



American Chemical Society Susquehanna Valley Section

FEBRUARY 2017 NEWSLETTER

SVS wishes all of its members a Happy New Year. The four hundred and thirty fifth meeting of the Susquehanna Valley Section of the American Chemical Society will be held on Wednesday, February 15th, 2017 on the campus of the University of Scranton. The meeting will begin at 7:00 PM in the Loyola Science Center (LSC), room 133 and will be preceded by a dinner at 5:30 PM in the LSC atrium. The speaker will be Dr. Sandhya Kortagere of Drexel University in Philadelphia, PA. This month's meeting is cosponsored by the Neuroscience Program, and the Health Profession Organization (HPO) at the University of Scranton.

“Dopamine D3 receptor agonists to treat Parkinson's Disease: A Gamble or Opportunity”

Dr. Sandhya Kortagere
Associate Professor, Department of Microbiology and Immunology
Adjunct Faculty, Department of Pharmacology and Physiology
Adjunct Faculty, School of Biomedical Engineering and Health Sciences,
Drexel University College of Medicine, Philadelphia, PA

Parkinson's disease (PD) is the second most common age-related disease involving degenerating dopamine nerve function. Although treatments can be effective for moderating disease related loss of motor function, their effects wear off over time, and eventually cause tremors and dyskinesias (abnormal involuntary movements such as those induced by Levodopa, LID). In addition, nearly all known dopaminergic drugs that are currently on the market for treating PD, including the Pramipexole, cause impulsive control disorders (ICD) such as gambling and compulsive drug abuse in patients. However, the underlying molecular mechanisms of LID and ICD in patients are not known. In the past decade, studies in PD patients and animal models have suggested that dopamine D3 receptors (D3R) play a key role in PD, LID and ICD wherein D3R expression is decreased in PD and increased in both LID and ICD. We have recently designed and developed a novel, G-protein biased, D3R selective compound to treat symptoms of PD. We have demonstrated that biased signaling can be an answer to efficient PD therapy without the risk of developing dyskinesia or compulsive behaviors.

Dr. Sandhya Kortagere is a molecular pharmacologist and drug discovery professional specializing in designing small molecules to therapeutically relevant drug targets. Dr. Kortagere completed her Ph.D in Molecular Pharmacology at the National Institute for Mental Health and Neurosciences, Bangalore, India in 2003. She completed her postdoctoral research in Computational Biophysics at Weill Cornell Medical College, NYC under the guidance of Dr. Harel Weinstein and was a research and teaching specialist at Rutgers University- Robert Wood Johnson Medical School, NJ before joining Drexel University College of Medicine. Dr. Kortagere has developed a platform technology called the Hybrid Structure Based method to screen and design small molecule agonists, antagonists and allosteric modulators to several drug targets. These include an antimalarial compound that is currently under clinical trials, allosteric modulators of monoamine transporters and IL-1R antagonists. Her laboratory is focused on understanding the role of Dopamine D3 receptors in Parkinson's disease and to develop a

therapeutic to treat motor and cognitive impairment in Parkinson's disease which is an offshoot of her thesis work on dopamine receptors. She has authored a book titled "in silico models for drug discovery" published by Elsevier Press and has published over 42 peer reviewed articles in journals and has 8 patent applications. She is currently an Associate Professor at the department of Microbiology and Immunology and actively participates in biomedical graduate program with teaching responsibilities in multiple courses and directs the course on Structural Bioinformatics. Her research program is well funded by extramural and internal grants.

DINNER: The meeting will be preceded by buffet dinner at 5:30 PM in the atrium of the Loyola Science Center. Price for the dinner will be \$15. If you are interested in attending the dinner, please RSVP to Kate Stumpo by email (katherine.stumpo@scranton.edu) or phone (570) 941-7692 by Friday, February 10, 2017.

DIRECTIONS TO UNIVERSITY OF SCRANTON:



From I-81 Exit 185 (Central Scranton Expressway) to the Loyola Science Center (#45) (GPS Address: 252 Monroe Ave. Scranton, PA 18510). Follow signs to campus (on right). Before the first traffic signal, turn sharply right onto Madison Avenue. Make the first right onto Linden St. There is street parking on Linden St. and Monroe Ave. It is suggested to enter from the entrance on Monroe Ave (and not the interior of campus), which is on the first floor and the atrium is right there (for dinner), and the lecture hall is just past the atrium. See their [website](#) for more details.

SECTION NEWS:

2017 LOCAL SECTION ELECTION:

Congratulations go to Nicola Edwards of Misericordia University for being elected Chair-Elect for the 2017 calendar year. The section thanks James Swan of Bucknell University for his service as outgoing Immediate Past-Chair.

JOB POSTING:



Bucknell University announces a search for a one-year Visiting Assistant Professor. Teaching responsibilities include physical chemistry, general chemistry, and related laboratories. For the full listing and application, see: <https://apply.interfolio.com/40402>

2017 CHEMISTRY OLYMPIAD:



U.S. National Chemistry Olympiad

The local 2016 U.S. National Chemistry Olympiad (USNCO) will be held on Saturday, April 22, 2017 at Marywood University. If you know of a truly outstanding chemistry student please submit his or her name to Dr. Deanne Garver, dgarver@maryu.marywood.edu, by the end of March. See the [website](#) for more details.

Pennsylvania Junior Academy of Science (PJAS):



The local PJAS regions will be holding their annual high-school science competitions. PJAS is always looking for local science professionals to volunteer to judge the STEM projects of the area's 7th through 12th grade students. Region 5's competition (the western half of the SVS section) will be Saturday, March 4th at Susquehanna University and Region 2's competition (the eastern half of the SVS section) will on Saturday, March 4th at Wilkes University. For more information visit the websites at <http://www.pjas.net/region5> or <http://www.pjas.net/region2>.

MARM 2017:



A call for abstracts has been issued by MARM 2017. The deadline for abstract submission is March 13. Use the following link for submission: <https://marm2017.abstractcentral.com/login>. The 45th MARM is scheduled for June 4-6, 2017 and is being co-hosted by the Susquehanna Valley and Lehigh Valley Sections of the American Chemical Society. It will be held at Hershey Lodge in Hershey, PA. See their [website](#) for more details.

NATIONAL ACS NEWS:

ACT4CHEMISTRY:

Legislation that may impact the chemical enterprise comes before Congress on a regular basis, and ACS is committed to keeping its members informed and encouraging them to weigh in on high-priority issues. One of the main ways the ACS does this is through Act4Chemistry. To learn more please visit their [website](#) or email advocacy@acs.org.

NATIONAL MEETINGS:

The 2017 spring national meeting will be held in San Francisco, California from April 2-6. A call for papers has been opened with most divisions having a deadline of Monday, Oct. 31. See the [website](#) for details and registration instructions.

The 2017 fall national meeting will be held in Washington DC from August 20-24. Call for papers has been made; see [website](#).

Susquehanna Valley Section Web Page: <http://departments.kings.edu/SusquehannaValleyACS>

Please send any comments about the monthly newsletter to Ron Supkowski, Section Secretary
King's College 131 N River St Wilkes-Barre PA 18711 ronaldsupkowski@kings.edu
