



National Capital Area Chapter
Society of Toxicology Newsletter
Electronic Edition

March 2018

Issue No. 43

Gertrude-Emilia Costin, Editor

CHAPTER MISSION STATEMENT	2
MESSAGES FROM THE NCAC-SOT EXECUTIVE BOARD MEMBERS	2
The President, <i>Tracy Chen</i>	2
The Vice President/President-Elect, <i>Margaret Whittaker</i>	3
The Secretary, <i>Xinrong Chen</i>	3
The Student Liaison, <i>Elena Braithwaite</i>	4
The Graduate Student Representatives, <i>Kristin Noell-McMillan and Dana Freeman</i>	5
The Postdoctoral Representative, <i>Laura Savery</i>	5
The Newsletter Editor, <i>Gertrude-Emilia Costin</i>	6
TREASURER’S REPORT, <i>Charlie Thompson</i>	8
NCAC-SOT MEMBERSHIP	8
Details	8
Membership Application	9
Current NCAC-SOT members	10
NCAC-SOT EXECUTIVE BOARD MEMBERS CONTACT LIST	13
Election results – Meet the New Board Members	14
NCAC-SOT ACTIVITIES UPDATE	16
Reports – 2017 Meetings	16
2017 NCAC-SOT Fall Symposium	16
Meetings of Interest	17
Society of Toxicology Annual Meeting (<i>11-15 March 2018</i>)	17
Letter from the SOT President	17
NCAC-SOT and North Carolina SOT Chapter Joint Reception/Mixer	18
2018 National Capital Area Chapter Bern Schwetz Travel Award Winners	19
NCAC-SOT Presenter List at SOT	20
NCAC-SOT Spring Symposium: Consumer Products – Motivating and Promoting Toxicity Reduction (<i>April 2018</i>)	22
Outreach Activities	22
Update from the Chairs	22
WHAT’S NEW IN TOXICOLOGY? <i>FDA’s Predictive Toxicology Roadmap by Dr. Tracy Chen</i>	23
MEMBERS ACCOMPLISHMENTS CORNER (September 2017 through March 2018)	24
Publications and Presentations	24

CHAPTER MISSION STATEMENT

The National Capital Area Chapter of the Society of Toxicology (NCAC-SOT) was established to provide a regional focus for scientists of all disciplines interested in toxicology. The Chapter acts to:

- Sponsor and co-sponsor symposia on current issues in toxicology
- Provide annual awards to an outstanding student and postdoc in toxicology to assist in attending the annual meeting of the SOT
- Maintain communication with the National SOT regarding current toxicology and regulatory concerns
- Sponsor Regional Chapter events at the SOT Annual Meetings

- // -

MESSAGES FROM THE NCAC-SOT EXECUTIVE BOARD MEMBERS

President's Message

Dear NCAC-SOT members,

Starting in 2018, we are looking forward to having more interesting activities to share with our NCAC community!

The first will be the 57th SOT Annual Meeting in San Antonio from March 11-15, 2018. During the meeting, we will hold a joint reception with the North Carolina Chapter of the Society of Toxicology (NCSOT) on March 12 from 7:00 to 9:00 PM at the Pat O'Briens. The 2018 NCAC Bern Schwetz Travel Awards will be presented during the reception. I hope you can join us! Additional information such as venue, time, and registration, etc. have already been communicated via community emails and are also included in this newsletter in case you haven't registered already!

Also, it's time to show our support for the local STEM-Regional Science Fairs (March 3 to March 24 depending on each County's event schedule) and the 2018 USA Science & Engineering Festival in DC from April 7-8, 2018! If you are interested to volunteer in these activities, please contact [Dr. Pedro Del Valle](#).

Our Spring Symposium will follow shortly after and the NCAC Board has been preparing for the event. Dr. Margaret Whittaker will share more details soon.

In addition, on behalf of NCAC-SOT, I would like to THANK our Board members who are completing their terms for their leadership, dedication and contributions to our community:

Dr. Pedro Del Valle served as Past President.

Dr. Gertrude-Emilia Costin served as Councilor (Newsletter Editor).

Ms. Kristin Moneque Noell-McMillan served as Graduate Student Representative.

Starting May 1, 2018, our newly elected Officers will come on board to serve our regional chapter: Dr. Emily Madden (Vice President/President-Elect), Dr. Frederic Moulin (Councilor, Newsletter Editor), and Ms. Sarah Attreed (Graduate Student Vice-Representative). Let's congratulate and welcome the new NCAC Board members!

Last but not least, please look out for our NCAC announcements! More toxicology related information such as seminars, webinars, workshops, etc. will be shared via community posts. If you have news to share with NCAC members, please let us know!

Best wishes,

Tracy Chen, PhD, DABT
NCAC-SOT President

Vice President's Message

Congratulations - You Made it to the Varsity Team!!

As part of a recent continuing education class on leadership, our instructor asked us to describe characteristics of a great team and to describe our relationship with our primary professional association. Being on a great team has been very important to me throughout my life - from the time that I swam inter-collegiately at the University of Michigan and then over the past 20 years of my professional career. Great teams don't happen by chance - they are formed when team goals are understood by everyone and when everyone participates actively and positively. The National Capital Area Chapter (NCAC) of SOT's mission is described in our [Chapter bylaws](#) where we pledge to stimulate research and encourage communication among people who have a professional interest in toxicology. Our Chapter was formed in 1982, and our purpose is even more important in today's world to protect human health and advance environmental protection.

As your Vice President, I have endeavored to design symposia that fulfill our Chapter's purpose, and foster interaction, learning, and ideally, establish new relationships between members. The word "relationship" is defined as the way in which two or more concepts, objects, or people are connected. Strong teams must have great team chemistry (or I like to use the phrase "great team toxicology") to sustain team members and build and strengthen relationships. The NCAC team comprises 164 members, and it is my goal to connect with each one of you and provide you with good reason to participate in team activities. I invite those of you who haven't yet participated in the NCAC to attend our Spring Symposium on consumer product safety (details to be circulated separately), as well as attend the [NCAC reception](#) on March 12 at the SOT Annual Meeting (please remember to register in advance!). Toxicology is indeed a team sport, and I've reserved a place for you on our starting lineup!

Meg Whittaker, PhD, MPH, CBiol, FRSB, ERT, DABT
NCAC Vice President

- // -

Secretary's Message

Dear NCAC-SOT Members,

My name is Xinrong Chen and I serve as the Secretary of the NCAC Board and my main duty is to prepare meeting minutes for the NCAC monthly Board meeting. I work for the Consumer Product Safety Commission (CPSC). CPSC regulates consumer products such as furniture, clothing, children's toys, and household cleaning products. I love my job and I am very excited that NCAC will host a Spring Symposium in April with a focus on the consumer products. One of my colleges, Dr. Mike Babich, will present at this symposium and he will tell you more about our agency and how we conduct our daily routine work.

