eat, why they sleep for so long, and how they change. She felt that this attitude of the instructors is Agastya's greatest strength.

Like many of her peers, Vijayalaxmi considers the YIL programme as the catalyst which boosted her learning trajectory. She created new things, practically learnt about science, observed things intuitively and even took specific initiatives to improve her surroundings. Her most memorable project was 'Happy Journey' which aimed to avoid road accidents. She explained, "In my village many people travelled in auto-rickshaws that caused several accidents and deaths. I talked with the drivers to get and give suggestions on safe driving and also created an awareness programme. By using phosphorescent paint, I marked the dangerous places and asked the drivers to drive slowly in those areas." The paint glowed in the dark and helped the drivers recognise unsafe places and negotiate them carefully.





She was happy to report that there was a decrease in the accident rate.

#### From rote learning to understanding concepts

Through her YIL experience, Vijayalaxmi's outlook underwent considerable changes. Before Agastya, she studied well but relied on rote learning to achieve good marks, without ever understanding the concepts. This changed once she got involved in Agastya's hands-on experiential learning. Vijayalaxmi reveals, "The experiments I did in Agastya brought me closer to science. It was difficult for me to understand the concept of energy but after seeing the potential energy model in the Agastya lab, I started to connect science with daily life and performed simple activities to understand the concepts on my own."

Her communication skills too improved. She said, "Because of the YIL training I now like public speaking and volunteering for community teaching. I started teaching a small group of students in my village who were unable to pay the tuition fee. I also started to teach others during the lockdown for free and conducted small experiments learnt in Agastya to get children interested in studies." She also credits Agastya for making her resilient so that she was able to live life in lockdown with courage and face other problems steadfastly. Vijayalaxmi also ran awareness campaigns for her

neighbours on how to prevent corona virus infections. Talking about the most noticeable change in her personality, Vijayalaxmi said, "I had massive stage fear and would find excuses to avoid talking in front of the entire class and would escape when such occasions arose. As a YIL, I had to compulsorily select one topic each day and speak to the class about it. Thus, I developed courage and my attitude changed from fear to confidence." The three-day national level Jignyasa science fair organised by Agastya had a huge impact on her. She saw Agastya students making so many innovative models and their creativity inspired her. She declares, "I am proud to be a YIL alumnus and I would like the new YILs to make the best use of this opportunity, especially the rural students."

Vijayalaxmi will always be thankful to Agastya for their financial assistance as she paid her college fees with the scholarship of INR 2,000 that she received annually for six years. Agastya's staff would visit her hostel to ask about her studies and encourage her to pursue her dreams. This constant life-affirming support from Agastya is helping her to move forward in her life.

Vijayalakshmi is gratified to say that she is a YIL member and a part of Agastya. She encourages her juniors to participate in Agastya's activities, seeing the immense change she experienced, not only in academics but also in her character and behaviour.



"I had to compulsorily select one topic each day and speak to the class about it. Thus, I developed courage and my attitude changed from fear to confidence."







### C Sushmitha

Age: 21

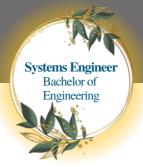
Years spent with Agastya: 2010 - 2016

**Background:** 

Father: Inspector, Sanitary Department

Methor: Homomokor

Mother: Homemaker



## A vision to take initiatives

ushmitha is a 21-year-old, placed in Infosys as a Systems Engineer. She completed her integrated course of Intermediate and a bachelor's degree in technology in Electronics and Communication from Indian Institute of Information Technology (IIIT)- Rajiv Gandhi University of Knowledge Technologies, Basara, Telangana in 2023. Sushmitha believes she was a lucky child as she got the opportunity to explore Agastya's Kuppam Campus from the very young age of nine and take part in campus activities with her cousin brother informally until her seventh standard. Her zeal was so strong that whenever possible, after school, she would jump into Agastya's vans, meant for other students from government school. She confessed, "Agastya people did not stop me or anyone from coming to the Campus as they encouraged students who were curious to visit Agastya Campus and learn."



The kind hearted and co-operative instructors at Agastya would invite us to come forward and ask questions and also explain topics we know to others.

Thus, our curiosity was satisfied and more importantly, our confidence built!



Recalling her first visit, she felt some aspects of the Campus a bit weird but in a good way. It was the first time she saw buildings that were different from those in her town. She kept thinking, "Why are the designs on the entrance like this? And why are there so many labs here?" After touring the extensive centres and grounds, the models in the biology lab attracted her the most. Sushmitha found Agastya environment, so calming and relaxing.

#### The advantages of a government school

Sushmitha was ecstatic when she joined the nearby government run Andhra Pradesh Model School (APMS) in Gudipalli, where she formally joined Agastya. She recollected, "My school teachers were a bit rigid, and we were scared from them. The kind hearted and cooperative instructors at Agastya would invite us to come forward and ask questions and also explain topics we know to others. Thus, our curiosity was satisfied and more importantly, our confidence built!"

As instructors practically demonstrate topics from the school syllabus, Sushmitha revealed, "Since, I was not getting any practical teaching in our school I utilised this opportunity well." She remembered once she was given a model of the internal organs of the human body in pieces numbered from 1 to 15. After matching the numbers on the pieces with the numbers on the body frame, she was able to make a model of the human body. She went home and explained the functioning of the internal organs to her brother and sister, and in the





process, felt like she had learnt something huge at a very young age.

Sushmitha became a Young Instructor Leader (YIL) when she started her ninth standard and divulged, "I have always liked sessions at Agastya, so becoming a YIL made me literally fly with joy!" Her YIL journey with Agastya were full of 'opportunities and initiatives' like cleaning the surroundings of the school and planting trees. As a YIL spokesperson, Sushmitha once observed that the bus stop near her school did not have the bus schedules mentioned properly. The Agastya instructor, Mahesh sir duly considered her observations and spoke to the government faculty in charge of the bus depot. After noting down the timings, Sushmitha and her fellow YILs painted the bus schedule on the wall.

On another event was when Agastya organised a session for parents, Sushmitha's mother who is a homemaker and her father a sanitary department inspector in the Dravidian University along with siblings also too part. Sushmitha with her other YILs, showed them how to distinguish between real and fake condiments. For instance, they displayed brick powder along with fake chilli powder and real red chilli powder. By then, Susmitha became very bold in taking initiatives.

#### The confidence to approach the Chief Minister

Among other challenges, APM School did not have proper basic facilities like running water. Opportunity knocked when the Chief Minister, Chandra Babu Naidu visited Kuppam and was scheduled to pass by her school. Sushmitha prepared a list of problems that the students faced in discussion with her principal and gave the grievance list to the Chief Minister after boldly talking to him when his entourage stopped. The bold and fearless Sushmitha, credits Agastya for building confidence in her. The regional newspaper even published this particular event.

The Governor of Uttar Pradesh, Anandiben Patel gave Sushmitha and her classmate a silver medal for a project they submitted for IRIS (Initiative for Research and Innovation in STEM), a national level science competition. With the guidance of Mahadev sir from Agastya, they actually prepared a dishwashing soap with Naaru Akku, a Telugu word for plain palm.

Sushmitha's college gave her a study laptop but she did not know how to operate it. As she struggled to get instruction from others, she did not want her juniors to face the same. So, she along with five of her classmates, approached the principal for permission to teach juniors the basics of computer operations, which would solve the problem. She credits Agastya International Foundation for nurturing in her the ability to take initiative, thoughtfulness, to lead with confidence and to speak in public. She said, "After going through the YIL programme and doing activities with teachers, anyone can get confidence and vision to take the initiative."



"After going through the YIL programme and doing activities with teachers, anyone can get confidence and vision to take the initiative."





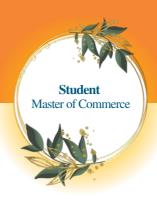


### V Geethanjali

Age: 21

Years spent with Agastya: 2015 - 2018 **Background:** 

Mother: Worker in canteen



## Dancing into science!

eethanjali is an enthusiastic student who was influenced by Agastya for three years and is currently studying at IRM Kuppam Degree College, AP. She did her schooling in Zilla Parishad High school, Guddadahalli, and her pre-university at Andhra Pradesh Model School, Guddadahalli. Her mother is the sole bread winner as her father no longer lives with them. Her younger sister is studying in the tenth standard and youngest brother in the ninth standard. She loves to watch television and read books during her free time.

Initially, Geethanjali knew nothing about Agastya and wondered what was so special that people were creating such a hype about it. Agastya's world of science answered all her questions. "Basic knowledge of science is what I had received in my school but my introduction



My introduction to Agastya in the seventh standard showed me the path to advanced science. The experiments, practical lessons, and the help of Agastya instructors are what gave me the confidence to do something on my own and be self-reliant



to Agastya in the seventh standard showed me the path to path to advanced science. The experiments, practical lessons, and the help of Agastya instructors are what gave me the confidence to do something on my own and be self-reliant," said Geethanjali.

On her first visit to the Agastya Campus in Kuppam, she saw different science models and experiments. One fascinating experiment showed various chemical reactions of solutions to different types of mixtures. Her curiosity about science increased when she herself did the volcano experiment. At the Butterfly Park, she saw different types of butterflies and was intrigued by their remarkable life cycle.

She also got to play volleyball and kabaddi with her friends there. She enjoyed the 15-minute warm-up where they played 'Passing the Ball' game. When the Agastya instructor said stop, whoever had the ball, had to talk for one minute on a topic chosen the instructor. Even though some children were not comfortable, the Agastya instructor motivated and encouraged them to speak in their regional languages. This reduced their fear of talking in public and increased their interpersonal skills. Through this exercise she was able to overcome her shyness while interacting with others.

In the tenth standard, she became a Young Instructor Leader (YIL) after she and a few other students correctly answered some questions asked by the,





instructors. Geethanjali had been an introverted child but after warm-up sessions and two-minute talks, she overcame her shyness and was able to stand on stage and talk in front of a crowd without preparations. Things were now looking up for Geethanjali, as a new person was emerging, all thanks to the Agastya instructors! They encouraged her to regularly come on stage and speak on a topic and she actually began to like public speaking. Today her self-confidence, creativity, problem solving and thinking abilities are qualities that she developed through Agastya, which stood her in good stead.

#### The influence of Agastya instructors

One memorable day the Agastya instructors asked the students to do a two-minute talk on the topic 'who is your inspiration?' When no one came forward, Geethanjali stood up and said that her school teacher, Rama Murti sir, motivated her with his many morals and values. He made the class interesting as he did mimicry. She wanted to learn how to talk to others with the same confidence and make her speeches interesting just like he did. Jayama Ma'am was another one who inspired her in Agastya International Foundation. She was strong and bold and always ready to assist. Geethanjali was astonished that Agastya instructors never forced students to study. If they felt that a child was getting bored or tired, they would send the child out on an errand or play a game with the class. She loved the Agastya classes which were always interesting compared to the reading from textbooks in her school. Another difference was the clarity in teaching which the children were able to comprehend better.

Agastya is the place where Geethanjali discovered her love for dance. After she took part in a dance,

performance the instructors told her to continue studying dance because she was good at it. Geethanjali attended dance classes where she learnt both classical and folk dance. She hopes to someday make a career out of dancing.

Geethanjali qualified for an Agastya scholarship which was initially INR 1,500 and increased by INR 500 in subsequent years. "Agastya gave me a chance to improve my scores and help my friends with their studies," said Geethanjali. Agastya also encouraged extra-curricular activities such as dancing and singing. Today she credits Agastya for whatever she is in her life and for having helped her at every stage.

The Agastya instructors always encouraged them and told them that, "They should help others without expecting anything in return." Influenced by their selflessness, Geethanjali too wants to help others. Some children in her village are not able to go to school and as part of social service, she wants to talk their parents into allowing them to continue their studies.

Before she did not have any aim in life, but Agastya gave Geethanjali clarity of mind, insights into identifying her goals and pursuing them with hard work. Her ambition was to work in a multi-national corporation, so she decided to graduate in commerce, then complete a master's degree and become a teacher. She hopes to motivate others the way Agastya instructors inspired her, and she also wants to offer dance classes to children who would like to learn a different art form. She hoped, "If possible, I would like to be a part of Agastya International Foundation and would love to teach classical and folk dance to the students."



"Agastya in the seventh standard showed me the path to advanced science."







### Harshita L

Age: 22

Years spent with Agastya: 2014 - 2015

**Background:** 

Father: Office attendant Mother: House helper



remember the concepts behind the science," Harshita

recalled. Her entire class had the good fortune to visit

## **Developing personality**

In 2014, India became the only Asian nation to orbit Mars. Harshita and her eighth standard knewlaws/mattestremendous achievement this was because instructors from Agastya International Foundation had demonstrated a model of the solar system to them that very same year. When Agastya introduced themselves at her school, they explained that their mission was to create a large community of young science enthusiasts through practical learning.

#### **Coming First on a Longer Path**

As a bright student at the Government High School in Yelahanka, Bengaluru, Karnataka, Harshita had some exposure to school exhibitions. "Although I had previously seen science models, the way that Agastya instructors explained them, helped me understand and

My introduction to Agastya in the seventh standard showed me the path to advanced science. The experiments, practical lessons, and the help of Agastya instructors are what gave me the confidence to do something on my own and be self-reliant.

the Agastya Science Centre once a month. She enjoyed the training phase of Agastya's science exhibition the most, saying "The preparation for the science exhibition began almost 10 days in advance, where Agastya Instructors would train all of us on how to present and explain our models to the visitors." Her model demonstrated the concept of speed. Two iron balls rolled down two pathways - one straight and other curved. Visitors tried to guess which ball would reach the bottom first before dropping the balls. She added, "It was a fantastic experience and there were two things I was happy about. First, I got to understand why the ball on the longer curved path reached the bottom before the one on the straight path. Second, it greatly improved my communication by making me understand how to present and convey my thoughts to people." In her ninth standard, Harshita became one of four Young Instructor Leaders (YIL) in her class of 42 students.

Agastya identifies as YILs, those children who show potential for leadership and a willingness to engage in teaching other children. She stated, "Agastya instructors explained that when peer instructors talked about concepts and information, students were not afraid to ask questions and absorbed the information better. As representatives of Agastya, all of us should be able to present and teach what we learn to others. I was so excited about it."





Her YIL sessions till her tenth standard did not involve only science but also several seminars on health, nutrition, environment, among others in which experts in those fields taught them. Along with YILs from other schools, Harshita used to explain different concepts to other students at the science centre. She declared, "It has really helped me build my confidence."

Ever since she was a child, Harshita wanted to join the Indian Administrative Services. Her father who works as an office attendant at a private school encouraged her as did her mother who is a house helper. Her older brother works as an Assistant Associate in Tech Mahindra. However, due to the time and intense effort required to pass the exams, she decided to study information technology.

Harshita completed her Bachelor of Computer Application from Maharani Lakshmi Amani College for Women and at 22 years, is a Test Engineer at Cognizant Technologies, Bengaluru. She ruminated, "I don't know if I will try for civil services or not, but I have not given up on the dream entirely."

"Attending Agastya sessions greatly helped me improve my academic performance as well as developed my personality. I rate my experiences with Agastya as 5 out of 5, because it was wonderful for me," she declared. Harshita felt it is helping her even in her current job. When asked to make a PowerPoint Presentation, she can do it well because of the confidence she has gained through Agastya.



"I rate my experiences with Agastya as 5 out of 5."







### M Hemanth Kumar

Age: 20

Years spent with Agastya: 2013 - 2016

**Background:** 

Father: Farmer

Mother: Farmer



# Making the impossible, possible

Hemanth began his memorable journey with Agastya International Foundation in the seventh standard in Zilla Parishad High school, Dandikuppam village, Chittoor district in Andhra Pradesh. He used to see his seniors eagerly climbing into Agastya's bus and wondered why. However, he never dared ask as he was scared of talking to strangers. On his first visit to their amazing Kuppam campus, he was filled with curiosity and eagerness to explore the campus. Hemanth recalled his surprise at models of the human eye, brain and other specimens in the biology lab. In the Chemistry and Physics labs, they saw different chemical reactions and how to conduct basic experiments.

Out of 52 students in the ninth standard, Hemanth and six others became Young Instructor Leaders (YIL).

66

He felt very self-assured and confident when explaining different concepts to his entire class since he had practical experience in Agastya. His leadership skills also came to the fore during seminars in his college.



They were lucky enough to visit the Kuppam campus once every month during school hours. He remembered the very practical YIL sessions along with group discussions and games. Through these activities they learnt academic and non-academic topics. Many nearby schools participated in the mandal level science school exhibition held at Ramakuppam village. From his school alone, around 15 student teams participated with 15 different experiments. Hemanth's team chose to demonstrate a water purification method with two pots, placed one on top of the other. The sand in the top pot filtered out waste matter from the dirty water and pure water collected in the lower pot. They were overjoyed when they won the third prize!

Hemanth explained how Agastya would give the YILs tasks and experiments to perform and demonstrate them to the rest of the class. This gave him the experience to lead a team, give required inputs, plan, gather information on the topics given, collate the information collected and divide work among the team members. Agastya taught him to talk confidently and face a crowd.

As a YIL, Hemant would often visit the biology lab as he was keen to learn more about it. His teachers often asked him to share his knowledge on different topics. He felt very self-assured and confident when explaining different concepts to his entire class since he had practical experience through Agastya. His leadership skills also came to the fore during seminars in his college. All this was possible because of the exposure he





gained through Agastya's YIL activities. Hemanth is now 20 years old and aspires to pursue a master's degree in chemistry or pharmacy after he graduates in biotechnolog. Both his parents are farmers and are proud of his academic progress.

He thanked Agastya for conducting programs in government schools and creating opportunities for school students like him. Agastya has made the impossible possible through the YIL programme.



"I thank Agastya for conducting their programs in government schools and creating opportunities."

## Lab-on-a-Bike -

## Bringing hands-on learning to remote India

Compact, convenient, and cost-effective, the Lab-on-a-Bike enabled Agastya to reach tribal and isolated villages in India. Riden by an instructor, a bike attached with a box consisting of low-cost equipment allowed Agastya to provide hands-on learning to the students in the inaccessible locations.









### **Guruprasad N**

Age: 26

Years spent with Agastya: 2008 - 2009

**Background:** 

Father: Labourer

Mother: Homemaker



## Teachers who were also Friends!

n 2008 Agastya International Foundation launched I its programme in our school!" Everything about Agastya was a plus point, there was absolutely nothing negative about it," said Guruprasad who was 14 years old and studying in the eighth standard at that time. "We had an actual science lab in our school. We sometimes did not attend regular classes, but we never missed a single Agastya science class!"

Guruprasad felt that Agastya's teaching standards were high and yet simple. Students were easily able to understand everything and enjoyed the process of learning. At that time, his school ZP High School, Vasanadu, did not have a science teacher and Agastya's science sessions were their only means to study physics, chemistry, and biology. "I still remember the names of



Their instructors always encouraged us and advised us to forget the word fear. Those words had a profound impact on me.



my teachers Shridhar sir and Murthy sir. They made it easy to grasp the concepts quickly and simplified long definitions for us. They also taught us to build models and to experiment. They demonstrated various science phenomena through hands-on methods and helped us experience them. They would never burden us with long notes and homework."

#### Learning through doing

Guruprasad found that the Agastya instructors gave much more importance to activity-based learning and lab experiments. Through practical down-to-earth methods, students could effortlessly understand and remember the concepts. He said, "Even my friends who were not interested in science, enjoyed the experiments and became curious about science." Guruprasad and his gang of friends, all passionate about science, would always approach the Agastya instructors to clarify doubts. In fact, they were their 'go to' people for clarity on all subjects! Guruprasad emphatically added, "Not even once did the instructors say no to us. If they did not know the answer to our questions, they would do the research and get back to us. Agastya instructors were not like teachers; they were our friends!"

#### An Eventful Experience

Guruprasad's most memorable experience was a threeday science fair for which he got a certificate. According to him, close to 400 students, some with their own models, visited the science fair. It was that big!



#### TRANSFORMED LIVES



He and his friend built a model of the planet Uranus and explained its features to the visitors. "Shridhar sir helped us create the model and guided us on what to say about the planet." He never felt any stage fear and was elated when the presentations went well. "The guidance I received from the Agastya instructors on how to present and what to speak was so useful."

Though he greatly desired to study more, family circumstances forced him to find a job. Guruprasad is now 26 years old and working as a sales executive. He declared, "Communication skills and confidence is important for this type of job and I learnt both from Agastya. Their instructors always encouraged us and advised us to forget the word fear.

Those words had a profound impact on me. Today, if I can speak confidently, be it with clients or during meetings, it is because of the basics that Agastya instructors taught me."

Guruprasad thinks that Agastya is perfect. Even those students who were not interested in science were able to appreciate the science classes. He proclaimed, "Agastya International Foundation is doing a great job in imparting quality knowledge and experiential learning. It is a boon for all students, especially the underprivileged ones." He summarized his experience with Agastya in one line, "Agastya is running the world of education."



"Agastya International Foundation is doing a great job in imparting quality knowledge and experiential learning."







### Sindhu S

Age: 22

Years spent with Agastya: 2013 - 2015 **Background:** 

Father: Farmer



## A data analyst who learnt her lessons!

hen Sindhu became a Young Instructor Leader (YIL) in the eighth standard in Government Junior college, Yelahanka, Bangalore, little did she know that this Agastya International Foundation programme would be an important turning point in her life. Initially, Sindhu was extremely shy and tried to be invisible. "Before joining Agastya, I lacked confidence. Then I slowly started to learn and visualise things." The YIL programme allowed her to teach students. Agastya's group-based activities like peer-to-peer learning sharpened her interpersonal skills. She was able to engage more deeply during team-based activities like mentoring and when communicating with others. She was able to learn better and gradually came out of her shell.

#### See, Do, Learn!

Agastya's teaching pedagogy changed her perspective on education. She explained that in school the teaching was theory-oriented but in Agastya it was practical. This made it easier to understand lessons and concepts. Sindhu found that the 'See, Do and Learn' method, helped her comprehend science better. As a result, during exams or when her schoolteachers asked questions, she was able to answer correctly. "The practical teaching approach forces students to think creatively and come up with solutions. Agastya has a motivating team to help us achieve our goals," Sindhu asserted. Agastya provided all types of support for students, including scholarships. The YIL programme also provided her with a scholarship of INR 2,000 annually.

Agastya's teachings were very useful when Sindhu was studying engineering as it required experimental and practical knowledge. The YIL programme helped her creativity, leadership development, problem-solving and mentoring skills, through group activities. She learnt self-development and determination from lectures and experiences of the Agastya instructors.

She believes that the qualities she developed with Agastya's guidance, impacted her deeply and she has been applying them in her job as a Data Analyst. She said, "Activities like asking general knowledge questions and memorising have helped in my current workplace."



Their instructors always encouraged us and advised us to forget the word fear. Those words had a profound impact on me.





#### TRANSFORMED LIVES



The problem-solving and other skills which she acquired during her time with Agastya, are a key factor in the information and technology sector. She professed, "My job involves meeting with the clients and assisting them with issues related to data. My task involves a lot of communication and working as a team, all qualities I picked up from Agastya." Her most memorable moment was attending a speech by the former President. She avowed "We met Abdul Kalam sir and that was a great moment. He had visited the Indian Institute of Science, Bengaluru and we attended from Agastya. His motivational speech was encouraging, and it continues to motivate me."

"Abdul Kalam told us to be determined and shared events in his life which were inspiring." She strongly feels that Agastya should continue to reinforce science education and help students build skills. These soft skills are really important for a person when they finish their education and are ready to start their careers. She urged Agastya to continue supporting all government schools because many of them do not have enough facilities. Sindhu has completed her degree in engineering and is currently working in Price Waterhouse Cooper, CV Raman Nagar Banglore as an Associate in Data Analytics to the delight of her Farmer father, mother and married older sister.



"The practical teaching approach forces students to think creatively and come up with solutions."







## Roopa Hondad S

Age: 24

Years spent with Agastya: 2012 - 2014

**Background:** 

Father: Farmer
Mother: Homemaker



## Nurturing dreams Like a Fragile Egg!

24 -year-old Roopa is married but still fondly remembers attending sessions conducted by Agastya International Foundation. When she was in the eighth standard, Agastya's instructors came to SJR High School and explained about science, its importance and how it could be related to daily life. Roopa's curiosity compelled her to question the instructors on everything that came into her mind. She distinctly remembers that her groups and asked to build a tower out of paper. She thoroughly enjoyed the day's discussions and activities which were new to her and very interesting. She was able to visit their famous Campus once a month till she completed her tenth standard

"I did not know that I could understand science using a practical approach. I loved attending Agastya sessions



Their instructors always encouraged us and advised us to forget the word fear. Those words had a profound impact on me.



as we could understand difficult concepts through simple hands-on experiments. This was not the case in school where we only used textbooks," recalled Roopa. Her schoolteachers too accompanied the class to the Agastya Campus and taught them to relate the models and experiments to those in her school textbooks. Agastya's way of teaching was so different from that of her school that she began to take much more interest in science. She credits Agastya's pedagogy for her choosing science in her eleventh standard!

#### Developing an interest to study

Roopa joined Agastya's Young Instructor Leader (YIL) programme after passing an exam which included general knowledge, mathematics and science. It helped enhance her soft skills like communication, confidence and dedication which continue to be of value even today. Earlier, school was only about having enough attendance as she was least interested in learning. After joining the YIL programme, she needed no prompting to learn as her interest in science was intense. She was easily able to interact with everyone and found herself speaking in public with ease.

"At Agastya I saw various apparatus and learnt how chemical reactions take place, something I had only read about at school. It was like magic when I actually got to see physical demonstrations and reactions. I even carried out experiments and these experiences made me love science," said Roopa.





Some other activities that captivated her included the working of the human heart, the solar system, Newton's Law and using the abacus in maths. Her YIL scholarship of INR 3,000 per year paid her college fees.

By imparting knowledge that she received as a YIL to other students, she tried to improve them and her surroundings. Agastya taught her how to make use of waste materials lying around, and convert them into models or art. She also headed a team to clean the school Campus — another skill that she acquired at Agastya. Though she did not use it much in school, the ability to manage teams came to good use in college. Agastya's problem solving and decision-making activities aided her in handling challenges and getting the job done.

"Education is not just about the knowledge one gets from books, but from the various learnings about society and life. I have come across various challenges and the sessions at Agastya have helped me overcome them," said a confident Roopa. She loves community teaching because she likes to share all she knows with those who do not know that much. She also helped her community become aware about safety and the environment. "I was just like any other student in the beginning; just thinking

just thinking about myself and my education. Thanks to Agastya's influence, I now look for ways to help people and see how I can sort out the problems in society," declared Roopa.

Roopa is pursuing a bachelor's degree in commerce because her family was unable to raise the finances to study science. Her father is a farmer, and her mother is a housewife, and they would like all four of their children to study. Though she did not have a specific career goal, she knew that she wanted to help people. She would like to become a teacher and use the methodology of Agastya. Roopa wants to continue her association with Agastya and help new YILs make full use of the opportunities offered by Agastya. According to her, the instructors at Agastya play a major role in building the confidence of the students, encouraging them onward when difficult situations make them give up.

A specific activity had a significant impact on her – Agastya instructors asked her to drop an egg from the third floor of a building without breaking it. After she successfully completed the task, she learnt that the egg symbolised her dream or her life and that she has to take good care of both!



''Education is not just about the knowledge one gets from books, but from the various learnings about society and life.''







## J Guruprasad

Age: 19

Years spent with Agastya: 2012 - 2018

**Background:** 

Father: Farmer

Mother: Homemaker



## Of Leadership and oration skills

ith a specific goal of joining a software company and earning well, 19 - year - old Guruprasad is a second-year student of a Bachelor's Degree in Technology in Computer Science from Indian Institute of Information Technology, Kadapa, Andhra Pradesh. His lofty ambitions began in the fourth standard at Mandal Parishad Primary School, Ramulagutta, Andhra Pradesh when his class visited the nearby science centre in Gudipalli in the colourful Agastya van. He remembered, "Seeing so many figures built out of scrap metal made me very curious. I instantly wondered if I could also do the same." On returning home, Guruprasad told his father who is a farmer and his mother who runs the house about all the multiple experiments in science, math, ecology, and astronomy at the science centre. He said, "Though my parents did not

understand what I spoke about, they were happy for me." In the sixth standard at ZPH school, out of 38 students, he and six others became Young Instructor Leaders. He successfully answered a set of questions asked by the Agastya instructors and became 'an agent of social change.' As a YIL member he would visit the Agastya centre once a month and along with his entire class, he would visit the centre once every two months.

#### Transformation through the YIL programme

The YIL sessions helped him focus on what he had to do to be a responsible member of the society. When YIL students arrived at the science centre, they first saw motivational videos which inspired and motivated them to be better persons and to improve society.

One of the important YIL skills acquired was leadership. Guruprasad has applied these skills almost everywhere. He recalled an occasion when he organised students arriving at the science centre into a queue. When he successfully did this, it built a level of confidence in him. Another skill he acquired was public speaking, which helped him overcome his stage fear. The instructors at Agastya provided him opportunities to speak on different topics in front of all the YILs. Even today this has been helping him in his college, when he confidently makes presentations at seminars in front of his entire class and lecturers.



Their instructors always encouraged us and advised us to forget the word fear. Those words had a profound impact on me.







Teachers in his school were only teaching the theoretical part without the practical aspects. When he started attending Agastya sessions, he learnt by performing experiments and by observing how things work. His 'AHA' moment came when he practically understood why litmus paper changed colour when dipped in an acid or base solution. During Agastya's summer camp after his ninth standard, he found the robotics lab very attractive and fascinating. There he learned how to set up small connections for a working model of a car and how it works.

Once Agastya's instructors took all the YILs to a railway station to understand how trains coordinate and how they change tracks. "It was new information for us. Although I had seen the railway station, tracks, and trains hundreds of times before,

that was the first time I got to know how everything is integrated and how they all work in coordination." The scholarship of INR 2000 that he received when he was in his eleventh and twelfth standard helped him to buy study materials.

Guruprasad describes Agastya as an institution with the capability of making science both fun and practical. He hopes that, since knowledge is advancing exponentially, the equipment at the centres are updated to match present-day technology. Being in constant touch with Agastya over the past five years and remembering how much her learnt through all the fun activities he welcomes any opportunity to return to Agastya. Alumni were good role models for him and he too hopes to offer practical support to students as an alumnus himself.



"Education is not just about the knowledge one gets from books, but from the various learnings about society and life."







### Nandeesh M

Age: 22

Years spent with Agastya: 2012 - 2015 **Background:** 

Father: Clerk



# Question everything!

andeesh works as an iOS application developer at Cognizant Technology Solutions, Bengaluru. He is responsible for developing applications for mobile devices powered by Apple's iOS operating system. Even though he is in a technical line of work, he struggled with mathematics and science in school and credits Agastya for helping him overcome this. They helped him realise that if one knew the basics, and understood the reasons, techniques and their application in daily life, no mathematical equation or problem is difficult.

With Agastya's intervention over time, he developed a passion for mathematics and was able to help children in his community by teaching it to them during the COVID-19 pandemic. During the lockdown, he also volunteered for an all-India awareness programme, a government initiative.

Their instructors always encouraged us and advised us to forget the word fear. Those words had a profound impact on me.

The Corporator of his village asked him to create awareness and educate the people of his locality about prevention techniques that would help in reducing the transmission of COVID-19. Nandeesh said that it is because of Agastya's training he was able to effectively conduct the awareness programme.

Nandeesh's association with Agastya began when he was in the eighth standard Govt Yelahanka old town Bengaluru and continued till his tenth standard. Though he was not selected for their Young Instructor Leader (YIL) programme the first time, Nandeesh performed well the next year and was selected for a workshop conducted by Agastya. It was only after participating in these sessions that he was able to experience the full force of what participatory, proactive learning meant. It was then that he understood and experienced what his seniors had been telling him about Agastya all along.

The instructors showed models that demonstrated concepts of reflection and refraction and the path of light through a concave and convex lens. During workshops held on Saturdays when the instructors showed science models and discussed various topics, he became more curious. His mind was full of doubts and questions and once the instructor explained the topic, he was able to find satisfactory answers. This paved the way for his expanding interest in Physics.

#### **Self-development through Hands-on Learning**

Agastya's instructors played a vital role in his learning,





as they conducted and demonstrated scientific concepts through models, puzzles, and experiments.

Nandeesh was surprised at how easily he learnt concepts by doing things practically. The school's teaching style was different compared to Agastya's methodology, which was efficient and helped him increase his exam scores. In school most of the work was done in groups, so he never got an opportunity to talk in front of people. However, Agastya encouraged individual participation and gave him a chance to talk about a science topic every month. His school teachers asked them to memorise the lessons whereas Agastya encouraged them to understand the concepts through applied, exploratory learning.

Through Agastya, Nandeesh took part in many science-based activities mostly related to Physics. When he was in the ninth standard, the instructors asked the YILs to come up with ideas for science-related models. His group decided to show reflection and refraction. The Agastya instructor not only encouraged them, but also suggested where they could acquire the material to make a model, and also gave them money to buy the material.

This type of engagement with Agastya aroused his interest in science, making him practice more activities on his own.

A memorable experience during his ninth standard was a visit to an international school for a workshop. Nandeesh confided facing a few challenges like initiating conversations. Nandeesh was very fortunate to visit various institutions to see projects and exhibitions that showed the practical implementations of many theoretical concepts.

A major revelation was his love for teaching his friends and people who sought help. This improved his confidence to speak in front of a larger crowd, be a volunteer and participate in competitions. It also developed his speaking skills and removed stage fear. He participated in debate competitions and along with his friends, wrote short stories that his school magazine published.

Nandeesh found that even during his degree course, the professors only taught the concepts and asked them to refer to books for further understanding. He felt luckier than most of his classmates as Agastya had given him a strong base in science enabling him to become one of the toppers in his class.



"I was surprised at how easily I learnt concepts by doing things practically."







### **Gowtham B**

Age: 20

Years spent with Agastya: 2012 - 2015 **Background:** 

Mother: Farmer (sole bread winner)



## Consistency, hard work and determination

" am glad that Agastya provided me with so many opportunities" declared Gowtham. A curios and and 'doer,' the enthusiastic 20-year-old wears many hats. As an Operation Vasantha (OV) volunteer since 2019, he teaches 30 to 40 students in his village every evening. He is completing the third year of a bachelor's degree in Technology - Electronics and Communications, from Kuppam Engineering College. He also helps his village with technical issues and is an active youth member.

Gowtham credits Agastya International Foundation with the development of his capabilities, improvement in skills and confidence. "Agastya brought out my inner abilities and I was able to realise and analyse my potential," he said. Through their experiments in the practical sessions, the children observed, discovered and



It was a 'wow' moment for all of us!
We were fascinated by the life-sized science models, the Ecology lab, the garden in the shape of a human body, the hut in which we all sat and the art centre.



developed methods for a better understanding and explanation of our finding. Gowtham was able to visit Agastya's Kuppam Campus at least once a month from his sixth standard onwards. On entering the Campus for the first time, he was awestruck, "It was a 'wow' moment for all of us! We were fascinated by the life-sized science models, the Ecology lab, the garden in the shape of a human body, the hut in which we all sat and the art centre." Colourful formulas, puzzles and numbers covered the walls and tables of the math lab and his entire class enjoyed 'fun math' - the structure of the pie, (a+b)2, cuboids, pentagons and other concepts were no longer objects of dread! He was able to see, touch and feel how all the sides of a cube are equal. In the Biology lab, he saw organisms in three dimensions, instead of the flat pictures in his science textbook, and learnt about herbivores, carnivores and other elements of the food chain through games and videos. Simple experiments with kitchen chemicals like vinegar and baking soda produced bubbles and froth and made chemistry entertaining. Gowtham asked many questions and after watching the instructor, Gowtham demonstrated experiments to his class too with a lot of enthusiasm and zeal. Thus, his journey as a Young Instructor Leader (YIL) began.





#### Thinking out of the box

Gowtham was so spellbound by these creativity labs that he wanted one in his school. He and a few of his friends requested their school headmaster who approved a room for it. They obtained some frogs, tortoises, and insects and were also able to get a human skull for their biology lab. He is proud to say that the lab still exists in his school.

Peer-to-peer teaching helps the one teaching and the one learning to grow and he asserted that "The attitude of the leader should be such that s/he empowers the others and allows them to grow under his/her guidance." Along with two others, he presented a model in the eighth standard. His team learnt to make an innovative fire-extinguisher and improved their communication, reasoning, building, time management, and presentation skills. Agastya's instructors helped him overcome many problems, the main one being to improve his English-speaking skills. They asked him to concentrate on grammar, then word formation, and to watch English movies on television. Agastya also helped him think 'out of the box' - his 'Hot Steriliser' model for ICUs was short-listed for the 'INSPIRE (Innovation in Science Pursuit for Inspired Research)' award at the district level science fair in Chittoor. During the selection round, students had to come up with ideas and solutions, which addressed social issues. The INSPIRE award jury selected Gowtham's idea and though he did not win, he relished the opportunity to think creatively and innovatively. He declared "It is a boon to have Agastya in our lives. Agastya sessions also brought out talents, which I did not know I had in me" he confided

Though he had never been on stage before, he gave a dance and mime performance during the alumni meet, when in the ninth standard. Gowtham particularly remembers one speech there, "This gentleman told us that he too was from a financially poor background but his determination and strong will helped him to become successful in life. Hence, I too can pursue my dreams to join a multi-national company and earn well, despite the challenges in my life. That is my life's formula which has brought me till here." His confidence, reasoning and decision-making skills improved. Recently his students in the OV centre told him about leakages caused by improperly maintained taps and surroundings. His professor encouraged him to find out 'why' and 'how' he could solve it. Putting his heart and soul into finding a solution, he came up with a model called 'Efficient solution for water management at residential places.' It won the second prize at Anveshana 2023, a Science and Engineering competition. He is interested in patenting it before selling it as a product.

Gowtham's father passed away a year ago leaving his mother as the sole breadwinner. Through farming, she is taking care of the financial and educational needs of Gowtham and his younger brother who is pursuing his second year at Polytechnic college, Kuppam. The stipend of INR 2,000 that he gets for his work at OV every month from Agastya, is therefore a big help. Eventually, I wish to see myself as a CEO of Mindtree or Amazon in about five years" and added, "Consistency, Hard Work and Determination will always help in achieving success."



"Consistency, Hard Work and Determination will always help in achieving





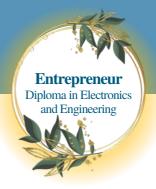


### Praveen S Karane

Age: 22

Years spent with Agastya: 2015-2017 **Background:** 

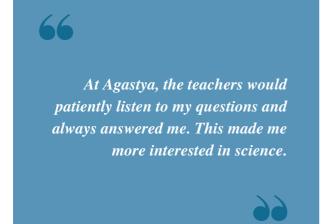
Brought up by Grandparents who run a tailoring shop



# Like a question bank

Prayeen's whole life changed when he lost both his parents at the tender age of ten. He and his younger brother went to live with his maternal grandfather who is a tailor while his grandmother ran the house. They enrolled him in a Kannada medium Government High School in Jalan Nagar, Bijapur, Karnataka in the fifth standard. Having earlier studied in an English medium school, understanding lessons in Kannada was very difficult. His only motivation to attend school was to eat the lunch they provided. However, he was always interested in science and enjoyed fixing electrical and LED lights and repairing mixers at home.

When he was in the eighth standard, Agastya instructors came to his class and gave a presentation about volcanos. Praveen loved the practical way that they



taught and was amazed that they answered his numerous questions. He recalled, "In school I would keep asking from my never-ending question bank and I never got satisfactory answers. Whereas at Agastya, the teachers would patiently listen to my questions and always answered me. This made me more interested in science."

Praveen was so fascinated that as soon as he woke up, he would want to go to Agastya to share his ideas. Sometimes he would even sleep at the science centre. It was Agastya's methods that sparked Praveen's curiosity and actively involve himself. Selected as a Young Instructor Leader (YIL), he presented his work and ideas to Agastya instructors, Nagaraj Sir and Geetha Madam. Both guided him to do more and to develop those interests through more research.

#### **Scarcity stimulates Creative Thinking**

One memorable project that he liked was the Waterless Bath project, that was shortlisted by the Google science fair judges. The idea for this project came from the acute water shortage in Bijapur city, when entire families had to go without a bath for days. This made him seriously wonder how much water our daily activities consumed and how much wasted. Praveen even started questioning why we needed to bathe! He found out that washing cleaned our bodies of dust, bacteria, and dead cells, prevented sores, and helped us feel fresh.





Praveen approached his Agastya instructor to understand what attracted these particles to our bodies. He discovered that static electricity, body chemicals and electrons attracted metallic and non-metallic particles. With the help of Agastya, Parveen constructed a large cabin made of plastic sheets and generated static electricity inside it. When a person went inside, the static electricity would attract all the dust particles and bacteria from the human body. After releasing glycerine, it gave the same fresh feeling one got after a bath.

Praveen realised this idea only because of Agastya's instructors, who guided him every step of the way. They instilled a great deal of confidence in Praveen as they listened to him, believed in him, and encouraged him to develop his ideas. While studying for his Diploma in Electronics and Engineering BLDE'A Polytechnic College Vijayapura, Karnataka, he decided to start his own business in computer sales and services. Agastya played an important role in shaping his

ideas on business. Praveen shared how Agastya's Geetha madam helped him get orders. His first LAN installation was an experiment at Agastya Foundation, Bijapur. Subsequently clients started calling him to set up LAN connections and business was so good that he dropped out of college. He converted his grandfather's tailor shop into an office and recruited school and college dropouts. His company, Techno Support has its head office in Bijapur and manufacturing unit in Malleshwaram, Bengaluru.

Praveen categorically declared that it was only because of Agastya and being a YIL, that he is today the CEO of his own company. The exposure and opportunities that Agastya gave him, opened a new world of entrepreneurship for him.

He conveyed his special thanks and gratitude to Agastya instructors because they were the only ones who listened his ideas while others laughed at him.



"The exposure and opportunities that Agastya gave me, opened a new world of entrepreneurship."







### M Alivelu

Age: 24

Years spent with Agastya: 2009 - 2013 **Background:** 

Parents: Farmers



# The joy of serving others!

High School Vasanadu Andhra Pradesh. She and her brother were more fortunate than other children, because their parents believed in the importance of education. As an ordinary student, she completed all her assignments and maintained average marks in class. This changed when one day, the teachers gathered all the students and explained that Agastya International Foundation would be teaching them the science syllabus in a practical way.

Alivelu was both nervous and excited about this unfamiliar programme and these new people but quickly learnt that Agastya's learning process was so much more fun and effortless. She recalled how her Agastya instructor, Ms Renuka, once took the students out to plant saplings. Coming from a farming family she had

66

My interest in biology was driven by my interest to see, what was otherwise unseen, such as the cell arrangement of an onion peel under the microscope.

