



**American Chemical Society - Orange County Section**

# **High School Awards Dinner Banquet**

**Monday, May 19<sup>th</sup> 2014**

**Student Center, University of California  
Corner of West Peltason Drive and Pereira Drive**

Registration	- 5:45 pm	Dinner	- 6:15 pm
Speaker	- 7:15 pm	Awards Presentations	- 8:00 pm

**Reservations:** Register online through the Orange County American Chemical Society website [www.ocacs.org](http://www.ocacs.org). On the 'Community' tab, click on the 'High School Exam' button and then the 'Awards Dinner link', or go to [www.ocacs.org/reghighschoolinner2014.htm](http://www.ocacs.org/reghighschoolinner2014.htm). Follow the directions to register all the guests and pay for their dinners with a credit/debit card or PayPal.

Make sure Dinner registration and payment is completed by **midnight** on **Thursday, May 15<sup>th</sup> 2014**.

To be seated with a particular high school's students, make sure to enter the name of the High School and we will do our best to accommodate you.

**Cost:** \$25 per dinner. The teacher of each student awardee and the student attend as guests of ACS, but reservations are required. No one can be seated for dinner without advance reservations.

**Please remember to pay for the Dinners after filling in and submitting the registration form.**

E-mail questions to Helen Wagner at [hwagner0227@gmail.com](mailto:hwagner0227@gmail.com).

**Directions:** Exit the 405 freeway on Culver Drive going South. Turn right onto University Drive and then left onto Harvard Ave. Turn right onto Bridge Rd. and finally left onto Pereira Dr.

The parking structure is across from the Student Center. Tell the parking attendant that you are there for the AirUCI/ACS Awards Banquet for the discounted parking rate.

# Lighting up Biology: Bioluminescence Imaging to Monitor Cellular Interactions in Live Animals

**Miranda A. Paley**

*PhD candidate, University of California, Irvine*

**Abstract:** I will discuss engineering firefly luciferase (the protein that makes them glow) to visualize and track cancer progression in mice. We hope to “light up” the interactions between tumor cells and healthy cells of the immune system and other surrounding tissue. This light can be detected at very low levels that allows us to monitor the disease and its beginning stages —which is the best time to detect and treat any disease, especially cancer. Eventually we hope that the profile of cancer’s interactions with healthy cells will help scientists harness the immune system to fight off cancer in a safer and less-invasive manner than current cancer therapeutics.

The best science tells a story and all scientists have one of their own. I’ll briefly discuss how I got to where I am now, and where I hope to go with my chemistry degree. I hope to inspire you to craft your own story in chemistry and in life.

**Biography:** I grew up in Denver Colorado, and thus miss both snow and skiing. I went to Denver School of the Arts for Creative Writing before taking a hard left turn into science with a biochem major at Grinnell College in the cornfields of Iowa. I studied abroad in Denmark and completed research at the University of Kansas. After graduation, I worked as a research assistant at the Institute for Behavioral Genetics at University of Colorado, Boulder. I started at UC Irvine in March 2010 and will graduate in the next year. I hope to pursue a career in science writing and communication.