



Spring 2020 Newsletter

President's Message: Jennifer L. Burkey, PhD

Hope you are all getting excited about the SOT annual meeting in Anaheim; we are looking forward to seeing many of you at sessions, posters, and of course our annual specialty section meeting! We are very fortunate to have the winner of the Translational Impact Award, Dr. Jett, as our speaker this year.

This newsletter is packed with information regarding the annual meeting, and the impact our specialty section has had on the agenda. We have also elected new officers for the coming year, who will have the opportunity to lead our specialty section into the next year. We are currently looking for a new post doc representative, so if you or someone you know is interested, please let us know!

It has been my great pleasure to serve as your specialty section president this past year, and I look forward to supporting the officers in the coming year.

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Don't forget to download the 2020 SOT Event App!

This is your all-in-one tool for managing your time and maximizing your experience at the meeting. Build a custom schedule, access session and abstract descriptions, find speaker information, and more!





59th Annual Meeting & ToxExpo

Anaheim, California • March 15-19

The
CTTSS Officers Meeting
will be held on
Monday, March 16th

6:30 to 8:00 am
at the
Mix Restaurant & Lounge
Anaheim Hilton
777 W Convention Way

We hope to see you at the luncheon!

This will be a great opportunity to make new acquaintances, renew old ones, and network with colleagues old and new. A short business meeting will be held to report on the Specialty Section's activities in the last year, to present awards and to discuss plans for future activities.



The
CTTSS Annual Luncheon
and Business Meeting
will be held on
Tuesday, March 17th

12:00 to 1:30 pm
at the
Anaheim Convention Center
Room CC203B

12:00 - 12:30
Lunch and Refreshments

12:30 - 12:50
David A. Jett, PhD
(featured speaker)
"20 minutes of Chemical Threats and
Translational Toxicology"

12:50 - 1:30
Business Meeting and CTTSS
Award Ceremony

CTTSS Featured Speaker:



David A. Jett, PhD

**NIH Countermeasures Against Chemical Threats (CounterACT)
Program and National Institute of Neurological Disorders and Stroke,
Bethesda, MD**

**Dr. Jett has received the 2020 SOT Translational Impact Award for
his translational research efforts to develop safer and more effective
treatments for highly toxic agent exposure.**

After earning his PhD in pharmacology and experimental therapeutics from the University of Maryland in 1992, Dr. Jett conducted his postdoctoral fellowship at the Johns Hopkins University, where he later joined the faculty and led a laboratory focused on organophosphorus pesticides. He then joined the National Institutes of Health (NIH) as a Program Director at the National Institute of Neurological Disorders and Stroke (NINDS), where he worked on programs to increase diversity in the neuroscience workforce and began the development of the NIH Countermeasures Against Chemical Threats (CounterACT) Program in response to a request from the White House Office of Science and Technology Policy.

Currently, Dr. Jett is the Director of the NIH CounterACT program and the Scientific Team Leader within the Division of Translational Research at NINDS, among other intergovernmental responsibilities related to chemical security and public health. Since the program's establishment in 2006, Dr. Jett and his team of NIH scientists have recruited over 100 of the nation's top laboratories into the program, including senior investigators with diverse areas of expertise, including epilepsy, lung disease, toxicology, dermal toxicology, and ophthalmology. The basic and translational research generated by these scientists has resulted in over 1,400 publications in civilian peer-reviewed journals that have provided an unprecedented enrichment in the scientific knowledge base for chemical poisonings. Further, several products initially developed by CounterACT researchers are in the last stages of development, and many more are poised for advanced development in the near term. The recent approval of Seizalam, now on the market for treating nerve agent exposure, was largely due to a CounterACT-supported clinical trial that Dr. Jett helped organize with several federal agencies. The CounterACT program's success is owed in large part to Dr. Jett's "basic to translational" design of the program in its infancy. His efforts in establishing the program earned him and his team the prestigious NIH Director's Award in 2007.

In addition to his appointment as Professor Adjunct of Epidemiology and Public Health at Yale University, Dr. Jett contributes his expertise to the scientific community through serving on the Neurotoxicology Editorial Board and as a reviewer for many high-impact journals. He has served on state and federal advisory panels and is an active member of the International Neurotoxicology Association, New York Academy of Sciences, and American Society for Experimental Neurotherapeutics, as well as SOT, which he joined in 1993. Dr. Jett is a member of the SOT National Capital Area Regional Chapter, Neurotoxicology Specialty Section, and Clinical and Translational Toxicology Specialty Section.

Translational Impact Award Lecture:

Finding Better Cures for Chemical Poisonings: An Unmet Need in Public Health

Wednesday, March 18th

8:00 - 9:00am | CC Ballroom A

Congratulations to our Travel Award Winners!

The CTTSS is pleased to announce the winners of the section's travel award for this year, which is intended to help defray some expenses for travel of a student and/or postdoctoral fellow to present their research at the SOT annual meeting in Anaheim. The awardees will receive a recognition certificate and more importantly a check at our Section luncheon at the annual meeting. We hope that you are able to attend the luncheon to warmly greet our winners. We have provided the presentation information for our award winners below – we hope that you have time to visit their presentations and congratulate them!

