

MECHANISMS

A Specialty Section of the Society of Toxicology

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Fall 2012

A MESSAGE FROM THE PRESIDENT

My name is Mike Aleo. I received a BS degree in Chemistry from Dickinson College followed by a PhD in Pharmacology and Experimental Therapeutics from SUNY Buffalo. I conducted my postdoc under Rick Schnellmann at the University of Georgia before joining Pfizer. I have been involved in investigating mechanisms of drug-induced toxicity for 20 years with a special interest and focus in the areas of hepatic, renal and ocular toxicity.



My admiration for and inspiration from members of this specialty section goes back many years when I was a graduate student and post-doc. From my perspective the Mechanisms Specialty section collects a wonderfully diverse group of scientists that are insightful, creative, professional, and collegial. I have fun interacting with many of you at the Annual Meeting. As such, I am extremely honored and privileged to serve as your president this year.

As a specialty section we have several goals to achieve this year:

- Raise \$5200 in direct contributions to get the Ronald G. Thurman Student Travel Award Fund to permanently endowed fund status this fiscal year
- Establish a Mechanisms Specialty Section Career Achievement Award
- Increase membership in this specialty section

I will need your help in achieving these goals for our specialty section. I ask you to consider contributing to the Ronald G. Thurman Student Travel Award. Any gift amount will help us achieve this important goal. As a specialty section we need to reach endowed status by 2014, otherwise the award itself will be lost and the money received will be returned to the general endowment fund. You will find more information about the fund and process for contributing money in the Status of Endowment Funds section of this newsletter.

At the 2012 business meeting Patty Ganey mentioned the opportunity for us to establish a

career achievement award for this section. We will be discussing this as a leadership team this year and have a few ideas regarding the award. However, we would like to hear your ideas, as members of this specialty section. Please consider an email or phone call to any of the officers listed in this newsletter. We want to hear from you.

Finally, I would like to see us increase membership in this specialty section. With 26 other specialty sections within SOT there are plenty of places to call home. I, myself, am a member of three special sections, although I am most active in Mechanisms. Please consider inviting new members of SOT to become members of this specialty section, or better yet invite someone to join us at the business meeting and introduce him/her to your colleagues. I am sure they will encounter the very qualities I admire most in members of this specialty section.

Thank you for making the Mechanisms Specialty Section a great organization within SOT. Happy grant and manuscript writing.

A WORD FROM YOUR STUDENT COUNCILOR



My name is Kyle Poulsen and I am the student councilor for the Mechanisms SS for 2012-13. I finished my undergraduate career at Eastern Michigan University in 2008 with a B.S. in Biochemistry and Toxicology and two weeks later, I began my first lab rotations in the Department of Pharmacology and Toxicology at Michigan State University. Eventually I settled into the laboratory of Dr. Robert Roth, performing some of our lab's first mechanistic studies in an attempt to uncover how drugs with hepatotoxic liability in humans interact with an inflammatory stress. The strong toxicology presence at MSU certainly factored into my joining the Society of Toxicology and the nature of my work in the lab pointed me directly to the Mechanisms SS.

When I became the Mechanisms SS student councilor, I saw it as an opportunity to transition from bench-top science and begin to interact with the scientific community as I continue to develop my career in toxicology. It is a fantastic opportunity to see how a professional society functions at the same time as having the ability to network with scientists from academia, government and industry. As a student councilor, I am a member of the Graduate Student Leadership Committee (GSLC). The objective of the GSLC is to carry out the strategic goals of the SOT by facilitating scientific and professional development of future scientists in toxicology, develop leadership skills and act as a link

between SOT members and councilors. The GSLC plays a vital role in developing programming and networking opportunities at the 2013 National Meeting in San Antonio. The GSLC is comprised of three Subcommittees working to fulfill its objective, which include the **Communications, Professional Development and Programming** Subcommittees.

Communications acts to facilitate knowledge transfer to students and is responsible for a new blog designed for graduate students that will be an update to the current format of a published newsletter. Professional Development, charged with advancing student career skills, sponsors various webinars throughout the year and is sponsoring a symposium *Epigenetic and miRNA Regulations in Carcinogenesis: Toxicological Implications* at the 2013 meeting. The Programming Subcommittee organizes the Lunch with an Expert as well as the Student and Postdoctoral mixer, which always draws a large crowd. The Programming Subcommittee is expanding the **Tox ShowDown**, building on the success of the inaugural ShowDown at last year's meeting. The ShowDown is a quiz game that challenges competitors in scientific/toxicological knowledge and how it relates to society and culture and was well received at last year's meeting in San Francisco. The ShowDown will be on Tuesday, March 12, and we hope to see you there! The SOT council views the GSLC as one of the most important components of SOT, and hopes it maintains its history of active participation from the future leaders in Toxicology. Please visit the GSLC website to learn about more sponsored activities, award opportunities and how you can contribute to SOT. <https://www.toxicology.org/ai/spd/studentservices.asp>

