

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

I. Slate of Officers and Committees

	<u>2005</u>	<u>2006</u>	<u>2006</u>	<u>2007</u>
President	Richard Seegal		Robert MacPhail	
Vice President	Robert MacPhail		Chris Newland	
Vice President Elect	Chris Newland		Marion Ehrich	
Secretary-Treasurer	Mary Gilbert		Karen Steinmetz	
Past President	Cary Pope		Richard Seegal	
Councilors	Stephen Lasley		Pamela Lein	
	Pamela Lein		Edward Levin	
Student Representative	Michele Taylor		Christine Curran	

2005 – 2006 Annual Meeting: March 7, 2006

II. Activities

The annual Officer's Meeting was called to order at 7:00am on Tuesday, March 7 by Neurotoxicology Specialty Section President, Richard Seegal. In attendance were President Richard Seegal, Past President Carey Pope, President Elect, Bob MacPhail, Vice President Elect, Christopher Newland, Councilors Pam Lein and Steve Lasley, Secretary-Treasurer Mary Gilbert, Webmaster Russell Carr. Newly elected officers, in attendance were Marion Ehrich (VP Elect), Karen Steinmetz (Secretary-Treasurer), Ed Levin (Councilor), and newly appointed Student Representative Chris Curran.

The reception and business meeting for the Specialty Section was held on Wednesday evening March 8, 2006, beginning at 6:00 p.m., and was attended by approximately 140 members. President Richard Seegal 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, Marion Ehrich, Ed Levin, Karen Steinmetz and Chris Curran were introduced. The nominating committee was chaired by Steve Gilbert and committee members included Bellina Veronesi, Louise Abbott, Jon Doorn and Michele Taylor. Election ballots were prepared and distributed by the Secretary-Treasurer. Newly elected members are listed above.

B. Secretary-Treasurer's Report

Finances: The NTSS account balance was \$14,759 on June 30, 2006.

Membership in the NTSS as of June 2006 stands at 272.

C. Taylor Francis Publishers Gift Certificate Award. For both student and postdoctoral competitions, Taylor Francis Publishers donated gift certificates for 1st prize \$150.00; 2nd prize \$100.00; 3rd prize \$50.00 at the Business Meeting/Reception.

D. Elsevier Publishing Encyclopedia Set Award. For both student and postdoctoral competitions, 1st place winners received a 4 volume set of the Encyclopedia of Toxicology from Elsevier, thanks to Elsevier Rep Phil Wexler.

E. Scientific Meeting.

Scientific Sessions at SOT. NTSS was well represented at this year's meeting with 2 Continuing Education Courses, 6 Symposia, and 1 Workshop. NTSS was primary sponsor on 4 Symposia.

Continuing Education Courses:

Essential of Metal Toxicology

Neuropathology for the Toxicologist

Symposia:

Risk Assessment Implication of Direct Nose-to-Brain Transport of Inhaled Xenobiotics

Indirect Mechanisms of Toxicity: Advancing Understanding of Neuroendocrine-Immune Interactions

New Concepts in the Neurotoxicology of Lead

Risk Assessment and Regulatory Implication of Convulsive Neurotoxicity

Determinants of Manganese Neurotoxicity: From Worms to Man

Obesity: Developmental Origins and Environmental Influences

Workshop:

Thermoregulation – Influence on Toxicity Assessment

Poster/Platform Sessions:

Frontiers of Neurotoxicology: Extrapolation & Human Health

Safety Evaluation-Pharmaceutical I – Neuro Cardio Endocrine/Metabolic

Nervous System: Disease Models

Neurotoxicity: Developmental

Neurotoxicity: Pesticides

Neurotoxicity: Metals - General

Neurotoxicity: Manganese

Nervous System: Mechanisms and Effects

F. Awards.

1. Distinguished Investigator Award

This special award honored the life long achievements of Dr. Herbert Needleman for his pioneering and continuing work on the neurotoxicity of lead. The award was presented by Dr. Steve Lasley, and congratulations were extended to Dr. Needleman.

2. Predoctoral Poster Awards

First Place:

Mr. Neal Burton
Environmental Health Sciences, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD

Mentor: Tomas Guilarte

Title: In vivo attenuation of the Parkinsonian phenotype by induction of the Keap1-Nrf2 pathway.

Second Place:

Ms. Sanjeeva Wijeyesakere
Toxicology Program, University of Michigan, Ann Arbor, MI

Mentor: Rudy Richardson

Title: Modeling the patatin domain of neuropathy target esterase.

Third Place:

Ms. Linnzi Wright
Division of Neurotoxicology, NCTR and Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, Little Rock, AR

Mentor: Merle Paule

Title: Evaluation of changes in hippocampal gene expression associated with the behavioral toxicity caused by chronic developmental ketamine or remacemide treatment in rats.

Postdoctoral Poster Awards:

First Place:

Dr. Kristy Thompson
Department of Genetics and Complex Diseases, Harvard School of Public Health, Boston, MA

Mentor: Marianne Wessling-Resnick

Title: Olfactory transport of manganese to the brain is enhanced by anemia and involves divalent metal transporter-1.

Second Place:

Dr. Genarro Giordano
Department of Environmental and Occupational Health Sciences, University of Washington, Seattle, WA

Mentor: Lucio Costa

Title: Low concentration of domoic acid (DA) induces mitochondrially mediated apoptosis in mouse cerebellar granule cells.

Third Place:

Dr. Christopher Toscano

Mentor: Franesca Bosetti

Brain Physiology and Metabolism Section, National Institute on Aging, Bethesda, MD

Title: Mice deficient in cyclooxygenase-2 are more susceptible than wild types to kainic acid excitotoxicity.

Top Ten Abstracts in Neurotoxicology:

Top Abstract:

Pam Lein and colleagues for their work on chlorpyrifos and axon outgrowth.

Other Abstracts (in alphabetical order):

Amanda Ashley and colleagues for their work on the PARK7 KO mouse.

Stan Benkovic and colleagues for their work on forced exercise and kainate.

Neal Burton and colleagues for their work on Nrf2 and Parkinsons Disease.

Tomas Guilarte and colleagues for their work on neuroimaging in monkeys.

Guy Perkins and colleagues for their work on Bcl-xl and photoreceptors.

Brian Powers and colleagues for their work on developmental PCBs and auditory impairment.

Khristy Thompson and colleagues for their work on olfactory transport of manganese.

Marcelo Wolansky and colleagues for their work on pyrethroid mixtures.

Nasser Zawia and colleagues for their work on lead and Alzheimer's Disease.

III. Other 2004 - 2005 Activities and Accomplishments:

A special thank you is extended to Dr. Michele M. Taylor, the out-going NTSS Student Representative who promoted the NTSS through her efforts to initiate a NTSS logo contest in addition to purchasing NTSS pens and lanyards that were distributed to current and potential members, and designing a promotional poster which was displayed at the annual SOT meeting and Student-Post Doc mixer.

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. Continue to foster current and new partnerships with industry, government and academia.
3. Continue to provide leadership in the area of neurotoxicology.
4. Continue efforts to increase training opportunities for student and post-docs.
5. Serve as a forum for disseminating information regarding research opportunities.