

MOUNTAIN WEST REGIONAL CHAPTER

ANNUAL REPORT: 2016-2017

May 1, 2016 to April 30, 2017

I. Officers/Committees:

<u>Officers</u>	<u>2015-2016</u>	<u>2016-2017</u>
President:	Yin Chen	Jared Brown
Vice President:	Jared Brown	Cassandra Rice
Vice President Elect:	Cassandra Rice	Debra MacKenzie
Secretary/Treasurer:	Karen Cooper	Karen Cooper
Past President	Todd Thompson	Yin Chen
Councilors:	Jeff Angermann Todd Thompson	Todd Thompson Yin Chen
PDA Representative:	Jonathan Shannahan	Erica Dashner
GSLC Representative:	Bryan Harder	Sebastian Medina
Junior Student Representative	Sebastian Medina	Erica Toth

II. Activities:

The 34th Annual MWSOT Regional Chapter Meeting in Salt Lake City, Utah, hosted at the University of Utah guest house, September 21st-23rd. More than 75 attendees participated in the meeting which included representation from the University of Arizona, University of Colorado, Colorado State University, University of New Mexico, University of Utah, Utah State University, Montana State University, Lovelace Respiratory Research Institute, Roseman University, and Westminster College. The meeting opened with a reception on Wednesday evening September 21st which followed by the Air Quality, Health and Society Retreat hosted by the University of Utah. This reception allowed attendees from both organizations to meet and greet prior to the formal initiation of the meeting on September 24th. Many of the attendees of the Air Quality, Health and Society Retreat stayed for, and presented during, the MWSOT regional meeting. Drs. Cassandra Rice (MWSOT vice president) and Kristen Keefe (Interim Dean of the College of Pharmacy, University of Utah) welcomed the attendees and introduced the theme of the meeting which was focused on “Environmental Effects on Human Health: a Focus on Regional Issues. Dr. Rice gave an overview of the meeting schedule (see Appendix I). Dr. Gary W. Miller (Emory University) provided the keynote lecture entitled, “The Exposome and Toxicology: Mutual Beneficiaries”. There were three plenary topics covered during the meeting and included (1) Environmental exposures and human health; (2) Air Pollution – regulation, monitoring, personalized medicine; (3) Environmental exposures – mine waste, diet, cardiovascular effects and cancer. Each plenary session was chaired by a graduate student or postdoctoral MWSOT member who introduced the speakers and each topic. In addition to the plenary topics, students and postdoctoral fellows presented their research in both a platform session and/or a poster session. The poster session was held from 6:30-9 pm on Thursday September 22nd with a total of 17 posters were presented by a mix of faculty, students,

undergraduates and postdoctoral fellows. Unique to this year's meeting, was the addition of an undergraduate outreach session. This session was held on Thursday the 22nd during lunch.



Participants in the undergraduate session at the regional chapter meeting in Salt Lake City, UT. Front (left to right): Kristina Fox, Abby Scott, , Ashli Hunter, Nam Nguyen, . Back (left to right): Gary Skiles, Michael Franklin, Matthew Reed, Kevin Welch, Deion Jackson, Teofilo Borunda.

Speakers from academia, industry, the USDA, and a non-academic research institution introduced the field of toxicology from their unique perspectives to the undergraduates. Due to support from SOT we were able to provide lunch and free registration for the 16 undergraduates who attended. Additional financial support for the meeting was provided by registration fees, SOT travel awards for students and the plenary speaker, donations from the University of Utah College of Pharmacy and Pharmacology and Toxicology Department, individual donations and vendor booths (Elevation Supply, Invitrogen, ThermoFisher).

