

## UPCOMING TRAINING:

- Biosafety Training

June 22nd, 9am

July 20th, 2pm

August 16th, 9am

- Bloodborne Pathogen training

June 14th, 9am

July 18th, 2pm

August 15th, 9am

Training classes are held at the ORCBS North Campus Satellite in room 164 Giltner Hall

## INSIDE THIS ISSUE:

Plants, Animals and the Lab 1

Lab Relocation 1

Mold and Water 2

Use of Human Materials 2

Transgenic Plants 3

Lab Chairs 3

Shipping Materials Off Campus 4

Cleaning Lab Coats 4

Safer Sharps and You 5

## Cacti, Goldfish, and Salmonella – Plants and Animals in the BSL-2 Lab

Those that spend their work week (and many times even their nights and weekends) in the research laboratory often find solace in making their environment more warm, comfortable, and inviting. This may come in the form of photographs, pictures, posters, plants, or the occasional goldfish or gecko. While these items may bring a sense of calm and hominess to the lab, there are some safety issues and regulations that cannot be ignored. Work with infectious materials does not only pose a threat to humans, but potentially to plants and animals as well. The Biosafety in Microbiological and Biomedical Laboratories (BMBL) manual states that for a Biosafety



Plants and Animals are not permitted in Biological Safety Level-2 Labs

Level 2 (BSL-2) work environment, "animals not involved in the work being performed are

not permitted in the lab". The manual expounds on this principle when discussing Biosafety Level 3 (BSL-3) labs stating, "animals and plants not related to the work being conducted are not permitted in the laboratory". So remember – if you are working with infectious substances or recombinant DNA in your lab, keep the pet goldfish at home and decorate with a small fern instead. For those working in a BSL-3 laboratory, be sure there are no plants or animals in the lab that are non-work related. As always, feel free to contact the ORCBS Biosafety Office for further information on this topic.

## Movin' Out: Laboratory Relocation and Clean Out

Laboratory relocation and clean out requires the movement of various pieces of equipment, computers, physical data, paperwork, research specimens, chemicals, hazardous waste, and other assorted miscellaneous items. Often safety is overlooked in the moving process, but should not be undermined; it is still very important to ensure personnel protection as well as the integrity of samples and specimens being transported. The ORCBS is available to assist in transport of biological materials, clinical and diagnostic specimens, radioactive and chemical waste, and any other hazardous material. The Biosafety Team and Hazardous Waste professionals can help ensure all biological waste is properly treated and disposed of so no hazardous material is left behind. The ORCBS has a guide for laboratory close outs and relocations, called, (Laboratory Close Out Procedures, covering all of the various hazards and risks present in

laboratories, and how to manage the close out or relocation. Decontamination is an important part of the moving process. Decontamination of lab equipment such as refrigerators and incubators must occur before any piece can be moved or serviced and requires the completion of an Equipment Release Form. This form can be located on the ORCBS website ([www.orcbs.msu.edu](http://www.orcbs.msu.edu)) under "Manuals & Forms". For laboratories possessing radioactive materials, at least two weeks advance notice must be provided before relocation or close out. Radioactive materials must not be moved without authorization, proper labeling of rooms, a complete decommissioning survey of the laboratory must be performed by ORCBS Radiation Safety Staff, inventory must be updated, leak tests must be performed of radioactive materi-

als before transport, all radioactive or contaminated items must be properly labeled and transport must be done in compliance with all DOT requirements. Please notify us well in advance if you plan to move, terminate radioactive materials use, or add new locations.

The Hazardous Waste Team can remove and properly dispose of partially empty chemical bottles or any unidentifiable waste

Amber Bitters	Industrial Safety Hygienist	432-5262
Jim McEvers	Hazardous Waste Coordinator	432-4328
Robert Ceru	Chemical Safety Officer	355-5146
Kristin Erickson	Radiation Safety Officer	355-5008

## Got Mold/Water?? Who do you call... “Mold/Water Busters”



**Mold Growth Can Occur in a Variety of Environments**

“Regulations regarding the use of potentially infectious materials serve to protect people, animals, and the environment we share”



Although the title of this article is intended to be humorous, mold and water infiltration is no laughing matter. Whether you have rainwater infiltration, roof leaks, drain clogs, toilet overflows, broken pipes, walk-in coolers or a myriad of other water/moisture sources, the end result is the same...“If you don’t dry it within a certain time frame (24 to 48 hrs) you will have grossly contaminated, Category 3 black water and/or the onset of mold growth”. If water infiltration sources are

left unrepaired or untouched, significant mold growth is certain to occur.

