

**Neurotoxicology Specialty Section  
Annual Report: 2006 - 2007**

**I. Slate of Officers and Committees**

	<u><b>2006 — 2007</b></u>	<u><b>2007 — 2008</b></u>
President	Robert MacPhail	Chris Newland
Vice President	Chris Newland	Marion Ehrich
Vice President Elect	Marion Ehrich	Susan Schantz
Secretary-Treasurer	Karen Steinmetz	Karen Steinmetz
Past President	Richard Seegal	Robert MacPhail
Councilors	Pamela Lein	Edward Levin
	Edward Levin	Ron Tjalkans
Student Representative	Christine Curran	Derek Drechsel

**2006 – 2007 Annual Meeting: March 26, 2006**

**II. Activities**

The annual officer's meeting was called to order at 12:15pm on Monday, March 26 by Neurotoxicology Specialty Section President, Bob MacPhail. In attendance were President Robert (Bob) MacPhail, Past President Richard Seegal, President Elect Christopher Newland, Vice President Elect Marion Ehrich, Secretary-Treasurer Karen Steinmetz, Councilors Ed Levin and Pam Lein, Student Representative Chris Curran, and newly elected Vice President Elect Susan Schantz.

Addendum May 9, 2007: Newly elected NTSS Student Representative: Derek Drechsel

The reception and business meeting for the Specialty Section was held on Wednesday evening March 28, 2006, beginning at 6:00 p.m., and was attended by approximately 140 members. President Bob MacPhail called the meeting to order at approximately 6:30 p.m. The following items were discussed:

**A. Election Results**

The President introduced and welcomed the new NTSS officers, Vice President Elect Susan Schantz and Councilor Ron Tjalkans (not present). The nominating committee was chaired by Chris Newland and committee members included Carey Pope, Michael Aschner, and John O'Donohue. This election is the first conducted electronically through SOT Headquarters. Election ballots were prepared, made available by e-link through the SOT website on February 9 with a February 28, 2007 closing date.

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

Finances: The NTSS account balance was \$16,988 on June 30, 2007.

Membership in the NTSS as of June 2007 stands at 346.

### **C. 2007 NTSS Book Award Donation**

The NTSS is grateful to Dr. Peter S. Spencer for the generous donation of two (2) autographed copies of his book entitled “Experimental and Clinical Neurotoxicology, 2<sup>nd</sup> edition” (Eds. P.S. Spencer, H.H. Schaumburg, and A.C. Ludolph) to the First Place winners of the Best Poster Award. This year’s recipients are Ming-Kai Chen (Pre-Doctoral) and Stan A. Benkovic (Post-Doctoral).

### **D. Scientific Meeting.**

President Bob MacPhail, Past President Rich Segal, and incoming President Chris Newland comprised the review committee for NTSS proposals for 2007 meeting. A summary of proposals submitted to NTSS for sponsorship for the 2007 annual meeting are as follows:

Primary sponsorship: Three proposals were submitted, all three were endorsed, and all three were approved as workshops by the SOT program committee.

- (1) Thyroid Hormone Disruption: From Kinetics to Dynamics.
- (2) Advances in Causation, Diagnosis and Therapy of Parkinson and Parkinson-Like Movement Disorders: Views from Toxicologists and Clinicians.
- (3) Air Pollution, Oxidative Stress, and Neurodegeneration.

Secondary sponsorship: Four proposals were received, of which NTSS endorsed three. Only one was approved as a workshop by the SOT program committee.

- (1) Environmental Risk Factors for Autism.

Tertiary sponsorship: Two proposals were received, of which NTSS endorsed one, which was approved by the SOT program committee as a symposium.

- (1) Current Issues in Developmental Immunotoxicity.

#### Poster/Platform Sessions:

Nervous System: Effects and Mechanisms *in Vivo*

Nervous System: Mechanisms *in Vitro*

Neurotoxicity: Developmental

Neurotoxicity: Pesticides

Neurotoxicity Metals

Chemical and Biological Weapons

Chemical Weapons - Mechanisms

### **F. Awards.**

#### **1. Distinguished Investigator Award**

This is not viewed as an annual award but rather an award to recognize truly exceptional contributions. There were no 2007 nominees for the Award.

#### **2. Predoctoral Poster Awards**

##### *First Place:*

Mr. Ming-Kai Chen

Mentor: T.R. Guilarte

Environmental Health Sciences, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD

Title: Dopaminergic and glial cell markers in a chronic MPTP non-human primate model of Parkinson's Disease

*Second Place:*

Anand Giddabasappa

Mentor: D.A Fox

Department of Biology and Biochemistry, College of Optometry, University of Houston, Houston, TX.

Title: Gestational lead exposure (GLE) increases cell proliferation and neurogenesis in the developing mouse retina.

*Third Place:*

Ms. April P. Neal

Mentor: T.R. Guilarte

Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD.

Title: Effects of lead exposure on synaptic targeting of NMDA receptor subunits and signaling pathways in rat hippocampal neurons.

**Postdoctoral Poster Awards:**

*First Place:*

Dr. Stanley A. Benkovic, Jr.

Mentor: D.B. Miller

Toxicology and Molecular Biology Branch, CDC NIOSH, Morgantown, W.V.

Title: Exercise provides neuroprotection against kainic acid toxicity through induction of the chemokine MCP-1 in the hippocampus of C57BL/6J mice.

No second or third places were awarded.

**Best Abstract Competition:**

1. **Ming-Kai Chen**, H Kuwabara, RJ Adams, JR Brašić, JL McGlothan, M Alexander, A Kumar, DF Wong and TR Guilarte. Dopaminergic and glial cell markers in a chronic MPTP non-human primate model of Parkinson's disease.
2. **Dongren Yang**, Dziennis S, Alkayed NJ, Hurn PD, Lein PJ Developmental exposure to polychlorinated biphenyls reduces infarct size in the adult rat following ischemic stroke.
3. **Krishnan Sriram**, Porter DW, Tsuruoka S, Endo M, Jefferson AM, Wolfarth MG, Rogers GM, Castranova V and Luster MI, Neuroinflammatory responses following exposure to engineered nanomaterials
4. **Xueqian (Shirley) Wang**, G. Jane Li, Wei Zheng. Iron (Fe) transport across the blood-CSF barrier in vitro as affected by manganese (Mn) exposure
5. **Sarah E. Owens**, ML Summar, JL Haines, and M. Aschner. Genetic susceptibility in autism.

### **III. Other 2006 - 2007 Activities and Accomplishments:**

Special thank yous and acknowledgements are extended to out-going Student Representative Dr. Chris Curran and out-going Councilor Pam Lein who worked on the NTSS website in the absence of a NTSS webmaster. An updated working version of the new website was presented at the Executive Board meeting. Also, Dr. Curran continued to spearhead NTSS outreach by distributing lanyards and pens to members and Abstract/Poster winners.

### **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.