



BIOSCOPE



BRINGING FUN AND INTERESTING FACTS ABOUT THE CI BIOLOGY PROGRAM TO YOU!

12TH EDITION - SPRING 2013

9TH ANNUAL POE SYMPOSIUM

This year the 9th Annual Poe Symposium was held on April 19, 2013. The title of the symposium was: Global Warming: The Earth Has Been Here Before. The campus and community at large heard from invited guest speakers: David Bottjer, Ph.D. introduced the audience to hothouse events in Earth's past; James C. Zachos, Ph.D. discussed the Paleocene-Eocene Thermal Maximum, due to methane released from the sea floor; Frank A. Corsetti, Ph.D. discussed the end-Triassic event, due to carbon dioxide from volcanic eruptions along the North America-Europe-Africa join; E. Clapham, Ph.D. discussed the end-Permian event, from carbon dioxide and methane released during eruptions in central Siberia and David L. Kidder, Ph.D. compared the present trend with past episodes of intense volcanic CO2 emission, in order to anticipate the trend over the next several centuries. Each speaker also highlighted the warming effects driven by the burning of fossil fuels on the ecosystem and the duration of the recovery.

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UNDERGRADUATE ALUMNI



Angela Wirsching graduated from CI in spring of 2008 with a BS in Biology and a Minor in Environmental Science and Resource Management. After graduating she began a natural resources focused internship with Naval Facilities Engineering Command, Southwest. After successfully completing the internship, she was placed as a Natural Resources Specialist at Marine Corps Base Camp Pendleton to provide environmental support for several military construction projects. At the Marine Corps base her role includes ensuring environmental compliance, preventing impacts to threatened and endangered species, and implementation of National Environmental Policy Act documents. In the near future she plans to complete her field hours to attain a survey permit for the threatened Western Snowy Plover, coastal California Gnatcatcher and the endangered California Least Tern.

STUDENT SPOTLIGHT



Congratulation to Nikki Wetton who was one of 16 students from the CSU's to earn the CSUPERB Presidents' Commission Scholar Award. Nikki along with her faculty mentor, Dr. Nitika Parmar, will spend this summer investigating how cervical, ovarian, breast and uterine cancer cell lines in women respond to anti-cancer agents using Phenotype MicroArray Panels and what protein pathways are impacted in them

GRADUATE ALUMNI



Benjamin Hill graduated from CI in 2007 with a M.S. degree in Biotechnology and Bioinformatics. He currently works as a consultant and project manager for a number of U.S. and European biopharmaceutical firms, including Genentech/Roche, GE Healthcare, Stemedica, Acceleron, and others. His work encompasses operations, drug development, manufacturing, QA and regulatory. He previously worked at Amgen for several years in laboratory and IT operations while studying at CI.

Benjamin had this to say about the M.S. in Biotechnology and Bioinformatics Program:

"As a consultant who supports a variety of practice areas within the industry, it is important to have a comprehensive understanding of the industry and how the various application areas fit within the overall business. The M.S. in Biotechnology and Bioinformatics provided us with practical exposure to a wide range of scientific and business areas in the context of a biotechnology organization. This has given me the tools I need to get up to speed quickly on new projects and make meaningful contributions to industry clients."

BIOLOGY HAS GONE SOCIAL...SOCIAL MEDIA THAT IS

The Biology Program understands that times have changed when it comes to the way media is used to communicate. Media is no longer a one-way street where you only read a newspaper or listen to a report on television. Media is now a two-way street and through the use of social media we all now have the ability to communicate. The Biology Program has teamed up with CI's Multimedia Coordinator and hired a new Social Media student assistant to keep up with these changing times and to deliver information about the program through the use of social media. Our Student Assistant will manage our select social spaces such as Facebook and Twitter feeds. To see what the assistant has created so far checkout out the CI Biology Facebook page at <https://www.facebook.com/CIbiology>

BIO 422 PLANT PHYSIOLOGY (4 Units)
 An introductory course in the physiology of plants, with emphasis on the processes of biochemistry, molecular, cellular and organismal biology.



Amorphophallus

Due to its odor, the hideous smell it produces attracts pollinating insects to help perpetuate the species.

Pollen

As allergy-causing pollen lands on the membranes of the nose, histamine is released causing excess mucus production.

