



# Neurotoxicology Specialty Section

Fall 2017

## Dear Neurotoxicology Specialty Section (NTSS) Members:

The NTSS Executive Committee would like to update you on the activities of our specialty section from the past several months, and announce new deadlines and important award information. We hope you are able to submit an abstract and look forward to seeing you at the upcoming 2018 SOT meeting in San Antonio, TX, March 11-15, 12018.

## IMPORTANT DEADLINES FOR 2017-2018 NTSS AWARDS (detailed information for each can be found in the newsletter)

Abstract and Awards	Deadlines	Eligibility requirements
<b>SOT Abstract</b>	<b>October 9, 2017</b>	All members of SOT
<b>Toshio Narahashi NTSS Trainee Conference Endowment Award</b>	<b>November 6, 2017</b>	Graduate Students and Postdoctoral Fellows must be members of NTSS or show evidence of application for membership. Undergraduates and Post-Baccalaureates need not be members, but submitted abstract must be neurotoxicology focused. All applicants must be in attendance at the 2018 annual meeting, <a href="http://www.toxicology.org/groups/ss/NTSS/awards.asp">www.toxicology.org/groups/ss/NTSS/awards.asp</a> .
<b>Distinguished Neurotoxicologist Award</b>	<b>December 8, 2017</b>	Full, Retired, or Emeritus members of NTSS nominated by two full members of SOT, one of whom must be a member of NTSS, <a href="http://www.toxicology.org/groups/ss/NTSS/awards.asp">www.toxicology.org/groups/ss/NTSS/awards.asp</a> .
<b>Toshio Narahashi Neurotoxicology SS Graduate Student and Postdoctoral Fellow/Associate Poster Award</b>	<b>Phase 1: February 12, 2018</b> <b>Phase 2: March 2, 2018</b>	Graduate students and postdoctoral research fellows/associates who are NTSS members or show evidence of application for membership, and must be in attendance at the 2018 annual meeting, <a href="http://www.toxicology.org/groups/ss/NTSS/awards.asp">www.toxicology.org/groups/ss/NTSS/awards.asp</a> .

## SUBMIT AN ABSTRACT FOR THE 2018 SOT NATIONAL MEETING

**DEADLINE FOR ABSTRACT SUBMISSION IS OCTOBER 9<sup>TH</sup>, 2017**

Top reasons for rejection of an abstract submission by the SOT Scientific Planning Committee includes:

1. Test substance is not defined
2. The abstract is poorly written, including use of chemical abbreviations or uncommon jargon
3. Abstract promotes a commercial product and sounds like an advertisement for a company
4. The abstract is one of several emanating from a single study and cannot form a separate presentation
5. The abstract provides little data or is a literature review with no new interpretations or applications.

## 2018 - NTSS INTERESTS ARE WELL REPRESENTED IN SOT SPONSORED SESSIONS

Six sessions endorsed by NTSS to appear on the 2018 Meeting Agenda!

The Use of Advanced Imaging and Microscopy Techniques to Detect, Determine and Treat Disease and Retinotoxicity in Man and Experimental Models
Toxicological Implication of Copper in Neurodegenerative Diseases
Decoding Oxidative Stress from Inflammation: Implications for Exposure, Toxicity, and Disease
Mechanisms of Autophagic Function and Dysfunction in Neurotoxicity and Neurodegeneration
Reaching Hazard Conclusions for Endocrine Disrupting Chemicals: Adapting Systematic Review Methods to Critically Assess the Evidence
A Search for Biomarkers of Neurotoxicity: A Practical Approach

## ANNOUNCING 2018 TOSHIO NARAHASHI TRAINEE CONFERENCE AWARD

The Neurotoxicology Specialty Section is committed to helping student members defray monetary costs of attending our annual meeting. As a result, we encourage all Post-Baccalaureates, Graduate Students, and Postdoctoral Fellows to apply for our Toshio Narahashi Trainee Conference Award. This is a travel award selected based on the scientific merit of submitted SOT abstracts and with a commitment from mentors that any additional travel costs will be covered to ensure students are able to participate in the meeting.

