

3M and Discovery Education Celebrate 10th Anniversary of Young Scientist Challenge, Awards America's Top Scientist with \$25,000 Prize

Gitanjali Rao named America's Top Young Scientist in Nation's Premier Middle School Science Competition for inventing a device that aims to test for lead in water

Discovery Education (@DiscoveryEd) and 3M (@3M) have named 11-year-old Gitanjali Rao from Lone Tree, Colo., the winner of the 2017 Discovery Education 3M Young Scientist Challenge (#YoungScientist). Gitanjali is working to develop *Tethys*, a sensor-based device that can detect lead in water faster than other current techniques.

Rather than using expensive equipment for testing, Gitanjali's cost-effective approach to water safety uses a mobile app that populates the water's status almost immediately. *Tethys* is designed to be portable and easy to use, allowing individuals to test water safety whenever needed. She hopes to solve the water contamination crisis and decrease long-term health effects from lead exposure.

A seventh-grader at STEM School and Academy, Gitanjali competed alongside nine other finalists during a live competition at the 3M Innovation Center in St. Paul, Minn. She was awarded the title of "America's Top Young Scientist" as well as a \$25,000 prize.

During the past three months, Gitanjali and the other finalists had the exclusive opportunity to work directly with a 3M scientist to develop their innovations as part of a unique summer mentorship program. Gitanjali was paired with Dr. Kathleen Shafer, a 3M research specialist who develops new plastics technologies that have real-world applications in dentistry and other fields.

Each of the students collaborated with some of 3M's leading scientists, who provided guidance as they worked through the scientific method to advance their ideas from a theoretical concept into a physical prototype. Together, the 3M mentors and finalists shared their passion for science, reviewed the scientific process and worked virtually through pre-assigned objectives, with resources and support provided by 3M and Discovery Education.

"3M's commitment to the next generation of science leaders is energized each year by the creativity and ingenuity of these young scientists," said Paul Keel, senior vice president, business development and marketing-sales, 3M. "Making the world a better place through science starts with a spark of curiosity, which leads to passion – and results in making an impact. 3M is inspired by these finalists and their contributions to making lives better."

During the final competition, the finalists presented their inventions to an esteemed panel of 3M scientists, school superintendents and administrators from across the country. In addition to presenting their prototypes, the ten finalists paired up to compete in two additional challenges through which they combined multiple 3M technologies to solve real-world problems.

"Discovery Education proudly joins 3M to celebrate a 10-year commitment to fostering the next generation of passionate innovators," said Lori McFarling, senior vice-president and chief marketing officer, Discovery Education. "Empowering students with access to innovative learning opportunities sharpens their mastery of critical thinking and problem-solving skills, and ignites their desire to improve the world with science."

For teachers, students and parents seeking a place to explore the world of scientific innovations and opportunities, Discovery Education and 3M developed the Young Scientist Lab, an interactive portal filled with engaging activities and standards-aligned teaching tools, anchored by the award-winning annual Young Scientist Challenge.

The remaining nine finalists received \$1,000 and a variety of prizes from Discovery Education and 3M. The second, third and fourth runners-up also received a trip to a taping of a show on Discovery's family of networks.

These extraordinary students are:

[Rithvik Ganesh](#), an eighth-grader at C.M. Rice Middle School from Plano, Texas, received second place. Rithvik built upon existing research to conduct tests and identify one lead molecule from Apigenin, a compound found in fruits and vegetables, that could potentially be used to treat Alzheimer's disease. Looking forward, Rithvik hopes to take his findings through in vitro and in vivo testing and improve thousands of lives affected by Alzheimer's disease.

[Kathryn Lampo](#), a ninth-grader at Legacy High School in Broomfield, Colo., received third place. Kate created *Lawn Bot*, a water management robot designed to help individuals reduce the amount of fresh water wasted during home lawn care. Kate's innovation aims to be a more cost-effective and aesthetic water management system that measures the moisture content in soil. Made from starch-based plastic and powered by solar energy, *Lawn Bot* is also environmentally friendly. Kate hopes her innovation will help reduce the amount of fresh water wasted.

[Devin Willis](#), a ninth-grader from Florida Atlantic University High School in Boca Raton, Fla., received fourth place. Devin created *SLIDEMAP*, a device that integrates a motorized stage used in 3-D printers, microscope imaging and machine learning algorithms to distinguish a tumor as cancerous or benign, increasing accuracy and speed of diagnoses. Devin was inspired to improve the state of treatment after his grandfather passed away from cancer, and tapped into his passion for robotics to develop a solution. He hopes his innovation will improve current standards of global healthcare by enabling faster, more accurate and affordable diagnoses, especially in developing countries where access to medical professionals is scarce.

The fifth through tenth place winners each received a \$1,000 prize and a \$500 excitations gift card. These finalists, in alphabetical order by last name, are:

[Laalitya Acharya](#), a ninth-grader at William Mason High School in Mason, Ohio, Laalitya invented *ELIE* – or "Environmentally Low Impact Energy" device – that generates energy from multiple sources to increase alternative energy use in the U.S. and across the world. Her prototype uses a low-flow low-head, portable water turbine, piezos and solar panels to generate electricity in multiple environments.