Student and Postdoctoral Awards Presented at the 2016 MWSOT Regional Chapter Meeting:

Annual Garold Yost Award

Huan Xu

(University of New Mexico; Advisor: Scott Burchiel)

Undergraduate Poster Presentation

Bethany Sanchez

(University of New Mexico; Advisor: Matthew Campen)

Undergraduate Platform Presentation

Ashli Hunter

(Utah State University; Advisor: Abby Benninghoff)

Graduate Student Poster Presentation

1st place – Sebastian Medina

(University of New Mexico; Advisor: Scott Burchiel)

2nd Place Indushekhar Persaud

(University of Colorado; Advisor: Jared Brown)

Graduate Student Platform Presentation

1st Sumira Phatak

(Utah State University; Advisor: Abby Benninghoff)

2nd – Monica Sandoval-Johnson

(University of Colorado; Advisor: Jared Brown)

Postdoctoral Award

Christina Tyler

(University of New Mexico; Advisor: Matthew Campen)



MWSOT officers and awardees from the regional chapter meeting in Salt Lake City, UT. (left to right): Todd Thompson, Jared Brown, Indushekhar Persaud, Ashli Hunter, Sumira Phatak, (Back: Karen Cooper), Christina Tyler, Bethany Sanchez, Monica Sandoval-Johnson, Cassandra Rice.

Travel Award Recipients for Attendance to the MWSOT Regional Meeting: Supplemental funding for student travel to the regional chapter meeting was kindly provided through SOT. There were 16

student recipients for travel funding include representation from the University of New Mexico, University of Colorado, Colorado State University, and the University of Arizona.

2017 SOT Annual Meeting Reception was a joint reception with the Southern California Regional Chapter of SOT and was held in Baltimore, MD at Ripley's Believe it or Not on Tuesday March 14th from 6-9 pm. The reception was well attended by members of the MWSOT including the University of Arizona, University of Colorado, University of New Mexico, University of Utah, Colorado State University, and New Mexico State University. The gathering was very productive and provided members of MWSOT to interact with not only their counterparts in the region but also Southern California regional members including many industry contacts. Food, drink and entertainment were provided through the reception.

Other Regional Chapter Activities 2015-2016:

The poster shown below was exhibited at the 56th Annual SOT meeting in Baltimore, MD. presenting information on the mission of the MWSOT and factual information about the organization.

Mountain West Regional Chapter of the Society of Toxicology



"Fostering regional collaboration, information exchange, & training in toxicology for scientists & trainees throughout the Southwest"

The Mountain West Society of Toxicology (MWSOT) has been in existence for over 30 years, since 1984! The main functions of the chapter are to 1) foster and support southwest regional toxicologists' initiatives and collaboration and 2) to provide a training recourse to our graduate students and postdoctoral fellows. These goals are primarily achieved through the MWSOT Annual Meeting, locations of which rotate through the main academic centers of Arizona, Colorado, New Mexico and Utah. The meeting is held over 1-2 days with topics focused on regional toxicology interests and issues. A full slate of scientific speakers (national, international and local experts) is complemented by research platform and poster presentation venues for students and postdoctoral fellows. To provide incentive for trainees, awards are given to top performers. Any scientist or student with an interest in toxicology is encouraged to attend the MWSOT Annual meeting! **The 2017 meeting will be held in Albuquerque, New Mexico.**

MWSOT FAST FACTS

Established: 1984

Membership:

- Total Membership: 76
- Full: 60
- Postdoctoral: 3
- Student: 12
- Emeritus: 1

Undergraduate attendees: 16

Diversified Membership:

61% Academic, 8% Research Institute, 11% Industry, 16% Consulting, 3% Government, 1% Other

Geography

Largest Geographical Area of the Regional Chapters: **Arizona, Colorado, New Mexico, Utah, Nevada, Wyoming, & Southern Idaho**

Primary Chapter Focus:

Student and Postdoctoral Training through the Annual Regional Chapter Meeting

2016 AWARD WINNERS:

Yost Award: Huan Xu
Undergraduate Poster/Platform: Bethany Sanchez/ Ashli Hunter
Graduate Student Poster: 1st Sebastian Medina, 2nd Indushekar Persaud
Platform: 1st Sumira Phatak, 2nd Monica Sandoval-Johnson
Postdoctoral Award: Christina Tyler

STUDENT AWARDS

Gerald Yost Predoctoral Student Award
Award recognizing a predoctoral toxicology student exhibiting exceptional interest and aptitude in toxicology through participation in regional chapter activities.

