



## “Design It! Build It! Launch It!”

### The International Space Station Project

Want to do something out of this world? Join the Girl Scouts of Hawai'i in building your leadership skills and abilities by boarding a MicroLab experiment on the International Space Station (ISS)! Through this project, you will have the opportunity to **DISCOVER** what you are capable of doing by engaging in conceptualizing, researching, testing, coding, building and documenting a scientific experiment that will run on the ISS; **CONNECT** with other high school girls from around Oahu as well as mentors and experts who will help you along the way; and **TAKE ACTION** to highlight a global problem that will help make the world a better place.

### What's a MicroLab?

It is a Twinkie-size container, constructed by a 3D printer, that encases a scientific experiment that is blasted into space on a rocket. Once the rocket's capsule docks at the ISS, crewmembers offload the MicroLab and plug it into a rack that provides the power needed to run the experiment in a microgravity environment.



Driven by a circuit board and computer program that the girls design, the experiment will run for one month. Periodically, crewmembers will download data and photos back to earth so the team can collect, analyze, and monitor their experiment.



### What role will I have?

Be prepared to be part of an elite group of people who have worked on a project that has gone into space. As a member of the **Design it! Build it! Launch it!** Team, you will work in at least one of five areas:

- **Electrical:** Do you like to know how things work? You can build and solder circuit boards that drive and power the science experiment.
- **Mechanical:** Are you into sketching? You'll be making drafts and designing how the science experiment will fit in the MicroLab, then creating the mechanical designs to NASA and ISS specifications.
- **Public Relations:** Do you like telling stories? Bring your documenting skills! Digitally record your team's progress and capture every moment to share with online community networks.

- **Software:** Do you like apps? You don't need to be a computer whiz, but you will learn to create programs that tell the experiment what to do while it is in space.
- **Testing:** Do you like seeing immediate results? You'll test all the parts of the project, including electrical, mechanical and software components, to ensure your MicroLab will be a success in outer space!

### Who can participate and do you have to be a Girl Scout?

Any girl on Oahu who is in grades 9-12 is eligible to join the team. You do not have to be a Girl Scout at the time of registration. However, to participate in the program you will need to become a Girl Scout.

### Who will I be working with?

Your team will consist of up to 20 girls all working on the same experiment. You must be willing to stretch the limits of your thinking and talents to create a scientific experiment that runs in a microgravity environment.

The adults who will be working with you are experts in their fields. Instead of telling you what to do, they will rely on their professional expertise and experience to support and guide you as your team drives the project success.

### When will the team meet?

Your team's MicroLab will be launched on a spacecraft early in 2014. As a member of the team, your time and commitment is an important part of the success of the program. Weekly workshops on Sunday afternoons from September through November, with additional meeting when needed to ensure that the team meets all the deadlines established by the Quest Institute<sup>1</sup> and NASA. Most workshops will be held at the Girl Scouts of Hawai'i headquarters (Ala Moana Hotel) but you may also need to travel to other locations as you create your experiment.

### What is the participation fee?

The program fee is \$600 per girl, including a nonrefundable \$100 deposit due at the time you submit an application in order to secure a spot in the program. Financial assistance is available based on need. For more information or any questions, please contact Jennifer Frisbee at (808) 675-5520 or at [jefrisbee@girlscouts-hawaii.org](mailto:jefrisbee@girlscouts-hawaii.org).

### How can I be part of the project?

The deadline to apply is **August 23, 2013**. You can download and print an application at [www.girlscouts-hawaii.org](http://www.girlscouts-hawaii.org), under Programs > STEM > The International Space Station Project (or [click this link](#)). If you are accepted, a Girl Scouts of Hawai'i representative will notify you. To learn more about the project, attend the **Information Session on September 6, 2013, from 4-7 p.m.** at the Girl Scout Headquarters on the second floor of the Ala Moana Hotel.

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<sup>1</sup> Our space station opportunity is made available by Valley Christian Schools ([www.vcs.net](http://www.vcs.net)), the Quest Institute for Quality Education ([www.thequestinstitute.com](http://www.thequestinstitute.com)) and NanoRacks, LLC ([www.nanoracks.com](http://www.nanoracks.com)) via its Space Act Agreement with NASA's U.S. National Lab.