Currently, we have lots of activities going on at NCAC. In addition to the Spring Symposium I mentioned above, we have a NCAC SOT reception on March 12, 2018 in San Antonio, Texas. We collaborate with local events such as Regional Science Fairs and USA Science and Engineering Festival. As a graduate student or postdoc, you can apply for several NCAC awards; these include Poster Competition Award for the Spring and Fall Symposium, and NCAC Bern Schwetz Travel Award. Please do pass this information to your colleagues or friends. We are looking forward to seeing you at the upcoming Annual SOT Meeting, the local Science Fairs, the USA Science and Engineering Festival, and the Spring Symposium!

Xinrong Chen
NCAC-SOT Secretary

Student Liaison's Message

2017 Fall Symposium Poster Competition

During NCAC's 2017 Fall Symposium and Webinar entitled "TSCA: Best Practices in Toxicology, Risk, and Chemical Management Strategies," a highly competitive poster competition was held to feature the outstanding research of local graduate students and postdoctoral scholars. Each applicant was evaluated by a panel of judges including Drs. Bruce Fowler and Deepa Rao. Scores were determined based on the clarity of the abstract, the quality of the studies performed and the quality of the presentation. The following individuals were acknowledged for their scientific achievements.

Graduate Student Category



Sarah Attreed from Johns Hopkins Bloomberg School of Public Health, Department of Environmental Health and Engineering was awarded first place for her poster entitled "Chronic arsenic exposure reduces influenza vaccine immunogenicity in adult female C 57BL/6 mice".



Camille Lombard-Banek from George Washington University was awarded second place for her poster entitled "Single-cell Temporal Proteomic Analysis in the Developing Frog (Xenopus) Embryo".

Honorable mention

Megan Chesnut from Johns Hopkins University, Bloomberg School of Public Health

Poster title: "Development of a dysmyelination test to study developmental neurotoxicity of environmental chemicals in a human brain microphysiological system"

Postdoctoral Scholar Category



Dr. Laura Savery from the US Food and Drug Administration (CDRH) was awarded first place for her poster entitled "Deriving a provisional tolerable intake for intravenous exposure to nanoparticles released from medical devices".



Dr. Darshan Mehta from the US Food and Drug Administration (CFSSAN) was awarded second place for his poster entitled "Evaluating performance of chemical fingerprinting methods and machine learning algorithms for in silico prediction of Ames mutagenicity".

Honorable mention

Dr. Mapa S. T. Mapa from the US Food and Drug Administration/CFSSAN.

Poster Title: "Elucidating the mode of transport of fatty acid esters of 3-MCPD into proximal tubule cells"

Elena Braithwaite
NCAC-SOT Student Liaison

Graduate Student Representatives' Message

Greetings National Capital Area Chapter Student Members!

Happy New Year! We hope everyone had an enjoyable break and returned to their respective institutions well rested. In addition to that we would like to wish everyone a productive semester. There are just a few things that we would like to remind everyone as the SOT Annual Meeting is approaching.

- (1) We invite everyone to attend the Graduate Student and Postdoctoral Mixer that will be held **Sunday March 11 in the Hemisfair Ballroom in Convention Center, from 7:30 pm – 9:00 pm**. We will have a poster present and would love to meet you all. **This event is free, however tickets are required for it.** Tickets can be requested during the registration process for the SOT Annual Meeting. If you are unable to secure a ticket, please contact us, and we will try to assist in this matter. We look forward to seeing you all.
- (2) Our regional Chapter (National Capital Area) will be hosting a Joint Reception with the North Carolina Region Chapter. The reception will be **Monday March 12th from 7:00-9:00 pm at Pat O'Brien's located at 121 Alamo Plaza in San Antonio.**
- (3) There are other opportunities that may be of interest to you all such as Chat with an Expert and the Poster Tour with Trainees. Further information about these activities and other activities of interest can be found at <https://www.toxicology.org/events/am/AM2018/events-and-activities.asp>.
- (4) Please be on the lookout about upcoming information in regards to our Spring Symposium. Information is forthcoming and will be disseminated via email.

If you have any questions about upcoming events, please don't hesitate to contact Kristin (kmnoell@umes.edu) or Dana (dfreem20@jhmi.edu). You can also reference our graduate student page on the Chapter website: <http://www.toxicology.org/groups/rc/ncac/students.asp>.

Cheers,

Kristin Noell-McMillan and Dana Freeman
NCAC-SOT Graduate Student Representatives

- // -

Postdoctoral Representative's Message

Dear NCAC SOT Postdoctoral Scholars,

As postdocs in the National Capital area, we all have exciting and unique opportunities from our local region and institutions/industry, which makes setting priorities difficult. Here are some friendly suggestions of priorities to focus on during your postdoc as we go into 2018 and the SOT Annual Meeting:

- PLAN. Set 3-month goals with soft deadlines and prepare a mock end-of-year review as if you were an employee. This exercise will prepare you to be an independent scientist and be better prepared for the job market.
- EXPAND. How will you grow professionally? Recordings of [past continuing education courses](#) are free to postdoc members or register to attend a course in person at the [Annual Meeting](#). Use SOT [meeting materials](#)

or [mobile app](#) to navigate the vast amount of science at the annual meeting and to ensure to see the work of past and current colleagues and to meet scientists you would like to network with. Ensure to attend the [events and activities](#) at the SOT Annual Meeting of most interest to you.

- EXPLORE. Do you know all the [different sectors](#) where toxicologists are employed? [Career development webinars](#) are available on the SOT website. Ensure you have mentors to give you advice and direction along the way. SOT has a [mentoring program](#) to assist and avenues of networking with other postdocs such as the [PDA luncheon](#).
- CONSIDER. Is the DABT or another certification something you should do? Do other toxicologists in your desired sector find it needed/required/beneficial? Do your research and ask your mentors!
- PREPARE. Every step of your postdoc needs to be in preparation for your career position. Continually look and apply for job positions including at SOT's [Job Bank](#). Keep a fresh resume that is updated quarterly. Have your science get noticed by applying to [awards](#) through NCAC and SOT.
- CONTRIBUTE. Ensure to get your work published and consider applying in SOT's official journal, [Toxicological Sciences](#). Present your work at SOT's annual or regional meetings. Offer to volunteer for activities within NCAC or SOT or plan to run for a leadership position. Plan to be a mentor to a graduate or high school mentee in the mentoring program. Contact PDA for more information of volunteer opportunities!
- BE WELL-BALANCED. When that interview question is asked of you, "Tell us about yourself! What do you do in your free time?" ensure you have an honest answer! Make time for yourself to ensure you're a well-rounded scientist showing you manage your time and well-being responsibly.

See you all at the SOT Annual Meeting and the NCAC Spring Symposium!

Laura C. Savery, PhD
NCAC Postdoctoral Representative

- // -

Newsletter Editor's Message

Thank you!