**Eligibility requirements:** More detailed information about eligibility, submission requirements, and judgment criteria is available on the NTSS website: <http://www.toxicology.org/groups/ss/NTSS/awards.asp>

**Submission requirements:** (1) The original abstract submitted to SOT, (2) a CV, and (3) the completed conference award form (<http://www.toxicology.org/groups/ss/NTSS/awards.asp>) **must be submitted as a single pdf** to [Lucio Costa \(lgcosta@u.washington.edu\)](mailto:lgcosta@u.washington.edu), **NTSS Vice-President Elect by November 6, 2017**. Please note that the conference award form has a separate section that needs to be filled out by the mentor and that section will be submitted separately.

## CONGRATULATIONS TO THE 2017 TOSHIO NARAHASHI TRAINEE CONFERENCE AWARD WINNERS!



**Shelbie Burchfield** — Northeast Ohio Medical University, Mentor: Dr. Jason Richardson

**Gelareh Alam** — Northeast Ohio Medical University, Mentor: Dr. Jason Richardson

**Pallavi Pilaka** — Virginia Commonwealth University, Mentor: Dr. Andrew Ottens

**SPECIAL THANKS TO NTSS VICE PRESIDENT  
MICHELLE BLOCK FOR CHAIRING THIS COMPETITION**

Left to Right: Jason Richardson, Gelareh Alam, Dhelbie Burchfield, Pallavi Pilaka, Andrew Ottens

## ANNOUNCING 2018 TOSHIO NARAHASHI POSTER COMPETITION

The Neurotoxicology Specialty Section is committed to highlighting and supporting the excellent research conducted by our Graduate Student and Postdoctoral members. The Toshio Narahashi Poster Competition allows students to present their research and to be recognized for their excellent work and presentation ability. Additionally, it provides an opportunity for members to exchange ideas and share new research, as there are over 40 NTSS members that participate in judging abstracts and poster presentations. We encourage all NTSS student members to participate! Posters will be presented during the 2018 SOT meeting. **Please see pictures below for past award winners.**

**Eligibility requirements:** More detailed information about eligibility, submission requirements, and judgment criteria is available on the NTSS website: <http://www.toxicology.org/groups/ss/NTSS/awards.asp>

**Submission requirements:** (1) An extended abstract as defined above (3 pages); and (2) a letter of support from the graduate student's advisor or postdoctoral mentor outlining the independence and role of the candidate in the research must be submitted to **Abby Li** ([abbyli@exponent.com](mailto:abbyli@exponent.com)), Chair of the NTSS Student and Postdoctoral Awards Committee by **February 12, 2018**. Participants will also be required to send a **PDF of their complete poster to Dr. Li by March 2, 2018** to facilitate the judging (this pre-submission of the poster need not be the final version presented at the 2018 Annual Meeting). Monetary prizes and plaques will be awarded for first, second and third place. Winners will be announced at the annual NTSS Business Meeting in San Antonio.

NTSS members interested in judging either extended abstracts and/or posters should contact **Abby Li** ([abbyli@exponent.com](mailto:abbyli@exponent.com)) or **Vanessa Finsanakis** ([vfitsanakis@neomed.edu](mailto:vfitsanakis@neomed.edu)).

