



# Neurotoxicology Specialty Section

Fall 2016

## Dear 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 2017 SOT Annual Meeting in Baltimore, MD.

## IMPORTANT DEADLINES FOR 2016-2017 NTSS AWARDS (detailed information for each can be found in the newsletter)

Abstract and Awards	Deadlines	Eligibility requirements
<b>SOT Abstract</b>	<b>October 7, 2016</b>	All members of SOT
<b>Toshio Narahashi Neurotoxicology SS Trainee Conference Endowment Award</b>	<b>November 7, 2016</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 2017 Annual Meeting.
<b>Distinguished Neurotoxicologist Award</b>	<b>December 9, 2016</b>	Full, Retired, or Emeritus members of NTSS nominated by two full members of SOT, one of whom must be a member of NTSS
<b>Toshio Narahashi Neurotoxicology SS Graduate Student and Postdoctoral Fellow/Associate Poster Endowment Award</b>	<b>Phase 1: February 13, 2017</b>  <b>Phase 2: March 3, 2017</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 2017 Annual Meeting

## RENEW YOUR NTSS MEMBERSHIP!

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 Neurotoxicology 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!

## SUBMIT AN ABSTRACT FOR THE 2017 SOT NATIONAL MEETING

**DEADLINE FOR ABSTRACT SUBMISSION IS OCTOBER 7<sup>TH</sup>, 2016**

Top reasons for rejection 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.

## CONGRATULATIONS TO THE 2016 TOSHIO NARAHASHI TRAINEE CONFERENCE AWARD WINNERS!



From left to right:

**Jasmine Brown**—U.S. EPA; Mentor: Tim Shafer

Abstract: Further Evaluation of Developmental Neurotoxicity (DNT) Hazard Screening using Neural Networks from Rat Cortical Neurons on Multi-well Microelectrode Arrays

**Marshall Edwards**—University of Texas, San Antonio; Mentor: Georgiana Gould

Abstract: Early Juvenile Exposure of Mice to High-dose Acetaminophen Confers Elevated Serum Eotaxin Levels and Sociability Impairments in Adulthood

**Dana Laurenstein**—NYU School of Medicine; Mentor: Judith Zelikoff

Abstract: E-cigarette Exposure Induces Neuro-alterations in Mice Exposed During Early Life

**SPECIAL THANKS TO NTSS VICE PRESIDENT MARY GILBERT FOR CHAIRING THIS COMPETITION**

## CONGRATULATIONS TO THE 2016 TOSHIO NARAHASHI POSTER COMPETITION WINNERS!

Graduate Students:

**Katriana Popichak**—Colorado State University; Mentor: Ronald Tjalkens

Abstract: Activation of The Nuclear Receptor Nur77 by A Novel Diindolylmethane Analog Suppresses Inflammatory Gene Expression in Primary Astrocytes

**Miles Bryan**—Vanderbilt University; Mentor: Aaron Bowman

Abstract: A potential role for phosphatidylinositol-3-kinase (PI3K) in regulating manganese transport through an autophagy-mediated mechanism

**Shivani Ghaisas**—Iowa State University; Mentor: Anumantha Kanthasamy

Abstract: Chronic exposure to manganese causes selective changes in the enteric nervous system and gut physiology leading to altered nutrient metabolism and intestinal motility

Postdoctoral Fellows:

**Briana Miranda**—University of Pittsburgh; Mentors: Edward Burton and J. Timothy Greenamyre

Abstract: Astrocyte specific expression of DJ-1 attenuates rotenone-induced neurotoxicity; a gene therapy approach

**Marissa Sobolewski**—University of Rochester; Mentor: Deborah Cory-Slechta

Abstract: Enhanced Hormonal Dysregulation in Adult Mice Maternally Exposed to a Mixture of Low Dose Endocrine Disrupting Chemicals

**Kim Keil**—University of California, Davis; Mentor: Pam Lein

Abstract: DNA Methylation As a Mediator of 2,2',3,5',6-Hexachlorobiphenyl (PCB 95) Induced Dendritic Arborization