So who do you call? Michigan State University has developed a mold and water infiltration team consisting of Physical Plant Professionals and ORCBS Biosafety Team members. When a flood event occurs, immediately call the Physical Plant who will then dispatch the team to respond. For mold investigations, you may call the Physical Plant or ORCBS and again, the entire team will be

dispatched to the scene. If the area affected is large enough, then commercial contractors and industrial hygienists will be dispatched as well. Members of the water/mold infiltration team include:

### Physical Plant

John Phillipich (353-1760)  
Debra Russell (353-1760)

### ORCBS/EHS

Dr. Jamie Sue Willard (353-1877)  
Amber Bitters (432-5262)  
Andy Smith (353-8956)

## Are You Using Human Materials?

### Forms you need to comply with MIOSHA & the MSU Bloodborne Pathogens Exposure Control Plan...

#### Site-Specific Training Checklist:

Complete within 30 days of the bloodborne pathogens initial or annual training.

Review with a supervisor or trainer. A supervisor guideline is available to assist the supervisor/trainer in completing this form.

#### Task-Specific Assessment for Controlling BBP Exposure Risk:

This form was designed to serve as a tool to use to develop site-specific and task-specific procedures for BBP exposure risk reduction.

Complete this form for each task that has a reasonably anticipated risk of exposure to human materials. (An option is to have a written procedure in place)

#### Safer Sharps Devices Annual Review Form:

The purpose of this form is to document annual consideration and implementation of appropriate commercially available and effective safer sharps devices designed to eliminate or minimize exposure.

All sharps currently in use must be listed on the form but only sharps that are being used on human materials need to be reviewed for safer sharps devices available.

See page 4 for Safer Sharps Demo Day information.

Forms can be found in the MSU BBP Exposure Control Plan or by going to [www.orcbs.msu.edu](http://www.orcbs.msu.edu)

Please keep all forms with your departmental records. All forms will be subject to periodic audits by the ORCBS.

# Are You Field Testing Transgenic Plants?



The use of biotechnology to modify plants is a common practice in the agricultural sciences, and the number of field trials for genetically modified plants is rapidly growing. A field release registration document has been developed to cap-

ture experiments involving the field release of transgenic plant material. It is based, in part, on the National Institutes of Health's Guidelines for Research

Involving Recombinant DNA Molecules (NIH Guidelines) and on guidance from the Animal and Plant Health Inspection Service of the United States Department of Agriculture (USDA-APHIS). With the planting season just around the corner, the MSU Institutional Biosafety Committee (IBC) would like to remind plant researchers that

conducting field trials of transgenic plants requires registration with the IBC. The most recent version of the Field Release Registration Document is available on the Biosafety in Research website

**Remember!** Registration documents must be turned in to the IBC and be fully reviewed before planting takes place. Please allow 6-8 weeks for the review process.

(<http://www.biosafety.msu.edu>).

*“Chairs and other furniture used in laboratory work should be covered with a non-fabric material that can be easily decontaminated”*

## “Chair” With Me, Please...

The Biosafety in Microbiological and Biomedical Laboratories (BMBL) manual states, that for a Biosafety Level 2 (BSL-2) or higher work environment, “Chairs and other furniture used in laboratory work should be covered with a non-fabric material that can be easily decontaminated.” The purpose of this recommendation is to avoid the use of furniture that cannot be easily cleaned and decontaminated after a spill of potentially

infectious material. Cloth covered chairs cannot be easily cleaned with typical disinfectants used in the BSL-2 laboratory. Some laboratories have decided to use the non fabric covered chairs just in areas where they will be working. But, it is easy to move a fabric covered chair into a contami-



nated area or become contaminated if someone wears soiled lab clothing while sitting in a clean fabric covered chair. To avoid having contaminated chairs ORCBS would like to phase out all cloth covered chairs in Biosafety level 2 or higher labs on campus. The non fabric chairs should be cleaned and disinfectant periodically or when a spill occurs.

## NEW REQUIREMENT:

### **Lab-Specific Written Protocol for BBP Source Testing**

**Who:** All MSU departments that are in the Bloodborne Pathogens program and have an identifiable source for their human blood or other potentially infectious material.

**What:** Written protocol for handling a source after an employee exposure to bloodborne pathogens. This includes identifying the source (if possible), contacting the source for consent and testing.

**Assistance:** A sample source protocol is available on the University Physician web site at [www.uphys.msu.edu](http://www.uphys.msu.edu) under “Forms”. You can also contact Paula Guss with any questions by email at [guss@msu.edu](mailto:guss@msu.edu).