## CONGRATULATIONS TO THE 2017 TOSHIO NARAHASHI POSTER COMPETITION WINNERS!

### GRADUATE STUDENTS:



Left to Right: Lauren Aleksunes, Diana You, Jason Richardson, Jennifer Panlilio, Mark Hahn, Anumantha Kanthasamy, Monica Langley, Amy Zmarowski

### **1<sup>st</sup> Place Sponsored by Batelle.**

**1<sup>st</sup>. Monica Langley** — Iowa State University, Mentor: Anumantha Kanthasamy

**2<sup>nd</sup>. Jennifer Panlilio** — Penn State University, Mentor: Alura/Hahn

**3<sup>rd</sup>. Diana You** — Northeast Ohio Medical University, Mentor: Aleksunes/Richardson





Left to Right: Suren Bandara, Pam Lein, Kimberly Keil, Katie O'Shaughnessy, Mary Gilbert

## **POSTDOCTORAL FELLOWS:**

**1<sup>st</sup>: Kimberly Keil** — U California, Davis,  
Mentor: Pam Lein

**2<sup>nd</sup>: Katie O'Shaughnessy** — U.S.  
Environmental Protection Agency,  
Mentor: Mary Gilbert

**3<sup>rd</sup>: Suren Bandara** —U California, Davis,  
Mentor: Pam Lein

**SPECIAL THANKS TO WILL BOYES AND HELEN  
SABLE FOR CHAIRING THIS COMPETITION  
and  
THE 40 VOLUNTEER JUDGES THAT HAD THE  
ARDUOUS TASK OF EVALUATING AND  
SCORING ALL THE GRADUATE STUDENT AND  
POSTDOCTORAL PARTICIPANTS**

## **ELECTION OF NEW NTSS OFFICERS**

**Call for Nominations:** Early in 2018, NTSS will elect a new Vice-President-Elect, a Counselor, a Secretary/Treasurer, and Post-Doctoral and Graduate Student Representative. It is time to gather nominations for those offices. **Will Boyes** will chair the Nominating Committee this year as the Past Past President, and requests your suggestions. Please carefully consider your nominations – no particular expertise is required, but candidates should be dedicated to service for NTSS. Remember that the future success of the specialty section will be dependent on these people. It is best if the nominator knows the candidate is willing to serve, but the Chair and other Nominating Committee members will make those contacts. **Please forward the names and contact information of all nominees to Will Boyes ([boyes.william@epa.gov](mailto:boyes.william@epa.gov)) by December 1, 2017.**

## **CALL FOR NEWSLETTER COMMITTEE VOLUNTEERS**

Are you interested in becoming more involved in NTSS? Consider volunteering for the Newsletter Committee. Biyearly, NTSS sends a newsletter with informative updates about the specialty section to the entire membership. As a volunteer, you have access to the most up-to-date info about NTSS! This is also an excellent opportunity to network with fellow NTSS members, as well as gain valuable scientific communication skills. If you have any questions or are interested in volunteering, please email **David Edmondson ([edmondsd@purdue.edu](mailto:edmondsd@purdue.edu))**, the current NTSS Graduate Student Representative.

## **STUDENTS – VOLUNTEER TO SERVE AS SESSION CHAIR AT 2018 SOT MEETING!**

Are you interested in becoming more involved during the SOT meeting? Student members are encouraged to indicate their willingness to chair a session at the 2018 SOT meeting! Guidance will be provided. Gain experience, add it to your CV, get a fancy ribbon for your nametag! Check the box when you submit your abstract and of selected, you will be contacted by the Scientific Programming Committee of SOT.

## **TOSHIO NARAHASHI NEUROTOXICOLOGY FELLOWSHIP ENDOWMENT FUND**

### **SPECIAL THANKS TO OUR CORPORATE SPONSORS AND SUBSTANTIAL ENDOWMENT DONORS!**

Special thanks to **Battelle Research Laboratories** for funding the '**2017 Best Student Research Award**' and to **Charles River Laboratories** for '**Corporate Gold Level**' donation to the Toshio Narahashi Neurotoxicology Fellowship Award Fund.