Agastya gave me this opportunity and focussed my interests



always felt close to nature, but this activity on 'how planting for nature and agriculture for sustenance go hand-in-hand' and discussions with Agastya instructors gave her new perspectives.

Through the exciting Agastya sessions, Alivelu found herself learning more than what was in the textbook. She really enjoyed the hand-on experiments conducted in front of her eyes which made it easier to understand and learn concepts. "My interest in biology was driven by my interest to see, what was otherwise unseen, such as the cell arrangement of an onion peel under the microscope. Agastya gave me this opportunity and focused my interests," she recounted. After this experiment, Alivelu asked the Agastya instructor to show her what cell arrangements in leaves and humans looked like as well.

Selection as a Young Instructor Leader (YIL), when she was in the eighth standard, changed her life. She understood how to be a leader, to handle people and to improve her communication skills, adding, "Being a leader means to understand the situation and plan how to take myself and my whole team forward and not lag in anything."

During YIL classes if she had any difficulty in understanding a topic, she would raise her hand or call out to the Agastya teacher or wait till the class ended to clarify her doubts. She found this environment vastly different from school and confided, "The atmosphere in



#### TRANSFORMED LIVES



Agastya was so open and joyful, that it never felt like regular school. At Agastya, I wanted to study more and excel more!"

Agastya taught her that there is more than one solution to every problem. She said, "In one of the sessions, the entire class had to come up with multiple solutions to harvest water in our area. We could not repeat a solution proposed by any other group. This made my group spontaneously think of innovative solutions." Alivelu also enjoyed learning and sharing her experiences with other children who were not part of the YIL programme.

Alivelu always wanted to become a doctor to help those around her who were suffering. Agastya sessions further fuelled this ambition. She began to feel that it was important to learn more and score well to achieve her ambitions. Hands-on sessions helped her comprehend lessons better which further motivated her. Her marks in school gradually improved and so did her confidence levels.

This desire to learn more made her pro-active in school too. As time passed, Alivelu realised that "Studying to become a doctor is very costly, and my family could not afford it. However, I wanted to be in the medical field, so I chose to become nurse instead." When her parents arranged her marriage, she thought she would have to give up her career dreams once again. To her luck, her future husband asked her to continue her studies and even helped her complete a degree in Nursing. Today Alivelu leads a happy life serving others as a staff nurse in PES medical college in Kuppum and supporting her family.

Agastya's positive impact changed the way she thought about life, transformed her mindset from being narrow minded to broad minded and helped her understand the bigger picture of life. Just thinking about Agastya, brings a smile to her face. "Agastya allowed me to see what I only heard in school. It showed me practically, whatever I blindly learnt in school. It motivated me to stand on my own feet, build my future and help others. It brought great happiness to me! Thanks Agastya!"



"Agastya motivated me to stand on my own feet, build my future, and help others."







### J A Chandana

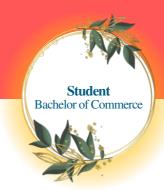
Age: 20

Years spent with Agastya: 2013 - 2017

**Background:** 

Father: Farmer

Mother: Homemaker



# Discipline dictates the future of a person

20 0-year-old J A Chandana is a second year, commerce degree student from IRM Degree College, Kuppam, Andhra Pradesh. Agastya's 172-acre Campus works with about 80 schools within a radius of 25 km in the Chittoor district, to 'impart science education, boost organisational prowess and develop decision-making skills among poor children and teachers in India'. Chandana still remembers when KP school, Santipuram took her seventh standard class to Agastya. The day started with meditation, prayer, and lectures after which they played some videos about human values. Chandana was able to identify and answer what the morals were about. At the biology lab, she enjoyed participating in many activities and experiments.

As a Young Instructor leader (YIL), she greatly benefited from this innovative peer-to-peer learning

I think practical learning is better than reading books, as it helps us to understand and remember the concept.

model that delivers practical, hands-on science education to students. Chandana also enjoyed their talent hunts where students could tell stories, sing, dance or showcase any skill. She benefited a great deal from the experiential, hands-on activities in the monthly YIL sessions, saying "I think practical learning is better than reading books, as it helps us to understand and remember the concept." She solved puzzles which improved her thinking power and learnt how to connect electrical circuits. Another memorable activity was to write or draw what she felt while listening to music. "I did many activities like presenting team projects, collecting plants, and creative paintings." As a YIL she shared knowledge with others as well as encouraged and controlled her team.

#### Relating science to daily activities

She was able to relate science to the daily life of people. While Agastya's instructors answered many questions about science, they also made students come up with many more. She particularly mentioned the candle and cup experiment where a lighted candle goes out if there is no oxygen. It made them ask what other things needed oxygen. What happens if there was no oxygen?

Chandana is so grateful to have experienced this extraordinary opportunity through Agastya. Listening skills, analysis and understanding the concept are some of the core teachings which helped her learn everything with ease.





She was also able to improve her communication, organising and leadership skills. One of the major life lessons Chandana inculcated from Agastya is discipline, with which one can achieve anything that one wants.

Along with building confidence, Agastya encourages many students to overcome stage fright. With her sister, Chandana tutors 20-25 students at home under Agastya's night school programme, Operation Vasantha. Her father who is a farmer and her mother who manages the household, are proud of her. She continually supports her younger brother and sister who are first year degree students with the knowledge she received from Agastya. She utilised her YIL scholarship amount of INR 2,000 to pay fees and purchase books, which impressed her parents, as she did not have to ask them for money.

Chandana would like to do social work, especially educating girls and helping those wishing to achieve something in their lives. For there are so many people who stop girls from pursuing higher education and she would like to counter such situations. that, she said it requires a lot of courage, confidence and discipline and she is eternally grateful that she got all those qualities from Agastya.

Chandana would like to do social work, especially educating girls and helping those wishing to achieve something in their lives. There are so many people who stop girls from pursuing higher education and she would like to counter such situations. For that, she said it requires courage, confidence and discipline and she is grateful that she got all those qualities from Agastya.



"One of the major life lessons I inculcated from Agastya is discipline."

## **Operation Vasantha -**

## **An Evening Community Teaching Programme**

Operation Vasantha program was initiated with the aim of providing a learning support to the underprivileged community. This program operates in the evenings through centers established in villages, where a dedicated community volunteer takes the responsibility of teaching. The program also acts as an after-school learning support to the students and an opportunity for school drop-outs to get back on their education track.











## Udaya J

Age: 22

Years spent with Agastya: 2013 - 2016

**Background:** 

Father: Retail Florist Mother: Homemaker



# I changed my city!

gastya is the only platform, be it for me or for A anybody else, which sharpened our skills and helped us overcome our fears," declared Udaya. This is the mission of Agastya International Foundation - to spark curiosity (Aah!), nurture creativity (Aha!) and instil confidence (Ha-Ha!). As an eighth standard student at Hebbal Government Higher Secondary School, Bengaluru, Karnataka, he and his class visited the Agastya Science Centre where the first thing they did was meditate. It was only after this that the children started an activity related to science. In his ninth standard, he recalled how the Agastya instructor divided the whole class into groups of five and assigned an activity to them. Udaya's group completed the activity successfully and won! Selected for Agastya's Young Instructor Leader (YIL) programme he attended sessions at the government high school located near his school.

I think practical learning is better than reading books, as it helps us to understand and remember the concept.

As a YIL, he participated in a project called 'I change my city' with support and encouragement from his Agastya instructors. The main objective was to fill up potholes and repair all the aspects of the roads. It meant talking to senior people in the government, like the Corporator of the area, Dhanpal Reddy. His Agastya instructor mentored and advised him on leadership, communication and confidence building skills. He managed to organise his entire class for the meeting with the corporator. He was proud to report that the government took about four months to repair the road. After this event Udaya felt that he could talk to anyone if the need arose.

With his newly acquired ability to lead, Udaya was able to make numerous presentations and had no hesitation in asking his teachers about doubts. He particularly remembered a presentation about the precautions needed by a wireman working in BESCOM. His team did very well and received a certificate of participation.

Udaya found that Agastya's way of teaching was very helpful because he was comfortably able to clarify all his doubts. The Agastya instructors would first teach the theory and then demonstrate it practically. This worked so well that he only skimmed through his textbooks during exam time. Udaya also felt that the instructors were pillars of strength to him. When he was confused by a project given by his schoolteacher on the industrial procedure of sugar extraction from sugarcane, Udaya





approached his Agastya instructor for clarity. He not only helped verbally but also used a projector, and the internet to explain the process.

Another major event Udaya participated in, was the Prathibha Karanji festival in Malleshwaram, where he represented his school, His topic was how to extract sodium metal using sodium chloride salt using electrolysis. He got the first prize for his experiment in the first round of the inter school competition. In the second round, Udaya performed another experiment on generating electricity through the power of wind. His working model of a windmill connected to a small generator received the second prize.

Udaya was a normal student who used to score an average of 50-60% in science and mathematics. He declared, "My ninth standard class teacher motivated me to read science as it had a lot of scope, and in parallel,

the Agastya instructors also helped me by demonstrations and videos. To understand how a car battery works, the Agastya instructors would demonstrate how to recharge the battery using sulphuric acid, and how the electrons flowed through the chemicals." When Udaya reached home, he explained this to his family. Both his elder sister and mother were filled with pride seeing him explain things with such clarity.

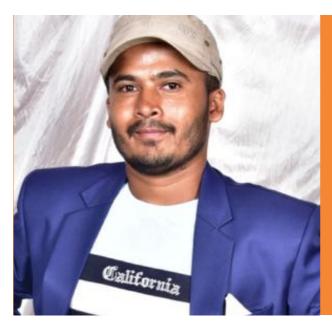
After Udaya finished his tenth standard he received a scholarship for a year, which he used to buy his books and pay for his college admission. Udaya is now 22 years old and has completed his Diploma from Swami Vivekananda ITI, Vijayapura, Karnataka. Everyone knows that Agastya's sessions are very effective, so he wishes that Agastya International Foundation could increase their engagement with students to two or three sessions a week.



''Agastya is the only platform, be it for me or for anybody else, which sharpened our skills.''







### T Thirumala

Years spent with Agastya: 2008 - 20109

**Background:** 

Father: Farmer

Mother: Homemaker



## A linguist with a desire to teach!

<sup>T</sup> n those formative years of my life, Agastya  $m{I}$  instructors nurtured me to become who I am today. Looking back, I feel that at the time I needed that care and support. I can never be thankful enough to Agastya who gave me attention and direction when I was feeling lost," declared Thirumala. A regular linguist, Thirumala speaks seven languages, viz. English, Hindi, Kannada, Telugu, Tamil, Malayalam and Urdu. "Ever since I was small, I was very curious to learn languages. If anyone around me said something which I did not understand, I would become very restless till I was able to understand."

Thirumala first visited the Agastya Creativity Campus when he was in the third standard in Zilla Parishad Prathmik Pathshala, Andhra Pradesh. He recalled that it



Teaching others made me very happy and helped in building my confidence and overcoming my fears. I do not think I would have done this without the encouragement from the Agastya instructors.



was like a park where children went for fun, team games nature walks, doing activities in the math lab, etc. After that, he and his classmates always asked their teachers, when they would visit the campus next.

He became a Young Instructor Leader (YIL) while studying in the seventh standard at Zilla Parishad High School, Sanganapalli, Andhra Pradesh. There the instructors asked the students to explain topics that they had already learnt from their science and math syllabus to the rest of the class. He recalled "I was one of six students from my class of 52 who explained very well and thus became a YIL. That initial bus ride to the Agastya campus was the start of my journey to becoming a leader." In the YIL lab, he experienced meditation for the first time, "It was so quiet and soothing, that I could feel the wind in my ears while sitting in the lab which was on top of a hill. I had never felt that calmness before," recalled Thirumala. He immediately felt relaxed and calm when recalling the experience, "See! Even remembering it now, is making me feel so good."

#### **Learning through teaching**

He was delighted to meet many students from different schools on campus. Different groups did diverse science experiments. His first activity was how to make his own litmus paper using turmeric, hibiscus flower, etc. He was amazed to discover that common items used in daily life were acidic or basic in nature. When the Agastya instructor asked who wanted to explain the experiment, Thirumala raised his hand.



#### TRANSFORMED LIVES



"I was very scared but remembered the selection day when they told us not to be afraid of making mistakes. I fumbled and forgot but completed my explanation with the help of the Agastya instructor. Though I made mistakes, the instructor encouraged and appreciated me," he narrated.

Thirumala admitted to being a naughty child who could not remember what he had learnt while writing his exams. His schoolteachers would complain, 'He is not doing his homework' or 'He is not studying in class,' etc. He laughingly added, "My exam marks were like telephone numbers, 6,3,7,5." It all stopped when he got to the seventh standard and started learning science practically. "Agastya instructors gave me a lot of love, care and encouragement. I was able to remember because I was learning practically and then teaching it to others," he said. Thirumala lost his mother when he was 11 years old and lives with his father who is a farmer, in Peddaparthikunta village in Kuppam, Andhra Pradesh. His father became hopeful about his future, after seeing the improvement in his academic performance. As a YIL, Thirumala started teaching his juniors as well as other adults in his village. He helped students with their homework and explained difficult topics. He taught adults how to book gas cylinders for

a refill, how to call the police and new types of farming techniques, among other things. "Teaching others made me very happy and helped in building my confidence and overcoming my fears. I do not think I would have done this without the encouragement from the Agastya instructors" says Thirumala.

He graduated in Mathematics, Statistics and Computer Science from Dravidian University, Kuppam, Andhra Pradesh and later obtained a master's degree in Computer Science from the same University. Agastya gave him an annual scholarship of INR 1,500 for his eleventh and twelfth standards, which increased to INR 3,000 during graduation and INR 5,000 for his masters. It purchased books and paid for travelling to college. 26-year-old Thirumala is now working as a Software Test Engineer at Patrol One Solutions in Bengaluru.

He continued attending Agastya sessions, until his tenth standard and will always be grateful to Agastya instructors for guiding him in career choices as he had no one in his family who could do this. He too wishes to help Agastya financially when he gets more settled in his life. He loves interacting with people and hopes he would be able to take one YIL class and teach current YILs if given the opportunity.



"I can never be thankful enough to Agastya who gave me attention and direction when I was feeling lost."







## Young Instructor Leader - A Holistic Development Programme

The Young Instructor Leader (YIL) Programme plays a vital role in redefining the conventional dynamics between teachers and students, as well as among the students themselves, through peer-to-peer learning. The students not only receive knowledge but also actively teach their fellow students, creating a highly interactive environment. In addition to peer-to-peer teaching, the students engage in team-building activities, organize science fairs, and visit communities to share their learning.

The three-year flagship programme of Agastya, empower the students with a holistic development, including the enhancement of communication and leadership skills.



Exwessive delay





### **Gnana Kushwanth**

Age: 21

Years spent with Agastya: 2012 - 2015

**Background:** 

Father: Farmer

Mother: Homemaker



# Winning prizes for being cool!

nana Kushwanth is 21 years old and currently pursuing a bachelor's degree in technology and computer engineering at the Rajiv Gandhi University of Knowledge and Technologies, Kadapa district, Andhra Pradesh. He is the only child of his father who farms for a living and his mother who runs the house.

When he was in the sixth standard in the Zilla Parishad High School, Kuppam, a motorbike came roaring in. It was Agastya International Foundation's Lab on a Bike, which had simple hands-on experiments that teach scientific concepts easily, with a laptop, internet, and access to language-neutral science videos, quizzes, and more. He was excited and curious to see the working and uses of so many different types of equipment. Agastya instructors taught them about robotics and Gnana fell in love with machines, electrical equipment and motors!



I did not know what to do!
Fortunately, Agastya organised a
career guidance session, where I
learnt about the other streams of
engineering.



On their second visit, hands-on learning techniques made math simple. By playing with math puzzles, geometric models, and paper folded into recognizable shapes, he learnt how math helps practically. The instructors taught him formulas to find the perimeter, area and volume of various objects (rectangle, square, sphere, etc.) which he still remembers even today.

#### **Turning limitations into strengths**

He credits the Young Instructor Leader (YIL) programme with developing his abilities so that he became a leader both in school and college. "The main advantage of Agastya is that they help us to understand what our strengths and weakness are. They assist us to develop our strengths or turn our limitations into our strengths" he opined.

He and his fellow YILs planted trees in the school compound and his village. The school authorities were very impressed by his actions and appreciated his good work. Now, whenever he gets time, he goes to his school to see those trees and never forgets to water them. Agastya is the reason he became socially conscious as they created a sense of awareness on why we should protect nature.

He also made posters to create awareness about various diseases, precautions, medications, etc. He attended Agastya's 20-day Summer Camp where he saw different models and experiments in various labs.





They promoted creative thinking and problem-solving skills as well as improved learning outcomes. He recalled, "The most interesting factor is that the instructors are always accessible. If students have any doubts on any topic, they can ask the instructors without any hesitation." The instructors asked them to write their doubts on a piece of paper and during the question-answer session, they would patiently read all the questions and answer them. They satisfied the innate curiosity that children have to ask many questions.

Agastya also improved his creative ability. He made a headlight for a motorcycle using a dynamo. In 2018 at the Jignyasa Science fair, he used a wooden box with a hole in the front and placed cold water inside it. Behind that, he placed a fan. When the fan turns on, cool air comes out of it. When this low-cost AC received first prize, he was very happy. The previous year he presented a hydraulic power generator at Jignyasa with a turbine and a motor pumping water. The flow of water rotated the turbines converting mechanical energy through a generator into electrical energy which lit up a bulb.

He found the instructors in Agastya friendly and creative. They used models, activities and experiments to make classes fun, interactive and interesting. In school, however, reading and understanding books and notes was very boring and difficult. In his tenth standard, he scored 10/10 on his science test and got good marks in physics and math. He reiterates that it is Agastya's methodology that fosters creative thinking, helps to apply knowledge, kindles curiosity and allows children the liberty to ask questions anytime and anywhere. In college, he confidently organised a three-day health camp, thanks to Agastya's training.

He utilised his scholarship of INR 2,500 per year for buying books during his pre-university. His short-term goal is to work hard, graduate and get a job. "I wished to be an Aeronautical engineer but could not find a college offering such a course. I did not know what to do! Fortunately, Agastya organised a career guidance session, where I learnt about the other streams of engineering. I finally chose a bachelor's degree in technology," he recalled.



"They assist us to develop our strengths or turn our limitations into our strengths"







## T Harsha Raj

Age: 22

Years spent with Agastya: 2013 - 2017

**Background:** 

Father: Construction labourer Mother: Tailor



# Cricket as much for girls as for boys!

Harsha's journey with Agastya started when he became a Young Instructor Leader (YIL) in the sixth standard of the Government High School, Santipuram, Chittoor in Andhra Pradesh. When he first visited the Agastya campus in Kuppam, he loved its greenery and architecture. "It was the most beautiful place in Kuppam!" he declared.

The teaching methodologies used by the instructors, made everything easy to understand. He remembered activities with acids, bases and salts, and experiments on light incidence, refraction, and reflection. The hands-on participatory methods made him curious about everything and kept him interested in learning more. He began carefully observing the changes happening around him.

66

I did not know what to do!
Fortunately, Agastya organised a career guidance session, where I learnt about the other streams of engineering.



Through participation in new and unique activities at Agastya's robotics and art workshops he enjoyed learning. He recalled, "I particularly remember the ball picker robot, where the colour sensor fixed in the eyes of the robot, first identifies the ball colour and then picks up the ball as per the command given. This was fascinating as I was seeing something like this for the very first time." Harsha loved every session with Agastya because he developed insights into various topics, "Earlier I use to mug up all the questions and answers but after Agastya, I started understanding concepts."

"Discussions were common during Agastya sessions," said Harsha. He remembered talking about cricket being a game that only boys played. The students were then asked to paint the game, using their imagination. Harsha painted a cricket field with a girl sitting there, wondering why nobody was including her in the game. After the paintings were discussed, he suggested that they involve girls of the class in a game of cricket as well. He was encouraged by the Agastya teachers and told to share it with other children. Such motivation helped him develop leadership skills and confidently seek help without fear. Harsha also made sign boards on traffic safety.

YIL team building activities like 'who is the leader, material finding, breaking the pot, etc. helped him develop leadership qualities and take up various roles and responsibilities without hesitation.



#### TRANSFORMED LIVES



He asserted, "I was unaware that I could guide children studying in lower classes and lead them during playtime. I would never have discovered this, had Agastya not given me the space and opportunities to do so."

The books on campus always made him curious and he creatively made his own storybooks with new knowledge from the Agastya library. "I used to like reading story books and at the same time hated the books which did not have drawings. So, I made my own drawings for a story called Lion of the Jungle," said Harsha.

He replicated the simple and low-cost experiments in the chemistry lab, both at school and at home. "I was able to clearly understand the acid, base and salts testing experiment and also demonstrated it in my home," declared Harsha. Harsha, along with other YILs, visited the post office and milk dairy. Such visits made him realise the problems that people faced, such as not knowing the services offered by the post office. Along with his classmates, he enquired about the procedure to save and deposit money for children (Sukanya Samruddhi Yojana) and shared that information with neighbours and friends.

He and his friends also took initiative to clean the interiors of a bus. After being a YIL, Harsha said he felt confident and strong to solve problems at home, school, and college.

T. Harsha Raj is now 22 years old and lives with his father who is a construction labourer and his mother who does tailoring from their home. She too brings in an income from stitching orders for people in their neighborhood. Currently doing his fourth year of Bachelor of Technology in Computer Engineering from Kuppam Engineering College, in Andhra Pradesh, Harsha wants to find a good job and become successful in life by making the most of his engineering education.

After passing tenth standard, Harsha visited the Agastya campus and found that he still loved it as it keeps growing. He said, "On a visit, I saw many new buildings had been constructed, trees had grown bigger, teachers had changed, and the campus looked even more beautiful." Harsha considers that the faculty at Agastya play a critical role in reaching out to students and making them productive. He believes that the experiential teaching methods and the comfortable environment built for sparking curiosity and creativity, are the cause of the success of Agastya and the students.



"Discussions were common during Agastya sessions."







### K Upendra Kumar Naidu

Age: 20

Years spent with Agastya: 2012 - 2017 **Background:** 

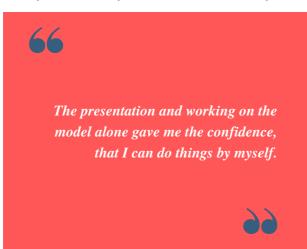
Father: Farmer



## **Directing traffic!**

20 -year-old Upendra declares, "Agastya is a place for Innovative Learning because they give importance to and spark students' ideas. They also have all the equipment to support these ideas and fulfil them." Visiting Agastya's Kuppam campus was one of his fondest memories where he was amazed to see so many different scientific models and experiments in so many different labs. He loved how the sessions at Agastya would always start with meditation.

Upendra described one of the activities he did at Agastya. He demonstrated a 'ray of light' using candles and cardboard. "This way of learning was very new to us as it never happened in our school. I felt very happy about learning science in a practical manner as it was my favourite subject," said Upendra. Even though nobody in his family understood science, they were



happy about his excitement at being a part of Agastya.

When he was in the eighth standard at Zilla Parishad High School, Dandikuppam, Andhra Pradesh, Upendra became a Young Instructor Leader (YIL). His visits to the Agastya campus increased to twice a month. The instructors there split the YILs from various schools into two groups. Each group went to different labs in the first half of the day and interchanged with the other group for the second half. So, Upendra was able to spend the entire day on campus. He remembered participating in an exhibition, where with the props consisting of working traffic signals, models of cars converging at a junction, small human figures and traffic police to control the traffic, he explained the rules of the road. Many school students were present to observe and learn more about his model in the exhibition. "Creating the whole model was an achievement. Where I had difficulty, I asked my Agastya instructors. The presentation and working on the model alone gave me the confidence, that I can do things by myself' Upendra proclaimed.

Upendra's schoolteachers knew him well as they had taught him for around eight to nine years continuously. Considering that the instructors from Agastya only interact for around three years, he was astonished at their welcoming attitude, efforts and dedication. The main difference however was that Agastya instructors gave them practical insights into all the subjects. Upendra loved the Robotics lab and even built small robots like an automatic dustbin and remote-controlled car.



#### TRANSFORMED LIVES



The robotic manual in the lab assisted while the Agastya instructors guided him.

In his ninth standard, Upendra and his fellow YILs took up the initiative to create awareness about reducing plastic usage. With permission from his schoolteachers, on behalf of Agastya, Upendra painted messages on the school walls.

As YILs visited Agastya more often than the normal students, Upendra would explain to students visiting the campus, everything he had learnt earlier as a YIL. "It was only because of activities in which I had participated in Agastya, that I was able to inculcate some important skills in myself. Thanks to that, I was able to go on stage, speak in seminars and also be a member of the choir in both school and college." Even recently, he served as Captain of his class and was responsible for communication between his lecturers and his classmates. Fond of outdoor games and more specifically volleyball, Agastya also opened up other avenues. "The Agastya instructors encouraged us to participate in dance and other cultural activities just

after the lunch session, to change our mood." Due to this dance became a hobby of his.

Upendra was always interested in science and scored high marks therefore, he opted for Biology, Physics and Chemistry in his intermediate. He got into Mahathi College of Pharmacy in Madanapalle, Andhra Pradesh for his degree as he secured a good rank in the Engineering, Agricultural and Medical Common Entrance Test. After he graduates, he aims to become a Doctor in Pharmacy. This young son of farmers hailing from Santhur village of Santipuram has very clear goals!

Upendra was always interested in science and scored high marks therefore, he opted for Biology, Physics and Chemistry in his intermediate. He got into Mahathi College of Pharmacy in Madanapalle, Andhra Pradesh for his degree as he secured a good rank in the Engineering, Agricultural and Medical Common Entrance Test. After he graduates, he aims to become a Doctor in Pharmacy. This young son of farmers hailing from Santhur village of Santipuram has crystal clear goals!



"Agastya is a place for Innovative Learning because they giveimportance to and spark students."







## Nandini Chalapati

Age: 18 years
Years spent with Agastya: 2015 - 2019
Background:
Father: Farmer



## Germinating like a plant!

Tandani was studying in the sixth standard at the Zilla Parishad High School when a yellow bus transported her class to Agastya's Campus. Amazed by the scenery and greenery, Nandini recalled how eagerly she wandered around, looking and observing. She was very quickly drawn towards the chemistry lab, where she got some practical, hands-on experience on doing a few experiments, something she did not get to do in her school. Nandini could understand the subject better when it was explained by the Agastya instructors because, in her school, teachers only taught theory, whereas at Agastya they provided her with practical demonstrations of the same topic. This was the beginning of Nandini's association with Agastya, which lasted for five years of her schooling, from her sixth to tenth standard, during which she studied in Zilla Parishad High School.

Agastya is the only place where one can acquire a precise and polished experience of leadership quality.

Nandini's school would try to send them to Agastya once or twice a month, so that they could gain experience from activities. She was most interested in plant germination, as the daughter of a farmer, and wanted to learn how to nurture growing plants. She started a project by first collecting soil in different sized pots in which she planted a variety of seeds. Nandini watered these plants daily and she recorded data based on the growth pattern. Agastya instructors taught her how to handle different chemicals and how they reacted with others.

#### **Skill Oriented Activities**

Agastya instructors created groups of five students each and assigned tasks to them. She led her group in the chemistry lab where, each of the members in the group were given different acids and asked to observe the reactions and the final outcome after mixing any two of the acids. She stood tall by performing all the chemical experiments successfully.

Nandini feels that all the top-notch skills which she has acquired today, she got from those activities. The most important skill she gained from participating in the Young Instructor Leader (YIL) activities was that of leadership. The group activities were especially beneficial because when students were segregated and grouped, everyone did not understand all the topics. It was here that she found an opportunity to explain topics to her group members. By explaining to others, she thinks it is advantageous to her because, the topic



#### TRANSFORMED LIVES



becomes clearer and remains with her for a longer period of time. Even after she left Agastya, she continued to explain topics such as, thermodynamics and Newton's Laws.

18-year-old Nandini is the daughter of a farmer and is presently completing a BBA degree. After her tenth standard, her interests deviated towards business studies, because her elder brother who was an MBA graduate in finance was there to help her. Nandini found a huge difference between she and her friends in the BBA course in terms of confidence.

She finds it very easy to present at seminars and can handle crowds without a hint of stage fear. She easily presented a 10-minute-long talk on microeconomics, in her college auditorium, in Dravidian University, Kuppam. Her friends, however, struggle on the stage even when presenting a simple one-minute topic. This confidence came from her time with Agastya. When it comes to improving Agastya's YIL sessions, she thinks that the sessions should be taught in both English and Telugu, and not entirely in English. She concluded, "Agastya is the only place where one can acquire a precise and polished experience of leadership quality."



Agastya is the only place where one can acquire a precise and polished experience of leadership quality.







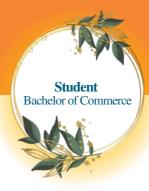
## Lavanya Raghunath

Age: 19

Years spent with Agastya: 2015 - 2020

**Background:** 

Father: Tailor Mother: Labourer



## **Sharing knowledge!**

ith an innate love for reading and exploring new opportunities, 19-year-old Lavanya is in the 2nd year of a commerce degree at R C College, Bengaluru, Karnataka. Her father is a tailor and her mother is a labourer at Provimi Animal Nutrition Private Limited, Doddaballapur. Her younger sister is doing her preuniversity at the Government PU College, Yelahanka.

According to Lavanya, many students like herself experienced the positive impact of Agastya. Most government schools did not have a laboratory and therefore the majority of students had no clue about scientific experiments. The Agastya instructors, Transformed Lives ly Mahesh and Prashant, were generous and patient, guiding and answering all her doubts with practical examples. Lavanya emphatically proclaimed that the



If we do not communicate information, it is of no use! We should share knowledge with the world for the mutual benefit of both self and the world.



Agastya instructors played a critical role in teaching her science as well as instilling important qualities in all students. They encouraged them to participate in many activities and aired motivational films. Lavanya's communication skills improved as she taught her classmates and other students about various science experiments. This brought about a huge change in Lavanya, as it helped her overcome her shyness and stage fear.

#### **Knowledge Received must be Shared**

Lavanya became a Young Instructor Leader (YIL) while in the eighth standard at Yelahanka Bangla School in Bengaluru, Karnataka. Lavanya will never forget the day she demonstrated a volcanic eruption using baking soda, washing liquid, and vinegar. The Agastya instructor praised Lavanya and she felt very proud. Another favourite experiment was the Litmus Paper Test because she was fascinated by how a simple paper can change colour due to an acidic reaction. Models of the human body awed her. For the first time, she saw a nine-monthold baby in the womb while the Agastya instructor explained the different stages of prenatal development and patiently answered questions.

She vividly remembers the 'Potato Powered Light' where the potato acts as an electrolyte that enables the electrons to flow through it. When a circuit connects a nail, coin and potato, the chemical energy converts to electrical energy with enough power to turn on a small light.





Her YIL scholarship of INR 2,000 paid her examination fees and bought her books. With the help of Agastya's teachings and the lessons she learnt in school, Lavanya acquired good marks in both school and college. Thus, she only paid 50% of her fees for which Lavanya will always be grateful to Agastya. Lavanya has learnt a lot from Agastya and reiterates that the most important learning was that of sharing her knowledge with others. She found peer-to-peer teaching exhilarating and believes that it is an important exercise to move forward in life. Lavanya stated, "If we do not communicate information, it is of no use! We should share knowledge with the world for the mutual benefit of both self and the world."

When Lavanya was in the tenth standard, she along with her sister, taught maths and science to primary class students. During this time, she wanted to make the children aware of the importance and benefits of trees and also encouraged them to plant trees in their homes. The Agastya instructors inspired her and supported her during her awareness initiative. Another programme she embarked on was when she found that people in her village did not segregate wet waste and dry waste.

According to Lavanya, many children complained that Agastya was not coming to their schools. When Lavanya talked about the development that Agastya had brought about into her life, her friends told her that they too would like to experience the brilliant hands-on teaching methodology. Agastya is helping children perform well academically, as well as making them socially responsible by engaging them in activities to keep the surroundings clean, and to respect the differences seen in people, culture, language and gender. According to Lavanya, every child that comes out of Agastya is well aware of what they should do in their lives and for society. Hence, she hopes that many more children must benefit from the functions of the Agastya International Foundation.

She also said that the COVID-19 pandemic has brought new changes to the education system as well as society and that she would like to be part of any new and innovative initiatives that Agastya develops for children. Lavanya continues to be in touch with Agastya International Foundation. She said, "It has been eight wonderful years as a student and now as an alumnus."

Lavanya could not graduate in Computer Applications and become an expert in ethical hacking as she had not opted for maths in her pre-university. However, she said, "I wish to work in a reputed company as that would make my parents happy and at the same time, I will be improving my standard of living. Also, I am sure of qualifying to be a part of a multinational corporation once I complete my MBA." She continues to be grateful to the friendly supportive instructors who were easy to approach and who helped her fulfil many of her hopes.



"It has been eight wonderful years as a student and now as an alumnus."







### V K Bhaskar

Age: 21

Years spent with Agastya: 2012 - 2017

**Background:** 

Father: Farmer

Mother: Homemaker



## A well-rounded person!

haskar is presently 21 years old and has completed his Bachelor of Arts in Accounts, Statistics, and Statistics and Computer Science from Sri Venkateshwara Arts College which is located in Tirupati. He admits he owes much of his achievements to his rich association with Agastya International Foundation, which began when he was in the sixth standard in Zilla Parishad High School, Vasanadu, Chittor. He became a Young Instructor Leader when he got to the eighth standard. He recalled, "I was on the merit list of our class after the seventh standard, so I was selected."

Bhaskar fondly remembered his very first visit to the Kuppam campus. As soon as they entered the campus, the instructors greeted them and made them feel welcome.



I thought my life was limited to my village and my school, but when I stepped out of my comfort zone to get a higher education, the skills I acquired from Agastya played a major role.



They divided their class into batches and sent them to different labs such as the Discovery lab Gurugruha lab, Science labs and others. Bhaskar's group went to the Robotics lab, and he vividly remembered, "That first day, the instructors allowed me to observe various models of robots. After that, I made a model of a robotic car under the guidance of the instructor. At the chemistry lab, I did experiments on acids and bases which were related to my school syllabus." When he reached home that evening, Bhaskar told his parents and sister about his visit. They were very happy and his elder sister even expressed her wish to visit the Agastya campus.

Bhaskar found that the way Agastya's instructors taught was impactful, as compared to his schoolteachers. This was because his school did not have enough equipment or apparatus in their lab to support scientific studies. Bhaskar observed that Agastya is a well-oiled organisation that focuses on science subjects, and all the well-trained instructors explain concepts clearly to students.

As a YIL gave Bhaskar got many opportunities and learnt important skill sets. He said, "I was working in a group on an experiment on the topic of friction. I had taken the initiative to lead the group and not only complete the task but also explain the strategy to everyone in the group. I also received inputs from other group members as well, and in the process, I also learnt communication skills."



#### TRANSFORMED LIVES



Bhaskar also represented his school in inter-district level competitions in science exhibitions. When he was in the eighth standard, he prepared a small model to demonstrate during his solar system presentation. Another topic that he talked about was nutrition, when in his ninth standard. He explained what a person should consume in a day to maintain a balanced diet. He stated, "After participating in these exhibitions, I understood that I had to improve a lot in many fields. Such events helped build up my confidence."

"I thought my life was limited to my village and my school, but when I stepped out of my comfort zone to get a higher education, the skills I acquired from Agastya played a major role. Initially, I was an introvert and never stood up to ask questions as I thought they would ask some other questions back to me. But after I attended Agastya's YIL sessions I gradually turned into an extrovert and my attitude towards everything changed," declared Bhaskar. He was not just a person who only read books and was good at his studies, but also excelled in sports. He won medals in various events including four times at the inter-district level and thrice at the school level. He was unhappy when his school stopped

Agastya's campus visits when they reached the tenth standard as they had to prepare for their board exams. He said, "I think it would have been better if we had continued studying at Agastya as it would have helped us in scoring higher marks because hands-on learning helps in better understanding the topics."

According to Bhaskar, Agastya is a place where anyone can find the equipment and means to support their ideas. The staff too care about and treat every student as their own. Bhaskar added "Nowadays even in schools, there is no time for games and fun but this is not the case at Agastya. As soon as students enter the campus, instructors allow them to meditate and during or after lunch they conduct sports events to keep them active throughout the day. Agastya gave me all-round knowledge of not just science topics but also how to conduct one's life." Bhaskar was not keen on studying science as he did not score well in his tenth standard board exam. After opting to study social sciences instead, he would like to get a job in a government bank and is preparing for the same. He thinks, working in a bank as a Probationary Officer (PO) or Manager will bring stability to his life. This is quite a leap for the son of a farmer and homemaker.



"Agastya gave me all-round knowledge of not just science topics but also how to conduct one's life."







### **Subramany R**

Age: 22

Years spent with Agastya: 2014 - 2016

**Background:** 

Father: Farmer

Mother: Homemaker



## An army man!

Subramanya's schoolteachers enthusiastically introduced Agastya International Foundation to the seventh standard students at the Government High School, Doddaballapur, Karnataka. They explained that Agastya would vastly enrich and amplify their scientific knowledge through experiential methods. Punctual and a little shy, Subramanya loved going to school as he was interested in learning and did well in his exams too. Very excited about this new journey that he was becoming a part of, he declared, "Math and science are difficult subjects! Since Agastya was there to teach science, I was prepared to make the most out of this opportunity."

Subramanya and his friends were in total shock when they first saw Agastya's Science Centre. They were fascinated seeing the huge campus, the infrastructure,

66

Agastya is doing a great job by helping government school students and underprivileged students excel in academics as well as helping them build skills.



science labs, and the serene, beautiful environment. In subsequent visits, he spent time visiting the art gallery, the butterfly park, the square wheeled cycle and trying to absorb all the new experiences. He exclaimed, "It was not at all like our school. They had so many models and experiments which until then I had only read about in textbooks. It was very different from how school taught us."

New to this dynamic, hands-on, science-based education, Subramanya enjoyed every one of his visits. He learned to perform experiments, to understand concepts and how not to study by rote. "Our school practised theoretical ways of teaching and we just learnt from books. But we suffered when trying to remember what was in the book. Agastya changed this for us. With their strong visual and experimental components, the lessons stuck in our memory." He was happiest when he to performed activities on his own. At home too, he would experiment as much as he possibly could and fixed small electric problems there. He saw this as a revision for all that he was learning at Agastya.

At first, shy Subramanya struggled to work with others. He did not communicate much and kept quiet most of the time. After a few interesting and fun sessions, he began actively responding and conversing with everybody. He confidently asked questions and cleared his doubts with the instructor. Once his team leader chose him to explain oscillatory motion.



#### TRANSFORMED LIVES



He recalled feeling nervous about speaking in front of the whole class. When he saw his classmates speak, he too gained courage and explained, "A pendulum is a weight hung from a fixed point and allowed to swing freely in oscillatory motion. According to Newton's laws, it shows that a body in motion is at motion and an object at rest stays at rest until disturbed by any external unbalanced force." Even today he is proud that he successfully presented without letting on that he was nervous.

Subramanya credits Agastya for his gain in confidence and development of self-esteem. With coaching from Agastya instructors, he participated in different competitions, debates and science fairs conducted by his school and spoke confidently without stage fear. Always interested in math and accounts, Subramanya is currently doing a bachelor's degree in commerce at Ramnarayan

Chellaram College of Commerce and Management, Bengaluru. He had to work part time while simultaneously attending college to fund his degree. In those tough times, he would remember Agastya and school days when he spent days learning science without a care in the world. Subramanya applied to join the Army as he dreams of becoming an army officer. While waiting for the results, he immersed himself into agriculture in his village.

He would like Agastya to start teaching in English and provide better quality material for experiments. "Agastya is doing a great job by helping government school students and underprivileged students excel in academics as well as helping them build skills like confidence and communication which enhances their lives. I sincerely hope this organisation will be able to help many more students."



"I sincerely hope this organisation will be able to help many more students."







#### Shweta Hosamani

Age: 22

Years spent with Agastya: 2012 - 2021

**Background:** 

Father: Accountant Mother: Homemaker



# Helping others with no expectations!

22 -year-old Shweta is in the third semester of a post graduate distance education degree in in commerce from KLE's JG College of Commerce, Vidyanagar, Hubballi, Karnataka. She is also working at Existential Private Company as an Application Development Associate. She lives with her father who is an accountant, and her mother who is a housewife. In her free time, Shweta likes to sing and read novels.

Shweta studied in KGS, a rural girls' school in Nulvi village, Hubballi, Dharwad district, Karnataka and she recalled, "When I was in the seventh standard, instructors from Agastya International Foundation conducted many science activities. It was the first time any of us had ever seen scientific apparatus. Later they asked us to do the same activity and demonstrate it to

others. I volunteered and not only conducted the activity but also explained the concept to the students present. This gave a massive boost to my confidence levels and leadership qualities. From the initial days, I was very happy to be a part of Agastya." Shweta also loved exploring the Agastya Science Centre Campus in Hubballi, and happily participated in the multiple activities there.

From the many diverse activities which included solar, bottles, straw or robotic experiments, Shweta particularly remembers one with light. She was amazed, "Seeing how light behaved, especially image formation in lenses and mirrors was fascinating. It was really difficult for me to understand these concepts as our school did not show us any experiments. From that moment, science looked easier to me,"



While attending Agastya sessions I started to talk more about its activities to my friends and classmates and in the process, my confidence increased.



#### Instructors who are also friends

According to Shweta, Agastya's instructors were different – they asked students to come forward and ask questions and clarify even silly doubts. After observing them, she went out and helped neighbourhood students with their science lessons and boosted their interest through peer-to-peer teaching. Shweta enjoyed all the sessions conducted in the Young Instructor Leader (YIL) programme and took a particular interest in the 'Pick and Speak' activity, which helped her build self-confidence and removed her stage fear. Like many of her peers, Shweta firmly believes that the YIL programme was a blessing in disguise.



#### TRANSFORMED LIVES



She noticed considerable changes in her academic performance and personality. She stated, "While doing science activities I started asking many questions to the instructor and my school teachers, to learn as much as I could. I also liked to explain to my friends, concepts that I had learnt which helped me attain mastery over such topics." Shweta also volunteered her time in her community by raising or by joining awareness programmes about the environment and road accidents.

She gained many skills during her YIL training in Agastya. She explains, "While attending Agastya sessions I started to talk more about its activities to my friends and classmates and in the process, my confidence increased. By doing the leadership activities my stage fear disappeared, my discipline improved, and I became courageous. With the increase in confidence, I also started to communicate better, and

I began to help others without any expectations in return." Shweta particularly remembers her interaction with the founder of Agastya who motivated her about her career. She congratulated Agastya on doing a great job to uplift children all across the country. "Without Agastya, I would never have had the opportunity to learn correctly. Agastya taught me how to learn effectively and how to use science in our day-to-day life."

