

**JOHNS HOPKINS HOSPITAL  
JOHNS HOPKINS UNIVERSITY**

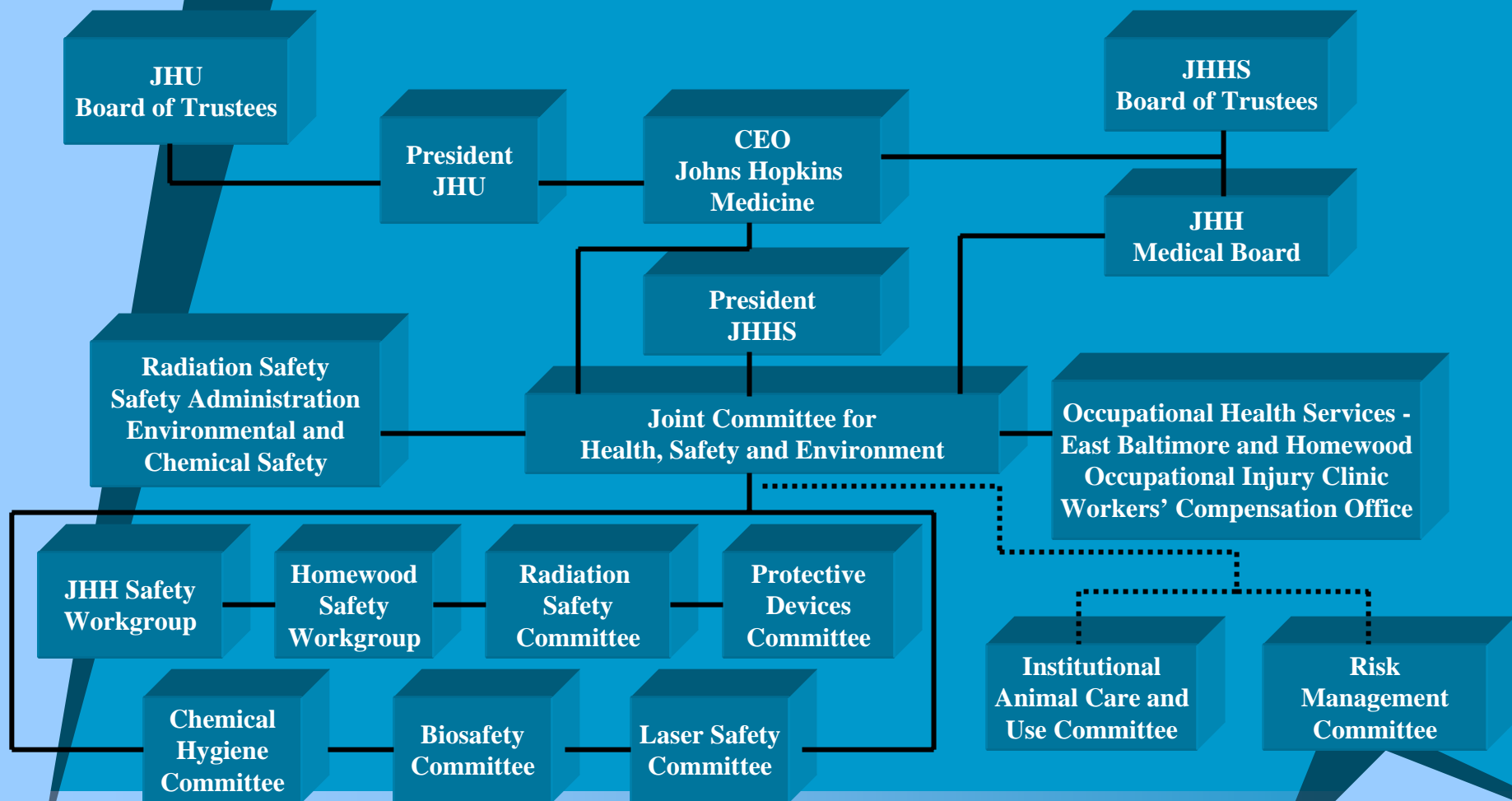
**Health, Safety, and Environment**

**Program Summary**

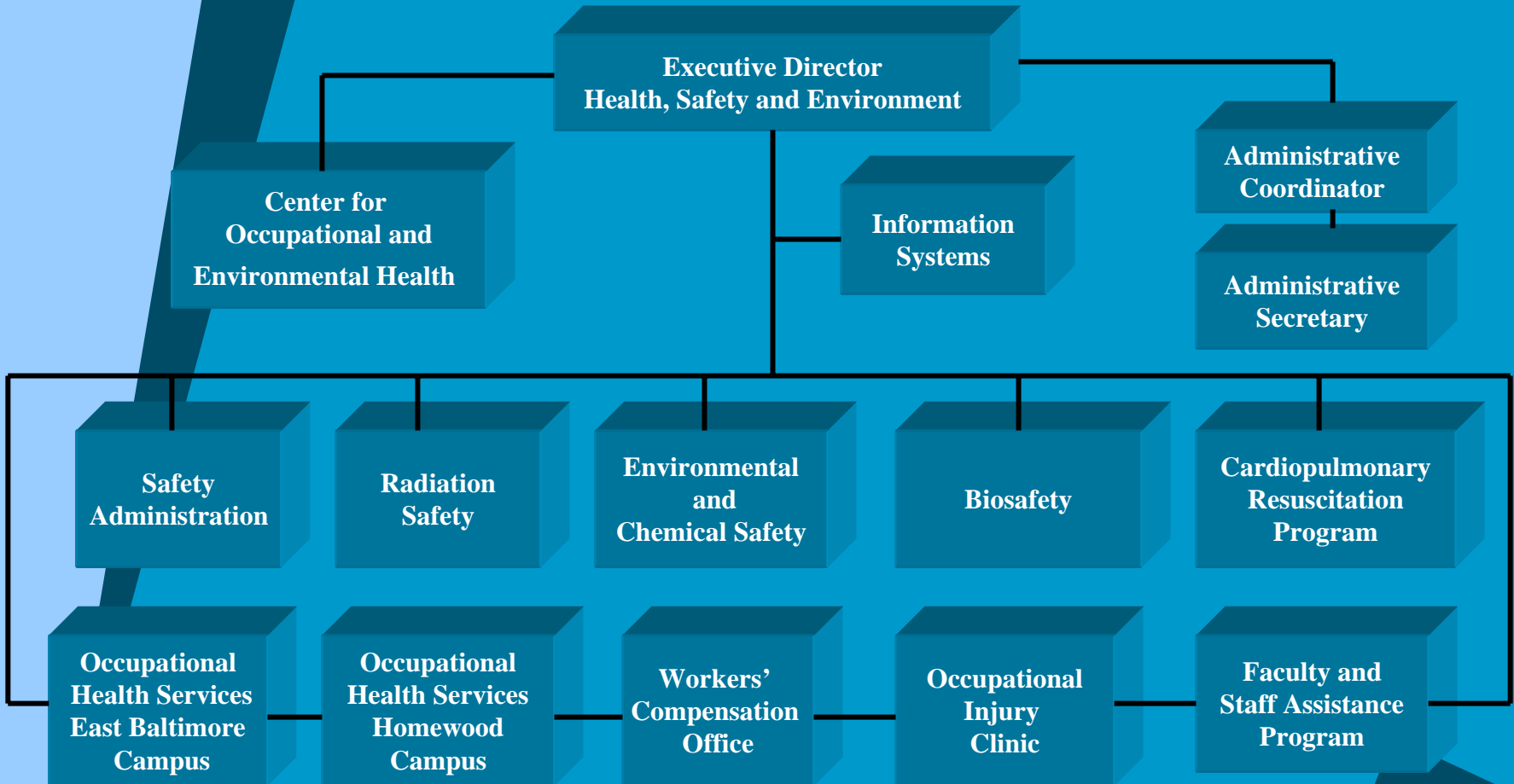
**New Faculty Orientation**

**October 10<sup>th</sup>, 2006**

# Health, Safety And Environment Organization Johns Hopkins Institutions



# Health, Safety and Environment Organization



# Occupational Injury Clinic

- ◆ **Performs assessment and treatment of work related injury and illness.**
- ◆ **Conducts post-exposure management of bloodborne pathogens (HIV, HBV, HCV).**
- ◆ **Conducts early detection/intervention ergonomics/early return-to-work programs (in cooperation with Safety Administration).**
- ◆ **Maintains OSHA 300 Log.**

