

# MECHANISMS

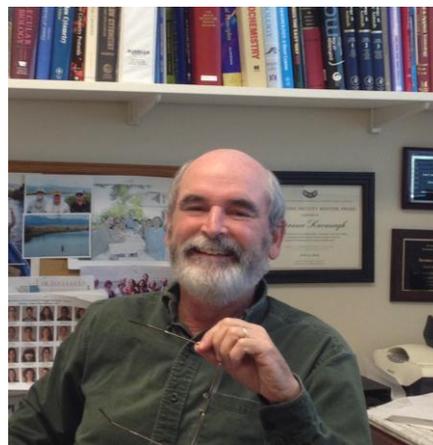
## A Specialty Section of the Society of Toxicology

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### A MESSAGE FROM THE PRESIDENT

Greetings fellow Mechanisms Specialty Section members! It has been a very busy year for our specialty section, with both significant achievements and some unfortunate news. We mourn the passing of our dear friend and colleague Dr. Joan B. Tarloff after an extended and difficult illness. Joan was so special to all of us, and she will be sorely missed. She was a very active member of our specialty section, a devoted member of the SOT and a respected scientist who pioneered several areas of renal toxicology, especially the roles of metabolism, pharmacokinetics and susceptibility factors in the toxicity of acetaminophen to the liver and kidney. The MSS leadership encourages you all to consider donating to the MSS Renal Toxicology Award endowment in Joan's name. She was especially proud of her role in helping to establish this award, and would be happy to know that this award continues to be an important part of the support we give to our young investigators.



Last year, we solicited support for the establishment of the Ronald G. Thurman Travel Award. Thanks to the very generous support of many of you, we are happy to announce that we achieved our goal of establishing the endowment for this fund. This achievement was made possible with the enthusiastic and outstanding leadership of Drs. Ivan Rusyn, Blair Bradford and Jeff Handler, all former members of Dr. Thurman's lab. In addition to being a leader in our field, Dr. Thurman was especially devoted to the training of young scientists (of which there were many), and this student award is a fitting tribute to that great legacy. A warm thanks to all of you who were involved in helping to move this award forward!

We are also pleased to announce the establishment of the MSS Career Achievement Award. This award recognizes those who over the course of their careers have made outstanding contributions in the area of mechanisms of toxicity. To nominate a candidate for this award, a current CV and two letters of recommendation should be sent to me by Jan 1, 2014. Please see the MSS Website for more information.

In closing, I wish to give my thanks to all of the other officers in the MSS for their time and efforts, and to all of you for making this specialty section such an intellectually rich, and highly collegial organization. I wish for you the best of success in your endeavors, and look forward to seeing you all in Phoenix in March!

## A WORD FROM YOUR STUDENT COUNCILOR

My name is Laura Armstrong, and I am the graduate student councilor for the Mechanisms SS for 2013-2014. I currently attend University of Rhode Island and am enrolled in the PhD program within Biomedical and Pharmaceutical Sciences working in Dr. Angela Slitt's research laboratory. Our lab has predominantly studied the effects of diseased-states and nutrition on drug transporters in the liver, and continues to study environmentally and toxicologically relevant chemicals, such as BPA and PFOS, for their metabolic effects allowing novel perspectives on the implications of the persistence or use of these chemicals. The Society of Toxicology annual meetings has created a platform for networking and presenting toxicologically significant data at the national level, and has continued to provide an extended network of close colleagues and collaborations that have been beneficial within our research and success as a lab.



Representing the Mechanism SS as student councilor has provided me with an opportunity to expand my networking within the Society of Toxicology and surround myself with greater opportunities to progress my research through knowledge and collaboration, and expand my scope and networking for careers within toxicology. Attending the SOT Annual Meeting as a graduate student and presenter allows one to not only share their data and accomplishments, but potentially formulate new hypotheses, helpful tips, or collaborations, and to gain a greater perspective or insight beyond the scope of bench-top research.

