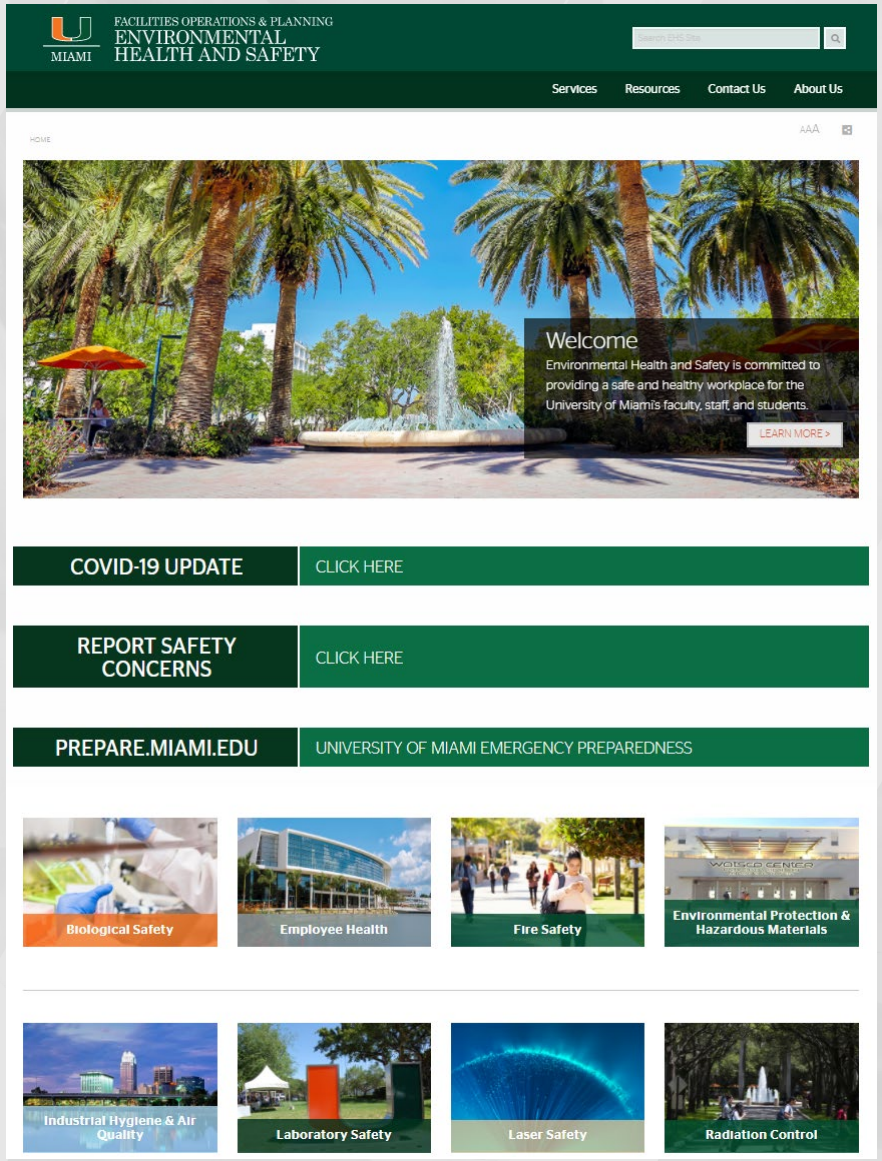
Starts at 12:30pm

2024 Annual Biosafety Month Seminar

Environmental Health & Safety - Biosafety

What is EHS?

Environmental Health & Safety



- Biosafety
- Chemical Safety
- Laser Safety
- Hazardous Materials
- Industrial Hygiene & Air Quality
- Fire Safety
- Radiation Control

