

# RAM Safety Source

*All things related to research safety culture at CSU*

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## Research Safety Culture Program

e. [anthony.appleton@colostate.edu](mailto:anthony.appleton@colostate.edu)

w. <https://www.research.colostate.edu/research-safety-culture/>

t. [@RamSafeResearch](https://twitter.com/RamSafeResearch)

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## Chemical Management Unit

The Chemical Management Unit of EHS is a multidisciplinary office that oversees the Chemical Hygiene and Safety Program, Chemical Hazardous Waste Program, Controlled Substances Program, EHS's Emergency Response Team, and the Energetic Materials Safety Program. "We like to help people out," says Chris Giglio. "If you don't know what to do with it, just give us a call. We see this as being good environmental stewards."



CAMS is CSU's new Chemical Acquisition and Management System. Here are some helpful links:

[CAMS Overview](#)

[CAMS How-To Videos](#)

[CAMS FAQs](#)

[CAMS Quick Reference Guide](#)



# Empowering Resources for Researchers: CSU Bio-Cybersecurity Discussion Series



## BIO-CYBERSECURITY DISCUSSION SERIES

Tuesdays from 4-5 p.m. via Zoom  
March 23 | April 6 | April 20

The push to develop vaccines and drugs to counteract the SARS-CoV-2 virus has revealed cybersecurity issues such as attacks on vaccine databases. This is part of a larger, emerging issue facing biomanufacturing and the bioeconomy in general, and is of growing concern for government, industry, and academia. Addressing these challenges will require multidisciplinary research collaboration and new educational efforts.

To inform the Colorado State University community and the public about bio-cybersecurity issues and opportunities for research and education, the Office of the Vice President for Research is hosting a series of three discussions with short presentations by experts, followed by questions from the audience.

The topics for these events are:

- DNA databases and commercial DNA synthesis: What are the risks of attacks on DNA databases? Are current strategies enough to block the procurement of DNA for malicious purposes?
- Biomanufacturing: As manufacturing operations are increasingly networked, what are the risks that a controller or sample analysis instrument could be attacked and manipulated by outside entities?
- Databases of bioprocess and product information: Companies and universities store valuable data on processes and products, including vaccines, under development and production. How can the information in these databases be protected from outside entities?

**These discussion events will be held virtually at 4:00 PM MT on  
April 6 | April 20**

**The events will be open to the public.**

**Please click on the date to register for each discussion.**

# Safety Champion: Karolien Denef - Core ARC LRST

## *How to use MS Teams to create an onboarding, safety training, and instructional environment.*

Over the past year, the Analytical Resources Core staff have had to grapple with new limitations on Core occupancy, as well as various social distancing rules limiting their ability to train new users face-to-face. The ARC developed innovative technological solutions which have allowed them to continue teaching and training new users virtually during the COVID-19 pandemic. Many of these developments will enhance the ARC's core operations, safety culture, and online education, as well as user and community engagement post-pandemic.



Figure 1 ARC MMA Director Dr. Karolien Denef creating instructional movies around safety and instrument operations with CSU Online.

One particular innovative solution that will bring long term benefits to CORE operations is the ARC Local Research Safety Team (LRST). The CORE started this LRST in October 2020 with the purpose of providing our users a remote platform, via MS Teams, where they could find all relevant user documentation in one place. Previously, these documents would be shared via various emails or they would live on static websites or as hard copies in binders next to instruments. The ARC LRST has now become the first place new users get directed to and where they are introduced to the different steps of how to use our facilities. This begins with how to request training, services or schedule instrument time in iLab, how to safely access the facilities under COVID-19, how to communicate with staff and other users through Slack, etc. The LRST has also become an instructional environment where new users will find safety and instrument training documentation for each laboratory, including instructional SOP movies, safety and operational knowledge quizzes, instrument manuals and SOPs, and standard experiments for proficiency testing.

The ARC LRST is currently being developed for the ARC-MMA laboratories with input from our ARC faculty advisory board. 54 new users have joined since October with new daily requests. The other ARC Centers will soon be joining the ARC LRST to provide their users similar access to facility access, safety and user training guidelines and documentation. For more information, please contact me, [Karolien.Denef@colostate.edu](mailto:Karolien.Denef@colostate.edu).

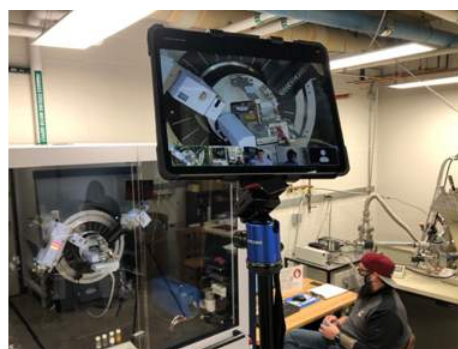


Figure 2 ARC-MMA X-ray lab manager Dr. Brian Newell teaching and training remotely in MSE502 SAMD course, with participants taking remote control over the instrument.

