



Orange County Local Section of the American Chemical Society

February Dinner Meeting

Thursday, March 21, 2013

The DoubleTree Club Hotel
7 Hutton Centre Drive, Santa Ana
Phone: 714-751-2400

Social: 6:00 PM
Dinner: 6:30 PM
Program 7:00 PM
Presentation: 7:15 PM

Discovery and Optimization of Small Molecule Inhibitors for the Botulinum Neurotoxin

Dr. Nicholas Salzameda

Department of Chemistry & Biochemistry
California State University, Fullerton

Reservations:

All Reservations: Please contact us no later than 12 noon on Monday, March 18, 2013 at OCACS@sbcglobal.net. Please indicate if you will be attending the dinner and program or the program only. Also, please list all names of attendees.

Note: OCACS pays the hotel on the basis of the number of dinner reservations made. Your RSVP for dinner is a commitment to pay for dinner. Dinner cost is \$25 for Members and Member's Significant Others; \$30 for Non-Members or those without reservations.

Members and guests are invited to attend the program at 7 PM. There is no charge to attend the program only, but advance reservation is appreciated. Space may be limited.

Presentation:

The botulinum neurotoxin (BoNT) is a protein secreted by the bacteria *Clostridium Botulinum*. The neurotoxin causes the disease botulism, a severe paralytic illness that can be fatal. The neurotoxin is highly toxic with an LD₅₀ of 1 ng/kg of human body weight. Currently, there is no approved small

molecule therapeutics available for the treatment of botulism. With the fear that this highly toxic neurotoxin could be used as a bioterrorism weapon there is a great need for small molecule therapeutic treatments for botulism. Through the use of chemical synthesis and high throughput screening our research group has identified a small molecule that inhibits the BoNT. I will present the BoNT inhibitor and our progress on optimizing the lead molecule via a Structure-Activity Relationship study.

Speaker:

Nicholas Salzameda received his B.A. in Chemistry from the University of San Diego and Ph.D. in Organic Chemistry from the University of Nevada, Reno. His post-doctoral research was in the field of bioorganic chemistry at The Scripps Research Institute. Currently Nicholas is an Assistant Professor of Chemistry at California State University, Fullerton. His research group at CSUF focuses on the synthesis of novel compounds for the disruption of protein-protein interactions related to human health and disease.

Directions: Take the Costa Mesa freeway (55). Exit at MacArthur Blvd. and go west (towards South Coast Plaza). Turn left at Mac Arthur Place. Doubletree Club Hotel is straight ahead slightly to the left. Use parking lot in front of hotel or follow signs to nearby parking. If in error you turn right at Hutton Centre Drive, you will find the Doubletree Hotel, which is not the Doubletree Club Hotel. Please be aware of the similar hotel names. Our dinner is at the Doubletree Club Hotel.