

MOUNTAIN WEST REGIONAL CHAPTER

ANNUAL REPORT: 2021 - 2022

July 14th, 2022

I. Officers/Committees:

<u>Officers</u>	<u>2020-2021</u>	<u>2021-2022</u>
President:	Mirella Meyer-Ficca	Alicia Bolt
Vice President:	Alicia Bolt	Aikseng Ooi
Vice President Elect:	Aikseng Ooi	Kristofer Fritz
Secretary/Treasurer:	Karen Cooper	Erica Dashner-Titus
Past President	Ronald Tjalkens	Mirella Meyer-Ficca
Councilors:	Kristofer Fritz	Jeb Lampe
	Jed Lampe	Julie Moreno
PDA Representative:	Sebastian Medina	Rachel Speer
GSLC Representative:	Angela Cruz-Hernandez	Kendra Prutton
Junior Student Representative:	Kendra Prutton & Christopher Pohl	Jacklyn Nguyen

II. 2021 Membership total: 118

III. Key Outcomes in 2021–2022:

- A. Held our Annual Fall Regional Meeting, virtually in September 2021.
- B. Held our MWSOT Reception at the Annual Meeting in San Diego, CA in March 2022.

IV. Activities:

39th Annual MWSOT Regional Chapter Meeting

The meeting was hosted by the University of New Mexico, College of Pharmacy, Department of Pharmaceutical Sciences. It was held virtually via zoom due to the COVID-19 pandemic on September 23rd, 2021. The agenda for this conference is included as Appendix I. This conference started with opening remarks from Dr. Alicia Bolt (MWSOT Vice President), followed by a fantastic presentation by our keynote speaker Dr. Bruce Stanton from Dartmouth University. Title of presentation: Environmental arsenic suppresses the host immune response to infection.

The meeting focused on highlighting emergent research from our MWSOT trainees. Following the keynote presentation, we had two trainee presentations sessions (3 presentation each) where students showcased their research followed by an engaging question and answer period. The meeting ended with a virtual poster session which included 10 trainee posters



Figure 1. Keynote Speaker for the 39th Annual MWSOT Regional Chapter Meeting. Dr. Bruce Stanton, Dartmouth University.

presented in individual zoom breakout rooms. Participants were able to travel from room to room to visit/network with poster presenters and colleagues.

After the conclusion of the meeting, the following **Trainee Awards** for best presentations were given: (There were a total of 6 oral student presenters and 10 total posters presented.)

Awardees:

- The Yost Outstanding Graduate Student Award: **Savannah Rocha, Colorado State University**
- Graduate Student Outstanding Oral Presentation Awards:
 - **Keegan Rogers - 1st place, University of Colorado Anschutz Medical Campus**
 - **Cameron Chock - 2nd place, University of New Mexico**
 - **Jacklyn Nguyen - 3rd place, University of Utah**
- Graduate Outstanding Poster Presentation Award:
 - **Lauren Thompson, 1st place, University of Colorado Anschutz Medical Campus**
 - **Joshua Alcon, 1st place, University of New Mexico**
 - **Scott Tilden, 2nd place, University of Colorado Anschutz Medical Campus**
 - **Nelson Amaya, 3rd place, University of New Mexico**

Trainee Oral Presentations:

- Daniel Foster, University of Colorado Anschutz Medical Campus. “Lung development pathways are enriched in lipofibroblasts during the development and resolution of pulmonary fibrosis”
- Cameron Chock, University of New Mexico. “Tungsten exposure enhances bone metastasis and osteolysis in 4T1 breast cancer mice.”
- Casey McDermott, Colorado State University. “A53T alpha-synuclein mutation delays neuropathology in a viral model of Parkinson’s disease.”
- Keegan Rogers, University of Colorado Anschutz Medical Campus. “Characterization of nano-sized silica in agricultural exposures and its role in the pathogenesis of chronic kidney disease of an unknown etiology.”
- David Scieszka, University of New Mexico. “Electronic cigarette vapor increases neurological senescence-associated beta-galactosidase.”
- Jacklyn Nguyen, University of Utah. “Immunological Characterization of single and repeated ozone exposure in the healthy and susceptible lung.”

Trainee Poster Presentations:

- Savannah Rocha, Colorado State University. “Rotenone induces alpha-synuclein aggregation and regional gliosis prior to loss of dopaminergic neurons is a novel murine model of Parkinson’s disease.”
- Scott Tilden, University of Colorado Anschutz Medical Campus. “Toxic or helpful? Exploring the body’s response to viral-like nanoparticles.”
- Lauren Thompson, University of Colorado Anschutz Medical Campus. “Development of a Cisplatin toxico-kinetics and dynamics model to inform about acute kidney injury.”
- Celine Campos, Regis University. Manganese induced enteric nervous system toxicity and neurodevelopmental behavioral abnormalities.”