Dear NCAC-SOT Members,

Believe it or not, this newsletter number is the last one I will edit for the Chapter as part of my Newsletter Editor term. I can't believe it's been 3 years since Dr. Mark F. Miller, Lieutenant Commander, USPHS and then NCAC SOT President informed me that I was elected the NCAC Newsletter Editor for the 2015-2018 term. I was ready to take on the role, meet new scientists, and learn as much as I could about the functionality of our Chapter. I immediately reached out to the then Editor, Dr. Melanie Biggs (CPSC) who was so generous with her time and shared with me information about the dynamics and activities of the NCAC Board members. It meant a lot to me to learn from the past Editor and I would like to offer my support to Dr. Frederic Moulin whom we welcome as the incoming Newsletter Editor for NCAC. And speaking of smooth transitions, I encourage all outgoing Board members to be supportive of the incoming ones by sharing from their experience as their busy schedules allow. Each Board member paved the way of what is now the NCAC-SOT and each easy transition contributed in itself to that bigger goal.

I had a wonderful time being the Editor of the NCAC-SOT newsletter. I worked as part of different teams, I served three Presidents and participated in numerous activities the Chapter was involved in. It has been a fantastic journey and I want to thank you all – past and current Board members and members at large – for supporting me, for sharing your knowledge, and for embracing changes I brought to the newsletter. I hope you find it informative and consider it your platform to share news, make connections and learn about progress in our field. On this note, I learned in these last three years that each NCAC Board member has a mission to not only communicate news through their respective columns in the Newsletter, but also to address the membership by sharing from their career paths, experience, and by providing support, mentorship and guidance. The Board members are the voices of the members at large and we have the duty to listen and to further communicate to the SOT the needs and ideas of our colleagues.

It has been my pleasure and honor to work with you and I will continue to stay involved with our Chapter. I admire the dedication of our team to science and education. While working hard on their individual projects, the NCAC Board members drive the efforts to plan the seeds of next generations of scientists and this is a wonderful mission. I look forward to new achievements of our Chapter.

To those who wonder if they should run for election for roles in our Chapter's Board, I say: ***Go for it!*** You will learn so much from a very open, generous and sharing family. Some aspects of the Chapter and its ways to function are unique and you could not learn them elsewhere. Ashley Black, the Liaison to Regional Chapters and Special Interest Groups, has offered tremendous support to the NCAC-SOT Board members, their activities and requests. I would like to personally thank her for her help throughout my editorial tenure without which I could not have learned how to navigate the SOT communication system in a short time. If there was anything that I or we needed at the NCAC-SOT Headquarters, Ashley had the answer or solution right away.

Thank you for three wonderful years and I look forward to more successes of our Chapter in the years to come,

Gertrude-Emilia Costin, PhD, MBA
Outgoing NCAC-SOT Newsletter Editor

- // -

TREASURER'S REPORT

Date: 9 February 2018

NCAC Financials (from HQ): 1 July 2017 through 30 November 2017

Income	Amount (\$)
• Donations	1000
• Dues	1390
• Registration (Fall)	925
• Total Income	3,315
Expense	
• K-12 Outreach	-500
• Meeting (Spring)	-151.33
• Meeting (Fall)	-2,950.22
• Total Expense	-3,601.55
Net Cash Flow	-286.55
Closing Check Acct Balance	13,906.86

Bank Statement: 31 December 2017

Income	Amount (\$)
• Deposit	844.04
• Deposit	545.00
○ Total Income	1,389.04
Expenses	
• FallSymp-StTrv (Chk #1371)	-157.34
• FallSymp-Poster (Chk #1374)	-50.00
• FallSymp-Poster (Chk #1376)	-50.00
• FallSymp-CSW (Chk #1390)	-1,220.18
○ Total Expenses	-1,477.52
Closing Check Acct Balance	13,818.38

- // -

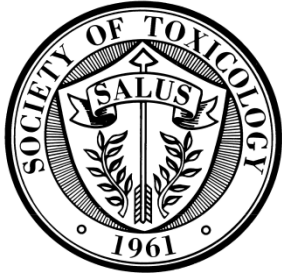
NCAC-SOT MEMBERSHIP

Details

Did you remember to renew both your SOT and NCAC memberships this year? Annual membership fees for NCAC-SOT remain unchanged this year and are only \$25 for regular memberships and \$10 for full-time students. These negligible fees are used to fund our symposium each year and to support a myriad of student activities, including student awards, travel supplements, and K-12 outreach.

If you have not yet renewed your regional Chapter membership, please do so today! You can do that online at <https://www.toxicology.org/membership.asp?page=duesor> or just fill out and mail in the membership application form on the next page.

Membership Application



National Capital Area

MEMBERSHIP APPLICATION

Name: _____
 Affiliation: _____
 Address _____

 City: _____
 State: _____ Zip Code: _____
 Area Code: _____ Phone: _____ FAX: _____
 E-mail: _____
 Membership Type _____ Full Member (\$25) _____ Student (\$10)

Please check the most appropriate responses:

SOT Member	Highest Degree Attained		Type of Affiliation
_____ Yes	_____ A.S.	_____ M.P.H.	_____ Academia
_____ No	_____ B.A.	_____ M.S.	_____ Consulting
	_____ B.S.	_____ M.A.	_____ Contract Lab
	_____ D.V.M.	_____ Ph.D.	_____ Government
	_____ D.V.M./Ph.D.	_____ Sc.D.	_____ Industry- Chemical/Petroleum
	_____ M.D.	_____ V.M.D.	_____ Industry- Pharmaceutical
	_____ M.D./Ph.D.	_____ V.M.D./Ph.D.	_____ Industry- Other
			_____ Other- _____

Please complete the information above and send with a check, money order or credit card (payable to National Capital Area Chapter SOT, no POs) to the address below. The NCAC SOT will review your application, and you will be notified within 30 days. Those not accepted will receive a full refund. *Current RC members: please do not use this form since your renewal dues are billed annually through SOT.*

Payment Type: Money Order _____ Check _____ Credit Card _____
 Credit Card # _____ Exp date _____
 Name on Card _____
 Signature _____

Please send form as a pdf to:
 D. Charles Thompson, Treasurer
d.charles.thompson@fda.hhs.gov

If paying by check, please send to:
 Society of Toxicology, ATTN: Ashley Black
 11190 Sunrise Valley Drive, Suite 300,
 Reston, VA 20191

Current NCAC-SOT Members

Dear NCAC-SOT members,

The NCAC-SOT Executive Board considers useful to publish the membership roster in each newsletter. As of September 2017, the Chapter members are listed below (*First Name → Last Name → Institution*):

Jay	Ansell	Personal Care Products Council
Sarah	Attreed	Johns Hopkins University
Michael	Babich	US Consumer Product Safety Commission
Sainath	Babu	Hampton University
Cheryl	Bast	Keller and Heckman LLP
Ilona	Bebenek	US FDA
Nancy	Beck	U.S. EPA
Richard	Becker	American Chemistry Council
Tracy	Behrsing	US EPA
Rosonald	Bell	Indivior
Adrienne	Black	3E Company
Uni	Blake	American Petroleum Institute
Gary	Bond	US FDA CDER
Steven	Bradbury	Steven P Bradbury & Associates LLC
Elena	Braithwaite	US FDA
Kelly	Brant	US FDA
Richard	Braun	US Army Corps of Engineers
Chad	Brocker	National Cancer Institute
Deborah	Burgin	CDC-ATSDR
John	Burns	
Connie	Chen	ILSI Health and Environmental Sciences Institute
Tracy	Chen	US FDA
Xinrong	Chen	U S Consumer Product Safety Commission
Weihshueh	Chiu	Texas A&M University
Chrissy	Cochran	US FDA
Joseph	Contrera	Computational Toxicology Services LLC
Lisa	Cooper	DSM Nutritional Products

