

ANNUAL REPORT: 2008-2009
MOUNTAIN WEST SOCIETY OF TOXICOLOGY
May 1, 2008 to April 30, 2009

I. Officers/Committees:

Officers:	<u>2008-2009</u>	<u>2009-2010</u>
President:	Vasilis Vasiliou	Philip Moos
Vice President:	Philip Moos	Matthew Reed
Vice-President-Elect:	Matthew Reed	Donna Zhang
Secretary/Treasurer:	N. Shane Cutler	
Councilors:	Kevin Welch Vincent Murphy	
Student Councilors:	Ebany Martinez Michael Holt	
SAC Representative:	Michael Holt	
Past-President:	Richard Vaillancourt	Vasilis Vasiliou

II. Activities

At the start of the 2008-2009 year, the executive committee was informed by National SOT that our chapter was >\$4000 in debt, and that we must generate a payback plan since National SOT had covered our debt. We generated a three-year plan for generating revenue at the fall meetings to pay back the debt, and this plan was approved by National SOT. We were informed that the debt had accumulated by overspending in the previous two fall and preceding spring meetings. Dr. Vaillancourt reviewed the expenditures and found that \$2000 that should have been designated for Mountain West SOT in the fall of 2006 was deposited in the Midwest SOT chapter account. Once this accounting error was corrected, dues from our chapter were applied to the debt by National SOT and we were informed that our debt was paid in full. However, during this process, National SOT had imposed restrictions on our regional activities, including the fall 2008 meeting.

2008-2009 Meetings:

The fall, 2008 Mountain West SOT Chapter Conference was held at the University of Utah in Salt Lake City on October 2nd and 3rd, 2008. The theme of the meeting was “Epigenetics in Toxicology” which coincidentally aligned well with one of the major themes of the Spring 2009 National Meeting in Baltimore. This regional meeting was hosted and supported by the Department of Pharmacology and Toxicology at the University of Utah. Additional support for this meeting came from National SOT, Covance, and the commercial suppliers VWR and Thermo Fisher Scientific. The plenary session included thematic talks that detailed DNA methylation alterations that have been discovered in cancer and the discussion of pharmacological interventions. Scientific talks included: “*DNA methylation in lung cancer*” by Dr. Tessema, a member of Dr. Belinsky’s group lung cancer group at the Lovelace Respiratory Research Institute in New Mexico; “*Targeting DNA methylation in the treatment of cancer*” by Dr. Jones from the Huntsman Cancer Institute at the University of Utah; and “*Epigenetic remodeling by environmental arsenicals*” by Dr. Futscher from the Department of

Pharmacology and Toxicology at the University of Arizona. These forward looking basic science talks were followed by a talk that discussed the pharmacogenomics of a recently released product, TheraGuide-5-FU, detailed in "*Pharmacogenetic analysis of dihydropyrimidine dehydrogenase and thymidylate synthase identifies patients at significantly increased risk for 5-fluorouracil toxicity*" by Dr. Bowles from Myriad Genetics in Salt Lake City. Another general session include the following scientific talks: "*Consequences of Pulmonary DNA Alkylation by 3-Methylindole*" by N. Shane Cutler, "*Histone deacetylase inhibitors and steroid receptors: Possible mechanisms of endocrine disruption.*" by Cathy Smith, "*Alcohol-induced organ damage: The role of epigenetics and retinoic acid homeostasis*" by Vasilis Vasiliou, PhD., and "*Distinctive Chromatin in Human Sperm Packages Genes that Guide Embryo Development*" by Saher Sue Hammoud.

One of the strategic objectives of our Regional Chapter is to increase local industry participation. With a new Covance facility under construction in Arizona, we began a new partnership that in this meeting materialized as an Industry Education Workshop where Dr. Moore from Covance Program Management presented a talk entitled: "*Drug development – Strategies & pitfalls: An industry perspective*" where he detailed steps required to move discovery work to actual application in human medicine in the clinic. This talk provided insight for everyone from principal investigators that would like to translate their discovery work to the clinic to trainees who aspire to careers in an industrial setting.

Another goal for our meeting is to provide trainees opportunities to present their work. Seven student travel awards were supported by National SOT to allow attendance. We had two student platform sessions (8 total talks) and a poster session (16 total posters) in which they participated. These platform sessions give trainees experience presenting their work in a time constrained manner and serve as preparation for presenting their work at National SOT meetings. Perhaps the poster session allows for the most interaction between the conferences attendees. Many student posters and talks were very impressive and made it difficult for judges to choose the 2 top posters and 2 top platform presentations. The top poster award went to Fredine Lauer from the Center for Environmental Health Sciences at the University of New Mexico for her work entitled "*Temporal-spatial analysis of environmental air samples from the US-Mexico border: Assessment of the bioactivity of PM2.5 and PM10 extracts on human bronchial epithelial cells*". The runner-up award went to Karen Thomas from the Department of Pharmacology & Toxicology at the University of Utah for her work entitled: "*Involvement of TRPV1 and ER stress in lung cell death in vitro and acute lung injury in vivo*". The top platform presentation went to James Ruff from the Biology Department at the University of Utah for his talk entitled: "*Developing organismic performance assays as sensitive tools for toxicity assessment*". The runner-up platform presentation went to Jessica Weems from the Department of Pharmacology and Toxicology at the University of Utah for her talk entitled: "*3-Methylindole-mediated DNA damage and cytochrome P450 induction in primary normal human bronchial epithelial cells*".

The spring, 2009 Mountain West SOT meeting was held jointly with the Southern California Chapter at the 48th annual Society of Toxicology meeting in Baltimore, Maryland. The reception was held on Monday, March 16, 2009, at Philips Seafood

Restaurant. The reception was well attended by both chapters. There was an intriguing discussion among the executive committee's of both chapters regarding a joint fall meeting. With the economic times as they are, the Southern California Chapter indicated that there were certain constraints on them regarding the time and location of the meeting, so the Mountain West Chapter membership (since travel is a normal component of this region for our meetings) was queried about the possibility of joint meeting in Southern California, but the majority of the membership voted that there was more support for a meeting in New Mexico over a meeting in Southern California for the coming fall meeting.

Projected Meetings:

Proposed Date	Proposed Topic	Proposed Location
September 24 & 25, 2009	Toxicology in the Development of Countermeasures for Radio/Chem/Bio Threat Agents	Albuquerque, NM
March 7-11, 2010	National Meeting	Salt Lake City, UT

SOT RC Funding Received and Used to Support:

Mountain West SOT Regional Chapter received the following support from National SOT that was used to help support the fall 2008 meeting.

Funds Received (category)	Amount
Student Travel Awards	\$2000
Speaker Travel Awards	\$1500
RC Strategic Plan	\$2000

Additional funds to support the fall meeting were received from Covance (sponsored lunch as well as housing and the talk by Dr. Moore), the Department of Pharmacology and Toxicology (paid for printing/binding of the program and the expense to rent the poster boards, plus departmental rate was given for the renting of the meeting facility), and the science suppliers, VWR and Thermo Fisher Scientific (sponsored coffee breaks during the meeting).