# Report of Incident Form

**THE JOHNS HOPKINS INSTITUTIONS  
EMPLOYEE REPORT OF INCIDENT**

Name:	_____
Social Security Number:	_____
JHH History Number:	_____
Employer (circle one):	JHH    SOM    SOH    BSI JHHS    HWD    MCS
Other (specify):	_____

Part I. Employee Incident Information (to be completed and signed by the supervisor)

Occupation \_\_\_\_\_ Functional Unit/Department \_\_\_\_\_

Date of Incident \_\_\_\_\_ Time of Incident \_\_\_\_\_ AM/PM    Date Reported \_\_\_\_\_

Time Work Day Began \_\_\_\_\_ AM/PM

Location of Incident \_\_\_\_\_ Building \_\_\_\_\_ Room \_\_\_\_\_

Description of Incident (Must include all equipment and materials employee was using at the time of incident as well as the specific activity employee was engaged in at the time of incident)

\_\_\_\_\_

Was there a safety procedure or mechanism available?     Yes     No

Was it in use at the time of incident?     Yes     No

Is the activity part of the normal job duties?     Yes     No

List names of anyone present at time of incident: \_\_\_\_\_

Probable cause of incident (object or substance responsible for injury/illness) \_\_\_\_\_

\_\_\_\_\_

If indicated, what was discussed with employee to prevent recurrence? \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_ Supervisor Name \_\_\_\_\_ Extension \_\_\_\_\_ Beeper \_\_\_\_\_

Employee's Signature \_\_\_\_\_ Supervisor's Signature \_\_\_\_\_

**Note: Any additional comments you feel are pertinent to an investigation of this incident can be made on a supplemental sheet and attached.**

Part II. Disposition - Occupational Injury Clinic Use Only

Inc # \_\_\_\_\_ Body Part \_\_\_\_\_ ICD9 DX Code \_\_\_\_\_

Disposition     Full Duty     Restricted Duty     Off Duty     Restrictions not Accommodated

Referral (ER, WER, Ortho, Plastics, Etc)     RTC Scheduled     RTC PRN

Recordable\*     Yes     No

Safety investigation requested     Yes     No    If yes, comments: \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_ Healthcare Provider's Signature/Title \_\_\_\_\_

\* As defined by OSHA

Distribution of Copies: Original - accompany the employee to Occupational Injury Clinic  
Copy - retain in department

Revised: 11/01/05

The form and instructions for completing it can be found at:

[http://www.hopkinsmedicine.org/hse/forms/Report\\_of\\_Incident.pdf](http://www.hopkinsmedicine.org/hse/forms/Report_of_Incident.pdf)

# Industrial Hygiene & Ergonomics

- ◆ **Identifies and controls chemical, physical and ergonomic hazards.**
- ◆ **Monitors and administers hazardous chemical waste disposal program.**
- ◆ **Conducts environmental sampling monitoring.**
- ◆ **Responds to chemical spills and accidents.**
- ◆ **Investigates complaints related to workplace exposures.**
- ◆ **Conducts training in the use, control, disposal, and shipping of hazardous chemicals.**
- ◆ **EPA compliance.**

# Safety Management

- ◆ **Conducts periodic facility surveys and laboratory safety inspections.**
- ◆ **Performs incident investigations and record keeping functions.**
- ◆ **Conducts job hazard analyses.**
- ◆ **Responds to fire and other emergency situations.**
- ◆ **Surveys all Hospital/University areas for compliance with regulatory standards and public health practices.**
- ◆ **Conducts safety training (Biohazard, HazCom, Fire Safety, Bloodborne Pathogens, TB, etc.).**

# Occupational Health Services

- ◆ **Conducts pre-employment health screenings (Hepatitis B, Varicella, Rubella, Rubeola, Drug Screen, Health Assessment, TB Testing).**
- ◆ **Performs immunizations (Hepatitis B, Rubella, Rubeola, Tetanus, Rabies, MMR).**
- ◆ **Conducts Flu Vaccine Program (immunization of employees and faculty/staff).**
- ◆ **Conducts tuberculosis prophylaxis evaluations and treatment as necessary for PPD converters.**
- ◆ **Performs return-to-work clearance (any employee medically absent from work for more than seven days and any employee who is absent for a communicable or contagious disease) .**

# Management of Hazardous Materials/Chemicals

## HSE Policy 701:Hazard Communication

- Also called OSHA's "Employee Right to Know" law.
- States every employee has a right to know every hazard associated with each chemical they work with.
- This is communicated in two ways—Material Safety Data Sheets (MSDSs) and labels.