Without Agastya, I would have missed out on this vital knowledge. I would not have been the confident person I am today," Shweta emphatically stated. She wants to associate with Agastya through internship programmes and help other YILs. Shweta declared, "The YIL programme is an excellent opportunity as children will develop more skills and it will help build their careers. For government school students, this is the perfect programme to build their knowledge and calibre so they must utilise such opportunities."



"Without Agastya, I would have missed out on this vital knowledge."







#### Shravani R

Age: 22

Years spent with Agastya: 2010 - 2015

**Background:** 

Father: Farmer

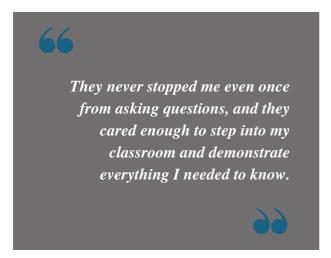
Mother: Homemaker



# The complete package!

D uring her summer holidays, just before entering the eighth standard, Shravani and her cousin had a wonderful time at Agastya International Foundation's summer camp! For her, a camp meant lots of fun and good things to eat. They were amazed when the instructors at the camp taught science through fun activities and also showed them how to make models.

When she was in the seventh and eighth standards, science subjects were not taught as individual branches of Physics, Chemistry and Biology. It was the Agastya instructors who explained the three main divisions of physical, life and earth science. She thus understood, "The gravitational laws put forward by Sir Isaac Newton are taught under physics which was a sub-division of physical science."



#### Science broadens perspective

Her father transferred Shravani from a private to a government school. Being a government higher primary teacher himself, he was well acquainted with Agastya's philosophy and its practical ways of teaching. He wanted his daughter to experience the Agastya way of education as he believed it would greatly impact her future.

An Agastya science centre was located just beside Shravani's new school Sarvodaya Higher Primary School, Tumkur. She began attending sessions there every month and soon became very comfortable with all the faculty members. Shravani enjoyed attending Agastya's practical hands-on teaching, unlike the theoretical methodology used in both her previous private school and current government school. "Whenever I had any doubt about a topic, I would go to Agastya instructors without any hesitation. They used to encourage everyone to ask questions," she explained. Shravani's view was that the Agastya instructors put themselves in the shoes of the students when clearing their doubts. As a result, the students easily understood the topics. She shared an incident, "I had difficulties regarding the different types of lenses, so I approached the instructors during my leisure period to clarify my doubts. They never stopped me even once from asking questions, and they cared enough to step into my classroom and demonstrate everything I needed to know about convex and concave lenses. Ever since then, my favourite topic in physics has been lenses!"





While she continued to adjust to her new school environment, the Agastya instructors encouraged Shravani and her classmates to do activities that enhanced their cognitive abilities and that could help them become team players. Once the instructors gave her entire class a piece of paper and told them to create anything they wanted within a limited time period. Shravani wanted to make a bridge but was unable to complete the assignment in the time given. The instructors helped them understand that they could have completed their tasks if they had worked in groups. After this, Shravani ensured that she joined groups for various activities and in this way, learnt how to complete tasks and assignments on time.

Agastya's classes nurtured and encouraged Shravani's interest in Life Sciences. She opted to study Biology for her pre-university as she wanted to pursue a career in Agriculture.

Due to a low score in the Common Entrance Test, she settled for Horticulture as her major, which was close to what she wanted to do. Shravani is currently in her third year of a bachelor's degree in Horticulture from the College of Horticulture, Tamaka, Kolar. After graduation, Shravani hopes to complete her Masters in the same field and then find a job as a college lecturer.

According to Shravani, Agastya is a student-friendly place where one can learn any subject. She believes a student's thinking ability and grasping capacity are at their peak when they are in the primary and higher primary stage of their studies. Therefore, along with the normal curriculum, Agastya focuses on honing numerous other skills like creativity, curiosity, confidence building, team spirit, and leadership, amongst many others, which students need to succeed in life. Hence, she urges everyone to gain skills with Agastya, who offers 'The Complete Package.'



"Whenever I had any doubt about a topic, I would go to Agastya instructors without any hesitation. They used to encourage everyone to ask questions."







#### Subramanyam Gari Govindarajalu

Age: 22

Years spent with Agastya: 2006 - 2015

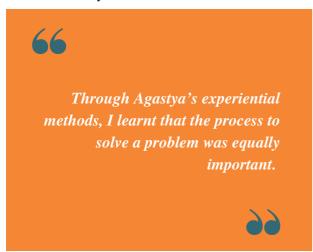
**Background:** 

Father: Dairy business Mother: Dairy business



# Satisfaction is more than money!

ubramanyam's first visit to Agastya's Campus Creativity Labs was when he was in the sixth standard at Zilla Parishad High School, Gonugur, Chittoor District, Andhra Pradesh. The 100+ children were divided into groups and each group went to a different science lab. Subramanyam's group visited the biology lab. He thought he was well versed and knowledgeable about microscopes due to extensive reading but was thrilled when he actually handled and used a real microscope! He wondered how they invented a device that could help see items that were invisible to the naked eye. Subramanyam recalled that the Agastya instructor, Shailaja Ma'am, brought some algae and placed it on a slide. Subramanyam and his friends took turns observing the bacteria present in the algae by peering through the lens of the microscope and adjusting it for better clarity.



At the end of the session, Shailaja Ma'am asked if anyone could explain what they had learnt and Subramanyam was quick to answer. He briefly explained the parts of the microscope and also the procedure to use it. Noting the boy's keen interest, ability to talk and explain the working of a microscope, she immediately selected Subramanyam for the Young Instructor Leader (YIL) programme. From that day, till his tenth standard, Subramanyam and his YIL mates visited the Campus once a month.

#### The process is as important as the result

According to Subramanyam, till his sixth standard, he only knew addition and subtraction in mathematics. He often wondered why we should learn mathematics and what purpose it served in daily life. He received answers to his questions when he attended sessions in the Math lab. The instructor explained some of the formulas simply by folding pieces of paper. Subramanyam recalled that in his school he just memorised the formulas and tried to apply them to math problems. Through Agastya's experiential methods, Subramanyam learnt that the process to solve a problem was equally important.

Subramanyam's schoolteachers would usually only explain the portions of a subject that they thought were important from an exam point of view. Whereas in Agastya International Foundation, models or activities clearly explained each part of a topic or a concept. Subramanyam questioned, "How are the distance and





temperature of celestial bodies that were far from the earth measured?" Though the physics teacher in his school taught the topic, he never understood how.

However, his Agastya instructors took them to the lab and answered his questions by using light, angles, and models of the solar system. The understanding of this spectacular concept which he thought had no explanation, led to his interest in Physics as a subject. Though he loved Biology, the integration of concepts of calculations, force dynamics, and interactions of chemicals in the Agastya labs made him choose the Maths-Physics-Chemistry group in his intermediate studies.

As a YIL, Subramanyam took peer-to-peer teaching very seriously when helping his juniors at school with some of their Science Day projects. In a project on 'Saving Water,' he assisted his juniors to build a model of a village with thermocol sheets, where they highlighted the various ways in which villagers could save water. The model showed wastewater from houses flowing into water plants and to rainwater harvesting pits. Shallow wells dug in the lower parts of the imaginary village collected water and raised the groundwater level.

He recalled an embarrassing occasion during an elocution competition in front of the whole school in his seventh standard. When his turn to speak came, he was lost for words and forgot all that he had prepared! However, his instructors encouraged him, and he never allowed this experience to deter him. From the eighth standard to date, he has won all elocution competitions around the district that he participated in.

He has spoken on various world issues, like global warming, saving water, etc.

Subramanyam said that as a result of the destruction of property by some seniors when they left the school, the lack of proper furniture or electricity, was a huge inconvenience to the students of his class. In the tenth standard, Subramanyam came up with the idea of keeping a donation box in the class and encouraged his classmates to contribute a bit of their pocket money. He planned that when they had enough funds, they could replace or repair broken furniture and electrical equipment. The initiative turned out to be a huge success and his school still follows it! Subramanyam also learnt the art of delegation from his instructors at Agastya and uses it at his place of work. He makes sure that many of the tasks at his place of work, Apollo Pharmacy, Kuppam, such as cleaning, giving medicines, keeping accounts of stocks and billing are equally divided among his seven-member team.

Subramanyam's parents derive an income from selling around 40 litres of milk from their cows to Dodla Dairy. He graduated in Math, Physics, and Chemistry from the Government Degree College, Kuppam. His hobbies include reading novels and Biology related books in Telugu, and his library card from the government library helps him borrow books. However, after running a under Agastya's 'Operation Vasantha' programme for about a year, he realised that he loved sharing his knowledge with children. Subramanyam wants to become an Agastya instructor as he wants to motivate and inspire youngsters just like he was. "Satisfaction is more than money," he opined.



"I realised that he loved sharing knowledge with children."







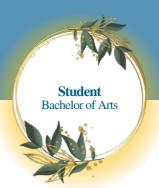
#### **Chitra Mural**

Age: 22

Years spent with Agastya: 2014 - 2016

#### **Background:**

Father: Policeman Mother: Homemaker



# **Cementing relations with science**

orn to a policeman and a stay-at-home mother, 22year-old Chitra Mural is now in her third year of degree from Kadasiddeshwar College, Hubballi, Karnataka. She recalled when her teachers at The Basel Mission Kannada Medium School in Hubballi tested eighth standard students to check their mental acumen. Asked to create something with a bunch of straws, Chitra made a small house and passed the selection process with flying colours. As a Young Instructor Leader (YIL) she visited their Kuppam Campus once a month. On her very first day she won a debate - this moment is forever registered in her memory! Chitra performed many lab experiments and took part in numerous community development initiatives. She said, "I enjoyed outreach programmes in some forest areas and orphanages and motivated the children." She celebrated the brotherhood festival of Raksha-Bandhan

ebrated t

In Agastya, they teach children through experiments, hands-on learning, peer to peer learning and showing models, with the active participation of children.



with the children and tied rakhis for the boys. Connecting with children and watching their happiness, filled Chitra with immense joy and hope.

She said, "I learnt to combat stage fear and develop presentation skills. When I participated in Jignyasa I was able to present my model with confidence because of these skills." Her model explained the threats to wildlife, and the need for protecting them to maintain healthy wildlife populations and to restore, protect or enhance natural ecosystems.

In her ninth standard, she attended Agastya's Summer Camp for 25 days in their Vidyanagar Campus. There she learnt about the functions of a computer and how to use it. Games like passing the ball made the studies more engaging and interesting. She won second prize at a drawing competition on '21st-Century Women' in her eleventh standard. Agastya's sessions always focused on the importance of being socially responsible s she was able to think and creatively come up with solutions towards the issues faced by women.

#### Getting ready to face a competitive world

Chitra declared, "Agastya sessions helped me increase my thinking ability and to make decisions smartly. They gave us mental ability questions that made me think a lot." The most noticeable change in her personality as a YIL was a transition from negative to positive thinking. She was afraid to attend any functions or participate in any competition or activity, or even talk to teachers.





After Agastya's intervention, she was able to overcome her fear of speaking to others and going out to attend functions or competitions. It boosted her confidence level. Talking about the benefits of the YIL programme, she said, "YIL programme is helping students to get necessary knowledge in this competitive world. YILs should participate in every activity actively so that they can use those skills in their life." As a YIL, her scholarship amount paid for her PUC and first-year degree fees and books.

Recalling her most interesting experience in Agastya, Chitra said, "I was very curious when I first saw Bheeshma's Arrow Bed Model, which had huge nails sticking out. The children were scared to sit on the chair fearing that those nails would injure them. Then the Agastya instructors explained how a person's weight is spread over many nails. One by one everyone sat on the chair without getting hurt. On that day, I understood how some people cheat innocent people. More importantly, I understood that a few people wrongly use science to earn money."

Agastya also helped Chitra improve her painting and craft-making skills. During the 'Best out of Waste' classes conducted by Agastya instructors, she learnt how to make paper flowers and paper houses. As part of a waste awareness campaign, she influenced others to reduce, recycle, and reuse plastic. She also made people aware of the risk of riding without a helmet. As a National Service Scheme volunteer, she also went to Ramakuppam village for a 'Clean Village' project. At the Agastya Science Centre, Hubballi, she was amazed

at a model of the human digestive system and curiously asked the Agastya instructor, "How does food reach the stomach?" The Agastya instructors explained the body parts involved, beginning in the mouth when chewing food, passing through the oesophagus to enter the stomach which breaks it down and reprocesses it in the large and small intestines before the bloodstream absorbs and circulates nutrients throughout the body. This had a major impact on Chitra, and she decided to focus on biology.

She found many differences in the methods used by the Agastya instructors and the teachers at her school, "Our school had no labs and we only had one teacher to teach science but in Agastya, they teach children through experiments, hands-on learning, peer to peer learning and showing models, with the active participation of children" she said. However, her science and mathematics teacher supported and encouraged her to participate in Agastya activities and programmes.

After her visits to the Agastya campus, she would teach her friends at school whatever she had learnt, adding, "The instructors encouraged us to share our knowledge with others. They always taught with a proper scientific explanation with facts and figures. Most importantly, students were able to interact with the approachable instructors without having any second thoughts." She attended the 2021 Agastya Alumni Meet, where she interacted with freshers and shared her experiences and growth as a YIL. Chitra still contacts her Agastya instructors for guidance and support. She wishes to become a lecturer and is studying to achieve her goal.



"I enjoyed outreach programmes in some forest areas and orphanages and motivated the children."







### Chiranjeevi R

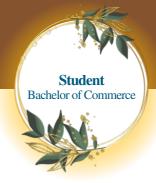
Age: 21

Years spent with Agastya: 2015 - 2016

**Background:** 

Father: Employed in United Brewery

Mother: Homemaker



### Path to solace

he Agastya Science Centre used to be located right in front of Chiranjeevi's rural Bengaluru school, the Government Junior College, Nelamangala, Karnataka. The hustle and bustle of visiting students and yellow buses in and around it, was a constant source of curiosity for Chiranjeevi and his classmates. The path that eventually took Chiranjeevi there became the 'path to solace' for these young students, who used to visit the centre to get help from Agastya instructors on their projects.

Chiranjeevi's tryst with Agastya began when he was studying in the ninth standard. Although he knew that students from his school visited Agastya's famous science centre, he could not gather enough courage to walk in. It was only when his school decided to

It was interesting and a lot of fun compared to when I tried understanding the same thing theoretically.

participate in Agastya's science fair that he along with other students from his class entered the centre. They began preparing for the event, with very little knowledge of science, and a lot of skepticism that came from a lack of confidence.

#### **Light bulb moments!**

Chiranjeevi was a timid child with almost no interest in science. He and his parents worried about him failing as he did not understand the subject at all. However, some helpful friends in Agastya changed his attitude. He recalled his first interaction, "The Agastya instructors asked if I liked science and I just said no! Then they asked me why and I told them that I had difficulty understanding. Till then, nobody had ever asked me about the problems I was facing. Instead, they kept telling me how difficult it would be for me to have a career." Chiranjeevi loved the way the Agastya instructors tried to understand his issues and how they encouraged him to let them help. Under their guidance, Chiranjeevi prepared for his science fair presentation, for three weeks. He chose the 'electric circuit model with series and parallel connections' for the exhibition. "Agastya instructors taught me the entire topic theoretically and practically with the help of batteries, wires and a bulb which would light up once the circuit was complete. It was interesting and a lot of fun compared to when I tried understanding the same thing theoretically," declared Chiranjeevi. After days of performing the experiment, drawing circuit diagrams and practicing explaining the experiment to other fellow





students, Chiranjeevi became a 'Young Instructor Leader (YIL).' As an 'agent of change' he taught at least five other students. Chiranjeevi's confident presentation at the science fair and his selection as a YIL surprised everyone including his schoolteachers and parents. His performance motivated him to study science and truly believe that he could pass with good marks. Agastya continued teaching science to his class that year which allowed him to visit the science centre three times a week and learn all topics in his syllabus in a practical way. He said, "Agastya was my go-to place. Any doubts that I had, I would clear with help from the Agastya instructors as they were very friendly and helpful. I remember how Naveen sir and Jagdish sir helped me do my school science projects after school. It was fun."

By the end of his ninth standard, Chiranjeevi was consistently scoring good marks, and this built up his confidence. These results made him extremely happy, and he ran to the science centre to share the news with his Agastya instructors. In the tenth standard, Chiranjeevi's formal visits to the centre stopped as the school wanted the students writing board exams to focus

on studying for them. However, this did not stop Chiranjeevi from informally visiting it. When he could not understand theoretical concepts taught in school, he sought help from Agastya instructors.

"They voluntarily taught me the topics both theoretically and practically, which not only helped me understand better but also memorise it well, so that I could write it in my exams," he disclosed. Seeing Chiranjeevi visit Agastya's science centre during break or after school, fuelled the desire of other students to accompany him to clear their doubts

21-year-old Chiranjeevi comes from Nelamangala, one of the many rural districts of Bengaluru. He lives with his father, who works at United Brewery, mother who is a homemaker and sister who is doing her second-year pre-university. After completing school, he opted to study Commerce from Sri Siddaganga First Grade College, Nelamangala and is happy with his decision. "Science was bearable only because of Agastya," stated Chiranjeevi, who is now proud of his job as a Human Resource executive in Indian Broiler, a poultry enterprise.



"Agastya was my go-to place. Any doubts that I had, I would clear with help from the Agastya instructors as they were very friendly and helpful."







#### Shweta Kundari R

Age: 24

Years spent with Agastya: 2012 - 2014

**Background:** 

Father: Farmer Mother: Homemaker



## Mirror, mirror!

eing the eldest child, Shweta was expected to excel **B** at studies in SJR High School, Nulvi Hubballi Karnataka but had no idea how. At the beginning of the eighth standard, the Agastya International Foundation started offering practical science teaching. Elated, she said, "My school did not have a science lab, nor did it have a dedicated teacher for every class. So, I was very happy that I was going to have practical sessions with Agastya." Shweta felt that this would not only help the students learn better but would also help their science teacher as Agastya would cover some portions of the syllabus. In the first session with Agastya, students separated insoluble solutions through filtration and soluble solutions with the help of evaporation. "I enjoyed these practical studies with the approachable Agastya instructors, and the way they explained subjects to us.



Agastya is doing a great job teaching students about science in rural areas and I hope many more students benefit from this initiative.



They would link every topic to our daily life with examples, and this made even a difficult concept look easy," she disclosed.

A year later, in her ninth standard, Shweta became a Young Instructor Leader (YIL). She was very happy to be one of the 30 students selected from a class of 70. The YILs created 2D and 3D paper models of a rectangle, sphere, triangle, square, cube, cuboid, etc. Later, they had to explain how to calculate the areas of these shapes with the help of the models to the entire class. The YILs visited Agastya's Science Centre in Hubballi once a month and participated in activities related to the environment, practising public speaking and peer-to-peer teaching.

"There were a lot of models in every nook and corner of the centre, that we could see and explore," she added, remembering previous Agastya sessions in school where there was only one model related to that day's topic. She participated in a drama on 'Adopting a Healthy Lifestyle,' where she along with her YIL group enacted the subject to create awareness. In the beginning, Shweta lacked confidence and doubted herself but Agastya helped her improve. "It is the confidence I gained being a YIL, that has been my greatest takeaway from Agastya," she proclaimed.

#### Liberation through confidence

Shweta demonstrated a model on 'Types of Mirrors and Image Formation' to visitors at Agastya's science fair.





She prepared and practiced her presentation with the Agastya instructors for two weeks and acquired enough knowledge on the topic to be able to answer questions from the visitors. "I had arranged concave and convex mirrors in such a way that I could change the angle from which light was coming and show my visitors an inverted or upright image. I must have explained the model and mechanism of image formation in the mirrors to hundreds of students and answered most of their questions. As a ninth standard student, it was my biggest accomplishment back then" said Shweta proudly.

Her Agastya sessions ended when she advanced to the tenth standard and had to focus on the board examinations. She started studying with confidence and did not hesitate to share her knowledge with her siblings and friends. There were positive changes in her academic performance, so she received an annual scholarship of INR 1,000 during her pre-university, and INR 3,000 for her graduation. The amount was of significant help in buying books.

She completed her Bachelor of Engineering in Computer Science from Basaveshwar Engineering College in Bagalkot district, Karnataka. During her free time, Shweta likes to take courses for improving her coding skills and listen to mythological stories. After getting married, she lives with her husband and his family in the Gadag district. Born to a farmer father and a housewife mother, with two younger siblings, this 24-year-old girl from Nulvi village in Hubballi district is currently working as a Developer at Tata Consultancy Services. Like many others in these stories, she is living proof of Agastya's vision of a creative India of 'tinkerers, solution-seekers and creators' who are 'humane, anchored and connected.'

She was very thankful to Agastya for extending opportunities to government school students in rural areas, where there is a lamentable lack of facilities, resources and infrastructure. Students from villages do not get the exposure to learn at par with urban students but even have to compete with them. "Agastya is doing a great job teaching students about science in rural areas and I hope many more students benefit from this initiative," she added.



"It is the confidence I gained being a YIL, that has been my greatest takeaway from Agastya."







### Laxmi Belaganvakar

Age: 22

Years spent with Agastya: 2014 - 2016

**Background:** 

Father: Carpenter

Mother: Homemaker



## **Holistic learning!**

hen Laxmi was studying in the eighth standard at Basel Mission Girls High School, Hubballi, Karnataka, Agastya instructors in a Mobile Science Lab visited them. "Split into groups we drew ourselves, which was great fun, as the teacher also participated. Additionally, Agastya gave us information about their science teaching programmes in government and aided schools," she explained. Laxmi said that all the fun, interactions and laughter during the sessions made everyone comfortable with each other. She and her classmates began attending Agastya sessions once a month after that.

In her first two Agastya sessions, Laxmi learnt how to differentiate between acids and bases using litmus paper and reproduction in unicellular organisms. 20 girls from



My Agastya instructor told me not to be afraid as everyone present were people whom I knew; even if I forget what I had to speak, it is a very small thing as everyone forgets something at some time!



her entire class became Young Instructor Leaders (YILs) as per the recommendation of her school principal. In addition to experiential learning in science, math, ecology and art, Agastya engaged the YILs in various activities such as drama, debates, nutrition and health, flora and fauna, computers and robotics, conversational English, broadcasting, story writing, etc.

She narrated one of many incidents, "We did a play to create awareness about malnutrition among young children. We were divided into four groups with five girls in each group. Each group talked about a different topic related to health to celebrate Nutrition Day. We invited people from the village and put up the show in front of them." Laxmi remembered how nervous she was but the many practice sessions and constant encouragement she received from the instructors helped her overcome her stage fears. "I once cried during the practice sessions because I kept forgetting my lines. Then my Agastya instructor told me not to be afraid as everyone present were people whom I knew, and even if I forget, it is a very small thing as everyone forgets something at some time!" He told Laxmi to just focus on playing her part and not on the result. All the advice and practice helped her do well on the final day.

#### Focus on the journey, not the destination

According to Laxmi, learning at Agastya was holistic and engaged the mind, body, and spirit of the learner. She learnt that by asking questions one could get clarity





on a concept. This brought out her innate curiosity. Laxmi loved the YIL programme as it was not just about science, but they also got to take part in additional activities that taught them skills like communication and leadership. Being a part of this programme was a great opportunity for her.

"During the summer camp, I made a model of the stethoscope using low-cost materials such as a funnel, balloon and pipes. I was so happy as the model worked and from that moment, my love for science increased," said Laxmi. These small successes, constant encouragement and opportunities to speak in public, made Laxmi a very confident person. She overcame her stage fear and considered the confidence she gained to be the most valuable skill she gained from her time with Agastya.

"At first, I was afraid to participate in any of Agastya's programmes in school. Then the instructors encouraged me and I slowly started by explaining models to my peers. This led to me taking part in JIGNYASA and explaining models to other school students. I could see the positive change in my personality from what I was earlier," explained Laxmi. She feels that if it had not been for Agastya and their friendly instructors, she would have missed many aspects of education and also in gaining crucial life skills. Inspired by the creativity, dedication and passion of the Agastya instructors, Laxmi too wanted to become a teacher. The awareness plays that she participated in, which helped educate the community on malnutrition and other hygiene practices

made her realise that she enjoyed talking to people about social issues. She also understood that she loved community teaching and that spark was the appreciation she received for explaining the model of her stethoscope to the parents and children at a science fair. She felt that even the adults benefitted from her teaching and were able to do their work more easily.

Laxmi received a scholarship of INR 1,000 annually during her pre-university and INR 2,000 during her graduation. Since her father works as a carpenter, her mother is a homemaker and with two younger sisters who are still studying in school, these funds helped fund the purchase of her books. She completed her Bachelor of Science from Shri Kadasiddeshwar Arts College and H S Kotambri Science Institute, Hubballi in Karnataka. 22-year-old Laxmi is currently working as a store incharge in Vibhava Industries, Hubballi. She wants to get a government job that will give her stability and security. Laxmi hopes to continue her association with Agastya by training YILs in the future.

"In the first session of the YIL programme, they called us change makers and role models. I learnt that when we change ourselves in a positive way, people around us also react positively," stated Laxmi about the impact of the YIL programme.

"Agastya instructors were my biggest cheerleaders during my school days, and I believe every student should get one like them," said Laxmi while summing up her experience with Agastya.



"Learning at Agastya was holistic and engaged the mind, body, and spirit."







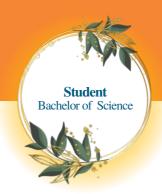
#### Bindu A

Age: 21

Years spent with Agastya: 2015 - 2017

**Background:** 

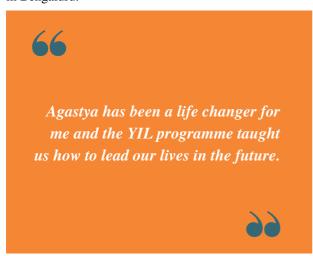
Father: Real estate Agent Mother: Homemaker



# Kindling a flame, not just filling a vessel

Prom the small village of Gadepalli in Chikkbalapura, Karnataka, Bindu's family migrated to Bengaluru to Bengaluru in search of better opportunities, when she was 11 years old. There she joined the Government High School, Hebbal in the sixth standard. Bindu's father works in a real estate agency as a land registration agent while her mother manages the house. Her two sisters not only study but work as well.

21-year-old Bindu is in the third year of a degree in chemistry, biology and zoology from the Government First Grade College, Yelahanka, Karnataka. Though her main goal was to pursue a degree in Agriculture Sciences, she could not do so as she obtained a seat in the Belgaum district. Her parents did not allow her to travel that far so she had to settle for what was available in Bengaluru.



As a second option, she chose to study science and simultaneously prepare for banking exams such as Second Division Assistant, First Division Assistant, State Bank of India, and Reserve Bank of India, to bag a stable job.

When she was in her eighth standard, she recalled how instructors from Agastya International Foundation motivated her entire class to attend sessions at the science centre to gain confidence and get rid of their stage fear. 10 students including Bindu became Young Instructor Leaders (YILs) from her class of 45 students. The instructors told them that they had to teach and share whatever they learnt on a day, with their friends, parents, juniors, or others. Bindu enthusiastically explained many science topics like solar eclipses and the importance of nature, to many of her juniors studying in the fifth and sixth standards. She credited YIL activities for helping her overcome stage fear. During her preuniversity and degree years, she was able to make presentations in seminars in front of large audiences without flinching. She recounted, "My friends and classmates were hesitant and sweated it out whenever they had to present."

Bindu remembered an exhibition where they saw several other students presenting scientific models and experiments to other visitors and students like her. "I too felt the desire to present and talk to visitors about experiments. Later, I asked the Agastya instructor to take our class as participants in the exhibition."





shared Bindu. A few months later, Bindu finally got the chance to make a presentation at a science exhibition. Assigned a model on the concept of 'friction' the instructors trained her for about a week on how to explain the concept to the visitors there.

Bindu said, "Agastya's held its sessions in school as well as at the Science Centre itself. At school, instructors came to our class and conducted quizzes and science experiments on topics related to our syllabus like separation techniques, forms of matter, etc. Whenever we visited Agastya, they engaged us in activities that helped us think out of the box, gain a positive attitude, improve learning skills and build our confidence. Although I was good in science and liked doing science experiments, Agastya sessions helped me more in grooming my personality," disclosed Bindu.

Along with nine other YILs Bindu participated in a three-month project called 'Eyes on Nature,' in which they had to observe species around them and write down their scientific Transformed Lives s. At the end of each day, she wrote a report on the number of species inhabiting a particular tree, the kind of food consumed by the animal or bird, and the characteristics and features of a particular animal. Since many of them came from different places, the only place suitable for everyone in her team was her school and its surroundings, where "We had the whole of land, sky and earth to observe." Her science teacher from school helped Bindu, as did the Agastya's instructors, as she had no idea about how to Transformed Lives an organism scientifically and characterise them based on their features. Bindu felt overwhelmed and slightly nervous when she heard that they had to present their findings at the Indian Institute of Science.

Post their seminar session, they also performed a drama to create an awareness of the future and communicate the importance of every facet of nature. All her team members received a certificate for the drama presentation.

Bindu appreciated the skill of the Agastya instructors in helping so many students overcome their fear of getting up on stage. They also helped her to improve her 'learning-how-to-learn' attitude, explore her creative side, and most importantly, vastly improve her communication skills.

Bindu and her classmates were only able to visit Agastya's science centre four to five times a year during class hours. Once a session started in Agastya, it would last for at least four hours and Bindu found it was never enough. She wanted more sessions and exposure so that she could better develop her skills. So, she was very pleased when her visits to Agastya increased with the 'Eyes on Nature' project. "I felt that Agastya's instructors were more open than the teachers at my school. Even though the Agastya instructors were new to us, they were very down to earth and understood doubts from our point of view. So, without any hesitation, I used to interact with them."

As she scored above 83% in her matriculation, she received an annual scholarship amount of INR 2,000. Bindu also received scholarships from the government as she belonged to the backward class, and all these funds helped pay her fees and buy books. Bindu categorically stated, "Agastya has been a life changer for me and the YIL programme taught us how to lead our lives in the future."



"We had the whole of land, sky and earth to observe."

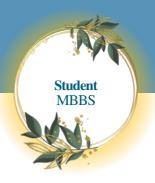






### Shreya Srinivasa D

Age: 19
Years spent with Agastya: 2018
Background:
Parents: Educators



# She chose to be a doctor!

When she was very young, a curious Shreya Srinivasa dreamed of becoming a When headlest sister passed the entrance test and joined MBBS, it intensified Shreya's decision to pursue medicine. Today 19-year-old Shreya is a first-year student of MBBS at Shri Atal Bihari Vajpayee Medical College and Research Institution, Bengaluru, Karnataka.

#### A Launching Pad for Scientists

Shreya will always be grateful to Agastya International Foundation for the wonderful experiences she obtained through their Anveshana programme. This well-thought-through and planned platform, serves as a launch pad for budding scientists and researchers across the nation. Her father, a professor in an engineering college, had his students participate in the state level competition.

Thanks to the exposure gained through Anveshana, I participated in many more science competitions and programmes. my leadership qualities came to the fore and was also able to share knowledge and educate others in the process.



Each college team had to choose two high school students and facilitate the process of mentoring between engineering students and school students while they planned, designed, and made the models together. Shreya was thrilled to be one of the selected ninth standard students as the experience gave her so much exposure and the opportunity to learn from undergraduate students and their teachers.

Over a period of three to four months, Shreya and her team put in a lot of effort to understand technical details, the purpose, and inferences of their project. Her father who was their guide, and senior students also approached Agastya instructors for clarifications. The experiment they worked on compared the different strengths of Dielectrics (transformer oil). They found out that sunflower oil was a better dielectric than traditionally used mineral oil and that it is more costeffective, reliable, and environmentally friendly.

Shreya thoroughly enjoyed participating in such a unique project and was proud to have worked alongside her seniors on the pedagogies and practices of hands-on learning and research orientation. Being in school, Shreya was amazed at how Anveshana helped her understand subjects that she had only read in textbooks, in a practical way. She could ask questions and seek help to better understand scientific topics. The whole experience propelled her dream of science as career much further forward.





The competition culminates in an annual Anveshana Science and Engineering Fair where the students exhibit their projects/models. This gave her the opportunity to present their project to eminent scientists, professors, bureaucrats, and other students at a large-scale event and boosted her confidence levels. Thanks to the exposure gained through Anveshana, Shreya participated in many more science competitions and programmes. Her leadership qualities came to the fore and she was also able to share knowledge and educate others in the process.

As a Carnatic classical singer, Shreya participated in many TV Shows and won awards. Five years ago, she

also participated in music shows like the Kannada Sa Re Ga Ma Pa and was the finalist representing Mandya. She credits Agastya for the improvement in her confidence and leadership skills.

Her parents are both educators and continue to encourage her curiosity and need to explore. Being a humble person, she credits not just them but everybody around, who has helped her directly and indirectly to achieve and make her dreams to become a doctor, come true. Her wish is that the Anveshana programme continues to be an inspiration to all students from rural areas, who have the potential to become responsible scientists.



''I give credits to Agastya for the improvement in confidence and leadership skills.''

## **Anveshana - The Science And Engineering Fair**

Anveshana is a unique program that brings together Government school students and college students. In this science and engineering fair, two school students and two college students form a team to brainstorm and seek innovative solutions. The students then develop their solutions in the form of new inventions, working models, and prototypes in a cost-effective way. At the end of the program, the students take pride in presenting their solutions, and the best solution is recognized and awarded.

Throughout this journey, the students collaborate and engage in peer-to-peer learning to exchange ideas, fostering a rich environment for innovation. By bringing together school and college students, Anveshana provides an opportunity for bridging the knowledge gap, mentoring and motivation for higher studies. This nationwide event takes place once every year, serving as a platform for students to unleash their creativity and become aspiring innovators and solution seekers.



















#### Ramesh Revannavar

Age: 23
Years spent with Agastya:
Background:
Mother: Housekeeping Staff



# Understanding one's strengths

amesh is pursuing a bachelor's degree in commerce at C B S College, Nulvi, Andhra Pradesh. At 23, he works as a part-time cab driver since his father is no more. His journey with Agastya began in 2011 when he was in the seventh standard at C I C Government High School, Adaragunchi, Karnataka. Ramesh recollected, "I distinctly remember the day I became a Young Instructor Leader (YIL). I love reliving those memories because Agastya made me understand my strengths." Ramesh's training as a YIL is a story of selftransformation. He explained, "Before I used to merely read. I was unable to express anything in front of my classmates and I was afraid to write exams even when I knew all the answers. Initially I preferred to stay quiet even in Agastya and not take part in the activities. I could not even open my mouth because I was afraid to

face the class." However, Agastya's hands-on learning method and the brain-storming sessions he participated in during the group discussions helped him to start speaking confidently and knowledgeably in front of the class. Ramesh acknowledged, "After attending Agastya sessions, I was assured that I am a person of calibre, so I gained confidence which helped me immensely to improve my academic performance."

Ramesh was lucky enough to visit the Agastya Science Centre in Hubballi every fifteen days. There he questioned everything, explored different activities and worked on various experiments. He shared, "On seeing a model of the Solar System I felt that my science textbook had come to life! That day I spent all my time asking questions and finding out more fun facts. This was a life-changing experience!"

He added, "Experiments on density and mass felt like magic, and I was mesmerised. Observing and practically performing the experiments made many concepts clear and I began to understand that science existed in day-to-day life." Agastya's teaching method which allowed for hands-on learning by the students developed his observation skills and he started to see science inside the kitchen, on the road and everywhere around him.

Armed with his training as a YIL, he participated in many initiatives to better his surroundings.



Agastya helped me get knowledge and also taught me social responsibility. I learnt public speaking and started volunteering for community teaching.





#### TRANSFORMED LIVES



He assisted with the cleanliness drive of Swachh Bharat Abhiyan in his locality. The YIL instructors helped Ramesh cultivate self-confidence and discover his strengths. "Agastya helped me get knowledge and also taught me social responsibility. I learnt public speaking and started volunteering for community teaching. I was initially nervous but quickly adapted and became more confident in my abilities." He elaborated, "A leader is a front-runner and hence shows others the way. Agastya mentored and assisted me to decide on my future."

His mother works in a hotel as a housekeeping staff. As the child of a single parent, Ramesh witnessed his mother go through a lot of hardships. The confidence and skills he developed at Agastya enabled him to take up a part-time job to financially support her, while he continues to study Ramesh feels confident about finding a job as soon as he finishes college and take-up the responsibility of providing for his family. He hopes to run his own company and be independent.

Ramesh realised how dismal his life would have been without Agastya as he would have been just a bookworm. He would not have participated in competitions or in Jignyasa (Agastya's innovation fair) and science would have been something in a book. To future YILs, Ramesh recommended, "Every session in Agastya is significant; take it seriously. Since every lesson will help in future, students should participate in all activities from day one."



"Every session in Agastya is significant."







### Priyadarshini Kumbar

Age: 25

Years spent with Agastya: 2010 - 2013

**Background:** 

Father: Farmer Mother: Homemaker



# Becoming a good human being!

Priyadarshini completed her engineering degree at the age of 23 and is preparing for the entrance exams for various government jobs. Priyadarshini's relationship with Agastya International Foundation began as an eighth standard student at SJRC High School, Nulvi. She recalled, "The instructors were strangers and I felt a bit nervous about my new surroundings. The anxiety soon disappeared when they asked us to make furniture using paper. My first day began with a lot of fun and enjoyment, and looking back, I yearn to engage in those activities once again."

#### Impact of the YIL programme

As Priyadarshini started the Young Instructor Leader (YIL) programme, her personality began to change "After every Agastya session, I would teach my friends what I had learnt and gradually, they too developed



Agastya has taught us that it is not necessary to be good at studies, but it is essential to become a good human being.



an interest in learning and gaining more knowledge," she said. Priyadarshini was fortunate to visit Agastya once a month and take part in many group activities. She declared, "Before becoming a YIL, I used to study alone. Once I understood the benefits of group engagement, my learning process became more efficient, and I also developed leadership qualities." Priyadarshini strongly supported this Agastya way of studying.

The YIL programme not only enhanced her academic performance but also that of her classmates through its peer-to-peer teaching. Earlier she would struggle to recall what she thought she had learnt by heart, but in YIL programme, her study methods changed, and her understanding of concepts through observing and experimenting at Agastya helped her to apply them in daily life. She also developed leadership and communication skills; now she loves public speaking, and can freely converse with people.

As she participated in the activities, she understood the importance of observing her surroundings, identifying problems and finding solutions. In her college days, she was actively involved in teaching the rural children, and volunteered at a government school. Priyadarshini stated, "Agastya creates great opportunities for rural students, especially with the YIL programme. They have brought many of us closer to completing our education. I can relate scientific principles to everyday life and understand their potential to bring positive changes in





society. The YIL programme teaches students to support each other to become better people. Agastya has taught us that it is not necessary to be good at studies, but it is essential to become a good human being." In future, she aims to become a government officer and attain the power to implement positive changes in society.



### **Science Fair - Fostering Passion For Life long Learning**

Agastya, in pursuit of instilling confidence and nurturing creativity in students, regularly organizes Science Fair. During this event, students have the opportunity to individually or collaboratively demonstrate science models to a larger audience, who are also students, aiding them in gaining a deeper understanding of the concepts of science. The fairs attract nearby schools, providing them with the chance to learn from these captivating displays of scientific knowledge. Through these science fairs, Agastya fosters an environment of exploration and discovery, igniting a lifelong passion for science in young minds.









#### **B** S Nandakumar

Age: 22

Years spent with Agastya: 2011 - 2015 **Background:** 

Father: Labourer in a granite factory

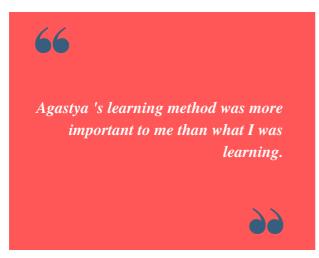
Mother: Rears cattle



## Just like a leader

Andakumar's class teacher introduced his sixth standard students to Agastya International Foundation when he was studying at the Zilla Parishad High School, Krishnadasanapalli, Kuppam, Andhra Pradesh. His first meeting with the Agastya instructors lasted only for ten minutes, during which they were told about practical science sessions and that their class would visit Agastya's Campus Creativity Lab the next day.

Nandakumar was awestruck by the 'science-like environment' of the inspiring Kuppam campus. Being a bright student, Nandakumar said excitedly, "There was science everywhere and in everything on the campus. If you questioned why this stone was kept in a particular way, the instructors would give a scientific reason. It was just great!"



Nandakumar's monthly visits to the Agastya campus included many science activities with the help of models. He particularly remembered the model of the solar system which had an electric circuit, batteries, wires, and a bulb. With this model he learnt about day and night, rotation, revolution, gravity, eclipses, and the sequence of planets.

#### **Developing a Love of Learning through Science**

Nandakumar was thrilled with this new practical way of learning! Although he was learning science, his understanding of basic concepts in other subjects improved as well. He stated, "The method of learning was more important for me than what I was learning. After understanding science sessions with Agastya, I wanted to learn all other subjects in the same practical way. When I considered the practical aspects of every topic, my conceptual understanding of the subject also improved."

Nandakumar was selected for the Young Instructor Leadership (YIL) Programme in the eighth standard, for which he had to clear an exam and make a presentation. "Being a YIL held prestige in our school, and meant that you are among the smart students," he declared. For the selection, Nandakumar wrote an exam on general science and passed with good marks. After the exam, which was held in his school, the presentation was held in the biology lab of the Agastya campus. He was asked to present and explain the topic 'Function of the Kidney' to the entire class.





"I think I did very well, which is why they selected me," said Nandakumar with confidence in his voice. Nandakumar was selected for the Young Instructor Leadership (YIL) Programme in the eighth standard, for which he had to clear an exam and make a presentation. "Being a YIL held prestige in our school, and meant that you are among the smart students," he declared. For the selection, Nandakumar wrote an exam on general science and passed with good marks. After the exam, which was held in his school, the presentation was held in the biology lab of the Agastya campus. He was asked to present and explain the topic 'Function of the Kidney' to the entire class. "I think I did very well, which is why they selected me," said Nandakumar with confidence in his voice.

As a YIL, Nandakumar started visiting the Agastya campus twice a month. The YIL sessions would start with meditations, followed by practical sessions in science, where the students taught each other in teams. He had happy memories of at least half of the YIL sessions being held out of the classroom with activities like theatre, drawing, poster making, tree plantation, etc.

Nandakumar along with his classmates painted signboards and the zebra crossing near his school. He also explained to passersby, the need to slow down at the zebra crossing during school opening and closing times, as many small children would run across the road.

