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

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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

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The mission of RSSI is to develop and promote a stronger culture 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

Peer-led Safety Initiatives Started Bottom-Up

Leadership Development for Students

Inclusive and Passionate Safety Culture

Safety Initiatives Started Bottom-Up
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
An inherent learning curve is present upon assuming safety advisor role due to:

- Knowledge barrier
- Transitions between safety advisors
- Pushback in enforcing lab safety protocols
- Inconsistency in lab management procedures
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 **self-confidence** of students in their leadership skills

• Serve as a **meaningful resource** for the duration of their tenure as a safety advisor

• Provide a **universal guideline** to ensure level playing field for all NU safety advisors
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

- October 2019: Second safety advisor panel
- Winter 2019 – Spring 2020: Content Design and Drafting with Safety Training Consortium
- April 2020: Course Launch
Future Efforts

Convenient RSSI / Research Safety App

Redesign TA training workshops with developed simulations
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Contact / Follow RSSI!

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