Erdem	Coskun	National Institute of Standards and Technology
Gertrude-Emilia	Costin	Institute for In Vitro Sciences
Irina	Dahms	DSM Nutritional Products Ltd
Pedro	Del Valle	US FDA-CDER
Marcus	Delatte	US FDA-CDER
Jose	Delgado-Jimenez	National Cancer Institute
John	DeSesso	Exponent Inc
Laxmikant	Deshpande	Virginia Commonwealth University
Kimberly	Ehman	Altria
Marion	Ehrich	Virginia-Maryland College of Veterinary Medicine
Michelle	Embry	ILSI Health and Environmental Sciences Institute
Neeraja	Erraguntla	American Chemistry Council
Louan	Fisher	Toxicology Regulatory Services (TRS)
Jennifer	Fleischer	ToxServices LLC
Thomas	Flynn	US FDA-CFSAN
Dana	Freeman	Johns Hopkins University
Shayne	Gad	Gad Consulting Services
Angela	Gallup	Charles River Lab
Joan	Garey	Reproductive Toxicology Center
Lee	Geiger	Geiger Toxicology Consulting
Chandramallika (Molly)	Ghosh	US FDA-CDRH
Peter	Goering	US FDA
Emily	Golden	Johns Hopkins University
Gopakumar	Gopalakrishnan	Supernus Pharmaceuticals Inc
Rupa	Guha	University of Maryland Baltimore

Maureen	Gwinn	US EPA/Office of Research and Development
Karen	Hamernik	US EPA
Wafa	Harrouk	US FDA-CDER
Kristina	Hatlelid	US Consumer Product Safety Commission
Sara	Henry	
Tala	Henry	US EPA-OPPTS
Colette	Hodes	US EPA-OLEM
Charisse	Holmes	PRA Health Sciences
Alan	Hood	US FDA
Eric	Hooker	US Consumer Product Safety Commission
Keith	Hostetler	Toxicology Regulatory Services (TRS)
Terry	Hrubec	Via College of Osteopathic Medicine Virginia Campus
Annette	Iannucci	Occupational Safety and Health Administration
Jon	Inglefield	Emergent BioSolutions Inc
William	Irwin	Regulatory
David	Jackson	US Army Center for Environmental Health Research
Sandra	James-Yi	
David	Jett	NIH Countermeasures Against Chemical Threats (CounterACT) Research Program
Yunhee	Ji	Florida International University
Bernard	Jortner	Virginia-Maryland College of Veterinary Medicine, Virginia Tech
Elizabeth	Katz	US FDA
Athena	Keene	Afton Chemical Corporation
Do Hyung	Kim	Henry M Jackson Foundation for the Advancement of Military Medicine Inc
James	Kim	EOP Office of Management and Budget
Elaine	Knight	NIH-NCI
Charles	Kokoski	US FDA
Gopala	Krishna	PAREXEL
Francis	Kruszewski	American Cleaning Institute
Cindy	Landgren	Office of the Secretary of Defense
Amy	Lavin Williams	Exponent Inc

Jonathan	Leshin	United States Public Health Service
Cissy	Li	US FDA
Anne	Loccisano	Exponent Inc
Linda	Loretz	Personal Care Products Council
Lindsey	Lund	ToxServices LLC
Judith	MacGregor	Toxicology Consulting Services
Michael	Madejczyk	US Army CEHR
Susan	Makris	US EPA-ORD
Wimolnut	Manheng	US FDA-CDER
Joanna	Matheson	US Consumer Product Safety Commission
Antonia	Mattia	US FDA
Kathleen	McCoy	Virginia Commonwealth University
Timothy	McGovern	US FDA
Marie	McKeon	MilliporeSigma (BioReliance/EMD Millipore)
Beth	Milesen	Technology Sciences Group Inc
Michael	Morrow	JPEO Medical Countermeasure Systems
Frederic	Moulin	US FDA
Brian	Mulhern	SciLucent, LLC
Caitlin	Murphy	Smithers Avanza
Laine	Myers	US FDA
Alexander	Nguyen	North Carolina State University
Andrey	Nikiforov	Toxicology Regulatory Services (TRS)
Kristin	Noell	University of Maryland Eastern Shore
Teresa	Palacios- Hernandez	US FDA
Geoffrey	Patton	US FDA
Leslie	Patton	Technology Sciences Group Inc
Jennifer	Pierson	ILSI Health and Environmental Sciences Institute
Anne	Pilaro	US FDA-CBER
Caroline	Pinto	US EPA-ORISE
Karen	Porter	PointCross Life Sciences
Resha	Putzrath	Navy and Marine Corps Public Health Center
Kathleen	Raffaele	US EPA-OSWER

Jennifer	Rayner	SRC
Gunda	Reddy	Army Public Health Center
Emily	Reinke	Army Public Health Center
Paul	Roney	BARDA
Leah	Rosenfeld	US FDA
Laurie	Roszell	Army Public Health Center
Tinashe	Ruwona	Institute for In Vitro Sciences
Kristal	Rychlik	Johns Hopkins University Bloomberg School of Public Health
Shakil	Saghir	Smithers
Laura	Savery	US FDA
Louis	Scarano	US EPA
Anthony	Scialli	Scialli Consulting LLC
Alfred	Sciuto	US Army Medical Research Institute of Chemical Defense
Fenna	Sille	Johns Hopkins Bloomberg School of Public Health
Shelby	Skoog	US FDA
Deborah	Smegal	US FDA
Rosie	Sneed	University of the District of Columbia
Babasaheb	Sonawane	TRACS LLC
Martin	Stephens	Johns Hopkins Bloomberg School of Public Health
Stephan	Stern	Cancer Research Technology Program Leidos Biomedical Research Inc
Anneliese	Striz	FDA
Dale	Strother	ToxSolve LLC
Evi	Struble	US FDA
David	Szabo	Reynolds American Inc
Sean	Taylor	Verto Solutions
Richard	Thomas	Intercet Ltd
D Charles	Thompson	US FDA-CDER
Richard	Troast	Troast Environmental Consulting
Lorraine	Twerdok	TWERDOK CONSULTING, LLC
Vipin	Tyagi	University College of Medical Sciences & GTB Hospital Delhi University

Zemin	Wang	FDA
Zhibin	Wang	Johns Hopkins University
Ronald	Wange	US FDA
Zhengxi	Wei	NIH-NCATS
Kimberly	White	
Margaret	Whittaker	ToxServices LLC
Paddy	Wiesenfeld	US FDA-CFSAN
Gary	Wolfe	Gary Wolfe Toxicology LLC
Elissa	Wong	University of Rochester Medical Center
Linnzi	Wright	US Army Edgewood Chemical Biological Center
Menghang	Xia	NIH
James	Yager	Johns Hopkins Bloomberg School of Public Health