## Biological Materials Shipping Update and Reminders



**“Training is also required when shipping on dry ice as a refrigerant”**

It is illegal to ship regulated biological materials without the proper training due to the ever-changing regulations and heavy documentation that must accompany each shipment. Training is also required when shipping on dry ice as a refrigerant. If you have not had training and need to ship biological materials including genetically-modified organisms/micro-organisms, or if you do not know if your materials are regulated, please contact Jamie Sue Willard, Biological Safety Officer (353-1877), Amber Bitters, Biological Safety Industrial Hygienist (432-5262), or Stephanie Smith-Edwards, Biological Safety Industrial Hygienist (355-1283). If you ship frequently (i.e., more than once a month) there is a Biological Materials and Infectious Substance Shipping Training CD avail-

able for you to complete for proper compliance. Refresher training is needed every two years. If you plan to ship minimally, please call one of the contacts above each time you need to ship and we will be happy to assist you with your shipping needs. Before you package and ship biological materials there are additional items that should be addressed. There are paperwork requirements that can take several weeks to complete, therefore you should prepare well in advance for them. A Material Transfer Agreement (MTA) must be filled out for materials that are being shipped off campus. You can contact the Office of Intellectual Property at 355-2186, or you can view their website at <http://www.oip.msu.edu> for additional information. The

CDC and other regulatory agencies also require permits for shipping certain etiological agents. If you are not trained and would like the Biosafety Team at ORCBS to assist in shipping please go to our website at [www.orcbs.msu.edu](http://www.orcbs.msu.edu), click on Biological Safety, click on Forms and Posters, and click on Biological Materials Shipping Form. You can send the information as an attachment to [bitters1@msu.edu](mailto:bitters1@msu.edu), [smiths32@msu.edu](mailto:smiths32@msu.edu), or Fax this information to our office (432-8659) and we will contact you to set up a time to ship your material.



## Are You Wearing a Dirty Laboratory Coat?

Lab coats should be laundered regularly in order to prevent contamination in the laboratory. Lab coats must not be taken home by employees to be washed; they must be washed by MSU Laundry. If coats are contaminated with biohazardous materials they should be placed in a biohazard bag before being placed in a black bag and

put in a hamper to go to MSU Laundry. Even lab coats that are not visibly contaminated should be laundered routinely. Remember: You must empty your pockets and dispose of any waste materials before placing coats in laundry hampers. Double check and make sure your pockets are empty of all sharps objects. MSU Laundry is

located on Service Road and there are hampers for laundry disposal available in the buildings on campus. Please contact laundry service to find where the hamper is located in your building.





**Michigan State University  
Office of Radiation Chemical and Biological Safety  
Biological Safety Office**

**SAFER SHARPS AND YOUR LAB**

Join us for our annual  
**Safer Sharps Demo Day**  
May 23<sup>rd</sup> & 24<sup>th</sup>

According to the MIOSHA Bloodborne Infectious Diseases Standard, all sharps exposed to human blood or other human potentially infectious materials must be reviewed on an annual basis by completing your:

**“Safer Sharps Devices Annual Review Form”**

**Who does this apply to?**

- All areas working with human blood or other potentially infectious body fluids, unfixed tissue/organs other than intact skin, cell or tissue cultures, organ cultures, culture medium or other solutions that may contain bloodborne pathogens, or blood from experimental animals infected with bloodborne pathogens.
- You are using sharps (needles/scalpels/capillary tubes/lancets) on these materials.

**What is required by MIOSHA?**

Effective engineering controls, including sharps with safety mechanisms, must be considered and used where appropriate in order to reduce the risk of an exposure incident.

- **Identify** sharps being used: Supervisors shall identify all sharp devices that have available products with safer engineering features and determine which products are to be evaluated.
- **Evaluate** safer needle and sharps devices as effective engineering controls. This evaluation process must be documented by using a “Safer Sharps Device Evaluation Form”.
- **Select** and implement use of the safer sharps devices as soon as possible.

**Visit us to learn about newly available products that  
can be evaluated as part of your review.**

Tuesday, May 23<sup>rd</sup>: Clinical Center, room A205C – (10:00 a.m. – Noon)  
Olin Health Center, room 247 – (1:00 – 3:00 p.m.)

**Biosafety Resources at MSU...**

**Dr. Jamie Sue Willard**  
Biological Safety Officer  
Responsible Official

(517) 353-1877  
cherryme@msu.edu

**Patti Pawski**  
Assistant Biological  
Safety Officer

(517) 432-8044  
pawski@msu.edu

**Amber Bitters**  
Biosafety Industrial  
Hygienist

(517) 432-5262  
bitters1@msu.edu

**Stephanie Smith-Edwards**  
Biosafety Industrial  
Hygienist

(517) 355-1283  
smiths32@msu.edu

**Shannon Soltysiak**  
Biosafety Graduate  
Assistant

(517) 432-5019  
soltysi3@msu.edu