**NTSS EXTENDS SINCERE THANKS TO THE 35 VOLUNTEER JUDGES WHO HAD THE ARDUOUS TASK OF EVALUATING AND SCORING ALL THE GRADUATE STUDENT AND POSTDOCTORAL PARTICIPANTS**

**SPECIAL THANKS TO PAST, PAST NTSS PRESIDENT AARON BOWMAN FOR CHAIRING THIS COMPETITION**

### **ELECTION OF NEW NTSS OFFICERS**

**Call for Nominations:** Early in 2017, NTSS will elect a new Vice President-Elect, a Councilor, a Secretary/Treasurer, and Graduate Student Representative. It is time to gather nominations for those offices. Aaron Bowman 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 Aaron Bowman ([aaron.bowman@vanderbilt.edu](mailto:aaron.bowman@vanderbilt.edu)) by December 2, 2016.**

### **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 **Megan Culbreth** ([megan.culbreth@phd.einstein.yu.edu](mailto:megan.culbreth@phd.einstein.yu.edu)), the current NTSS Graduate Student Representative.

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

NTSS has been highly successful in establishing the Toshio Narahashi Neurotoxicology Fellowship Award Endowment Fund. This endowment fund helps to fully cover our graduate student and postdoctoral fellow poster competition awards, and will provide support for the trainee conference award.

### **KINDLY CONTINUE TO DONATE**

Please consider renewing or making a new tax-deductible donation to the Toshio Narahashi Neurotoxicology Fellowship Award Endowment Fund this year. For every dollar donated, the Society will match the contribution dollar-for-dollar up to \$60,000, meaning your contribution will go even farther. Increasing the endowment fund will enhance the size and number of trainee poster and conference awards that NTSS can grant. 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. To make a donation, please click on <https://www.toxicology.org/endowment/contribute/donate.asp>.

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

The Distinguished Neurotoxicologist Award recognizes NTSS members who have made important high-impact contributions to our field. This award has been previously designated as “Distinguished Investigator” and “Distinguished Service” awards from NTSS

**Process:** To be considered for the Distinguished Neurotoxicologist Award for 2017, nominations must be submitted by **December 9, 2016** to NTSS President **Abby Li** ([abbyli@exponent.com](mailto:abbyli@exponent.com)) or Vice President **Mary Gilbert** ([gilbert.mary@epa.gov](mailto:gilbert.mary@epa.gov)). An NTSS Distinguished Award Committee will be appointed each year to review the nominations and determine if an award will be made. Nominations will be considered up to 4 years. More detailed information is available on the NTSS website: <http://www.toxicology.org/groups/ss/NTSS/awards.asp>

### **Eligibility requirements:**

- (1) The nominee must be a member, or retired member of NTSS, who has made significant scientific, regulatory, OR service contributions over a sustained period of time (>15 years post-training) that have had major impact on the field of Neurotoxicology. Only one of the following criteria must be fulfilled for nomination, though all contributions across these areas can be considered as part of the award decision:
  - a. Scientific: Has deeply or broadly enriched understanding of mechanisms and roles of toxicants or other environmental factors on the nervous system; OR
  - b. Regulatory: Has greatly influenced and improved the scientific basis for regulatory or risk/safety assessment decisions related to neurotoxicology; OR
  - c. Service: Has remarkably enriched the community of neurotoxicologists to enhance communication, rigor, or intellectual pursuits in neurotoxicology
- (2) Consideration also will be given to whether the nominee demonstrated leadership in neurotoxicology including involvement in NTSS or other meetings/organizations related to neurotoxicology (weighted value approximately 10-15%).
- (3) Current members of the Distinguished Award Committee can be nominated, but cannot receive the award while serving, or for a year after their term on the committee

**Submission requirements:** The nomination package should be no more than 6 pages, excluding the curriculum vitae of the nominee, and must include (1) a letter of nomination from a Full Member of the Society of Toxicology, (2) the curriculum vitae of the nominee (8 pages maximum), and (3) a second letter from a Full Member of the Society of Toxicology. At least 1 letter must be from an NTSS member. Both letters should provide specific examples and documentation of the scientific contributions of the nominee; a publication list is not sufficient without analysis. Self-nominations are not accepted. Upon selection of the Awardee, the nominator writes a short bio which will be published in the Newsletter and/or posted on the website.

