



BRUSHBOT FEST

Families Exploring Science Together



Children and their parents are partners in a night of discovery and hands on science experiences.

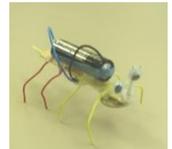
presented by Hawai'i Space Grant Consortium, University of Hawai'i at Manoa

How science really works! Curiosity + Joy + Dreams + Thrills + Wonder + Interest + Surprise + Creativity = Discovery....and it's Fun!!

We are all scientists! Children and scientists have much in common. Naturally inquisitive young children ask endless questions...they may spend half an hour watching a bug crawl on the floor, experiment by pouring water into soil or mixing different colors of paints or add blocks to a tower until it falls. They draw conclusions about the way things work.....they learn from and share information with others.

Family science programs:

- *help parents to be actively involved in the science learning of their child
- *encourage children and parents to work together
- *foster home/school partnerships
- *engage parents and students in thinking and working scientifically
- *assist parents to encourage an interest in science in their child in the home
- *help students to learn through active engagement in learning experiences



You are invited to bring the **BRUSHBOT FEST** to your school.....this **free** program, sponsored by the Hawai'i Space Grant Consortium will be offered on a limited basis. The program features science demonstrations, a "what is a robot" overview, and participants will build their own brushbot and compete in a speed race and a sumo tournament.

Presenters: Art and Rene Kimura, *Hawaii Space Grant Consortiium*

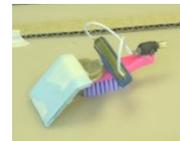
Schedule: 5:15 p.m.: *Future Flight* staff arrives to begin unloading materials

5:15 p.m.: facility available for set up (recommended facility: cafeteria)

5:45 p.m.: registration of participants by host school, inquiry activity during wait period

6:15-7:40 p.m.: science demonstrations, hands on activities, brushbot competition

7:40-7:50 p.m.: closing demonstrations and conclusion



Requirements:

1. participant eligibility: students in grades 2-8, each student accompanied by a parent
2. minimum of 8 **classroom** teachers who are not accompanying students: to assist in distribution of materials, hosting teams, and cleanup of materials (teachers should report by 5:30 p.m.)
3. video projector (to show powerpoint), screen, microphone/PA (wireless lapel microphone), 2 6 – 8 foot table at the front for demonstrations/display
4. adequate tables/chairs for students/parents to sit together (cafeteria preferred)
5. minimum number of students: 48; maximum number of students: 72 (each student to be accompanied by a parent; siblings should not be brought to the session); please provide confirmed list of teachers (and their grade level) and confirmed student count at least 3 weeks prior to the program; each child should bring a AAA battery.

Limited availability. To schedule this program, email Art Kimura, Program Director, *Future Flight Hawai'i*, art@higp.hawaii.edu (provide: name of school, name and home phone number/email address of coordinator or contact, number of students anticipated for this program, confirmation of at least 6 classroom teachers who will be there to support the program). *Future Flight Hawai'i*, Hawai'i Space Grant Consortium, P.O. Box 6412, Hilo, HI 96720-8927; phone/fax (808) 934-7261; *Future Flight Hawai'i* web site: <http://www.higp.hawaii.edu/futureflight/>;

<http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=/20060127/NEWS01/601270352/1001>

Honolulu Advertiser article about the Family science night: <http://the.honoluluadvertiser.com/article/2002/Feb/28/In/In42a.html> and

the Honolulu Star Bulletin article: <http://starbulletin.com/2003/02/05/news/index7.html> *Future In* honor of exploration and explorers, *Flight Hawai'i* is honored to provide this program to schools.

The Robotics Alliance Project