A NOTE FROM YOUR POSTDOCTORAL COUNCILOR



My name is John Clarke. I am in my second year of a Postdoc with Dr. Nathan Cherrington at The University of Arizona investigating the contribution of non-alcoholic fatty liver disease to the occurrence of adverse drug reactions. I grew up in the northwest and completed my PhD in Molecular and Cellular Biology from Oregon State University. 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 leaders in SOT. As we approach the abstract submission deadline for the 52nd Annual Meeting of the Society of Toxicology I hope that you will consider ways you can get involved and make the most of networking and career development opportunities. The SOT Postdoctoral Assembly (PDA) is a wonderful resource for Postdocs to come together and

work towards the next phase of their careers. On September 20th, 2012 the PDA sponsored a webinar entitled "Finding Funding for Early Career Scientists." That webinar and others are available to view on the SOT website <http://toxicology.org/ai/spd/PD-Career.asp>. If you have not done so already, make a point to visit the website and take advantage of these resources. Finally, remember that the Mechanisms SS Postdoctoral student travel award deadline is October 15th, so get your applications in to be considered. Best of luck with the rest of 2012!

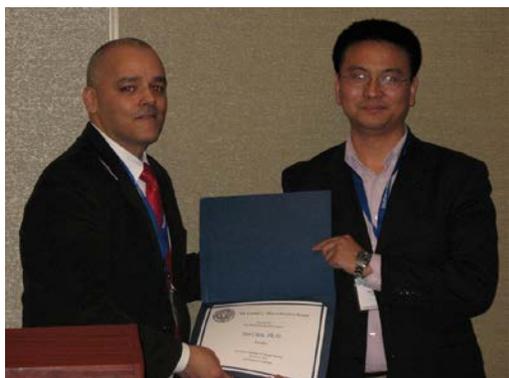
2012 Annual Business Meeting



Terry Kavanagh and Renal Toxicology award winner Jessica Sapiro



Mike Aleo and Robert J. Rubin Student Travel Award winner Leena Thuruthippallil



Jose Manautou and Gabriel L. Plaa Education Award winner Tao Chen



Carl C. Smith Graduate Student Award First Place awardee Alexandria Lau and Brian Cummings



Carl C. Smith Graduate Student Award
Second Place awardee Owen Kinsky
and Brian Cummings



Carl C. Smith Graduate Student Award
Third Place Awardee Afshin Momammadi
Bardbori and Brian Cummings

Timelines for 2013 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 15, 2012
Postdoctoral Student Travel Award	October 15, 2012
Renal Toxicology Award	December 14, 2012
Gabriel L. Plaa Education Award	January 18, 2013
Robert J. Rubin Student Travel Award	January 18, 2013

Updates and changes to the Carl C. Smith Graduate Student Award (as of 2011).

The deadline for the Carl C. Smith Graduate Student Award is October 15th. The submission process is the same as in past years. This includes a copy of the abstract, a statement that you wish to be considered for this award, and two letters of recommendation addressing the student and the project. One of the recommendation letters must be from the Departmental or Section Head. The letters must verify that the

work reported in the abstract was done while the student was enrolled in the graduate program and that this is the only specialty section to which this abstract is being submitted for an award. The letter must also specially cite the role and contribution of the student in the completion of the work, especially when there are multiple authors. Letters should be sent electronically to [Angela Slitt \(Angela_slitt@ds.uri.edu\)](mailto:Angela_slitt@ds.uri.edu) by the individuals making the recommendations. Complete information can be found at <http://www.toxicology.org/ISOT/SS/mechanisms/Awards.asp>.

One change from previous years is that, in addition to 1st, 2nd, and 3rd place awards, we will only be recognizing three students with Honorable Mentions. In the past we have recognized as many as ten students with Honorable Mentions. This change was made, in part, to reduce the work load on the reviewers for this award, which involves reviewing full length manuscripts for each finalist.

New Updates

Brian Cummings, Associate Professor at the University of Georgia, College of Pharmacy, was chosen to be a candidate from this specialty section for the Nominating Committee ballot. The SOT Nominating Committee is an elected committee made up of representatives from Regional Chapters, Special Interest Groups, Specialty Sections, Past Presidents, and the membership at large. The election ballot is composed of several candidates from each of these groups; members are elected by plurality vote of the SOT membership. The Nominating Committee is responsible for developing the slate of candidates for election to SOT Council and elected committees.

