

## Neurotoxicology Specialty Section

### ANNUAL REPORT: 2023–2024

May 1, 2023 to April 30, 2024

#### I. Officers:

2023–2024	2024–2025
President: Marissa Sobolewski Vice President: Vanessa Fitsanakis Vice President-Elect: Rodrigo Franco Secretary-Treasurer: Muhammad Hossain Past President, Councillor: Jason Cannon Councillor: Megan Culbreth Councillor: Marcia Ratner Postdoctoral Representative: Anna Kreutz Graduate Student Representative: Alyssa Merrill	President: Alison Bernstein Vice President: Muhammad Hossain Vice President-Elect: Ronald Tjalkens Secretary-Treasurer: Briana De Miranda Past President, Councillor: Marissa Sobolewski Councillor: Megan Culbreth Councillor: Edward Levin Postdoctoral Representative: Adam Schuller Graduate Student Representative: Jessie Badley

#### Committees:

President: 2023-24: Marissa Sobolewski - 2024-2025: Alison Bernstein  
Vice President: 2023-24: Vanessa Fitsanakis - 2024-2025: Muhammad Hossain  
Vice President-Elect: 2023-24: Rodrigo Franco - 2024-2025: Ron Tjalkens  
Secretary/Treasurer: 2023-24: Muhammad Hossain - 2024-2025: Briana De Miranda  
Past President: 2023-24: Jason Cannon, 2024-25 - Marissa Sobolewski  
Councilors: 2023-24: Marcia Ratner and Megan Culbreth - 2024-2025: Megan Culbreth and Ed Levin  
Postdoctoral Representative: 2023-24: Anna Kreutz - 2024-25: Adam Schuller  
Graduate Student Representative: 2023-24: Alyssa Merrill - 2024-25: Jessie Badley

#### Committees:

SOT Session Proposal Committee: Jason Cannon, Marissa Sobolewski, Megan Culbreth, Muhammad Hossain  
Distinguished Neurotoxicologist Committee: Deborah Cory-Slechta, Pam Lein, William Boyes, Megan Culbreth, Jason Cannon  
Poster Competition: Marcia Ratner and Megan Culbreth  
Travel Award Committee: Jason Cannon and Marissa Sobolewski

#### II. 2024 Membership total: 293

#### III. Key Outcomes and Accomplishments in 2023–2024:

The Neurotoxicology Specialty Section accomplished the following activities throughout the year.

- In-person meeting/mixer
- Endorsed session(s) at the Annual Meeting
- Mentoring/career development events
- Poster session for trainees
- Trainee awards conferred

- Scientist investigator awards conferred
- Member highlights
- Newsletter(s)
- Business meeting (communicated operations/finances to members)
- Utilized/expanded Endowment Fund(s) for Component Group

**IV. Collaborative Partnerships with Other SOT Organizations:**

The Neurotoxicology Specialty Section collaborated with the following organizations within SOT.

**V. Communication Methods:**

The Neurotoxicology Specialty Section stayed in contact with its members throughout the year through the following mechanisms.

- ToXchange
- Emails through SOT Headquarters
- Specialty Section website
- Newsletter(s)
- Through Graduate Student/Postdoc Representatives
- Other Social Media (Facebook, X, etc.)

**VI. Promotion of Inclusivity**

The Neurotoxicology Specialty Section maintained an inclusive organization through the following activities.

- Nominate a diverse slate of candidates for elections
- Solicit equitable input from all executive committee leaders
- Utilize virtual meetings for convening Specialty Section leadership
- Utilize standardized rubrics for judging awards/posters
- Include inclusive descriptions of Awards
- Prioritize diversity in selection of speakers/panelists
- Highlight trainee research
- Solicit member feedback for development of Specialty Section activities (such as webinar topics)
- Provide volunteer activities for the membership to be engaged
- Provide volunteer activities for the membership to be engaged
- Use multiple approaches to communicate with membership

**VII. Mentoring and Career Development Activities:**

The Neurotoxicology Specialty Section hosted the following mentoring activities throughout the year for its membership.

