

Safety
Starts
with



Vertical Safety Engagement Through New Community Connections of the University of Minnesota Joint Safety Team

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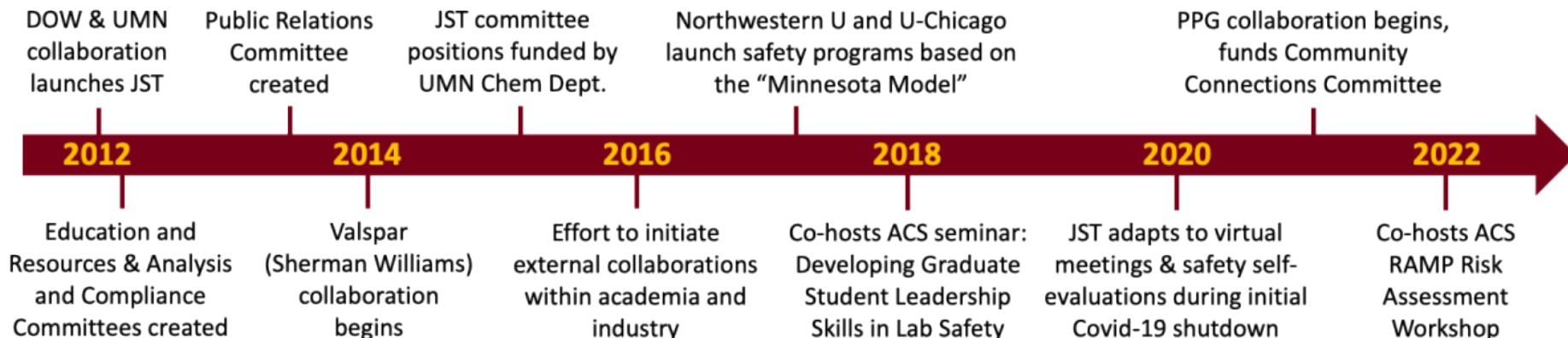


The UMN Joint Safety Team



Joint Safety Team (JST):

A researcher-led lab safety initiative between CHEM and CEMS departments supported by departmental leaders and EHS