As a YIL, Nandakumar started visiting the Agastya campus twice a month. The YIL sessions would start with meditations, followed by practical sessions in science, where the students taught each other in teams. He had happy memories of at least half of the YIL sessions being held out of the classroom with activities like theatre, drawing, poster making, tree plantation, etc. For one such activity, Nandakumar along with his classmates painted signboards and the zebra crossing near his school. He also explained to passersby, the need to slow down at the zebra crossing during school opening and closing times, as many small children would run across the road. The career guidance class that Agastya conducted after his tenth standard was a

major turning point for Nandakumar. The workshop helped Nandakumar choose Mathematics, Physics and Chemistry for his intermediate. He said, "If your parents have studied well, they can guide you. But for students like me who are first generation learners in their families, Agastya's career guidance sessions mean a lot. Nowadays, there are tons of YouTube channels, but back then when I was in school, Agastya instructors were our only source of information." Nandakumar felt that Agastya's unique way of teaching helped many students who were afraid and confused about their path in future.

Being a YIL, Nandakumar always believed in 'Never Giving Up' and was a go-getter. The puzzle solving and solution-oriented activities in the YIL sessions equipped him to be able to think through any problem in very practical ways. This was tested during the pandemic when due to limited financial resources, Nandakumar's family was struggling to make ends meet. His father mainly depended on daily wages from a granite factory while his mother reared cattle and his younger sister was still studying.

The problem was aggravated to the point where his father asked him to drop out of his third year of a degree in Electronics and Communication Engineering from Kuppam Engineering College. Nandakumar did not panic but thought the whole issue through. "I realised that dropping out would not help anyone, but that it was also important to earn enough to support the family. So, I decided to take tuitions and look for data entry work, which I could do from home. This contributed to our survival, supported my studies, and allowed me to complete my degree and get a job. This solved our problem and made our lives better," he said. He took a strong stand with his father on the pros and cons.

Nandakumar made him understand why he was taking such a decision, while also understanding his limitations. The Agastya YIL program 'encompasses experiential learning opportunities that go beyond science education and focus on the holistic development of students' – Nandakumar had proved he was a worthy YIL!



"I give credits to Agastya for the improvement in confidence and leadership skills."







#### M Meenakshi

Age: 22

Years spent with Agastya: 2010 - 2021

#### **Background:**

Father: Labourer

Mother: Works in garment factory

Husband: Wellness Coach



# Mosquito repellents to heal people

eenakshi credits Agastya for the improvement in her life! The 22-year-old confidents of her leadership skills and inspired by various YIL alumni stories about how they achieved their goals. She currently lives in Hebbal with her husband who is a wellness coach.

She recalled her first visit to the Agastya Science Centre when she was about 11 years old, "A huge bus was waiting in front of our Zilla Parishad High School (ZPHS) NewPet. Our parents had already packed our lunch for the day. As soon as we got down in front of the Kuppam campus, I saw a hanging bus on the entrance which really surprised me." Their class began visiting the campus once a month, till she became a Young Instructor Leader (YIL) in her eighth standard.

Agastya helped me get knowledge and also taught me social responsibility. I learnt public speaking and started volunteering for community teaching.

She was then able to experience Agastya's dynamic, experiential science education every week.

#### **Practically applying concepts**

There were experiments on gravitational force, lenses and heat in the physics lab and she found the models of the organs of the human body in the biology lab most interesting. In the robotics lab she learnt how to assemble and disassemble parts of a robot. Agastya instructors taught them about different types of chemicals reactions and how to correctly mix substances without harming herself and others so she lost her fear of handling acids. Her schoolteachers only taught theory and clarified doubts by explaining but in Agastya, it was the other way around! Students experienced practical aspects of each topic and the co-operative instructors cleared all their doubts. Her grasp of concepts improved even more when she started explaining some of the activities to her cousins at home. If there were any experiments which she could perform at home, she always tried them, such as rainwater harvesting to help water the field. Meenakshi was able to get good marks in her exams after attending Agastya sessions.

Her school was in a slum area where people frequently fell ill. When she learned this was mainly because of mosquitoes, she was determined to get rid of them. As a YIL, she and her classmates prepared a liquid repellent by boiling the leaves of neem, marigold, lemon grass, along with a bit of camphor and turmeric in water. After cooling, they sprayed it wherever there were mosquitoes.





She also prepared a solid form of the formula, where she stuffed the same ingredients into a bamboo stick and burned it. The resulting smoke acted as a mosquito repellent.

Agastya taught her how to interact with others, get over her stage fright, build her confidence as well as her leadership skills. In the seventh standard, Agastya instructors helped her to prepare a model to participate in a mandal level science competition, arranged by her school. The project was based on how light sensitive sensors work to automatically switch on lights when the room goes dark. Meenakshi called it the 'Automatic Power Saver,' and her project won the second prize. She then presented it at the district level and received her prize from the Union Minister of State, Vidyasagar Rao. Meenakshi received a scholarship of INR 3,000 for a period of four years starting from the eleventh standard till her second year of degree. As her father is a daily wage labourer, and her mother brings in additional income from her garment factory job, the amount purchased uniforms and books.

She attended summer camps where she and two of her junior classmates conducted classes for students from class 1 to 5. They taught them in the veranda of her school because there was a huge black board there. When she received an award for the best performance in academics from her college, she gave a 'Thank You' speech in front of a large audience. Agastya not only supports education but also sports, so she also learnt how to play Kho-Kho and badminton and in fact competed at the intercollegiate level.

Meenakshi graduated as a Bachelor of Medical Laboratory Technology from People's Education Society Institute of Medical Science and Research, Kuppam in 2021. She then joined PES medical hospital as an unpaid trainee where she collected samples from patients and distributed reports to them. Unfortunately, operating in the night shift, affected her health. She now works as a tele caller for loan enquiries in an outsourcing company called 'Shiva Financial Services.' With her background in the medical field, and with help from her husband, Meenakshi feels she can also become a wellness coach.



"I give credits to Agastya for the improvement in confidence and leadership skills."







#### Sushma S

Age: 22

Years spent with Agastya: 2014 - 2016 **Background:** 

Father: Autorickshaw driver Mother: Homemaker



# Maharani of human resources and finance!

Like many good students, Sushma buckled under the pressure to get high marks in academics. Though she went through the motions of lessons and homework in the eighth standard at the Government High School, Hebbal, Karnataka, she had lost interest in studying. However, Sushma's attention perked up when Agastya exposed her to its force-field. On her first visit to the Science Centre she said, "It was packed with models depicting concepts of physics, biology, chemistry and math." She and her entire class was so excited!

She recalled, "The Agastya instructors explained the solar system first, showing us how the sun, earth and Moon revolved around each other to cause day and night and change seasons. For the first time I was able to visualise this." Sushma and her classmates returned toschool, full of exciting new knowledge.



Although I did not study science in college, Agastya has blessed me with skills which has helped me both in my personal and professional life.



An eager Sushma went home to read more about science in her texts.

After a few sessions she began to love Agastya's classes due to the practical methodology demonstrated and taught in the science centres. She specially mentioned how they taught tricks in maths and their explanation of refraction. Fascinated at how light bends objects she asked the teachers many questions and even made them explain it many times just to see it repeatedly.

Her interest in studies grew exponentially while group activities and peer to peer teaching helped build her confidence and interacting skills. One such activity was to explain a random topic written on a slip picked by a team member, to the whole class. Through this, Sushma learnt how to communicate and teach. She said, "Explaining what we know to others just requires us to be confident and know the topic. But preparing our team to present in such a way that everyone can participate and understand the subject, was definitely an accomplishment. We did it frequently and it helped develop lot of self-confidence and the skills to work in a team."

After participating in Agastya's career counselling sessions, she was interested in becoming a Chartered Accountant. She joined Seshadripuram College, Mysore, Karnataka to complete her graduation in commerce with specialisation in Accounting and Taxation.





However, she realised that she could not afford this course as her father was an auto driver and mother a home maker. So, she decided to switch and applied for a Master's in Business Administration (MBA), "Although I did not study science in college, Agastya has blessed me with skills which has helped me both in my personal and professional life."

Currently in her first year at Maharani Cluster University, Bengaluru, she plans to do a double specialisation of MBA in Human Resources and Finance.

She is aiming for a stable government job in the financial or revenue sector. Sushma is proud about what Agastya has done for her, "It boosted my confidence, dignity and team-work skills and guided me every step of the way. I would like to commend Agastya."

She continued, "I wish Agastya would start classes in English along with the regional language so that they can reach many more students. Also I am thankful to Agastya International Foundation and I hope many more underprivileged students get this wonderful opportunity."



"I am thankful to Agastya and I hope many more underprivileged students get this wonderful opportunity."

## **Innovation Hubs - Nurturing Design Thinkers**

The innovation hubs focus on developing design thinking in students, a necessary skill that is vital for growth in any discipline. Design thinking entails understanding the needs and desires of end-users and generating innovative and effective solutions.

The curriculum fosters empathy, analytical think and creative ideation. Within these hubs, students acquire the skills to empathize with users, define problems, generate ideas, create prototypes, and test solutions. Students are guided by the instructors in each step during the entire process, and under their supervision students get to use cutting-edge tools and technology available at the innovation hub to create their prototypes. In the end, students take pride in presenting their prototypes to a large audience, showcasing their creativity and problem-solving abilities.

Additionally, the mini innovation buses are also an integral part of the innovation hub which serve as mobile platforms that bring the benefits of innovation hubs directly to students.















#### Nelamma Karashetti

Age: 19

Years spent with Agastya: 2015 - 2019

**Background:** 

Father: Farmer Mother: Farmer



### Addicted to science

International Foundation since she was in the sixth standard Government Higher Primary School Byahatti, for a total period of five years. Born to a farming family in Byahatti, Hubballi, Karnataka, Nelamma still remembers her first session with Agastya because she had never seen a topic explained practically the way the Agastya instructors explained to her class. It was very entertaining as Agastya initiated many group activities. So, after that first session with Agastya, Nelamma was both excited and curious about her next science class.

Initially when she along with her class members entered the science centre, Nelamma said that everyone was very eager to try out all the unfamiliar gadgets and chemicals placed around the lab.



Agastya helped me get knowledge and also taught me social responsibility. I learnt public speaking and started volunteering for community teaching.



Since she was weak in science, she would take down notes of all the classes that she attended in Agastya. But Nelamma felt it was unfortunate that her school allowed for sessions with Agastya only once a month. It was not just during class and group activities that she learnt a lot, but also during the summer camps they held. It was an entirely different experience for her because in her school she had never performed scientific experiments all by herself. After a couple of sessions in the Agastya science centre, she was addicted to doing experiments.

#### **Encouraging Creativity**

Nelamma said that Agastya was a great opportunity for me to learn new things in a different way. One of the best things that she learnt at Agastya was to connect a subject to regular daily life. She narrates, "Once in my eighth standard we were studying about the different types of pollution. The Agastya teacher took examples of our neighbourhood to help us better understand things which were in our textbooks." This helped her understand her surroundings better and enjoy nature more. It also helped her to learn by herself. She said that with self-learning, one of the best things that she acquired was to be proactive in any situation. Nelamma became proactive during lockdown and cleaned her village, something that made her very happy.

Nelamma says Agastya not only helps to achieve educational excellence, but also supports the children to get closer to their dreams by providing them career counselling.



#### TRANSFORMED LIVES



"Not everyone was good in science in my class, but everyone could go and talk to Agastya teachers about their future careers. They would usually ask few questions and then tell us all the career options available to choose from. It has helped me and many of my classmates," said Nelamma.

Nelamma was never passionate about science and in fact she found it hard to absorb the concepts. To make things even more complicated, her schoolteachers were only teaching the subject theoretically, which she could not digest. This was the prime reason for her to shift from science after her matriculation to complete a Commerce degree.

After observing Agastya's teaching methodology and their hands-on use of experiments, Nelamma wants to become a teacher.

She said, "When I become a teacher, I want to teach the Agastya way. The way Agastya teachers taught us, with patience and making us clearly understand the subject, inspired me a lot to also become a teacher."

19-year-old Nelamma gained confidence, got rid of her stage fear and did peer to peer teaching. She understood how human values are important to society and why leadership qualities are important. All these changes in her life happened only because of Agastya and she is eternally grateful to them.

She declared, "Agastya sessions, the instructors and all the scientific gadgets available in the labs are the perfect environment for a person to excel." She further described Agastya's science centre as a 'perfect science room' for a student.



"Agastya is a perfect science room for a student."







#### Yashwant R S

Age: 16

Years spent with Agastya: 2016 - 2020

**Background:** 

Father: Farmer

Mother: Homemake

Mother: Homemaker



# Lighting up a bright future

"A gastya helped me decide to take up further studies in science. They motivated me to achieve my my goals and analyse problems in all aspects of life. Agastya lit up a brighter future for me." Yashwant is grateful to his Agastya instructors for bringing out his hidden passion for science and electricity.

Introduced to Agastya International Foundation in the sixth standard Government school and college, Chamarajanagar Yashwant showed no interest in what they were saying. "When Agastya teachers came to school, I thought it is just another type of tuition. My initial ideas quickly changed because they were not like school nor like any tuition class." An only child who scored average marks in boring, lecture filled classes, he found Agastya refreshing because of its practical project - based approach.

66

They motivated me to achieve my goals and analyse problems in all aspects of life.



Yashwant always wondered how electricity worked till the Agastya instructors showed them its magic using circuits and lighting up bulbs with lemons. This sparked Yashwant's curiosity! "My interest was gradually building but after the lesson on electricity, I was fascinated and wanted to tell everyone how easy it was to understand. My parents were so relieved and happy." He began doing his own experiments in electricity, learned its concepts and developed a deep interest in the subject, so much so that he is currently completing a Diploma in Electric Communication, Government College, Chamarajanagar with the intention of becoming an engineer.

Even at home, Yashwant would make time to study science and continually returned to the Agastya instructors to clarify his doubts. He enjoyed watching chemical reactions and loved experimenting with acids and bases.

He discovered how empowering teamwork could be when the Agastya instructor, Mr. Manu formed his class into groups. Chosen as his group's leader, Yashwant learnt how to lead, to communicate effectively and to assign tasks to his teammates. He asked each student to bring different materials for the activity and to practice tasks at their houses beforehand. Practical activities became his favourite way of learning. He began to do well in school, asked more questions, and tried outsimple experiments on his own.





He also started analysing problems from various aspects and perspectives. As a leader, Yashwant realised that learning in groups was fun. He revealed, "I do not think anyone understands how it feels to be a leader and what responsibility it entails, unless you become one. Everyone looks up to you and you must be responsible first before others follow you."



## **Science Centre - The Nucleus of Experimentation**

The science centres, located in the urban and semi-urban areas, serve as hubs of innovation and interactive science learning for nearby schools. The Instructors in these centres enhance the school curriculum by incorporating science models, experiments, and fostering children's ability to create their own low-cost models & experiments, resulting in a deeper understanding concepts. In addition to students and teachers, the science centres attract a diverse array of visitors from various fields year-round, providing them all with the opportunity to indulge in hands-on learning.



















### Shivaraj Gudageri

Age: 21

Years spent with Agastya: 2015 - 2018

**Background:** 

Father: Farmer

Mother: Farmer



## **Aiming** for the stars

hivaraj loved looking at the night sky and often wondered about our place among the planets and stars. A 3D model of our solar system at Agastya's Science Activity Centre in Hubballi answered many of his questions. He was astonished at how small Earth was when compared to the sun!

Located in 15 states, these unique Science Centres are hubs which engage the senses. They teach students to observe and to think creatively, fostering the wonder and awe that is natural to children. Shivaraj was one of those lucky students who could visit the Centre at least once a month. "I entered another world where all my senses were activated by so many models and experiments" reminisced Shivaraj. From the 1st standard to seventh standard Hiriya Prathamila School, Sulla Hubli. From

7th Standard to 10th standard studied in SSBMHS Sulla, Hubli. He recalled the pyramid model and how the instructors simplified complicated formulae using math puzzles, geometric models, and hands-on learning techniques.

He realised that "Schoolteachers only think about finishing the syllabus in time for the exams, whereas Agastya instructors are different. They are cooperative, friendly and encourage students to come up with new ideas and make their own models. They understand the minds of children and include hands-on problemsolving through trial and error so that we understand the concept better. The instructors help you explore different interests so you can improve and develop your talents and skills."

The instructors help you explore different interests so you can improve and develop your talents and skills.



#### **Learning Science from a brother**

With Agastya instructor Guru as his guide, Shivaraj worked for three months on an 'Eco-friendly stain remover' for any type of fabric. He experimented with making a compound from Balanites Aegyptiaca (scientific Transformed Lives of the desert date or soapberry tree) with distilled water in varying compositions. Not only did the instructor provide the necessary materials and information to do this research but continuously motivated him as Shivaraj was quite afraid. Guru sir helped him explain the concept to the audience confidently and taught him how to use charts and graphs to make the presentation visually appealing.





This projectgave him self-assurance, confidence and presentation skills. His second great opportunity was becoming a Young Instructor Leader (YIL). The YIL programme uses a 'peer-to-peer learning model to deliver practical, hands-on science education to students.' Among many initiatives that he undertook to improve his community, Shivraj is most proud of giving rural children awareness of technology. His communication skills too improved after participating in various fairs where he had to present and speak to people.

A third exceptional opportunity was participating in IRIS – a National Fair that recognises and rewards outstanding projects by young Indian innovators. He had reluctantly participated and so was delighted to receive the second prize. More than the prize, he was happy to see how much he had improved and that he was no longer afraid. His father (a farmer), mother and younger sister were really happy and proud of his achievement.

Since then, this poise and experience helped him do well in many competitions. He competed in 'Jignyasa' - an annual competition for the enhancement of science at the school level. His success inspired other children who also wanted to do something on their own. "Participating in the IRIS competition overwhelmed me at one point. The instructor, however, encouraged me like I was his own brother. I never felt like I was learning science from a stranger in a public space. Instead, it felt like my brother was teaching me."

said Shivaraj, about the instructors. Agastya instructors would help the students make the model more effective and efficient. They gave students technical assistance, encouragement, and even the necessary materials, if needed.

Shivaraj was amazed at a 'seed sowing machine' that he saw at the Hubballi centre. In his village, people used traditional methods for sowing, which was time consuming and labourious. Shivaraj went to see the farmers about such a machine, and they showed an interest. So, he approached the Agastya instructor who also supported his idea. At last, with hard work and determination, he was able to make the machine and hand it over to the farmers of his village.

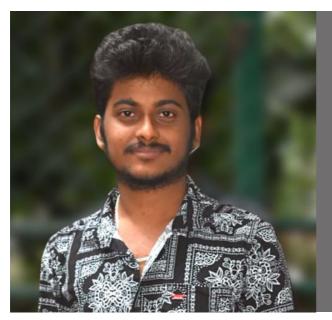
21-year-old Shivaraj reflected, "At Agastya, they taught us that theoretical knowledge does not always work and that one needs to think practically to solve certain problems. I am following that principle which is helping me today even in my personal life." If not for Agastya, he would have been working with his father as a farmer. He saved the annual YIL scholarship of INR 2,000 to pay his pre-university and degree fees. Shivaraj's personality has changed for the better as Agastya helped him come out of his comfort zone. He hopes to join the Karnataka Administrative Service because he wants to serve the needy and better their lives. Agastya taught him that following proper rules and procedures brings about improvement. He hopes to play a key role in bringing positive changes in society.



"One needs to think practically to solve certain problems."







## Balaraju C G

Age: 21
Years spent with Agastya: 2015 - 2018
Background:
Mother: House maid



## **Curiosity, confidence** and communication

Balaraju is the only child of his mother who is a domestic worker living in Chikkbalapura. From a young age, he helped his single parent with all the housework. Balaraju admits that though he cannot cook, he does contribute by putting rice in the cooker and placing it on the fire!

Balaraju clearly remembers the day that some strangers came to his Government High School in Hebbal, Bengaluru, Karnataka. His ninth standard teachers introduced them as instructors from Agastya International Foundation who were going to teach science topics which were in their textbooks, in a practical way. The Agastya instructors lit a candle inside a glass container. Balaraju and his fellow students were surprised as the container became very hot, but the glass

I still remember I made a lot of friends while doing this. I even demonstrated the experiment in my school and my teachers appreciated me. Events like these made me more confident in life.

did not break and curiously asked why. The Agastya instructors explained that even though most glasses looked transparent and delicate, they were composed of different materials, which is why some glass is strong enough to withstand high heat. He thoroughly enjoyed the practical demonstration on reflection and refraction. Another activity that fascinated him was seeing an onion through a microscope. Balaruju was amazed to see so many cells that were not visible to the naked eye. With their curiosity amplified, he and his classmates discussed these activities and even decided to try and do similar experiments themselves.

#### **Being Proactive and Inquisitive**

As soon as Balaraju started to understand scientific theories by practically learning them, his initial dislike started to change, and he began to look forward to these proactive sessions with Agastya's instructors. He credits this change to their teaching methodology and friendly, approachable instructors. Therefore, he and his classmates did not feel afraid to inquisitively ask them many questions like, whether they went to other schools, or did they teach other children like themselves. Balaraju and his friends became confident enough to ask the Agastya instructors to take them to see exhibitions and other scientific events.

His favourite experiment was designing the working of a communication network using plastic glasses and string. He exclaimed, "It helped me understand how communication happens over the phone by radio-active





waves. I still remember I made a lot of friends while doing this. I even demonstrated the experiment in my school and my teachers appreciated me. Events like these made me more confident in life."

Balaraju believed since his schoolteachers knew all the children, they were able to identify those who were weak or good in their studies. Then they proceeded to focus only on the good students. The Agastya instructors, however, treated everyone equally, regardless of their academic level in class. So, despite being a good student himself, Balaraju appreciated their way of teaching because weaker students got a chance to interact with other students and ask questions, and this elevated their learning and understanding. Some students do not pay attention to their teachers but tend to listen to their friends.

Due to the encouragement and motivation, he received from the Agastya instructors, his confidence began to grow, and he was able to speak in front of strangers. His mother was extremely proud and very happy when he joined the Young Instructor Leader (YIL) programme and advised him to take advantage of this opportunity as much as possible. Balaraju was excited to teach other students what he had learnt and thrilled to attend meetings with students from other schools and to visit new places. For example, as a YIL, his responsibility was to share everything he saw at the annual Gandhi

Krishi Vigyana Kendra, which is an agricultural mela, with those students who did not attend. Another task as a YIL was to create awareness in the community about the Animal Husbandry Department's helpline, which extends support for those whose livestock gets sick.

Another huge benefit was the Agastya scholarship of INR 2000 which helped him to buy his books. As a youngster, he wanted to join the police force despite his mother not being happy with his choice. Agastya's career guidance programme helped him understand that there were many choices and prospects available. After careful consideration and weighing the pros and cons, he shifted his aspirations to advancing his career in the line of Commerce.

An important reason for choosing Commerce was that the courses did not require him to be fluent in English and he could study in Kannada. Currently, in his second year of a degree in commerce at Bapu Degree College, Bengaluru, he wished he could help his mother who continues to work to pay his fees. However, Balaraju's mother is very proud of him and prays that he should do well and not struggle the way she has had to. His biggest learning from Agastya was communicating with clarity confidence. The advice he has for young children in their fifth or sixth grade is, "Make use of the Agastya faculty and facilities to the maximum: they will teach you to speak with confidence."



"They will teach you to speak with confidence."







### Sunita Narti

Age: 21
Years spent with Agastya: 2015 - 2018
Background:
Mother: House maid



# From hating science to graduating in style

2 1-year-old Sunita Narti is in her third year of a degree in science at Global Initiative College, Hubballi, Karnataka. Considering that she has chosen science as her subject in college, Sunita candidly admits that in school she was never interested, nor did she understand her Physics and Chemistry lessons. One of the reasons for her dislike of science was that it was all theory. She found chemistry boring and, dealing with equations meant nothing to her. Moreover, there was a lot of confusion regarding the experiments.

#### The Freedom to ask Questions

Her time with Agastya International Foundation changed all this. In the ninth standard, she attended a science exhibition in Gurudatta Bhavan, Dharwad District, Hubballi, where she was excited by various science



In Agastya, I found the instructors friendly and cooperative – they encouraged her to take part in group studies.



models and live examples of different science topics, something she had only read in books. Her natural curiosity led to questions and explorations about science. She finally understood why litmus paper changed colour based on whether the solutions were acids or bases.

Before attending Agastya's science classes, Sunita just by hearted whatever her schoolteachers taught. Agastya opened up a whole new world with many possibilities. with an amalgamation of both theory and practical classes. Due to this, she was able to understand concepts better and her interest in the subject grew. As she started finding answers to her questions and clarifying her doubts, chemistry began to look interesting! The Agastya instructors too motivated her to pursue her interest in science and she is even contemplating a doctorate in chemistry as well. Sunita whole heartedly credits Agastya's methodology for such a paradigm shift from dislike to an interest in science.

Agastya played a crucial role in shaping Sunita, helping her develop team building skills, analysing her own strengths and weaknesses, and dealing with conflict, which made her a good team player in college. She now dares to initiate, inspire and motivate people too. Her father who is a farmer and her mother who manages the house were delighted that she received a scholarship amount of INR 2,000 which helped pay her college fees. In her current academic setting, Sunita feels that the professors only give importance to theory and focus on



#### TRANSFORMED LIVES



completing the syllabus thereby limiting exploratory peer teaching and group cohesive skills. In Agastya, however, she found the instructors friendly and cooperative – they encouraged her to take part in group studies, due to which she was able to understand subjects more easily.

During the COVID-19 pandemic, she started taking classes in math and English for high school students in her village.

She liked sharing her knowledge and helping out students and aspires to become a college professor She was thoroughly motivated by Agastya's instructor to pursue this activity.

Sunita felt that many people were not aware of Agastya's various programmes and activities and wished for their promotion through social and print media so that more people know about the life-changing activities and more children can take advantage of what they offer.



"Agastya played a crucial role in developing my team building skills, analysing my strengths and weaknesses, and dealing with conflict."







## Vijay B

Age: 24

Years spent with Agastya: Since 2008

**Background:** 

Father: Painter

Mother: House maid



## It's time to give back!

From time to time, we hear stories that give us hope and make us feel good and Vijay's is one such story. Excellence in academics is evident in Vijay's house where he is a final year student in a bachelor's degree in technology (electronics and communication engineering) at Kuppam Engineering College and his younger brother is pursuing his bachelor's in business administration from Dravidian University in Andhra Pradesh. He is quite a linguist, fluent in Telugu, Tamil, English, Hindi, Kannada and Malayalam. Vijay's father is a painter and his mother a home maker residing in Model Colony, Kuppam.

Agastya's practical activities and experiments first left a lasting impression on the young fifth standard student in Gowtham English Medium High School, Kuppam.

In Agastya, I found the instructors friendly and cooperative – they encouraged her to take part in group studies.

His next exposure was in the sixth standard at Zilla Parishad High School, Newpet when he thought he would have to pay money to visit, even though his school principal told him otherwise. This was too good to be true for Vijay!

#### A desire to learn more

Vijay experienced fun experiments like erupting volcanoes and sparkling crackers. Later he and his friends went to the astronomy lab which was his best experience at the Campus Creativity Labs. In subsequent visits, they saw videos on how the universe, the galaxies and the earth formed, what the various planets looked like and were most curious to know more. This experience was most fulfilling because his school did not have the equipment or the labs that Agastya had. He remarked, "I remember the Astronomy class even to this day because that is the level of satisfaction I had on my first day, and that too for free." Later on in school, when his teacher was teaching the class about the solar system, she was impressed at how much he knew about the subject. Vijay and his friends also went to the Robotics lab which had a mechanical moving crocodile! He did not limit his pursuit of knowledge only to the Science Labs but started using his mother's smart phone to Google and search for more information and answers to his many questions. He had an insatiable desire to make sure that all he learnt was true. By nature, a curious boy, Vijay wanted to research everything. His neighbours boiled water with Shirish flowers for bathing.





They knew that it had medicinal value but did not know how or why. A persistent Vijay did some intense research on the internet and learnt a lot about the medicinal benefits of Albizia Lebbeck. To his good luck, opportunity came knocking on his door! An Agastya instructor, Dr Mahadevan, asked students to come up with different ideas for projects. Vijay and his friend told him what they had learnt about Albizia Lebbeck. To their surprise, their instructor too was researching the very same plant and he reviewed all the information they had collected. The next week, Vijay and his friend visited the Agastya Campus and combined their research with that of Dr Mahadevan and wrote up a paper on the benefits of Albizia Lebbeck. During his early days, a shy and nervous Vijay would faint even when he had to go up on the stage to collect a prize. However, during his bi-weekly visits to the Campus, he first learnt to be 'dedicated' and 'disciplined.' From the second week onwards, he studied how to interact, speak and present himself. This helped reduce his stage fear. Vijay said, "The instructors at Agastya helped me to become the person that I am, and they continue to help me today."

Vijay participated in IRIS (Initiative for Research and Innovation in STEM), a science competition, held at Christ University, Bengaluru. This state level competition made Vijay even more nervous than usual. He did not have the confidence to participate in front of strangers and did not want to step out of his comfort zone. Seeing his fear and anxiety, Vijay's parents advised him against participating, but the instructors from Agastya convinced them not to dissuade him. A YIL instructor taught them the knack of creating a presentation, body language and facial expressions that one used while presenting a paper. Despite his feelings of trepidation, Vijay somehow presented the paper about Albizia Lebbeck but failed to win the competition. Deeply disappointed, Vijay worked hard, pushing himself day and night and practising body language and presentation skills in front of the mirror. At another competition, INSEF (Indian Science and Engineering Fair), held in Vagdevi Vilas School, Marathahalli, all his hard work paid off and he won a silver medal for the same project. This was a memorable day in his life as he revelled in the praises he received and was thrilled to see how many new people approached him with different ideas to implement. At the Innovation Fair at Visvesvaraya Industrial and Technological Museum, he won the first prize.

A proactive Vijay would discuss seminar topics with his Agastya instructor, who in return would simplify it using models and activities. While presenting seminars, Vijay did not refer to notes as the concepts were crystal clear to him and he had the confidence gained from practical

knowledge. Subsequently, he attended many other competitions presenting different topics and to his credit, never returned without a prize, some of which were in cash. Vijay was grateful that through this journey of science competitions, the Agastya instructors were always just a call away. They helped by sending videos, images and documents on his chosen topics. Even after his tenth standard, Vijay continued to visit the Agastya Campus every day with new ideas and how to develop them.

He continued his learning with Agastya through Operation Vasantha. The in-charge of this programme asked him to set up and take care of one of the night school centres. Though reluctant at first, Vijay knew that it was his time to 'give back' by helping students in his locality. Though he had difficulties initially, he was able to run the Centre properly. With the salary earned through Operation Vasantha, Vijay purchased a projector to show children videos and images related to the subjects studied. He also felt that it was important for students to be responsible citizens. One such example was that of Santosh, an eighth standard student who had the habit of smoking. Vijay not only helped Santhosh with his studies but also motivated him against substance abuse. The rebellious Santhosh transformed into a person who received an award from Chief Minister Y S Jagan Mohan Reddy for securing the first rank in his district. Vijay planned to pass on the responsibility of the evening school centre to Santhosh. The emotional support and respect that Vijay receives from the people in his village is something he cherishes, "The people in my Operation Vasantha centre are more than friends to me, they are family."

Innovation was not the only skill he got from Agastya – he also learnt to plan and organise events. Along with other YIL alumni, he organised a district level science fair called 'Tejas.' It was the biggest science fair that the Chittoor district had seen with around 200 participants and 1000 visitors. After his grandmother told him about the benefits of sprouts, Vijay started growing them but found that monitoring their growth and taking care of them was a tedious task. He loves robotics and is planning a 'Sprouts Monitoring System' as his final year project. Vijay aims to be a part of Agastya even after he starts working. He revealed, "I learnt more about life than science at Agastya; about being a leader and facing my fears head-on."



"I learnt more about life than science at Agastya."







### A Usha

Age: 20 Years spent with Agastya: 2012 - 2015 **Background:** Father: Tailor

Mother: Homemaker



## A love of botany and chemistry

sha and her fifth standard classmates were very excited to make their first - ever visit outside school to Agastya's famous Kuppam Campus. Instructors demonstrated many science models and experiments and patiently answered their many questions - "why was the Foundation established in Kuppam?" "Who was responsible?" Usha went back home and told her parents the story of Agastya. The next day, her juniors and classmates who did not visit the Agastya Campus, had so many questions for her. During the lunch hour, Usha described in great depth and detail, everything she had seen and experienced.

Until her sixth standard, Usha and her class visited Agastya's Kuppam Campus twice a year. It was in her seventh standard when she was studying at Andhra,

My teaching skills have been enhanced and I have gained leadership qualities. I am a disciplined student now and I have lost all stage fear.

Pradesh Model School and Junior College, Santipuram Chittoor, Andhra Pradesh that Usha became a Young Instructor Leader (YIL). From her class of 4, she was among the 20 students who excelled in a science-related test. Usha was unaware of what being a YIL meant until one of Agastya's instructors explained that she would learn hands-on science and then teach her peers whatever she had learnt. Along with studying, she would have to improve her communication skills and self-management. Hearing this, she was very excited to be part of the YIL programme.

#### The art of speaking in English

On her first day she, along with the other YILs learnt meditation and engaged in fun activities. She later taught her friends at school the technique of meditation. She learnt to introduce herself correctly and to speak English. When some foreigners visited the campus, Usha confidently introduced herself in English and talked about her learning experiences at the campus. She had never imagined that one day she would talk to someone in English. She disclosed, "Initially I was scared of making mistakes and thought people would laugh, but instead everyone praised me and helped me. The Agastya Instructors told me that conveying meaning is most important even if I spoke in broken English."

As a YIL visiting the Campus once every fifteen days, Usha most enjoyed the practical experience of doing experiments. She distinctly remembers the hands-on experience of cutting leaves, observing cells of an onion





peel under the microscope and generating electricity using a copper coil, battery and wire. At Agastya, each experiment brought her closer to understanding science. Once she performed the experiments and understood how and where to use them, she repeated them on her own at home. Her mother was very proud that she was learning and demonstrating so many new things.

Like many of her peers, she considered the YIL programme a turning point in her academic and personal life. Usha has learnt self-confidence and the value of discipline from Agastya. Her training as a YIL motivates and reminds her to be her best self wherever she goes; have good manners, be active in class, concentrate on what her teachers say and ask questions whenever in doubt. Through peer-to-peer teaching, Usha actively supports and assists her siblings and friends in their studies.

She recalled the first time she had to teach her juniors and how afraid she was that they would laugh at her mistakes. She was uneasy, nervous and under pressure to teach the right way because her friends, classmates and fellow YILs were also going to be there. Usha was so relieved that the session went well, even though she had made a few errors. Her fellow YILs encouraged her and pointed out where she had gone wrong without making fun of her. It was a memorable day for her, and the experience made her feel confident and happy about her first, independent peer-to-peer teaching session. Deeply interested in helping her community, an inspired Usha voluntarily started teaching other students there.

She has observed many positive changes in her personality due to Agastya's influence. "I am very active in my studies.

I liked to do experiments in school and continue to do so in my college too. My teaching skills have been enhanced and I have gained leadership qualities. I am a disciplined student now and I have lost all stage fear. I can speak in my class and seminars fluently," pronounced Usha. Agastya provided Usha with many opportunities to manage and address people. With enough confidence, she started to participate in events organised by her school as well. She recalls giving a speech about women on International Women's Day at her school. At Agastya's Alumni Meet in 2018, she was in charge of managing the students, helping instructors assign places and arranging the models.

Usha also credits Agastya for helping her decide on her future career. She revealed, "Agastya ignited in me a love for botany and chemistry. I used to visit the labs and see how two chemicals mixed could create new things. My instructor explained how many of these chemicals are plant derivatives and medicinal in nature. Agastya allowed me to move closer to science and I have discovered my fondness for, and interest in, plants and chemicals."

Usha's father is a tailor, and her mother is a homemaker. She has a younger sister who is pursuing her twelfth standard. In her free time, Usha likes to paint and draw trees and scenic views because nature inspires her. She categorically stated, "I would not have understood my strengths without Agastya to guide me. I was filled with stage fear, low confidence and lacked elementary communication skills before joining Agastya and becoming a YIL." She would like to continue to associate with Agastya in future. She considered Agastya a life-changing organisation where friendly instructors treat everyone equally.



"Agastya ignited in me a love for botany and chemistry."







## Basavva Somappa Vaggar

Age: 20

Years spent with Agastya: 2003 - 2007

**Background:** 

Father: Farmer

Mother: House maid



# Reflecting the light to all!

Born to a father who works in the fields and a mother who does household chores in other houses, Basavva is an enthusiastic and curious little girl from Nulvi village in the Hubli district of Karnataka. She would never leave people alone, asking them questions about matters she did not know the answers to. One day, in her fifth standard, a yellow bus came to their school, Sarkari Hireya Prathamika Salya. She soon found out that it had brought instructors from Agastya International Foundation, with apparatus to demonstrate science experiments for the students. This momentous introduction to Agastya was the start of a life-changing journey.

Basavva and her friends were so excited by how light reflected through a mirror and how it refracted through

The instructors at Agastya were friendly but at the same time pushed us to our limit.

lenses or prisms, that they immediately wanted to try it out themselves! From the fifth to tenth standard, visits to Agastya's Science Centre at Hubballi every two weeks were instrumental in Basavva's metamorphosis. She learnt about the human body through the different models at the science centre. She conducted various chemical experiments to understand different phenomena. She thoroughly enjoyed this process of learning through experience and even forged friendships with the Agastya instructors who were of great help, coaching her on the art of thinking and working out answers for herself.

### Being confident in any situation

In her ninth standard, Basavva helped the instructors organise events in various science exhibitions in the Nehru Stadium and Sanskruti Bhavan at Hubballi, where she also monitored students' activities. Basavva enthusiastically tried to pass on all the knowledge she had received from Agastya's instructors to her friends. For instance, while talking about the 'water cycle,' she demonstrated it using straw pipes and water to make the whole process more interesting.

Her father had asked many people to help him upgrade his plough as he did not know how. Through problem solving activities at Agastya, Basavva came up with an idea, based on something she had seen in one of the science exhibitions. With the help of a local welder, who connected iron rods to pipes, they assembled a plough. Her grateful father was extremely proud of her





and uses the same plough in his field even to this day. Agastya did not teach only science – they also introduced her to art forms such as dance and drama. As Young Instructor Leaders (YIL), Basavva and her friends were involved in spreading awareness about various issues to the people in the village. Through a skit on the causes, symptoms and cure for dengue, she enacted the role of a patient while some of her friends played mosquitos!

"Dream, dream, dream. Dreams transform into thoughts and thoughts result in action." – A P J Abdul Kalam

"The instructors at Agastya were friendly but at the same time pushed us to our limits.

They gave us opportunities to overcome our fears. To be confident in situations is one major learning that I have carried with me," stated Basavva. She is grateful to the Agastya instructors and recommends that the YIL programme should be available to all and not just a few selected students. 20-year-old Basavva is currently doing her Diploma in Medical Laboratory Technology in Karnataka Institute of Medical Sciences, Hubballi. It is her dream to set up a clinical laboratory of her own.

She attributes her knowledge and learning to Agastya's methods of models, experiments and activities. She also effortlessly copes with the teaching methodology used at her college, as it is the same process used at the Agastya classes.



"To be confident in situations is one major learning that I have carried with me"







## Anjana Punjar

Age: 18

Years spent with Agastya: 2014 - 2020

**Background:** 

Father: Farmer

Mother: Homemaker



Agastya, where she learnt the value of recycling by

creating new products with reused paper, bottles and

waste cardboard. Thus, Anjana's creative side surfaced

when exposed to the learning environment offered under

Agastya's umbrella. She had found school studies hard but Agastya's practical way of teaching simplified

lessons. There were no science laboratories in her

school whereas Agastya had so many science labs. The

friendly Agastya instructors could easily be approached

without the fear of being reprimanded, something she

was unused to in her school.

by using a ball. She was hooked!

## **Questioning and learning**

A njana is 18 years old and comes from a rural family. Her father and brother are farmers, and her mother manages the house. She is currently pursuing her first year of a degree in commerce from the Government College Dharwad.

Anjana still recalls her first exciting exposure to Agastya in the sixth standard at KGS school, Byahatti. The task of finding the missing parts of a puzzle was challenging. She loved the monthly visits to the Agastya Science Centre in Hubballi where the Agastya instructors explained scientific concepts through practical demonstrations. Anjana loved the way they clarified her doubts and the patience with which they answered questions. This gave her a better understanding and a new perspective. Anjana attended summer camps in

A practical demonstration by Agastya instructors about the sun's energy and how its rays deviate and bend when passing through glass, fascinated Anjana. Another complicated chemistry experiment that was simplified at the Science Centre was where atoms covalently bond with others to gain more stability. Agastya instructors also demonstrated the gravitational effect of the earth,

Learning with Agastya helped her view society differently. During her free time, Anjana kept herself updated on current affairs including watching news on TV and reading newspapers. She credited Agastya for facilitating her participation along with other students, in three science festivals in Hubballi. Anjana also observed how biscuits are mixed, baked and manufactured on a large scale at a factory in Dharwad. Such visits helped improve her communication skills and ability to interact with others.

66

From the moment I started attending sessions at Agastya I stopped worrying about my marks and started to focus on understanding concepts.







#### **Knowledge is more important than marks**

Another major benefit was overcoming her fear of learning new things which had prevented her from expanding her knowledge. She said, "From the moment I started attending sessions at Agastya I stopped worrying about my marks and started to focus on understanding concepts because I realised that knowledge is more important than marks." Agastya's instructors encouraged her to stand up and ask questions confidently. Whatever she learnt from Agastya, she then taught local neighbourhood children. She even begapractisingng yoga.

Anjana was disgusted at how outsiders would throw garbage all around the grounds when visiting her school. She spread awareness about cleanliness and demonstrated her commitment by initiating the cleaning of the school surroundings herself.

Anjana became a Young Instructor Leader (YIL) after she passed a test in mathematics, science and general knowledge. As a YIL member she received an annual scholarship of INR 1,600, which she used to buy her textbooks. During YIL sessions the Agastya instructors would tell stories which had some moral lesson or value. The inspiring, motivational videos they showed led Anjana to realise that she wanted to help people and show respect to everyone. According to her, everyone leads a busy life, and no one gives importance to such values. However, Anjana felt deeply that these values were important and took it upon herself to spread awareness to others around her.

In 2019 Anjana introduced the chief guest at Jignyasa, a national science festival. She believes this prestigious opportunity came her way because of her confidence and good communication skills.

Due to economic reasons, Anjana had to shift her focus from science to commerce. She plans to attend coaching to become either a bank manager or a government employee. She credits Agastya for giving her the confidence to change tracks and work towards her goals.