Did You Know?

Elevated CO2 may result in the exhaustion of some soil nutrients due to faster growing roots.

This course counts as an upper division elective for majors

Fall 2013




BIO 490 ETHNOBOTANY (1 Unit)
 The study of how people of a particular culture and region make use of indigenous plants.



Skunk Cabbage
(*Symplocarpus Foetidus*)

A medicine made from this plant was used to treat hysteria and fits.

Bloodroot
(*Sanguinaria canadensis*)

The name comes from the deep red juice in the roots. Native Americans used the juice to decorate their bodies for ceremonial occasions.

Did You Know?

The gray coats worn by the Confederate Army during the Civil War were colored with dye made from butternuts. Confederate soldiers were called "butternuts" because of this.

This course counts as an upper division elective for majors

Fall 2013




Course Announcement **BIO 490: Special Topics**

Model Organisms

My name is Caenorhabditis, and I rock!

Why are they important? What have we learned?

This special course will explore **The Biology of Model Organisms:**

- E. coli and its phage
- Saccharomyces
- Arabidopsis
- C. elegans
- Drosophila
- Mus musculus

I'm agouti!

Invaluable preparation for grad and med school!

And! the newest model organism: Homo sapiens!

This stuff will blow your mind!

TUE & THU 12:00 - 1:15
3 Credits

Contact Charles Sackerson for more info!

This course counts as an upper division elective for majors

Fall 2013




LET'S CHECK IN ON SOME OF OUR FACULTY



Dr. Rachel Cartwright: This past spring semester Dr. Cartwright was provided with sabbatical leave to undertake her work in Hawaii on why maternal humpback whale females and their young calves are moving away from some regions of the shoreline to the deeper waters of the channel. Typically, mothers with young calves favor shallow coastline areas, as they offer the new moms some relief from overly affectionate male whales presumed to be more common in the deeper mid channel areas. Dr. Cartwright blogged about her research adventures in Hawaii for the New York Times, Scientist at Work: Notes from the Field. To check out the blog please visit: <http://scientistatwork.blogs.nytimes.com/author/rachel-cartwright>



Dr. Nitika Parmar: The student researchers in Dr. Parmar's lab have been quite busy. Laura Milbrandt received the CSUPERB Doris Howell Scholars Award (\$3500) to conduct research on women cancers for Spring, 2013. Shane Kennedy was the recipient of the Hank Lacayo Institute (HLI) Fellowship Award from CI (\$1500) for Spring, 2013. Nichole (Nikki) Wetton recently received the prestigious CSUPERB 2013 Presidents' Commission Scholar Award (\$8000) and she will be conducting research over the summer on anti-cancer agents. Finally, some of Dr. Parmar's research students presented their work at an international conference in April in Boston at the 2013 American Society for Biochemistry and Molecular Biology (ASBMB) meeting.



Dr. Tom Schmidhauser: For the first time this year, CI participated in the Corporate Games. The Corporate Games is a business-to-business team sports competition in which companies or organizations of similar size compete for awards over six weeks of competition. Our very own Dr. Schmidhauser joined TeamCI and participated in the 5K run coming in 3rd place. Congratulations!

First Annual

BIOLOGY

And **CHEMISTRY** *Field Trip*



Friday, April 5th, 2013

HUNTINGTON LIBRARY

And **BOTANICAL GARDENS**



Photo Credit: Stephen Osman

DID YOU KNOW?

Before humans, changes in climate resulted completely from natural causes in Earth's orbit, changes in solar activity, or volcanic eruptions. Now, most of the observed warming since the mid-20th century is due to human-cause greenhouse gas emissions. Humans have added billions of tons of heat-trapping greenhouse gases to the atmosphere since the Industrial Era began.

DEGREE SPOTLIGHT

The Biology Program has downsized the Bachelor's Degree to make it less confusing for students on what degree path to choose. Now students can either choose a B.A. in Biology or B.S. in Biology and using the graduation road maps pick which courses will best fit with their goals. For more information please visit the biology website: <http://biology.csuci.edu> and/or the university catalog website: <http://catalog.csuci.edu/>

We'd love to hear from you ! Let us know what you think of our e-Newsletter.
Please send your thoughts to: Catherine Hutchinson at catherine.hutchinson@csuci.edu