



LEAPS NEWSLETTER

UPCOMING EVENTS

PROMOTION!!

Congratulations LEAPS students



VOLUME 2, ISSUE 6

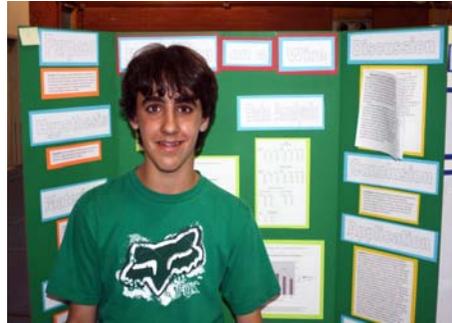
SANTA BARBARA JUNIOR HIGH SCHOOL

MAY/JUNE 2008

The State Science Fair

By: Elliott Kingston, 8th grade student

I recently attended the California State Science Fair, it was held in the Sports Arena, near USC in Los Angeles. My project was Recording on Wire, and the purpose of my experiment was to find the optimum conditions to record and play back magnetic information stored on a steel wire. I enjoyed glimpsing some of the other experiments. A number of the other projects were experimenting with improving current technology. I was judged five times, by very qualified judges. The judges were Nuclear Physicists, NASA Engineers, and retired scientists. All of them admired the home-made look of my project; which was magnified by the high-tech look of the projects around me. The judges were very friendly, and complimented my effort; I enjoyed discussing my experiment with them, as well as describing how the project evolved into the final product which I displayed at the fair. Overall, I had a great time giving explanations to judges, as well as exploring other students' experiments, it was an amazing experience.



Elliott Kingston proudly standing by his display titled *Recording on a Wire*.
(Photo Courtesy of Steve Shelton)

Fun Facts

- * Supernovas are explosions that can destroy an entire star.
- * Sunspots are areas on the surface of the Sun that are 3000 degrees cooler than other areas.
- * The only star in the sky that doesn't appear to move from night to night is called Polaris, the north star.
- * Jupiter is heavier than all the other planets put together.
- * If you could put Saturn in an enormous bathtub, it would float. The planet is less dense than water.

Lunch with a Scientist – May Candidates

Nayelli Villafana, Endy Rangel, Nick Clark, Jenny Suarez, Sophia Spann, and Carla Villa

Three... Two... One... Blastoff!!

By: Aime Rodriguez and Christie Delgadillo, 8th grade students

As some of you may know this last month in April, Ms. Garza's and Ms. Kluss's class have worked on and launched water bottle rockets. We worked in pairs of two trying to achieve the longest hang time, which would result in the reward of having the winners names engraved in the plaque of rocket science for eternity. After a long week of making parachutes, designing rocket fins, and creating nose cones out of manila folders, our rockets were completed and it was time to launch. It was unimaginable to think that our rocket would be the rocket to have the highest hang time out of approximately 170 rockets... but we were shocked and surprised when we found out that we had the best time in our class, which was 14.4 seconds. After that it became a waiting game, with two more classes left we were unsure whether our rocket would prevail. At the end of the day, we could hardly contain ourselves when we ran to Ms. Garza's class, and found out that our rocket had the best time in the entire school for 2008. Making our rocket and watching as it flew in the sky, was one of the most memorable events in our time at Santa Barbara Junior High School, and knowing that our names will be on the plaque of rocket science forever makes it a whole lot better!



Nick Clark blasts his newly built rocket into the sky.

Science Night

By: Sophia Spann, 8th grade student

This past Wednesday, the 21st of May, in the cafeteria of SBJHS, a science night of student demonstrations was held. Some included juggling a ball of fire, forcing an egg through a small bottle with fire, and blowing up a balloon with the gas produced by an acid and base. The exhibition of these science demos was phenomenal and went over really well. We hope you got a chance to check it out.



Students showing attendees the "Egg in the bottle" experiment.

Let's Explore

Auroras



Aurora Borealis shines above Bear Lake in Alaska.

Solar wind is a stream of charged particles that are ejected from the upper atmosphere of the sun. When solar wind collides with the earth's magnetosphere, auroras are produced. Auroras are natural colored light displays in the sky. Auroras are typically visible in the northern and southern polar regions on earth. The aurora, like many things in astronomy, was named after a Roman goddess, specifically the goddess of dawn.

5 Things You Did Not Know About...



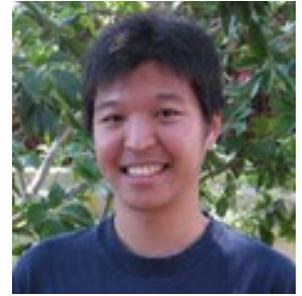
Dr. Leroy Chiao!

1. Received his Ph.D. in Chemical Engineering from UCSB.
2. He became an astronaut in July 1991.
3. His first job at age 16 was at a McDonald's in Walnut Creek, California.
4. He was assigned as Commander and NASA Science Officer of Expedition 10 and stationed in the International Space Station.
5. He was the first American to vote in a presidential election while in space.

Ribbit: What is the best part about being a scientist?

Fellow of the Month:

Mr. Kuo



Mr. Kuo's story begins with his birth in a small town in the deserts of California. While his earliest memories were from Georgia, he's called the California desert, home, for most of his life. The desert could not contain his interests in subjects like the environment, space, and the violin. However, his greatest passions were mathematics and computers. He turned these interests into a B.S. degree in electrical engineering from UC Berkeley, which introduced him to the world of German boardgames. This degree helped his acceptance to UCSB to research computer vision and image processing. UCSB, in turn, lead him to LEAPS, where he's now loving his second year, especially as a part of NanoLEAPS. In his off time now, Mr. Kuo tries to improve his photography skills. However, he looks forward to new activities he can try like sailing, flying a plane, and rafting.

 <p>Blowing stuff up!</p> <p>Ms. Gary</p>	 <p>Doing amazing and head-breaking research!</p> <p>Ms. Kim</p>
 <p>Endless supply of liquid Nitrogen!</p> <p>Mr. Karmis</p>	 <p>Waking up at 1 pm!</p> <p>Mr. Kuo</p>
 <p>You get to experiment and discover new things and people believe you... sometimes!</p> <p>Mr. Archer</p>	 <p>Going to field trips!</p> <p>Ms. Kline</p>

About LEAPS

Let's Explore Applied Physical Science (LEAPS) engages UCSB graduate and undergraduate Fellows as instructors and mentors for inquiry-based science in Grade 8 classrooms. By establishing collaboration between Fellows, science teachers, and UCSB scientists in school classrooms, the LEAPS project implements hands-on, minds-on learning experiences in physical science.

LEAPS partners with the Endowment for Youth Committee in Santa Barbara to coordinate after school clubs at junior high sites. The Fellows also help younger students to prepare for Family Science Nights that foster community interest to science education and opportunities.

Fellows

Reggie Archer
Lindsay Gary
Anthony Karmis
Lina Kim
Kimberly Kline
Thomas Kuo
Amir Rahimi

Teachers

Marilyn Garza
Julie Kluss

UCSB Participants

Beth Gwinn
Fiona Goodchild
Wendy Ibsen

Visit the LEAPS website: www.leaps.ucsb.edu
Send questions or comments to mgarza@mgarza.com



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