- // -

NCAC-SOT EXECUTIVE BOARD MEMBERS CONTACT LIST

President: Tracy Chen (2017-2018)
U.S. Food and Drug Administration
Tracy.chen.tox@gmail.com

Graduate Student Representative: Kristin Noell (2017-2018)
University of Maryland Eastern Shore
Kmnnoell@umes.edu

Vice President: Margaret Whittaker (2017-2018)
ToxServices LLC
202-429-8787
Mwhittaker@toxservices.com

Graduate Student Vice-Representative: Dana Freeman (2017-2018)
Johns Hopkins University
dfreem20@jhmi.edu

Treasurer: D. Charles Thompson (2017-2020)
U.S. Food and Drug Administration
dct590122@comcast.net

Secretary: Xinrong Chen (2017-2020)
U.S. Consumer Product Safety Commission
Xinrong_chen@hotmail.com

Councilors: Pedro L. Del Valle (2016-2018)
Past President & Chair of Outreach Activities
U.S. Food and Drug Administration
pedroldelvalle@verizon.net

Gertrude-Emilia Costin (2015-2018)
Newsletter Editor
Institute for In Vitro Sciences, Inc.
301-947-6524
ecostin@iivs.org

Lorraine Twerdok (2016-2019)
Website Coordinator
TWERDOK CONSULTING, LLC
letwerdok@verizon.net

Elena Braithwaite (2016-2019)
Student Liaison
U.S. Food and Drug Administration
doctorelena@yahoo.com

Postdoctoral Representative: Laura Savery (2017-2019)
US Food and Drug Administration
saverylc@gmail.com

Elections – Meet the New Board Members

New elected Board Members will join the Board on May 1st, 2018.

Vice President/President-Elect

Emily F. Madden, PhD, DABT



Dr. Emily Madden is a toxicologist with over fifteen years of diverse experience in the dietary supplement and pharmaceutical industries. Prior to working at ToxServices, Dr. Madden served as the company toxicologist for a dietary supplement manufacturer and her experience includes assessing the safety of dietary supplements, food ingredients, personal care products and essential oils and investigating serious adverse events. In this position, she has also written comprehensive safety evaluations for dietary ingredients in self-affirmed Generally Recognized as Safe (GRAS) reports and developed SOPs for evaluating product safety and investigating adverse events. In addition, Dr. Madden was a study director for a contract research organization and has directed preclinical toxicology studies for submission to regulatory agencies. Her strengths include in-depth knowledge of FDA regulations and excellent verbal and written communications skills that encompass publications in peer-reviewed journals and book chapters and presentations at scientific meetings.

Dr. Madden is a Diplomate of the American Board of Toxicology who earned a Ph.D. in Toxicology from The University of Maryland, Baltimore and a B.S. in Biochemistry from the State University of New York at Geneseo. Dr. Madden was a Post-Doctoral Research Fellow at the Center for Devices and Radiological Health of the U.S. Food and Drug Administration where she investigated rodent models of subclinical kidney injury for use in the safety assessment of medical device materials. Dr. Madden has also served in the U.S. Army where she researched and developed microencapsulation and sustained-release drug formulations and was awarded the Meritorious Service Medal for her contributions.

Councilor (Newsletter Editor)

Frederic Moulin, PhD



Dr. Frederic Moulin is a toxicologist in the division of Bone, Reproductive and Urologic Products (DBRUP) of the US Food and Drug Administration. He was born in Caen, France and received his Doctorate in Veterinary Medicine from the Veterinary School of the University of Lyon. After graduation, he practiced large animal medicine in Franche-Comté before switching to laboratory animal medicine for the French Department of Defense. Fate, in the form of an American exchange student, brought him to Michigan State University where he investigated the role of thrombin in LPS induced liver injury in the laboratories of Dr. Robert Roth and Dr. Patricia Ganey. After graduation, he became a post-doctoral fellow at the Chemical Industry Institute of Toxicology, studying the neurological effects of manganese inhalation for Ethyl Corporation in the laboratory of Dr. David Dorman. In 2000, Dr. Moulin joined the Discovery Toxicology department of Bristol-Myers Squibb (BMS) as a research investigator focusing on metabolism-mediated drug-induced liver injury and its early detection in drug discovery. At BMS, Dr. Moulin supported discovery programs in Cardiovascular, Thrombosis and Metabolic Diseases in New Jersey, and later in Antiviral and Neurosciences in Connecticut. In 2015, he joined the Center for Drug Evaluation and Research as a reviewer. He is a member of the rare diseases subcommittee, the liver toxicology working group, the division data standards lead (DDSL) and an investigator for the NCTR. In his spare time, he is a ski patroller at Whitetail ski resort and an avid skier and mountaineer.

Graduate Student Vice Representative

Sarah E. Attreed, MS



Sarah is currently a third-year Ph.D. student in the Toxicology, Physiology and Molecular Mechanisms program at Johns Hopkins University (JHU) Department of Environmental Health and Engineering. For the past year and a half Sarah has been working in the laboratory of Dr. Fenna Sillé, focusing her research on altered immune response to influenza vaccination in arsenic-exposed mice. Additionally Sarah has been an active member of her department's Student Organization for the past two years, acting first as student representative to the Educational Programming Committee and now as secretary. Moreover, she has sought a number of outreach activities during her time at JHU. In her first year she trained as a student educator for Community Adolescent Sexual Education (CASE). As a CASE educator, Sarah was able to teach sexual education to middle school children in inner city Baltimore who would not otherwise have had access to this resource.

Sarah also applied in her second year to join the Lyme Corps, a group of CDC-trained citizen activists who disseminate evidence-based information about Lyme disease and other tick-borne illnesses.

Prior to coming to JHU, Sarah worked in Dr. Judith Zelikoff's lab at New York University (NYU) Department of Environmental Medicine, researching the immunotoxic effects of exposure to hydraulic fracturing "produced" water. This work earned her an **M.S.** in Organ System Toxicology in 2015. While pursuing her **M.S.** degree she engaged in outreach work in communities of New York and Pennsylvania where hydraulic fracturing was proposed or had already begun. This community engagement work involved evaluating and addressing the needs, concerns and general inquiries of local citizens.

Sarah has won a number of regional and specialty section awards through the Society of Toxicology (SOT) since her time as a master's student for both her posters and presentations. It is one of her greatest pleasures in life being able to communicate complex health topics to audiences of all different backgrounds.

She has a deep personal interest in public health issues of ethical and social importance. Having a father who was an electrician in New York City for nearly 40 years, and having worked as an electrician's apprentice, she has always understood the importance of advocating for and securing rights for at risk populations. Additionally, working as a health inspector in New York State for two years gave her hands-on experience in health and safety regulations. As the graduate student vice representative for the National **Capitol** Area Chapter of SOT, she would like to expand participation in this group amongst junior SOT members and continue to foster an understanding of how toxicological research fits into a broader social and policy context.