Biosafety

- Shane Gillooly
  - Associate Director
  - Biosafety Officer

- Melanie Peapell
  - Biosafety Specialist
  - Laser Safety Officer

- Daniel Nunez
  - Biosafety Specialist

Others at EHS

- Jennifer Laine
  - Executive Director

- Adrian Hernandez Ferrer
  - Chemical Hygiene Safety Manager

- Noelia Estevez De Rosario
  - Industrial Hygiene Safety Manager

- Christine Daley
  - Fire Safety Manager

- Brian Cumbie
  - Hazmat Manager

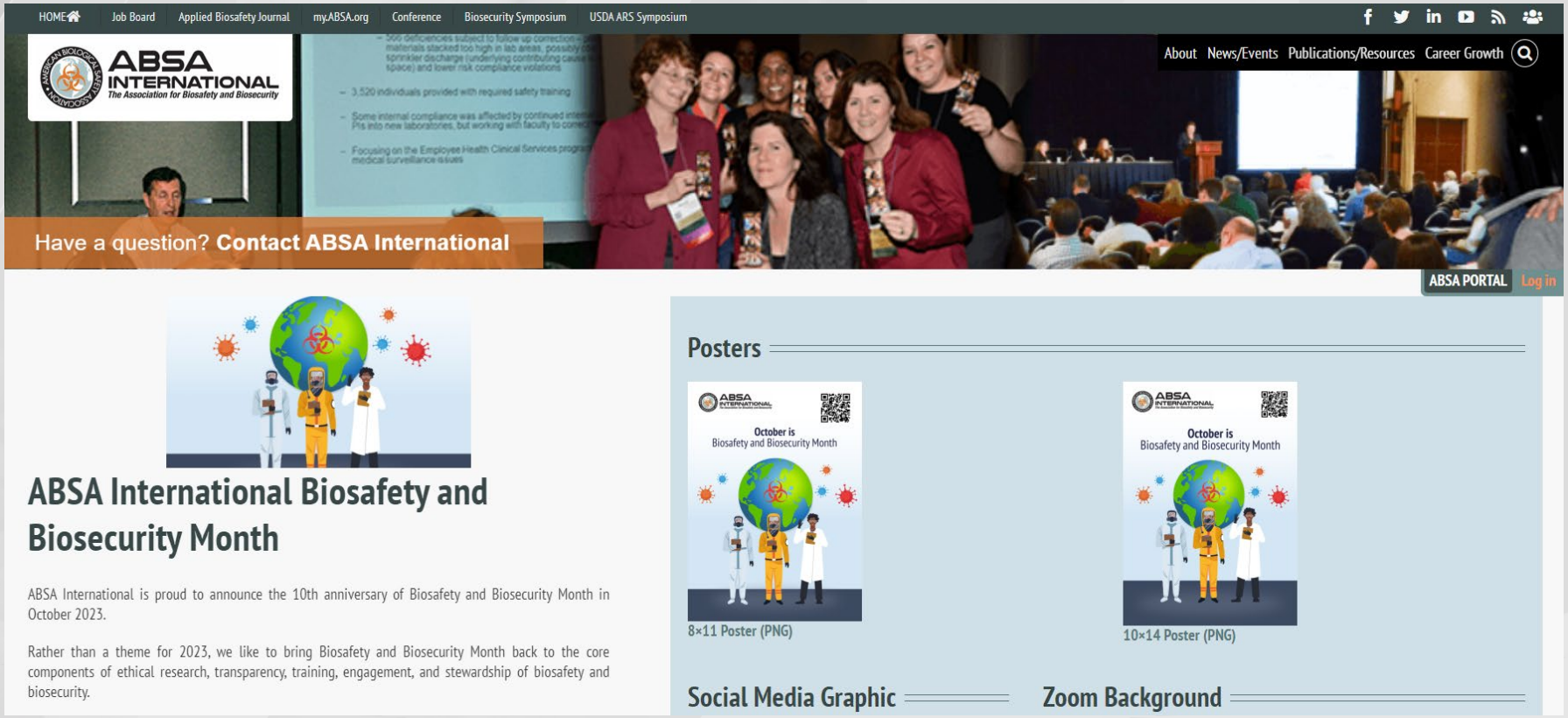
- Brian Reding
  - Hazmat Specialist

- Abraham Somoza
  - Hazmat Specialist

Biosafety Office Mission

What is Biosafety Month?

