



Bonding Students to Chemistry & Biochemistry

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Event Announcements

By: Dagoberto B. Ramos

University Deadlines:

- 3/2: Deadline to submit FAFSA application
- 3/27: Deadline to drop or withdraw from all classes and receive pro-rated refund

Seminar Series:

- 3/6: Jeff Cohlberg, CSULB " Come Together Right Now: Watching Proteins Assemble"
- 3/13: Joshua Figueroa, UCSD. Title TBA.
- 3/20: Karin Crowhurst, CSU Northridge. Title TBA.
- 3/27: Floyd Romesberg, Scripps Institute. Title TBA.

CNSM Department:

- 3/1: CNSM 5th Annual Faculty Research Symposium
- 3/14 @ 6:30pm: Fellows Colloquium. Prashanth Jaikmur, Physics and Astronomy: Cosmic Yin-Yang: The Bright and Dark Sides of Our Universe (Chartroom)
- 3/23 9am-3pm: Math Day at the Beach (University Student Ballroom)

SAS Center:

- 3/5: Pre-Medical Preparation Workshop
 - 3/8: Pre-Pharmacy Preparation Workshop
 - 3/12: Pre-Dental Workshop
 - 3/15: Pre-Physician Assistant Workshop
 - 3/19 @ 2pm: Science Education Credential Information Session (SAS Center)
 - 3/27: Health Professions Personal Statement Workshop
 - 3/29: Pre-Dental, PA, Optometry and Veterinary Application Workshop
- All workshops take place @2pm, location TBD

SAACS:

- 3/5 @ 5pm: 2nd Meeting (HSCI Rm TBA). Elections will take place.
- 3/8 @ 11am: Field trip to Danville Materials in Anaheim.
- 3/23 @ 12pm: Field trip to Bootlegger's Brewery in Fullerton.
- 3/29 @ 1pm: Field trip to Ohana Brewery in Los Angeles

Career Development Center:

- 3/4 @ 1:30pm: Resume writing for STEM majors
- 3/5 @ 1pm: Interviewing skills for STEM majors
- 3/6 @ 12pm: Assessing and Building your transferrable skills
- 3/7 @ 2pm: Business Etiquette 101
- 3/11 @ 1pm: Interviewing Techniques
- 3/12 @ 2pm: Search and Secure an Internship
- 3/14 @ 12pm: Job Search Success
- 3/18 @ 12pm: I'm Graduating- Now What?
- 3/19 @ 2pm: Interviewing Techniques
- 3/20 @ 1pm: Social Media and Your Job Search: Facebook, Twitter, etc.
- 3/21 @ 12:30pm: Creating your Career Portfolio
- 3/22 @ 9pm: Internship Conference
- 3/25 @ 12pm: Job Search Success
- 3/26 @ 1pm: Resume Writing Techniques
- 3/27 @ 2pm: Correcting Your Job Search Mistakes
- 3/28 @ 1pm: Job Search Success for International Students.

