

A photograph of a large, multi-story brick building with Gothic architectural features, including a prominent arched entrance and a gabled roof. In the foreground, a stone wall with a plaque reads "Washington University in St. Louis Danforth Campus". The sky is clear and blue.

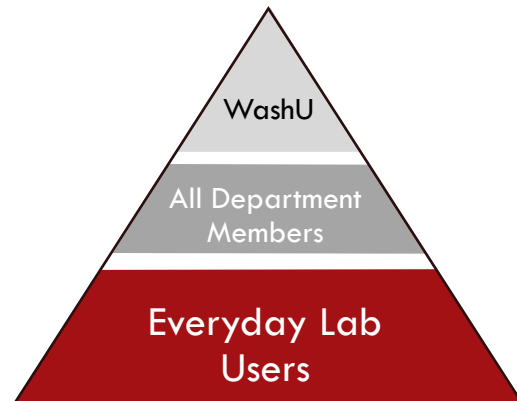
**CREATING A COLLABORATIVE SAFETY CULTURE:
INCORPORATING EH&S INTO SAFETY INITIATIVES AND
DEPARTMENTAL DISCOURSE**

Washington University in St. Louis
Department of Chemistry-
Peer Safety Committee
Rena Kramer

ABOUT US

Peer led safety group committed to raising safety awareness and inspiring a positive safety culture within the Chemistry Department at Washington University in St. Louis

- Department wide Safety Initiatives
- Lab Safety Team
- ACS Graduate Student Organization



Chair-
Rena Kramer



Secretary-Ashlyn
n Berry

Recipients of
the 2018
CSHEMA
Innovation
Award



ABOUT US

LAB SAFETY TEAMS

- Apart of a community of other researchers for discussing safety
- Access to safety education and guidance
- Ability to discuss challenges and successes with department safety culture

ACS GRADUATE STUDENT ORGANIZATION

- Access to resources helping with financing, retaining members, organizing events, running meetings, and much more.
- Solidified the Peer Safety Committee by helping us write bylaws
- Opportunities to apply for grants for the committee



Image Credit: Calla Mae McCulley



WHY WE FOSTER A GOOD RELATIONSHIP WITH EH&S

PSYCHOLOGICAL SAFETY

Psychological safety means feeling safe to take interpersonal risks, to speak up, to disagree openly, to surface concerns without fear of negative repercussions or pressure to sugarcoat bad news. –McKinsey and Company

HIGH QUALITY RELATIONSHIPS LEAD TO PSYCHOLOGICAL SAFETY

“...psychological safety is enhanced by high-quality relationships of shared goals, shared knowledge, and mutual respect.”²

- Changing department’s view of EH&S from authoritative to collaborative
- Emphasizing a common goal of safety between the department and EH&S

BEING PSYCHOLOGICALLY SAFE LEADS TO SAFETY EMPOWERMENT

“...when employees perceive that management are committed to safety, such safety climate influences safety behaviour and tend to reciprocate by compliance with safety rules and cooperation in safety teamwork”³