## ARC @ CSU

**ARC Users: Join our "VPR Core ARC LRST"**

- **User Guidelines**
- **Safety Training**
- **Instructional Movies**
- **Standard Operating Procedures**

<https://www.research.colostate.edu/arc>

VICE PRESIDENT FOR RESEARCH  
COLORADO STATE UNIVERSITY

**SAFETY FIRST**

# Lab Coat Services

[www.research.colostate.edu/research-safety-culture/lab-coat-services/](http://www.research.colostate.edu/research-safety-culture/lab-coat-services/)



The Research Safety Culture Program has partnered with the Occupational Health Program, Procurement Services, and researchers like you to highlight current lab coat services available to the CSU Research Community. Although these services will come with associated fees, we have made sure that they can be tailored to your needs (individual, group, department, building, etc.) using various lab coat styles at the best rates.



Have you considered personalizing your lab coat for your research group or department? Do you have your own logo? Consider a small investment in making your researchers WANT to wear their lab coats because they have your logo and their name.



If you have any questions about what type of lab coat meets your needs, please contact [EHS\\_Occhealth@colostate.edu](mailto:EHS_Occhealth@colostate.edu).

Lab Coat Protection  
Designed to meet your lab requirements



STANDARD LAB COAT



BARRIER COAT



FLAME RESISTANT, CHEMICAL RESISTANT LAB COAT



FLAME RESISTANT LAB COAT



# SAVE THE DATE

NEW INNOVATION PLATFORM

# CSU DEMO DAY

**APRIL 27-29, 2021**

Celebrate entrepreneurship and innovation with us on our new [csuinnovates.org](https://csuinnovates.org) platform and at CSU Demo Day! This premiere event inspires and enriches the entrepreneurial community of CSU and Northern Colorado.

Faculty, staff, and students, as well as alumni, business professionals, and entrepreneurs have the opportunity to engage with researchers and local emerging companies in and around our community.

In 2019, we had 106 research posters showcasing innovation across all 8 Colleges and 31 Departments;  
30 CSU-affiliated start-up companies, and over 450 attendees!

**Plus, we awarded over  
\$46,000 in cash to the presenters!**

# ABSTRACTS DUE APRIL 1

# Ask Me, I Care Weekly Office Hour

Every Thursday from 130-230 pm MST, the Research Safety Culture Program will hold an open office hour on MS Teams.

Join on your computer or mobile app.

Click [here](#) to join the meeting

Or call in (audio only)

+1 970-628-0547, 779263208#

Phone Conference ID: 779 263 208#



## SUSTAINABILITY



[freezerchallenge.org](https://freezerchallenge.org)

### 2021 International Laboratory Freezer Challenge

Sign-up and join the Freezer Challenge today! Here are a few incentives:

- All CSU participating labs that complete a scorecard will receive a *Certificate of Participation* to proudly display in your lab
- Unplug an unnecessary ULT, send it to surplus – **we'll cover the cost**
- Buying a new ULT to add to your fleet or replacing an old one – we could give you **\$2,000** for choosing an energy efficient model

You need to submit your Freezer Challenge scorecard by **June 1, 2021** to earn the **incentive money** (while funding lasts!). CSU Facilities Management, the CSU Green Labs program, and the Office of the Vice President for Research strongly support the spirit and goals of the Challenge and encourage your participation. Please contact [Stacey Baumgarn](#) if you have any questions – and thanks for the work you do!

# Safety Story: The Importance of Near Misses

## Adapted from the February 2021 CSHEMA President's Letter

Let's talk near misses. What is a near miss? OSHA defines a near miss as an incident in which no property was damaged and no personal injury was sustained, but where, given a slight shift in time or position, damage or injury easily could have occurred. One might also say that when someone narrowly escapes an accident that they are just plain lucky, or were the benefit of divine intervention. So, what's the big deal with near misses? Why should we care about them? A near-miss incident provides important information to EHS professionals regarding hazards and potential gaps in knowledge or process that can be used to mitigate a future serious or even catastrophic incident from taking place. Perhaps the most important thing when it comes to near misses is to act on them. In the words of CSHEMA member Steven Levenson of the University of Kansas-Lawrence, it is important to create a culture of "never ignore a hazard." EHS professionals need to quickly investigate the circumstances around the incident, make necessary improvements, provide training, and hopefully prevent reoccurrence. Sometimes we witness the near-miss personally and can act immediately. Other times and most often we must rely on people to report these incidents to us when they occur.

Incidents on campus can negatively affect a university in many ways. Cost of property damage lost work time, and reputation is just a few. Reporting and acting on near-miss incidents can be something that benefits the entire campus community, promotes a positive safety culture, and helps keep everyone safe.

### John W. Fellers

FROM THE PRESIDENT - FEBRUARY 2021



### CSU Safety Concern & Near Miss Reporting



Do you have an idea or would like to contribute to the RAM Safety Source?

Please contact

[anthony.appleton@colostate.edu](mailto:anthony.appleton@colostate.edu)



COVID-19 RECOVERY

"Never ignore a hazard."  
– Steven Levenson