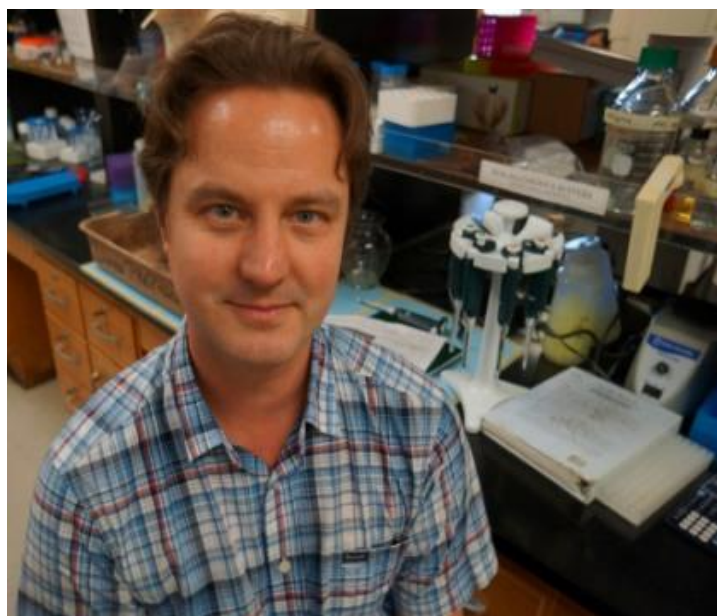


Faculty Spotlight: Dr. Eric Haas

By: Dagoberto Ramos; Editors: Jacqueline Dominguez, Brandon Graham

Dr. Haas' curiosity of the natural world was ignited at an early age. As a child, he would run around performing crude experiments and dissections on any that caught the attention of his inquisitive eye, or any organism that happened to become entrapped by meshed netting of his butterfly net. His curiosity transformed into an investigative questioning in high school, where his after school activities consisted of playing with extra lab materials and frog dissections in his biology instructors laboratory. Dr. Haas' enthusiasm with biology/microbiology began when he witnessed the death of an amoeba. When he asked his biology instructor, "How did it die?" his instructor simply answered, "I don't know. Why don't you figure it out?" This challenge marked the birth of the true researcher in Dr. Haas.

He has since refined his experimental techniques and focused research endeavors. He studied at UC Berkley earning his Ph. D, and then went on to do his postdoctoral research at UCSF. He left academia for a short while and went on to work at Bayer Pharmaceuticals, where he spent one and a half years doing corporate research. Dr. Haas eventually chose to return to academia and came to CSULB because he liked the integration of teaching and research. Currently his research focuses on two areas. The first deals with defining the biosynthetic pathway for prostaglandin synthesis.



While the other area investigates the pathogenesis of the baculovirus, which is an insect specific pathogen that liquefies caterpillars! Keep an eye out for the time lapsed video of this liquefaction process on the Biology's department website.

Dr. Haas is will be going on sabbatical leave for the Fall 2013 semester. Not to worry however as he will be returning to his lab in late Fall 2013 or early Spring 2014. Enthusiasm and a love for research are requirements to join Dr. Haas' research lab. Dr. Haas individualizes and tailors to his student research projects according to their needs and career goals. He measures his own success, vicariously, through the accomplishments of his students; and his success is constantly increasing. For more information on his research lab, contact Dr. Haas at Eric.Haas-Stapleton@CSULB.edu.



Dr Haas currently teaches: Introduction to Molecular Cell Biology, BIO 212, Molecular Cell Biology, BIO 340, Virology, BIO 416, and BIO 440 L, Molecular Cell Biology Lab. As an instructor, Dr. Haas does not want students to simply receive biology, but question the ideas being presented. He wants students to make new discoveries and help to advance our knowledge of the natural world.

Fun Facts:

- If you could be any organism what would you be?
A turkey vulture
- If you were stuck on a deserted island, what kind of food would you eat for the rest of your life, what reading material would you take, and what one band would you listen to?
South Indian food, subscription to nature, Erasure
- Hobbies: **cycling, traveling**
- **Saw two live leopards and giant river otters when he visited the deep jungles of Peru.**
- **Next big trip will be to Zambia, Africa.**

Selected Publications:

1. Moreno-Habel DA, Biglang-Awa IM, Dulce A, Luu DD, Garcia P, Weers PM, Haas-Stapleton EJ (2012). Inactivation of the budded virus *Autographa californica* M nucleopolyhedrovirus by gloverin. *Journal of Invertebrate Pathology*, Feb 28.
2. Chikhalya A, Luu DD, Carrera M, De La Cruz A, Torres M, Martinez EN, Chen T, Stephens KD, Haas-Stapleton EJ (2009). Pathogenesis of *Autographa californica* M nucleopolyhedrovirus in fifth instar *Anticarsia gemmatilis* larvae. *Journal of General Virology*, 90 (2009), 2023-2032.
3. Lucas JL, Mirshahpanah P, Haas-Stapleton EJ, Asadullah K, Zollner TM, Numerof RP (2009). Induction of Foxp3+ Regulatory T Cells with Histone Deacetylase Inhibitors. *Cellular Immunology*; 257(1-2):97-104.
4. Haas-Stapleton EJ, Lu Y, Hong S, Arita M, Favoreto S, Nigam S, Charles N. Serhan CN, and Agabian N (2007). *Candida albicans* modulates host defense by biosynthesizing the pro-resolving mediator Resolvin E1. *PLoS ONE*; 2(12): e1316.
5. Kohler GA, Brenot A, Haas-Stapleton EJ, Agabian N, Nigam, S (2006). Phospholipase A2 and phospholipase B activities in fungi. *Biochim Biophys Acta*. 1761(11):1391-9.
6. Haas-Stapleton EJ, Washburn JO and Volkman LE (2005). *Spodoptera frugiperda* resistance to oral infection by *Autographa californica* multiple nucleopolyhedrovirus linked to aberrant occlusion-derived virus binding in the midgut. *Journal of General Virology* 86: 1349-1355
7. Haas-Stapleton EJ, Washburn JO, Volkman LE (2004). P74 mediates specific binding of *Autographa californica* M nucleopolyhedrovirus occlusion-derived virus to primary cellular targets in the midgut epithelia of *Heliothis virescens* larvae. *Journal of Virology* 78(13):6786-91.
8. Haas-Stapleton EJ, Washburn JO, Volkman LE (2003). Pathogenesis of *Autographa californica* nucleopolyhedrovirus in fifth instar *Spodoptera frugiperda* larvae. *Journal of General Virology* 84: 2033-2040.
9. Washburn JO, Haas-Stapleton EJ, Tan FF, Beckage NE, Volkman LE (2000). Co-infection of *Manduca sexta* larvae with polydnavirus from *Cotesia congregata* increases susceptibility to fatal infection by *Autographa californica* M Nucleopolyhedrovirus. *Journal of Insect Physiology*. 46(2):179-190.
10. Washburn JO, Trudeau D, Haas-Stapleton EJ, Volkman LE (2000). *In vitro* hemocyte and tissue assay for assessing baculovirus interactions with their host insects. *In Vitro Cellular and Developmental Biology*. 36(2): 15



Scholarship Opportunities

By: Brandon Graham

Name: Mickey Leland Environmental Internship Program **Prize:** Full-time Summer Internship

Description: The program provides summer internship opportunities for college students to learn about environmental issues and gain professional experience. These paid, full-time summer internships are held either at the TCEQ or in the private sector. The purpose of the program is to expose undergraduate and graduate students to environmental issues and give them the opportunity to gain professional experience. Students must have completed 60 semester units and maintain a 2.0 GPA. Applications are found on the website and must be submitted by email to jobs@tceq.texas.gov.

Deadline: March 15, 2013

Website: <http://www.tceq.texas.gov/adminservices/employ/mickeyleland/index.html>

Name: Desk and Derrick Educational Trust Scholarships **Prize:** \$1,000-\$1,500 Scholarship

Description: This is a need based scholarship for students who are planning on a career in career in the petroleum, energy or allied industry, or research and development of alternative fuels such as coal, electric, solar, wind hydroelectric, nuclear, and ethanol. Applicants must be sophomore and maintain a minimum GPA of 3.2 or above. The application can be found on the website and must be typed and complete.

Deadline: April 1, 2013

Website: <http://www.theeducationaltrust.org/scholarships>

Name: Congressional Hispanic Caucus Institute Scholarship Program **Prize:** \$2,500 Scholarship

Description: CHCI's scholarship opportunities are afforded to Latino students in the United States who have a history of performing public service-oriented activities in their communities and who demonstrate a desire to continue their civic engagement in the future. There is no GPA or academic major requirement. Students with excellent leadership potential are encouraged to apply. Applicants must be full-time students who demonstrate financial need; consistent, active participation in public and/or community service activities; and strong writing skills.