"I realised that knowledge is more important than marks."







### Asha R

Age: 18
Years spent with Agastya: 2008 - 2019
Background:
Father: Farmer

Mother: Homemaker



## Present with both body and mind!

Little Asha was jealous – her older sister was teasing her about their senior class visit to the Agastya Campus and boasting about all the amazing activities there. However, Asha had to wait till she was in the fourth standard when the Zilla Parishad High School, Thimmarajupalli took her class to Kuppam for the first time. Asha said, "Now that I was finally going to visit Agastya, my happiness could not be contained." Her mother too was delighted and told her "During my childhood, we never went on trips, but you must go and enjoy."

Until then Asha had lived in a world that was all about her school, home and friends, but that day she entered a brand-new sphere called 'Agastya'! She noticed a quote at the entrance 'Aah, Aha, Ha-Ha.'

All I could understand is 'Ha-Ha!'
which meant this place is for fun
activities and laughter.

"All I could understand is 'Ha-Ha!' which meant this place is for fun activities and laughter." She was thrilled to experience the science and art centres, planetarium and creative teaching centres at the famous Campus Creativity Lab, saying "We saw many models on science and the human body, and played a lot of games."

"After that memorable first visit, however, I could not go there for another four years." Asha was studying in the eighth standard at AP Model School Santipuram, Andhra Pradesh when she became a YIL (Young Instructor Leader). "I was one of 15-20 students selected out of the 80 in my class because we did well in tests and I was an active participant in cultural activities and good at dancing!" she exclaimed.

#### What leadership means

The entire joint family consisting of her father, mother, older sister, younger brother, uncle and aunt were happy and proud that she became a YIL. For her, it was a validation that she had leadership skills and the knowledge to be a leader. Asha remembers her mother laughing at her boast, "I am a leader now, everyone will have to do as I say!" Her understanding of what it meant to be a leader changed drastically from that first day. She reduced her mischievous activities in the classroom, stopped eating her lunch before the break, and started taking more interest in her studies. She realised that "As a leader, I should not do something that I asked others not to do. I did not want to be a bad leader. After three years of the YIL Programme, I





YIL programme, I understood that leadership is not about ordering people to do what I say. I had to start regulating my behaviour which people would want to adapt to. Leadership is about being responsible." The frequent complaints of teachers to her parents for not studying stopped too. She still believes that one needs to discipline oneself first before disciplining others.

As she was not very good in academics, her school teachers too did not pay her much attention. Hence, she was pleasantly surprised to find that Agastya's instructors were open, friendly and treated everyone equally. Asha found herself eagerly looking forward to Agastya's hands-on practical oriented sessions which had detailed explanations. "The school taught us using books but in Agastya we learnt using actual models such as 'Parts of the Body.' In school our body was present, but our mind was absent whereas in Agastya my mind and body were both present and active." Asha had been a diffident child afraid of interacting with people or even asking her schoolteachers any questions, but the positive approach and behaviour of Agastya instructors enabled her to clear her doubts not only during Agastya sessions but also at school. She gained so much knowledge and confidence that on the

on Maths Day shepresented the uses of Pythagoras' theorem to visitors and teachers. In the Agastya alumni meet, she even gave a dance performance. As a YIL, she loved peer-to-peer teaching the most. She feels that it is her responsibility to teach others and share her knowledge. She created awareness in her village against the use of plastics and explained degradable and non-degradable waste. She mainly targeted young children as they are the ones who constantly buy chocolates in plastic wrappers. She found that her efforts paid off as people started to follow her advice, and that motivated her to do more awareness programmes.

Earlier her father would decide her for not studying and scold her for wasting time, but she proved him wrong by not only getting good marks but also winning a scholarship. Agastya's scholarship amount funded her college books and commute to college. Though her father is a farmer, now he does not want her to enter the farming field. Instead, both her parents want her to study well and reach greater heights. 18-year-old Asha is currently in the first year of a degree in business administration (BBA) at the Dravidian University, Kuppam. She chose BBA as she wants to run a business knowing that it is a male-dominated field. After YIL she has become independent and fearless; effortlessly presenting seminars in her BBA course!



"As a leader, I should not do something that I asked others not to do."







## L B Veena Reddy

Age: 19
Years spent with Agastya: 2016 - 2017
Background:

Father: Farmer

Mother: Anganwadi School Teacher



## Sowing seeds of knowledge

Veena is 19 years old and is currently a second-year bachelor's degree student in science from IRM Degree College. Her father is a farmer, and her mother is a Anganwadi School teacher. She has two sisters who are also studying. In her free time, Veena likes to read books and play chess.

Veena became a Young Instructor Leader (YIL) in the sixth standard at the ZPHS School, Santipuram, Andhra Pradesh. She remembered her Agastya forays in vivid detail, "The Agastya van came to pick me up along with the other YILs, and together with all my friends we visited the Campus. The instructors in Agastya were very welcoming. We saw all the labs and I liked the environment of the Campus immediately. I remember the calming meditation and some enjoyable group activities.



Agastya sessions motivated and inspired me to form and follow my dream.



Those were beautiful moments for me." During her monthly visits to the Campus, she enjoyed many aspects of the YIL programme, including practical experiments, the easy manner of the classes, the chance to express her ideas, and the opportunity to share her learning with others. She explained, "I used to describe what I had learnt at Agastya, to my classmates, with a kit containing models given to me by Agastya."

### Importance of helping others

Veena recalled a memorable instance when she was able to help her community. She narrated, "The people in my village built a bore well for drinking water. Two days before this, I had gone to Agastya and learnt how to check for the presence of fluoride in water and the demerits of this chemical. I told my parents about this and later during the construction of the bore well, I asked my father to talk to the village elders. They called a lab technician to test the water and the result showed that fluoride was present in the water! They stopped the project there and shifted to another area. Thanks to Agastya the whole village benefitted!"

The YIL programme had a positive influence on Veena's academic performance. Through those sessions, she honed her communication and creative skills, learnt how to think practically and improved her proficiency in peer-to-peer teaching. She clarified, "Agastya sessions motivated and inspired me to form and follow my dream. I want to help poor students in their studies and explain to them the importance of studying.



#### TRANSFORMED LIVES



I would like to run awareness campaigns against child marriage and ask my village people to send their children to school for compulsory education till they are at least 14 years." The YIL sessions have given Veena the courage to speak against social evils and bring more awareness about them. The visits of Agastya's founder, Ramji Raghavan and the former President, Dr Kalam

deeply influenced her. Since childhood, Veena wanted to become an IAS officer where she can have an impact on poverty, health and education, so she is preparing for the exams. Veena is convinced that, "Agastya instructors have treated us like their children and helped us improve our behaviour. They are sowing the seeds of knowledge in us; one day they will become trees and provide shade for others."



"They are sowing the seeds of knowledge in students."







### **Suraj Chandra Gowtham**

Age: 20

Years spent with Agastya: 2017 - 2021 **Background:** 

Father: Labourer Mother: Homemaker



## **Practicality!**

uraj is a bachelor's degree in technology(CSE) Student at Bharath University. His father is a labourer in a private company and his mother is a homemaker. He has a brother who is also studying. Suraj loves to assemble computer parts and make music. Suraj joined Agastya's Young Instructor Leader (YIL) programme when he was in his seventh standard at Government High School, Kandigai. He liked the way the instructors used models to help students understand scientific ideas. He declared, "I loved the Levitron model and was fascinated when a pencil with a magnet floated over another magnetic field. I was thrilled to see a 3D model of the solar system at Agastya, which I had only seen in books. It was an amazing way to learn." The concept of repulsive forces in magnetism and its use in bullet trains, was something he became interested in

66

I was thrilled to see a 3D model of the solar system at Agastya, which I had only seen in books. It was an amazing way to learn.



and vigorously researched on the internet, trying to understand why only Japan had been successful and not India.

### Learning to visualise

Suraj really liked Agastya instructor, Sivanandam sir, and considered him a role model. In regular school classes, they knew that a teacher was taking the class but at Agastya they felt like a friend was teaching them. The element of fear to ask questions or be self-conscious was never there with the Agastya instructors. Suraj attended the sessions at Agastya once a month.

In school, he faced a lot of learning problems from the sixth to the twelfth standard. He chose the computer group in the eleventh standard and was excited about learning different programming languages like C, C++. He said, "But the reality of my experience was a great disappointment, because we were not given computers to learn, and everything was taught theoretically." According to Suraj, the priority for schoolteachers is to complete the syllabus and prepare students for the theory exams. Only during the last 30 days before the final exam did they get to visit labs for a practical experience. He said, "This hampered my curiosity about subjects.

The skills to visualise and do research was something that he learnt at Agastya. He found out that he was good at public speaking only after using the platforms that Agastya gave him.



#### TRANSFORMED LIVES



"I don't think I would have become the person that I am now in terms of my talents and skills, if it had not been for Agastya," he asserted. Suraj took the initiative to improve his surroundings by sharing the knowledge that he received at Agastya. During the COVID-19 lockdown he taught computer science to a couple of students.

Being a part of Agastya was a great opportunity for Suraj, as it helped him to set his career goals. He pronounced, "I will first work in an IT firm and earn enough money to start a school. My school, will not have any theory classes and I will ensure that all my teachers practically teach concepts."



"I don't think I would have become the person that I am now in terms of my talents and skills, if it had not been for Agastya."







Agastya International Foundation Campus Kuppam, Andhra Pradesh



Spread over 172 acres, the campus houses more than 20 labs, ensuring a constant buzz of activity









The campus's ecology, meticulously restored by ecologists, serves a dual purpose - to preserves the integrity natural ecosystem and to educate children about the diverse flora and fauna.



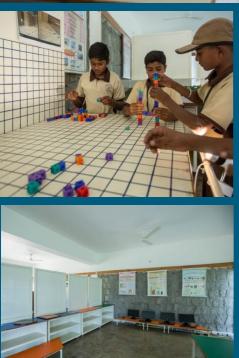














Each lab offers a unique hands-on experience that stir the curiosity and excitement of the students

















Each day, over 600 students visit the campus to engage in experiential learning



















Instructors act as catalysts in the process of learning















The curriculum is designed to complement the school syllabi enabling students to relate and explore











## Sandhya V

Age: 21
Years spent with Agastya: 2012 - 2019
Background:
Mother: Tailor



## My turning point...!

"In the seventh standard while studying in AP Model School and visited the Campus once in fifteen days. As a YIL alumnus, she asserted, "Two days of learning at Agastya is equal to one month at school."

Specifying the changes, she witnessed in herself, Sandhya said, "I was a girl with lots of fear and distress especially when I had to face an audience. After becoming a YIL and with constant support from the

I was a girl with lots of fear and distress especially when I had to face an audience. After becoming a YIL and with constant support from the instructors I gained the confidence to express myself.

instructors I gained the confidence to express myself in public and participate in activities. Now, whenever an occasion arises to participate or lead a team, I am the first to volunteer."

### **A Treasure House of Experiences**

For a shy child sitting quietly in the back of her classroom, Agastya took her on a journey of exploration. As a YIL, she introduced experiential learning to many children in her village, organised Alumni meets, held a cleanliness drive, taught school dropouts in another landmark programme called Operation Vasantha and organised rallies for increasing awareness about HIV/AIDS. She said, "With my experience of anchoring for Agastya's alumni meets I have gained self-confidence and belief in myself and feel that I can do anything. Now I can conduct seminars or explain experiments to my college peers." She learnt how to interact with others and strategise how to solve problematic issues in her community. Sandhya was indebted to Agastya for providing a friendly environment in which she could learn and grow and for instilling in her the spirit of teamwork. She reflected, "As a YIL I found courage and boldness within me, acquired leadership qualities, communication and analytical skills and positive thinking." The YIL training was a life-changer as it not only improved her academic performance but also made her socially responsible. For Sandhya, Agastya symbolised a treasure house of real-life experiences and educational enhancement.



#### TRANSFORMED LIVES



At the Marvic Teachers Global Summit, she interacted with foreign delegates, collaborated with others to perform experiments and amassed vital life lessons. Being the daughter of a father who is a farmer cum auto driver and a mother who is a homemaker, she was still astonished, "I would not have had this experience in my life had it not been for Agastya providing me with an amazing opportunity."

She dreams of becoming an IAS officer and serving her country, particularly those who are marginalised and impoverished. Her experience as a community leader has prompted her to identify pressing problems, analyse and solve them.

She said, "Belonging to a middle-class family, I only had dreams but could not commit to it due to lack of resources." It was the instructors in Agastya who motivated me to pursue them. Just as temples distribute 'prasadam,' Agastya freely gave scholarships, practical education and the motivation to chase our dreams. So, for me Agastya is greater than a temple!"

Sandhya is 21 years old and She considers herself in a better position than her counterparts at college because Agastya equipped her with a driving force to bring about change in society. "Everybody in their lives has a turning point. In my life I can proudly say mine was Agastya."



"Two days of learning at Agastya is equal to one month at school."







## **Syed Hidayath**

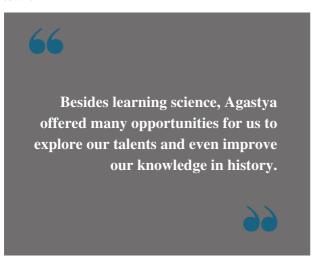
Age: 24
Years spent with Agastya: 2012 - 2018
Background:
Mother: Homemaker



## To shine a flashlight!

Suvarna news channel. In addition, he is well known for his own content on his YouTube channel Transformed Lives d 'Hello Hiddu Cine Beats.' Being an only child, Syed is the sole bread winner and support of his mother. He is presently preparing for the Union Public Service Commission (UPSC) examination, which he is going to sit for in the forthcoming year. According to Syed, his association with Agastya is what laid the foundation of his life.

He was only five years old when he lost his father. Brought up by his mother, who is a home maker. they migrated from Chikkaballapur to Bengaluru so that Syed could get a better education in the government Bruhat Bengaluru Mahanagara Palike High School in Tasker town.



This energetic 24-year-old young man was very fortunate to have been associated with Agastya ever since his eighth standard. In school, he found it difficult to understand subjects because his teachers only imparted theoretical knowledge. However, at Agastya's science centre, he was able to practically implement the theory he had learnt in school through experimentation. This helped him register, better understand and remember the concepts especially during exams.

Syed was impressed at how the Agastya instructors went about choosing YILs. They observed student interactions and communications as they gave his class a few scientific puzzles and games to solve. This experience made Syed feel that he had to be a part of the YIL programme, "I saw my growth and progress here, due to what Agastya taught us, something none of my other classmates could possibly see." He proudly proclaimed, "It was my good fortune to be selected as a Young Instructor Leader (YIL) by Agastya."

### **Discovering hidden talents**

Syed visited the Agastya science centre regularly and much to his excitement, engaged in cultural activities such as storytelling and dancing. He said, "Besides learning science, Agastya offered many opportunities for us to explore our talents and even improve our knowledge in history." He also mentions with pride, "The Syed Hidayath I am today is due to Agastya's practical sessions and cultural activities, which serves as a great opportunity for one to excavate and





bring forward hidden talents." Syed remained a YIL for four years till he completed his first year of preuniversity.

Various group activities were instrumental in bringing him out of his shell and learning leadership skills. As part of a Children's Day special, the Agastya instructors and his schoolteachers chose 15 students. Syed was the only one selected to participate as a Child Radio Jockey (RJ) for a programme called Active Bengaluru hosted by FM Radio Active 90.4. Radio Active was very impressed by Syed's skills, and at the tender young age of 13, he got his first job! Syed was very good at his daily job as an RJ and the station's boss soon noticed him and even raised his salary. Soon after, in 2015, he became part of the government's science and technology department's mathematics show, called 'Radio Mathematics', where he scripted a serial and played the challenging role of 'Putta'. This show aired all over India creating awareness in the field of science and maths and was one of the best radio shows of that time. These experiences gave him clear direction as to his career path.

Syed received a scholarship of INR 3,000 for a period of five years, starting from his tenth standard till his BA (History, Economics and Politics) degree. Every rupee from his scholarship paid for school and college fees, and to buy books for himself.

The scholarship also allowed him to visit Agastya's Kuppam Campus two or three times. Students from other districts like Hubballi and Dharwad overwhelmed him with their hospitality and treated him like a celebrity on the campus.

Syed and his classmate, Prashant received a prize voucher for coming first in a science competition conducted by the Rotary Club. They designed a Charcoal Refrigerator to store perishable items in a cool environment without incurring electricity costs.

During his last visit to the Campus as an Alumni in 2015, he talked about his achievements and insights to inspire the gathered students. He showed a two-minute video, with interviews that he had conducted with Amitabh Bachchan, Abhishek Bachchan, and many others.

Syed has been very satisfied with his choice of career and his family and friends were actually very proud of his decision. He is very enthusiastic about and fulfilled by his job with a television news channel. He plans to bring some school students to his workplace, so that they can see how a news channel actually works.

He feels that there is much talent hidden in all the government school children; only thing that Agastya has to do is shine a flashlight and illuminate their aptitudes.



"The Syed Hidayath I am today is due to Agastya's practical sessions and cultural activities"







### Sadhvika

Age: 19
Years spent with Agastya: 2014 - 2016
Background:

Father: Scholarship Head



## The complete package!

19-year-old Sadhvika is in the final year of a bachelor's degree in Microbiology, from Nalanda Degree College for Women at Nizamabad, Telangana. She studied in a private school, Sri Bashyam High School, where she did not get many opportunities to perform science experiments. However, Mrs. Shreedevi, her physics teacher noticed her keen interest in science and took her to Agastya's Science Centre in Nizamabad at least thrice a month. This hands-on practical knowledge opened up a whole new world and changed her perspective about science entirely.

She regularly went to Agastya for three years, until she finished her matriculation. In her pre-university classes too, the college lecturers were not interested in providing the students with practical experience. Whenever she



I was not able to forget the experience with Agastya, where I was addicted to understanding a concept after performing it practically.



approached them in search of a practical insight, they would refuse saying that there was no practical aspect applicable to that topic. Besides this, the lecturers were unapproachable and unwilling to address doubts. She said, "I was not able to forget the experience with Agastya, where I was addicted to understanding a concept after performing it practically. Learning from the textbook is one thing and getting hands-on experience is quite another, as it can solve all the doubts of students."

### **Emerging from a shell**

As a child, she was very frightened of performing scientific experiments, particularly those which involved fire. She had read about a chemistry experiment, where a lighted matchstick held at the mouth of the test tube filled with some gas, made a pop sound. It was at the Agastya science centre, accompanied by her physics teacher and guided by the Agastya instructors, that she was eventually able to perform this experiment. This helped her overcome the fears that she had!

Besides fearing fire, Sadhvika was also an introvert, and refused to mingle with people. Agastya changed this and developed her leadership and interpersonal skills, through their Young Instructor Leader (YIL) programme. Ganesh and Vaishnavi, Agastya instructors encouraged Sadhvika who was an avid dancer to conduct a summer camp in dance. She approached the Modern Public School located nearby and taught around 65 students over a period of 60 days.



#### TRANSFORMED LIVES



she also taught spoken English and some art activities as well. Sadhvika's courage and motivation to run such a large programme all by herself, came from her Agastya instructors who Transformed Lives d this project 'Project Lead Vikasa.'

As a part of YUVA CHANGEMAKERS, she approached the Principal of Zilla Parishad High School, to ask if she could teach their students. Extremely impressed by this young girl's intent, the principal gave her 11 batches of students to teach. As this was too much for her to handle alone, she roped in three of her peers, Shruthin, Shruthi and Nitya. When COVID-19 struck, Sadhvika and her small group did not stop but took their lessons online. In preparation for this, Sadhvika herself first demonstrated how to conduct the classes by taking up five batches and the rest of the team divided the

remaining six batches between themselves. Her father is working as scholarship head in the College of Physiotherapy and Nursing. Her younger sister and younger brother are both studying. Sadhvika has now become an extrovert and is always ready to meet new people. With her positive learning experiences, encouragement received from Agastya on one side, and the unwavering support provided by her father on the other side, Sadhvika aspired to become a doctor. However, health complications prevented this from happening, and she chose to graduate in Microbiology. Like many others, the COVID pandemic prevented her from going to Manipal University for an M. Sc. in Medical Microbiology.

She disclosed, "Agastya is the perfect place to learn and also to teach others what we have learnt. Agastya is a complete package."



"Agastya is the perfect place to learn and also to teach others what we have learnt."







## Varaprasad K

Age: 29
Years spent with Agastya: 2001 - 2010
Background:

Chartered

Accountant

Mother: Nurse

## Hard work and perseverance 'adds' up always!

V araprasad strongly believes that Agastya brought out the best in him. The high marks he received during his early schooling was because his mother pushed him to study. He described the studying pattern at school as, "Extremely mechanical - go to school, listen in classroom, write exams, score high marks, go to next class and repeat the same." Though his teachers and family members praised him for being a rank-holder, Varaprasad did not enjoy studying.

While math was his favourite subject, he disliked science. That changed in the sixth standard when Agastya instructors demonstrated science experiments at the Zilla Parishath High School (ZPHS) in Arapet. Their popular van had many science models, instructional material, an LCD TV, DV player and science videos, and his class watched a solar eclipse.



Innovative education model is holistic and experiential which provides opportunities to imagine and explore one's creativity with self-confidence.



This was a completely new experience as his underresourced school did not have any practical equipment. Varaprasad admitted he was a "little-bit excited about studying science!"

"As soon as I stepped into the eco-friendly Campus, it was a 'W-O-W' moment. The joy of skipping school receded and the excitement of seeing so many paintings, experimenting with different models and doing creative things in the Arts labs took over," said Varaprasad of his very first visit to the Kuppam Campus. Drawing landscapes had been challenging but he was intrigued that it also had science behind it. He saw a sculpture in the Arts lab and recalled, "Science was in the texture of the wood, which decides how much force or what type of knife was needed."

### The power of visualisation

Agastya 'innovative education model is holistic and experiential which provides opportunities to imagine and explore one's creativity with self-confidence.' The six years of learning with Agastya thus had a major impact on his life. 2D diagrams in books came to life as 3D models, learning become practical and hands-on, speaking skills improved and his scores in science subjects kept getting better. The instructors at Agastya encouraged him to speak out even if his answers were wrong, "I remember Manjula Ma'am who was our spoken English teacher, encouraging us to speak in English and correcting our grammar. This along with reading books helped me get fluent."





His mother brought him up as he lost his father when he was only two years old. A retired nurse from PES medical college, she always believed that hands-on practice is the best way to learn. For Varaprasad, it was sheer joy in the new ways of learning that was driving him to do better in exams. He recalled, "It was a win-win situation for everyone. My mother was happy with the marks and I was overjoyed with the learning style."

Varaprasad stated, "Agastya particularly helped me with science. I was good at other subjects but diagrams in science used to torture me a lot. I found it very vague. I was not able to practically correlate it with real life. After learning with models, I started to visualise patterns, scale, structures, and functions. My thinking changed and this helped me perform much better in exams."

In the eighth standard, he was one of four students selected as a Young Instructor Leader (YIL) from his class of 40 and could therefore visit the Agastya Campus every month. He recollected, "It was no more about skipping school, it was getting serious. Students looked up to us and bombarded us with their questions - what did you do, what did you learn? If at any time I was not able to answer, I felt really bad. I wanted to be prepared for every question and was therefore even more focused."

YILs also got the opportunity to visit science fairs and exhibition. Recalling one such event, he said "We went to Bengaluru for a science fair where we got to interact as a group with Dr A P J Abdul Kalam and it remains the best moment of my life. Abdul sir's simplicity is something I will carry forever in my life." The former President of India personally gave him a signed copy of his book Ignited Minds, which he considers his most prized possession. He said, "I have shifted houses, but

always kept that book with me. Every time I see that signed book, it reminds me of that science fair, Abdul Kalam and Agastya."

A competitive person who likes challenges, Varaprasad took part in the IRIS (Initiative for Research and Innovation in STEM) National Fair at Kolkata. Set up to promote and nurture science and scientific research among young Indian innovators, it recognises and rewards outstanding projects. Along with his friend, Varaprasad made a presentation on the 'cooling effect of water bottles,' the different materials used and how each bottle could withstand cold liquids. "Though I did not win any prize, I learnt how to present and answer questions. It was an incredible experience for me" declared Varaprasad. This was the first time he travelled out of Andhra Prasad and was very glad that the Agastya instructors were with him. He fondly recalled, "They were very caring, and this made my family feel comfortable about sending me that far away from home. It was first time I got to meet people from outside my state and experience a different culture. That trip brought me very close to Agastya instructors."

Agastya gave him skills which were well beyond scientific knowledge, "After my tenth standard, I chose Commerce as I loved math. I wanted to have a stable and independent career which was full of logic and challenges so decided to be a Chartered Accountant. Agastya supported me with a monthly scholarship of INR 2000 until my graduation. This helped me buy books to study and I cleared all the tough CA exams in single attempts. For me, Agastya was about 'AHA' moments, logic, reality, life-skills, confidence and worldly exposure." Varaprasad is currently an independent Chartered Accountant running his own firm called Varaprasad & Co, in Bengaluru, with around 350 clients.



"For me, Agastya was about 'AHA' moments, logic, reality, lifeskills, confidence and worldly exposure."







## Age: 20

**Girish Mattam** 

Years spent with Agastya: 2015 - 2016

Background:

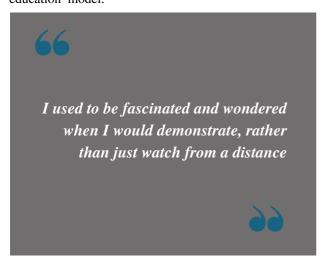
Father: Accountant Mother: Homemaker



## I was taught, now I will teach!

Girish is a 20-year-old MBBS (Bachelor of Medicine and Bachelor of Surgery) student, in his second year at the Employees' State Insurance government run hospital in Rajajinagar, Bengaluru, Karnataka. He desires to complete his Doctor of Medicine in Cardiology. He lives with his father who is an accountant in a private import and export company, mother who runs the household, and elder brother who has completed engineering and is looking for a job.

He was well aware of Agastya International Foundation as his schoolteachers at the Government High School, Yelahanka, used to take high school students to attend exhibitions at their Science Centres. Being in elementary school, he and his classmates were also fortunate to experience this exciting 'high-impact grassroots education model.'



The visits improved his creative thinking, interest in learning science, teamwork, and leadership skills.

### **Learning to teach others**

When he was in the ninth standard, Agastya instructors visited his class one day, and asked questions in science and logic. Girish actively participated and became a Young Instructor Leader (YIL). He enjoyed practising the programme's intent, which was 'sharing knowledge and insights that helped YILs integrate information, understand concepts, connect to new people and encourage them to own their ideas.' Girish said that Agastya's tagline for this was "You have to learn something to teach something."

Girish also attended the 12-day winter camps conducted by Agastya in his school. He and his classmates, under the guidance of Agastya instructors, built a model which demonstrated how to improve the conversion of mechanical energy to kinetic energy. Girish led his team through the course of the project. This experience built his leadership qualities. He says, "My parents and teachers were very happy to see me utilising my vacations in a productive manner."

He, along with other YILs, visited the TATA institute located in Yeshwanthpur, Bengaluru. The people working there explained the rotation of Earth, gravitation and the solar system, and he was astonished by models of the human embryo. He confidently said, "Participating in these events gave us a lot of exposure





and built our confidence to lead projects and work in a team. These were important skills." Girish felt privileged to also listen to a speech by Dr A P J Abdul Kalam at the TATA institute.

It was the first time he had seen so many people assembled in a single place with so many models and demonstrations. He observed his young students explaining various scientific experiments, and this made him also want to do the same. Whenever the opportunity arose, Girish would watch Agastya instructors conduct experiments while teaching his seniors. "I used to be fascinated and wondered when I would demonstrate, rather than just watch from a distance," said Girish.

According to Girish, Agastya was a place where he got individual attention, and was able to participate in many science events as a YIL. Despite their school teaching the same topics, Girish liked the practical and hands-on experience that Agastya provided at the Science Centres. He declared, "As students go into higher classes, science and math appear to be very difficult subjects, and we start to lose interest. For me, seeing the practical explanation of what I studied in the textbook, made it appear easy and understandable." For instance, while his school textbooks had a chapter on metals, Agastya instructors actually held a separate session on the metal Lead as it is very carcinogenic. Through Agastya's social behaviour classes, Girish and his classmates planted

many saplings all around the school Campus. He also started to provide water for birds outside his home. Agastya instructors taught him and his team to build puppets and helped him create a script for a show on conservation of nature. As each student got a separate character, the instructors helped them design their own puppets, which they created based on their own ideas.

Girish always dreamed of becoming a doctor, but never thought it would happen. After attending Agastya's science sessions, summer and winter camps and other activities, his resolve to join the field of medicine became even stronger. Unfortunately, his school did not support scientific activities even when he and his team approached them to do experiments. In stark contrast, Agastya encouraged and helped them successfully complete a Rainwater Harvesting project. Besides, Agastya also helped Girish financially with a scholarship of INR 2,000 over a period of three years, through his tenth standard and two years of preuniversity. He used the money for books and part for his college fees.

Despite his school stopping their arrangement with Agastya due to board exams, Girish said that he continued to associate with them. His sessions with Agastya are helping him in his MBBS and he will use the knowledge to guide and teach other students.



"You have to learn something to teach something."







### Anusha R

Age: 21

Years spent with Agastya: 2012 - 2014

**Background:** 

Father: Supervisor Mother: Homemaker



## Learning by touch and experience

nusha's whole class was super excited! For the very first time, students of the seventh standard Government High School, S.R. Nagar, were going on a surprise trip. Not knowing where they were going, further heightened their anticipation. "On the way, all of us kept making our own suppositions and assumptions about the place we were going to. Some guessed a park, others said a museum," she recalled. When they entered the Agastya Science Centre, all 42 students were wideeyed in amazement as well as trepidation. "There was so much to see - gadgets, apparatus, games, puzzles, experiments, and models. We were all very happy and at the same time scared because we thought we were not supposed to touch anything." They were surprised when the instructors instead encouraged them to try everything and very soon the room was filled with the commotion of

students excitedly experimenting with, touching and talking about the various exhibits. Anusha was not even interested in science so she just wandered around until she reached the biology corner. She revealed, "I kept seeing various things which were difficult for me to understand. When I saw a display on the growth process of a baby in a mother's womb, I immediately understood what it was. However, I wanted to see it more closely and kept wondering whether I could touch it or not, until Uday sir asked, "Do you want to hold it in your hand?" Her fears disappeared and she happily handled the model. She remarked wonderingly, "Agastya instructors were very different from our schoolteachers who only allowed us to see things from a distance."

The students also interacted with the Agastya team to find out who or what Agastya was? What did Agastya do? "After listening to the instructors' answers and getting to know that Agastya set up all of this for government school students, I felt so connected to Agastya and saw them as a major well-wisher," said Anusha. She and her classmates had never dreamt of getting this kind of opportunity and were thrilled.

This first visit had her hooked and thus began her monthly visits to the Agastya Science Centre on the Agastya bus. She explained, "We were learning science in a new way. We were conducting experiments and physically seeing working models on concepts that was just text in our schoolbooks. This made science more understandable for me."



They motivated me, counselled me on my anxieties and assured me that I will pass. They also did career counselling for me.







Their class experimented on cleaning water using filter paper, testing acids and bases, making paper crafts, solving mathematical puzzles and many others, all of which not only taught them something new but also improved different skill sets. Anusha was astonished that Agastya instructors let the students see, touch, and explore everything. They encouraged the students to do the experiment themselves, interpret it and ask for explanations when in doubt. "I will forever be grateful as I was able to pass with good marks in science despite not liking it," exclaimed Anusha.

Anusha looked forward to meeting the Agastya instructors every month and grew closer to them with every visit. Her attachment was not just to learning science. She genuinely shared her fears and interests with them. "In school, I never dared tell the science teacher that I didn't like her subject, but with Agastya instructors, I was able to share my fear of failing in science" she disclosed. The instructors helped her and tried to assuage her fears, "They motivated me, counselled me on my anxieties and assured me that I will pass. They also did career counselling for me."

#### The turning point

Anusha had to drop out of school in her tenth standard, when her father fell ill. Her father worked as a supervisor in a hotel while her mother ran the house. When Agastya instructors got to know about her situation, they asked me, "If I wanted to continue studying and I said yes, but not science. They replied, science or anything else does not matter, if you want to study then we will help." Happy to study once again Anusha joined the Government Pre-University College to study commerce. She used her scholarship amount of INR 2,000 from Agastya, to buy books.

She is currently in her first year of a bachelor's degree in commerce from Maharani Cluster University, Bengaluru. She wished that she could continue to be associated with Agastya and help other children, after she herself becomes financially stable as an Accountant or Chartered Accountant. She proclaimed, "I am very proud of being part of Agastya. It gives great opportunities to kids like us, which we can utilise to advance in our careers. It was Agastya's help at that moment of time, which changed the course of my life."



"It was Agastya's help at that moment of time, which changed the course of my life."







#### S Prasanna Kumar

Age: 21
Years spent with Agastya: 2011 - 2015 **Background:**Father: Labourer



### From waste to wealth

rasanna was among the toppers in his school ZPHS Newpet Kuppam till tenth standard but was not very confident in mathematics. The maths teacher explained theories in school and gave them problems as homework. Prasanna did not know how to solve them and confided, "I could not ask or discuss with anyone in class since I was the topper and no one else knew any better!" Prasanna vividly recollected his first fascinating session at Agastya's Math lab when he was in his sixth standard. "Agastya instructors helped us derive formulae through activities. I could understand the logic behind the formulae and it made me curious. In general, it helped questions," said Prasanna. clarify many enthusiastically explained the derivation for Pythagoras theorem and its practical applications. "All I was told at school was about the scientist and that we had to

I could understand the logic behind the formulae and it made me curious.

memorise the formula" he quipped. He was one among four or five kids selected from his batch for the Young Instructor Leader (YIL) programme. The experience of teaching and being taught by a peer, instilled confidence and self-belief in Prasanna. He enjoyed the monthly visits to Agastya and made new friends from other schools. "The YIL sessions focused on a step-by-step approach to problem solving and is very useful even till date," added Prasanna. YILs were also engaged in identifying various social problems and exploring practical solutions.

An interesting activity that he did with his team was calculating the age of a tree by measuring its diameter. The intriguing field of robotics fascinated him. "Being able to use blocks to construct a windmill, robot, boat, etc., and then be able to create and control its movement with motors was exciting," reminisced Prasanna. Looking closely at preserved specimens of animals and reptiles that one would normally run away from, piqued his interest and curiosity. These exciting visits to Agastya's Chemistry, Math and Biology labs not only enriched his learning experience but also helped him do well in his tenth standard exams. "School textbooks provided information, explanation and even illustrations about different science experiments. At Agastya we understood the topic better when we were able to physically do the experiment," Prasanna emphasised. He brought up an example of the elephant toothpaste experiment showing the decomposition of hydrogen peroxide.





The volcano of foam it created is still distinct in his memory!

#### **Finding Solutions to Problems**

Preparing for and participating in science fairs had a lasting impact on Prasanna. During YIL sessions on problem identification, Prasanna and his team came up with the challenge of body odour. Their instructor, Madhu Kumar suggested that they find a solution and register their project for the IRIS competition conducted by Intel. They worked after school on this problem every day for the next six months at Agastya. Ayurveda mentioned Albizia Lebbeck flowers as an effective antibacterial agent so Prasanna and team conducted trials for three months in Agastya's labs. With the help of instructor Mahadev, they grew bacterial colonies in agar plates, collected sweat samples and studied the effect of Albizia Lebbeck on them. In 2018, he and his team presented and explained their project to thousands of students at the IRIS Fair. Thanks to this experience, Prasanna and team represented their school in the Inspire Science Fair. In 2019 Prasanna and team won the silver medal at the Innovation Science Fair at Vagdevi Vilas school in Marathahalli, Bengaluru.

Prasanna's passion for identifying problems and finding solutions continued with more intensity. In 2019, he submitted a waste to wealth project to Atal Incubation Centre in Anantapuram. To bring efficiency in waste collection in apartment complexes, he suggested providing chutes for residents to drop segregated waste. After weighing, a fair value returned to the residents as Amazon vouchers, thus encouraging segregation.

He further developed the idea into an 'Automatic Dustbin.' The bin used sensors to automatically identify waste as organic, recyclable, and non-recyclable and then segregate it into different blocks. They integrated UV light into the bin after COVID-19 infections, which required the safe disposal of biohazardous materials. The idea turned into a start-up which he registered as Intellibin Solutions Private Limited. Prasanna holds a patent for the product and is the Director of the start-up. He is hoping to develop this product even further and then market it.

The Agastya method promotes confidence, creative thinking, problem-solving and leadership.

Through continued engagement with Agastya, Prasanna understood how to identify a problem, explore possible. solutions and finalise the most suitable practical solution. Every project he undertook in Agastya reinforced the subtle workings of this problem-solving thought process and its application. He applied the same process to his project 'Poultry Raking System' for his degree in technology. This is a battery powered automatic raking system that tracks and collects data of the ammonia level, temperature, etc., to maintain a healthy environment for chickens.

The presentation capabilities, confidence to get up on stage to explain and answer questions, and the ability to teach others, are assets that Prasanna gained through his interactions and YIL sessions. "I think these skills that I acquired through Agastya's sessions are what makes me different from my other friends in college, who are not comfortable presenting their ideas and answering questions. All of these began with problem solving sessions at Agastya and the opportunity to work on the IRIS project" recounted Prasanna. He considers everything as a butterfly effect, one small event leading to a wide network of effects.

"Good guidance and exposure in childhood has a great impact on life" said Prasanna confidently. Many of his own friends who have not had such exposure fell into bad ways. He attributed whatever success he had so far and the fact that he has the confidence to pursue higher education, to the exposure he obtained from Agastya's sessions and how it shaped his outlook. "To signify the beginning for education every child starts with 'a' (pronounced as in the word "amicable"), the first letter of the Tamil alphabets, at the temple. For me, 'a' represents Agastya" said Prasanna eloquently.

His father earns a daily wage doing intensive stone cutting work. His mother used to work in a garment factory but had to stop due to her health. Despite their humble background, his elder sister graduated, then got married while his younger brother obtained a diploma and has a job as a supervisor in the Quality Assurance department of Schneider Electric SE in Bengaluru. Prasanna aims for a fulfilling life both professionally and personally. His dream is to take his start up to new heights and provide a comfortable life to his parents who have always trusted him and have given him the best within their means.



Stressure Land





#### Jhansi Rani

Age: 26

Years spent with Agastya: 2015 - 2016

Background:

Father: Farmer

Mother: Teacher



### All life's colours!

J hansi Rani N is a 26-year-old pursuing her second year Ph. D. in Plant Pathology at the College of Horticulture, Bengaluru. Her father is a farmer and her mother is an anganwadi teacher. She has a younger brother who is studying M. Sc. in Hotel Management.

Agastya's Mobile Science Labs (MSL) came to her school when she was in the fifth standard. Having seen only pictures in books, the practical experiments and demonstrations attracted young Rani. This sparked her curiosity in science, especially in botany and anatomy. The experience infused the first seeds of pursuing research in her. More importantly, Agastya scholarships supported her higher studies, thereby sustaining her interest and passion for research.



#### Walking with Science

Life changed for Rani in the sixth standard at ZPHS, Gutharlapally, when she visited the Agastya Campus. It was here that she saw life in all its colourful splendour! This was where she realised that 'science is omnipresent.' This was the beginning of Rani's relation with nature and science. She always enjoyed her visits to the Campus Creativity Labs and remembered them with a lot of fondness and enthusiasm. Rani recollected "My first visit to Campus felt like walking alongside science. The Campus flora and fauna enthralled me." At every visit she learned, "New knowledge about science and experiential learning is waiting to be added to my treasury of facts and figures."

During her two years as a Young Instructor Leader (YIL), she taught students who visited the Kuppam Campus during the summer camps. Agastya instructors encouraged her to participate in the Intel IRIS National Science Fair, representing Agastya on a national podium at Kolkata. She along with her friend Roja grabbed this opportunity to demonstrate the 'Cooling Effect of leaves.' Rani was impressed with the unwavering support of the Agastya instructors who continuously contributed to making their idea better and more meaningful. One of her schoolteachers also played a major role in making sure that they could attend the science fair without any glitches. She added, "We did not win first prize, but the jury rewarded our efforts! They selected our work out of five projects for a special award."



#### TRANSFORMED LIVES



Her popularity grew after a local newspaper published her achievement. A few of the local leaders too felicitated Roja and Rani. There was a huge improvement in her personality as well. "As a YIL, I learnt how to talk to others, and this built my confidence. My experience in the National Science Fair motivated me to study more and be at par with students from urban backgrounds. During the Alumni meets, I met so many students and people from different backgrounds and heard their stories, which inspired me to continue my studies" she stated.

Rani felt that peer-to-peer teaching made her life fruitful. She said, "I was playing a part in making creators, thinkers, and innovators by sparking curiosity in each of my friends in my neighbourhood." Applauding the experiential learning imparted by Agastya, she again emphasised the importance of pictorial representation and experimentation to improve retention abilities, understanding as well as enhancing academic performances. Even today she remembers many of the experiments she performed in Agastya's labs.

The instructors in Agastya always encouraged her to ask questions freely and without hesitation. They would not get impatient even if she repeated them many times.

The knowledge, appreciation and the urge to learn more, which she got from Agastya, helped her to pursue a doctorate in Plant Pathology. "Without Agastya, I would have concluded my education with a bachelor's degree in science and would not have learnt to communicate as I am doing now. My experience in Agastya continues to give me the courage to do what I can do. It changed how I look at myself. Agastya taught me that I have talent and I can improve myself" she pronounced.

Rani observed that every opportunity and the motivation at Agastya helped her climb the ladder of development with confidence. It also created the desire to build a better future for the vulnerable in society. She declared "Even though I cannot measure my achievements, I feel like the richest amongst the rich. The confidence and the unwavering backing helped me to be an achiever."



"Even though I cannot measure my achievements, I feel like the richest amongst the rich."







#### Rahul T N

Age: 25
Years spent with Agastya: 2010 - 2013
Background:

Father: Business man Mother: Homemaker



### Agastya is medicine for life!

ahul's story is slightly different to those of other Kchildren who were from government schools because Agastya International Foundation neither visited nor held any programmes in Vidya Vikas Vidya Samsthe in Chitradurga as it was a private school in Karnataka. Agastya being an inclusive organisation was ready to teach any child interested in science and never turned a curious Rahul away but welcomed him. When asked whether he remembered the days spent at Agastya, his answer was a resounding 'Yes!' They opened a science centre right in front of his home when he was studying in the sixth standard, centre. "One summer vacation, out of curiosity I went to check what was happening there and found out it was a science fair." 12-year-old Rahul was fascinated by the science models, equipment and experiments, "They took an ordinary glass of water and added a little sodium into it.



