

RAM Safety Source

All things related to research safety culture at CSU

In This Issue

Empowering Resources for Researchers: CSU Bio-Cybersecurity Discussion Series

Safety Champion: Laurie Biela - Tracking Training via Red Cap

Considerations for Field Work - Prep for Your Adventure!

CSU DEMO Day - Save the Date!

NEW Emergency Door Postings

Safety Story: Biologics Researchers and Suppliers Beware



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p. 970-491-2015



Jim Abraham
Radiation Safety Officer
Radiation Control Office

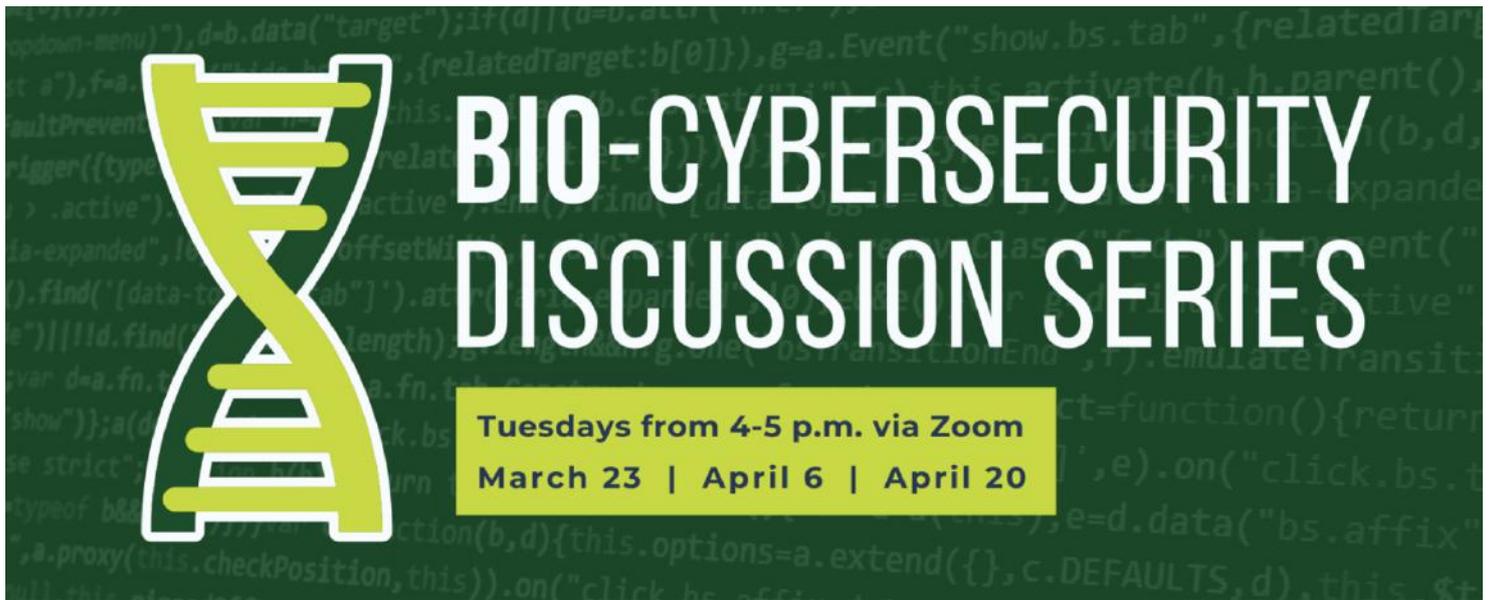
Radiation Control Office

The Radiation Control Office (RCO) provides technical assistance for the use of radioisotopes and radiation producing machines here at Colorado State University. Please let us know how we can help you!

We provide training for the safe use, and regulate all inventories, of radioactive materials on campus. The University provides this service in compliance with the State of Colorado's Rules and Regulations Pertaining to Radiation Control. In addition, we oversee the Radiation Safety Program, Laser Safety Program, and Magnetic Resonance Safety.



Empowering Resources for Researchers: CSU Bio-Cybersecurity Discussion Series



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?

The last discussion event will be held virtually at 4:00 PM MT on April 20.

The events will be open to the public.

