



OCACS TECHNICAL PRESENTATIONS ARE BACK!

(Virtually, without dinner this time!)

**Join the Orange County Local Section
of the American Chemical Society Meeting
Online**

Thursday, September 24, 2020

**Brief Annual meeting 6:45 PM
Speaker Presentation 7:00 PM**

We are returning to technical presentations with an extremely relevant talk (abstract and bios below) by **Dr. James S. Nowick and Dr. Adam Kreutzer of UC Irvine:**

“Structure-Based Design of a Cyclic Peptide Inhibitor of the SARS-CoV-2 (COVID-19) Main Protease”

To obtain the **Zoom link** you must pre-register to ensure that only legitimate attendees will have access. Send an email to OCACS@SBCGLOBAL.NET BY **NOON on Tuesday SEPTEMBER 22nd**. to request access (do it now if you wish!) and the link will be sent directly to you personally.

At 6:45 pm, just prior to the 7pm technical presentation, we will have a very short required “business meeting” to announce the upcoming election of a Secretary, on Councilor and one Alternate Councilor. You are all welcome to join in.

50-, 60- and 70-Year Members

First we shall recognize our 50-, 60- and 70-year members. Normally, they would be our guests at the in-person dinner meeting in September, but because of COVID-19, we will be listing their names here. If you wish to reconnect to one of them, please send your request to OCACS@SBCGLOBAL.NET and we will try to have them get in contact with you.

50-year

Mr. Douglas Cavanagh,
Mr. Norman Jacobson
Mrs. Joan Lebsack
Dr. Ying Sing Li
Dr. Michael Short
Dr. Donald Tyssee

60-year

Mr. George Abramson
Dr. Richard Sullivan
Dr. James Wright

70-year

Dr. Beverley Garrett
Dr. Herbert Nagasawa
Dr. Tse Cheng Wu
Dr. Ujinobu Niwa

Structure-Based Design of a Cyclic Peptide Inhibitor of the SARS-CoV-2 (COVID-19) Main Protease

Dr. James S. Nowick, Professor of Chemistry & Professor of Pharmaceutical Sciences, UCI

Dr Adam Kreutzer, Assistant Project Scientist, UC Irvine

Abstract:

This talk will describe the design and study of a first-in-class cyclic peptide inhibitor against the SARS-CoV-2 main protease (Mpro). The cyclic peptide inhibitor is designed to mimic the conformation of a substrate at a C-terminal autolytic cleavage site of Mpro. Synthesis and evaluation of a first-generation cyclic peptide inhibitor reveals that the inhibitor exhibits modest activity against Mpro in vitro and is non-toxic toward human cells in culture. The initial hit described in this talk, UCI-1, lays the groundwork for the development of additional cyclic peptide inhibitors against Mpro with improved activities.

Biography: James Nowick

James Nowick received his bachelor's degree in Chemistry in 1985 from Columbia University and his Ph.D. degree in Organic Chemistry in 1990 from MIT, where he was both an NSF Graduate Fellow and an ACS Division of Organic Chemistry Graduate Fellow. After an NSF postdoctoral fellowship in supramolecular chemistry at MIT, he began his independent career as an Assistant Professor at UCI in 1991. He was promoted to Associate Professor in 1996 and Professor in 1998. His research interests include bioorganic chemistry and chemical biology; molecular recognition and supramolecular chemistry; and peptide and protein structure. Current efforts in his research laboratory are focused on understanding the molecular basis of Alzheimer's disease and other amyloid diseases and the development of antibiotics.

With the members of his research group, Professor Nowick has published more than 120 research publications to date. In recognition of his scientific contributions, he has received a Camille and Henry Dreyfus Foundation New Faculty Award, an American Cancer Society Junior Faculty Research Award, an NSF Young Investigator Award, an Arnold and Mabel Beckman Foundation Young Investigator Award, a Presidential Faculty Fellow Award, a Camille Dreyfus Teacher-Scholar Award, an Alfred P. Sloan Research Fellowship, and an American Chemical Society Arthur C. Cope Scholar Award. He is a Fellow of the American Association for the Advancement of Science. For his contributions to research and education at UCI, he has received the Award for Outstanding Faculty Contribution to Undergraduate Research, the Chancellor's Award for Excellence in Undergraduate Research, and the School of Physical Sciences Award for Outstanding Contributions to Undergraduate Education.

Biography: Adam Kreutzer

Adam Kreutzer received his bachelor's degree in Biology in 2006 and his master's degree in Oncological Sciences in 2008 from the University of Utah. He received his Ph.D. degree in Chemistry in 2017 from UC Irvine. After two years of postdoctoral research at UC Irvine, in 2019 he transitioned to an Assistant Project Scientist position, in Professor Nowick's laboratory. His research interests include chemical biology, biophysical chemistry and structural biology, and antibody development and antibody drug development. His current research projects include understanding the molecular basis of Alzheimer's disease with the goal of developing new immunotherapies to treat the disease, as well as developing new anti-coronavirus drugs.