Before Agastya, I was not at all a science loving student, but watching this experiment triggered a curiosity in me for science.



I was shocked to see fire come out of the water. I thought water usually puts out fires, but here it was the opposite!"

Even after his vacations were over, Rahul continued to visit Agastya every day after school. He disclosed "Before Agastya, I was not at all a science loving student, but watching this experiment triggered a curiosity in me for science. Without a second thought I decided to explore the subject more." He visited the Agastya centre every single day, and sometimes even went to the instructors' house on Sundays, because of his passion to learn more. He said, "After joining Agastya I realised that science is not a difficult subject once we understand it."

#### How to think instead of what to think

Selected as a Young Instructor Leader (YIL), along with children from other schools, Rahul was very active and would earnestly explain everything he did and learnt to his peers. As a YIL, he also visited households in villages on the outskirts of Chitradurga district and created awareness about the science behind superstitious beliefs. His target audience were students in open air classes. "There is nothing such as 'superstitions,' because it is all science," Rahul stated firmly. A nostalgic Rahul explained, "First the instructors trained me and whatever I learnt, I would pass on to the villagers. We educated people about the revolution of the earth and explained how day and night happen withthe help of a model.





Some village quacks would perform a trick where they would burn camphor tablets on their tongue. When I explained the science behind it. Rahul creatively used interactive methods in his teaching, "Rotation and revolution were my favourite experiment. I would call three students on the stage to represent the sun, moon and earth. With their help, we demonstrated the actual rotation and revolution of the sun, moon and earth. My instructors came up with this idea and it was great fun for all."

Rahul learnt how to manage time and people as a YIL. While visiting villages they conducted 13 to 14 experiments at a time but would not have enough time to complete everything. So, the instructors trained them how to teach within the given time and ensure everyone understood. As Rahul explained and interacted with people, he became a good teacher and manager. Moreover, he also got a good grounding in basic science from Agastya. He declared, "This knowledge is helping me even today to be a better professional in my career."

Rahul proudly said that Agastya's instructors were the inspiration behind all his work. "The patient instructors were so down to earth and I never heard them say no to anything. Their teaching would always be fun with a lot of experiments and they would come down to the students' level to explain everything in the simplest way possible."

He remembered an incident in one of the Agastya sessions when he dropped and broke a test tube by mistake. He was terrified that the instructors would scold him but the instructor took it very casually and said, "It is not a problem as you have not done anything wrong, it's ok to make mistakes while learning." Those words touched Rahul as never before! According to him, the best thing about Agastya sessions was that the teachers would first show the experiments and then ask the students to do them, and while they did the experiments, they would guide and explain.

Though Rahul's father owns a general store in Chitradurga, and his mother runs their home, they helped Rahul move to Bengaluru for a degree in Mechanical Engineering from R N S Institute of Technology. 25-year-old Rahul is a young professional at TATA Starbucks in Bengaluru today. He holds the position of Manager and leads 16 people. With gratitude Rahul said, "If I had not been exposed to Agastya's methods, I would have still been saying science is not my cup of coffee and I would have remained a shy and introverted person. I would never have gained knowledge or made so many friends. Agastya is the most needed medicine for life.

Finally, Rahul said, "I am immensely thankful to Agastya because whatever I am today, is only because of Agastya."



"I am immensely thankful to Agastya because whatever I am today, is only because of Agastya."







#### Basamma H

Age: 26
Years spent with Agastya: 2015 - 2017
Background:
Parents: Labourers



### Young and confident

close friend of Basamma forced her to participate in an Agastya Summer Camp in the fifth standard and it changed her life forever. In that summer camp, she participated in group discussions, learnt how to make dimensional shapes with flat paper, extract natural colour from flowers and use turmeric for painting. "I usually spent my summer holidays playing at home. Agastya's summer camp changed the way I spent my holidays. Instead of just passing time, I ensured that in every long holiday, I learnt some skills like typing, working on the computer, etc." Basamma continued to participate in all the annual summer camps till the seventh standard and other children recommended from neighbourhood to join the summer camps. Her formal collaboration with Agastya started three years later.

66

I was very scared when I thought that we had to do everything alone. But Agastya instructors guided us and we were able to conduct the radio programme successfully. I was so happy and felt extremely confident.



With lots of enthusiasm, our young champ narrated her Agastya story, "I was in the eighth standard at Government High School, Kodigehalli, Bengaluru, Karnataka. From my class of 45 students, I was among the 20 chosen for the YIL programme. Since then, I have had so many opportunities that made my life much better and more meaningful. Little did I know back then that I was going to become what I am today." The period as a Young Instructor Leader enhanced her leadership skills, improved her knowledge of science and honed her presentation, observation and analytical skills. She was able to understand science practically, participate in and take ownership over activities as well as lead teams. She added, "I learnt the art of believing in my ability to keep the show running without fear!"

Agastya's YIL programme helped her explore so much more. She vividly remembers visiting the beautiful campus of the Indian Institute of Management, Bengaluru in 2015-16. They saw how electricity flows from anode to cathode and also learnt how to manage and handle equipment in the lab through experiments and activities.

She also recalled another momentous trip when Agastya took them to the TATA Institute of Social Science, Bengaluru. There Basamma met YILs from different schools. Her group created the script for a radio programme by Sumangala S Mummigatti, a popular AIR programme executive. She regularly broadcasts science programmes 'to create awareness among people about the development and applications of technology in our daily life and to bring a change among people to save resources.' Though the group members divided the work and diligently practiced before the final





programme, Basamma disclosed, "I was very scared when I thought that we had to do everything alone. But Agastya instructors guided us and we were able to conduct the radio programme successfully. I was so happy and felt extremely confident. I informed my parents who told our neighbours, and everyone praised me! I was ready to do that programme another 100 times!" That was Basamma's 'year of transformation' when she emerged from her cocoon.

Basamma's parents are daily wage labourers working at construction sites. As she looked back at her life, she thoughtfully remarked, "Who would have thought that a small girl from a small town who studied at a government school could become a Mechanical Engineering student? This was possible only because of Agastya." Her younger brother who is studying in the tenth standard at Government High School, Kodigehalli also had the fortune to be a part of Agastya since his fifth standard.

When questioned if her private school counterparts (and also those from well-educated families) at the Engineering College ever intimidated her, our courageous young lady boldly declared that it has never stopped her from being a 'Confident young Agastyan.' She said "It was my dream to do Mechanical Engineering and I secured a 39,000 ranking in my CET.

"The counsellors told me not to pursue Mechanical Engineering because 'it is not meant for girls.' I just did not understand this and therefore never took their advice. Instead, I promised myself that I would prove them all wrong, and I did!" She is currently pursuing the first year of a degree in Mechanical Engineering at Sir M Visvesvaraya Institute of Technology, Yelahanka, Bengaluru. "Today, I am doing well in my studies and my family, teachers and well-wishers are very proud of it" she proudly declared.

As a child, Basamma wanted to teach. Agastya sessions enabled her to make this a reality. Before joining Mechanical Engineering, she taught tenth standard students at GHS, Kodigehalli, which did not have a science teacher. The hands-on learning experience in Agastya sessions equipped her to teach them biology. She was able to answer their queries knowledgeably and with understanding. She also helped the students prepare for their internal examinations. 19-year-old Basamma considers herself fortunate, as she was able to do some good for others. Basamma aspires to work in an automobile company as an engineer, after her graduation.

Extremely proud of her journey till now, she declared, "I have been very fortunate that my family, my school and Agastya gave me so many opportunities to grow. Most of all, Agastya Transformed Me!"



"I learnt the art of believing in my ability to keep the show running without fear!"







### **Durgesh Jagtap**

Age: 20

Years spent with Agastya: 2015 - 2016

**Background:** 

Father: Book binding Contractor

Mother: Homemaker



# Striving for betterment never stops

t the young age of 20, Durgesh Jagpat A categorically states that traditional teaching methods adopted by schools only provide a theoretical approach to learning. This became clear to him once he began attending sessions in science with Agastya International Foundation. Their practical and experiential teaching methods set him on the path of a lifetime of discovery. Agastya's creativity-based education systems helped him and other students not only comprehend science better but understand life as well. Their marks and career choices reflected this too as many wanted to live that life in reality, glimpses of which Agastya had given them in their school days! A first-year Electrical Engineering student at Bharti Vidyapeeth in Pune, he lives with his father who works as a bookbinder and his mother who is a homemaker. His sister too is pursuing

66

The best part of the hands-on approach was the simplicity of the experiments and models. It was easy for anyone to learn and replicate for others.



an engineering degree in the field of mechanics. Durgesh attended S M Vadke School at Chondi Kihim, Tal Alibaug, Raigad in Maharashtra. From a very young age, Durgesh was interested in science. He first learned about Agastya's unique 'grassroots education model, which aimed to inspire and catalyse widespread social development, innovation and leadership' through an Agastya instructor. He motivated and supported Durgesh's interest in science and encouraged him to attend Agastya sessions. Recalling his very first experiment with litmus paper to determine acid and base, Durgesh happily recounted, "In Agastya, I learned science topics in a practical and hands-on way for the very first time. I was extremely excited as in school we could only pass by the lab for senior students. We could not go in there." Since it was not common for eighth standard students to conduct lab activities, Durgesh rushed back home and told his parents about his experiences. They were very happy and supportive of him attending Agastya sessions. Durgesh's elder sister, who had studied in the same school enviously said, "You are lucky because when I was the same age as you, Agastya was not there."

Durgesh also attended an Agastya summer camp where he participated in many interesting science activities such as force, motion, heat, and the human body. "The best part of the hands-on approach was the simplicity of the experiments and models. It was easy for anyone to learn and replicate for others," said Durgesh.





His group once prepared a play on the subject of 'Girls in Higher Science Education.' As a leader, Durgesh researched and then wrote the dialogues. Later he held discussions with the other students in the summer camp on how important it was to motivate girl students to study science and help them get a good and stable career. From when he began attending sessions and performing different kinds of activities, Durgesh has been able to improve his leadership abilities and has built the confidence to lead a team effectively.

Durgesh revealed, "I was always a disciplined child in school; however, I would zone out after some time." With Agastya it was different, as they helped him tap into his interests by engaging him in interesting activities every time. "There was less of listening and more of doing, which is why my attention was focused on the topic that was being taught," he said.

He also remembered going to the Agastya Curiosity Carnival in Alibaug in his ninth standard. With the help of Agastya instructors, Durgesh built a foldable ceiling fan cleaning machine. It had a scrubber at one end attached to a foldable stick, which moved in a circular motion with the help of the battery. Old people who lived alone could clean their ceiling fans without too much difficulty. He presented his invention to visitors at the carnival, which helped him gain the confidence to speak in public without any fear. During his junior college, Durgesh confidently demonstrated experiments like acid-base detection tests, simple pendulum activity, heat, temperature, etc.

that he had already learnt through Agastya, to his classmates for whom everything was completely new. He proclaimed, "There were a lot of things that I learnt with Agastya which helped me later. For a college exhibition, I made a remote-control car, which works with a sensor that detects motions and stops accordingly. I thought of this because I had earlier seen it in the Agastya science centre and the instructor had explained to me how it works."

Durgesh recounted a time in his junior college when a science project on Kinetic and Static Energy, involving a wood and rubber gun completely baffled him. It was then that he remembered the Agastya experiments on Newton's second law. He made the required alterations and produced a perfectly functional model. This ability to recall a concept at a moment's notice was because of the innovative learning tools and activities that he studied at Agastya.

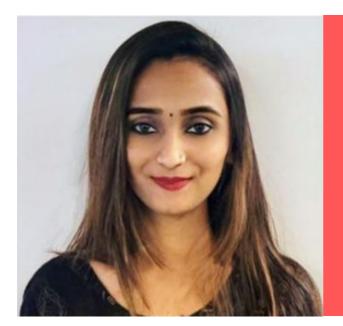
He wants to continue experiential learning in the years to come and work on different projects related to science throughout his college life and even after he starts working. Durgesh disclosed "Before I did not have anyone to guide me, but Agastya instructors were very supportive. If I had any questions related to my career choice or even any out of syllabus interests, they helped me learn, grow, and gave me the confidence to pursue it." He emphatically made the point that it was Agastya who gave him the motivation and guidance to define his career path.



"You are lucky because when I was the same age as you, Agastya was not there."







#### Suma

Age: 23
Years spent with Agastya: 2012 - 2015
Background:
Mother: Chef



### A valuable human resource!

23 -year-old Suma has been in the field of Human Resources (HR) for the past three years. She works as an HR recruiter in a technology company called Better Place Select while also pursuing an MBA in HR through distance learning from Dayananda Sagar University. Even though she graduated in Botany from Kuvempu University, she was unable to get a job despite giving many interviews. The COVID-19 pandemic too prevented many others like her from getting good opportunities. Her mother stopped working as a cook once Suma started working. As the sole breadwinner in her family, she also funds her younger brother's graduate studies in commerce at the Government College, Behror in the Alwar district of Rajasthan.

Suma was a normal child who studied only when exams were around the corner. She likes drawing, singing



I lost my stage fright, gained confidence and improved her speaking skills; with the help of these skills, working in human resources is a breeze!



and listening to music. She was in the eighth standard at the Government High School in the Immadihalli suburb of Eastern Bengaluru when the phenomenon that was Agastya International Foundation touched her life. They provided dynamic learning through experiments so that students understood theoretical concepts in science. Their instructors were very supportive and motivated her to take part in many competitions, science fairs, exhibitions, quizzes, competitions, etc. She believes this helped her and many other students at government schools excel in their careers. Their influence continues even today as she is still in touch with her Agastya instructor, Manjunath Sir.

When she first saw vegetable cells through a microscope, an enthralled Suma's interest specifically shifted towards biology. Despite disliking science earlier, Agastya gave her clarity about choosing science for her graduation. Agastya instructors would give her centre stage during competitions too. Thus, she lost her stage fright, gained confidence and improved her speaking skills. She declared, "With the help of these skills, working in human resources is a breeze! I am able to handle a team successfully."

Agastya's demo-based approach was different when Suma compared it with her school's theoretical approach. Schools do not have sufficient labs or resources to demonstrate experiments. Agastya's instructors helped her understand scientific concepts through models (solar system), puzzles (dismantling and





connecting organs of the human body), experiments (volcano), videos (big bang theory, eclipses) and problem solving. Her school teachers would teach a topic and then ask students to go to the Agastya lab to effectively understand the topic practically and visually.

Another major difference was that Agastya instructors encouraged students to ask questions and clarify their doubts. Suma was able to ace her exams because the Agastya instructor had thoroughly prepared them, even though their school had not completed the syllabus. Agastya not only focused on the theory but also bettered her creative skills, Transformed Lives ly drawing.

Suma was good at hosting programmes and narrated, "In my ninth and tenth standard, whenever an event was organised, like Science Day or Environment Day, I helped coordinate and host the celebrations. This helped me build my organising and public speaking skills." In Agastya's group activities, when she became the group in charge, her leadership skills too improved. She secured a distinction in her tenth standard exams and the Agastya scholarship of INR 3,000 paid for her books.

Agastya helped her in the workplace too. When she first joined, the new environment intimidated her. However, the learnings, communication skills and self-assurance that she acquired from the Agastya sessions, enabled her to overcome her fears and walk around making acquaintances with confidence. "I will forever be thankful to Agastya for teaching me communication skills. Having good interpersonal abilities is necessary to work in human resources," said a happy and satisfied Suma.

She hopes that Agastya will start focusing on government schools in sub-optimal development areas, where students are deprived of proper education. Suma appreciates Agastya for their work as all students get equal opportunities to study effectively. She congratulated the Agastya International Foundation for the great job that they are doing to fulfil the dreams and ambitions of so many children. She added, "Agastya helped me acquire good interpersonal and leadership skills. It helped me overcome stage fear and that has helped me be good at my job and thus support my family."



"I will forever be thankful to Agastya for teaching me communication skills."







#### **M** Satheesh

Age: 22 Years spent with Agastya: 2013 - 2017 **Background:** Father: Autorickshaw Driver

Mother: Tailor



# A transformative life experience

Satheesh first heard about Agastya when he was in the fifth standard at Rajanam Primary school in Kuppam block of Chittoor district, Andhra Pradesh, when Agastya instructors conducted scientific experiments in his school. He wondered how litmus paper changed colour with different acids or bases, "At first, I kept speculating whether this was because of the liquids or because of the paper. I was astonished and fascinated!"

Chosen as a Young Instructor Leader (YIL) in the tenth High standard at Zilla Parishad School Krisnadasanapalle, Satheesh visited Agastya's camps, science centre and the Kuppam campus, to participate in different projects, see demonstrations and actual experiments. Compared to their regular school

Explaining science to strangers was challenging! It also proved to be most beneficial for me as I gained confidence when talking.

classrooms, Agastya was such a unique space with so many different kinds of labs, experiments and models. At the Biology lab, he was able to dismantle a full-scale model and see the various parts of the human digestive system that was otherwise just a flat diagram in their textbook. The mathematics lab had models and puzzles to test their creativity in solving problems. Agastya instructors would prepare paper models to explain math formulae. They explained the solution live as against learning the formula or derivatives by rote at school. This enabled him to better comprehend and remember what he had studied. These distinctive experiences provoked his thinking and increased Satheesh's curiosity to explore subjects.

Satheesh's schoolteachers too constantly urged the students to practically learn science concepts at the Kuppam campus. Agastya always organised their colourful bus for this wonderful day-long excursion. When the YILs returned they explained whatever they had learnt to their fellow students. This helped build Satheesh's leadership qualities – he became a role model for his classmates and motivated them to be independent, speak fearlessly, complete given tasks and solve problems.

The YIL programme tackled various topics on general knowledge, science, maths, etc. in school syllabus areas. All the YILs would gather post lunch to discuss and share what they had learnt with other YILs and the instructors. Sometimes they competed in quizzes, solved





puzzles and also participated in entertainment programmes like singing, dancing, and dramas. YILs also participated in various science exhibitions, fairs, and social awareness programmes where other students would also come to exhibit their projects. Each would explain their project, or demonstrate it, or use prepared charts for visitors to visualise the topic. Thus, Satheesh and his mates improved their own knowledge, crosslearned from their peers and were able to showcase their talents. They not only heard Satheesh's voice but took his ideas seriously, "Explaining science to strangers was challenging! It also proved to be most beneficial for me as I gained confidence when talking."

Satheesh recalled experimenting on the effects of smoking on the lungs using two coloured balloons side-by-side. The four-member team all equally contributed while presenting. Another demonstration was on the life cycle of leaves. Each phase exhibited small to big size leaves, in their various shades of green, yellow, orange, brown and black. Satheesh's team won a prize, with medals and certificates for each team member. In his

tenth standard, Satheesh stood second with an 8.5 GPA and received a scholarship from Agastya of INR 1200 per year. This made his father who is an auto driver and mother who is a tailor very happy. His younger brother is studying Diploma in Electronics and Communication.

Currently pursuing his third year of a bachelor's degree in technology and Computer Science, at Kuppam Engineering College, 22-year-old Satheesh leads a team of four in a project on developing a web domain. He plans work allocation and how the team will proceed based on the quantum of work and timelines. He listens to the team members' ideas and carefully considers their feasibility. He is also able to confidently speak on stage as well as participate in various seminars at college. All those skills which he learnt through Agastya's YIL program, he is putting to good use, and he gratefully reiterated that the YIL programme changed his life! He hopes to work in Wipro Infotech. For Sateesh, the word Agastya will always mean practicality and life changing knowledge, "Transformative life experiences made my dull life razor sharp."



"Transformative life experiences made my dull life razor sharp."





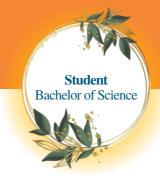


#### Bhavani

**Background:** 

Father: Machine Operator

Mother: Worker in Textile factory



### A little fun and experimentation

 $18^{\, ext{-year-old}}$  Bhavani bubbled with enthusiasm while speaking about Agastya International. Foundation. She had fond memories of the Mobile Science Lab and the instructors who visited Thavathiru Santhalinga Adikalar Government Higher Secondary School in Kattampatti, Coimbatore, Tamil Nadu when she was in the eighth standard. "From a van full of science equipment, they showed us so many experiments and then asked us to try them by ourselves. Everything which was part of my school syllabus like friction, sound, solar system, light, etc., they taught us practically. In one of the games we played, we reflected sunlight from one mirror to the other in a circular formation. Later, the Agastya instructors asked us questions and through our answers explained the concepts," she recalled. She found this method new and intriguing and added, "Ever since

the seventh standard, my favourite subject was math. But when Agastya's instructors showed us physics experiments, I developed an interest in physics as well. If you are always studying, you get bored; a little fun and experimentation make things interesting."

Bhavani loved Agastya's way of teaching through experimentation and hands-on doing which she and her classmates could easily relate to. She divulged, "When I saw the textbook lessons approached practically, not only did I find it more interesting, but I could also easily understand and remember them." After the Agastya instructors finished a session, they would ask selected students to teach the class those concepts that they had understood well. While each student explained, the Agastya instructors would guide and give them inputs on how to teach. Then they divided us into teams to play games. Those who played well and participated enthusiastically got more opportunities to teach or be class leaders. About her own teaching efforts, she laughingly revealed, "At first, I was really shy and my voice was not even audible to everyone. But as I started explaining more often, I got used to it, gained confidence and eventually started speaking fluently."

"The instructors always made the game-filled sessions fun. If they felt that the students were losing interest, they would immediately change the topic and talk about something else, even if it was not in the syllabus. The very considerate instructors would allow the students enough time to conduct the experiments, understand



The way Agastya taught me science in my eighth and ninth standards, laid the foundation for me taking up Computer Science in college.





#### TRANSFORMED LIVES



what they had just done and clear all their doubts. They would even conduct one on one teaching sessions if needed." She observed, "They sincerely explained concepts during class, and at the same time, they were friendly, approachable and encouraging!"

Bhavani reasoned, "The way Agastya taught me science in my eighth and ninth standards, laid the foundation for me taking up Computer Science in college." She is now the assistant representative of her degree class in science at Dr S N S Rajalakshmi College of Arts and Science. She clears the doubts of her fellow students and makes sure everyone completes the assignments given to them.

She also monitors the class and takes attendance when her teacher or class representative is absent. She firmly stated, "The experience I had teaching other students through Agastya is the only reason I can perform my role as the assistant class representative." Even though her father is a machine operator in a tea estate and her mother a tailor in a textile factory Bhavani's ambition is to become an IT professional in a multi-national corporation. She definitely recommends that all students should take part in Agastya's varied programmes. She hoped that with more students, the instructors would become even more enthusiastic to teach, and the students could learn with even more fun in class.



''If you are always studying, you get bored; a little fun and experimentation make things interesting.''







#### S Saraswathi

Age: 20
Years spent with Agastya: 2014 - 2017
Background:
Mother: Farmer



# Learn from mistakes and keep going

"V isiting the Agastya campus always brought joy to everyone in my class. Since our school did not take us out, going to Kuppam was like an excursion and allowed us to mingle with students from other schools as well," said S. Saraswathi. At the end of her eighth standard, Saraswathi and her classmates visited Agastya for the first time. They created posters on the city sewage system in the Arts lab and YIL lab. They were even happier when they were able to visit once a month when chosen as Young Instructor Leaders (YIL).

Saraswathi saw many models and specimens at the physics, chemistry and biology labs, and witnessed hands-on experiments which always helped her understand concepts in her school lessons better. Her favourites were the Innovation Hub and YIL lab.



The students also played games, did exercises and participated in quizzes. "Agastya instructors motivated us to take up initiatives on our own and helped us give shape to our ideas," she said. She and her group even built a model of a house using cardboard, sticks, and plastic straws.

Among Agastya's numerous activities, Saraswathi vividly remembered coming up with solutions to challenges in the state of Andhra Pradesh. Different groups tackled different problems. With her group of five girls, Saraswathi worked on the problem of health infrastructure in rural areas. They did research, discussed with Agastya instructors and created a poster presentation for the class. At the end of a day's session at Agastya, it was a regular practice for the instructors to take feedback from the students. The feedback was either written, voice or video recorded and this also helped students become comfortable when talking without an audience.

Saraswathi liked how the instructors at Agastya interacted so well with all the students. They motivated and taught them how to approach a problem practically. The instructors guided them by asking them to write down in a notebook what they observed, categorise their observations and then identify the problem and its possible solutions. She felt that the most important skill she gained from Agastya was learning how to approach a problem and she has utilised this in every aspect of her life.





In her school, teachers covered only what was in the syllabus, whereas the Agastya instructors helped them acquire practical knowledge. They made students understand the importance of their surroundings, whether it was nature or people. They helped them develop varied perspectives through social life lessons, overcome their fears of addressing a crowd, talk confidently and face up to problems. Both students and teachers liked Agastya's different style and approach. The instructors were more approachable and easier to talk to than their schoolteachers. When the students made mistakes, the instructors would help them course correct and then move on to the next session. They made the students feel comfortable by saying, "It is ok to make mistakes, learn from those mistakes and keep going!"

Saraswathi loved biology and recalled her biology teacher at school always appreciated her drawings. She recently lost her father and lives with her mother and maternal grandparents, in Morsanapalli village near Kuppam.

They and her married older sister did not encourage Saraswathi's desire to become a nurse. There were no seats available in the science stream in the English medium college nearby, and she felt it would be difficult to study in a Telegu medium college where she obtained a seat.

All this forced Saraswathi to give up a degree in science and study commerce with an attitude of "Whatever happens, will happen for good." Now 20 years old she is in her second year of a bachelor's degree in commerce with a major in Computer Applications at the Government Degree College, Kuppam, Andhra Pradesh. She hopes to become a software developer Saraswathi is clear that it is only because of Agastya that her creative thinking and problem-solving abilities have improved. Her YIL exposure has put her in a better position to decide on the various options available to her in life. To Saraswathi, "Agastya is a marvellous place for gaining and using knowledge!"



"It is ok to make mistakes, learn from those mistakes and keep going!"







#### M Kiran

Age: 22
Years spent with Agastya: 2015 - 2017 **Background:**Mother: Farmer



# A prism dispersing a rainbow of knowledge

22 -year-old Kiran is presently doing his sixth semester of a bachelor's degree in science (Chemistry, Botany, and Zoology) from the Government Degree College, Kuppam, Andhra Pradesh. He would like to do a master's degree in psychology but has yet to decide which college to apply to for his post-graduation.

When Kiran was in the seventh standard studying at Zilla Parishad High School, Dandikuppam, he visited Agastya's Kuppam Campus for the first time and continued for two more years. A happy Kiran said, "Whenever we visited Agastya's campus, from the first to the last visit, the whole day was like a joyous festival for me." The first lab he visited was the biology lab, where various models of the human body, brain, eyes, etc., were displayed. Even though the Agastya instructors

Whenever we visited Agastya's campus, from the first to the last visit, the whole day was like a joyous festival for me.

taught him the same topics as his school, the difference was, in his words, "In Agastya, I experienced hands-on practical aspects of the subjects taught to me in school. Our school, however, did not have scientific apparatus to support our studies." So, whenever Kiran visited Agastya, he would perform as many practical experiments as possible and participate in all activities. He still marvels at how 'Light through a Prism' refracted into a rainbow. The instructors also helped them green their environment by getting the entire class to plant a lot of saplings across their school campus.

In his eighth standard, Kiran became a Young Instructor Leader (YIL) and was able to visit Kuppam twice a month. Along with twenty other YILs from his class of 45 students, Kiran started sharing his learnings, which was the purpose of the YIL programme. He even made presentations on the functioning of the brain and lungs with the help of models. "When I got some practical and theoretical knowledge which was not in my school syllabus, I shared it with my juniors and even my friends and neighbours. It helped me to get rid of my stage fear and talk to everyone without any anxiety."

Kiran participated in a school exhibition and with Agastya's help, prepared a model on drip irrigation. He then presented it at an inter-school competition and came third among the eight schools that participated this made him enormously proud and his family incredibly happy. When he received an invitation to participate in a mandal level competition, with the same



#### TRANSFORMED LIVES



drip irrigation model, he and two other friends installed additional water sprinklers. The team presented this revised model but was unable to secure a prize because Kiran felt that they did not present their model effectively enough.

"As soon as we YILs entered the Kuppam campus, we first meditated. Then they taught us leadership skills through videos of great people such as Mahatma Gandhi, C. V Raman, A P J Abdul Kalam, and others. After that, the instructors would ask a few questions based on the videos and we were thus able to understand 'how great people do great things in life." Kiran's leadership qualities have been a most effective skill set, especially in college.

He narrated an incident when his chemistry class was divided into groups to conduct experiments. When his group was given the experiment and asked to explain it, Kiran successfully led his group. He declared, "It was not new or challenging for me because this is what I did throughout my time in Agastya."

22-year-old Kiran comes from Kollupalli, Santipuram Taluk of Chittoor District in Andhra Pradesh. His mother is a farmer, and his brother works in Bengaluru. He wished that he could have had more time with the Agastya instructors. He rued, "If I had attended Agastya sessions more frequently, at least twice a week, my skills would have improved even more."



"We were thus able to understand 'how great people do great things in life."







#### S Sivakumar

Age: 24

Years spent with Agastya: 2008 - 2012

**Background:** 

Father: Farmer Mother: Farmer



### Agastya campus – A reality show!

-year-old S Sivakumar is working as a pharmacist in Apollo Pharmacy in Santi Puram. Chittoor but still vividly remembers his many visits to Agastya's Kuppam campus. His association with Agastya began from his fifth standard in Government High School, Santipuram, Andhra Pradesh, until the end of his tenth standard. His entire class were fortunate enough to visit once a month and experience installations and exhibits that demonstrated the connections between math, science and technology to other fields like art, music, and architecture. Every time he went, he could not wait to visit the campus all over again. When asked the reason for this, he said, "There is a lot for a person to capture and comprehend so, a single visit is not enough to scan the complete campus." His class split into two groups and each group went to a different lab. After half

a day, each group exchanged the labs so that everyone got a chance to visit both labs. He said, "The instructors arranged it so that we never overlapped the lab visits at a given point in time, as there are an enormous number of places for the students to visit. So, we would not only learn topics in science but also about art, mathematics and robotics." Sivakumar explained that the Agastya instructors first explained the theory behind a topic and then practically demonstrated the theory. If the experiment was safe enough for students to perform, the students then did it themselves. In his school the teachers only covered the topics in the textbook and nothing more than that. But Agastya instructors not only taught the students every aspect of a topic but also added on some general knowledge sessions.



Whenever we visited Agastya's campus, from the first to the last visit, the whole day was like a joyous festival for me.



#### Becoming a leader

He became a member of Agastya's Young Instructor Leader (YIL) programme when he was in his eighth standard. The instructor selected four YILs from his class of 45 students, by analysing the way they answered questions related to daily life, science and logical reasoning. As a YIL, the main skill he learnt was leadership. He learnt how to communicate with others without hesitating, whether what he was saying was right or wrong. Sivakumar said that the day after visiting Agastya, he would share his knowledge of whatever he had learnt with his father, mother, two elder brothers and their wives as well as with his entire class. By using the leadership skills he acquired, he became a captain in both school and college.



#### TRANSFORMED LIVES



He also learnt to get on stage and speak on any topic. His fluency in English also improved, because the instructors would first explain topics in the local language and then gradually shift to English.

Sivakumar had been an introvert, but by the end of his stint as a YIL, he transformed into an extrovert. Before Agastya sessions, he dared not even ask questions to his teacher but now he is not satisfied until they clear all his doubts.

Sivakumar said, "During a three-day project at Agastya, I and my friends created a model of a boat to depict how it moves forward utilising Newton's third law. I also explained how for every action, there is an equal and opposite reaction to all the students and teachers present there." He presented it again at a school science exhibition and did so well that as an appreciation from Agastya, Sivakumar received a certificate which his school proudly displayed.

Sivakumar compared the teaching methodology used in Agastya and his school, "Agastya has an upper hand because when a student sees, hears and does things practically, he grabs the subject immediately."

But the methodology used in most schools is based on 'chalk and talk,' which makes it quite hard to understand a tough topic." However, he felt that both sets of teachers explained to the best of their abilities. The only disadvantage he felt with his school was the lack of equipment.

Sivakumar graduated in Computer Science in 2018 from Nalanda Degree College, Vijaywada, Andhra Pradesh. He said "I jumped from Computer Science to Pharmacy because of a lack of jobs in my field. As soon as I found an opening in pharmaceuticals, I took it without any hesitation. However, I hope to work for a software company later on."

Sivakumar declared, "Whenever I entered Agastya's campus I felt as if I was entering a reality show. I am saying this because the campus has everything a student needs to start their career in science." If the opportunity presented itself, he wants to do something for Agastya, "There are two things I would like to do. Even today there are a lot of things for me to explore and learn on the Agastya campus. On the other hand, I am also eager to teach young students who frequently visit the campus."



"Whenever I entered Agastya's campus I felt as if I was entering a reality show."



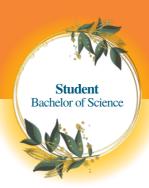




#### Bhavana M

Age: 20
Years spent with Agastya: 2014 -2017
Background:

Father: Security Guard Mother: Cook



# A Mathematician with a Love for singing!

gastya International Foundation set up a science A centre in Bhavana's school, Government High School, Immadihalli in Bengaluru, Karnataka. Despite being too young, a curious Bhavana would just walk over to take a look. "Agastya instructors never stopped us from seeing or touching things that were kept in the science centre," said Bhavana. She enjoyed studying the models and exploring them but never asked any questions. Once, during her sports period, she went to visit the science centre, where students from senior classes were working. Bhavana was very intrigued about what they were doing and provoked her to ask the Agastya instructor, "When will you be teaching our class?" The Agastya instructor replied that they would teach her class when she reached the seventh standard and that until then, she could visit the centre whenever she wanted.



At Agastya, we created the formulas and actually derived them with the help of models.



Feeling happy, Bhavana made her way back to her classroom. In her seventh standard, the Agastya instructors took their whole class to the science centre for their first session. Brimming with happiness, Bhavana finally started her journey of learning science experientially. They covered the solar system in that first session and along with so many other related topics like rotation, stars, sun, moon, planets, changing of seasons, etc.

Bhavana's class formally visited the science centre at least three times a week, to study science as well as math. Bhavana, however, would visit the science centre during her free periods, after school hours or whenever she felt like it! The instructors would play games with her and quiz her on what she had learnt. Bhavana credits them for developing her interest in learning subjects like maths which Agastya made 'interactive, immersive, and inspirational through a combination of installations and activities' - she particularly remembered learning 'Magic Math' from them. "Unlike usual classroom sessions where we would memorise formulas, at Agastya, we created the formulas and actually derived them with the help of models," she explained. She was so fascinated that she spent every free period in the science centre.

#### **Field Trips Fuel Ambitions**

In her eighth standard, Bhavana and her classmates visited the office of Hewlett-Packard (HP).





She narrated, "It was a full day trip where we had a lot of fun and games with the HP employees. Teams of two consisting of one HP employee and one student had different activities. We played games, made a painting using Paint software on the laptop, and learnt the functions of the software. Five teams with the best paintings and those students who learnt the maximum Paint functions, received prizes of stationery kits. The entire day was full of fun with all the games and good food that they provided for us." This unforgettable experience where everything from boarding the bus to visiting an office to spending an entire day in a corporate set-up, made Bhavana extremely happy and fuelled her ambitions! "I went there with the thought of enjoying myself and we all had a lot of fun, but I came back determined someday to work in an office like that of HP," avowed Bhavana. She participated in one of Agastya's Science Fairs as a student body member of the organising committee in the ninth standard. She, along with her other students managed the crowd and supplied materials for the experiments to stalls in chemistry section.

"It was the first time I was given responsibility; felt very happy I was able to manage it," said Bhavana. This experience subsequently helped her to organise events in her college. Bhavana is now 20 years old and lives with her father who works as a residential security guard, her mother who works as a cook and her two sisters. After completing her Bachelor of Science from Government Science College, Nrupathunga Road, Bengaluru, in Physics, Maths and Computer Science, Bhavana wants to pursue a master's degree in mathematics, a subject she has loved since her childhood. However, she misses Agastya's experiential teaching methodology in her preuniversity. Though she would like to be well educated and get a good paying job, she wants to become a professional singer. Bhavana had always been interested in singing and dancing and Agastya instructors encouraged the creative learning that flows from the bringing together of arts and science. She has learned Carnatic music and continues Abhyasa as she hopes to get a chance to sing in a film. At last, she says, "I am happy that Agastya came into my life. I wish everyone would learn hands-on, the way I did in Agastya.



"I wish everyone would learn hands-on, the way I did with Agastya."







#### **G** Santosh Kumar

Age: 20
Years spent with Agastya:
Background:
Father: Farmer
Mother: Farmer



## Imagination fuels model building

S antosh has been associated with Agastya International Foundation ever since he was in the fifth standard studying at Mandal Parishad Prathmik Pathshala. He remembered Jaya madam, an instructor from Agastya International Foundation, who came to his school. She introduced the students to Agastya's work and told them that they taught science in a practical way, using experiments and models. Then they took the excited and curious students to their campus in a van.

Upon arrival, the Agastya instructors informed them about the whole day's schedule and the activities available on campus. They attended morning classes on ecology, biology, zoology and in the afternoon, went to the robotics lab and Gurugruha, the astronomy lab, which was a very relaxing and beautiful visual experience.

Agastya helped me to acquire the skills of making models and prototypes of ideas which existed only in my mind.

Santosh found that the Agastya campus had a completely different environment, and he made new friends from different nearby schools.

#### Agastya's hands-on methodology

On their return, other students and teachers asked them about their experience and what they had seen. They explained how they got to practically study their syllabus subjects. The students even gave their schoolteachers physical proof of models and charts they had used as part of the practical learning at the campus. This convinced the schoolteachers who then encouraged and allowed the students to visit the Agastya campus during regular school hours. Once the teachers saw the positive outcome of the students' visit to the Agastya campus, they felt that this programme would help the students.

Santosh said that Agastya exposed the students to practical learning on various subjects like math, physics, chemistry, etc. They encouraged the students to conduct experiments and build models using cardboard or chart paper or straws. They learnt to measure dimensions like length, breadth, height and the area of a rectangle, triangle or square. This helped them arrive at different formulae using the models and measurements. According to Santosh, besides studying, the students also had fun, participating in various activities like singing, dancing and skits. Through question-and-answer sessions facilitated by the instructors, their speaking skills also improved.





Santosh had always liked science as a subject but found math much tougher than science. After he visited the Agastya campus, the installations, puzzles, activities and quizzes helped him understand math was not so difficult. Santosh explained that the school theoretically taught the formula (A+B)2 = A2+2AB+B2, whereas Agastya instructors would make them understand how to derive the formula using models. At Agastya, they would also conduct a lot of fun activities, and their practical approach influenced Santosh to eventually take up engineering, which focused on science and math.

#### **Inspiring and Teaching Other Students**

In 2016, when he was in the ninth standard, this active, confident student became a Young Instructor Leader (YIL). Along with 10 other students, the YILs visited Agastya at least three to four times a month. Motivational videos exposed them to morals and values, and they learned how to teach youngsters, through practical demonstrations. The YILs also went to a Milk Dairy to witness the process of how milk is collected, pasteurised and finally packed. They visited Dravida University to familiarise themselves with the university environment, because one day in the future, they would go there to learn. While studying in the ninth and tenth

standards, Santosh remembered attending a camp called 'Salt in Chemistry Lab,' where he spent a full day doing practical sessions and knowledge building exercises. Different judges evaluated groups of students. He recalled participating in the exhibition at the Agastya auditorium where students displayed their works for other school children to see. Santosh also participated in a mandal level science fair at Santipuram, where he displayed and explained his model of a burglar alarm, which he had built. Being a YIL Santosh got to inspire students and parents of Yamnur village, which is around 10 kilometres away from the Agastya campus, on the importance of education.

As a YIL, Santosh learnt to speak with confidence on any given topic and he became a class leader. All these qualities helped him make new friends in college. Also, his English-speaking skills improved. He plans to finish his Engineering in Kuppam Engineering College and then pursue a course on the Internet of Things, Embedded Systems, and VLSI to eventually get a job in a software company. This 20-year-old son of farmers affirmed, "Agastya helped me to acquire the skills of making models and prototypes of ideas which existed only in my mind. I see this as my greatest takeaway."



"I see this as my greatest takeaway."







#### Akshatha R

Age: 22
Years spent with Agastya:
Background:
Father: Provision Stores Owner
Mother: Tailor



### Viewing life through a scope

22-year-old Akshatha is in the last semester of a commerce degree from Varthur Government College, Madhura Nagar, Bengaluru, Karnataka. When she joined Government High School, Immadihalli, in the eighth standard, she recalled coming across a room full of science models. Curious, she sneaked inside the room through a window. "I had always considered myself a good student. Yet I saw a lot of things there which I could not understand, including models of the various parts of the human body. It was fascinating for me because I did not expect a government school to have these things" said Akshatha. Later she learnt that the room was Agastya International Foundation's Science Centre.

When the Agastya instructors along with her regular

After my successful presentation, I was filled with confidence and wanted to present ten more times.

science teacher announced that science class was going to take place at the science centre, Akshatha was excited as the students waited in a queue to enter the centre. With the help of a microscope, they got to see different cell structures, including onions and leaves. She and her classmates were very happy, as it was the first time that they studied science in this manner. "In my previous school, there was a science lab but we were never taught like this and I had never enjoyed studying science before!" she exclaimed.

Since the science centre was in her school, Akshatha was fortunate to be able to visit it often. Using models, puzzles, quizzes and experiments, she learnt about different topics like force, friction, electricity etc. This made science so much easier to understand. When Akshatha told her friends about Agastya's science sessions they too expressed an interest in attending these interactive lessons. "When it comes to studying science, my school was the best, because of Agastya" Akshatha proudly declared.

#### **Preparation for Presentations**

In her ninth standard, Akshatha participated in a science fair organised by Agastya. When the Agastya instructors said that this exhibition was not only about displaying science models but also explaining them to students from different schools, her feet turned cold! "I was so scared and nervous as I had never taught anyone," she said. Akshatha and her classmates prepared for two weeks for their presentation, in front of the Agastya



#### TRANSFORMED LIVES



instructors, their classmates and friends. Their project was to collect different plants, shrubs, herbs, etc. and explain their uses and properties to the visitors. "First, I made a list of plants such as tulsi, neem etc., which I wanted to include in my presentation, based on their medicinal properties and daily use. Then we collected plants and pasted them on chart paper for the presentation. Finally, I explained their uses in modern and traditional medicine to those who visited my stall." Akshatha remembered that the Agastya instructors advised her not to be scared if she made a mistake or forgot a point because everyone overlooks something or the other daily. She declared, "After my successful presentation, I was filled with confidence and wanted to present ten more times."

