

# Ocular Toxicology Specialty Section

## Founded in 2007

### Mission

The objective of this Specialty Section are to promote exchange of information among academic, clinical and preclinical researchers in ocular toxicology. The section intends to provide a forum for the interaction of toxicologists and other professionals involved in ocular toxicity/toxicology studies. Exchange of information is promoted through annual business meetings, sponsorship of sessions/workshops for the annual meeting and liaisons with other professional organizations.

### Executive Committee 2010

- President: Mark Vézina, Charles River
- President-Elect: JoAnn C. L. Schuh, Applied Veterinary Pathobiology
- Vice President: Brian J. Christian, Covance
- Secretary-Treasurer: Marina T. Seme Nelson, Covance
- Past President Councilor: Margaret E. Collins, Charles River
- Councilors:
  - Timothy K. MacLachlan, Novartis
  - Vasilis Vasiliou, University of Colorado - Denver

### OTSS Membership



### Goals

- To serve as the focal point for interaction of members of the Society of Toxicology interested in "Ocular Toxicology".
- To develop, propose, and conduct programs and educational activities that emphasize the latest developments in "Ocular Toxicology".
- To relate those developments to the activities of the Society of Toxicology and to stimulate new growth in "Ocular Toxicology" as it relates to the science of toxicology.
- To share information with other professional organizations related to "Ocular Toxicology".
- To act as a resource to the Society in the area of the Section's interest.
- To advocate the development of sound science-based guidelines for ocular assessment of therapeutics and update, as needed, guidelines for ocular irritancy assessment.
- To organize educational programs which emphasize new developments and issues in "Ocular Toxicology".

### Future Directions of the assessment of Ocular Toxicology

#### Advances in Technology

Use of technologies such as Ocular Coherence Tomography and Electroretinograms to assess the morphology and function of the retina. Research in medical devices such as intraocular lenses is also advancing.

#### New therapies for ocular diseases

There is increased use of biopharmaceuticals, as well as gene transfer and cell-based therapies to treat ocular disease. Novel drug formulations and delivery devices are being developed to address the barriers unique to ocular drug delivery. These new therapies, often requiring intraocular dosing, may benefit from specialized techniques for evaluation of ocular safety.

#### New ocular disease models

Progress in understanding complex age-related diseases such as macular degeneration depends on useful animal models. New transgenic rodent models are being developed that mimic diseases such as Dry AMD.

