



Welcome to our Fall 2023 Newsletter! Despite all the hurdles placed in front of all of us over the past few years, MSBSS is thriving. We would like to thank each of our 200+ active members for your continued support, and we are so happy to welcome our newest members to our community. I am delighted to serve the MSBSS membership, and I am thankful for this opportunity to reflect upon our successes while also looking forward at our mission and goals.

I joined MSBSS because of the outstanding science being done by our members, as well as the inclusive community that we foster. MSBSS has been a leader for trainee inclusion in SOT activities, and we are so excited to support and promote our early career members in their leadership of scientific sessions and career development opportunities. We also pride ourselves in our awards and travel support to our early career members. Due to the economic instability over the past years, we are grappling with our ability to continue the quality and quantity of awards that we have historically provided. Now, more than ever, we ask that our members help us to ensure that we are supporting the next generation of molecular and systems toxicologists by contributing to our MSBSS award endowment.

MSBSS continues to provide quality content and community at the SOT Annual Meeting. As we have done in the past, we look forward to sponsoring outstanding symposia, workshops, and continuing education sessions at the Annual Meeting that exemplify cutting-edge research in molecular and systems toxicology. We also will continue our very successful mentoring event at the Annual Meeting in 2024, which has been a popular event since the inaugural one in 2017. Lastly, we hope that you will all join us at the MSBSS reception on Wednesday, March 13 as we celebrate you—our members! We will be acknowledging amazing research from our members, celebrating our collective accomplishments, and spending some quality time networking and reconnecting with our colleagues.

We look forward to seeing you in Salt Lake City!

Kari Sant

2023–2024 MSBSS President

Stay Connected!

In an effort to improve year-round communications, we have a MSBSS Twitter handle. Follow for award updates, features, and scientific content!



@msbss_sot



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2023 MSBSS Treasurer's Report

The MSBSS finances (as of the end of Fiscal Year 2023) are below. Our General Fund is used to support the annual reception, mentoring event, and overrun award costs. The Endowment fund supports trainee awards. Our Specialty Section is in good financial standing with sufficient funds to support our meeting and award activities in the upcoming year.

	General Fund	Endowment
starting balance	32,579	63,201
trainee awards, plaques, etc.	2,845	2,550
mentoring activities	1,922	-
reception	7,119	-
membership dues	3,495	-
earned interest	1,322	1,967
contributions	2,250	500

Help MSBSS Continue to Support Trainees!

One of the key aspects of the MSBSS Mission is to support trainees. We recognize outstanding research at the undergraduate, graduate and postdoctoral stages; provide travel and Paper of the Year awards; and host a popular Mentorship Reception at the SOT Annual Meeting. Help MSBSS maintain this exceptional level of support for our trainees by making a tax-deductible [donation](#) to our Specialty Section. Some of your employers may have programs for matching employee contributions to charitable organizations like SOT, so check with your employers to maximize your giving. You can give directly to the [Molecular and Systems Biology Student Award Fund](#) or work through the MSBSS Treasurer (Leah Wehmas) to coordinate your donation.

Don't forget to vote in this year's MSBSS elections!
Online ballots will be distributed via email this winter.

2023–2024 MSBSS Officers

President

Kari Sant

San Diego State University



Vice President

Jessica LaRocca

Corteva Agriscience



Vice President-Elect

Jessica Hartman

Medical University of South Carolina



Secretary/Treasurer

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Postdoctoral Rep.

Yvonne Rericha

ORISE–US EPA



Senior Student Rep.

Marjorie Marin

University of Massachusetts

Amherst



2023 MSBSS Undergraduate Student Trainee Award



First Place, Zaria Killingsworth, Medical University of South Carolina

CYP2E1 expression in liver cells impacts lipid storage and utilization of free fatty acids

Second Place, Benjamin Gelfand, Rutgers

PGC-1 β Promotes Macrophage Metabolic Activation Towards a Proresolution Phenotype after Ozone Exposure



Third Place, Isabella Boyack, University of Massachusetts Amherst

*Potential recovery of exocrine pancreas growth following embryonic PFAS exposure in Zebrafish (*Danio rerio*)*

2023 MSBSS Travel Award Winner



Sarah Avila-Barnard, University of California Riverside

Tris (1,3-dichloro-2-propyl) phosphate disrupts cellular metabolism within human embryonic kidney (HEK293) cells

2023 MSBSS Graduate Student Trainee Award



First Place, Danielle Kozlosky, Rutgers

Enhanced Fetoplacental Cadmium Toxicity in Mice Lacking the Placental Bcrp Transporter



Second Place, Rachel Morgan, University of Michigan

Impact of Lead Exposure on Epigenetic Regulation During SH-SY5Y Neural Differentiation: Focus on piRNA and Transposable Element DNA Methylation



Third Place, Joanna Woo, University of Massachusetts Amherst

Inhibition of the Volume-Regulating Anion Channel LRRC8 Attenuates Contraction and Migration in Human Airway Smooth Muscle Cells

2023 MSBSS Postdoctoral Trainee Award



Michelle Kossack, Brown University
Juvenile 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure results in lasting sex-specific changes in cardiovascular health



2023 MSBSS Paper of the Year Award



Karina Orlowska, University of Michigan

Dioxin-elicited decrease in cobalamin redirects propionyl-CoA metabolism to the β -oxidation-like pathway resulting in acrylyl-CoA conjugate buildup

<https://pubmed.ncbi.nlm.nih.gov/35931118/>

Upcoming MSBSS Award Deadlines

MSBSS award deadlines are rapidly approaching! We are currently asking for applications for the following awards:

- Graduate Student Research Award
- Paper of the Year Award
- Postdoctoral Scholar Research Award
- Undergraduate Research Award

For more MSBSS Award information, please go to our website:

<https://www.toxicology.org/groups/ss/msbss/awards.asp>

Award applications are due January 2, 2024. SOT abstracts for the Annual Meeting must have been submitted by November 13, 2023.

RECAP: 2023 MSBSS Mentoring Reception

We were thrilled to host this event in person in Nashville in 2023. MSBSS partnered with the Biotechnology, Mechanisms, Risk Assessment, and Sustainable Chemicals through Contemporary Toxicology Specialty Sections, along with the Out Toxicologists and Allies Special Interest Group to host over 100 mentees and mentors representing various disciplines in toxicology including academia, industry, consulting, government, and science communication. In the “speed-mentoring” style event, mentors and mentees alike appreciated the opportunity to network with a diverse group of attendees in a fun, informal way, while making connections that we hope will be long-lasting and fruitful. In 2024, we look forward to continuing this networking event to enable mentees to meet scientists and leaders from different sectors and learn about the many career paths that are available in toxicology.



Save the Date!

**Sixth Annual MSBSS Mentoring Reception at the 2024 SOT Annual Meeting
in Salt Lake City**

Tentative date: March 11, 2024

Location: Hyatt Regency Salt Lake City

Stay tuned in January 2024 for registration and mentor information!

Save the Date!

**MSBSS Annual Members Reception at the 2024 SOT Annual Meeting in Salt
Lake City**

Date: March 13, 2024

Location: Hyatt Regency Salt Lake City

Stay tuned in January 2024 for more information!

We want to celebrate YOU!

Send us updates on your accomplishments on Twitter (@MSBSS_sot) or to our email address:

MSBSS.sot@gmail.com