She shared the experience of working on this project with her friends and family who were happy and proud of her. Agastya's sessions continued until her tenth standard and she thoroughly enjoyed learning every topic taught. She kept in contact with Agastya instructors even after passing out of school. The presentation skills she learnt at Agastya, came in very handy during college, where she garnered praise from her teachers. Akshatha is an only child and her parents, are determined to give her the best they possibly can. Her father runs a food stall near offices and her mother is a tailor. After completing her graduation, Akshatha wants to get a job in a good company and work in finance or accounts. Her goal in life is to be financially well-settled so that her parents can rest and enjoy life.



"When it comes to studying science, my school was the best, because of Agastya"







#### **Pavan Solanke**

Age: 22 Years spent with Agastya: 2009 - 2014

Background:
Father: Shopkeeper

Mother: Homemaker



### **Education with confidence**

Intense and vivid is how Pavan remembers his first day at Agastya's Science Centre! He created models of planets using waste materials and did hands-on experiments on the solar system. As a seventh standard at Government Higher Primary School, Anandnagar, Hubballi, Karnataka, he found Agastya's teaching methodology fascinating. It taught students how to learn rather than what to learn and how to think instead of what to think. Thus, it helped him understand science concepts in a much more understandable way. Subsequently, he was thrilled to visit their Hubballi centre once a month and spend time in the biology lab, chemistry lab and physics lab amongst many others.

#### The right mix of academic and social skills

Early in his eighth standard, Pavan participated in the

I loved how each instructor interacted with us, so I learnt to interact with the visitors in the same way.

JIGNYASA, an annual competition 'which has been. monumental in the enhancement of science at the school level!' Active and enthusiastic, Pavan explained to hundreds of visitors how the digestive system worked using a model. "I loved how each instructor interacted with us, so I learnt to interact with the visitors in the same way," exclaimed Pavan. His performance at JIGNYASA, opened the doors of Agastya's Young Instructor Leaders (YIL) programme for him. Along with five other students from his class, he too became a YIL.

Pavan was excited about being a YIL as this path-breaking programme went beyond just science education and focused on the holistic development of students. Peer-to-peer teaching helped YILs become knowledgeable, enthusiastic, and easily able to demonstrate complex scientific principles with confidence and obvious enjoyment. "Being a YIL helped me look beyond just studies to understand the problems of society and how we can solve them," explained Pavan. Activities around the science of physics and the magic of a kaleidoscope, increased Pavan's interest exponentially. Creation and mechanics fascinated him, and this gave him clarity about his career once he completed his schooling.

As part of the YIL programme, Pavan also improved his interpersonal skills. According to him, before joining Agastya, he never used to talk much or mingle with others.



#### TRANSFORMED LIVES



He used to be very hesitant to experiment with new things or to express his opinions on any subject. Agastya's methods taught him that if you are confident, you can do anything. He did not just stop at learning but also taught what he had learnt to his friends. After understanding the importance of keeping his surroundings clean, Pavan and his friends cleaned the school campus on their own initiative. With a better understanding of the ecosystem, Pavan also began raising awareness in his community on cleanliness and the environment.

"I was involved in making models of the respiratory system, electric circuits, remote control cars, etc. during my time at Agastya. This process instilled confidence in me and I was able to work on anything practical in college," declared Pavan. Agastya also taught him to communicate effectively, something he now uses to receive and share knowledge. Agastya was instrumental in making him curious to learn more about science. Whenever he lost interest in his studies or felt down, his

instructors would boost his confidence and encourage him. Agastya gave him an annual scholarship of INR 2,000 while he was studying in pre-university and INR 5,000 for his graduation. Pavan completed his graduation in Civil Engineering from SDM Engineering College, Dharwad, Karnataka in 2023. He declared, "Agastya's scholarship helped me buy much needed books for my studies."

Pavan's father runs a shop and his mother is a homemaker. He has an elder sister who is married and a younger sister who is studying. Pavan loves playing cricket and table tennis in his free time.

The 22-year-old works as a Systems Engineer at Tata Consultancy Services Bengaluru. Eventually, Pavan wants to be a businessman and provide employment to other people. In the future, "I want to associate with Agastya to help the YILs financially. Agastya is one of the best organisations which helps students change their personalities in a good way and make society better."



"Agastya is one of the best organisations which helps students change their personalities in a good way and make society better."







#### **Kaushal Kumar**

Age: 22

Years spent with Agastya: 2015 - 1018 **Background:** 

Father: Clerk, Gujrath Electrical Board



### A good learning environment

t the young age of 22, Kaushal Kumar is juggling studies and a job. While doing a five-year dual degree (B Tech and M Tech) in Engineering Design from the Indian Institute of Technology Madras (IITM), in Tamil Nadu, Kaushal is also working as a Product Design intern at Miro Mobility where he is learning to design automobile parts.

Kaushal was delighted when he first saw Agastya's Mobile Science Lab in A Van when he was studying in the fourth standard. He was instantly curious to know more about the colourful van covered with cartoons and what purpose it served. At that time, he was visiting his mother who was teaching social science in a government school where Agastya used to encourage children to understand and retain concepts better through their

It was all about science, but it felt like our daily lives. Through playing games and magic tricks, we learnt about the science behind them.

science models and practical experiments. Kaushal remembered how surprised he was when he heard that this type of 'imaginative and innovative hands-on science education' was available in Government schools.

In the ninth standard of D L Patel Sarv Vidya Mandir, Rankuva, Gujarat, he attended one of Agastya's science sessions. He learnt the concept of 'friction' with the help of a model that had different types of surfaces. By rolling an object on it, he was able to actually see and feel the levels of force that resisted the sliding or rolling of one solid object over another. He liked the way the Agastya instructors explained the topic. They also asked the students to list out different surfaces with different levels of friction such as roads, slides in the park, soles of footwear, etc. He explained, "It was an interesting activity as I was learning the concepts practically, instead of only reading some lines in a book." Kaushal always looked forward to his sessions at Agastya because it was an opportunity to improve his understanding of the application of concepts.

#### A memorable summer camp

Kaushal had vivid memories of a three-day summer camp at Kharel, which was far away from his school. Along with other students, he used to travel in the Agastya bus to Kharel in the morning and return home in the evening. "It was a project-based learning camp where we created several low-cost models based on fundamental science concepts such as force and motion,



#### TRANSFORMED LIVES



electricity, etc. Students from different locations attended the summer camp and it was really fun to interact with them and know what they were doing. The camp was very useful because we got to learn almost all the topics in our curriculum in advance," he disclosed. For Kaushal this was the most memorable time he had at Agastya, "It was all about science, but it felt like our daily lives. Through playing games and magic tricks, we learnt about the science behind them." He believed this was very important because several charlatans spread superstitious beliefs when people were unaware of the scientific basis behind ordinary phenomena. He described one of the activities where they cut a lemon with a knife dipped in potassium permanganate which released a red blood-like liquid. Quacks would use this simple trick to awe and cheat people.

Kaushal and his classmates also did short plays to portray how such superstitions negatively impact the lives of people. These activities helped Kaushal improve his communication skills and built his confidence. Finding science in everyday activities and interest in understanding science. This is the greatest skill he acquired from Agastya, and it has helped him even in the later stages of his academic life. Kaushal was grateful to Agastya and recommended their sessions to his juniors. He exclaimed, "Not everyone is privileged to get a good learning environment like I was. Agastya is a great opportunity for government school students!"

Kaushal lives with his father who works as a Senior Assistant in the Electricity Board of the Government of Gujarat, his mother and his elder brother. After completing his dual degree Kaushal hoped to get a high-paying job. He also wanted to continue enhancing his life and enriching his knowledge with internships and learning new things.

Summing up his Agastya experience Kaushal said, "Agastya kindled my curiosity to explore science as a subject at an age when I did not know much about it, despite being good at it. Agastya invoked my willingness to learn more about many subjects."



''Agastya kindled my curiosity to explore science as a subject at an age when I did not know much about it.''







#### Kavita S Walikar

Age: 24

Years spent with Agastya: 2008 - 2010

**Background:** 

Father: Farmer

Mother: Homemaker



### **Improving oneself**

hen she was in the seventh standard in the Government High School, Vishveswar Nagar Hubballi, Karnataka, Kavita got the opportunity to visit one of Agastya's science fairs. She already knew about them because they used to come to her school to teach science to the senior classes. Kavita was thrilled and mesmerised by everything at the fair. "There were hundreds of students from different schools and a group of Young Instructor Leaders (YILs) managed them. These YILs were students themselves but they organised the visitors, maintained lines, obtained feedback, and got food from the pantry for students," said a surprised Kavita. This was so different from the normal as students were usually not given responsibilities. She went from one model to another and was even more amazed to find the YILs explaining experiments about the solar system,

Before becoming a YIL, I would just give up when faced with a challenge, without even trying. Now I have started trying things without any fear and it has made me learn a lot,

the anatomy of the human body, parts of a computer, etc. "We were all given gulab jamuns with our lunch which was my favourite" smiled Kavita, with a sudden spurt of happy memory!

#### Write down your ideas!

After attending the science fair, Kavita felt she knew the Agastya instructors, even though she never got a chance to attend any of their sessions, as they always clashed with her other classes. It was only in her eighth standard that she got to attend her first Agastya session in her school. The fun-filled session had lots of activities like introducing oneself, making paper crafts and playing games. "We sat in a big circle and one of the students shared an idea by whispering it to the person sitting next to them. Then that student had to whisper it to the next person, and the same process carried on from student to student. By the end, the original idea was not only garbled but it had completely changed and had everyone laughing at the messed-up communication," recalled Kavita. Then Agastya's instructors explained the importance of clearly communicating with one another. They also said that it was important to write down ideas so that one does not forget them and can work on them later. She thoroughly enjoyed this learning in her very first session. Unlike other students, Kavita started volunteering to help the instructors replace the materials in their boxes at the end of the sessions. Kavita appreciated this practical way of learning with Agastya. They had three dimensional models which she could see, hear, smell and even hold





in her hand so she found it much easier to understand. At school, she learnt about the human heart only through drawings on charts whereas, in Agastya, a model with four chambers and pipes showed the working of the heart.

From her class of 5, Kavita along with six other students became Young Instructor Leaders (YIL). She was highly gratified at the honour of being a 'responsible person who actively participated.' After her selection, Kavita along with other YILs started to visit Agastya's Hubballi Science Centre once a month. In her YIL sessions, Kavita participated in different activities like plantation programmes, team building and science fairs. Another initiative was to clean certain areas and villages under the Swachh Bharat scheme She learnt when one needs to have a partner to displace a paper glass without touching it.

In Agastya's science fair she got the opportunity to explain her model about the sublimation process of solid forms to gaseous forms). In her second science fair, she managed junior students, which she felt was the best part of her Agastya learning. These activities and various other initiatives helped build her confidence.

During her two-year journey with Agastya's experiential learning methods, there was a tremendous improvement in Kavita's personality and her academic scores. She was able to win a pre-university scholarship of INR 1,500 annually from Agastya, then INR 2,000 annually during her three years of graduation and finally INR 3,000 annually through two years of her post-graduation. Kavita used the money to support her studies. "Before becoming a YIL, I would just give up when faced with a challenge, without even trying. Now I have started trying things without any fear and it has made me learn a lot," revealed Kavita. She loves making rangolis and enjoys singing too. She lives with her parents. Father is a farmer and mother is homemaker, while her sister is studying in 10 standard. She has completed her master's degree in social work from Karnataka University Post Graduate Centre, in Gadag, Karnataka. The 24-year-old is currently working at an NGO called Vivekanand Old Age Home in Hubballi as a Counsellor. After choosing social work as her career path, she wants to help girls who are economically backward or physically challenged. Kavita looks forward to continuing her association with Agastya to serve society. "I would also like to help people in need, just like Agastya does," said Kavita.



"I would also like to help people in need, just like Agastya does,"







#### Seema Sheikh

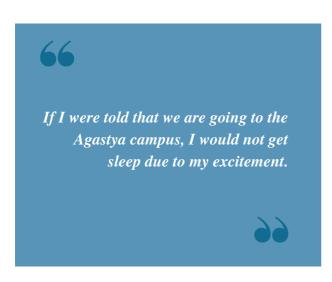
Age: 17
Years spent with Agastya: 2012 - 2019
Background:
Mother: Snacks & Kebab shop



### From waste to best!

17 -year-old Seema Sheikh is currently in the first year of a bachelor's degree in nursing from PES Medical College in Kuppam, Andhra Pradesh. She wants to work in the anaesthesia department of a hospital after completing her course. Excitedly she explained, "Anaesthesia means loss of sensation in the body. I want to work in that field as it has a lot of growth and demand as people want to make every medical procedure free of pain."

Sima was very young when she first visited the Agastya campus. Even though she was in the third standard at Mandal Parishad Prathamik Pathshala in Thumsi village, Santipuram, Andhra Pradesh, she had heard about it from her seniors. "We used to fight with our teachers to take us to the Agastya campus as well," she exclaimed.



When she eventually visited the campus and heard about its history, Sima described it as the 'Waste to Best' place. Her first visit to the campus was a memorable one. She visited Guru Gruha which is an astronomy lab and watched several videos about the solar system. "I knew about the sun, moon and stars, but it was the first time I saw the entire solar system with its other planets. We also saw the paths and speeds of different planets as they orbited the sun. I was so happy seeing it" she added. In the second half of the day, they met several instructors in the auditorium. Each student had to stand on the stage and introduce themselves one by one. "At that time, we were all scared to stand in front of others and talk. Today, standing on the stage and talking to people is my favourite activity," declared Sima, showcasing the confident young woman she had become.

She enjoyed visiting the campus and interacting with the Agastya instructors. She said, "If I were told that we are going to the Agastya campus, I would not get sleep due to my excitement." In the seventh standard, she practically learnt several science concepts like acids and bases, phases of the moon, natural colour extraction from flowers and turmeric, etc., with the help of models and materials. She disclosed, "During the COVID-19 lockdown, I used to ask Venkat sir when he would next call us to the campus."

#### The unique YIL experience

She became a Young Instructor Leader (YIL) when she





was in the eighth standard at AP Model School, Santipuram, Andhra Pradesh. "I did not know what a YIL was, other than what our seniors said, which was that it was like a badge for being a good student," said Sima. She was one among nine YILs from her class of 80 students. Recalling that momentous day, Sima narrated, "I was very happy but a few of my classmates and friends were upset. I told them not to feel bad, and that whatever we learnt, we would share with them."

Although Sima had been to most of the labs on the Agastya campus, there was a special lab only for YIL students. Hence, it was a completely new experience for her. She remembered meditating at the start of every session, followed by watching a motivational video. Then they used to study different topics either in a practical way or do activities like group discussions, poster making, etc. "We never memorised any formulae while learning math in the YIL lab but learnt using mathematic models. Later each one of us would share our learning with the rest of the class. I loved the way the friendly Agastya instructors interacted with us. They taught us even difficult topics in a very easy way" she added. For Sima, peer-to-peer teaching was her favourite part of Agastya sessions. She said, "Before, I was so scared to talk to people in case they laughed at me.

But after YIL sessions and practicing speaking in front of the class, my communication and confidence, both improved." She also participated in 'Math Day' celebrations which ran for three days in the Agastya auditorium.

She narrated, "We had to explain mathematics principles to students from other schools and a few foreigners who were visiting the campus. I was a group leader and explained the concept of Ramanujan's number and how he arrived at it. I felt like a fellow teacher and was very happy. I think peer-to-peer learning is my most valuable takeaway from Agastya as I continue to use it even in college."

Sima lives in Thumsi village, near Kuppam in Andhra Pradesh with her mother who runs a small snacks and kebabs shop from the veranda of her house. Her younger sister is studying in the tenth standard and her younger brother is in the eighth standard. She is among the very few students in her class in college who do not hesitate to walk up to the blackboard and explain a topic. "As a YIL, I was trained to share my learnings with others" she explained. Sima wishes Agastya could reach many more students like her and said, "I would love to always keep this connection with Agastya."



"I felt like a fellow teacher and was very happy."







### M C Bhavana

Age: 19

Years spent with Agastya: 2010 - 2017

**Background:** 

Father: Farmer

Mother: Homemaker



# Ask why instead of simply saying yes!

19-year-old Bhavana is pursuing a bachelor's degree in technology (Computer Science) from IIIT Hyderabad. Her father is a farmer, and mother is a housewife. She has two younger brothers studying in Intermediate classes and one elder sister who also graduated in technology Bhavana likes listening to music, reading books, gardening, painting, playing badminton and basketball.

She feels that becoming a YIL provided a significant boost to her academic performance and aided her in learning various life skills. Bhavana's journey with Agastya began when she was studying in the seventh standard at AP Model School, Kuppam. She recalled, "First, we meditated for a few minutes, after which we introduced ourselves to our fellow peers. Then we



Before joining Agastya I used to learn by myself, but after attending the sessions in Agastya I began to understand the value of learning with my peers rather than alone.



engaged in fun activities. I like that Agastya structures programmes to help us gain more knowledge and practical experience. As part of the YIL programme, we conducted awareness programmes which helped people a lot."

#### Advantage of learning with peers

She visited the Agastya Campus once in fifteen days, finding it a source of great inspiration. She loved the architecture and vividly remember the crafts shown to her, which she tried to replicate at home. She said, "That is how I developed a liking for art and craft as well as painting." Her most significant project was for IRIS, "I developed an ectomycorrhizal layer (which is a good layer for plants) around crop plants. As the daughter of a farmer, I devoted myself to this project. Today, we use this layer in our farms."

Bhavana got essential insights into her personality after becoming a YIL. She said, "Before joining Agastya I used to learn by myself, but after attending the sessions in Agastya I began to understand the value of learning with my peers rather than alone." As a YIL, she also involved herself in community work, "First, we planted a lot of trees around our school and then we planted many around my home and its surroundings. I also conducted a few awareness programmes such as why we should use LED bulbs instead of incandescent bulbs. I gathered people and demonstrated a few experiments." As an NSS coordinator in her college she has taken the time to explain various scientific concepts to her peers.



#### TRANSFORMED LIVES



Bhavana credits Agastya and the YIL programme for making her self-reliant and excelling in academics. She disclosed, "My experience at Agastya helped me choose my career. With my training as a YIL, I became more confident, gained leadership skills and have become a team player. I also feel that I have become more selfless and learnt to ask why instead of simply saying yes!" To understand a concept thoroughly, Agastya taught her ask many questions. She also learnt how to plan and organise, making her a keener and more assured person. Bhavana thinks life without Agastya would have been

miserable. She asserted, "I would have missed a lot of fun that I had whilst learning and growing up with experiences I had because of Agastya. I am blessed to be a part of Agastya and I strongly believe that I would not be who I am today without their intervention." Bhavana's advice to young YILs is, "Agastya offers a great opportunity, and they should use it properly. Not many people have the kind of platform that Agastya devised. I would like them to do their best and contribute more to society." Bhavana wants to become a software engineer and teach coding to underprivileged children.



"My experience at Agastya helped me choose my career."







### Muralidhar Vishwanath Divate

Age: 21

Years spent with Agastya: 2012 - 2016

Background:

Father: Businessman(Optical Shop) Mother: President, Mahila mandal



# Wearing a robotic costume with aplomb!

In urlidhar very honestly admits that in his fifth standard, he had no interest in studies and kept running away from school. When forced to go to class, he would sleep in the back. One day, the Agastya van came to his school to pick up those students who were part of the Young Instructor Leader (YIL) programme. His teachers and the Agastya instructors gave Murlidhar a list of Transformed Lives s and tasked him with rounding up the students on the list. When he finished, he sneakily jumpontonto the Agastya bus and joined the other students to see what it was that Agastya instructors were showing them at their Science Centre. He intended to go along for the ride and have some fun along the way.

#### Discovering creativity

This little piece of mischief changed Murlidhar's life!

All this time I was inside a box, but now I felt that a new world had opened.

At the Science Centre, he said excitedly, "All this time I was inside a box, but now I felt that a new world had opened."

He observed the practical teaching that was so different from his school which taught theory from books which he did not understand. Agastya's hands-on teaching which communicated science concepts practically through experiments inspired him. Murlidhar was astonished that the Agastya instructors spoke freely to the students and treated them as equals. Marvelling at the gravity and rainbow experiments, he thought, "By getting practical knowledge from Agastya, I want to learn new things and become somebody!"

He started showing interest in learning about the magic of maths, biology and many other subjects. His main interest, however, was in creating new and innovative things at the Science Centre, with help from the instructors. When Murlidhar took his creations home, his family were very impressed, and this made him happy. In the ninth standard, he collected newspapers to make a robotic dress which he even wore proclaiming, "My creation is strong, has height and is innovative!" Agastya instructors motivated children who did exceptional work in the Summer Camps, by giving them prizes. They were very appreciative of his invention, and he won a prize.

Murlidhar also made a mini projector. Since his father owned an optical shop, he was able to acquire mirrors





and glass for it. He received a lot of guidance from the Agastya instructors and even participated in the Jignyasa Science Fair where he won a water purifier as the third prize.

Agastya's instructors taught him so much which influenced his life even today. When the students sat down to eat, the instructors would join and eat along with them. Many students initially felt scared and nervous, the first time this happened, but the Agastya instructors would go out of their way to make them feel comfortable. Murlidhar remembered them saying that everyone made mistakes, whether they were at the top, bottom or in the middle. The important lesson was that everyone must learn from their mistakes. Initially, when he had to talk in front of a crowd, Murlidhar would experience stage fright. The first time he went on stage to welcome the chief guest, his hands were shaking, and he could not speak. The Agastya instructors told him not to worry about what others thought and to imagine that there was no one in front of him. After that, he spoke with confidence.

His parents felt that some type of magic had happened to Murlidhar after his association with Agastya from the fifth standard onwards. It was unfortunate that at the time he did not own a mobile phone to take photographs of his work. All he had were clippings from newspapers such as the Times of India, Prajavani and Udayavani.

He continues to be in touch with his instructors from Agastya and gets updates on various events. Murlidhar said that Suresh sir constantly encourages him to visit Agastya and interact with the students.

He was excited to exchange notes with ex-Agastya students from across Karnataka, Tamil Nadu and Andhra Pradesh at the Alumni meet a few years ago. His biggest takeaways from Agastya are the leadership and communication skills. Agastya's instructors taught him to work with and manage a team, and how to allocate work to team members, based on their capacities. Today as a participating member of the National Service Scheme, Youth Red Cross, and Lions Club of Hubballi, he plays a leadership role.

Murlidhar is 21 years old and a commerce graduate who lives with his father, mother, brother and sister-in-law. His mother is the president of her mahila mandal and a part of a group who sings bhajans during festivals. His father owns an optical shop in Hubballi.

Murlidhar feels, "We do not have to do anything except talk to young people and tell them what is right and what is wrong. They will understand what they need to do." He now intends to improve his father's business, and wants to do more but is confused with many ideas. He astutely remarked, "I will talk to experts in various fields before doing something new. Agastya is my base. Everything that I am is built on this base."



''His biggest takeaways from Agastya are the leadership and communication skills.''







### **Suhas Vittala**

Age: 26

Years spent with Agastya: 2015 - 2016

**Background:** 

Father: Retired Professor

Mother: Runs an agriculture R&D and machine manufacturing firm



# **Growing through** mentoring!

hen Suhas was in his first year of college, he came across an Agastya International Foundation flyer about the Anveshana Science Fair, where graduate students mentor high school students to make innovative solutions that address real life social problems. Being competitive by nature he took part with his team. Little did he know, what a huge impact this would have on him. Suhas revealed, I thought Anveshana would be like any other competition." It was only later he realised that not only did he have to conceptualise the project but also train government school students, plan, design and build the models." He mused, "This was a challenge since we had never mentored anyone before. It was always our responsibility to manage ourselves and build models but to teach concepts to government school children was completely new for us."



I had always been a student and found that being a teacher is quite different. It was extremely interesting, challenging and had its moments.



#### Teachers learning from the students

Suhas chose two students from an orphanage close by and one student from a private school. They worked together on their model for six months and he found the students quick at grasping ideas, curious and eager to experiment. Suhas observed, "I had always been a student and found that being a teacher is quite different. It was extremely interesting, challenging and had its moments." During their brainstorming sessions, an idea clicked when he thought back to the years 2016, 2017 and 2018, when there were waste management issues in Bengaluru. The landfills where the waste from Bengaluru was dumped were located around his city Tumkur. Suhas was unhappy that his city was being exploited, but he knew they could not face the problem head on and hence wanted to find a solution. He disclosed, "Although we are engineering students, we decided on waste management, because we knew that no one is interested in it. We hoped to be unique and thus improve our chances of winning. We were playing the probability game." One of the girls saw some pigs around the landfills and told Suhas, "Just like we are converting the waste into something more compostable, so is the pig. Thus, they Transformed Lives d the project Varaha after the third avatar of Lord Vishnu who took the form of a boar to save the earth."

Suhas and his team did a door-to-door survey around their locality asking how much waste was being generated per household. They found around 600-800 grams of wet waste and 1.5 kilograms of dry waste were





being generated from 150 houses. Suhas also discovered that the landfill issue was happening due to improper segregation of waste. The team met every day because Suhas wanted the school students to be involved in every step. He said, "They were definitely good learners and in reality, I think we learned more from them." The value of teaching and learning in an interactive environment is elaborated on by Suhas, "We often hear the word perspective, but I think we do not understand what it means. As a teacher I had to gauge the children's perspective and understand what and how we had to teach, for them to be able to understand. Experimentation is the best way to teach according to me and Agastya."

Suhas and the students were hesitant to throw or carry the waste themselves. The wet, black waste stank, and it felt inhuman to have people handle it. Project Varaha was a 4-foot-tall bin that had a central pipe running in between with two eight-inch pipes and a two-inch pipe in between, with a handle to rotate stainless steel blades going across it. He stated, "The consumer only had to throw their wet waste in, rotate the handle, go away, and forget it! We wanted the process to be as seamless as possible."

Suhas' team only won the fourth prize and he felt that they lost points because it was too technical. The social impact messaging that would have attracted the audience was left out. Despite this, Varaha had quite an impact in Anveshana. Suhas said, "Since I had the backing of my parents' factory, we were able to create and sell 75 Varahas across Bengaluru and Tumkur. Our curiosity led us to see how long we could sell our creation. We sold till the end of college but after that it was too intensive for us to continue. However, it was a good

learning experience on how different selling a product is compared to designing it." Anveshana also gave him a platform to showcase his work and interact with customers to a point where he understood what consumers wanted from a product. He said, "If it had not been for Agastya International Foundation and Anveshana we would not have been able to create and sell as many Varaha as we did."

Suhas still feels most competitions are just contests but Anveshana was an exception, "My team members were Arjuna to my Krishna. They had to perform, and I had to bring out the entire Bhagwat Gita to empower them." He thanked Agastya for honing his communication and explanation skills, "Through Anveshana, I had to teach young kids a complex project for six months. I had to be incredibly detailed and descriptive for them to be able to understand and present Varaha."

He would be happy to be associated with Anveshana in the capacity of a mentor and hoped for a chance to judge a competition. Anveshana is worth the time and effort that students must put in, to create such innovative outcomes. He thinks that the selection of projects should be based on the authenticity and value of the project rather than on the selection of children and its impact on them. If a space with various machines and tools are provided, it would give freedom for the students to create and explore their imagination without the boundaries of limited resources.

26-year-old Suhas and has graduated in electronics and communication engineering from HMS Institute of Technology, Tumkur in 2018. His parents own and run an agriculture research development and manufacturing factory called Dharma Technologies, which manufactures post-harvest machinery.



"I had always been a student and found that being a teacher is quite different."







## **Ajeeth Reddy**

Age: 21

Years spent with Agastya: 2011 - 2014 **Background:** 

Father: Farmer

Mother: Government Primary School Teacher



# Daily discoveries through Science

"I was good in my studies, but nobody ever motivated me to excel the way Agastya did. It made me feel better about myself and my ability despite being from a village," Ajeeth stated. His father is a farmer while his mother who used to be a government primary school teacher manages their house. His older brother completed his degree in Agriculture in 2021 and works on their land. Whenever Ajeeth visits his home in Kuppam during holidays (he lives in Guntur), he too helps his father in farming, something he has loved since his childhood.

When Ajeeth was in the fifth standard, a yellow-coloured cartoon painted van entering his village grabbed his attention. His seniors told the curious little boy that it was a Mobile Science Lab belonging to Agastya

66

I lacked the courage to express myself. I started building this skill with the help of Agastya instructors as they encouraged me to repeatedly practice speaking with people.



International Foundation which aims to provide experiment-based learning and hands-on experience. By relating science to daily life and its many influences on our daily lives, Agastya has been helping to demystify science as well as dispel superstitious beliefs. That evening, the Agastya instructors showed the gathered villagers how cutting a lemon with a particular chemical produced a red liquid, which tricksters would say was blood. "I was very small at the time and did not quite understand all the details, but what I saw that day remains with me in my memory," he declared.

It was only when Ajeeth moved to the Government High School, Santipuram in the sixth standard, that he was able to visit the famed Kuppam campus. He still remembers how excited he was about this new experience. Moreover, he remembered how fascinated he was with Agastya's experiments in his village, and this sharpened his anticipation. He said, "I was very excited, and liked everything about the campus. I met many new people and made friends with children from other schools during the lunch break. The surroundings there were so green and clean." The Agastya instructors were friendly and helpful right from his first interactions with them.

He recalled how groups from his class collected water samples from different taps, government tankers and bore wells to test for chlorine content using a detection test in the chemistry lab. They found out the water from tankers had chorine mixed in it.





At that time, he was more excited about the finding than the process and said, "I was so thrilled about knowing that there was chlorine in the water tanker, that I wanted to race home and tell everyone about it." In the four years that he spent with Agastya, Ajeeth learnt in a hands-on and practical manner, about many science topics from his school syllabus like light, friction, solar system, electricity, etc.

In the seventh standard, Ajeeth could not become a Young Instructor Leader (YIL). However, the Agastya instructors told him not to be disappointed and to try again the following year. Ajeeth then participated in a tree planting activity and even gave a speech on the importance of trees with the help of Agastya instructors. "I lacked the courage to express myself. I started building this skill with the help of Agastya instructors as they encouraged me to repeatedly practice speaking with people," he disclosed. Ajeeth applied for selection to National Cadet Corps (NCC), where he had to run a race and deliver a speech in public. "Thankfully, Agastya had made me practice public speaking before, and this made it easier for me to speak and get selected," declared Ajeeth. He then started actively taking part in NCC programmes and continued visiting Agastya for science classes. Through NCC, he felt he was living the life of a YIL with social awareness activities, planting trees, etc.

Ajeeth's visits to Agastya stopped at the end of the ninth standard owing to the tenth board examinations. The auditorium was Ajeeth's favourite place on the campus, as he had performed there several times. He said, "The auditorium gave me my first ever opportunity to speak on stage in front of everyone and this built a lot of confidence in me. I also made many memories in this place while practising for dance events which were organised by the instructors."

One of his cousins told him about having a career as a Chartered Accountant and he decided to take up the same and make a stable life for his family and himself. The 21-year-old graduated in commerce from Acharya Nagarjuna University, Guntur, Andhra Pradesh. Parallelly Ajeeth has also been studying to be a Chartered Accountant and has been able to clear his Common Proficiency Test. He believes it would hold a brighter future for him than science, where everyone was going.

He particularly remembered his very friendly instructor, Naveen Sir from the Media Arts Lab, who had taught him photography, music and how to edit music videos. When told that Naveen continued to work at Agastya's Kuppam campus, Ajeeth conveyed a message for him, "Please tell him that, I miss him."



"It made me feel better about myself and my ability despite being from a village."







### Siddarth Kurubar

Age: 18

Years spent with Agastya: 2016 - 2018

**Background:** 

Father: Labourer Mother: Homemaker



# Motivation through goals fear to confidence

S iddarth and his fourth standard classmates ran after the bright yellow van as it turned into his school. They had never seen such colourful pictures on a vehicle. They watched in awe as their seniors climbed inside wishing they too could go with them. When the older boys came back, the youngsters crowded around asking where they had gone and what they had done. That is how Agastya came into Siddarth's life, sparking curiosity and changing him and many others like him for the better!

This bright happy young boy became a Young Instructor Leader (YIL) when he was in the fifth standard in Sri Parappa Mushappa Primary School, Byahatti, Hubballi district. He believed he was chosen because he was able to pass the assessment conducted by Agastya instructors



My friendly behaviour and attitude towards the students, which I learnt from the Agastya instructors, helped me develop my leadership skills.



and also because of his positive attitude. He would eagerly wait to attend the monthly sessions and actually perform experiments at the Agastya Science Centre, Hubballi. As the instructor explained how the human body worked, handing out the removable parts of a human body model, he and his fellow students touched, saw and learnt about their remarkable bodies. This was in stark contrast to school where students were not allowed to touch the scanty lab equipment that was available. However, Agastya instructors used hands-on learning which enabled students to understand and retain the concepts easily. He still remembers seeing how chemicals reacted with one another, changing colours in the glass test tubes or turning into gases. In school the focus was on theory and covering the syllabus in time for the exams, whereas Agastya instructors answered his curious and sometimes irrelevant questions patiently. He never felt that he was attending a class in Agastya but felt like he was playing and learning about life through fun games!

#### Ways to fix a problem

One of his favourite activities at the Science Centre was 'Tod-Fod-Jod.' Groups of children had to reassemble and connect dismantled equipment properly to get them working again. He was the leader of his group of five who had never seen the inside of a dismantled fan. The instructors explained how the items worked and thus they learnt how to construct a fan. This inspired him to try and fix the fan as well as many other appliances in his own house.





"My friendly behaviour and attitude towards the students, which I learnt from the Agastya instructors, helped me develop my leadership skills" stated Siddarth. As a leader, he took care of all the children visiting Agastya from his school. He also orchestrated a campaign with children in his school group to plant trees around their school Campus. The inspiration came from Agastya's teachings on the importance of trees and the need for young children to act against deforestation. The school also supported this initiative, and the authorities appreciated their hard work. Even today when he visits his school, he is very happy to see all those trees and feels proud of his achievement.

Siddarth's father and brother work as labourers and his mother somehow runs the house on the meagre income that they bring in. Even though they were not educated, they wanted their smart young son to learn and make the most of whatever opportunities came his way. His family was so happy when he won an Agastya scholarship and Siddarth is pleased that his education has not been a burden on his father.

The YIL programme made a huge difference in his character and behaviour; and he could see the improvement in his concentration, skills and knowledge. He was able to understand scientific principles and concepts clearly and thus his academic performance improved too. Other Agastya sessions helped him to gain confidence, overcome stage fright and improve his personality. He was also able to identify problems in his environment and attempt to resolve them with help from Agastya's instructors.

Now an 18-year-old second year, pre-university student at the Government First Grade College in Byahatti, Siddarth intends to graduate in Commerce because of its job opportunities. He wants to work in a bank and become a manager. Therefore, after graduating, he intends to get coaching for competitive exams.

Siddarth reiterated that Agastya is the best NGO, and the Young Instructor Leader program is one of the best for students to improve themselves and achieve their goals.



"Young Instructor Leader program is one of the best for students to improve themselves and achieve their goals."







### Asha Rani VA

Age: 24
Years spent with Agastya: 2015
Background:
Famer: Farmer
Mother: farmer & homemaker



# Hands-on learningteaching experience!

24 year-old Asha has some impressive academic credentials, for which she credits her father who farms for a living. Asha, who is now, recalled that she and her brothers would work in the fields both mornings and evenings to help their parents, and would always find the time to study and prepare for a career. She graduated in Electronics and Communication from Sri Venkateshwara College of Engineering, Vidyanagar, Bengaluru.

In 2015, in her sixth semester, Asha participated in Agastya's Anveshana Science and Engineering Fair, held at Shikshakara Sadana, K G Road Bengaluru. This is a competition where undergraduate engineering students, mentor underprivileged school going students in the creation of models, while inducting knowledge and confidence in them.

It is not just mentoring, but also the art of making others understand by getting to their level to explain.

It culminates in a fair where thestudents exhibit their projects/models. Asha and her team members met the principal of SV School to explain the requirement and to include school children in their project. They selected ninth standard students and the team decided that their project would be 'Design and Implementation of Smart Two-Wheeler Vehicle Management System for Improved Road Safety.'

Asha explained "If the fuel indicator has a digital display, it will help riders know the exact amount of fuel available in their fuel tank and prevent them from being cheated. They can also calculate the distance they can travel based on the availability of fuel in the tank." Asha's team also worked on the idea of a smart helmet that when worn can detect alcohol in the user.

College lecturers and Agastya instructors supported Asha's team by providing them with technical information, periodically reviewing the project and giving suggestions on improvement. They were also available on calls for clearing doubts, for a period of two to three months.

#### The Learning-Teaching experience

Asha remembers how enthusiastically the school children would arrive daily after school and work happily for around three hours in their college lab, which fortunately was near the school. She saw how surprised and excited the children were to see the lab, and how interested they were.





Asha and the older students would discuss the project regularly with the younger students, to ensure they understood. When they successfully completed their project, Asha was happy that the school children were well informed about the idea behind the project and what they were trying to achieve. They uploaded their project for Agastya to further process and select for participation in the state level competition.

Asha described how thrilled her team was when the Head of Department at her college informed them that their project had been shortlisted for Anveshana. Asha still remembers the excitement and anticipation of their entire team as they boarded the Agastya bus. They felt independent and empowered while setting up their equipment in the stall allocated to them. Dignitaries from various places across Karnataka visited the fair along with senior scientists, teachers, students from other colleges, public, etc. This was a completely new and energising experience for all of them. She and her team were very proud of the project ideas they had developed, because they felt it contributed in a small way, towards public health and safety. This belief made it possible for them to talk confidently and with assurance. Asha observed that the school children were better at presenting and explaining the project to the public.

She felt, "It is not just mentoring, but also the art of making others understand by getting to their level to explain. I will always remember this learning from the Agastya instructors. This Learning-Teaching itself is an experience to cherish forever."

Happy to return with such beautiful experiences and memories, the teams hoped to participate in more projects, where they could help each other gain and share knowledge. Asha is confident that she can play an active role in more seminars and projects because of this opportunity provided by Agastya to participate in Anveshana. She reflected "Anveshana is a good platform for science and engineering students to achieve something in life because it helps them gain confidence, improve retention and expands their technical knowledge."

Asha hoped that Agastya International Foundation would host more such fairs and competitions that would help many students get such amazing exposure to other people and projects. Asha thanked Agastya for creating such an opportunity through which she not only gained the experience of teaching children but in a small way, also contributed to their future.



"His Learning-Teaching itself is an experience to cherish forever."







### Yashwanth Babu

Age: 21

Years spent with Agastya: 2013 - 2016

**Background:** 

Father: Lab Assistant Mother: Homemaker



# YILs are game changers

AP model school, Santipuram, Andhra Pradesh, when he first started sessions with Agastya. He recalled, "In a complete surprise to our entire class, Agastya instructors introduced us to their Young Instructor Leader (YIL) programme and said we would have to pass a selection exam." Yashwanth laughingly recalled, "The word exam made everyone in my class get scared." The exam had questions related to general knowledge, math, and science. "I scored 18 marks out of 20 and was happy to be selected," Yashwanth said. However, he was not excited since he had no idea about Agastya or the YIL programme.

When Yashwanth entered Agastya's Kuppam campus, he was enthralled, "The calmness and beautiful natural surroundings was unmatched!"



Every activity we did, Agastya instructors always used to tell us the cause and purpose behind it.



He and his friends enjoyed the freedom of playing on campus. YIL sessions usually started with gathering in a circle and meditating for 10 minutes. It helped them to build their concentration and remain calm, and he added, "Every activity we did, Agastya instructors always used to tell us the cause and purpose behind it." After that came hands-on science activities based on their syllabus. Yashwanth remembered activities related to colour changes and various types of odours. These sessions also helped Yaswanth score well in science and boosted his interest in chemistry which was his favourite subject.

On Science Day, at an exhibition organised by Agastya in his school, Yashwanth demonstrated how to produce electricity from a potato. He explained to visitors and other students how the potato works as a battery with its juice acting as an electrolyte. He was nervous in his first presentation but steadily got better after repeated explanations to several students and teachers. His anxiety vanished and he delightedly exclaimed, "I, for the first time felt the joy of confidence!"

The YIL program not only encompasses experiential learning but also focused on the development of problem-solving, analytical, and creative thinking skills of students. Yashwanth and his YIL batchmates gathered information about the problems in their village, like drainage or water. After noting all the problems of the villagers, they discussed possible solutions.



#### TRANSFORMED LIVES



"The YIL programme creates a mentality of selflessness and one starts to think beyond our self or our houses. It gave me the courage to voluntarily participate in several programmes unlike before when my teachers dragged me to events." This helped him understand what active participation meant and to develop leadership abilities which continue to serve him well. In his college too, Yashwanth voluntarily participates in all programmes and thanks Agastya for this transformation. 21-year-old

Yashwanth is in his third year of a bachelor's degree in Technology (Electronics and Communication) from Siddhartha College of Engineering, Puttur, Andhra Pradesh. His father works as a Lab Assistant at IRM degree college, Kuppam, and his mother is a housewife. His two sisters have also benefited from Agastya's YIL programme. After completing graduation, he wants to get a good job and help his father. After few years of work he will try the Civil Services exam to become an IAS officer.



"The YIL programme creates a mentality of selflessness."

## **Jignyasa - The Model Making Competition**

Jignyasa, which embodies the concept of 'an inner urge to learn,' is a state-level competition focused on model-making. Students come together to collaboratively create innovative and cost-effective models, which they showcase on the final day of the event. Throughout the process, Agastya instructors provide guidance, enabling students to gain a profound understanding of the scientific concepts underlying their models. As they present their creations to a larger audience on the concluding day, students also develop confidence in their abilities. This experience allows them to acquire practical knowledge while fostering a holistic ecosystem of learning.

















## Savita Ningappa Angadi

Age: 21

Years spent with Agastya: 2016 - 2018

Background:

Father: Farmer

Mother: Farmer



# Passing on the Knowledge

Agastya came into her life! "I was a very shy girl who did not interact much. Agastya sessions helped me overcome my timidity. I improved my communication skills and asked questions without fear in the class," revealed Savita.

Savita became a part of Agastya's Young Instructor Leader (YIL) programme when she was in the eighth standard at SJRC High School, Nulvi. Her nervousness quickly disappeared when she found how friendly and approachable the instructors were. "After a few discussions, we were split into groups and asked to do an activity with paper. I enjoyed that day and could not wait to get back," she remembered with a smile. Science intimidated her but after attending Agastya sessions

The instructors encouraged me, helped me rehearse and I was able to complete the activity. That made me realise how important encouragement is for students.

every month, her interest in the subject shot up. Savita has fond memories of the instructors at Agastya. She explained, "In the initial days, I was lost for words during an activity or on stage due to my nervousness. However, the instructors encouraged me, helped me rehearse and I was able to complete the activity. That made me realise how important encouragement is for students and now I can speak well in front of a crowd." At the science centre in Hubballi, she was excited and curious about all the models there. Savitha participated in many activities and her scores began to improve, without her being conscious of it. In school they learnt theoretically, but in Agastya she was able to understand concepts through practical experiments. This made it easy to recall lessons during examinations. Some of the hands-on activities which she enjoyed doing related to functions of the human eye, the brain, astronomy, and lenses.

