

# Biological Modeling Specialty Section Society of Toxicology

## ANNUAL REPORT: 2013-2014

May 1, 2013 to April 30, 2014

### I. Officers/Committees:

<u>Officers</u>	<u>2013-2014</u>	<u>2014-2015</u>
President:	Cecilia Tan	Harvey Clewell
Vice President:	Harvey Clewell	Paul Hinderliter
Vice President-Elect:	Paul Hinderliter	Eva McLanahan
Secretary/Treasurer:	Eva McLanahan	Stephen Edwards
Past President	Hisham El-Masri	Cecilia Tan
Councilors:	Miyoung Yoon Brad Reisfield	Miyoung Yoon Qiang Zhang
PDA Representative:	Martin Phillips	Martin Phillips
GSLC Representative:	Miyuki Breen (before 08/13) Todd Zurlinden (after 08/13)	Todd Zurlinden

### I. Committees:

The BMSS 2013 **Best Paper Award committee** was formed by the officers from volunteers among the specialty section members and chaired by Harvey Clewell (BMSS Vice President). Committee members were Paul Hinderliter, Eva McLanahan, Zhoumeng Lin, Jim Bruckner, and Jeffery Gearhart. Papers published either electronically or in hard copy from January to December 2013 were considered. The review process included an initial screening of hundreds of abstracts obtained by electronic searching and nominations from BMSS members followed by reading and ranking of the top six papers. The selection process was difficult due to the wide range of topics and modeling approaches considered.

### II. Activities:

**2014 BMSS Mentoring Lunch** was held at Coach's Corner Grill on Monday, March 24 at 12:15 pm. Approximately 16 people were in attendance. The mentoring lunch was partially funded by the CRAD Mentoring Initiative. Attendees had the opportunity to visit informally with experienced scientists in the field of biological modeling, including but not limited to the current officers of BMSS. Scientists from government, industry (both chemical and pharma), and academia provided brief descriptions of the nature of the opportunities for a career in biological modeling in their sector. Attendees asked questions regarding the appropriate education and experience needed to prepare for a career in this field.

**2014 SOT Annual Meeting Reception** was held in Phoenix, Arizona on Tuesday, March 25th. Approximately 75 people were in attendance. Cecilia Tan called the meeting to order at 6:15 PM. She briefed the audience on the status of the specialty section and thanked outgoing officers and congratulated the new incoming officers. Cecilia also provided the budget update. Harvey Clewell, Vice President, recognized the officers for 2014-2015 and provided his vision for the next operating year and briefed the audience on the selection process for the best paper award. The honorable mentions and best paper award were then recognized. The recipient of the 2014 Perry J. Gehring award for best presentation on biological modeling was recognized. The meeting concluded with a game of bingo with live musical entertainment from the Belladonna Blues Band.

### **III. Awards:**

**2014 Perry J. Gehring Student Award for Excellence in Biological Modeling:** Huali Wu from The Hamner Institutes for Health Sciences. "Can the association between serum perfluorooctanoic acid (PFOA) and delayed menarche be explained on the basis of physiology and pharmacokinetics?" (Abstract number 91, poster board 126, Monday morning session)

**BMSS 2013 Best Paper Award Winner:** Zhang Q., Kline D.E., Bhattacharya S., Crawford R.B., Conolly R.B., Thomas R.S., Andersen M.E., Kaminski N.E. (2013) All-or-none suppression of B cell terminal differentiation by environmental contaminant 2,3,7,8-tetrachlorodibenzo-*p*-dioxin. *Toxicol Appl Pharmacol.* 268(1): 17-26.

### **BMSS 2013 Best Paper Honorable Mentions:**

Strikwold M., Spenkelink B., Woutersen R.A., Rietjens I.M., and Punt A. (2013). Combining in vitro embryotoxicity data with physiologically based kinetic (PBK) modelling to define in vivo dose-response curves for developmental toxicity of phenol in rat and human. *Arch Toxicol.* 87(9): 1709-23.

Lumen A., Mattie D.R., and Fisher J.W. (2013). Evaluation of perturbations in serum thyroid hormones during human pregnancy due to dietary iodide and perchlorate exposure using a biologically based dose-response model. *Toxicol Sci* 133(2): 320-41.

### **IV. Financials**

#### **Endowment fund:**

Beginning of Year - net assets = \$37,668 (March 31, 2013)  
End of Year - net assets = \$41,552 (March 31, 2014)

#### **Operating Budget:**

Beginning of Year – net assets = \$8,764 (April 30, 2013)  
End of Year – net assets = \$9,262 (April 30, 2014)

## **V. 2014 SOT Annual Meeting Courses/Sessions:**

The section received many proposals seeking its sponsorship: one CE course proposal, six symposium proposals, and three workshop proposals. The section leadership chose to sponsor all ten sessions. The CE course, one workshop, and one symposium were accepted by SOT.

*CE course:* “Advanced Methods for Human Health Risk Assessment”

*Workshop:* “The Doorway between Exposure and Response: How Biologically-Based Inhalation Dosimetry Models Enhance Human Health Risk Assessment”

*Symposium:* “Computational Approaches to Predict Repeat-Dose Toxicity: Lessons Learned from Cosmetic Ingredients”