The UMN Joint Safety Team

Analysis and Compliance

Student-led lab walkthroughs,
Safety surveys

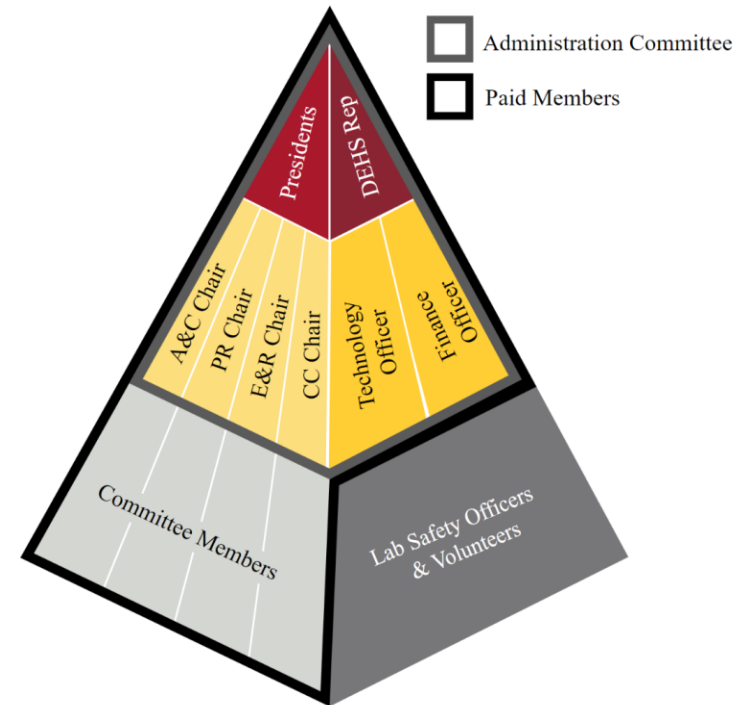
Education and Resources

Bi-monthly LSO meetings,
LSO guidebook

Public Relations

Presentation safety moments,
Safety posters and JST social
media

Community Connections



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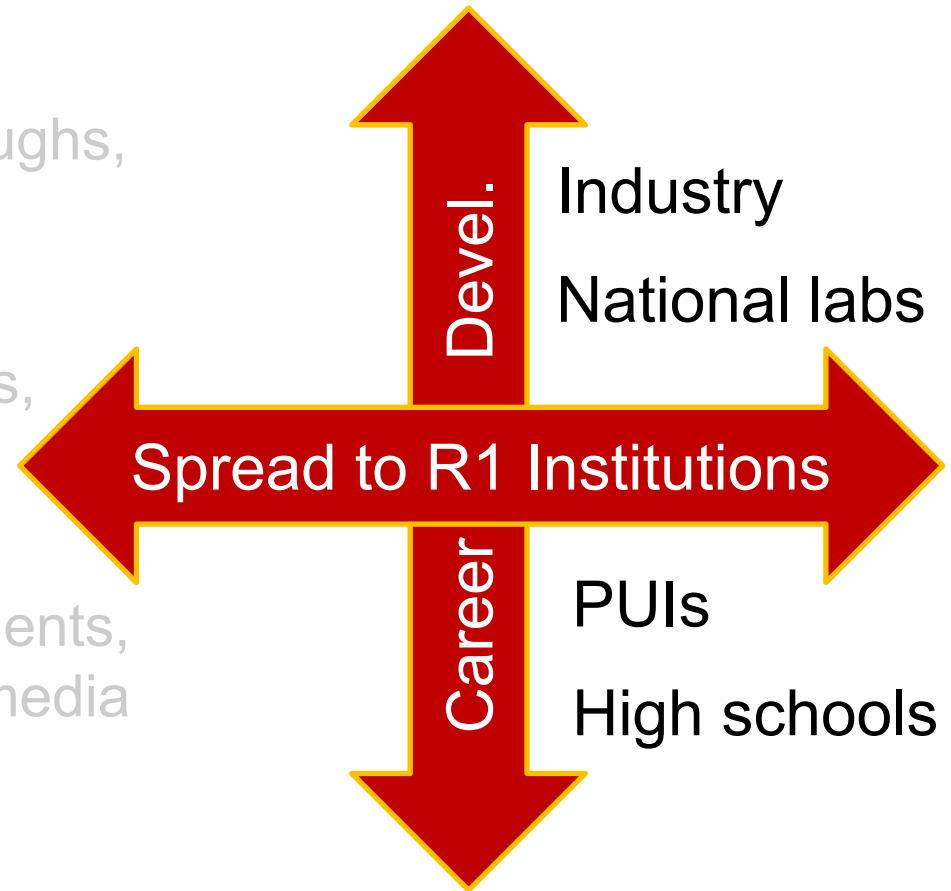
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Community Connections



CCC Organization



High School Workshop



PUI Connections



Industry Seminars



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High School Workshop

Emphasizing Safety Early

How do we expand the JST ideals to the High School setting?

Emphasizing Safety Early

How do we expand the JST ideals to the High School setting?

Through the teachers!



Teacher Incentives

Collaboration with Colorado School of Mines



Continuing Education



Workshop Curriculum

Waste handling, storage, and disposal

Adam Krajicek and Brian Andersson

Safer Demos

Dr. Harrison Frisk

Make it safe, make it green

Dr. Jeffrey Buenaflor

PPE and Liability

Dr. Nyema Harmon and Chuck Handlon

Safety Culture

Steven Butler and Vilma Brandao

Workshop Execution



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Primary Undergraduate Institutions (PUIs)

Why PUIs?

A visit to a PUI sparked the idea of creating the CCC

Difference in safety teams

- Student's research experience is shorter
- Small research groups

The connection starts: Mostly professors that have been a part of the department for a long time with new professors interested in changing the culture

- Student research labs and laboratory classes
- Current safety practices do not check comprehension
- Disengaged students

Goal: improve student's appreciation for safety

Students can create an easier and more intuitive safety code to students, faculty will also benefit from it.

Working closely with the CCC:

- Invite students to participate in laboratory walkthroughs, bimonthly meetings and events
- Learn how other universities and PUIs are handling safety
- Encourage students to take a personal role in lab safety and invite discussions to take place



- **U of WI – Eau Claire**

Chemistry

Joined JST events

Improving communication

- **U of NC – Asheville**

Chemistry Department

Joined JST events

Biology department contact initiated

UofWI - The Beginning

April 2021

Dr. Krysti K. Gupta initiated contact

- Improve safety culture in both Chemistry and Biology departments of UW Eau Claire

August 2021

UWECSSST 4 Core students, Dr. Krysti K. Gupta as the faculty advisor.

- Establishing a safety team
 - Student engagement
 - Faculty engagement

October 2021

- JST visit to Eau Claire



JST visits UW Eau Claire



Departmental seminar presentation.