- // -

NCAC-SOT ACTIVITIES UPDATE

Reports – 2017 Meetings

NCAC-SOT 2017 Fall Symposium: TSCA: Best Practices in Toxicology, Risk and Chemical Management Strategies



Chemical
Society of
Washington

On October 13, 2017 the NCAC-SOT organized the Fall Symposium titled TSCA: Best Practices in Toxicology, Risk, and Chemical Management Strategies which was co-hosted with the American Chemical Society's Local Section, the Chemical Society of Washington. The activity allowed participants to join in person or via webcast and to listen to diverse viewpoints from US EPA, the American Chemistry Council, the Natural Resources Defense Council and other experts to learn more about TSCA (Toxic Substances Control Act). Students and Postdocs participated with posters and entered the competition and participated in the mentoring luncheon. The Student Liaison's letter shares the winners of the awards for the poster competition. It was a very successful activity and we thank you for your participation and to our speakers for sharing from their knowledge and for engaging in productive discussions during the symposium.

Time	Topic	Speaker
8:30-9:00 AM	Registration opens	
9:00-9:15 AM	Opening Remarks	Meg Whittaker (NCAC-SOT Vice President) Jen Tanir (CSW Secretary)
9:15-9:45 AM	Implementing New Reforms to TSCA – Advancing Agency Processes for Chemical Prioritization and Risk Evaluation	Nancy B. Beck (Deputy Assistant Administrator, Office of Chemical Safety and Pollution Prevention, U.S. EPA)
9:45-10:15 AM	The Effect of TSCA Reform on New and Existing Chemicals: EPA Review, Regulation, and Testing Requirements	Richard Engler (Bergeson & Campbell PC Senior Chemist)
10:15-10:45 AM	Break	
10:45-11:15 AM	TSCA Implementation: The Importance of Ensuring Rigorous Assessment to Address Hazardous Chemicals On or Entering the Market	Jennifer Sass (Natural Resources Defense Council Senior Scientist) and Bob Sussman (Georgetown Law Center and Yale Law School)
11:15 -11:45 AM	Three Speaker Panel Q&A	Chair: Meg Whittaker
11:45 AM-1:15 PM	Lunch and Student/Post-Doc Poster Session	
1:15-2:00 PM	On the Utility of EPA's Toxics Release Inventory (TRI) in Assessing the Effectiveness of Industrial Green Chemistry Practices, and TRI's Role in Support of TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21 st Century Act	Stephen C. DeVito (Senior Scientist, Toxics Release Inventory Program, U.S. EPA)
2:00-2:45 PM	Advancing Risk Assessment Methods and Practices in the Implementation of New TSCA	Tala Henry (Director, Risk Assessment Division, Office of Pollution Prevention and Toxics, U.S. EPA)
2:45-3:15 PM	Break	
3:15-3:45 PM	The New TSCA – Enhancing Transparency, Objectivity and Consistency in the Risk Assessment Process	Kimberly White (American Chemistry Council Chemical Products and Technology Division Senior Director)
3:45-4:30 PM	Group Panel Q&A	Chair: Jen Tanir
4:30 PM	Wrap-up	

Meetings of Interest

SOT 57th Annual Meeting and ToxExpo



Letter from the SOT President

On behalf of the SOT Council, Committees, Exhibitors, Regional Chapters, Special Interest Groups, Specialty Sections, Supporters, and other partners, I invite you to join us in San Antonio, Texas, March 11–15, 2018, for the SOT 57th Annual Meeting and ToxExpo.

Every year, SOT prides itself on hosting the preeminent toxicology conference in the world, providing access to groundbreaking, basic, and applied science. More than 2,000 presenters will be sharing their research and expertise during the 170+ Scientific Sessions, featuring more than 2,500 abstracts.

Based on feedback from our members and meeting attendees, we are excited to announce a new all-day Poster Session format for 2018. We believe this will enhance the experience of all attendees who in the past may not have been able to visit posters due to conflicting schedules.

With more than 6,500 toxicologists from all over the world expected to attend, opportunities for networking and finding new collaborators are abundant - from the Scientific Sessions and other daytime events through the evening receptions. To help attendees make connections, once again, we have created dedicated networking time on Tuesday and encourage you to visit with the 330+ ToxExpo exhibitors during this time. As always, ToxExpo is hosting leading organizations, companies, laboratories, agencies, research partners, and more, ready to provide information on new products and technology, career and partnership opportunities, and other toxicological research-related support.

SOT is delighted to be returning to San Antonio for the first time since 2013. The newly renovated Henry B. González Convention Center is located near the River Walk, adjacent to Hemisfair Park, and a short walk to the Alamo, Spanish Missions, and Market Square.

I hope you join us in the heart of Texas for the 57th Annual Meeting and ToxExpo to help explore, advance, and understand the field of toxicology.

Sincerely,

Patricia E. Ganey, PhD
2017–2018 SOT President

NCAC-SOT and NCSOT Joint Reception/Mixer

Dear NCAC-SOT members,

We would like to invite you to join our joint reception with the North Carolina Chapter of the Society of Toxicology (NCSOT) during the 57th SOT Annual Meeting in San Antonio, TX. The joint reception information is listed below and on the flyer.

Event: National Capital Area Chapter SOT (NCAC-SOT) & North Carolina Chapter SOT (NCSOT): Joint Reception/Mixer

Time: Monday, 3/12/2018, 7:30-9:00 PM

Venue: Pat O'Brien's (<http://www.patobriens.com/patobriens/sanantonio/>), 121 Alamo Plaza, San Antonio, TX 78205

Registration: click [here](#) (RSVP required; limited space available!!)

Food and Drinks will be available! Don't forget to **bring your SOT badge!** On behalf of the NCAC-SOT Board, we look forward to meeting with you in San Antonio!

Tracy Chen, PhD, DABT
President, NCAC-SOT



Attention Chapter Members!

The National Capital Area Chapter of the Society of Toxicology (NCAC-SOT)
and
North Carolina Chapter of the Society of Toxicology (NCSOT)

Invite you to a Joint Reception/Mixer!

Location: Pat O'Briens (<http://www.patobriens.com/patobriens/sanantonio/>)
121 Alamo Plaza, San Antonio, TX 78205

Monday, March 12, 2018 7:00 p.m. – 9:00 p.m.



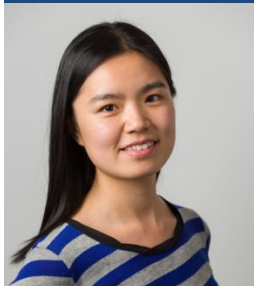
Food and Drinks will be available!
Please [register](#) here
RSVP required; limited space available
Don't forget to bring your SOT badge!



2018 National Capital Area Chapter Bern Schwetz Travel Award Winners



Bern Schwetz Postdoctoral Scholar Travel Award



Zhengxi Wei was awarded first place for her abstract entitled “Profiling Environmental Chemicals which Modulate the TGF β /SMAD TGF β ”/SMAD Signaling Pathway”.