Graduate Student Award:

Joel Vazquez

University of Arkansas for Medical Sciences

1243: Poster Board – P305:

Discovery of Biomarkers to Differentiate Liver Injury and Benign ALT Elevations

Monday, March 16th

10:45am – 12:30pm

Postdoc Fellowship Award:

Milankumar Prajapati

Brown University

2560: Poster Board - P158:

Genetic Inhibition of Liver Manganese Import Corrects Aberrant Liver Erythropoietin in a Mouse Model of Inherited Manganese Excess Due to Deficiency in the Manganese Transporter Slc30a10

Wednesday, March 18th

9:00am – 10:45am

CTTSS-sponsored SOT Events

Formally accepted after CTTSS endorsement: Translational science makes an impact! Look for these sessions in the upcoming program!

Monday, March 16

- **The Epidemic of Chronic Kidney Disease of Unknown Etiology in Agricultural Communities**
Alison Harrill (Informational session | 11:00 AM to 12:20 PM | CC Room 303C)
- **Aircraft Cabin Fume Events: Is There a Toxicological Explanation?**
Allister Vale (Workshop session | 11:00 AM to 12:30 PM | CC Ballroom D)
- **Variety is the Life of Spice! The Clinical Toxicology of Synthetic Cannabinoids**
Sally Bradberry (Workshop session | 3:00 PM to 4:30 PM | CC Room 304C)
- **The More, the Better? Single Biomarkers, Panels and/or Composite Biomarkers to Characterize Organ Injury**
Patrick J. Devine (Workshop session | 3:00 PM to 4:30 PM | CC Room 303C)

Tuesday, March 17

- **Electronic Cigarettes and Cardiovascular Toxicity: New Friend or Old Foe?"**
Mark Olfert (Symposium session | 8:00 AM to 10:45 AM | CC Room 204B)
- **Quantitative and Translational Systems Toxicology: Improving Drug Safety from Pre-Clinical to Clinical Outcomes**
James Stevens (Symposium session | 8:00 AM to 10:45 AM | CC Ballroom A)
- **Cyanide as a Chemical Threat: Finding Better Antidotes**
David Jett (Symposium session | 8:00 AM to 10:45 AM | CC Room 304C)
- **Using Human Genetics to Aid Safety Assessment of Therapeutics**
Jing Yuan (Workshop session, 8:00 AM to 10:45 AM CC Room 303A)
- **Mechanisms and Multiple Exposures: Methods to Tackle Toxicology's Most Difficult Challenges Using Systematic Review Frameworks**
Andrew Rooney (Workshop session | 1:30 PM to 4:15 PM | CC Ballroom C)



Wednesday, March 18

- **Sex, Lungs, and Air Pollution**
Meghan Rebuli (Workshop session | 8:00 AM to 10:45 AM | CC Room 204B)
- **Novel Use of Analytical Platforms for Efficacy/Safety Biomarker Selection to Improve De-risking of Therapeutics**
J. Eric McDuffie (Informational session, 11:00 AM to 12:20 PM CC Ballroom C)
- **Parental Cannabis Exposure and Long-Term Neurobehavioral Deficits in Offspring**
Kristen Ryan (Workshop session | 1:30 PM to 4:15 PM | CC Room 303C)

Thursday, March 19

- **Express Yourself (or Not...): The Nonclinical Safety of Oligonucleotide Therapeutics**
Jessica Sutherland (Symposium session | 8:30 AM to 11:15 AM | CC Ballroom C)
- **Cannabidiol Science, Safety, and Societal Impacts: Where Do We stand?**
Sol Bobst (Workshop session | 8:30 AM to 11:15 AM | CC Ballroom D)

Special Invitations...

Invitation for CTTSS members to Contribute to Next Edition of Patty's Toxicology

SOT Colleagues:

As members of SOT and due to your interest in toxicology, the editors of are offering the members of this specialty section an opportunity to share your knowledge by contributing to the next edition of one of the classic texts in our field, Patty's Toxicology (7th edition). The next edition will be about 146 chapters and will likely be 7-8 volumes in length.

We are inviting your members to tackle one of the chapters listed below. In nearly all cases, the chapter only requires an update (which is often not a huge undertaking). We do need someone to handle the Herbicide chapter (that is a new one).

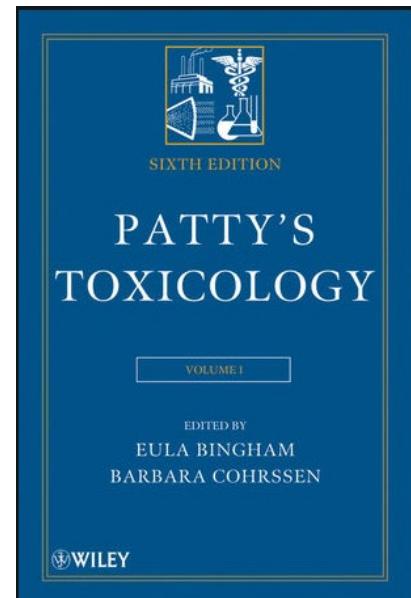
The timetable is April-June 2020 for a draft of the updated chapter, with the final version by October-November, 2020 (since all but one are updates, this should not be a big challenge). We will share a Word version of the last published chapter.

