

# San Dieguito Academy's Biotechnology NEWSLETTER

March, 2009



Exciting things are happening with Biotechnology at San Dieguito Academy.

**Next Advisory Board Meeting:** Wednesday, May 6, 2009, 5:30 – 6:30 pm in the Library

We welcome your participation!

**Great News for the Biotechnology Pathway:** Thanks to the vision of our principal, Michael Grove, and district administrators' including Stephen Levy, Rick Schmitt, and Superintendent Ken Noah, our biotech facility is forging ahead. We have begun phase two of construction on the biotech lab, which includes major infrastructure repairs. Using funds that are ear-marked by the state for facility improvement only, the district will begin improving water and electrical supply. Once this repair is complete, we will then install our HVAC hoods.

**SDA Hosts World Renowned Scientist, Dr. John Reed:** Dr. Reed is the director of the Burnham Institute and studies programmed cell death (apoptosis) which is an essential part of why cancer cells grow wild. It has a huge part to play in cancer and stem cell research. We were honored to have him speak to our students on Tuesday, March 24th.



Jocelyn Broemmelsiek, Dr. John Reed, Leslie Gushwa

## Salk Institute High School Science Day

Eight *Introduction to Biotechnology* students joined more than 200 students and teachers from the San Diego region Saturday morning on Feb. 28 at the Salk Institute for the 19th annual High School Science Day. This wonderful opportunity consists of a half-day community outreach event designed to get youngsters interested in considering an exciting career in research. Students were presented with a presentation on the latest research at the Salk Institute and then were split into small group cohorts to visit a number of the research laboratories where they did hands on techniques that are used in the labs on current research. One activity had students identifying growth stages of chicken egg embryos being monitored in a developmental study.



## **NSTA 2009 National Conference on Science Education**

As part of the Biotechnology Program's ongoing commitment to promote excellence in science education and innovation in science teaching, Jocelyn Broemmelsiek attended the National Science Teachers Association's annual conference March 18-22 in New Orleans, Louisiana. There she attended many seminars, workshops, and presentations, ranging from informational and inspirational presentations of neuroscience research that focuses on how the brain functions in a learning environment and its implications for instructional strategies, through current working and successful programs aimed at helping students become more successful in Advanced Placement (AP) courses, to the latest biotechnology lab implementations. The 60,000 member strong NSTA conference offered over 1800 presentations, short courses, symposia, and exhibitor workshops in disciplines of biology, chemistry, physics, environmental science, general science and professional development.

**Introduction to Biotechnology:** We are so excited to see *Intro to Biotech* actually come to fruition. Two sections of this hands-on, academic class are off and running. Students are enjoying the many interactive labs which introduce them to professional lab skills as well as the workplace skills businesses require. For example, our biotech students were asked to examine a "crime scene" in the teacher lunch room. Dressed in white lab coats, protective goggles, and rubber gloves, students collected tell-tale evidence strewn around the room. Data was collected and analyzed, and the students thoroughly enjoyed this "taste of CSI".

**New Lab Assistant:** We are pleased to announce Ian Martin has accepted the position of lab assistant in biotechnology. Ian is a graduate of SDA, and anxious to join our program. He will be an immense asset to the Introduction to Biotechnology class.

**First HOSA Meeting:** The first meeting of our newest student organization, Health Occupations Student Association (HOSA) was held on February 19. Twelve students, three science teachers, and two administrators joined together to plan activities, elect officers, and learn about internship opportunities. Jeanne Jones and Deb Abrahamson also attended the CAL-HOSA conference in Sacramento, March 20-23. HOSA members will receive a conference update on April 23.

**Counselors Attend Biotech Workshop:** All three of San Dieguito Academy's counselors (Ann Nebolon, Vicki DeJesus and Candice Rolfsmeyer) along with CTE team member Deb Abrahamson, attended the Counselor Workshop at Life Technologies (formerly Invitrogen.) They toured the laboratories, distribution and supply, and even the loading docks, and were very impressed with the many employment opportunities in biotechnology. Thanks to our community partners, Life Technologies, students at SDA will be better informed on opportunities in this exciting field.



**Summer Internships:** SDA biotech students have the opportunity to apply for paid internships this summer through the Life Science Student Institute (LSSI), sponsored by BIOCUM. The San Diego Workforce Partnership is also sponsoring paid internships with Scripps Healthcare, Encinitas. Students may also choose to attend the Biotech Boot Camp, sponsored by the Biotech Club at CSUSM. Internship opportunities are also being planned in partnership with Hospice by the Sea for fall, 2009.

**Biotech Career Fair:** at Mira Costa College, April 24

**Demo Day at Mira Costa College:** for their Biotech program, May 1