- NIH designated, ABSA sponsored
- Month to encourage institutions to highlight importance of biosafety and strengthen their biosafety programs



Since the Last Biosafety Month…

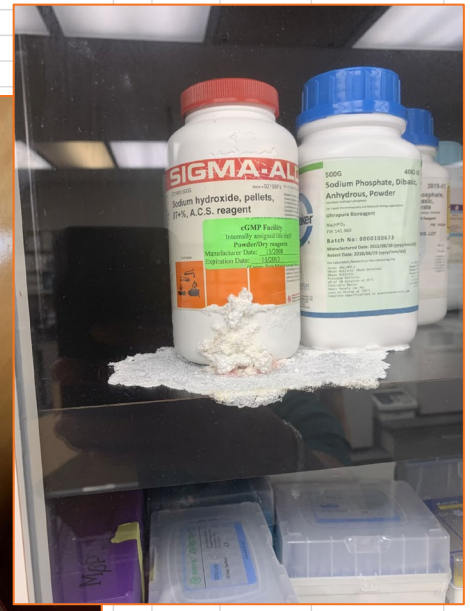
New Labs & Long-Gone Labs

- Responsibilities of lab commissioning and lab de-commissioning
- Critical considerations:
  - Unknown chemical/bio vials
  - Fading or illegible labels
  - Structural integrity of containers

- For de-commissioning labs:
  - Call EHS for a final walkthrough
  - Reduce chemicals and biological footprint as work slows
  - You may leave, but problems stay

Chemical Concerns

- Commonly found in every lab
  - Splash hazards not always obvious
  - Safety glasses often overlooked
- Segregation of chemicals
  - Ie, flammables vs corrosives
- Stay diligent on labels
- Chemical Inventory
  - Regular, annual updates



UNIVERSITY OF MIAMI
OFFICE of ENVIRONMENTAL HEALTH & SAFETY

Environmental Health and Safety (EHS)
1400 NW 10th Ave. Suite 405
Miami, FL 33136
305-243-3400

YOUR NAME HERE **Lab Chemical Inventory**

Principal Investigator	YOUR NAME HERE
Building	Lab's Building name
All Lab Room Number(s)	405, 406, 406-B
Date Last Revised	25-Jan-23
Note	Chemicals of Interest are highlighted in yellow

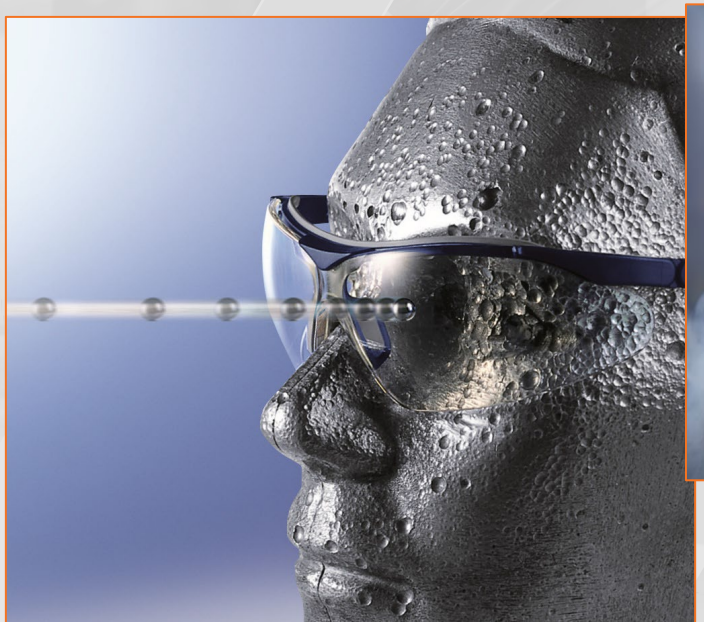
Chemical Name (including concentration, if applicable)	CAS #	Room Location(s) of Chemical	Location in Room	Estimated Amount (units of meassure)		Hazard Class	Vendor or Manufacturer
Hydrochloric Acid 37%	7647-01-0	405	Acids Cabinet	1	Gallons	Corrosive to metal	Sigma-Aldrich
Sodium acetate	127-09-3	406, 406-B	Bench A	2	Kg		LabChem
Methanol	67-56-1	406	under Hood 1	3	L	Flammable	Fisher