[Anika Bhagavatula](#), a ninth-grader at Wilton High School in Wilton, Conn., invented *EcoBoom*, a natural solution to clean up oil spills using pomegranate husks and orange peels. Anika's research on major oil spills in the U.S. led her to develop a prototype that can absorb oil four-to-five times its weight. Major oil spill incidents, which can cause approximately 1.3 million gallons of petroleum to spill into U.S. waters each year, inspired Anika to explore cost-effective, biodegradable options that can remedy this national and global issue.

[Austin Crouchley](#), an eighth-grader at Garden City Middle School in Garden City, N.Y., in Garden City School District, created *an affordable way to provide electricity and clean water using solar energy*. Austin's device features a pulley mechanism, allowing its solar panel to constantly face the sun and produce 18 percent more electricity than a fixed panel. Contaminated water is a major health risk in developing countries, and Austin hopes his innovation can increase clean water supply used for drinking, farm irrigation and livestock, alleviating energy poverty around the globe.

[Simone Jacobs](#), an eighth-grader at Washington Middle School in Seattle, Wash., invented *Sill Sentry*, a device to help prevent children from falling out of windows. When a potentially dangerous situation is detected on the windowsill, a net is deployed to swoop up and stop the child from falling out of the window. Simone believes her innovation is a superior alternative to current window safety technology and hopes that it will be able to save many lives and trips to the emergency room.

[Samu Shrestha](#), a ninth-grader from Highlands Ranch High School in Highlands Ranch, Colo., developed a mobile app that provides individuals with disabilities control of computer or mobile devices by using head movements, facial expressions and hand gestures. He was inspired to help a classmate with disabilities manipulate mobile devices like the rest of his classmates. Samu's innovation could unlock interaction with the digital world for individuals with disabilities and bridge the interaction gap for internet users worldwide.

[Allie Weber](#), a seventh-grader from Edison Middle School in Sioux Falls, S.D., created a breathing device that doubles as a suction dart toy to allow child respiratory patients to have fun while doctors collect essential medical measurements during their treatments and hospital stays.

Since its inception, the Discovery Education 3M Young Scientist Challenge has awarded hundreds of thousands of dollars in student prizes, paired students with world-renowned scientists to give them real-world insights and delivered much-needed science resources to millions of students, teachers and families across the country. It targets students in the years when research indicates their interest in science begins to wane and encourages them to explore scientific concepts and creatively communicate their findings. Winners have gone on to be featured in *Forbes* magazine's annual "30 Under 30" list, speak in front of members of Congress and attendees at the United Nations, meet the President of the United States, and demonstrate innovations on national television programs such as *ABC World News Tonight*, *Fox & Friends*, and *The Ellen DeGeneres Show*.

The annual premier competition recognizes scientific thinking and curiosity in students grades 5-8 who dream up a solution to an everyday problem that ultimately could reshape and improve the way we live our lives. To download hi-res images and video of the science competition, [click here](#). For more information on the 2017 Discovery Education 3M Young Scientist Challenge and to learn more about this year's finalists, go to www.YoungScientistLab.com.

Discovery Education 3M Young Scientist Challenge materials are also available through Discovery Education Streaming Plus. For more information about Discovery Education's digital content and professional development services, visit www.discoveryeducation.com. Stay connected with Discovery Education on social media through [Facebook](#), follow us on Twitter at [@DiscoveryEd](#), or find us on [Instagram](#).

###

About 3M

At 3M, we apply science in collaborative ways to improve lives daily. With \$30 billion in sales, our 90,000 employees connect with customers all around the world. Learn more about 3M's creative solutions to the world's problems at www.3M.com or on Twitter [@3M](#) or [@3MNewsroom](#).

About Discovery Education

Discovery Education is the global leader in standards-based digital content for K-12, transforming teaching and learning with award-winning digital textbooks, multimedia content, professional development, and the largest professional learning community of its kind. Serving 4.5 million educators and over 50 million students, Discovery Education's services are in half of U.S. classrooms, 50 percent of all primary schools in the UK, and more than 50 countries. Discovery Education partners with districts, states, and like-minded organizations to captivate students, empower teachers, and transform classrooms with customized solutions that increase academic achievement. Discovery Education is powered by Discovery Communications (NASDAQ: DISCA, DISCB, DISCK), the number one nonfiction media company in the world. Explore the future of education at www.discoveryeducation.com.

Katie Alper, for 3M 646-935-4325, Katie.Alper@ketchum.com Charmion N. Kinder, Discovery Education 240-274-2173, Charmion_Kinder@discovery.com

<https://news.3m.com/2017-10-18-3M-and-Discovery-Education-Celebrate-10th-Anniversary-of-Young-Scientist-Challenge-Awards-Americas-Top-Scientist-with-25,000-Prize>