### **SOT'S 2016-2017 Honor Roll of Contributors To Toshio Narahashi Neurotoxicology Endowment Fund!**

Charles River Laboratories (Institutional Gold)

Marion Ehrich, Gary and Patti Miller, Richard Nass (Lifetime Paracelsus Circle Benefactors)

Joan Cramner, Pamela Lein (Lifetime Paracelsus Circle Member)

James P. O'Callaghan, Mary Gilbert, Editors of Neurotoxicology & Teratology (Paracelsus Circle)

Abby Li and Pui-Yan Kwok, Michelle Block, Susan Makris (Gold)

Edward Levin, Galen William Miller, Merle Paule, Kristen Ryan (Silver)

Jason Cannon (Bronze)

**THANK YOU** to many who contributed to the **Toshio Narahashi Endowment Fund** between 2011 and today (see [Donors](#)). In the last two years, these donations have tapered off. Please consider contributing again or for the first time! For this fiscal year 2017, the SOT Council has agreed to match donations to any endowment fund dollar for dollar up to \$60,000. As of last month, 50,000 dollars was still available. Increasing the endowment fund will enhance the dollar amount and number of trainee awards that NTSS can support. Few things that we do, will have such a positive impact on so many young scientists early in their careers, and will continue to do so in perpetuity. **Please help divert these matching funds towards the Toshio Narahashi Endowment Fund by making your donation ASAP!**

1. Click [Donate](#) and fill out the SOT online form <http://www.toxicology.org/ai/csot/contribute.asp>
2. Call SOT and ask for Jim Dailey (703.438.3115 x1428), who can do it over the phone.

Information about different recognition levels and benefits can be found [here](#).

### **CALL FOR DISTINGUISHED NEUROTOXICOLOGIST AWARD NOMINATIONS**

The NTSS has a rich history of inspired scientists advancing our field through research, regulatory, and service accomplishments. The Distinguished Neurotoxicologist Award honors and recognizes NTSS members who have made uniquely significant contributions to the field of neurotoxicology. Accomplishments recognized include sustained and substantial contributions to the scientific understanding of the role of toxicants on the nervous system, improving the scientific basis of regulatory or risk/assessment decisions, and/or service to enhance the neurotoxicology community. At most, only one Distinguished Neurotoxicology Award can be presented each year. **Process:** Nominations for the Distinguished Neurotoxicologist Award for 2018 are encouraged. Nominations must adhere to the guidance provided on the NTSS website, and must be submitted by **December 8, 2017** to NTSS Past President **Abby Li** ([abbyli@exponent.com](mailto:abbyli@exponent.com)). Detailed information regarding the criteria for the award and the nomination process is available on the NTSS website: <http://www.toxicology.org/groups/ss/NTSS/awards.asp>



Dr. Debbie Cory-Slechta, Amy Slechta

### **CONGRATULATIONS TO DR. DEBORAH CORY-SLECHTA 2018 DISTINGUISHED NEUROTOXICOLOGIST**

Dr. Cory-Slechta has demonstrated a life-long commitment to neurotoxicology. She has been a pioneer in championing neurotoxicology and behavioral science, and in exploring the interactions of chemical and non-chemical stressors to understand the complex etiology of behavioral diseases. This research is highlighted, for example, in experimental work

confirming that low-level lead exposure alters neurodevelopment, which was highly influential in setting federal guidelines for developmental lead exposures. Her more recent research including that on the interactions between air pollution exposure and socioeconomic stress on neurodevelopment also promises to be highly influential. In addition, Dr. Cory-Slechta has served extensively in a variety of administrative roles including as Department Chair, Institute Director, and Dean for Research at two prominent academic programs on occupational and environmental health. She also has served on numerous federal advisory panels and as an Officer and President of the NTSS. This overall record of research accomplishments and service marks a singularly distinguished career in neurotoxicology that is recognized by this award.



#### 2016-17 HIGHLIGHTS FROM SOCIETY OF TOXICOLOGY AWARDS FOR NTSS MEMBERS:



**Jason Richardson**, Ph.D., DABT, ATS, was awarded the 2017 SOT Achievement Award for his significant contribution to toxicology. Dr. Richardson is Professor of Pharmaceutical Sciences and Acting Associate Dean for Research College of Pharmacy at Northeast Ohio Medical University. His research is focused on toxicological influences and pathogenic mechanisms in Alzheimer's, Parkinson's disease and ADHD. Recently, he published articles highlighting mechanisms associated with exposure to pyrethroid insecticides resulting in microglial dysfunction.



