

Molecular and Systems Biology Specialty Section

**ANNUAL REPORT: 2025–2026**

May 1, 2025 to April 30, 2026

**I. Officers:**

| <b><u>2025–2026</u></b>                                                                                                                                                                                                                                                                                                                                                                                                    | <b><u>2026–2027</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Postdoctoral Representative: Michelle Kossack<br>President: Jessica Hartman<br>Vice President: Elizabeth Martin<br>Vice President Elect: Subham Dasgupta<br>Past President, Councilor: Jessica LaRocca<br>Secretary-Treasurer: Oswaldo Lozoya<br>Senior Councilor: Lindsay Wilson<br>Junior Councilor: Bharat Bhushan<br>Senior Student Representative: Jordan Lee<br>Junior Student Representative: Syed Rubaiyat Ferdous | President: Elizabeth Martin<br>Vice President: Subham Dasgupta<br>Vice President-Elect: Joshua Harrill<br>Secretary-Treasurer: Oswaldo Lozoya<br>Past President, Councilor: Jessica Hartman<br>Senior Councilor: Bharat Bhushan<br>Junior Councilor: Milankumar Prajapati<br>Postdoctoral Representative: Nicole McNabb-Kelada<br>Senior Student Representative: Syed Rubaiyat Ferdous<br>Junior Student Representative: Gillian Williams |

**Committees:**

No appointed committees

**II. 2026 Membership total: 188**

**III. Key Outcomes and Accomplishments in 2025–2026:**

The Molecular and Systems Biology Specialty Section accomplished the following activities throughout the year.

- In-person meeting/mixer
- Sponsored session(s) at the Annual Meeting
- Endorsed session(s) at the Annual Meeting
- Poster session for trainees
- Trainee awards conferred
- Paper of the year award
- Webinars

**IV. Collaborative Partnerships with Other SOT Organizations:**

The Molecular and Systems Biology Specialty Section collaborated with the following organizations within SOT.

**V. Communication Methods:**

The Molecular and Systems Biology Specialty Section stayed in contact with its members throughout the year through the following mechanisms.

- Emails through SOT Headquarters
- Specialty Section website

- Newsletter(s)
- LinkedIn

#### **VI. Promotion of Inclusivity**

The Molecular and Systems Biology Specialty Section maintained an inclusive organization through the following activities.

- Nominate a diverse slate of candidates for elections
- Solicit equitable input from all executive committee leaders
- Utilize virtual meetings for convening Specialty Section leadership
- Utilize standardized rubrics for judging awards/posters
- Include inclusive descriptions of Awards
- Prioritize diversity in selection of speakers/panelists
- Highlight trainee research

#### **VII. Mentoring and Career Development Activities:**

The Molecular and Systems Biology Specialty Section hosted the following mentoring activities throughout the year for its membership.

- Co-sponsored the NetworX mentoring event run by CAMAN

#### **VIII. Awards Given:**

|                     |   |
|---------------------|---|
| <b>Trainee</b>      | 9 |
| <b>Early Career</b> | 3 |
| <b>Mid Career</b>   | 0 |
| <b>Late Career</b>  | 0 |

#### **IX. Key Outcomes and Improvements:**

- Increased numbers of sessions submitted
- Increased numbers of trainees applying for awards and higher quality research

#### **X. Strategic Plan:**

The Molecular and Systems Biology Specialty Section supported the following SOT Strategic Priorities.

- Proactively pursue impactful scientific content
- Support the development and application of tools that advance toxicology
- Develop a talent pool of toxicologists for the future
- Provide mentoring and networking opportunities for all career levels
- Enhance member recognition and visibility at all levels

#### **XI. Scientific Topics of Interest:**

The Molecular and Systems Biology Specialty Section is interested in seeing the following topic areas developed into sessions at future SOT Annual Meetings.

- Many of molecular and systems biology technologies are slowly making it into regulatory acceptance. A broader ranging discussions around risk assessment and other key tox functions that utilize these technologies would be of interest. An example of this could be

how i.e. metabolomics, transcriptomics, imaging, LLM, or explainable AI are being or could be used in various areas of chemical risk assessment (i.e. hazard characterization, weight of evidence assessments, IATAs, etc.).

**XII. Feedback to the Society:**

- A. What is the one thing the Society should be doing that it currently does not do (or does not do effectively) that would be of importance/benefit to the members of the Specialty Section?

If a single Specialty Section endorses multiple sessions, making sure that those sessions are non overlapping such that those that are most interested can attend

- B. What is the one thing the Society is currently doing that impacts the Specialty Section that should be changed (e.g., stopped, modified, etc.)?

MSBSS leadership recommends reinstating expectations for cross-sector speaker representation within scientific sessions. Recent changes in the scientific program style have decreased the number of speakers making cross-sector representation harder. While this has resulted in an increased the number of session proposals, we observed fewer sessions that include speakers from academia, industry, and government together. Cross-sector representation has historically been a strength of the sessions as it facilitates discussion and collaboration across silos.