

**Neurotoxicology Specialty Section  
Annual Report: 2005 - 2006**

**I. Slate of Officers and Committees**

	<u>2004</u> - <u>2005</u>	<u>2005</u> - <u>2006</u>
President	Carey Pope	Richard Seegal
Vice President	Richard Seegal	Robert MacPhail
Vice President-elect	Robert MacPhail	Chris Newland
Secretary/Treasurer	Mary Gilbert	Mary Gilbert
Past President	Stephanie Padilla	Carey Pope
Councilors	Lisa Opanashuk	Stephen Lasley
	Stephen Lasley	Pamela Lein

**SOT Committees**

Animals in Research	Jan Oberdoester (Chair 2005-2006) Brian Marable (2003-2006) Nikolay Filipov (2005-2008)
Career Resource Development	Ginger Moser (2004-2007)
Program	Philip Bushnell (2004-2007)
Committee on K-12 Education	Steven Gilbert (2005-2008)
IUTOX Councilor	Marion Ehrich (2004-2007)
Subcommittee on Non-SOT & Contemporary Topics in Toxicology	Janice Chambers (2005-2006)
Subcommittee Regional Chapter Funding	Janice Chambers (2005-2006)

**2004 - 2005 Annual Meeting: March 7, 2005**

**II. Activities**

The Officer's Meeting was called to order at 7:00am on Monday, March 7, 2005 by the Neurotoxicology Specialty Section (NTSS) President, Carey Pope. In attendance were Past President Stephanie Padilla, President-Elect Richard Seegal, Vice President Robert MacPhail, Councilors Lisa Opanashuk and Stephen Lasley, Secretary-Treasurer Mary Gilbert, Student Representative Michele Taylor, Webmaster Russell Carr, and newly elected officers Pamela Lein (Councilor) and Chris Newland (Vice President Elect).

The reception and business meeting for the Specialty Section was held on Tuesday evening March 8, beginning at 6:00 p.m., and was attended by approximately 140 members. President Carey Pope called the meeting to order at approximately 6:30 p.m. The following items were discussed:

**A. Election Results**

The election results were announced and the new officers, Chris Newland and Pamela Lein were

introduced. The nominating committee was chaired by Bernie Weiss and committee members included Wei Zheng and Spencer Mortensen. Election ballots were prepared and distributed by the Secretary-Treasurer. Newly elected members are listed above.

## **B. Secretary-Treasurer's Report**

### Finances:

The SS account balance was \$15,006 on June 30, 2005.

Membership in the SS as of September, 2005 stands at 282.

## **C. Monsanto Support for Student Awards**

The pre-doctoral and post-doctoral winners of the student awards were announced (see below). For both student and postdoctoral competitions, first prize is \$500.00 cash; second prize is \$300.00 and third prize is \$150.00. As in past years, the cash awards to the first-place winners in the pre- and post-doctoral categories were paid from funds provided by Monsanto. This donation originated 5 years ago based on an annual contribution of \$1000.00. This the last year of funding from this source. Officers were encouraged to seek additional sources of funding to continue this award.

**D. Taylor and Francis Certificate Award** . For both student and postdoctoral competitions, in addition to monetary awards, gift certificates for \$150.00 for 1<sup>st</sup> prize, \$100.00 for 2<sup>nd</sup> prize, and \$50.00 for 3<sup>rd</sup> prize were presented by Taylor Francis Publishers a representative from Taylor Francis was present at the Business Meeting/Reception.

## **E. Scientific Meeting**

Scientific Sessions at SOT. Neurotoxicology was well represented at this year's meeting, with 4 Symposia, 2 Workshops, 2 Sunset Sessions, and 7 Poster Sessions. NTSS was primary sponsor for 3 of the symposia, both Workshops, and 1 of the Sunset Sessions..

### Workshops:

Neuroimaging Strategies for Application to Neurotoxicology and Risk Assessment

Cellular/Molecular Mechanisms Involved in Environmental Chemicals: Dopaminergic Neurotoxicity & Neurodegenerative Diseases

### Symposia:

Organophosphates and Carbamates: Cholinergic vs Noncholinergic Mechanisms

Pesticide Neurotoxicity in Adults: Integrating Contributions for Epidemiology & Toxicology

What Makes Metals Neurotoxic in Degenerative Disorders?