**William Boyes**, Ph.D. was selected to receive the SOT 2017 Ocular Toxicology Specialty Section Career Achievement Award. Dr. Boyes is an Environmental Health Scientist at the US Environmental Protection Agency. Some of his roles at EPA have included, Acting Director for Emerging Materials for Chemical Safety and Sustainability and Neurotoxicology Division Programs. His research is focused on toxicological influences of nanoparticles.

**Stephen Gilbert**, Ph.D., DABT, was selected to be a Global Senior Scholar Exchange Program (GSSEP) Host for SOT. The GSSEP funds Scholar toxicologists from developing countries to increase toxicology capacity and professional opportunities in their country. In this role, he will mentor and support Dr. Ansam Sawalha, who intends to acquire knowledge and ideas on how to start a world-class toxicology program in Palestine. Dr. Gilbert is the Director and Founder of the Institute of Neurotoxicology and Neurological Disorders.

#### IN MEMORIAM OF DR. HERBERT NEEDLEMAN

This year, NTSS sadly lost one of its distinguished neurotoxicologists, **Dr. Herbert Needleman**.

It is not possible to overstate the contributions of Dr. Herbert Needleman (1927-2017) to pediatric environmental health. His groundbreaking 1972 study marked the beginning of a long struggle to alert the scientific community as well as policy makers and regulatory bodies about the dangers of lead exposure in children. The inverse association between blood lead levels and IQ in children that now seems so well established is only a result of his tireless and undaunted efforts. Herb was an inspiration to many of us fledglings in our careers and a champion of our efforts. He may be gone, but his voice will always be heard. *Remembrance by Deborah Cory-Slechta*

The New York Times has published a wonderful article highlighting his achievements was published in NY Times: <https://www.nytimes.com/2017/07/27/science/herbert-needleman-dead-lead-poisoning-in-children.html> and his obituary can be found here: <http://www.utimes.pitt.edu/?p=45115>

### **SOCIETY OF TOXICOLOGY AWARD OPPORTUNITIES**

**Don't Miss Out on Other Award Opportunities!** Regional Chapters, Special Interest Groups, and Specialty Sections of the Society of Toxicology confer a number of awards throughout the year to recognize the achievements of toxicologists, particularly graduate students and postdoctoral scholars. Visit SOT website – [SOT Awards webpage](#) - **Many Deadlines are in September/October 2017. For example, Postdoctoral Best Publication Award is due October 1<sup>st</sup>, 2017!**

### **FOLLOW NTSS ON TOXCHANGE**

All the most up-to-date information for NTSS can be found at <http://toxchange.toxicology.org/p/co/ly/gid=86>.

### **RENEW YOUR NTSS MEMBERSHIP / ENCOURAGE OTHERS TO JOIN NTSS!**

Your membership provides the financial support to keep our specialty section running. NTSS seeks to promote neurotoxicology as a vibrant specialty of toxicology. The NTSS Executive Committee actively seeks to enhance and promote neurotoxicology themed sessions at the annual meeting. It also offers each of you a place to meet up with your colleagues at our annual SOT reception. In addition, NTSS supports the growth of our field with the endowed Toshio Narahashi Fellowship Award program – as this endowment grows we hope to provide even more opportunities to support the next generation of neurotoxicologists. Your membership continues to be the foundation of our section. Please renew today, and encourage your colleagues who are not members to join!

[www.toxicology.org/groups/ss/NTSS/join.asp](http://www.toxicology.org/groups/ss/NTSS/join.asp)

**Honored to stand as President of this vibrant SS and looking forward to an exciting meeting in 2018!**

Sincerely,

Mary Gilbert, Ph.D., President, NTSS