Drs. Bill Farland, Jim Klaunig, and I are the editors. Dr. Len Levy (of the UK) and Dr. Helmet Greim (EU) are the associate editors. If you have questions about any aspect of this opportunity or wish to step forward and place your name on one of these chapters, please contact me (Dennis Paustenbach) at dennis@paustenbachandassociates.com (415-509-4085), Bill Farland at laughfox5@msn.com or Jim Klaunig at jklauni@indiana.edu (812 856 3957).

Thanks for considering this opportunity. With your contribution, we believe this will be the highest quality edition of Patty's in recent memory.

Wishing you the best,

Dennis Paustenbach, PhD, DABT, FATS



*You're
invited*

List of Available Chapters (all are updates of previously published papers):

1. Metallocenes
2. Niobium
3. Aliphatic Hydrocarbons (methane, ethane, propane, n-butane, 2-methylpropane, n-pentane, 2-methylbutane, 2,2-dimethylbutane, 2,3-dimethylbutane, 2,2-dimethylpropane)
4. Alicyclic Hydrocarbons (cyclopropane, cyclobutane, cyclopentane, methylcyclopentane, ethylcyclopentane, cyclohexane, methylcyclohexane, dialkylcyclohexanes, cycloheptane, cyclooctane)
5. Aliphatic Carboxylic Acids: Saturated (formic acid, propionic acid, butyric acid, isobutyric acid, valeric acid, isovaleric acid, caproic acid, isocaproic acid, 2-methylvaleric acid, 2-ethylbutyric acid)
6. Aliphatic Carboxylic Acids: Unsaturated (propiolic acid, acrylic acid, crotonic acid, methacrylic acid, pentenoic acid, trans-2-hexenoic acid, sorbic acid, 2-heptenoic acid, linolenic acid, linoleic acid)
7. Monohydric Alcohols—C7 to C18, Aromatic, and Other Alcohols (1-heptanol, isoheptyl alcohol, 2,3-dimethyl-1-pentanol, 1-octanol, 2-ethylhexanol, isoctyl alcohol, 2-octanol, 3-octanol, 2,2,4-trimethyl-1-pentanol, 1-nonanol)
8. Esters of Mono-, Di-, and Tricarboxylic Acids (methyl benzoate, ethyl benzoate, isopropyl benzoate, butyl benzoate, hexyl benzoate, vinyl benzoate, benzyl benzoate, methyl salicylate, ethyl salicylate, amyl salicylate)
9. Aliphatic Nitro, Nitrate, and Nitrite Compounds (nitromethane, tetranitromethane, notroethane, 2-nitropropane, 1-nitropropane, 1-nitrobutane, chloro-1-nitroethane, trichloronitromethane, 2-nitro-2-butene, methyl nitrate)
10. Aliphatic and Aromatic Nitrogen Compounds (ethyleneimine propyleneimine triethylenemelamine, chloroethylamines (nitrogen mustards), nitrogen mustard (hydrochloride), nitrogen mustard N-oxide (hydrochloride), tris(beta-chloroethyl)amine (hydrochloride), dimethyl(beta-chloroethyl)amine (hydrochloride), diethyl(beta-chloroethyl)amine, (hydrochloride), uracil mustard)
11. Miscellaneous Organic Nitrogen Compounds (pyridine, methylpyridines, di- and trimethylpyridines other alkylpyridines, vinylypyridines, aminopyridines, aminopicolines, pyridinethione compounds, nicotine, substituted uracils)
12. Cyanides and Nitriles (cyanide, hydrogen cyanide, sodium cyanide, potassium cyanide, calcium cyanide, cyanamide, calcium cyanamide, cyanogen, cyanogen chloride, cyanogen bromide)

New Chapter:

1. Herbicides

New Officers

The results are in from our election that ended in February and we are happy to work with our new officers as they fill their positions in May of 2020!

- **Vice President-Elect: Kai Kehe**
- **Secretary/Treasurer: Emma C. Bowers**
- **Councilor: Deidre Dalmas Wilk**

Officers: 2019-2020

President (1 year): Jennifer L. Burkey
Vice President (1 year): Sally M. Bradberry
Vice President-Elect (1 year): Yvonne P. Dragan
Secretary/Treasurer (2 year): William B. Mattes
Past President (1 year): John-Michael Sauer
Councilor (2 year): Tracy Chen
Councilor (2 year): Mitchell R. McGill
Postdoctoral Representative (2 year):
Emma C. Bowers
Student Representative (2 year): Jephthe Akakpo

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Postdoctoral Representative (2 year): OPEN
Student Representative (2 year): Jephthe Akakpo

As we welcome the new members to the leadership of the CTTSS, we also thank those that will be transitioning off:

- **William B. Mattes**
- **Tracy Chen**

We look forward to seeing you in Anaheim!