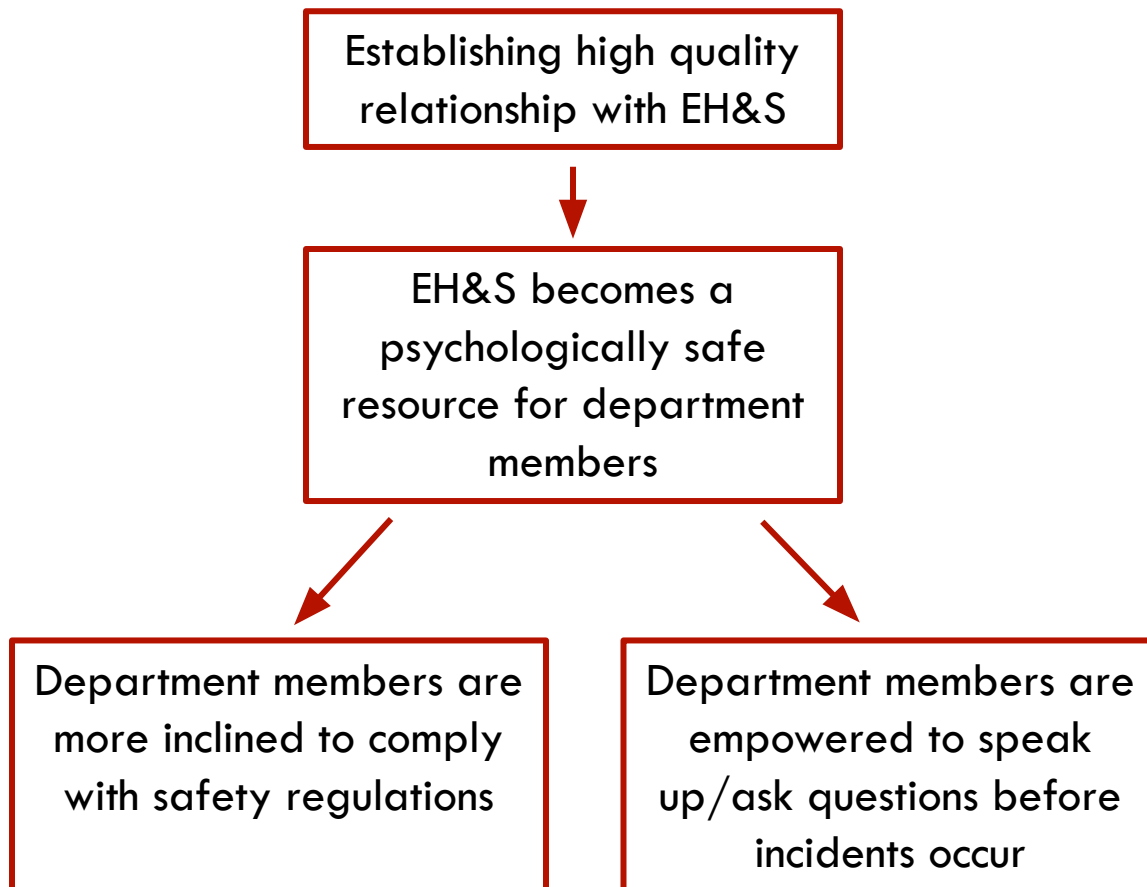
- Empowered department members will be more compliant and willing to reach out about concerns

1. <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-psychological-safety>

2. Carmeli, A. and Gittell, J.H. (2009), High-quality relationships, psychological safety, and learning from failures in work organizations. *J. Organiz. Behav.*, 30: 709-729.

3. David Yoon Kin Tong, Devinaga Rasiah, Xue Fa Tong, Kim Piew Lai, Leadership empowerment behaviour on safety officer and safety teamwork in manufacturing industry, *Safety Science*, Volume 72, 2015, Pages 190-198.

WHAT EMPOWERMENT MEANS FOR THE DEPARTMENT



HOW CAN WE ESTABLISH A HIGH-QUALITY RELATIONSHIP?

- Demonstrating a high-quality relationship as student safety leaders
- Show EH&S as part of our team and not just an authoritative entity
- Increase EH&S presence in the department


PEER-LED SAFETY INITIATIVES

Involving EH&S in Departmental Activities

SAFETY SOCIAL

2 Hour Open House Focusing on Safety

- Done as part of CSHEMA's Lab Safety Awareness Week
- Brought departments attention to safety and gave them an opportunity to participate in safety discourse
- Peer Safety Committee facilitated snacks and advertising for the event
- EH&S provided a table with safety labels, games, and the opportunity to speak to an EH&S member about safety
- Sustainable lab program at WashU provided a table with information on conducting lab work in a greener way



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FEBRUARY

BRYAN 5TH FLOOR LOUNGE

**LAB SAFETY
AWARENESS WEEK
SAFETY SOCIAL**

[HTTPS://EHS.WUSTL.EDU/LAB-SAFETY-AWARENESS-WEEK/](https://ehs.wustl.edu/lab-safety-awareness-week/)

LAB SAFETY AWARENESS WEEK
Feb 13-17, 2023

WashU EH&S

3:00-5:00 PM

Come join us for food, games, and safety information!

