

BIOSAFETY NEWS

Getting Your Viral Vector Work Approved by the IBC ...the FIRST time!

Before approval of any registration of work with biohazardous materials, the Institutional Biosafety Committee (IBC) evaluates what has been submitted and will issue approval based on the risk assessment and mitigation methods described in the “Summary Statement.” Because the risk associated with gene transfer systems can vary, no “catch all” guideline can be offered other than to have all gene transfer protocols reviewed by an IBC. To help researchers with general knowledge and registration, a comprehensive document outlining containment procedures, appropriate PPE, disinfection, replication competency testing, and other special requirements for viral vector usage is available online [here](#).

In addition to the information currently requested in the online registration form, for successful submission of work and consecutive IBC approval, it is important to address the following items in your Summary Statement:

- ◆ Is the inserted gene(s) oncogenic or otherwise harmful?
- ◆ Are personnel aware of the hazards involved with accidental exposure to the viral vectors in use, including exposure consequences related to the insert?
- ◆ Are human/animal cells transfected with 1st or 2nd generation viral vectors tested for replication competency prior to administration to animals?
- ◆ Is replication competency testing documented, should this information be requested by the IBC?
- ◆ Are animals restrained or anesthetized before administration of these materials?
- ◆ Are animals administered cells transfected with 1st and 2nd generation viral vectors housed at ABSL2 for 72 hours post administration, before moving to ABSL1 housing?
- ◆ Are human/animal cells transfected with 3rd generation (or greater) viral vectors washed prior to administration to animals?
- ◆ If concentrating your stocks via centrifugation, where is the centrifuge located relative to your BSC? Are sealed buckets used to prevent aerosolization? Where are these opened after centrifugation?
- ◆ If downstream assays will be done on these materials, how are they inactivated before removal from the BSC?



Inside this issue

- Successful registration of viral vector work
- Near misses: accident reporting
- Importance of animal restraint
- Better Bio Awards
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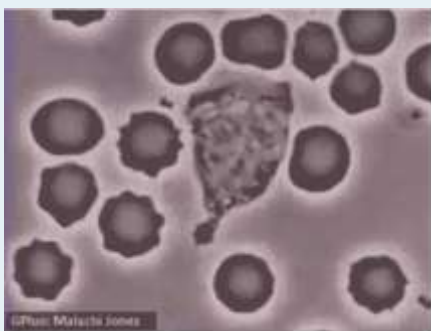
Near Misses and Why It's Important to Report Them

A **near miss** is an unplanned event that did not result in injury, illness, or damage but had the potential to do so. Only a fortunate break in the chain of events prevented an injury, fatality or damage. Unsafe working conditions or near misses accidents should be reported to Occupational Health and Safety at (859) 257-3827, or using the [University's Accident-Injury Report](http://ehs.uky.edu/ohs/accident.php) at <http://ehs.uky.edu/ohs/accident.php>.

“Restraint devices and practices that reduce the risk of exposure during animal manipulations (e.g., physical restraint devices, chemical restraint medications) should be used whenever possible.” BMBL 5th edition

Phagocytosis-LIVE!

Click on the image below for an animated gif of a white blood cell chasing bacteria.



Link: imgur.com/5KvylbN

Restraint Practices for Animal Work

When animals are to be injected with infectious agents, personnel should wear appropriate protective equipment, including gloves. Animals should be properly restrained using physical restraints (e.g., use of squeeze cage for primate inoculation), anesthesia, or specific handling practices to avoid accidents that might result in disseminating infectious agents, as well as to prevent injury to the animal and to personnel.





Click on the pictures to be directed to the online documents for printing

Biosafety Reminder:

The updated laboratory waste triage flowchart and poster with pictures can be found on our website. Clicking on the pictures will direct you to these documents. Posters can be printed and posted in your laboratory to assist personnel with correct disposal of materials commonly generated in the lab.

Space Heater policy:

To utilize a space heater for temporary, supplemental heat, all of the following requirements are mandatory:

1. Unit must be UL listed,
2. Unit can only be used in an office space,
3. Unit must be plugged directly into a hard-wired electrical wall outlet (no extension cords or power strips under any circumstance). Contact the building operator to ensure the electrical circuit will not become overloaded,
4. Unit must be positioned a minimum of 3' from any combustible material,
5. Unit must have a thermostat,
6. Unit must have a safety "tip-over" shut-off, and
7. Unit must be continuously supervised by designated personnel.
8. Liquid fueled space heaters of any type shall not be used. Salamander/Torpedo heaters for internal (PPD) construction projects will be evaluated on an individual basis.

Questions concerning this Policy may be addressed to the University Fire Marshal at (859) 257-6326.



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

Kyprianou (Combs)

D'ORAZIO, J. (Combs)

Voss/Siefert (THM)

Rohr (BPC)

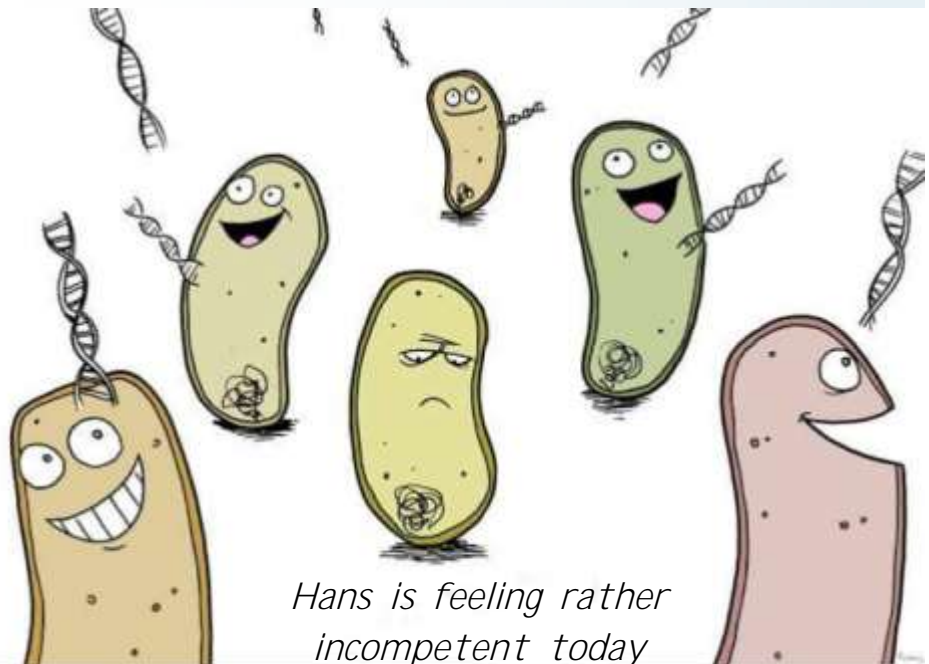
Flennor (CTW)

Gentry (BBSRB)

Is your lab too hot? Is the faucet leaking? Are your door locks working properly?

If your lab requires repair or maintenance, fill out a work order by going to:
<https://myuk.uky.edu/irj/portal>

- ♦ click on the “Enterprise Services” tab
- ♦ click on the “Facilities Management” tab



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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/>