# HSE 701- Hazard Communication

**MSDS' can now be found on line via  
Chemwatch**

[http://www.hopkinsmedicine.org/hse/environ\\_health.htm#MSDS](http://www.hopkinsmedicine.org/hse/environ_health.htm#MSDS)

## Related Policies

**HSE 703 – Management of Hazardous Chemicals**  
Covers transport, storage, use, disposal, and spill  
procedures

[http://www.hopkinsmedicine.org/hse/Policies/HSE\\_Policies/indiv\\_sections/hse703.pdf](http://www.hopkinsmedicine.org/hse/Policies/HSE_Policies/indiv_sections/hse703.pdf)

# Response to FIRE/SMOKE



1. **Remove anyone in immediate danger**
2. **Close the door**
3. **PULL THE ALARM (found along your exit route)**
4. **Call 5 – 4444 to give location of fire.**
5. **Do not use fire extinguishers unless you have been formally trained on an annual basis.**

# How do you respond to a fire alarm in your area?

## ◆ Healthcare Occupancy:

- Defend in place. Close doors, clear hallways, and place all patients and visitors in their rooms.

## ◆ Business Occupancy:

- Evacuate patients, visitors, and employees to a connecting building.

# Training Classes

- ◆ **Hazard Communication**
- ◆ **Bloodborne Pathogen**
- ◆ **Shipping (DOT/IATA)**
- ◆ **Supervisor Safety**
- ◆ **Laboratory Safety**

# HSE Website

Health, Safety & Environment Department - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://www.hopkinsmedicine.org/hse/>

**JOHNS HOPKINS**  
Health, Safety & Environment Department

**DIVISIONS** HOME EMERGENCY POLICIES GUIDANCE FORMS FAQ

Director's Office  
Occupational Safety  
Biosafety  
IBC  
Occupational Health  
EAST BALTIMORE  
HOMEWOOD  
Workers' Compensation Office  
CASE MANAGEMENT  
Environmental Health  
Occupational Injury Clinic  
Center for Occupational & Environmental Health  
Radiation Safety

SHORTCUTS: Go to....   SEARCH

MSDS POLICY INDEX

WELCOME

Last Updated: Wednesday, August 9th, 2006

**Alerts**

- Smoke? Fire? Not sure? [PULL THAT ALARM!](#)
- Evacuation Plans in JHH - Policy [HSE 408](#)
- Evacuation Plans in JHU, East Baltimore Campus - Policy [HSE 412](#)
- Homewood Building Evacuation - [Evacuation Map](#)
- [ADA Safety Evacuation Plans for Disabled Persons](#)

**Notices**

- Revised [DOT/IATA training schedule](#) for the rest of 2006. All DOT/IATA classes start at 1:00 (06/15/06).
- Updated [Hazardous Materials Disposal](#) schedule and location for JHH (06/09/06).
- Updated Biosafety forms for Registration of [Recombinant DNA](#) and [Human Tissue](#) asking for badge number instead of SSN (06/09/06).
- New forms for [requesting medical information](#) from Occupational Health and updated submission instructions (04/13/06).

**Policy and Guidance Document Updates**

- Updated [HSE 031: Handling Of Hazardous Drugs](#) to reflect the hospital's waste segregation efforts. (07/27/06).
- New Guidance Document [HSE G03 Using Ortho-phthalaldehyde \(Cidex® OPA\) to Disinfect Equipment](#) (06/16/06).
- New Policy [HSE 809: Laboratory Clearance Policy](#) (05/26/06).

[http://www.hopkinsmedicine.org/hse/environ\\_health.htm#MSDS](http://www.hopkinsmedicine.org/hse/environ_health.htm#MSDS) Internet

<http://www.hopkinsmedicine.org/hse/index.htm>



# Johns Hopkins Biosafety Overview



The goal of the Biosafety Office is to:

- Promote the safe handling of potential biological hazards including Recombinant DNA, Infectious Agents and Pathogens (including bloodborne pathogens associated with human tissues), and Biological Toxins
- Ensure Compliance with Federal, State, and JHU regulations and policies.