#### **Improving Skills through Science**

It is Savitha's opinion that without Agastya she would not have developed an interest in her own education nor would there have been any positive changes in her personality. Whatever she learnt in Agastya she taught to other students, and this increased her confidence. The YIL programme further improved her bond with her mother who works as a labourer, her father who farms for a living and her two siblings who are still studying. She also learnt to be grateful for their support and they in turn were happy that she got a YIL scholarship of INR 3,000 per year which paid for her fees and books.



#### TRANSFORMED LIVES



The best part of Agastya was JIGNYASA (a science fair) and the summer camps, as these brought about a visible change in her. There she learnt to observe her surroundings and mustered the confidence to speak with people. In the summer camps, she learnt about organic farming. She initiated an awareness drive about waste management in her neighbourhood where she explained about the negative effects on the environment and on the health of people. This initiative brought about a change in the attitude of the people on how they should discard waste. Savitha ruminated, "An Agastya activity, where we used straws to make any object, greatly influenced me. I made a pen stand and realised that I can reuse waste material to create functional items." While Savita learnt a lot at Agastya, her most important lesson was being confident. Due to this lesson, she has been able to take up challenges and learn things

independently. She loves playing sport, dancing and singing, and wants to help children complete their education. She wants to contribute to society by helping orphans, as she feels that she understands their problems and can connect with them. Inspired by Agastya's teaching methodology, this young 21-year-old would like to become a lecturer. Agastya's instructors encouraged her to follow her ambition to teach so after a bachelor's degree in commerce, she plans to study for a master's degree and then complete a bachelor's degree in education.

She feels that it was a great opportunity to be a part of Agastya's YIL programme and if it were not for them, she would have been married by now. Savitha strongly hopes that students from the fourth standard onwards should be able to benefit from Agastya's amazing programme.



''Agastya sessions helped me overcome my timidity.''







### Uma Maheshwari

Age:

Years spent with Agastya: 2005 - 2007 **Background:** Father: Farmer

Mother: Homemaker



# Eyes filled with curiosity!

ma Maheshwari was an excellent student in school who consistently performed well in her exams. In the eighth standard she learnt about the Agastya pedagogy and became a Young Instructor Leader (YIL) in the ninth standard. At that time, they were still defining and developing the programme, yet Uma found that, "Agastya had a very child friendly environment. School taught us theoretically which is sometimes boring. But in Agastya we could touch and feel models and we did the science experiments ourselves. This definitely heightened our interest in learning science." Models on astronomy taught her about the universe while at the biology lab she learnt about the human brain and its structure. She was fascinated and amazed by everything she saw. Uma's hands-on experience improved her learning speed and capacity.

Agastya had a different atmosphere. It really made an impact on the students and boosted my determination and self-esteem.

During the Agastya sessions, she was very active and learnt concepts faster than the other students. This allowed her to volunteer to teach others, whence she gained self-confidence and self-esteem. Uma stated, "Agastya had a different atmosphere compared to our schools. It really made an impact on the students and boosted my determination and self-esteem."

#### Motivated to do better

Uma also taught at different schools, such as GHS Sanganapalli, where she taught the tenth standard about the human brain. She declared, "I felt very proud and confident at that time. Agastya motivated us to express ourselves with clarity and poise." She and her peers were very fortunate to also learn English as they were from a Telugu medium school. Within a span of three months, she was able to speak fluently and even aced her English exams. Uma said, "The friendly instructors were very co-operative and helped me excel in academics."

Agastya conducted a Science Fair in which Uma explained how a 'Solar Eclipse' took place to around 250 students. Her classmates and other visiting students asked many questions and she confidently answered them. During a Summer Camp, Uma taught children about 'Rainwater Harvesting,' why it was important, how to trap rainwater and how to use it in our daily lives, rather than letting it run waste on the streets. She was very happy with the chances she got in Agastya saying, "I was inspired to teach when I saw my friends





and students from lower grades come to me with curiosity, with eyes filled with the desire to learn new things." Her own eyes sparkling, Uma declared that she continues to share her knowledge with children.

Agastya became the platform on which Uma could stand tall and develop her leadership and communication skills. It gradually changed her personality and made her a more evolved person by giving her many different occasions to teach, learn and explore everything She continued, "Today nothing scares me, in the sense, I never say no to any opportunity that comes my way. I think Agastya gave me the biggest chance in life and I think I have made the best use of it. I learnt many moral values and qualities that I needed for my life and thank Agastya for doing such a great job." Her YIL scholarship of INR 1,500 assisted her to buy her college books.

On the same day that she received the scholarship, Dr Abdul Kalam visited the Campus and an ecstatic Uma said she was fortunate to meet such a great scientist, "I would not have had such an excellent opportunity if I was not part of this wonderful world of Agastya." Immensely grateful to this learning platform, she strongly believes that Agastya will impact more students who lack access to opportunity and will make their lives better.

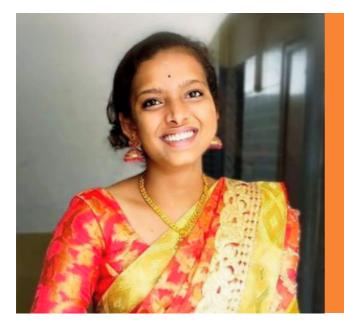
Uma has completed her bachelor's degree in technology from Kuppam Engineering College. Today, she is proud to be a farmer's daughter who is working as a Lead Engineer in HCL, Bengaluru. She asserted, "The skills I developed in Agastya, especially English language communication, helped me a lot in my workplace. Taking the lead to accept the projects coming my way without refusing anything, has helped me to reach where I am today."



"Agastya gave me the biggest chance in life and I think I have made the best use of it."







### Chandana C

Age: 22
Years spent with Agastya: 2016 - 2019
Background:
Mother: Homemaker



# Let me nurse your troubles away!

handana's mother has been a massive support for her daughters and is the reason behind their success success. After her father who was an auto driver succumbed to lung cancer, her mother started a small hotel when she was in the fifth standard. As a testament to her successful business sense, her mother constructed a house and shifted back to Shivagange from Kodigehalli in Bengaluru three years ago. Her second sister too contributed to Chandana's fees, by holding music classes. She proudly said, "My mother and my sister are both pillars of our house."

While studying in the eighth standard Agastya International Foundation instructors came to her school Government Primary School, Kodigehalli, to select bright students for their Young Instructor Leader (YIL) programme.



The science-based activities were very helpful and exciting because we were able to feel, see, hear and learn.



The instructors told the 30-40 chosen YILs that they would be teaching other children and conducting innovative community projects.

#### The impact of an experiential approach

Her school never had any science equipment or models to physically see and touch. She sometimes even dozed off during theory classes because they were boring! On Saturdays, however, all the students would eagerly wait to visit Agastya's science centre in Shivajinagar, Bengaluru or to participate in activities held in her school. "The science-based activities were very helpful and exciting because we were able to feel, see, hear and learn what we had read theoretically in our school syllabus," said Chandana. With Agastya instructors explaining and demonstrating, the students were able to understand concepts clearly, instead of trying to imagine what would happen. Such an experiential approach made them very enthusiastic and curious about science. This was the huge difference that Agastya has made in Chandana's life.

She recalled that her very supportive Science and Maths teacher, Chandrakala, who accompanied the students to the Kuppam campus, would guide the students and explain the models or specimens in the labs, making every visit unique and different. Similarly, if they wanted to communicate with Agastya Foundation, they would go to this teacher. The YIL training taught Chandana how to talk about and demonstrate various models (including two stroke engines) at monthly





monthly seminars. With this confidence, even today as a final year nursing student, she continues to explain disease conditions and other concepts to her class or any audience.

In the ninth and tenth standards, five groups of YILs made documentary films. Chandana's group decided to make theirs on child marriage to educate other students and parents on the harm caused to girls due to early marriage. Titled Araluva Munna meaning 'Before Blooming' her YIL group wanted people in rural areas to understand its ill effects. Her group interviewed the child health officer, women and girls who had married early, to gather information for their film. They also learnt technical aspects of movie making - handling a camera, lighting, focusing, capturing, timings and so on. When her school showed the documentary film to the public of Kodigehalli ward of Bengaluru, it earned her group many accolades and prizes. They also screened the film at an IT company, ADOBE Inc., where Chandana also sang a solo Kannada song about birds and nature. Chandana said, "This is a beautiful memory which gives me great happiness and makes me proud of my achievements and success. It instilled self confidence in me."

She is grateful that she got this opportunity through Agastya's YIL programme and thanks Mr Praveen, the Agastya instructor who guided them every step of the way.

She credited him as the reason for their success in the documentary. After finishing her tenth standard, Agastya instructors interviewed Chandana at their Kuppam campus in Andhra Pradesh. When asked what her biggest motivation was, Chandana replied that it was her father who had died of cancer. She realised that many people suffer as they did not have money or support when they fall ill. Hence, she dreamed of becoming a doctor to serve people and hopefully, find a cure for some types of cancer.

Originally Chandana wanted to become a Kannada lecturer, but after the YIL experience, she gravitated to science. As her marks were not high enough to enter MBBS, her teacher directed her towards bachelor's degree in Nursing. Agastya supported her with an annual scholarship of INR 3,000 from her tenth standard up to her first-year degree and she even received a grant of INR 5,000 as support for her education

22-year-old Chandana is now in her final year at Shri Satya Sai Institute of Higher Medical Science, Whitefield, Bengaluru. After joining college, Chandana found that everybody communicated only in English which she could not speak. With the help of her seniors and classmates, her speaking skills improved and she started talking to her classmates. "Though I wanted to become a doctor, I can still realise my ambition and dream of serving the needy as a nurse. I need a lot of patience to see others pain and help them calm down."



"This is a beautiful memory which gives me great happiness and makes me proud f my achievements and success. It instilled self confidence in me."







### Aruna D

Age: 22
Years spent with Agastya: 2014 - 2016
Background:
Mother: Farmer



# Agastya, a beautiful phase in my life!

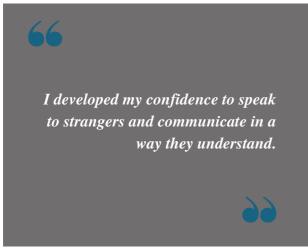
year-old Aruna was born and brought up in Bengaluru and is currently preparing for Civil Services Exam, after completing her Bachelor of Engineering in Electronics and Communication from East Point College, Bengaluru, Karnataka in 2023. When she was 14 years old, she and her eighth standard classmates visited an Agastya Science Centre, close to their school. "Along with our regular science teacher, an instructor from Agastya taught us science using handson methods. It was our first time to learn something practical and we all were so excited," said Aruna. Spellbound by so many models, many students confused the space for a museum! "The first thing I saw when I entered a dark room was a big, glowing model of the solar system," she exclaimed. She ended up loving learning science with the help of models and experiments

which demonstrated the earth's revolution and rotation, types of eclipses, acids and bases, the functioning of eyes, ears, the human heart, etc.

In her ninth standard at Government High School, Immadihalli, she participated in a science exhibition organised by Agastya. She explained and presented a model of the solar system to visitors and answered their questions. "It was my first time participating in a science exhibition and I was very nervous. Thankfully, we practised our presentation for two weeks before the exhibition. On the day, I confidently presented my solar system model to hundreds of people" she said. Since that experience, Aruna took a keen interest in understanding the lessons as she wanted to be capable of explaining them to others.

## Rising by Lifting Others

When she got to know that Agastya not only teaches science to government school students, but also does community service, Aruna said "I was so excited, and wanted to be part of this." She volunteered to teach senior citizens with Agastya instructors and requested them to take her along. After taking permission from her parents, she accompanied the instructors in their evening community visits after school. She taught people how to take care of their cows, how to maintain body hygiene, etc. To successfully communicate, she used to prepare by practising speaking when she was alone. Aruna owed a major part of her personality development to this phase of her life. "I developed my confidence to speak





#### TRANSFORMED LIVES



to strangers and communicate in a way they understand," she explained. She became very close to the Agastya instructors and they took good care of her during the field visits. Aruna, along with the instructors involved Aruna in the discussions and decisions on which topics would be helpful to community members. "I learnt a major lesson through this activity, which was if you want to assist someone, help them in a way that is valuable to them," stated Aruna wisely.

Aruna lost her father when she was in the tenth standard and had to relocate to their maternal grandparent's home with her mother and younger sister to Kolar. Agastya however ensured that she continued her education as her mother could not afford to educate two children on her earnings as a farmer.

"They helped me with a scholarship of INR 2,500 during my first year of pre-university and I received INR 4,000 in my second from GE company." This was a great help to her, not just for her education but also to survive in Bengaluru. "I am forever indebted to Agastya," she said gratefully. Even after passing out from school, she continues to remain connected with the Agastya instructors.

Aruna chose engineering to be eligible for the civil services examination as she wants to get a government job. Once she clears these exams, she would like to help children who are in a similar situation to hers. "It was Agastya who helped me when I was in need. I want to be like Agastya for someone else in need," she declared. Aruna's aid, Agastya was a beautiful phase in her life.



"It was Agastya who helped me when I was in need, I want to be like Agastya for someone else in need."







### Ramila Vadhiya

Age: 23
Years spent with Agastya: 2014 - 2016
Background:

Father: Farmer Mother: Homemaker



# Doing instead of only showing!

E ven though Ramila's relationship with Agastya International Foundation began when she was in the ninth standard, her family members have been a part of Agastya for a long time. Three of Ramila's sisters have experienced Agastya's teaching methodology, and one even participated in an exhibition organised by Agastya. Her brother is an instructor at Agastya.

Agastya instructors would come in a van to teach the students at Nainmada Adivasi Ashram Jhari school in Tharasalli once a week. They demonstrated biology, anatomy of the human body and the reproductive system through the use of various models. Ramila remembers more about female reproductive parts than the male! Her favourite subject was botany, and the topic that interested her the most was seed technology. It focused on the basics of growing a good quality seed rather than

66

After talking to Agastya instructors, working with models and in labs, and teaching other people that I was able to gain confidence on how to talk to people, what words to use etc.



looking at its superficial market value. She liked learning about how to sow seeds, the quantity of fertiliser or manure for a healthy plant, the effect of soil in a particular region, and how to take care of crops.

#### A different way of teaching

Her favourite experiment was the one with a paper circle on the mouth of a glass of water - when the glass was turned upside down, the water did not gush out! Her school separated the boys from the girls, but Agastya taught both together. This gender-neutral approach made an impression on her, as she had never experienced anything like it before. Ramila said, "The teachers in my school were not this free and open. They only focused on bookish knowledge. Agastya taught us with the help of models and activities which helped us understand concepts at a deeper level. This is what I liked about them the most." The Agastya instructors did not scold or shout at them. She felt it gave them freedom and helped them to explore more without worrying about being punished. According to Ramila, the difference, between Agastya and her school was that "They don't show, they do!"

The male instructors taught Ramila and the other students about the reproductive system in a sensitive and comfortable way. This inspired her to teach young girls in her village about the reproductive system, menstrual cycle, anatomy of the body and personal hygiene. She said, "It is important to talk about these topics because they are natural and there is no reason to shy away



#### TRANSFORMED LIVES

these conversations. The girls in my village have not studied after their fourth or sixth standard, and that is why I feel it is imperative for them to know about these things."

Ramila also mentioned how her learning experience with Agastya made her curious and increased her confidence. It also improved her communication skills, something which she displayed by teaching young girls in her village. Ramila really liked teaching and girls would come to her home where either her brother or she would teach them. However, Ramila was not always this extroverted, confident girl, wanting to teach and better people's lives, "I was not that talkative before tenth standard. I was a quiet and shy girl. It is only after talking to Agastya instructors, working with models and in labs, and teaching other people that I was able to gain confidence on how to talk to people, what words to use, etc."

Ramila is 23 years old and currently in her fourth year at Ratnagiri Agricultural University, pursuing a bachelor's degree in science in Agriculture. She wants to help her family who have a farm in Palghar, Ratnagiri. Earlier she had no knowledge of the varieties of plants available as she only saw the same crops that had been growing for generations.

Ramila wants to change this. She also spoke about how the government offers positions like that of a Krishi Sevak who informs farmers of the right crops to sow, how to grow them, what will have a higher margin in the market, how much fertiliser to use, etc. Therefore, she had attempted the Krishi Sevak exam to get a better understanding of the test and what it entails. She plans to give it again after completing her degree. She wants to pursue a master's degree in Agriculture.

Her family has always been supportive and tell her to do whatever she wants to. Ramila stated, "Girls from my village do not go far in terms of higher studies or jobs. I think I am the only one from village to have come this far to study agriculture in such detail." She felt that younger classes should learn science as early as possible. The size of the student group or the number of teachers teaching a particular group should be adjusted so that every student gets attention, and their needs are catered to.

Despite it being evident that her family needed monetary support, Ramila was steadfast in her desire to help people and make a difference. In Ramila's words, "Agastya is the best for learning, and from my own experience, I would urge everyone to participate in the classes too."



"Agastya is the best for learning."







### Karthik T B

Age: 20
Years spent with Agastya: 2013 - 2016
Background:
Mother: Farmer



# A double-dose of Agastya!

arthik came to know about Agastya International Foundation when his whole class went to Agastya for a residential summer camp. They had completed their fifth standard examinations from National English Higher Primary School, Tarikere in the Chikmagalur district of Karnataka. On that momentous occasion, they first meditated then played games, sang songs and some even danced. The instructors then asked them to create models from ideas that came to their minds. Karthik was interested in 'Growing plants using a limited amount of water.' With the help of Agastya instructors, he developed a drip irrigation model suitable for mountainous terrain. That summer camp was a turning point in his life because it brought him into Agastya's sphere of influence and to the water issue he wanted to work on in the future.



It was an after-school ritual to visit the science centre from 4:30 PM to 5:30 PM. We quickly built a rapport with the instructors. We would ask them all our doubts and they would clear them



After returning from the camp, Karthik voluntarily started visiting an Agastya Science Centre located in a nearby government school. "It was an after-school ritual to visit the science centre from 4:30 PM to 5:30 PM. We quickly built a rapport with the instructors. We would ask them all our doubts and they would clear them for us." These conversations with the instructors motivated him and other students. After attending several summer camps, Karthik and his friend felt comfortable enough to barge in at any time and the approachable Agastya instructors always welcomed them.

In the beginning, they had difficulty understanding the experiments, but the friendly instructors helped Karthik and other volunteer visitors to learn at their own pace. They patiently explained the difficult concepts through demonstrations, experiments and models. For his seventh standard, he shifted to Morarji Desai Residential School, where Agastya used to hold systematic classes. This was the start of his formal engagement with Agastya, where he learnt science through consistent, ordered sessions.

Despite being able to learn science with Agastya during school hours, Karthik happily continued to visit the science centre after school. He chuckled, "It was a double dose of Agastya!" During school hours, he used to do experiments on syllabus topics like electricity, friction, motion, mass, matter, the human body, etc. During the evening visits, Karthik would ask about





topics that were not in their formal syllabus, general science and about life.

#### The Life of Earth - water and forests

Karthik participated in a Science Fair organised by Agastya while studying in the ninth standard. Usually, students were allotted projects to work on, but for Karthik, this fair was an opportunity to develop ideas on his favourite issue of 'Agriculture using less water.' Karthik approached the Agastya instructors and after two weeks of incubation and training, Karthik presented his model at the Science Fair. He narrated, "I created a base with mountainous land topography similar to that of Coorg and laid dripping pipe channels to irrigate the plants. Taking the water uphill without using powered motors was a challenge. Since I wanted it to be low cost and to work without electricity, I created a storage tank close to the peak, to collect and store rainwater and then automatically flow through the pipes with gravitationalpotential energy." The visitors were delighted to see Karthik's project as they could relate to it. He recalled, "Working on this project is my fondest memory about Agastya, as it taught me how to transform ideas into

actual models. "My initial thoughts were full of loopholes, but the guidance from Agastya made me come up with effective solutions. After this presentation, I gained a lot of confidence."

Karthik was unhappy with the reduction in his formal interactions with Agastya when he got to the tenth standard. However, he continued visiting the Science Centre informally and was always welcomed by the instructors.

Karthik's mother harvests betel nuts and sells the fruit while his elder brother works as a painter. It is their daily wages that run the household ever since his father passed away thirteen years ago. He is now 20 years old and is currently studying Forestry in the third year of a Bachelor of Science degree from the College of Forestry, Ponnampet in Kodagu (Coorg). He declared, "I have chosen to study forestry because I was always able to connect with nature. I have walked miles in the forest with my mother telling me all about it. It is my home and hence, I am concerned about it." He is worried about the 'running-off of topsoil' and is keen to look into this.



"Agastya taught me how to transform ideas into actual models."







### Sravani R

Age: 22

Years spent with Agastya: 2012 - 2015

**Background:** 

Father: Farmer

Mother: Homemaker



# **Knowledge serves** humanity best!

22 -year-old Sravani R has completed her B. Tech. from Madanapalle Institute of Technology and Science in Andhra Pradesh, in the field of Electronics and Communications. She got selected as an Associate Software Engineer at Accenture and is currently waiting to be informed about the joining date.

Sravani's father is a farmer, her mother a housewife and her brother a student doing his B.Sc. in Palamanuru. He too has greatly benefitted from Agastya's programmes. Sravani is an avid reader, a sports enthusiast and loves playing outdoor games like ring tennis and volleyball. Prior to Agastya, she was an introvert who did not even talk to her friends. She was not socially inclined and hesitated to explore the environment. She had difficulty in conversing even when she knew the topic.



I found a positive change in my academic performance; earlier I just used to learn from books to write exams but after joining Agastya's YIL programme, I started to learn by doing.



Sravani was selected into Agastya's Young Instructor Leader (YIL) programme when she was in the seventh standard Zilla Parishad High Kenamakulapalli. The path-breaking programme mentors 'bright students who display innate curiosity and think laterally to become student leaders. She was fortunate to visit Agastya's amazing campus at least once a month. Her first trips were like picnic sprees. "I loved the way in which the instructors approached and interacted with us. Before they started any activities, they would ask us to meditate to increase our concentration. The activities and experiments were new to me and so I was keen to learn."

In her school there was less interaction between teachers and students. She recalled an Agastya instructor, Swetha ma'am, who asked their class to bring interesting items from their surroundings. Students brought soil, stones, papers, leaves, etc., and then they were asked to arrange the items they brought according to their imagination. Once the students had completed the arrangements, she explained why she had asked them to do so. She wanted them to practically understand the difference between living and non-living things. In this way, other Agastya instructors would teach topics through practical demonstrations and by getting students physically involved in the activity. According to Sravani, students were thus able to get a better understanding of concepts which they would remember for the rest of their lives. This strong foundation of knowledge becomes useful later in higher studies as well as for the development





of society. Sravani always liked the 10-minute warm-up yoga section before a topic which was rejuvenating and helped her concentrate better.

She found Agastya's teaching methodology different from the rote learning style used in her school. "I found a positive change in my academic performance; earlier I just used to learn from books to write exams but after joining Agastya's YIL programme, I started to learn by doing, understanding the concepts and connecting it to the life surrounding me," said Sravani on her change in attitude towards education. The YIL programme nurtures students, boosts their organisational prowess and helps them develop decision-making skills. In her eighth standard, Agastya instructors asked the group about problems in their village and community. It was then she started to speak for her community. She pointed out the scarcity of water in her village and with the help of Agastya instructors; she was able to get a water tank built in their village.

She particularly remembers visiting students with speech and hearing impairments and being amazed at their passion for learning. This was a huge motivation for her as she realised that they were studying despite their challenges while she herself was not utilising all her capabilities.

Leadership capabilities, teamwork principles and overcoming stage fright were some of the skills that she acquired during her time with Agastya. She asserted, "Before getting into the YIL programme, I was very nervous to speak in public but now I love both debating and community teaching. I even won second prize in an elocution competition conducted on the birth anniversary of our first female prime minister, the late Indira Gandhi. Through community teaching I have gained more knowledge." Sravani loves to learn by teaching and so she wants to continue her association with Agastya in helping teach the new YILs.

During an Agastya session on photosynthesis, her curiosity was piqued and she asked the instructors about a superstition in their village. The villagers did not go near pedal trees at night because they believed ghosts resided in them and therefore considered them dangerous. The instructor explained that the trees take in

carbon dioxide and give out oxygen during daytime, but in the night, they take in oxygen and give out carbon dioxide. When Sravani realised the scientific reasons behind not sleeping under trees at night, she went back to her village and explained that it was not ghosts. She was also inspired to make her village greener by planting more trees and she is proud to say that those trees are thriving! During the 2017 alumni meet, she along with other alumni performed a drama portraying the importance and benefits of trees.

As a part of Operation Vasantha from the eighth to the tenth standard, Sravani motivated school dropouts from her village to get back to school. While in the ninth standard, she found out that two of her seniors were being forced by their parents to stop going for classes. Their community believed that only boys needed an education since they would look after the family, while girls were considered a burden. With Agastya staff, she went to their houses, and spoke to their parents and made them understand the importance of education for girls. In this way, she was able to help those girls to complete their tenth standard. It was a great initiative as two girls joined school and one of them was successful in completing her matriculation. Sravani also said, "I used to only learn from my books and write exams but after joining the YIL programme at Agastya, I started understanding concepts and connecting it to the life surrounding me."

Scientific concepts fascinated Sravani. Earlier she had blindly believed in village superstitions but rational and simple facts cancelled the idea of irrational belief and this motivated her to choose science as a career. She chose to study B. Tech. over a simple degree because she wants to be financially independent and do something for society. Sravani aspires to be a government servant as she wants to serve humanity in the best way possible. Though she is not attending any IAS coaching currently, she tries to find spare time during weekends to refer to online videos available via YouTube. Sravani would like Agastya to incorporate English classes along with other subjects as most students are only familiar with their regional languages.

"Knowledge serves humanity best. Like Agastya I want to work for the community and give something back to society", said Sravani.



"Knowledge serves humanity best. Like Agastya I want to work for the community and give something back to society."







### Mounika Reddy

Age: 26

Years spent with Agastya: 2008 - 2013

**Background:** 

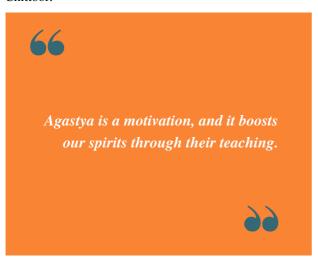
Father: Farmer Mother: Homemaker



# Hope - a driving force of life

Supervising the horticultural activities in Ramkuppam Mandal of Chittoor district, 26-year-old Mounika works as a Horticulture Assistant under Government of Andhra Pradesh. A girl who once struggled to understand her subjects and was doubtful of qualifying in school, is now a confident working woman who with most clarity explains use of agricultural fertilizers & machineries to the farmers.

Growing up working with her farmer parents in farmland, Mounika could only do little for studies as she lacked conceptual clarity and motivation for a brighter future, but it did not meant to be same for too long. Mounika's journey towards an inspiring transformation began when she was studying in class 7 of Zilla Parishad High School in her village, Sivarampuram located in Chittoor.



What motivated her in this transformational journey is not a mystery though - 'it was because of the Agastya sessions,' said Mounika.

'On the very first day, I was curious about what might happen in the session, as it was new to us. They taught us about blood in the biology lab, and we were fascinated.' She said with earnestness.

The instructors would conduct experiments that excited the students. The experiments in the Agastya sessions generated an interest in science, and doing experiments hands-on engaged her with the subject. Eventually, Mounika developed a liking for science, and learning became quite easy and fun. As she started learning more, she gained technical knowledge and developed an ability to think of an idea in multiple dimensions. Gradually, understanding science became simpler. By the time she reached the 8th grade, she could grasp the concepts quickly. Since Agastya sessions were practical, and most of them were related to the school syllabus, Mounika could also analyze and explore more on the topics. Mounika explained that 'in school, we could gain only the textbook knowledge however, the practical experience in Agastya classes was quite realistic and made lessons understandable.'

Then came the important chapter in her journey with Agastya. Mounika got the opportunity to be a part of Agastya's Young Instructors Leader(YIL) Program. Mounika recollected an incident that happened in one of





the YIL classes. 'When I was in ninth grade, one of the instructors asked her to step on the stage and speak out everything she learned till then. I was very scared.' Said, Mounika. Since most of the YIL programs that she attended were on the stage and involved speaking, she lost all her stage fear and gained confidence and public speaking skills. Moreover, after each session, the instructors would ask her to explain what she learned, which also helped her gain fluency in speaking. 'Because of the YIL program, I developed skills like leadership and communication.' stated Mounika proudly.

Throughout her journey in Agastya, she got the opportunity to learn, explore, and develop confidence through various practical experiences. Most importantly, she had a good relationship with the Agastya instructors. 'I cannot forget them because they have given me hope in life.' Expressed Mounika emotionally. The instructors have immensely motivated her to gain confidence and understand science concepts rather than just by-heart it for sake of passing exams. "We always read books for the sake of exams, but doing experiments gives us practical knowledge and experience". In her opinion, Agastya taught her that it's not difficult to learn something new. Mounika understood that learning depends on our hard work and visualization of the concept, which does the magic. Mounika eventually turned out to be a bright student in her 9th and 10th grades, and she received a scholarship of Rs Thousand. She used the money to buy newspapers and study materials.

When she moved to college to pursue her Bachelor of Science in Botany, Zoology, and Chemistry, at Padmavathi Degree College, Tirupati. Everything she gained in the Agastya sessions proved to be fruitful. Mounika explained that by listening to people and

observing them, she could understand them better. She was also able to communicate effectively. Mounika proudly stated that she delivered a lecture on leadership qualities to almost two thousand students in her college.

However, attaining this position was not a cakewalk for Mounika. After she completed her degree, she attended an interview to join the Horticulture department, but unfortunately, she was rejected. Mounika did not lose her heart. Deep inside, she knew that she was eligible for the post. She knew that the confidence and scientific knowledge she gained both in Agastya sessions, as well as her school and college, would not go in vain. Becasue the biggest gift she received from Agastya is the hope in life. She tried again to attain her dream position, but this time it was in a different way. She went on to clear the state-level Horticulture officer exam and was recruited for the said position in 2019. Her hard work paid her well.

Mounika has come a long way in the transformational journey. Today Mounika is a happy and independent woman who also supports her family. Coming from a farming family, her parents and her younger brother are proud of her achievements. Mounika mentioned that she will never forget the Agastya International Foundation. 'I'm grateful to this organization for providing me the knowledge and life skills.' Mounika expressed her gratitude. Even now, she participates in the Agastya Alumni meet, and once, she delivered a speech about her successful journey in Agastya. "Agastya is a motivation, and it boosts our spirits through their teaching. We probably won't find those facilities that we get in Agastya in regular schools. Agastya was a life changer for me; I've learned a lot from it and gained immense confidence". Spoke Mounika from the depth of her heart.



'I cannot forget them because they have given me hope in life.'







### D Varun Kumar

Age: 24
Years spent with Agastya: 2012 - 2013

**Background:**Father: Farmer

Mother: Homemaker



# **Associating Concepts** with Daily Life

he green, serene, campus of Agastya International Foundation's Science Centre at Kuppam enthralled Varun and his sixth standard classmates. "It was the monsoon season and everything looked so refreshing, like some kind of a resort," remembered Varun. In the Ecology lab they learnt about the usage of multiple plants in Ayurveda and saw several animals and specimens. They then went to the Physics and Mathematics labs and experienced life-size models, visual displays, experiments, and many mentally engaging activities. At Guru Gruha, the astronomy lab, they saw videos on our universe and solar system. It was a memorable day for Varun who expressed, "I had never seen science models and apparatus in my Zilla Parishad High School or anywhere else. If not for Agastya, I would probably have passed out of my Vijalapuram.

For the first time in my life, I was selected for anything, and it gave me so much confidence. My parents too were very happy when I told them.

school in Chittoor without ever seeing or learning with these models." He felt very lucky when he heard that his class would get to visit the Agastya campus every month.

On his next visit, the instructors demonstrated blood circulation in the body with a model built with thin pipes, balloons and tapes. A red-liquid indicative of blood, flowed through two openings and collected in a balloon. On squeezing the balloon, it would pump the red liquid through the outlet and into all organs through the thin pipes. After completing the circle of going through all the organs, it would refill the balloon once again. "We were fascinated to observe the mechanism of blood movement through the body. We understood the importance of the right amount of pressure. We learnt that too much pressure would make the balloon (heart) work faster and possibly lead to a heart attack. Similarly, if there was not enough pressure, blood will not reach all the organs adequately," said Varun. He and his classmates were captivated as they had never understood blood circulation as easily as the Agastya instructors demonstrated it.

Varun joined the Young Instructor Leader (YIL) programme when he was in the eighth standard. In the biology lab, a 3D model taught the functioning of the human heart to his class. Later on, they drew the heart and explained its functioning, based on what they had observed. Only Varun and one of his classmates were able to draw the heart in detail as well as explain it to





the entire class. At that time, he did not know that this was part of the YIL selection process. Varun was extremely proud because he was one of two students selected from a class of 80. He declared, "For the first time in my life, I was selected for anything, and it gave me so much confidence. My parents too were very happy when I told them."

#### The benefits of personal experience

In his ninth standard, Varun along with other YILs participated in a road show on the 'The life of a farmer in Kuppam and how it can be changed.' Initially, everyone was a little concerned about what to present, but the Agastya instructors told them not to worry. "We brought in our personal experiences, something suggested by the Agastya instructors," Varun confided. As his father was a farmer, the road show was very personal and the whole experience strengthened his problem-solving abilities. He declared, "Everything becomes simple if your understanding is based on your experience. When I reflect on science topics about everyday life, it is easier to understand concepts – Agastya constantly taught me this!"

When the former President of India, Dr Abdul Kalam visited Agastya's Kuppam Campus, Varun was studying in the tenth standard. He vividly remembered interacting with him at a science exhibition.

"Kalam sir himself came to my table where I was presenting cell structure and asked me, 'Where all can you use this microscope?' He appreciated my answer and even said 'very good!' I was so very happy!" he revealed. Varun managed to take a picture with the former president, which he proudly displays on the wall of his sitting room. He adds, "There are hundreds and thousands of students and people, who only heard about Abdul Kalam and saw him in photos. I consider myself very lucky to be among the few who actually talked to him. This only happened thanks to Agastya!"

Varun completed his bachelor's degree in commerce and opted to study for a master's degree in Commerce and Computer Application from Dravidian University, Kuppam, Andhra Pradesh. Though he was unsuccessful in several attempts to clear CA IPCC exams, he recently cleared his Junior Assistant Exam of the Collectorate Office in Andhra Pradesh, to manage payrolls and reconciliations. He is waiting for his appointment letter and posting. A proud and happy Varun would like to see his sister married before he settles down and can help his parents.

Varun is now 24 of age and still wants to continue learning in what he calls, 'the Agastya style'. He loves to continue his association with Agastya by conducting sessions for other government school students or YILs.



"Everything becomes simple if your understanding is based on your experience."







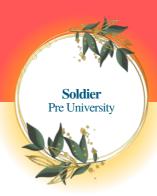
### Shrivishnu S

Age: 25

Years spent with Agastya: 2013 - 2015 **Background:** 

Father: Farmer and TV Technician

Mother: Homemaker



# A soldier and a cook!

25-year-old Shrivishnu strongly believes that education and knowledge are different, and is greatly satisfied that he got both from Agastya International Foundation. "Education is what you learn from school, but knowledge is something you gain by understanding people, interacting with individuals, learning their language, culture, traditions, food habits, etc." Hailing from the small town of Challakere located in the Chitradurga district of Karnataka, Vishnu's father is a farmer and TV technician and his mother managed their home.

Vishnu was introduced to Agastya in the eighth standard at Infant Jesus High School, Challakere. "Agastya's programmes did not cater to private schools, so coming across Agastya was complete providence. When I was 13



The first thing I got from Agastya is education, second is self-confidence, and third, I learnt to overcome my fear.



years old, a colourful van with vibrant pictures came to my village. Two instructors warmly greeted me and said I was most welcome to try and conduct science experiments by myself, and that they would support me." Since Vishnu was keenly interested in science, this idea electrified him! Fascinated by Agastya's way of teaching, he realised that practical training is what the brain remembers and not the theory. He emphasised, "If you hear a story, you will forget it, but if you see and hear a movie, you remember much more. Theory and visualisation are very different. If you practically do projects, they remain in your memory. Performing chemical experiments, seeing, and smelling the reactions with your senses makes learning a memorable and enjoyable activity. If you, do it yourself, you will enjoy it. When you enjoy it, you understand, and it will be with you forever." Agastya's teaching methodology helped Vishnu become independent and allowed him to take up a part-time job in a lab and start earning while in the eleventh and twelfth standards.

Today, Vishnu has built himself a successful career in the Indian Army and has been serving our nation for six years. He proudly proclaimed that he acts as the 'ears and eyes' of the armed forces in Kashmir. The exposure through Agastya helped him build his career, "The first thing I got from Agastya is education, second is self-confidence, and third, I learnt to overcome my fear, besides learning science in Agastya method which developed my analytical skills."





The young and energetic army man recalled, "I used to travel in one of the mobile labs and would perform 'Pavada Rahasya Bayalu' or the tricks behind superstitions in front of people. I used to demonstrate experiments, do projects and build models that would inspire students from other schools to come and visit Agastya centres." One of the biggest events he ever attended was the Mega Science Fair held at Palace Grounds in Bengaluru in the year 2012. He, along with his team, built a working telecommunication model to demonstrate how communications systems transmit and receive data. They built a four-foot tower with bamboo sticks and created a circuit to showcase the system. He presented this model to hundreds of visitors and Vishnu triumphantly said "As a student who could not even speak in front of his class, I was able to present and demonstrate a model in front of hundreds of people. I truly owe this personal development to the education, knowledge, and exposure gained from Agastya."

Also, the best thing about training in Agastya was that they would also get to learn something extra and out of the syllabus. He remembered how he and his eighth standard friends used to go to the lab and observe tenth standard students doing experiments. Vishnu remembers the Agastya faculty with immense gratitude. "The instructors would always put in 200% of their effort when it came to guiding and encouraging students. I can

tell with hindsight that every teacher who joins Agastya has a student mindset – they were constant learners themselves, and they would teach everything they learned." Above all, according to Vishnu, no instructor from Agastya ever said no when he asked them for help and guidance.

Vishnu has continued his association with Agastya International Foundation over the past 12 years despite his busy schedule. "Today I see Agastya has many knowledgeable and resourceful people. It has developed in leaps and bounds. Students are getting even better exposure and opportunities. Now, they are even able to build their robots." Vishnu thinks that Agastya should extend its programmes to private schools and engineering students as well. He fervently declared, "Education should be free and available to all. Education is not for sale, it is for students to earn. Agastya never formally came to my school or taught my class. I went myself and they welcomed me, and this continues even today." Vishnu concluded, "I am extremely grateful to Agastya International Foundation which is like my second home and I will be with Agastya forever. The major difference between school and Agastya was practically experiencing theoretical concepts, which completely transformed me. Students go for tuition but I strongly suggest that they visit Agastya learning centres to improve in leaps and bounds."



"Education should be free and available to all. Education is not for sale, it is for students to earn."





# **Glossary of Terms**

Agastya - Agastya International Foundation

YIL – Young Instructor Leadership is Agastya's flagship programme to promote leadership among students from under-privilege backgrounds.

YILs - Young Instructor Leaders are students who were part of Agastya's YIL Programme.

YI – Young Instructors are students, who are trained by Agastya to present Models and do hands-on experiments in science fairs organized by Agastya.

OV - Operation Vasantha, an evening community teaching program

IRIS - Initiative for Research and Innovation in STEM is a national level science fair to promote innovation and research in the field of science

STEM - Science, Technology, Engineering & Mathematics

INSPIRE - Innovation in Science Pursuit for Inspired Research scheme is one of the flagship programmes of Department of Science & Technology (DST), Government of India to promote ideas/innovations rooted in science and societal applications to foster a culture of creativity and innovative thinking among school children.

GHS – Government High School, refers to schools teaching students of grade eighth to tenth

GHPS - Government Higher Primary School, refers to schools teaching students of grade five to seven

ZPHS – Zilla Parishath High School

B. Tech – Bachelor in Technology

BA - Bachelor of Arts

BBA - Bachelor of Business Administration

MBA - Masters of Business Administration

PhD. – Doctor of Philosophy





# **Acknowledgement**

who make up an integral part of Agastya's family. In this journey of collecting, producing, and publishing 100 extraordinary stories of our alumni (50 boys - 50 girls), we not only got to hear their stories of transformation, but also lived it through memories of their 'Agastya Days'.

We thank various state governments of India and their concerned departments, for their continued support to Agastya. Their cooperation and encouragement have helped Agastya scale and excel in its mission to provide experiential learning opportunities to under-privileged children. We thank Ramji Raghavan and Hamsa Suresh from Agastya International Foundation for their unwavering guidance and direction during the course of the study. Hamsa was instrumental in holding the project together and ensuring delivery every step of the way.

We also thank Agastya's Young Instructor Leader (YIL) programme team in Bengaluru and Kuppam, Operation and Field teams in Karnataka, Gujarat, Maharashtra and Telangana for their support and cooperation during data collection.

The data for the case studies were collected by Aniruddh G R, Pranjali Tripathi, Jackline Sangeetha G, Hudson Sonu Singh, Adithya S, Cherita Suresh and Nandini R. We thank them for the pivotal role played in the interviewing process.

Adithya S designed the layout of the publication and Poonam Baid provided the cover page design: 'Girl with Agastya Tree'

Best Practices foundation designed the methodology for the collection of stories, trained the team on the instruments, story collection and conducting interviews, reviewed the drafts and ensured regular quality checks for the story production. The case studies were authored by Sudha Menon and Pranjali Tripathi, and the Best Practice Foundation editorial team was responsible for the final edit.

Sangeetha Purushothaman Executive Director Best Practices Foundation





# The important thing is not to stop questioning. Curiosity has its own reason for existing. - Albert Einstein



101 Varsav Plaza, 12 Jaymahal Main Road, Bangalore - 560046, INDIA Tel No. (+91 80) 41124132 www.agastya.org/



1 Palmgrove Road, Victoria Layout, Bangalore - 560 047, Karnataka, India. Tel: +91-80-25301861 Email: bpfound@gmail.com www.bestpracticesfoundation.org/