- Vincenzo Gilberto, Colorado State University. “Neuronal treatment of models of Alzheimer’s disease using CBD and Trazodone.”
- Amanda Latham, Colorado State University. “Neuropathogenesis in Guinea pigs exposed to mycobacterium tuberculosis.”
- Ray Hua, University of Arizona. “Transporter-mediated uptake of the reversible male contraceptive H2-gamendazole across the human blood-testis barrier.”
- Tanner Murphy, Colorado State University. “Neuroprotective ability of mesenchymal stems cells in prion disease.”
- Joshua Alcon, University of New Mexico. “Vitamin E acetate is degraded to toxic byproducts by vaping as determined using a THP-1 monocytic cell toxicity assay.”
- Nelson Amaya, University of New Mexico. “Astemizole, an antihistamine with activity as a functional inhibitor of acid sphingomyelinase (FIASMA), as a modulator of autophagy.”

Funding support

The student presentation awards were sponsored by funds from the Mountain West SOT regional chapter. Online platform support was provided by The University of New Mexico.

The **2022 Mountain West SOT Annual Meeting Reception** was held at the Barley Mash in the Gaslamp Quarter in San Diego, CA on Tuesday March 29th, 2022. It was a happy hour event attended that provided an opportunity for many MWSOT members to reconnect and network with each other. Approximately 45 people attending this event.

We presented a poster at the SOT Annual Meeting in San Diego (shown below) to highlight the participating regions, activities and mission of the Mountain West regional chapter.

MWSOT

Mountain West Regional Chapter of the Society of Toxicology

MWSOT FAST FACTS

Established: 1984

Membership: 91 Total

Geography: Arizona, Colorado, New Mexico, Utah, Nevada, Wyoming, Southern Idaho

CHAPTER OBJECTIVES		OFFICERS		STUDENT AWARDS																															
<ul style="list-style-type: none"> 1. Foster regional collaboration, information exchange, & training in toxicology for scientists & trainees throughout the Southwest 2. Provide a training platform to our graduate students and postdoctoral fellows. 3. Foster student and postdoctoral training through the Annual Regional Chapter Meeting. <p>Any scientist or student with an interest in toxicology is encouraged to attend the MWSOT Annual Meeting!</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Position</th> <th>2021-2022</th> <th>2022-2023</th> </tr> </thead> <tbody> <tr> <td>President</td> <td>Mirella Meyer-Fico, Utah State University</td> <td>Alicia Bolt, University of New Mexico</td> </tr> <tr> <td>Vice President</td> <td>Alicia Bolt, University of New Mexico</td> <td>Aikseong Ooi, University of Arizona</td> </tr> <tr> <td>Vice President Elect</td> <td>Aikseong Ooi, University of Arizona</td> <td>Kristofer Fritz, University of Colorado</td> </tr> <tr> <td>Secretary/Treasurer</td> <td>Karen Cooper, University of New Mexico</td> <td>Erica Dashner-Titus, University of New Mexico</td> </tr> <tr> <td>Past President</td> <td>Ronald Tjalkens, Colorado State University</td> <td>Mirella Meyer-Fico, Utah State University</td> </tr> <tr> <td>Councilors</td> <td>Kristofer Fritz, University of Colorado Jed Lampe, University of Colorado</td> <td>Julie Moreno, Colorado State University</td> </tr> <tr> <td>Postdoctoral Rep</td> <td>Sebastian Medina, New Mexico Highlands University</td> <td>Rachel Speer, University of New Mexico</td> </tr> <tr> <td>Senior Student Rep</td> <td>Angela Cruz-Hernandez, University of Colorado</td> <td>Kandice Prutton, University of Colorado</td> </tr> <tr> <td>Junior Student Rep</td> <td>Kendra Prutton, University of Colorado</td> <td>Jacklyn Nguyen, University of Utah</td> </tr> </tbody> </table>		Position	2021-2022	2022-2023	President	Mirella Meyer-Fico, Utah State University	Alicia Bolt, University of New Mexico	Vice President	Alicia Bolt, University of New Mexico	Aikseong Ooi, University of Arizona	Vice President Elect	Aikseong Ooi, University of Arizona	Kristofer Fritz, University of Colorado	Secretary/Treasurer	Karen Cooper, University of New Mexico	Erica Dashner-Titus, University of New Mexico	Past President	Ronald Tjalkens, Colorado State University	Mirella Meyer-Fico, Utah State University	Councilors	Kristofer Fritz, University of Colorado Jed Lampe, University of Colorado	Julie Moreno, Colorado State University	Postdoctoral Rep	Sebastian Medina, New Mexico Highlands University	Rachel Speer, University of New Mexico	Senior Student Rep	Angela Cruz-Hernandez, University of Colorado	Kandice Prutton, University of Colorado	Junior Student Rep	Kendra Prutton, University of Colorado	Jacklyn Nguyen, University of Utah	<ul style="list-style-type: none"> Garold Yost Predoctoral Student Award: Recognizes a predoctoral toxicology student exhibiting exceptional interest and aptitude in toxicology through participation in regional chapter activities Student Travel Awards: Students from outside of the state holding the annual meeting are eligible by submission of their abstract for either a platform or poster presentation, a CV, and a brief description of their research Student Platform and Poster Presentation Awards: Applicable to predoctoral or undergraduate students working in a research laboratory of a member of MWSOT chapter Postdoctoral Fellow Platform and Poster Presentation Awards: Applicable to postdoctoral fellows working in a research laboratory of a member of MWSOT chapter 	
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ANNUAL MEETING		2021 STUDENT AWARD WINNERS		MAJOR CONTRIBUTORS TO MWSOT																															
<ul style="list-style-type: none"> Held in September or early October Rotates yearly through beautiful southwest locations in Arizona, Colorado, New Mexico and Utah / Southern Idaho Nationally recognized speakers presenting on a broad range of toxicology topics of interest Platform and poster presentation for graduate students and postdoctoral fellows Top presentations are recognized by awards 		<ul style="list-style-type: none"> Garold Yost Predoctoral Student Award: Savannah Rocha, Colorado State University Student Oral Presentation Awards: Keegan Rogers, University of Colorado; Cameron Check, University of New Mexico; Jacklyn Nguyen, University of Utah Student Poster Presentation Awards: Lauren Thompson, University of Colorado; Joshua Alcon, University of New Mexico; Scott Tilden, University of Colorado; Nelson Amaya, University of New Mexico 		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Academic Institutions</th> <th>Non-Academic Institutions and Industry</th> </tr> </thead> <tbody> <tr> <td> 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 Utah Utah State University </td> <td> Array BioPharma, Inc. (CO) Century Environmental Hygiene (CO) Charles River Laboratories (WV) Covance Laboratories (AZ) EP Hays Toxicology Services (CO) Frailtrons Toxicology (CO) Front Range Environmental Toxicology, Summit Toxicology (CO) Services (CO) Los Alamos National Laboratory (NM) Lovelace Respiratory Research Institute (NM) </td> </tr> </tbody> </table>		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 Utah Utah State University	Array BioPharma, Inc. (CO) Century Environmental Hygiene (CO) Charles River Laboratories (WV) Covance Laboratories (AZ) EP Hays Toxicology Services (CO) Frailtrons Toxicology (CO) Front Range Environmental Toxicology, Summit Toxicology (CO) Services (CO) Los Alamos National Laboratory (NM) Lovelace Respiratory Research Institute (NM)																										
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PREVIOUS MEETINGS																																			
Year	Location	Theme																																	
2021	Virtual (Hosted by the University of New Mexico)	MWSOT Trainee Research Highlights																																	
2020	Virtual (Hosted by Utah State University)	Epidemiology and Toxicology: The Organism-Environment Interface and its Role in Health																																	
2019	Fort Collins, CO (Hosted by Colorado State University)	Innovative Toxicology: Exposures, Mechanisms and Clinical Outcomes																																	
2018	Phoenix, AZ (Hosted by the University of Arizona)	Translational Toxicology - From Bench to Bedside																																	
2017	Bilborough, MA (Hosted by the University of New Mexico)	Insights from the Past: Shaping the Future Research at the Intersection of Pharmacokinetics and Toxicology																																	