Revision Date: 06-23-2023

Page 1 of 1

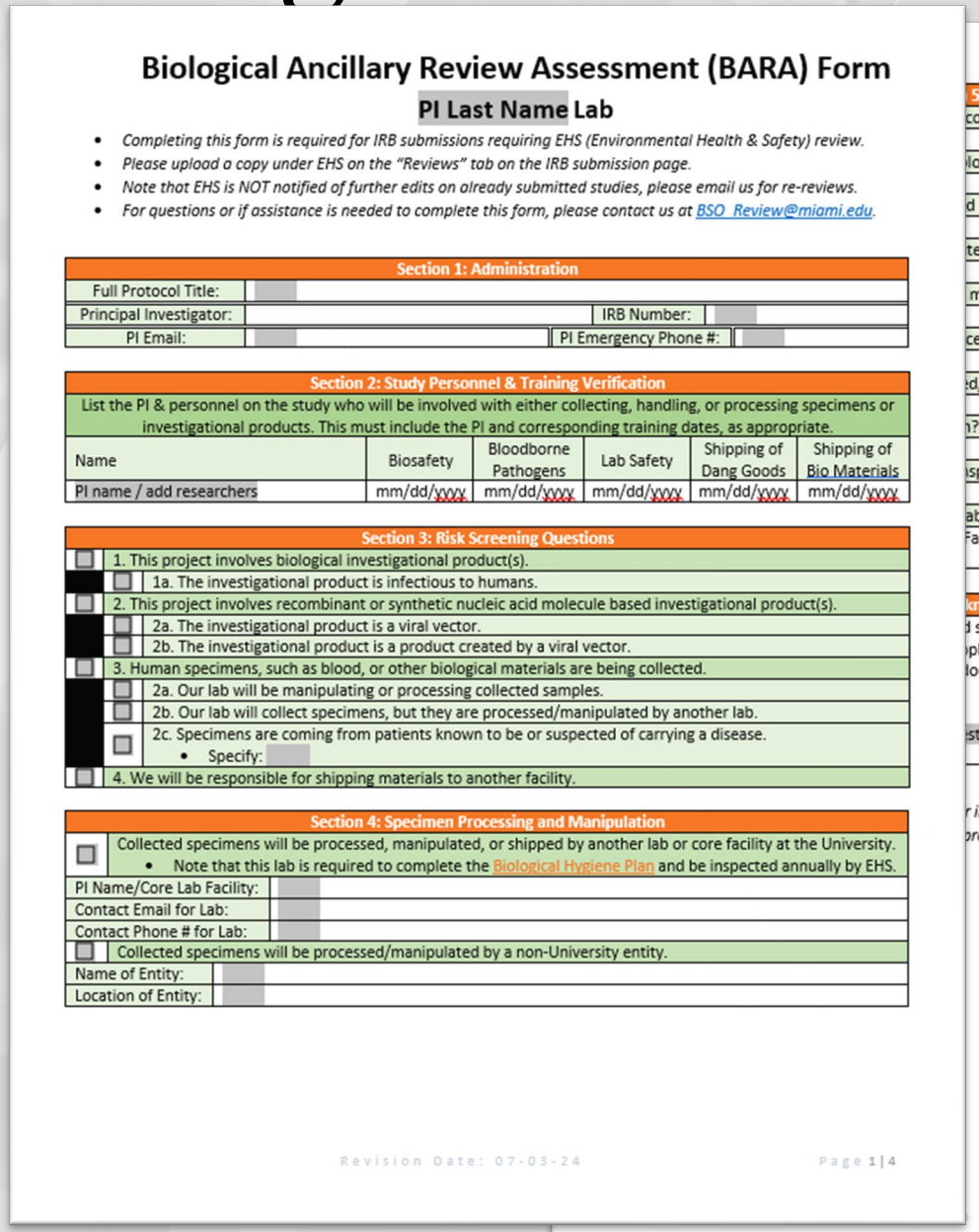
Other Safety Concerns

- Projectiles can occur unexpectedly
- Any physical thing can be a projectile
  - Be thoughtful when applying force
  - Again, safety glasses are critical
- Cryogenic container degradation
- Broken glass checks



BARA Form Changes

- BARA always req. for IRB submissions
- Significant revisions
- New BARA form req. as of Oct 1st
- Must be completed by lab submitting the protocol
- No longer need core/processing labs input for form comp.
- Focus on hazards of work and investigational products, and occupational risks for research staff



