SCIENCE BUDDIES
Project Ideas Roundup

STUDENT EDITION

June 2011

Another Science Fair Season Comes to an End

A 'Sweeping' Science Fair Success!
Team from Contra Costa County wins big with cancer treatment research

"Science fair" headlines over the last few weeks have been brimming with stories of K-12 students who successfully used the scientific method to ask a question, hypothesize an answer, and put it to the test with experimentation. With approximately 10 million students in North America tackling a science fair project each year, the flurry of results as the school year draws to a close has been exciting and inspiring. Top competitors wrapped up the science fair season with a flourish as their best-of-the-best projects were showcased at the **Intel International Science and Engineering Fair** (ISEF).

For Blake Marggraff and Matthew Feddersen (*left in the photo*), the Intel ISEF was a final stop on a domino chain of fairs that began with a "sweep" at the **Contra Costa County Science and Engineering Fair** (CCCSEF). They went on to the **California State Science Fair** (CSSF) and then took top honors (and more than $80,000) at the 2011 Intel ISEF for their research on an alternative and lower-cost cancer treatment protocol. *Science Buddies is excited that Blake and Matthew will be interning with us this summer!*

Interested in pursuing top competition next year? Our **Advanced Project Guide** can help you get started.

Local Science Fairs Seed the Future
Community support helps county fairs

Growing fairs like CCCSEF are vital for encouraging students to get involved in the science fair scene, and the success of such local fairs depends heavily on support from community sponsors and partners, many of which also contribute special awards. Chevron, a sponsor of Science Buddies' resources and projects in the area of **geology**, is a sponsor of CCCSEF. For a recap of Chevron's special awards winners at CCCSEF, see **"A CCCSEF Wrap-Up."**

New Engineering Design Process Guide!

A Nuts and Bolts Guide to Invention

Have you ever selected a project to work on and then struggled to "fit" it into the steps of the scientific method? Some projects are more "engineering" than "science" and follow a different set of steps. Science Buddies' new **Engineering Design Guide** walks you through the process:

- **Define the Problem**
- **Do Background Research**
- **Specify Requirements**
- **Create Alternative Solutions**
- **Choose the Best Solution**

(Leonardo DaVinci kept numerous design notebooks!)

2010-2011 Outstanding Mentor Award

Congratulations to Nithin Tumma, a junior at Port Huron Northern High School in Port Huron, MI. Nithin **won the Science Buddies Craig Sander Outstanding Mentor Award** for his community service as an online mentor at **Ask an Expert** during the 2010-2011 season.

- **Do Development Work**
- **Build a Prototype**
- **Test and Redesign**

These are the steps an engineer takes to first identify a problem or need and then create and develop a solution that solves the problem or meets the need. Engineering design projects are about *creating* solutions!

On the Blog

Nithin also won the 2011 Intel ISEF **Best of Cellular and Molecular Biology Category Award** and a **First Place Award** for his research on interactions between Cytochrome-P450 2E1 (a liver enzyme) and medicines used to treat Type-II diabetes.

Follow Us

Stay in touch with us all summer long by joining our **Facebook community**. Click "Like" to add us to your favorites! (Or follow us at **Twitter**!)

Summer Science

- Did you go to a summer science camp last year? Are you going to one this year? We are gathering stories about students who attend summer science programs. If you have a story to share, please **email us**.

- Still making summer plans? Our **Summer Science Camp Resource** can help you find an exciting and enriching science-based summer program.

Quick Links

- **Project Ideas**
- **Topic Selection Wizard**
- **Project Guide**
- **Scientific Method**
- **Careers in Science**
- **Ask an Expert Forums**
- **My Science Buddies**
- **Blog**

Safer 'Surfing'

Make sure your online surfing this summer is as safe as possible. Our **Internet Safety** resources, sponsored by Symantec Corporation, encourage you and your family to think about ways to make being online a safer experience. Be sure to review the **Internet Safety Guide** and the **Family Online Safety Guide**. And, if you play online games, don't miss **The Good News About Video Games**.

(Symantec Corporation sponsors the Science Buddies computer science area and resources designed to increase family awareness about Internet safety)