Plans for the upcoming year:

The 40th annual meeting of the MWSOT regional chapter will be held in Santa Fe, New Mexico, August 28th – 30th 2022. This year's MWSOT meeting will be held concurrently with the International Particulate Toxicology Conference (IPTC). The MWSOT participants will have the opportunities to interact and network with those attending the IPTC. We will have keynote presentations, oral presentations selected from submitted abstracts, a joint poster session with IPTC, a trainee career development event, and social hours to network and catch up with friends.

MWSOT will also be hosting a reception at the annual SOT meeting in March of 2023 in Nashville, TN.

V. Feedback and Ideas:

- C. In what ways is your group fostering and maintaining an inclusive environment? Please give examples of any current practices used to support inclusion in processes such as 1) leadership selection and promotion, 2) award descriptions and selection, and 3) endorsement of proposals for the annual meetings.

MWSOT leadership do not discriminate against others based on age, sex, sexual orientation, or race. MWSOT participation is inclusive and open to all. We encourage others to contribute or provide input to MWSOT through multiple avenues including participation in annual events, or correspondence with MWSOT leadership.

- Individuals running for elected offices within MWSOT are selected based on their qualifications, not on age, sex, sexual orientation, or race. We do not ask individuals to disclose this information in their biosketches.
- Award description and selection are based on the individual's qualifications not on age, sex, sexual orientation, or race. The descriptions are void of language that would disqualify an individual from applying or winning/not winning an award based on age, sex, sexual orientation, or race.

- D. How might SOT better support your group's activities (perhaps something the Society should be doing that we currently do not do, or do not do effectively, that would be of importance/benefit to the members of your component group?):

Note: If funding is listed, please provide detail on the membership need that the funding would support.

- Provide a list of funding opportunities to regional chapter leadership at the beginning of the term, including what the funds can be used for and due dates for applications.
- Provide strategies for how to fundraise for activities outside of SOT funding.
- Provide a Regional Chapter Handbook or FAQ for Regional Chapters Leadership that includes relevant information about running a regional chapter.

E. What is one thing that the Society is currently doing that impacts your component group that should be changed (e.g., stopped, modified, etc.)?

None at this time

F. What changes do your component group anticipate making in the way in which it operates in the coming year?

None at this time