Please click [here](#) to register.

Safety Champion: Laurie Biela

Struggling with tracking and documenting CSU and Lab Specific Required Safety Training?

Author: Laurie Biela

Adequate safety training for laboratory personnel is a necessity towards regulating a safe and effective research environment. This time intensive process had been something the Research Operations Team at the Human Performance Clinical Research Laboratory (HPCRL) struggled to efficiently manage and document over the years. Here is our story.

The Research Operations Team has successfully utilized REDCap (Research Electronic Data Capture) for data management in human clinical studies. REDCap is a "HIPAA-compliant web-based application designed for an easy-to-use data entry system, with data validation, the ability to import data from external sources, audit trails for tracking data changes and exports and a sophisticated survey tool for building and managing online surveys". The use of REDCap is free to the CSU community who register as members of UCDenver-Colorado Clinical and Translational Sciences Institute (CCTSI), for IRB approved human research studies. <https://redcapinfo.ucdenver.edu/policies-for-use.html>

REDCap's versatile capabilities for clinical data collection inspired Emma McGinnis and Sarah Mast, Assistant Managers of Research Operations, to build a REDCap training portal to streamline the onboarding process and management system for research training within the department of Health and Exercise Science. With approval for an exception from the CCTSI REDCap team, the Research Operations team recently began pilot-testing the online data management system for research training purposes under the direction of Laurie Biela- Manager of Research Operations.

Through REDCap, the Research Operations team can easily identify training completion based on a report function allowing information to be filtered and exported based on a desired variable (name, laboratory, expiration date, etc). When an individual starts working at the HPCRL, a REDCap screening form has become the first place they are directed to and includes links to required training modules embedded within the system. Research Operations staff designed the database to use a filtering logic that creates a unique survey queue specific to the required training for that individual based on their indicated laboratory. Upon completion of each training, the individual can then upload proof of completion into the REDCap system. In addition, all previous in-person safety training has been recorded and a link to the videos, safety SOPs, and comprehension quizzes are also embedded.

The creation of this online training database ultimately yields a universal home and onboarding system for new laboratory personnel while simultaneously providing more efficient oversight for the Research Operations team. Thus far, the database has been pilot tested by new personnel during the Spring 2021 semester and has provided promising results for use moving forward. Research Operations staff are working to improve the database based on feedback from those who pilot-tested the system, and hope to transition to a fully virtual system for incoming laboratory personnel this summer.

The Research Operations Team is happy to answer any question you might have!

hpcrlresearch@colostate.edu

<https://www.chhs.colostate.edu/hes-hpcrl/resources-for-hpcrl-researchers/>



Laurie Biela, HPCRL Manager of Research Operations, pictured during the recording of DEXA radiation safety training.



Emma McGinnis (left), Sarah Mast (right) Manager of Research Operations Assistants.



Considerations for Field Work

and other useful documents to prepare for your adventure!

Please go to [EHS's webpage](#) under "EHS Manuals and Fact Sheets" for all available documents. This [document](#), Considerations for Field Work, is a collaboration between CSU researchers and research support. It was assembled based on currently utilized processes and resources within our own field research community. This document is meant to serve as a guide to those looking for resources. Like an asynchronous conversation between colleagues about how they prepare to go into the field. This document is NOT meant to lay out requirements nor set to identify compliance standards.

Thank you to those in our research community that have contributed thus far: **Delphine Farmer**, Associate Professor of Chemistry; **Seth Webb**, Director of the Mountain Campus; **Troy Bauder**, Assistant Deputy Director Ag Experiment Station; **Tony Chapa**, Director of the Center for the Environmental Management of Military Lands; **Bill Brazile**, Associate Professor of Environmental & Radiological Health Sciences; **Stephen Reynolds**, Professor of Environmental & Radiological Health Sciences; **Matt Wallenstein**, Professor of Soil & Crop Sciences; **Mark Paschke**, Professor of Forrest Rangeland Stewardship; Research Associate Dean; **Mark Zabel**, Professor of Microbiology, Immunology, & Pathology; Research Associate Dean; **Sally Alexander**, Director of Risk Management & Insurance; **Jim Graham**, Director of Environmental Health Services; **Joni Triantis Van Sickle**, Occupational Health Program Administrator; **Frank Gonzales**, Risk Management & Insurance; **Rebecca Moritz**, Biosafety Director; **Heather Blair**, Biosafety Officer; **Nicole Marlenee**, Biosafety Officer; **Anthony Appleton**, Research Safety Culture Program Coordinator



Field Work Safety

RESEARCH
SAFETY CULTURE

Helping you prep for your
research adventure!