- What is safety culture
- Why safety is important.
- When to wear/ NOT to wear PPE
- What small steps you can take



Tour the facility, tour their labs and gave tips on how to improve

Requested to include their teaching labs, but UWEC is a very research focused PUI.

UW Eau Claire visits UMN

Currently 9 members structured in public relations, student resources, besides the administrative committee.

Visit on April 2022:

- Faculty meetings
- Lab safety walkthrough



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Upward Efforts: JST Industry Connections

Industrial Safety Connections

The JST has historically organized industrial visits to the DOW campus in Midland, MI and the Valspar Corporation corporation in Minneapolis, MN.



New JST CCC Initiatives

- Invite speakers to discuss their industry safety practices
- Create an informal space to ask questions and build relationships
- Host lunch networking series
- Organize lab walkthroughs with local industries

Industry Connections Seminars

- Pre-seminar question submission, brief presentations followed by open conversation
- Over 50 attendees: Chem Dept. and CEMS graduate students, postdocs, and PUI connection students and professor



November 2021

Dr. Eric Olson, Advanced Research Specialist, Wet Chemical Analysis

Dr. Jeff Ting, Senior Polymer Scientist, Materials Informatics



April 2022

Dr. David Stone, Research Associate I, Substrate Protection

Dr. Derek Saxon, Research Chemist I, Polymer Synthesis

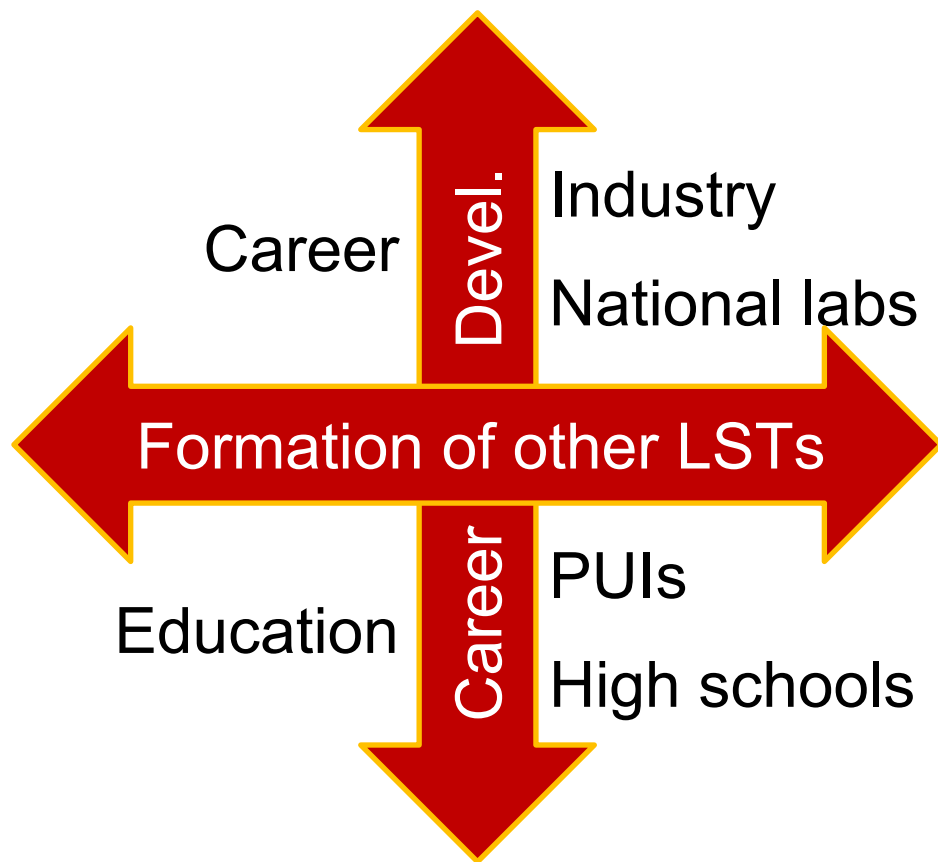
Industry Seminars - Insights

Student's Industrial Safety Insights:

- Safety considerations and waste stream recorded before ordering new materials
- Internal emergency response team, made up of volunteers
- Weekly hall meetings keep neighboring labs aware of safety risks
- Practice emergency scenario “Box Drills”



New Vertical Safety Connections



Contributors and Sponsors

Community Connections Committee:



JST Administrative Committee:



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