- Actively recruit members to be part of the SOT Mentor Match system
- encourage senior members to join the mentoring breakfast

**VIII. Awards Given:**

Trainee	12
Early Career	0
Mid Career	

**IX. Key Outcomes and Improvements:**

Our Specialty Section was very active this year, with over 23 members running for positions on the Executive Committee. We sponsored six symposiums (The State of the Science Linking Environmental Chemicals to Age-Related Neurocognitive Disease, Neuroinflammation as a Central Mediator of Neurotoxicity: Implications for Environmental Links to Chronic Neurodegenerative Diseases, Accelerating Discovery in Parkinson's Disease: A Blueprint for Modeling Environmentally Relevant Exposures through Cross-Disciplinary Collaboration, Thyroid System Disrupting Chemicals and the Developing Brain, Harmful Algal Blooms and Human Health, and The Lifesaver or the Devil: Identify Key Molecular Signaling Pathways and Their Roles in Chronic Exposure-Induced Neurological Diseases). Also, we sponsored one workshop (Advancements in Utilizing Zebrafish-Based Behavioral Assays for Detecting Developmental Neurotoxicity and Understanding Associated Cellular and Molecular Changes). Dr. Tim Greenamyre was awarded an Honorary Membership and Dr. James P. O'Callaghan was awarded the SOT Distinguished Toxicology Scholar Award.

The second key outcome for our Specialty Section this year was the strong success of our trainee awards program. We had 44 total submissions for our poster awards with nearly 60 NTSS members serving as judges. We were able to award 8 poster awards for graduate students and postdoctoral fellows (Neda Ilieva, Yuan-Teng Chang, Pedro Bernardino, Jeremy MacMahon, Ashley Adamson, Emily Pitzer, Janine Cubello, and David Leuthold). We also awarded four travel awards (MaryAnn Hawks, Dipro Bose, Nadia Herold, Catherine Rojas). Furthermore, our trainees won multiple Societal awards, including three Undergraduate Award winners, One Alternative Methods Award winner, and finally the winner of the Perry J. Gehring Diversity Student Travel Award. Finally, we awarded the Distinguished Neurotoxicologist Award to Dr. Anumantha Kanthasamy.

**X. Strategic Plan:**

The Neurotoxicology Specialty Section supported the following SOT Strategic Priorities.

- Proactively pursue impactful scientific content
- Support the development and application of tools that advance toxicology
- Effectively communicate scientific advances
- Develop a talent pool of toxicologists for the future
- Provide training and education that reflects the needs of members
- Enhance member recognition and visibility at all levels

**XI. Scientific Topics of Interest:**

The Neurotoxicology Specialty Section is interested in seeing the following topic areas developed into sessions at future SOT Annual Meetings.

- There are many exciting and emerging scientific topics worth highlighting at future meetings. First, direct translocation of toxicants to brain, which includes novel data on microplastics. Second, more translational research presented on behavioral neurotoxicity, which includes considerations for reproducibility and novel assay development. Third, more research integrating molecular research with functional outcomes, focused perhaps on the role of epigenetics in a mechanism for neurotoxicology. Fourth, more research on how exposome-based research can inform neurotoxicology.

**XII. Feedback to the Society:**

A. What is the one thing the Society should be doing that it currently does not do (or does not do effectively) that would be of importance/benefit to the members of the Specialty Section?

We should be giving out a mid-career award, and perhaps a best paper award targeted at early career scientists. We are currently not offering these awards and we will begin conversation on how to fill this gap.

B. What is the one thing the Society is currently doing that impacts the Specialty Section that should be changed (e.g., stopped, modified, etc.)?

More financial support for the Specialty Sections could be used to help expand mentoring opportunities and build collaborations between Specialty Sections. Alternatively, the Society could consider offering a centralized mentoring opportunity for all the Specialty Sections at the meeting.