



Bonding Students to Chemistry & Biochemistry

Event Announcements

CSULB and CNSM Important Exams

Writing Proficiency Exam (WPE)

-Exam Date: 11/19/11, Deadline to register 10/28/11

-Note: Registrations must be received by the above deadlines by 5:00pm

-Students applying for extended time must do so one week before the deadlines listed above.

Chemistry Placement Test (CPT)

-Exam Day: November 4, 2011 at 9:00am

-Deadline to register October 24, 2011

*For more info please contact the Dept. of Chemistry/Biochemistry

October Seminar Series

“Protein Delivery to Cells Using Degradable Polymer Nanocapsules”

Presented by Yi Tang of UCLA

When: Wed, October 5th from 4-5pm @ HSCI-103

(Hosted by Dr. Schramm - please contact schramm@csulb.edu for more info or if you would like to join the speakers for a free lunch)

"Watching Quantum Mechanics in Action: Why Horses Can't Tunnel and When Molecules Behave Like Electrons in an Atom"

Presented by Ludwig Bartels of UC Riverside

When: Wed, October 12th from 4-5pm

(Hosted by: Dr. Brazier – please contact cbrazier@csulb.edu for more info or if you would like to join the speakers for a free lunch)

"Collagen Mimetic Peptides in Drug Delivery"

Presented by Kasha Slowinski

When: Wed, October 19th from 4-5pm

(Hosted by Dr. Slowinski – please contact kslowins@csulb.edu for more info or if you would like to join the speakers for a free lunch)

“Title TBA”

Presented by Steve Buratto of UC Santa Barbara

When: Wed, October 26th from 4-5pm

(Hosted by Derakhshan – please contact sderakhs@csulb.edu for more info or if you would like to join the speakers for a free lunch)

Association of Pre-Pharmacy (APP) Announcements

October 7th, 2PM: Long Beach Memorial Medical Center Field Trip *Contact Mariko ASAP to reserve a spot!

October 18th & 19th 11AM-5PM: APP Blood Drive at USU Ballroom

October 27th 6PM: 3rd General Meeting: Guest Speakers: USC Special Assistant Dean and current students at LA1-167

For more info please contact President, Mariko Yokokura at marikoc yokokura@gmail.com.

SAACS Announcements

Meeting: October 4th at 5 pm on the MLSC patio

Halloween Party: TBA!

Want to come visit the **BP Carson Refinery**? Come sign up at our next meeting. (Location & Time TBA.)

Position Opening: SAACS representative for CNSM. For more info come to our meeting or contact Carolyn Kusaba.

For more information please find SAACS on beachboard or President, Carolyn Kusaba at carolynandallen@gmail.com.

Career Development Center Announcements

[All workshops are located at BH-250 unless otherwise noted]

Oct 3rd: **Interviewing** Techniques from 2-3pm

Oct 4th: Prepare for the **Job Fair** from 1:30-2:30pm

Oct 5th: **Resume** Writing Techniques from 12:00-1:00pm

Oct 6th: **Applying to Graduate** School from 3-4pm

Oct 10th: Search & Secure an **Internship** from 1-2pm

Oct 11th: **Resume** Clinic from 1-2pm

Oct 12th: Prepare for the Job Fair from 12-1pm

Oct 13th: Fall **Job Fair** from 12-4pm; Location: USU

Oct 17th: Letters of **Recommendation** from 2-3pm

Oct 18th: Employer presentation from 4:30-5:30pm [**Raytheon Co.**]

Oct 19th: Employer presentation from 11am-12pm [**Peace Corps**]

Oct 19th: **Business Etiquette** from 1-2pm

Oct 19th: Employer presentation from 4-5pm [Carnegie Endowment for International Peace]

Oct 20th: **Government Jobs** 101 (Panel) from 12:30-2pm

Oct 24th: Search & Secure an Internship from 3-4pm

Oct 24th: Employer presentation from 4:30-5:30pm [Nordstrom]

Oct 25th: **Networking** Beyond Business Cards from 1-2pm

Oct 25th: AmeriCorps **Volunteer** Program from 3-4pm

Oct 26th: Employer presentation from 3-4pm [The Washington Center for Internships & Academic Seminars]

Congratulations to the following labs:

The Narayanaswami Lab for the "Pyrene: A probe to Study Protein and Conformation and Conformational Changes" publication in a Special issues of "Fluorophores - The Fluorescent Toolbox in Biological and Biomedical Research."