MWSOT Student Travel Award
Students from outside of the state holding the regional meeting are eligible with the submission of their Abstract for either a platform or poster presentation, submit a CV and a brief description of their research. These files will be evaluated by the MWSOT Regional Chapter Officers.

MWSOT Predoctoral Student Platform and Poster Presentation Awards
Applicable to predoctoral students working in a research laboratory of a member of the Mountain West Regional Chapter.

MWSOT Postdoctoral Platform and Poster Presentation Awards
Applicable to postdoctoral trainees working in a research laboratory of a member of the Mountain West Regional Chapter.

CURRENT OFFICERS

President: Jared Brown, PhD, University of Colorado
Vice President: Cassandra Deering-Rice, PhD, University of Utah
Vice President-elect: Debra MacKenzie, PhD, University of New Mexico
Secretary/Treasurer: Karen Cooper, PhD, University of New Mexico
Past President/Councilor: Yin Chen, PhD, University of Arizona
Councilors: Todd Thompson, PhD, University of New Mexico
Jeff Angermann, PhD, University of Nevada, Reno
Erica Dashner, PhD, University of New Mexico
Postdoctoral Representative: Monica Sandoval-Johnson, University of Colorado
Senior Student Representative: Monica Sandoval-Johnson, University of Colorado
Junior Student Representative: Sebastian Medina, University of New Mexico

MEMBER CONTRIBUTIONS TO MWSOT REGIONAL CHAPTERS

The Mountain West chapter encompasses the beautiful states of Arizona, Colorado, Utah, Southern Idaho, Nevada, New Mexico, and Wyoming.

Academic Institutions	Non-Academic Institutions and Industry	
Colorado State University Fort Lewis College Idaho State University New Mexico State University Northern Arizona University University of Arizona University of Colorado University of Nevada - Reno University of New Mexico University of Northern Colorado University of Wyoming Utah State University	Array BioPharma, Inc. (CO) Century Environmental Hygiene (CO) Charles River Laboratories (NV) Covance Laboratories (AZ) EP Hays Toxicology Services (CO) Flatrons Toxicology (CO) Front Range Environmental Toxicology Services (CO) Los Alamos National Laboratory (NM)	Lovelace Respiratory Research Institute (NM) National Jewish Research Institute (CO) Poisonous Plant Research Laboratory (UT) Rocky Mountain Poison Center (CO) Shopp Nonclinical Consulting (CO) Summit Toxicology (CO) Technikos Research Associates (AZ) Woven Egg Consulting (CO)

ANNUAL CHAPTER MEETING TOPICS AND LOCATIONS

- Held annually in September or early October
- Regional, National and International toxicology topics of interest
- Nationally recognized and regional speakers
- Rotates yearly through beautiful southwest locations in Arizona, Colorado, New Mexico and Utah / Southern Idaho
- Platform and presentation venues for graduate students and postdoctoral fellows

SUCCESSFUL CHAPTER INITIATIVES & ACHIEVEMENTS

- Undergraduate Toxicology Outreach Program, developed to introduce undergraduates to the field of Toxicology
- Industry speakers discuss scientific areas of interest in industry and career potentials for toxicologists
- Increase Industrial and Consulting Participation
- Collaborative National Receptions with Southern California Chapter of SOT (primary industry membership)

III. Appendix I – Agenda for the 34th Annual MWSOT Regional Chapter Meeting:

Meeting agenda:

Wednesday, September 21st, 2016

6:00 – 8:00 pm Registration Open- *Floor 1 Foyer South*

6:00 – 9:00 pm **Reception - *Douglas Ballroom***

Thursday, September 22nd, 2016

7:30 – 8:30 am Registration Open- *Douglas Ballroom*

7:15 – 8:30 am **Continental Breakfast- *Douglas Ballroom***

8:30 – 8:40 am **Opening comments** – Kristen Keefe, Interim Dean, College of Pharmacy, University of Utah

8:40 – 8:50 am **Meeting Introduction** – MWSOT President Jared Brown & Vice-President Cassandra Deering-Rice

8:50 – 9:50 am **Keynote Speaker** – Gary W. Miller, Ph.D. Emory University – “The Exposome and Toxicology: Mutual Beneficiaries”

9:50 – 10:00 am **Break**

10:00 – 12:00 pm **Plenary Topic I:** Environmental exposures and human health
(Session chair: Monica Sandoval-Johnson)

10:00 – 10:30 James Roede – "Down Syndrome and the Proteostatis Network: are Down syndrome individuals a sensitive population?"

- 10:30 – 11:00 Amanda Bakian – “Short-term ambient air pollution exposure and risk of suicide”
- 11:00 – 11:30 Aikseng Ooi – “A genomic view of NRF2 signaling in cancer”
- 11:30 – 2:30 pm **Lunch on your own/Free time**
- 11:30 – 2:30 **Undergraduate Toxicology outreach program (Lunch provided)**
- 11:45 – 12:00 **Opening comments**
- 12:00 – 12:30 **Introduction to Toxicology:** Mike Franklin, U. of Utah
- 12:30 – 12:50 **Toxicology at the USDA:** Kevin Welch, USDA
- 12:50 – 1:00 **Non-academic research institution:** Matt Reed, Lovelace
- 1:00 – 1:20 **Toxicology – an industry perspective:** Gary Skiles, Amgen
- 1:20 – 1:40 Break
- 1:40 – 2:20 **Panel Discussion**
- 2:30 – 4:00 pm **Plenary Topic II:** Air Pollution – regulation, monitoring, personalized medicine (Session chair: Cristina Tyler)
- 2:30 – 3:00 Brock LeBaron – “Utah Air Quality Regulation and Planning for Ozone in the Uinta Basin”
- 3:00 – 3:30 Kerry Kelly – “Low-cost air-quality sensing: opportunities and challenges for understanding personal exposure”
- 3:30 – 4:00 Brian Stone – “Asthma, Air Pollution, and Genetics: Tracking Personalized Asthma Management in Utah”
- 4:00 – 5:30 **Student Presentations**
- 5:30 – 6:30 **Dinner/poster setup**
- 6:30 – 9:00 pm **Poster Session / Mixer**

- 7:15 – 8:30 am Continental Breakfast- *Douglas Ballroom*
- 8:30 – 9:30 am **Student/Postdoc Presentations – *Douglas Ballroom***
- 9:30 – 10:00 am **Break** and Award Committee Meeting
- 10:00 – 12:00 pm **Plenary Topic III:** Environmental exposures – mine waste, diet, cardiovascular effects and cancer
(Session chair: Sebastian Mendina)
- 10:00 – 10:30 Deborah MacKenzie – “Immune Dysregulation and Autoimmune Responses in Tribal Communities Exposed to Mine Waste and Metal Contaminants”
- 10:30 – 11:00 Matthew Campen – “Cardiovascular effects from pulmonary exposure to metal-contaminated dusts from an abandoned uranium mine”
- 11:00 – 11:30 Russ Richardson - “Vascular consequences of inhaled particulate matter: Vulnerability in health and disease”
- 11:30 – 12:00 Abby Benninghoff – “Consumption of a diet that emulates typical U.S. nutrition, the total Western diet (TWD), promotes colitis and colon tumorigenesis in mice”
- 12:00 – 12:30 pm **Awards Presentation and Closing**