



*Bonding Students to Chemistry & Biochemistry*

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# Event Announcements

By: Kimmy Phan

## University Deadlines:

- 5/11: Last day of instruction
  - 5/11: Deadline to drop with college dean's signature
  - 5/14 – 5/19: Final Examinations
- [http://www.csulb.edu/depts/enrollment/registration/final\\_exam/spring\\_chart.html](http://www.csulb.edu/depts/enrollment/registration/final_exam/spring_chart.html)
- 5/25: Last day of semester
  - 5/25: Deadline to file Request for Medical Withdrawal
  - 5/25: Deadline to file Request for Educational Leave with \$10 missed deadline fee

### - Session Dates

- May Intersession: May 21 – June 8, 2012
- Full Summer Session (SSD, 1, RNS): May 29 – 8/17
  - Session I (S1S, 6W1): 5/29 – 6/6
  - Session III (S3S, 6W3): 7/9 – 8/17

<http://www.csulb.edu/depts/enrollment/summer/index.html>

## CNSM Department:

- 5/4 – 5/5: 26<sup>th</sup> Annual CSU Statewide Student Research Competition at CSULB
- 5/10: Annual CSULB Alumni Dinner
  - Location: Hyatt Regency, Long Beach
- Commencement Ceremony for College of Natural Sciences & Mathematics (Biological Sciences, Chemistry & Biochemistry, Environmental Science & Policy, Geological Sciences, Mathematics & Statistics, Physics & Astronomy, Science Education)
  - 5/25 @ 1:00PM

\*All ceremonies are held outside in Central Quad

## SAACS:

- End of semester bonfire! Bring food or a game.
  - Date: 5/18, all day!
  - Location: Bolsa Chica Beach near Jack in the Box (look for the blue SAACS t-shirts)
- Coffee & Donut Hour
  - Every Friday from 9:30 – 10:30AM at the MLSC patio

## Seminar Series:

### **“Complex Natural Products as a Driving Force for Discovery in Organic Chemistry”**

Presented by Brian Stoltz from Caltech

When: 5/2 from 4 – 5PM

Where: HSCI-103

(Hosted by Dr. Buonora: [paul.buonora@csulb.edu](mailto:paul.buonora@csulb.edu))

\*Please contact the hosting professors for more info or if you would like to join the speakers for a free lunch

## Career Development Center:

[All events are held in BH-250 unless otherwise noted]

- 5/1: I'm Graduating - Now What? 2 – 3PM
- 5/2: Resume Writing Techniques, 12 – 1PM
- 5/3: Interviewing Techniques, 1 – 2PM
- 5/9: Employer Presentation: Verizon Wireless, 3:30 – 4:30PM



# Faculty Spotlight: Elizabeth Eldon

By: Kimmy Phan; Editors: Brandon Graham, Jacky Dominguez, Cindy Pham

Dr. Eldon was initially inspired on a class field trip in elementary school through marine biology and ever since, she has always had a fascination for biology. Dr. Eldon attended Connecticut College for her undergraduate degree. From there she went on to get her doctoral degree at Indiana University with a Ph.D. in Molecular, Cellular and Developmental Biology. For her Ph.D. she researched an ectoderm specific gene in the California purple sea urchin and how its expression was regulated during embryonic development. Her passion to live her life as not only a researcher but also as a professor pushed her to continue her education at Baylor College of Medicine in Houston, Texas. Here, she completed her Post Doc in the Department of Cell Biology, (and later) in the Department for Molecular and Human Genetics.

Dr. Eldon expressed that during her high school and college years, there were not many women in her classes who wanted to be research scientists due to balancing the time consuming commitments of running a household, while also devoting time to research. As a wife and mother of two sons, having time for a family was definitely a challenge. She laughs when recalling bringing her son, in his baby seat, to her lab rocking him to sleep while looking at her research data. Fortunately there are now more female scientists, especially at CSULB, which is one of the reasons why she loved CSULB's Biology department in the first place. The department is very welcoming and friendly. The complicated tasks of juggling motherhood and a career in science may seem difficult but she claims that if you truly want something in life, you make it work.

She is currently researching fruit flies, development and oogenesis (making of eggs in



*Drosophila melanogaster's* embryonic the ovary). Her research group is studying role of a Toll-like receptor in organ formation. The current goal is to understand how the receptor functions in making salivary glands in the embryo and what other genes it interacts with to form a functional network. By far the biggest accomplishment in this research has been when one of her graduate students demonstrated that the gene they have all been studying contributes to the ability of flies to fight bacterial infection. *Drosophila* do not make antibodies, but have an evolutionarily conserved innate immune response that is able to fight bacterial and fungal infections. She has been published in a variety of Developmental Biology journals and most recently in Developmental Dynamics. Her current goals for lab are to further study cell movement and migration in the embryo, to understand the processes involved at the cellular level. Understanding the basic biology of organ formation may lead to improvements in human health, such as preventing or treating birth defects or to advances in regenerative medicine.