GREEN LABS PROGRAM
PLATINUM
Sustainability

CHEMISTRY MAJOR
Chemistry PSC

SAFETY SEMINAR & WORKSHOP LUNCH

PSC Sponsored Event Focused on Industrial Safety

- Speaker Dr. Keith Reed from ExxonMobil
- Two-day event series including a department seminar, student led lab tours, and workshop lunch
- EH&S presence at department seminar and workshop lunch to provide additional perspective on safety at WashU

Grad Student
workshop lunch
with Keith! Free
catered food!
Safety!

Safety Seminar & Workshop

Keith Reed, ExxonMobil



Departmental Seminar
hosted by the PSC! We
will have cool snacks,
please come!

April 4th

Join us April 4th and 5th for the first ever PSC Safety Seminar & Workshop! This unique opportunity allows for members of the department to learn about the gaps in safety between academic and industrial settings.

Keith is a member of the PALS workshop hosted by ExxonMobil every year. He received his PhD from Georgia Tech, which means he has firsthand experience in both academic and industrial safety.

We will have three events during Keith's visit:

1. Brown bag lunch on Thursday, April 4th for students to learn about careers at ExxonMobil
2. Departmental Seminar Thursday, April 4th for the department to hear about safety and culture at ExxonMobil
3. Safety Workshop Lunch on Friday, April 5th for graduate students to meet with Keith and discuss the importance of safety in research settings.

Please contact Rena (k.rena@wustl.edu) with any questions or if you're interested in attending the Brown Bag Lunch or are a graduate student interested in the Safety Workshop!

ANNUAL DEPARTMENT SAFETY TRAINING

Mandatory Departmental Training for All Lab Workers

- Theme and speaker decided with input from members of the Peer Safety Committee and EH&S
- 10 Minute presentation given by two members of the Peer Safety Committee and members of EH&S
- A way for EH&S to share their new initiatives and resources with the department



PALS WORKSHOP ATTENDANCE

Partners in Academic Laboratory Safety

- Co-Founding member of PALS
- Now involves six schools:
 - WashU, UT Austin, Georgia Tech, University of Florida, University of Houston, Texas A&M
- Annual workshop hosted by ExxonMobil focusing on the gap between academic and laboratory safety
- Participation from six schools, each bringing a different safety perspective
- An EH&S member from WashU attends each year



JOINT SAFETY CERTIFICATE

Safety education program that is consistent among schools.

- Program that focuses on the application of knowledge through practical demonstrations
- Have worked with other schools, primarily UT Austin for two years developing the program
- Have worked personally with an EH&S member from WashU to find support for the program
 - CSHEMA has taken stewardship



Angie Dartt, Director
of Chemical Safety at
WashU

EVIDENCE OF SAFETY EMPOWERMENT

Testimonies of Department and EH&S Members

TESTIMONIES

“Working with chemistry is always exciting because I get to see the benefits of having a partnership with chemistry and a department invested in safety. When we meet new students in safety class, we are able to impress upon them the importance of safety, and reinforce it when we present at the annual safety seminar. ... As a result, chemistry has the best safety culture of any group at WashU by a wide margin, and despite the hazards they work with, we don't have to worry about them nearly as much as some other departments.”

-Mark Mills, EH&S

”It's nice to know that our safety exists as a collaboration. Safety procedures are not simply handed down from a faceless entity.”

-Ashlynn Berry, Graduate Student

” [The safety culture] has made me feel comfortable asking for help or advice about handling safety issues without feeling like I'm going to get the lab in trouble.”

-Tom Howell, Graduate Student

THANK YOU

Rena Kramer

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Washington
University in St. Louis®



<https://chemistry.wustl.edu/safety>

Members of EH&S

Angie Dartt

Mark Mills

Lauren Gunther

Scott Florin

Members of the Peer Safety Committee

Ashlynn Berry

Madalyn Bochantine

Jovelt Dorsainvil

Anissa Findley

Isaac Fuentes

Ryan Gagnon

Triston Groff

Tom Howell

Avika Jayatilaka

Collin Merrick

Sierra Napoleon

Savannah Scruggs

Sabrina Talir

Kristen Wang

Valerie Winkler