The SOT Annual Meeting provides not only a platform to learn and share data, but an opportunity to meet future colleagues and network. The Graduate Student Leadership Committee (GSLC) allows graduate student members input to be heard through the student councilors in order to create networking opportunities, develop programs to provide professional support, and to bring graduate student members together. The GSLC is comprised of three subcommittees, Communications, Professional Development, and Programming, that overall drive the scientific and professional development of SOT student members to become the future of the society. There are various webinars offered throughout the year by the GSLC Professional Development Committee and sponsored seminars at the annual meeting. The Communications Committee started the YouTox Video Challenge last year with the support of SOT, which challenges individuals, laboratories, or universities and institutions to submit a 5 minute video about "Why Did I Become a Toxicologist", so get creative and submit your entry this year! The Programming Committee organizes the Student and Postdoctoral mixer following the Welcome Reception, which provides a great opportunity to meet and network with other graduate students at the beginning of the meeting. Also, the Tox ShowDown, a quiz game that challenges three groups of contestants about toxicology as a science, but also as it relates to society, arts, culture, and history, will be held on Tuesday, March 25<sup>th</sup>. If interested in becoming a contestant email [avenosa@eden.rutgers.edu](mailto:avenosa@eden.rutgers.edu), or join in on the fun as an audience member! All these opportunities are just a few of the opportunities to participate in at the annual meeting or become a part of for future meetings!

## A NOTE FROM YOUR POSTDOCTORAL COUNCILOR

My name is Matt Merrell. I am in my second year of a Postdoc with Dr. Edward Morgan at Emory University, investigating the effect and mechanisms of inflammatory disease on drug metabolism and disposition. I completed my PhD in Pharmacology and Toxicology from the University of Arizona in 2011, and have previously served as the Postdoc representative for the Southeastern Regional Chapter of SOT. Being the Postdoc representative in the Mechanisms SS has been a wonderful opportunity for me to contribute to the SOT and work closely with other members in the society.



As we approach the abstract submission deadline for the upcoming Annual Meeting of the Society of Toxicology, I hope that you are planning on joining us and in presenting the results of your work. Attending and presenting at this meeting is an excellent way to both stay abreast of the latest developments in the field of toxicology and to make the most of the networking and career development opportunities that SOT offers. The SOT Postdoctoral Assembly (PDA) is a wonderful resource for Postdocs to come together and work towards the next phase of their careers. Several recent career-development webinars have been made available on the SOT-PDA website, including “Exploring Alternative Career Paths in Toxicology”, “Finding Funding for Early Career Scientists”, and “K99-R00 GRANTS: Tips from the NIEHS Administrator, the Grantee, and the Reviewer”. These and other excellent resources can be found on the SOT website <http://www.toxicology.org/ai/spd/PD-Career.asp>

See you in Phoenix!

## 2013 Annual Business Meeting



Renal Toxicology Award



Gabriel L. Plaa Education Award  
John Clarke



Post-doctoral Travel Award



Carl C Smith Award winner  
Tongde Wu



Carl C Smith Award 2<sup>nd</sup>  
place Daniel Ferreira



Carl C Smith Award 3<sup>rd</sup>  
place David Klein



Carl C Smith Award finalists



Robert J. Rubin Student  
Travel Award Greg Landry

## Timelines for 2014 Mechanisms Awards

The Mechanisms SS oversees the distribution of numerous awards to students and postdocs. Please apply for them or encourage your students and postdocs to apply. They are listed below with the deadlines for application. Details regarding each award, the application process, and restrictions can be found on the SOT website (<http://www.toxicology.org/ISOT/SS/mechanisms/Awards.asp>).

Award	Deadline
Carl C. Smith Graduate Student Award	October 14, 2013
Postdoctoral Student Travel Award	October 14, 2013
Renal Toxicology Fellowship Award	December 13, 2013
Robert J. Rubin Student Travel Award	December 31, 2013
Ronald G. Thurman Student Travel Award	January 1, 2014
Gabriel L. Plaa Education Award	January 13, 2014

## New Updates

### Status of Endowment Funds

Our endowed awards are in very sound financial shape.

<u>Carl C. Smith Student Award</u>	<u>Gabriel L. Plaa Education Fund</u>	<u>Renal Toxicology Fellowship Award</u>	<u>Robert J. Rubin Student Travel</u>	<u>Ronald G. Thurman Student Travel</u>
\$90,500	\$82,724	\$47,083	\$37,911	\$38,904

\* These numbers have not been audited and may change slightly. We encourage each of you to consider your continued support of the endowment funds. You can find more information at the following link:  
([http://www.toxicology.org/ai/csot/Endowment\\_Donor\\_form.pdf](http://www.toxicology.org/ai/csot/Endowment_Donor_form.pdf))