Bern Schwetz Graduate Student Travel Award



Sarah Attreed was awarded first place for her abstract entitled “Chronic Arsenic Exposure Reduces Influenza Vaccine Immunogenicity in Adult Female C57BL/6 Mice”.



Alexander Nguyen was awarded second place for his abstract entitled “Cytotoxicity of a Lithium Phenyl (2,4,6-trimethylbenzoyl)phosphinate (LAP) and Gelatin Methacryloyl (GelMA) Hydrogel in Human Kidney Primary Proximal Tubule Cells (hRPTEC)”.

Annual SOT NCAC-SOT Presenter List (presented by day/date, time, alphabetical order – author’s last name)

Date	Time	Session Title	Abstract ID/ Poster Board	Author(s)	Presentation Title	Institution
				First (initial). Last Name		
3/12/2018	9:15 AM to 10:45 AM	Emerging Technologies	2151/ P488	S. Skoog; L. Savery	Quantitative In Vitro-In Vivo Extrapolation (QIVIVE) of Nickel Toxicity to Tissues Adjacent to a Metallic Implant	US FDA
3/12/2018	3:00 PM to 4:30 PM	Immunotoxicity	1117/ P147	S.E. Attreed	Chronic Arsenic Exposure Reduces Influenza Vaccine Immunogenicity in Adult Female C57BL/6 Mice	Johns Hopkins University Bloomberg School of Public Health
3/13/2018	9:15 AM to 12:00 Noon	Understanding the Molecular Mechanisms of Zika Virus Reproductive and Developmental Toxicity	Symposium Session:	P. L. Del Valle	Introduction: A Brief Overview of Zika Virus Infection and Current Magnitude of Infection and Chair of the session	US FDA
3/13/2018	3:00 PM to 4:30 PM	Exposure Assessment: Applications	2402/ P758	M.H. Whittaker	Proposition 65 Safe Harbor Determinations for Lead Utilizing Differing Exposure Assessment Approaches	ToxServices LLC
3/13/2018	9:15 AM to 10:45 AM	Emerging Technologies	2152/ P489	A.K. Nguyen	Cytotoxicity of a Lithium Phenyl(2,4,6-trimethylbenzoyl)Phosphinate (LAP) and Gelatin Methacryloyl (GelMA) Hydrogel in Human Kidney Primary Proximal Tubule Cells (hRPTEC)	North Carolina State University
3/13/2018	10:45 AM to 12:15 PM	Neurotoxicology: Neurodegenerative Disease II: Parkinson’s Disease and Dopaminergic Toxicity	2230/ P571	D. Freeman	Toxicity, Recovery, and Resilience in a 3D Dopaminergic In Vitro Model Exposed to Rotenone	Johns Hopkins Bloomberg School of Public Health
3/13/2018	9:15 AM to 10:45 AM	Medical Devices	2150/ P487	L. Savery	Safety Assessment of Color Additives Released from Medical Devices	US FDA
3/14/2018	8:00 am to 10:45 AM	Zika Pathophysiology and Potential Intervention	Platform Session	P. L. Del Valle	Chairing with Co-Chair E. Hernandez-Ramon	US FDA
3/14/2018	9:15 AM to 10:45 AM	Animal Models	3082/ P709	S.A. Saghir	Geriatric Toxicology: Understanding Human Relevance of Toxicities Observed at Late Stage of Long-Term Animal Studies	Smithers Avanza
3/14/2018	3:00 PM to 4:30 PM	Risk Assessment Applications I	2831/ P354	M.H. Whittaker	Derivation of an Oral Reference Dose for Trimethyl Silanol	ToxServices LLC
3/14/2018	3:00 PM to 4:30 PM	Risk Assessment Applications II	2848/ P371	M.H. Whittaker	A Class-Based Evaluation of 2,5-Dimethyl-2,5-Hexanediol in Drinking Water	ToxServices LLC

Date	Time	Session Title	Abstract ID/ Poster Board	Author(s)	Presentation Title	Institution
				First (initial). Last Name		
3/14/2018	9:15 AM to 10:45 AM	Alternatives to Mammalian Models II	3127/ P755	K.M. Noell	Evaluation of Metabolic Response during Lipid Starvation of a Model Parasite <i>Perkinsus marinus</i>	University of Maryland Eastern Shore
3/14/2018	9:15 AM to 10:45 AM	Alternatives to Mammalian Models II	3128/ P756	Z. Wei	Profiling Environmental Chemicals Which Modulate the TGF β /SMAD Signaling Pathway	NIH/NCATS
3/14/2018	1:30 PM to 3:00 PM	Modeling of Pharmacokinetics and Biological Effect	3196/ P835	G. Costin	Oral Irritation Assessment of Electronic Liquids Using an In Vitro Oral Testing Model	IIVS
3/14/2018	4:43 PM to 4:52 PM	The Kinetically-Derived Maximum Dose (KMD), a New Dimension to the Maximum Tolerated Dose (MTD)	Lecture	S.A. Saghir	Use of KMD in Regulatory-Mandated Toxicity Testing of Non-Pharmaceuticals: From Concept to Application	Smithers Avanza

NCAC-SOT Spring Symposium



The theme of our Spring Symposium is Consumer Products – Motivating and Promoting Toxicity Reduction and it will take place in April 2018. NCAC Board members have been preparing for this event. The Vice President, Dr. Margaret Whittaker will share more details soon via community posts. Stay tuned!

- // -

Outreach Activities

Update from the Chairs

Dear NCAC Members,

The NCAC Board is planning the 2018 Outreach Activities in the DC area with the support of SRC, a not-for-profit, R&D corporation that has supported us in previous years as well. The main two activities for 2018 include judging at 8 RSF and participate in the Festival Expo of the USA Science and Engineering Festival. Volunteers will receive 1 t-shirt for all outreach activities during the year and are requested to wear the shirt during the event participation.

RSF: We need at least 5-6 volunteers to judge each RSF and select a First and Second Place winners to receive the 2018 NCAC Regional Science Fair Toxicology Award. A Coordinator will be appointed for each RSF and will be responsible for presenting or providing the awards to RSF Directors and providing me the names, title of the projects and contact information for each winner. The NCAC will provide a Certificate and a First-Place cash award for \$100 and a Second-Place cash award for \$50. Awards will be distributed evenly in case there will be more than 1 presenter per project.

USA Science & Engineer Festival: Times are Saturday 10 am - 6 pm and Sunday 10 am - 4 pm. We will organize volunteers in block of 2-h shifts and will need at least 3-4 volunteers per shift. I will send an update on time shifts by the middle of March.

Please select the activity(ies) you would like to participate from the list below, indicate if you are willing to act as RSF Coordinator, and send an email to Pedro.DelValle@fda.hhs.gov with the **subject "NCAC Outreach"**.

