

2019 CAMP INVENTION PROGRAM: SUPERCHARGED™



The Innovation Force™

Children team up with members of Innovation Force™, a group of NIHF Inductees who have been transformed into comic book superheroes! By thwarting the evil Plagiarizer, a supervillain out to steal the world's ideas, children create a device to retrieve the stolen ideas and, in the process, learn about the importance of intellectual property and the patent system.

Participants will:

- Engage with inventors in a relatable and exciting way.
- Design, build and market an invention to aid the Innovation Force and their noble cause.
- Learn the basics of intellectual property and the importance of protecting one's ideas.



Deep Sea Mystery™

Children embark on a research adventure at sea to dig up fossils, but soon find themselves stranded on an island. Using lessons and advice from NIHF Inductees Sumita Mitra and Stan Honey, children invent island-survival tools and underwater equipment used to better study marine life.

Participants will:

- Explore navigation techniques using the constellations by creating a Little Dipper Lamp Projector to take home, which helps find the North Star.
- Use group work to build confidence and collaboration skills as campers work in teams to solve real-world problems.
- Build and design miniature boats that must float and carry pieces of cargo.



Farm Tech™

Children are put in charge of managing their own farm and learn the basics of running a business. With the assistance of their very own Bot-ANN-E robot, campers learn fundamental coding techniques to maximize their time and profits. NIHF Inductee Marvin Caruthers joins the fun and introduces students to DNA syntheses, and children perform their own mock DNA experiment to check the health of their newly purchased cattle.

Participants will:

- Play the role of a farmer and tackle the real-world economic challenges of running a farm and business.
- Program a robot to conduct the practical tasks of running a farm and explore the power and efficiency of automated tasks.
- Explore DNA and learn how doctors and scientists determine the health of people and animals.



DIY Orbot™

Children explore frequency, circuit boards, motors and gears as they use real tools to reverse engineer a remote-controlled DIY Orbot™. Throughout the week, campers will adapt their DIY Orbot to perform increasingly challenging tasks from sports to art.

Participants will:

- Work together in teams to overcome each day's unique challenge, culminating in the creation of a large obstacle course.
- Learn basic engineering skills by taking apart their robot to better understand its inner workings.
- Use engineering design principles to adapt their robot to each day's new activity.