Biological Ancillary Review Assessment (BARA) Form

PI Last Name Lab

- *Completing this form is required for IRB submissions requiring EHS (Environmental Health & Safety) review.*
- *Please upload a copy under EHS on the "Reviews" tab on the IRB submission page.*
- *Note that EHS is NOT notified of further edits on already submitted studies, please email us for re-reviews.*
- *For questions or if assistance is needed to complete this form, please contact us at BSO_Review@miami.edu.*

Section 1: Administration			
Full Protocol Title:			
Principal Investigator:		IRB Number:	
PI Email:		PI Emergency Phone #:	

Section 2: Study Personnel & Training Verification					
List the PI & personnel on the study who will be involved with either collecting, handling, or processing specimens or investigational products. This must include the PI and corresponding training dates, as appropriate.					
Name	Biosafety	Bloodborne Pathogens	Lab Safety	Shipping of Dang Goods	Shipping of Bio Materials
PI name / add researchers	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy	mm/dd/yyyy

Section 3: Risk Screening Questions

- ☐ 1. This project involves biological investigational product(s).
  - ☐ 1a. The investigational product is infectious to humans.
- ☐ 2. This project involves recombinant or synthetic nucleic acid molecule based investigational product(s).
  - ☐ 2a. The investigational product is a viral vector.
  - ☐ 2b. The investigational product is a product created by a viral vector.
- ☐ 3. Human specimens, such as blood, or other biological materials are being collected.
  - ☐ 2a. Our lab will be manipulating or processing collected samples.
  - ☐ 2b. Our lab will collect specimens, but they are processed/manipulated by another lab.
  - ☐ 2c. Specimens are coming from patients known to be or suspected of carrying a disease.
    - Specify:
- ☐ 4. We will be responsible for shipping materials to another facility.

Section 4: Specimen Processing and Manipulation	
☐ Collected specimens will be processed, manipulated, or shipped by another lab or core facility at the University. • Note that this lab is required to complete the Biological Hygiene Plan and be inspected annually by EHS.	
PI Name/Core Lab Facility:	
Contact Email for Lab:	
Contact Phone # for Lab:	
☐ Collected specimens will be processed/manipulated by a non-University entity.	
Name of Entity:	
Location of Entity:	

Revision Date: 07-03-24 Page 1|4

5: Hazard Communication

collected by lab, their biological nature, & their associated hazards.

logical materials function to serve the aims of the research.

d by your lab?

tes of the materials used in the lab? (ie. Inhalation, bloodborne, etc.)

materials:

cedures employed in this lab. How are these risks mitigated?

d/treated?

?

sported between facilities and/or shipped to other facilities:

ab:

Face Shield ☐ Disposable Gown ☐ N95 Respirator

knowledgement and E-Signature

d special microbiological practices, containment equipment, personal plicable to this project. I will ensure that all faculty, staff, and locument and will follow these recommendations as a condition of