She is not looking for students to join her lab at the moment; however students graduate every semester so there may be openings for the fall semester. The requirements to join her lab are to have an interest in developmental biology and research, and a minimum commitment of 10 hours a week to work in the lab. If interested, speak to her at the end of the semester before they want to begin research. If research is not for you, make sure you take her other courses offered at CSULB. She is currently teaching BIOL 211 (Introduction to Evolution and Diversity), BIOL 433 (Developmental Biology), BIOL 432 (Stem Cell Biology), BIOL 440L (Molecular Cell Biology Laboratory). When asked for tips to excel in her class she said, "It's all about attitude and finding interest in the material, as well as attending office hours." So, do not hesitate to ask her questions and visit her in her office at MLSC-204.

Living her life as a biology professor, avid researcher, and mom was not easy. She has shown through her passion that if you truly love what you do and do what you love, anyone can accomplish and live out their dreams, even if there are some detours along the way. To put it simply, "Go for it. If you love it, you'll find a way."

### Selected Publications:

1. Kleve, C.D., D.A. Siler, S.K. Syed and E.D. Eldon. 2006. Expression of 18-wheeler in the follicle cell epithelium affects cell migration and egg morphology in *Drosophila*. *Developmental Dynamics* 120: 1953-1961.
2. Dushay, M.S., J.R. Roethele, J.M. Chaverri, D.E. Dulek, S.K. Syed, T. Kitami, and E.D. Eldon. 2000. Two attacin antibacterial genes from *Drosophila melanogaster*. *Gene* 246: 49-57.
3. Dushay, M.S. and E.D. Eldon. 1998. Insights from Model Systems: *Drosophila* Immune Responses as Models for Human Immunity. *Am J. Hum. Genet.* 62: 10-14. (Invited review.)
4. Williams, M.J., A. Rodriguez, D.A. Kimbrell and E.D. Eldon. 1997. The 18-wheeler mutation reveals complex antibacterial gene regulation in *Drosophila* host defense. *EMBO J* 16: 6120-6130.

### Fun Facts:

- ❖ Her dad was in the military so she moved around often but always called California home.
- ❖ She used to row with the Long Beach Rowing Association.
- ❖ Her favorite series of short essays is by Barbara Kingsolver called *Hide Tide* in Tucson.
- ❖ She enjoys watching foreign films with her husband; most recently watching the Swedish film versions of the Stieg Larsson Millennium novels.
- ❖ Anonymous 4, is her favorite female *a capella* classical group.
- ❖ She meant to only have two cats, but ended up with four.
- ❖ If she had a superpower, it would be the ability to change into various animals so that she can fly to see the countryside, or swim long distances to explore the wonders of the oceans.
- ❖ If she can combine any two organisms she would call it "humanoid," to combine a human with something with a tail. Example: A fluffy tail like a squirrel to keep warm or anything with wings!

# 2011-2012 Chemistry Awards

**Freshman Chemistry Award:** Kayla Bollinger • **Spyros Pathos IV:** Stephanie Sodergren • **Organic Chemistry Award:** Lauren Olson • **ACS Polymer Chemistry Award:** Joshua Feng • **Merck Award in Organic Chemistry:** Mariko Yokokura • **Analytical Chemistry:** Jeanice Rodriguez • **Inorganic Chemistry:** Kelley Vineyard • **John H. Stern Award in Physical Chemistry:** Trevor Reutershan • **Biochemistry Award:** Jeanice Rodriguez • **Horalek Award:** Carolyn Kusaba • **Hypercube Award:** Amethyst Radcliff • **American Institute of Chemists (AIC) Baccalaureate Award Chemistry:** Tae Ji • **American Institute of Chemists (AIC) Baccalaureate Award Biochemistry:** Jocelyn del Cid • **Scoggins Award:** Mariko Yokokura • **Departmental Honors for BS candidates:** Mariko Yokokura, Jeanice Rodriguez & Jocelyn del Cid • **American Institute of Chemists (AIC) Graduate Award Chemistry:** Straun Phillips • **Rhodes Award:** Mariko Yokokura **American Institute of Chemists (AIC) Graduate Award Biochemistry:** Gwen Jordaan • **Outstanding Teaching Associate Award:** Andrew Parker • **Perlgut Award:** Lauren Hartman • **Departmental Honors for MS candidates:** Gwen Jordaan, Straun Philips & Andrew Parker • **Outstanding MS Thesis Award:** Arti B. Patel • **Outstanding Graduate in CNSM Award:** Jocelyn del Cid • **Henderson Award:** Carolyn Kusaba • **Kenneth L. Marsi Scholarship:** Tuyen Tran • **Michael Monahan Memorial Summer Research Scholarship:** Tom Cullen • **NHK Laboratories Inc., Award:** Cindy Pham • **Wynston Award in Biochemistry:** Malinda Tan • **McAbee-Overstreet Graduate Research Scholarship:** Roy Hernandez • **Sarno Graduate Research Scholarship:** Sea Kim

## Scholarship Opportunities

*By: Brandon Graham*

### **Navy Wives Club of America**

**Prize: Variable**

**Description:** This group offers several different scholarships all of which require some form of association with the Navy Wives Club of America. The affiliation may be direct membership or of being the spouse or dependent of a member. Most of the rewards are financial need and require good standing in the university.