The Schramm Lab for the "pH Influenced Molecular Switching with Micelle Bound Cavitands," article in an issue of *Chemical Communications* and being awarded "The National Cancer Institute" Health SCORE grant.

Dr. Bu's Lab for being chosen as "Hot Paper" in an upcoming issue of *Angewandte Chemie* for their paper on "Multi-Component Self-Assembly of A Nested Co₂₄/Co₄₈ Metal Organic Polyhedral Framework."

Acey Lab member **Joselyn Del Cid** for being chosen to present her research to Members of Congress in Washington D.C.

Faculty Spotlight: Dr. Judy Brusslan

Written by: Karen Yu; Edited by Lauren Olson & Kimmy Phan

Dr. Judy Brusslan's love for biology began as a childhood hobby. As a little girl running around the woods of Illinois, she spent all her free time collecting insects and pinning them down once they died. She was the only girl in the neighborhood whose room was filled with displays of insects in jars and cigar boxes. Her mother's willingness to support her fascination helped pave the way for the young biologist in Judy Brusslan.

Before entering college, she debated between becoming an artist or a scientist. Though she loved photography, encouragement from an undergrad freshman science teacher and a mentor in grad school influenced her to pursue science. Dr. Brusslan received her Bachelor's degree from Middlebury College in Vermont. Afterwards, she moved to New York City to work as a technician at New York University. She then went on to earn her PhD in Genetics from the University of Chicago. Her PhD research focused on molecular genetic engineering of herbicide resistance for a photosynthetic protein in cyanobacteria. Her post doctorate work, which brought her to California, looked at phytochrome in *Arabidopsis thaliana*, using light as a developmental cue to communicate changes in gene expression. While plants have always been the theme of her research, her interest did not surface until late in her graduate studies.

Today, she is a full time professor at Cal State Long Beach teaching Intro Evolution/Diversity (BIOL 211), General Genetics (BIOL 370), Molecular Biology Laboratory (BIOL 440L), Molecular Plant Physiology (BIOL 447/547), and a graduate course in Advanced Genetics (BIOL 570). Molecular Plant Physiology a class offered only in the spring has "no exams, just papers and presentations - no memorization no anxiety, purely learning and purely improving skills you need in the professional world." For this reason, Molecular Plant Physiology is her favorite course to teach.

When asked why she became a teacher, Dr. Brusslan stated that she "fell into this job". While on a pure research track, becoming a college professor never crossed her mind. She initially accepted the job offer because her husband had many professional connections in California. However, looking back it made perfect sense - she always enjoyed working with students in lab and even ran into some trouble for being a TA too many semesters while in graduate school. For Dr. Brusslan, the most rewarding aspect of her job is seeing the progress



*When all is said and done how do you want to be remembered?
-“On my bicycle passing people up a big mountain.”*

students make throughout the semester. Additionally, a side of teaching she did not expect to love was preparing lectures. Teaching continues to be an exciting challenge for her and is constantly finding ways to improve. Her efforts as an educator have not come unnoticed and she most recently received the 2009 Faculty Award for Excellence from CNSM.

Dr. Brusslan is currently involved in numerous research projects but is most excited about two in particular. The first project involves plant epigenetics evaluating histone methylations over an entire genome when plant leaves senesce. Her lab observes how patterns of methylations change for certain genes. Since leaves transfer nutrients to grains, it has important agricultural implications. Her second project examines changes in plant gene expression in bright light. What students can gain from working in her lab is proficiency with molecular biology skills. Many of her former research students are now in PhD programs, teaching, working in industry, or in health professions. To join her lab, contact Dr. Brusslan towards the beginning of spring semester. In addition to teaching and research, Dr. Brusslan runs a program in spring called, "Third Grade Hands on Science" (SCED 496). Every Friday for one hour, students teach science to a

third grade class. There are five prepared labs such as acid base and DNA extraction and on the final day students design their own experiment. The inspiration for this program came from her own experience teaching in her daughter's third grade class. She said there's, "Nothing more fun than walking out of the schoolyard having thirty kids run up to you and hug you saying, 'what are we doing today?'" What started as a New Years resolution is now a successful program that allows students to gain an appreciation for teaching and third graders an appreciation for science. If interested in this program, contact her at Bruss@csulb.edu.