*In partnership with Environmental Health Services,
Risk Management and Insurance, and researchers like you*



VICE PRESIDENT
FOR RESEARCH
COLORADO STATE UNIVERSITY



SAVE THE DATE

NEW INNOVATION PLATFORM

CSU DEMO DAY

APRIL 27-29, 2021

Celebrate entrepreneurship and innovation with us on our new 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!**

NEW Emergency Door Postings

If you see a new posting on your door and would like to make changes, please contact EHS@colostate.edu.
PPE & Custodial Requirements can be changed.

Example Posting

General Services Building

004

PPE REQUIRED
BEYOND THIS POINT



CAUTION/DANGER
RADIOACTIVE
MATERIAL



Beta
β



Safety Glasses



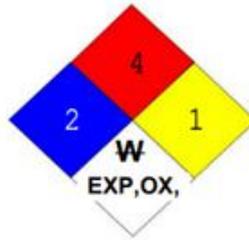
Lab Coat



Full Coverage
Feet and Legs



Gloves



NFPA Ratings are based on your chemical inventory. Questions about the new chemical acquisition and management system? Visit the [EHS Chemical Management Unit](#) webpage.



NO FOOD OR DRINK ALLOWED

ADMITTANCE TO AUTHORIZED PERSONNEL ONLY

CONTACT	NAME	OFFICE PHONE	EMERGENCY PHONE
PI			
Manager			
Alternate			

EMERGENCY OR AFTER HOURS - 911, ENVIRONMENTAL HEALTH SERVICES 491-6745

**Please check CONTACT INFORMATION.
This MUST ALWAYS be up-to-date!**

If you do NOT have a new Emergency Door Posting, please contact EHS@colostate.edu.

Safety Story

WIGGIN
WIGGIN AND DANA

Tahlia Townsend
Partner



Biologics Researchers and Suppliers Beware: International Exchange of Non-pathogenic Research Materials Including Common VSV-G Packaging Plasmids May Trigger Export Penalties

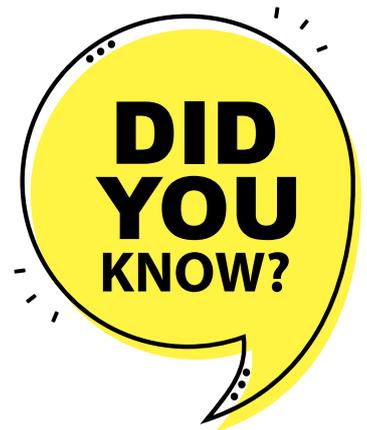
On February 1, the Department of Commerce, Bureau of Industry and Security (BIS) announced a settlement with Princeton University, which BIS alleged exported animal pathogens and genetic elements of animal pathogens without required export licenses to researchers in the U.K., Canada, Australia, Europe, South Korea, India, Singapore, and China.

Although Princeton voluntarily disclosed the violations, BIS imposed a penalty of \$54,000, mandated two audits of Princeton's export compliance program (with findings reported to BIS), one of which must cover a twelve month period pre-dating the settlement and be conducted by an external third party (at Princeton's expense), and further mandated submission to BIS of two reports detailing enhancements to Princeton's export control processes.

In the words of the responsible Special Agent in Charge, "[t]his action demonstrates that the Office of Export Enforcement will continue to leverage our unique authorities as enforcers and regulators of our nation's export control laws to investigate possible violations by research institutions and hold them accountable when appropriate."

The full order, charging letter, and settlement agreement may be accessed at this [link](#).

Read more [here](#) from Tahlia's article.



CSU Export Control



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

Please contact

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COVID-19 RECOVERY

"If safety is a joke, then death is the punchline."
– Paul LaForrest