**Deadline:** Deadlines vary so it is highly recommended that you visit the website to check dates.

**Website:** <http://www.navywivesclubsofamerica.org/scholarships/>

### **Collegiate Inventors Competition**

**Prize: 1<sup>st</sup> \$12,500, 2<sup>nd</sup> \$10,000, 3<sup>rd</sup> \$5000**

**Description:** The application consists of: general student information; an essay including a brief description or abstract of the invention; information on the faculty advisor; a letter of recommendation from the faculty advisor; a literature/patent search and summary; and any relevant supporting or supplemental materials you wish to submit (examples: charts, graphs, CDs or DVDs, slides, samples, etc.). Students chosen as finalists must attend the final judging session and awards presentation in Washington D.C. in November to be eligible for awards (airfare and hotel will be paid for by the Competition.) Additionally, finalists may be asked to officially confirm their status as a student.

**Deadline:** 6/15/12

**Website:** <http://www.invent.org/collegiate/overview.html>

### **Universities Space Research Association Scholarship Program**

**Prize: \$400 – \$1000**

**Description:** This program offers four \$1000 scholarships and one \$400 all based on the same application. The purpose of the USRA Scholarship Program is to provide college scholarships to students who have shown a career interest in the physical sciences or engineering with an emphasis on space research or space science education. Applicants must be a junior level student with a 3.5 GPA. Applicants must also provide 2 letters of recommendation, a 500-word essay, and official college transcripts.

**Deadline:** 8/1/12

**Website:** [http://www.usra.edu/about/outreach/scholarship/USRA\\_Scholarship\\_Application\\_Package.pdf](http://www.usra.edu/about/outreach/scholarship/USRA_Scholarship_Application_Package.pdf)





## The Fume Hood

By: Lauren Olson

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

Last month we polled you on your favorite ligands, and you came up with the following:

- **Iodide**
- **Ethylenediaminetetraacetate**
- **Dimethyl sulfoxide**

We appreciate your input, and good luck with finals everyone!

## Chemistry for Today's World

By: Cindy Pham

*"Your chemical connection to today's world"*

Scientists have found that decreasing the enzyme in cells' guanine oxidation, E. Coli becomes more sensitive to antibiotics and vice versa. This study will help with the treatment of bacterial infection.

<http://cen.acs.org/articles/90/i17/Common-Antibiotic-Mechanism-Shown.html>

For all those who plan to go to graduate school, summer is a great time to look into the schools you want to apply for. The site below is the ACS guideline on what you should look for in a graduate program.

[http://portal.acs.org/portal/PublicWebSite/education/students/graduate/CNBP\\_022480](http://portal.acs.org/portal/PublicWebSite/education/students/graduate/CNBP_022480)

This site will help you search for different chemistry programs at different colleges.

[https://portal.acs.org/portal/acs/corg/coldfusionapp?nfpb=true&pageLabel=mapp\\_cptasl\\_page#](https://portal.acs.org/portal/acs/corg/coldfusionapp?nfpb=true&pageLabel=mapp_cptasl_page#)

## Chemertainment

By: Monica Royer

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

Seeing as this is my last contribution to the Beaker, I thought it would be appropriate to share my favorite movie and book series of all time. Are you ready?

### **Book Series:**

"The Lord of the Rings" by J.R.R. Tolkien

This epic series takes you on a journey as a young hobbit named Frodo Baggins attempts to save Middle Earth from the wrath of the dark lord Sauron in the ultimate struggle between hope and despair.

### **Movie Series:**

The Lord of the Rings Trilogy

Wonderfully adapted by Peter Jackson, Fran Walsh, and Pippa Boyens, these movies showcase the essence of Tolkien's works through stunning cinematography, a memorable cast, and three of the best soundtracks you will ever hear.

We here at the Beaker wish you all luck during finals and would like to extend our congratulations to all graduating seniors. In particular, we would like to thank **Monica Royer** for her dedication and enthusiasm over the past year as a part of our staff. We wish you the best of luck in your future endeavors.

We will be back in September with chemistry puzzles and prizes in addition to our regular sections. Thanks for supporting our newsletter and have a great summer, everyone!