Systems Biology: Approaches/Applications to Toxicology

### Sunset Sessions:

Developmental Toxicology Evaluations: Issues of Neurotoxicology & Immunotoxicology Assessments

Brominated Flame Retardants: New Findings

Poster Sessions:

Neurotoxicity of Metals: Dosimetry and Effects

Neurotoxicity of Metals: Mechanisms

Developmental Neurotoxicity I

Developmental Neurotoxicity II

Nervous System: Methods and Functional Effects

Nervous System: Mechanisms of Toxicity

Neurotoxicity: Pesticides

**F. Awards**

1. Astra-Zeneca Travel Award

This year the Astra-Zeneca Travelling Lectureship was awarded to one of specialty section members and former President of NTSS, Dr. Kevin Crofton. Congratulations were extended to Dr. Crofton.

**2 . Predoctoral Awards**

Monsanto 1<sup>st</sup> Place Award

Lisa Domico

Mentor: Dr. Keith Cooper

Joint Program in Toxicology

Rutgers and State U New Jersey

Piscataway NJ

Neurotoxic effects of mancozeb and Maneb in vivo and in vitro

2<sup>nd</sup> Place

Donna Lee

Mentor: Dr. Lisa Opanashuk

EHSC Dept Environmental Medicine

Rochester, NY

HO-1 Induction Contributes to PCB-Induced Oxidative Stress in Dopaminergic Cells.

3<sup>rd</sup> Place

Joyce Riehl

Mentor: Dr. Isaac Pessah

Molecular Biosciences

UC Davis School of Veterinary Medicine

Davis, CA

2,2'-Dibromodiphenyl ether binds and induces calcium release through the ryanodine receptor in an FKBP12-dependent manner

**3. Postdoctoral Award Winners:**

Monsanto 1<sup>st</sup> Place Award

Krishnan Sriram, PhD

Mentor: Dr. James O'Callaghan

CDC-NIOSH

Morgantown, WV

Identification of signaling pathways activating reactive gliosis in multiple models of brain injury:  
A genomic, proteomic and protein phosphorylation analysis

2<sup>nd</sup> Place Award

Anne Dreiem, PhD  
Wadsworth Center, New York State  
Department of Health, Empire State Plaza  
Albany, NY

Mentor: Dr. Richard Seegal

Effects of methylmercury on mitochondrial function and reactive oxygen species formation in striatal synaptosomes from rat.

3<sup>rd</sup> Place Award-Tie

Jason Richardson, PhD  
Center for Neurodegenerative Disease &  
Dept Environmental and Occupational Health  
Emory University, Atlanta, GA

Mentor: Dr. Gary Miller

Developmental Pyrethroid Exposure Alters Dopaminergic Neurochemistry Resulting in Hyperactivity and Enhanced Toxicity of MPTP

3<sup>rd</sup> Place Award - Tie

Cheng Wang, PhD  
National Center for Toxicological Research  
Division of Neurotoxicology  
Jefferson, AR

Mentor: Dr. William Slikker

Blockade of N-methyl-D-aspartate Receptors by Ketamine Produces Loss of Monkey Frontal Cortical Neurons in Culture.

**III. Other 2004 - 2005 Activities and Accomplishments:**

NTSS had planned to institute a “Best Poster in Neurotoxicology” Competition in 2005.

Due to the limited period of time available to review abstracts once available online, it was agreed that the competition be a “Best Abstract” not a “Best Poster” Award and be based on self-nomination.

The NTSS student representative, Michele Taylor, presented a poster of the Student Mixer to encourage student membership.

**IV. Future Plans**

1. Increase membership in the NTSS. Continue attempts to retain members after they have completed their doctoral or post-doctoral training and to identify potential new student members.
2. We will initiate a Logo contest among our student membership and have trickets provided at the Student Mixer.
3. Continue to foster new relationships with industry.
4. To continue to provide leadership in the area of neurotoxicology.
5. To continue efforts to increase training opportunities for student and post-docs.
6. To serve as a medium for disseminating information regarding research opportunities.