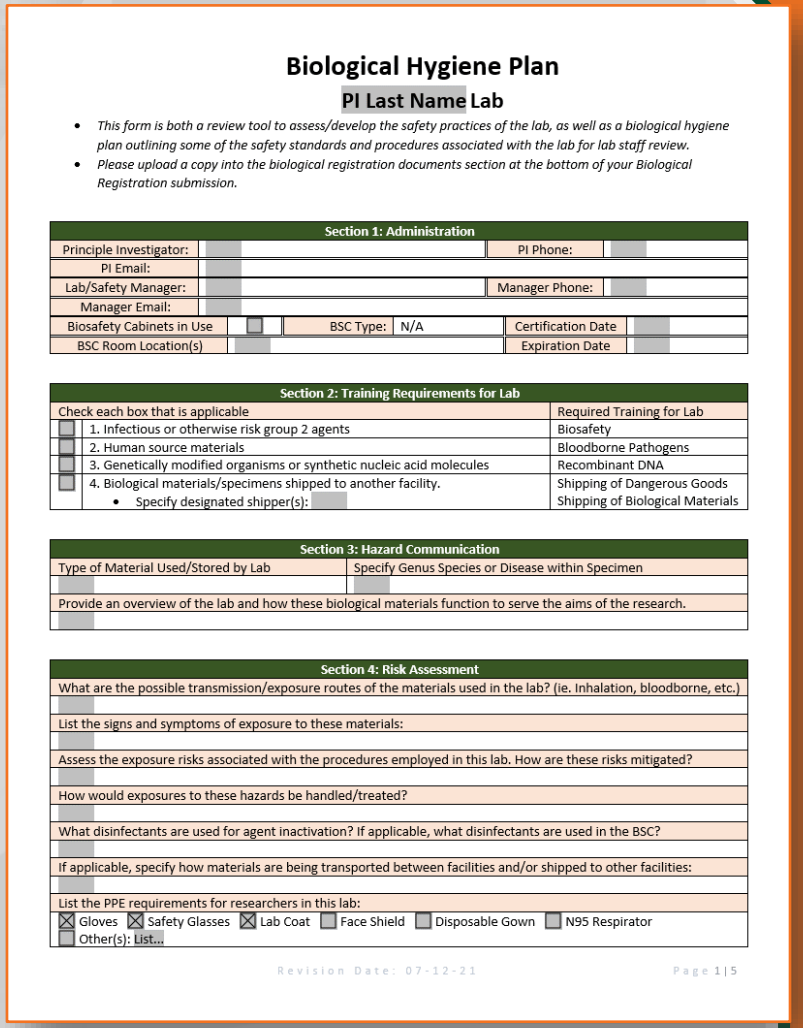
stigator Full Name Date Completed

r investigational products, please complete Section 7: Hygiene Plan. processed/manipulated by another lab, you may stop and submit.

Date: 07-03-24 Page 2|4

Biological Hygiene Plan

1. Ensures we know who the emergency contacts are and how to get ahold of them 24/7
2. Ensures all lab personnel know what training is req'd of them
3. Serves as agent specific training to lab personnel
4. Ensures lab personnel understand the risks in the lab and how to mitigate them
5. Meets universal standard for hygiene plans
6. Screens for materials that could require additional oversight and be a risk to the University
7. Confirms lab understands and has planned accordingly for hazardous work
8. Gives EHS Biosafety quick opportunity to provide safety guidance
9. Best practice, always prepared for regulatory inspections



Biological Hygiene Plan

PI Last Name Lab

- *This form is both a review tool to assess/develop the safety practices of the lab, as well as a biological hygiene plan outlining some of the safety standards and procedures associated with the lab for lab staff review.*
- *Please upload a copy into the biological registration documents section at the bottom of your Biological Registration submission.*

Section 1: Administration			
Principle Investigator:		PI Phone:	
PI Email:			
Lab/Safety Manager:		Manager Phone:	
Manager Email:			
Biosafety Cabinets in Use	☐	BSC Type: N/A	Certification Date
BSC Room Location(s)			Expiration Date

Section 2: Training Requirements for Lab	
Check each box that is applicable	Required Training for Lab
☐ 1. Infectious or otherwise risk group 2 agents	Biosafety
☐ 2. Human source materials	Bloodborne Pathogens
☐ 3. Genetically modified organisms or synthetic nucleic acid molecules	Recombinant DNA
☐ 4. Biological materials/specimens shipped to another facility. • Specify designated shipper(s):	Shipping of Dangerous Goods Shipping of Biological Materials