### CALL FOR OFFICER NOMINATIONS

Fall is the time of year that we put together a slate of candidates for the specialty section offices of Vice President-Elect, Junior Councilor, Secretary/Treasurer, Graduate Student Councilor and Postdoctoral Councilor. Self-nominations are more than welcome! **If you want to serve in one of these positions, please inform Terry Kavanagh ([tjkav@uw.edu](mailto:tjkav@uw.edu)) or any of the other officers (listed below) of your interest!**

### CURRENT OFFICERS

President	Terrance Kavanagh	<a href="mailto:tjkav@uwashington.edu">tjkav@uwashington.edu</a>
Vice-President	Vasilis Vasiliou	<a href="mailto:Vasilis.Vasiliou@ucdenver.edu">Vasilis.Vasiliou@ucdenver.edu</a>
Vice-President Elect	Richard Vaillancourt	<a href="mailto:vaillanc@pharmacy.arizona.edu">vaillanc@pharmacy.arizona.edu</a>
Secretary/Treasurer	Nathan Cherrington	<a href="mailto:cherrington@pharmacy.arizona.edu">cherrington@pharmacy.arizona.edu</a>
Senior Councilor	Angela Slitt	<a href="mailto:Angela_slitt@ds.uri.edu">Angela_slitt@ds.uri.edu</a>
Junior Councilor	Lauren Aleksunes	<a href="mailto:aleksunes@eohsi.rutgers.edu">aleksunes@eohsi.rutgers.edu</a>
Postdoctoral Councilor	Matthew Merrell	<a href="mailto:matthew.merrell@gmail.com">matthew.merrell@gmail.com</a>
Graduate Student	Laura Armstrong	<a href="mailto:lauraarmstrong@my.uri.edu">lauraarmstrong@my.uri.edu</a>
Past President	Michael Aleo	<a href="mailto:michael.d.aleo@pfizer.com">michael.d.aleo@pfizer.com</a>

### SCIENTIFIC PROGRAMMING FOR THE 2014 MEETING

The following accepted programming for the 2014 annual meeting was sponsored (S) or endorsed (E) by your Mechanisms Specialty Section. Congratulations!!! Thank you for contributing in this significant way to the success of our Annual Meeting. To all Mechanisms members, please consider developing and submitting proposals for our 2015 meeting in San Diego, CA.

Session Type	<u>TITLE</u>
SYM-13	Molecular Mechanisms Involved in Neuro/Glial Toxicity: From Oxidative Stress to Redox Signal Transduction
WKSP-16	Is Manganese-Induced Parkinsonism Mediated via Dopamine Neuron Degeneration or Dysfunction?
SYM-12	Methylmercury's Modes of Action: New Approches to Understanding an Old Problem [OLD TITLE: Molecular Mechanisms and Modes of Action of Methylmercury Toxicity]
SYM-07	Does This Chemical Make My Liver Look Fat? (Environmental Exposures and Steatosis)
SYM-17	Mechanisms of Metal-Induced Disruption of DNA Repair
SYM-18	The Emerging Role of Mitochondrial Turnover, Biogenesis, and Dynamics in Tissue Injury
SYM-22	Use of Stem Cells in Toxicity Testing—From Basic Research to Personalized Toxicology
WKSP-02	Adverse Outcome Pathways: A Conceptual Framework for 21st Century Risk Assessment
WKSP-17	New Concerns and New Science Addressing Environmental Asbestos Exposures
WKSP-09	Databases Facilitating Systems Biology Approaches to Toxicology
SYM-11	Exploring the Interface between Air Pollution and Metabolic Syndrome: The

	Bittersweet Dilemma [OLD TITLE: Linking Air Pollution and Metabolic Syndrome: The Bittersweet Dilemma]
WKSP-10	Developmental Programming of Hepatic Metabolism: Assessing the Impact of Perinatal Exposure to Xenobiotics
WKSP-29	Understanding Weight of Evidence: Exploring Different Approaches to Integrating Evidence from Diverse Data Streams
SYM-01	Adverse Outcome Pathways As an Integrative Framework for Predictive Toxicology: Combining Top-Down and Bottom-Up Thinking

## MARK YOUR CALENDARS

The Mechanisms Specialty Section business meeting will be held Tuesday (March 25th). See final Program for details on time and location.

Don't forget to register for SOT's 53<sup>rd</sup> Annual Meeting, March 23-27, 2014, at the Phoenix Convention Center, Phoenix, AZ. Looking forward to seeing all of you there!