# The Principal Investigator is ultimately responsible for:



- Compliance with all Federal, State and Institutional Policies
- The safety and training of all directly associated laboratory and administrative staff



# You Are Not Alone...

# We Are Here To Help



## Biosafety Office Administration:

Stephen C. Dahl, Ph.D., RBP, Biosafety Officer

Weiyang Pan, Ph.D., Associate Biosafety Officer

Tylicia McRae, Institutional Biosafety Committee Coordinator

Kathleen Cook, Administrative Assistant

## Biological Safety Cabinet Certification Team:

Tamie Maier, Service Coordinator

Tim Travers, Technical Supervisor, NSF-certified Technician

Eric Flutka, NSF-certified Technician

Bryan Kahler, NSF-certified Technician

Robert Williams, Technician

## Research Safety Specialists/Laboratory Inspection Team

Jack Barrett, M.S., HEM

Elise Hopkins, HEM



# Biosafety Compliance...

## What Do You Need To Know?



- Research Registrations
- Select Agent Oversight
- Institutional Biosafety Committee
- Biosafety Cabinet Certifications
- Laboratory Inspection Program
- Laboratory Safety Training



# Research Registrations

## What to register?



- Recombinant DNA/RNA
- Pathogens and Infectious Agents
- Biological Toxins
- Human Tissues
  - Clinical Focus
  - Laboratory Focus



# Registration Forms

## What is needed?



- Identify vector(s) and insert(s)
- Identify agent(s)
- Identify host(s)
- Identify delivery system(s)
- Identify personnel
- Identify known and potential safety issues
- Identify methods and overall goals



# Recombinant DNA



- Federal Requirement
- National Institutes of Health Guidelines
  - <http://www4.od.nih.gov/oba>

The NIH Guidelines for Research involving Recombinant DNA Molecules specifies practices for constructing and handling (i) recombinant DNA molecules and (ii) organisms and viruses containing recombinant DNA molecules

(Lifted from section I-A of the Guide)



# Pathogens and Infectious Agents



- Johns Hopkins Institutions Policy  
(Federal Regulation for Select Agents)
- CDC/NIH BMBL is the accepted standard
  - Biosafety in Microbiological and Biomedical Laboratories  
(<http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm>)
  - Assignment of biosafety containment (BSL1 – BSL4) and required procedures and practices



# Biological Toxins



- Johns Hopkins Institutions Policy  
(Federal Regulation for Select Agents)
- Select Agent Toxins have possession limits. Investigators at or below the trigger value need only register with the Biosafety Office. Quantities above the threshold require formal application, inspection, and FBI clearance including fingerprint registration.



# Human Tissue



- OSHA Bloodborne Pathogen Standard
- All personnel who may come in contact with human tissues or body fluids (including those who package and ship specimens) must receive annual bloodborne pathogen training.
- Yes, human cell lines count
- Yes, we offer classroom and online courses.



# There are Two Types of Human Tissue Registrations



- Clinical Focus
  - Investigator only needs to register once.
  - Personnel list must be maintained
  - Universal precautions
- Laboratory Focus
  - Investigator only needs to register once
  - Personnel list must be maintained
  - Biosafety Level 2 (BSL2)



# Institutional Biosafety Committee (IBC)



- Reviews all research registrations except exempt DNA and Human Tissue
- Reviews clinical trials involving gene transfer and/or any introduction of pathogens or infectious agents into human subjects.
- Meets monthly. Materials received in a given month will be considered the following month.



# Important!



Your registration is not in effect until it has been approved by the IBC.

The use of recombinant DNA, pathogens, infectious agents, or biological toxins without IBC approval is in violation of Federal, State, and/or Johns Hopkins regulations.



# Biological Safety Cabinet Certification



- Annual certification is required by NIH, CDC, and/or JHU policies
- JHU maintains an in-house Biosafety Cabinet Certification Team with NSF-certified techs.
- Biosafety Cabinets are regulated by the Biosafety Office. You must contact us if you intend to purchase, decommission, or move a Biosafety Cabinet.



# Laboratory Inspections



- Required by Johns Hopkins Policies
- Laboratories will be inspected annually for:
  - Proper chemical storage and disposal
  - Proper biomedical/biohazardous waste disposal
  - Proper compliance with the BMBL
  - Proper hazard, materials, and contact signage
  - Proper maintenance of safety and emergency equipment such as eyewash and BSC.



