UK Biosafety News
Department of Biological Safety
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What in the world is DURC?!

Dual Use Research of Concern (DURC), as defined by the National Institutes of Health (NIH) is life sciences research that, based on current understanding, can be reasonably anticipated to provide knowledge, information, products, or technologies that could be directly misapplied to pose a significant threat with broad potential consequences to public health and safety, agricultural crops and other plants, animals, the environment, materiel, or national security.

How does that involve me?

The NIH continues to review its requirements for funded researchers as well as provide guidance for institutional oversight of DURC. As a reminder, ALL research conducted at the University must comply with the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines). **Your lab should be aware of what dual use research is, whether or not any of the seven DURC categories apply to your work and how, if applicable, you can take action to minimize misuse.** The NIH has provided the following informational materials for use in educating yourself or lab staff on this subject:

Does Your Research Have Dual Use Potential?
(http://osp.od.nih.gov/sites/default/files/resources/EducationalBrochureDualUseResearch.pdf)

A Code of Conduct Toolkit - January 2012
(http://osp.od.nih.gov/sites/default/files/resources/A_code_of_conduct_tool_kit_PPJan2012.pdf)

Dual Use Research Educational Module
(http://osp.od.nih.gov/sites/default/files/resources/B_Dual_Use_Educational_Module_FINAL_0.pdf)

Educational Video
(http://www.youtube.com/watch?v=0yS1ur24j40)

The Dept of Biological Safety would like to thank the following labs for setting a shining example of lab housekeeping and maintenance. Well done!

Weisrock Lab (TH Morgan)
Veterinary Diagnostic Lab
E.P. Black Lab (BioPharm)
Graf Lab (BioPharm)

VIRAL VECTOR TECHNOLOGY SEMINAR

Date:

Friday, April 18, 2014

Time:

Lunch at 11:30am

Seminar 12:00pm-1:00pm

Location:

Medical Science Building, MN 363

SPACE IS LIMITED!

REGISTRATION IS REQUIRED by Friday, April 11, 2014

To register, go online **http://ehs.uky.edu**

This seminar will provide an introduction to viral vector technology and will focus on the most commonly used viral vector systems—lentivirus, retrovirus, adeno-associated virus and adenovirus. Special attention will be paid to how viral vectors are made, how they work, and advantages and disadvantages of each viral vector system. We will explore what "generation" of viral vector means, the difference between amphotropic and ecotropic viruses, and how a helper virus functions. Safety considerations for working with each type of viral vector will also be discussed.

Michael Mendenhall, PhD, is an Associate Professor with the University of Kentucky Department of Molecular & Cellular Biochemistry and Markey Cancer Center. Dr. Mendenhall earned an A. B. degree in Biochemistry from the University of California, Berkeley and a Ph.D. in Molecular Biology from the University of Wisconsin Madison. Dr. Mendenhall did his post-doctoral work on cell cycle regulation at the University of California, Santa Barbara and the Scripps Clinic and Research Institute, La Jolla, California. He's been on the faculty of the University of Kentucky since 1988 in the Department of Molecular & Cell Biochemistry and the Markey Cancer Center. Since 2009, Dr. Mendenhall has been the director of the NIH-supported Viral Core for the COBRE in the Molecular Basis of Human Disease. He has served on the UK Institutional Biological Safety Committee since 2011.

UK UNIVERSITY OF KENTUCKY
Environmental Health & Safety
Department of Biological Safety

Sponsored by the University of Kentucky Department of Biological Safety

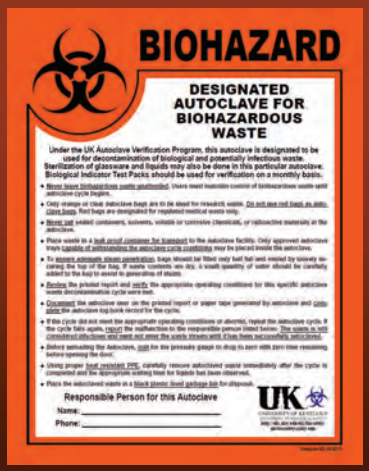
If you utilize a fireboy, bunsen burner or other flame producing device that relies on gas, please remember to regularly check the integrity of the gas tubing, with special attention towards where the tubing is attached to the burner or gas valve. Old, cracking, weakened, or otherwise improper tubing can lead to gas leaks and/or fire! **USE ONLY** approved and rated tubing types. Below are examples of rated tubing:

- o **Kantleke** gas burner tubing (Fisher #14-185-5)
- o **Science Equipment** cloth-covered rubber tubing (Fisher # S49140)

Biosafety Reminder:

Autoclave users please be aware! Certain autoclaves are specially designated for processing specific types of materials. For instance, autoclaves designated for processing biohazardous wastes and/or transgenic plant materials are required to be verified on a monthly basis and therefore these units have signage indicating what materials are allowable. Please ensure you are using the appropriately designated units for your load. Examples of indicative autoclave signage are shown below.

Biohazards allowed



No biohazards allowed

Designated for transgenic plants

University of Kentucky

Department of Biological Safety

As part of the Division of Environmental Health & Safety, the Department of Biological Safety is responsible for programs concerning the safe use of recombinant and synthetic nucleic acids, infectious agents, and potentially infectious materials such as human sourced materials in the research and teaching laboratories at the University of Kentucky. This includes training, auditing, and consulting with researchers, laboratory personnel and teaching staff concerning compliance with the federal and state laws and regulations in these areas.

Visit us on the web!

http://ehs.uky.edu/biosafety/

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