Deadline: April 16, 2013

Website: <http://www.chci.org/scholarships/>

Don't forget to Apply for the CNSM scholarships due March 15, 2013 by 4:00pm.

Career Explorer

By: Jacqueline Dominguez

Ever wonder what you can do with your professional science degree?

Medical Scientist

Tasks:

- Direct studies to investigate human or animal disease, preventive methods, and treatments for disease.
- Perform research to develop preventative methods and treatment for disease by developing methodologies following safety procedures for medical application, analyzing data, publishing findings, and presenting work to a scientific audience or general public.

Tools used:

- Atomic absorption AA spectrophotometers; graphite furnace atomic absorption spectrophotometer; recording spectrophotometers; ultraviolet-visible spectrophotometers.
- Automated centrifuges; high-speed centrifuges; tabletop centrifuges.
- Gas and liquid chromatography.
- Scientific Software: BioArray software environment BASE software; Medical Scientists Hybrid AI; Waters MassLynx; Waters Q-DIS/QM LIMS

Education Level:

- Science related master's or doctoral degree

For more information about this career or others in this field log onto:

www.onetonline.org



The Fume Hood

By: Jacqueline Dominguez

"A place where your noxious thoughts can be carefully filtered and fed back to the public!"

I am a chemical symbol for an element.
I am an element that was discovered in 1824.
I am a Spanish word without the accent.
Reverse me so I become a form of a common verb.

What symbol am I?

*Answer the riddle on our facebook page!
Two winners will be chosen and given a special prize.*

Let us know on our [Facebook](#) page.

Chemistry for Today's World

By: Cindy Pham

"Your chemical connection to today's world"

A new family of inhibitors has been found to stop the spreading of flu. This article along with a short video clip explains how the inhibitor can work against flu. Click on the link below to view the colorful animation!

<http://cen.acs.org/articles/91/i8/Neuraminidase-Inhibitors-Work-Tamiflu-Doesnt.html>

Dr. Ernest Moynz, a physicist from MIT, is the new director of Energy Initiative. Hopefully with his knowledge of physics, he can persuade congress to finally head towards cleaner energy and reduced green house gases. Read more about Dr. Moynz and his role for cleaner energy!

<http://www.nature.com/news/physicist-tipped-for-us-energy-post-1.12500>



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Chem-ertainment

By: Jacqueline Dominguez

B J V F X K Z E X K C B R A J
Q J J T S E N P Q I T I E P I
H C E A E T L K Z Z K V A W I
Z W L S H V H P R J A J C L D
C F U A I F Z Y M B S V T N C
M H L F W A E Y E A R M I J I
D P E Q P V K W C C S T O Q M
Y W Z M E J R O A E F C N B G
U K O O I A B E U X U Y U G E
A F H R I S T P U G A U K Y V
B R W D K K T E X Z H G Q G Y
A Q K G R H M R B L P G H R N
R E K A E B G P Y F X B R E Q
E Q U I L I B R I U M Y K N P
H E A T E M H S Z D N W I E S

BEAKER, CHEMISTRY, ENERGY, ENTHALPY,
EQUILIBRIUM, FLASK, HEAT
REACTION, SAMPLE, WORK

This Month in ChemHistory

By: Brandon Graham

"The only reason for time is so that everything doesn't happen at once." Albert Einstein

March 14- The observation of the first atom of element 108 occurred at the GSI Laboratory, in Darmstadt, Germany, in 1984.

March 23- William Crookes identified a new gas which was isolated from air (by W. Ramsay) as helium (He, 2) in 1895.

March 28- Glenn T. Seaborg, et al. demonstrated that plutonium 239 undergoes fission by slow neutrons in 1941.

March 30- Crawford W. Long was first to use ether as an anesthetic on a patient in 1842.