Working three full time jobs as a researcher, teacher, and mom is a truly inspirational feat. While she describes the theme of her existence as constantly running on empty, she says it's totally worth it and, "it's just been a blast". From the days of roaming around the forest to where she is today, she has always loved what she does and has stayed true to her own advice, "Do what you enjoy!"

Brusslan Fun-facts:

- Favorite Book: The Rider by Tim Krabbé
- Favorite Movie: Romantic Comedies
- Favorite Music: Bright Eyes, Radiohead, and Taylor Swift
- Hobbies: Road Racing. She recently completed the Mt. Whitney Stage Race in the Sierras – A 2 day race, biking 29 miles and climbing 9000 feet each day. Also, baking bread.
- Married with 2 girls ages 16 and 13
- Very first job as a cashier at Gsell's Drug Store in Highland Park, Illinois
- Comes from a family of lawyers
- Adopted a German short hair pointer pitbull mix which showed up on her doorstep
- She struggled with genetics as an undergrad receiving a B-. Her pre-med lab partner had no interest in working with a "nerdy freshman girl" and would come in early to take care of everything
- Plants were not part of her undergraduate curriculum so she had to read the plant chapter right before the GRE just so she wouldn't fail
- Loved working as a technician at NYU because she got to go out every night!

Company Spotlight: Baxter

By: Lauren Olson

Dr. Donald Baxter M.D. and Dr. Ralph Falk M.D. founded Baxter in 1931 with a tenacious desire to help save and sustain the lives of patients who suffer from renal disease, blood disorders, trauma, and other medical conditions. Their main focuses are on products for renal disease, blood (including recombinant proteins), and intravenous therapies. If you are considering working for Baxter in the future they are seeking eager employees with a marvelous work ethic, pleasant attitudes, and the ability to listen. They typically hire people with an exceptional understanding of science and engineering,

and claim the more education one has the better. Educational Assistance Programs (EAP) are offered for high rated employees to obtain a bachelor's degree, and occasionally an MBA. If you are interested in their EAP program, please inquire during the interview process. Baxter does offer internships in late spring, and encourages CSULB students to reach out to their Human Resources departments in their Orange County, Los Angeles, Thousand Oaks, and Westlake locations. Visit www.Baxter.com for more information and career opportunities.

The Fume Hood

By: Lauren Olson

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

Results from our last issue indicate many of you are responsible, and have been using your molecular model kits for studying stereochemistry. However, just as many of you have had other, more bizarre uses for these kits. Either way we appreciate your responses and creativity!

This month's question:

What has been your most memorable experience in lab? We want to hear about your funny, scary, sad, embarrassing, or educational experiences. Whether you cried into your lab goggles or developed a vast knowledge of analytical chemistry, we want to hear it.

Let us know at thebeakercsulb@gmail.com or post your responses on Facebook @ [facebook.com/thebeakercsulb](https://www.facebook.com/thebeakercsulb)!

Chemertainment

By: Monica Royer

"Scientific & Sci-fi recommendations from a chemistry nerd"

This Month's Book Suggestion:

"A Brief History of Time" by Stephen Hawking

For recreational astronomers or physicists that want all the joys of interesting theorems and light calculus without the exams, this famous book by the renowned physicist/cosmologist aims to explain the great mysteries of the universe in a straightforward manner.

This Month's Movie Suggestion:

"Moon"

This haunting sci-fi thriller will keep you on the edge of your seat as the 15 year old secret of lunar Helium-3 miner Sam Rockwell is revealed by..."Sam Rockwell".

Chemistry for Today's World

By: Cindy C. Pham

"Your chemical connection to today's world"

In April the *New York Times* listed Biomedical Scientist as having a 40% job growth bringing them up to the 6th position on "Top 10: Where the jobs are".

Trailing not too far behind are Biochemist and Biophysicist, who made the list as well at 9th place with a 36% job growth. These statistics are based on "The Bureau of Labor Statistics' list of growing occupations" at

http://www.bls.gov/emp/ep_table_103.htm. For more information on salary and why this is the field to be in, click on the link below to view the full article!

Article:

http://www.nytimes.com/2011/04/17/education/edlife/edl-17conted-t.html?_r=2&ref=education

Next Month's Issue Features...

- Our very own Dr. Vas Narayanswami, the first biochemist to graduate from India Institute of Technology!
- Kelley Scientific, a leader in global scientific recruitment!