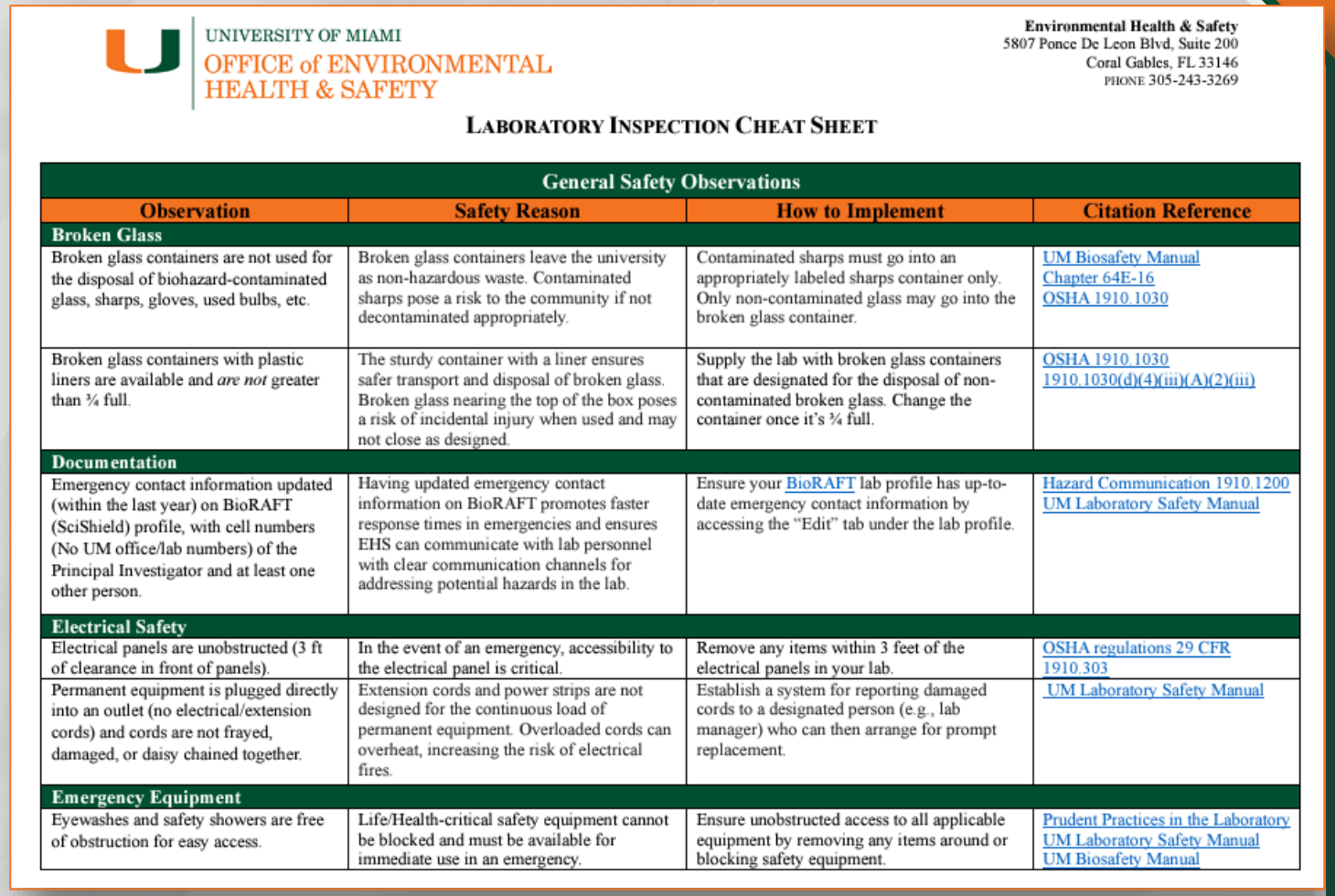
Section 3: Hazard Communication	
Type of Material Used/Stored by Lab	Specify Genus Species or Disease within Specimen
Provide an overview of the lab and how these biological materials function to serve the aims of the research.	

Section 4: Risk Assessment
What are the possible transmission/exposure routes of the materials used in the lab? (ie. Inhalation, bloodborne, etc.)
List the signs and symptoms of exposure to these materials:
Assess the exposure risks associated with the procedures employed in this lab. How are these risks mitigated?
How would exposures to these hazards be handled/treated?
What disinfectants are used for agent inactivation? If applicable, what disinfectants are used in the BSC?
If applicable, specify how materials are being transported between facilities and/or shipped to other facilities:
List the PPE requirements for researchers in this lab:
☒ Gloves ☒ Safety Glasses ☒ Lab Coat ☐ Face Shield ☐ Disposable Gown ☐ N95 Respirator ☐ Other(s): List...