Status of Ronald G. Thurman Student Travel Award Fund

Please consider helping us achieve our goal of getting the Ronald G. Thurman Student Travel Award Fund to endowed status this fiscal year. We have received a number of pledges but encourage you to support this special award. Ron Thurman was an outstanding educator and investigator in the fields of hepatic metabolism, alcoholic liver injury and toxicology at the University of North Carolina at Chapel Hill. He was an active member of SOT through this specialty section. Please consider honoring his memory through a contribution to his named fund to benefit graduate student travel to the annual meeting. Your tax-deductible contributions can be made through this [form](#). Please remember that corporate matching gifts directed to the Ronald G. Thurman Student Travel Award count towards the \$25,000 of **direct** contribution needed to get this award to endowed status. As of June 2012 there were **direct** contributions totaling \$19,800. This amount does not include invested accumulations into the fund listed in section below.

Status of Endowment Funds

Financially our endowed awards are in very sound financial shape.

Carl Smith	Gabriel L. Plaa	Renal Toxicology	Robert J. Rubin	Ronald G. Thurman
<u>Student Award</u>	<u>Education Fund</u>	<u>Fellowship Award</u>	<u>Student Travel</u>	<u>Student Travel</u>
\$81,437	\$73,255	\$41,545	\$34,093	\$21,479

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, Graduate Student Councilor and Postdoctoral Councilor. Self-nominations are more than welcome! **If you want to serve in one of these positions, please inform Mike Aleo (michael.d.aleo@pfizer.com) or any of the other officers (listed below) of your interest!**

CURRENT OFFICERS

President	Michael Aleo	michael.d.aleo@pfizer.com
Vice-President	Terrance Kavanagh	tjkav@u.washington.edu
Vice-President Elect	Vasilis Vasiliou	Vasilis.Vasiliou@ucdenver.edu
Secretary/Treasurer	Nathan Cherrington	cherrington@pharmacy.arizona.edu
Senior Councilor	Brian Cummings	bsc@rx.uga.edu
Junior Councilor	Angela Slitt	Angela_slitt@ds.uri.edu
Postdoctoral Councilor	John Clarke	clarke@pharmacy.arizona.edu
Graduate Student Councilor	Kyle Poulsen	poulsenk@msu.edu
Past President	Joan B. Tarloff	j.tarlof@usp.edu

SCIENTIFIC PROGRAMMING FOR THE 2013 MEETING

The following accepted programming for the 2013 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 2014 meeting in Phoenix, AZ.

TITLE	S/E	Session Type
Mechanistic Role(s) of Cytochrome(s) P450 in Oxidative Stress and	S	Symposium

Inflammation: New Opportunities for Drug Discovery		
Understanding Toxicities of Abnormal Lipid Metabolism: Alcoholic, Nonalcoholic, and Toxicant-Induced Fatty Liver Disease	E	Symposium
The Dynamics of Neuroinflammation and Inflammatory Cell Responses in Neurologic Disease	E	Symposium
Toxicogenomics, Disease Susceptibility, and Implications for Risk Assessment	E	Symposium
Bone As a Target Tissue for Environmental Toxicants	E	Symposium
Modeling Human Genetic Variability and Susceptibility in the Laboratory	E	Symposium
Pulmonomics, the Exposome, and Microbiomes in Immunotoxicology	E	Workshop
From Inhaled Particles to Cardiovascular Disease and Toxicity: Evidence from Studies in Volunteers, Experimental Animals, and Cell-Based Systems	E	Workshop
Are We Like Rodents, Rabbits, or Something Else? Mechanisms of Developmental and Reproductive Toxicity Across Species	E	Workshop
Health Risks of Sodium (Salt) Intake: Too Much or Too Little?	E	Workshop
Toxic Effects of Metals	E	CE Basic
Recent Developments in Cardiovascular Physiology-Based Toxicology	E	CE Basic
The Practice and Implementation of Neural Stem Cell Based Approaches to Neurotoxicology	E	CE Basic
Weighing In on Nutrition - Essential Concepts for Toxicologists	E	CE Basic

MARK YOUR CALENDARS

The Mechanisms Specialty Section business meeting will be held Tuesday (March 12th). See final Program for details on time and location.



Spend time touring the Alamo. Cruise or stroll along the river walk. Attend SOT's 52nd Annual Meeting, March 10-14, 2013, at the Henry Gonzalez Convention Center San Antonio, Texas.