## Northwestern WEINBERG COLLEGE OF ARTS & SCIENCES

# Development of a Short Course for Collateral Duty Safety Advisors in Academic Research Laboratories

**Megan Wasson** 

PhD Candidate
Department of Chemistry
Northwestern University
President of RSSI



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#### **About Research Safety Student Initiative (RSSI)**

Started in 2017 following a trip to Dow Chemical Company

Inspired by UMN JST / other student safety groups



Chemistry, Chemical Engineering, Materials Science and Engineering, and Interdisciplinary Biological Sciences

#### **RSSI** Mission

The mission of RSSI is to develop and promote a <u>stronger</u> <u>culture</u> of safety across research laboratories at Northwestern University through an increased awareness of safety hazards and a more positive mindset towards safe laboratory practices. In conjunction with ORS, we aim to encourage university-wide commitment to safety by providing education, resources and training.

#### What RSSI Brings to NU Research Safety









# **Ensuring Day to Day Research Safety Dependent on Students**

Office of Research Safety

Research Advisors

Safety Advisor (researcher in group)

Research Groups (largest >50 people)

#### **Safety Advisor Roles**

- ✓ Conduct new member safety training
- ✓ Assess spaces for hazards
- ✓ Enforce safe lab practices



## Difficulties Experienced by Graduate Student Safety Advisors

- Inexperience
- Conflicting time demands
- Overcoming lab / department culture toward safety
- Inherent hierarchical structure of academic research

#### **RSSI Safety Advisor Panel**

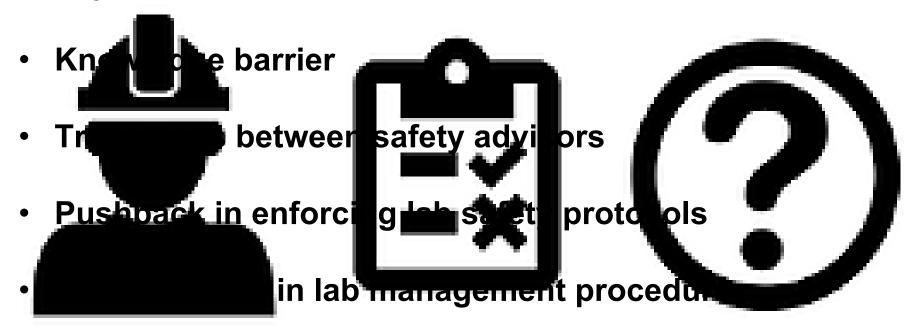


- Organized a panel with support from Materials Research Science and Engineering Center targeting chemistry department
- 4 panelists
  - Third year post doctoral student
  - Inorganic, Organic, Physical, and Biological
- 17 attendees



#### **RSSI Safety Advisor Panel Takeaways:**

An inherent learning curve is present upon assuming safety advisor role due to:



#### **RSSI** and Research Safety Proposed Solution:

The learning curve for newly appointed safety advisors can be shortened and confidence can be increased by developing a short, online training course.



#### **Goals of Training Course:**

- Enhance <u>self-confidence</u> of students in their leadership skills
- Serve as a <u>meaningful resource</u> for the duration of their tenure as a safety advisor
- Provide a <u>universal guideline</u> to ensure level playing field for all NU safety advisors



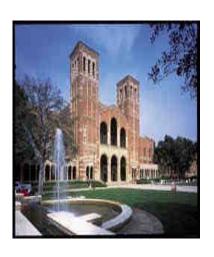
#### **Safety Training Consortium**

The mission of the Safety Training Consortium is to improve researcher safety by developing high quality, engaging and cross-certifiable safety training for the research community.

**Courses by Universities for Universities** 







#### Vision of Safety Training Consortium

- √ Standardized courses
- ✓ Reduce resource and organizational demands
- ✓ Share the "best of the best" independent of commercial interest
- ✓ Build a community with interest in improving safety
- ✓ Make the future safer

# Timeline for Creation and Implementation of Safety Advisor Training



#### **Future Efforts**



Convenient RSSI / Research Safety App



Redesign TA training workshops with developed simulations

### **Acknowledgments**

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#### **Contact / Follow RSSI!**





rssinorthwestern@gmail.com meganwasson2022@u.northwestern.edu



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