- March 3** Anne Arundel County Regional Science & Engineering Fair, North County HS, Glen Burnie, MD
- March 10** Montgomery County Science Fair, FDA, Silver Spring, MD
- March 10** Prince William-Manassas Regional Science Fair, Kelly Leadership Center, Manassas, VA
- March 15** Loudoun County Regional Science & Engineering Fair, Riverside HS, Leesburg, VA
- March 17** Fairfax County Regional Science and Engineering Fair, Robinson Secondary School Fairfax VA
- March 17** DC STEM Fair, *location TBA*
- March 24** Prince George's Area Science Fair (Calvert, Prince George's, and St. Mary's Counties), Charles Herbert Flowers HS, Springdale, MD
- March 24** Baltimore Science Fair, Towson University, Towson, MD
- April 7-8** USA Science & Engineering Festival, Walter E. Washington Convention Center, DC

Thank you for your participation. The success of NCAC Outreach Activities in previous years was based on your participation to donate your time and reach out to the community to promote and make awareness of Toxicology.

Pedro L. Del Valle
Past President NCAC-SOT

WHAT'S NEW IN TOXICOLOGY?

In this Spring issue of the NCAC-SOT Newsletter, we invited the President of NCAC-SOT, Dr. Tracy Chen, to share with us about the recently launched FDA's Predictive Toxicology Roadmap.

FDA's Predictive Toxicology Roadmap

Toxicology testing plays a key role in ensuring the safety of FDA-regulated products. As new methods are being developed for toxicity testing, they offer unique opportunities to enhance our ability to quickly and more accurately predict toxicities and reduce associated risks. These breakthroughs have potential to help us move products to the market faster while preventing those with increased toxicological risk from ever reaching the market. In some cases, these technologies reduce the need for animal testing – furthering FDA's long-held goal of refining, reducing, and replacing testing on animals.

During the past decade, FDA scientists have taken major steps to upgrade their toxicology toolboxes. However, FDA has also recognized the need for a comprehensive strategy to evaluate new methodologies and technologies for their potential to expand the Agency's toxicology predictive capabilities and to potentially reduce the use of animal testing.

In early December 2017, FDA launched its [Predictive Toxicology Roadmap](#), a six-part framework for integrating predictive toxicology methods into safety and risk assessments (also see the news from [FDA Voice](#)). The roadmap was developed by senior FDA toxicologists across the Agency with deep expertise in FDA's product areas and knowledge of the differing legal authorities for evaluating safety and toxicity in those product areas.

Among other recommendations, FDA's roadmap calls for FDA research to determine data gaps and to support intramural and extramural research to make sure that the most promising technologies are developed, validated, and integrated into the product pipeline. The roadmap also identifies toxicology issues that need tackling for FDA-regulated products and toxicology areas that could benefit from improved predictivity.

Tracy Chen, PhD, DABT
Chair, FDA Toxicology Working Group
Office of Regulatory Science and Innovation
Office of the Chief Scientist, Office of the Commissioner
Food and Drug Administration

- // -

MEMBERS ACCOMPLISHMENTS CORNER (September 2017 through March 2018)

At NCAC-SOT we like to acknowledge the accomplishments of our members. The Newsletter Editor will send an email to the members asking to share their publications, presentations and other accomplishments from the last number of the newsletter to date to be included in the next number. We are happy to spread the word of your successes, so please take advantage of this opportunity to share them with your colleagues.

Publications and Presentations

Presented in alphabetical order based on the author who is member of the NCAC-SOT (underlined)

Books/chapters

Jett, D.A., Guignet, M., Supasai, S., and P. Lein. Developmental toxicity within the central cholinergic nervous system. In: "Handbook of Developmental Neurotoxicology, Second Edition", edited by William Slikker Jr., Merle G. Paule, and Cheng Wang, Elsevier, New York, 2018.

Saghir SA, Dorato MA. Role of absorption, distribution, metabolism, excretion, and systemic dose in toxicology testing. In: "Comprehensive Toxicology", Third Edition, vol 9, McQueen CA (ed.), pp. 95-118. Oxford: Elsevier Ltd., 2017.

Manuscripts

Costin G.-E., Menon G.K. Know your skin cells: III. The melanocyte. *Cosmetic Chemist*. 2018. Available at: http://www.thecosmeticchemist.com/education/skin_science/know_your_skin_cells_iii_the_melanocytes.html.

Jinot J., Fritz J.M., Vulimiri S.V., Keshava N. Carcinogenicity of Ethylene Oxide: Key Findings and Scientific Issues. *Toxicol Mech Methods*. 2017; Dec 6:1-27. doi: 10.1080/15376516.2017.1414343. [*Epub ahead of print*].

Choudhuri S., Patton G.W., Chanderbhan R.F., Mattia A., Klaassen C.D. From Classical Toxicology to Tox21: Some Critical Conceptual and Technological Advances in the Molecular Understanding of the Toxic Response Beginning From the Last Quarter of the 20th Century. *Toxicol Sci*. 2018 Jan 1;161(1):5-22.

Chandrasekar V., Janes D., Riaz Ahmed K.B. et al. Improving risk assessment of color additives in medical device polymers, *J. Biomed. Mater Res. B. Appl. Biomater.*, 2018, 106 (1):310-319.

Awarded manuscript

*President's Award for the **Best Paper Published in 2016** in the International Journal of Toxicology by the American College of Toxicology (Award presented at ACT's 2017 Annual Meeting in Palm Springs, CA):* Sharma A., Morrison J.P., Rao D.B., Pardo I.D., Garman R.H., Bolon B. Toxicologic Pathology Analysis for Translational Neuroscience: Improving Human Risk Assessment Using Optimized Animal Data. *Int. J. Toxicol.* (published online doi:10.1177/1091581816636372ijt.sagepub.com 2016).

Lectures

Jett, D.A. 2018 "The NIH CounterACT Program: Chemical Threats Targeting the Nervous System", Grand Rounds, Neurology Departments of Walter Reed National Military Medical Center and the Uniformed Health Sciences University of the Health Sciences, Bethesda, MD.

Training Course Presentations

Costin G.-E. *In vitro* assays used for safety assessment: skin irritation and corrosion. Replacing regulatory experiments on animal webinar series. The webinar was recorded for the 2017 course “Replacing regulatory experiments on animals: an introduction to *in silico* models and *in vitro* test methods”. The course was co-hosted by PETA India and the Institute of Home Economics, University of Delhi. October, 2017. Available at: <https://www.piscltd.org.uk/replacing-regulatory-experiments-course/>.

Costin G.-E. *In Vitro* Skin Corrosion and Irritation Assays: Overview. PETA International Science Consortium (PISC) sponsored expert training in animal-free testing. February 8-9, 2018. More info available at: <https://www.peta.org/blog/peta-intl-science-consortium-sponsors-expert-training-animal-free-testing/>.

Webinars

Costin G.-E. and Rovidia C. Skin irritation and corrosion webinar. REACHing for alternatives to animal testing. A new webinar series on modern testing strategies for REACH organized by the PETA International Science Consortium and Chemical Watch. January 2018. Available at: <https://www.piscltd.org.uk/reaching-alternatives-animal-testing/>.