# Training Opportunities



- Laboratory Safety
- BSL1 and BSL2 Practices and Procedures
- BSL3 Practices and Procedures
- Biological Safety Cabinet Practices and Procedures
- Bloodborne Pathogen Training (+/- Monkey Module)
- DOT/IATA Dangerous Goods Shipping Course\*
- Radiation Safety\*
- Fire Safety and Hazard Communication Training\*

\*(These courses are offered through HSE, but not specifically by the Biosafety Office)



# Contact the Biosafety Office



- Phone: 410 – 955 – 5918
- FAX 410 – 955 – 5929
- Email: [biosafety@jhu.edu](mailto:biosafety@jhu.edu)  
[ibc@jhu.edu](mailto:ibc@jhu.edu)

*All of the following URLs work so pick your favorite!*

- [www.hopkinsmedicine.org/hse/biosafety.htm](http://www.hopkinsmedicine.org/hse/biosafety.htm)
- [www.hopkinsbiosafety.org](http://www.hopkinsbiosafety.org)      [www.jhubiosafety.org](http://www.jhubiosafety.org)
- [www.hopkinsibc.org](http://www.hopkinsibc.org)      [www.jhuibc.org](http://www.jhuibc.org)

# **Radiation Control Unit**



**Stan Wadsworth,  
Radiation Safety Officer**

**2024 E. Monument Street  
stanwads@jhmi.edu  
410-955-3710**

# Mission:



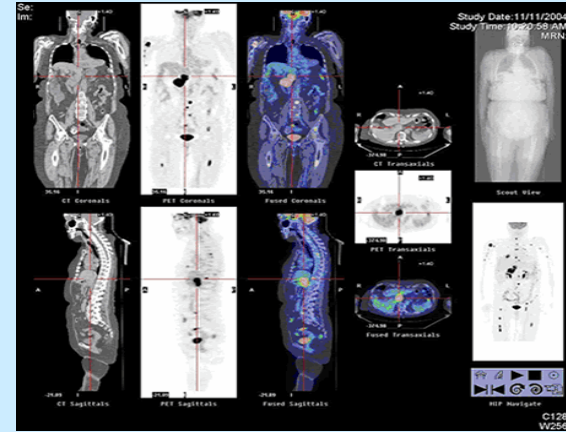
- Facilitate the safe and efficacious use of radiation sources in research, medical diagnosis, therapy, and education while maintaining compliance with regulatory licensing, registration, and accreditation standards.

# Radioactive Materials Research:



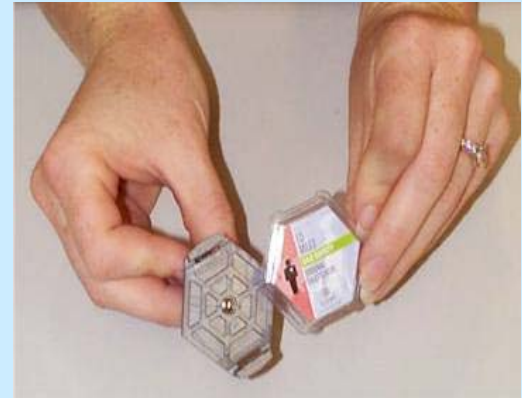
- The use of radioactive materials by personnel at Johns Hopkins is authorized by a radioactive materials license.
- Applications for use shall be submitted to the Committee through the Radiation Safety Officer.

# Human Research:



- Administration of radiation (x-rays or radioisotopes) to human subjects in research projects must be made on RCU form 5
- Completed form should be sent to the JHMI Clinical Investigation Committee

# Services offered by the Radiation Control Unit:



- Radiation safety training
- Laboratory and clinic surveys
- Personnel dosimetry
- Review of applications for radioactive material use
- Emergency response

# Services cont'



- Radioactive waste disposal
- Instrument calibration
- Radioactive source inventory
- Bioassays
- Brachytherapy/Radiopharmaceutical support

# Services cont'



- Review of applications for radioactive material use
- X-ray shielding analysis
- X-ray machine surveys
- Consultative services

# Forms, Policies, Worksheets



- <http://www.hopkinsmedicine.org/hse/forms.htm>
- <http://www.hopkinsmedicine.org/hse/Policies.htm>
- <http://irb.jhmi.edu/forms/>