In addition to an engraved plaque, the awardee will give a brief speech about their experience as a neurotoxicologist at the annual meeting. More detailed information is available on the NTSS website:

<http://www.toxicology.org/groups/ss/NTSS/awards.asp>

## **ANNOUNCING 2017 TOSHIO NARAHASHI POSTER COMPETITION**

**Process:** To participate in the 2017 poster competition, you will need to submit an extended abstract by February 13, 2017. The extended abstract will consist of the abstract originally submitted to SOT, 2-4 sentences describing the impact of the research, up to one page of key figures or data, and a 3-5 sentence conclusion (total of 3 pages). The extended abstracts will be reviewed by a committee prior to the meeting and will comprise 50% of the score. The remaining portion will be based on the face-to-face interviews at your posters. We anticipate 3 judges will evaluate each poster. More detailed information is available on the NTSS website: <http://www.toxicology.org/groups/ss/NTSS/awards.asp>

**Eligibility requirements:** (1) Graduate students and postdoctoral research fellows/associates must be in attendance at the 2017 Annual Meeting; (2) trainees must meet SOT criteria for classification as a graduate student or postdoctoral fellow at the time of the Annual Meeting; (3) graduate students and postdocs MUST be members of NTSS or show evidence of application for membership. Graduate students or postdocs giving platform presentations at the Annual



Meeting also are eligible if they prepare a poster summarizing their talk. Advisors or mentors who are not NTSS members are strongly encouraged to join.

**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 **Will Boyes** ([boyes.william@epa.gov](mailto:boyes.william@epa.gov)), Chair of the NTSS Student and Postdoctoral Awards Committee by **February 13, 2017**. Participants will also be required to send a **PDF of their complete poster to Dr. Boyes by March 3, 2017** to facilitate the judging (this pre-submission of the poster need not be the final version presented at the 2017 Annual Meeting).

In addition to recognition plaques for each winner, monetary prizes will be awarded for first, second, and third place. Winners will be announced at the annual NTSS Business Meeting in Baltimore.

NTSS members interested in judging either extended abstracts and/or posters should contact **Will Boyes** ([boyes.william@epa.gov](mailto:boyes.william@epa.gov)),

### **ANNOUNCING 2017 TOSHIO NARAHASHI TRAINEE CONFERENCE AWARD**

**Process:** Trainee applicants must submit their SOT abstract, CV, and completed conference award form (<http://www.toxicology.org/groups/ss/NTSS/awards.asp>) by November 7, 2016. The NTSS Awards Committee will review these materials, and select recipients based on the scientific merit of their abstract, and commitment from their mentor to cover any additional travel costs. Awardees will receive funds in advance of the 2017 SOT Annual Meeting.

**Eligibility requirements:** (1) Undergraduates, Post-Baccalaureates, Graduate Students, and Postdoctoral Fellows are eligible to apply. (2) Trainees must attend the 2017 SOT Annual Meeting in order to accept the award. (3) Graduate Students and Postdoctoral Fellows must be members of NTSS or show evidence of application for membership. (4) Undergraduates and Post-Baccalaureates need not be NTSS members, but their submitted abstract must be neurotoxicology focused. Advisors or mentors who are not NTSS members are strongly encouraged to join.

**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 to **Michelle Block** ([mlblock@iupui.edu](mailto:mlblock@iupui.edu)), **NTSS Vice President-Elect by November 7, 2016**. Please note that the conference award form has separate sections that need to be filled out by the trainee or mentor.

### **2016-2017 NTSS OFFICERS**



From left to right: Abby Li (President), Mamta Behl (Councilor), Megan Culbreth (Graduate Student Representative), Helen Sable (Councilor), Mary Gilbert (Vice President), Will Boyes (Past President), Aaron Bowman (Past Past President), and Marissa Sobolewski (Post Doctoral Representative)

Not Pictured: Michelle Block (Vice President-Elect) and Pam Lein (Steward of the Toshio Narahashi Endowment Fund)

### **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>.

Sincerely,

A handwritten signature in black ink, appearing to be 'Abby Li', with a stylized 'L' and a dot at the end.

Abby Li, Ph.D., President, NTSS