Revision Date: 07-12-21 Page 1 | 5

Lab Inspection Cheat Sheet

- Having trouble with lab inspections?
- Check out the Cheat Sheet!
- Find observation you're unsure about
- Cheat Sheet details:
  - Reason why it's a safety concern needing observance
  - How to implement the corrective action if you're unsure
  - Citation or reference for where that item comes from



UNIVERSITY OF MIAMI
OFFICE of ENVIRONMENTAL HEALTH & SAFETY

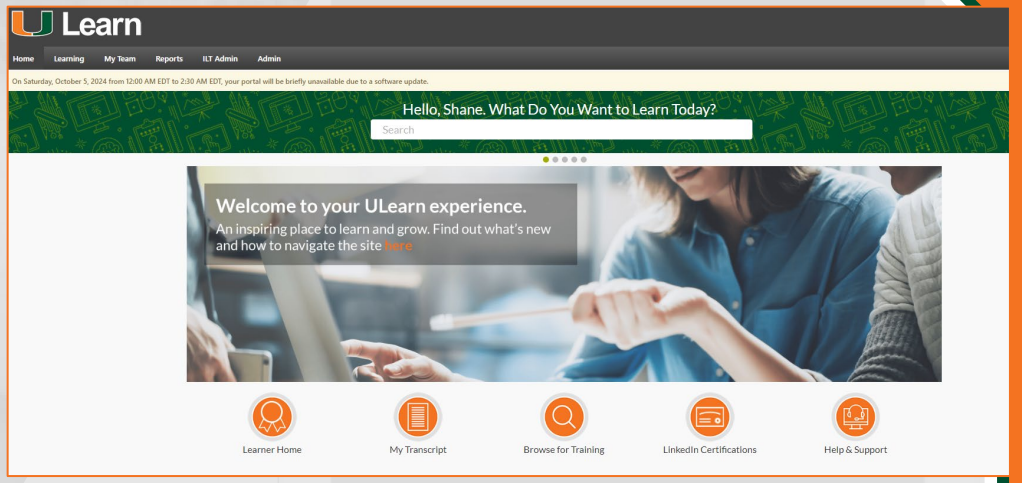
Environmental Health & Safety
5807 Ponce De Leon Blvd, Suite 200
Coral Gables, FL 33146
PHONE 305-243-3269

LABORATORY INSPECTION CHEAT SHEET

General Safety Observations			
Observation	**Safety Reason**	**How to Implement**	**Citation Reference**
Broken Glass			
Broken glass containers are not used for the disposal of biohazard-contaminated glass, sharps, gloves, used bulbs, etc.	Broken glass containers leave the university as non-hazardous waste. Contaminated sharps pose a risk to the community if not decontaminated appropriately.	Contaminated sharps must go into an appropriately labeled sharps container only. Only non-contaminated glass may go into the broken glass container.	UM Biosafety Manual Chapter 64E-16 OSHA 1910.1030
Broken glass containers with plastic liners are available and *are not* greater than ¾ full.	The sturdy container with a liner ensures safer transport and disposal of broken glass. Broken glass nearing the top of the box poses a risk of incidental injury when used and may not close as designed.	Supply the lab with broken glass containers that are designated for the disposal of non-contaminated broken glass. Change the container once it's ¾ full.	OSHA 1910.1030 1910.1030(d)(4)(iii)(A)(2)(iii)
Documentation			
Emergency contact information updated (within the last year) on BioRAFT (SciShield) profile, with cell numbers (No UM office/lab numbers) of the Principal Investigator and at least one other person.	Having updated emergency contact information on BioRAFT promotes faster response times in emergencies and ensures EHS can communicate with lab personnel with clear communication channels for addressing potential hazards in the lab.	Ensure your BioRAFT lab profile has up-to-date emergency contact information by accessing the "Edit" tab under the lab profile.	Hazard Communication 1910.1200 UM Laboratory Safety Manual
Electrical Safety			
Electrical panels are unobstructed (3 ft of clearance in front of panels).	In the event of an emergency, accessibility to the electrical panel is critical.	Remove any items within 3 feet of the electrical panels in your lab.	OSHA regulations 29 CFR 1910.303
Permanent equipment is plugged directly into an outlet (no electrical/extension cords) and cords are not frayed, damaged, or daisy chained together.	Extension cords and power strips are not designed for the continuous load of permanent equipment. Overloaded cords can overheat, increasing the risk of electrical fires.	Establish a system for reporting damaged cords to a designated person (e.g., lab manager) who can then arrange for prompt replacement.	UM Laboratory Safety Manual
Emergency Equipment			
Eyewashes and safety showers are free of obstruction for easy access.	Life/Health-critical safety equipment cannot be blocked and must be available for immediate use in an emergency.	Ensure unobstructed access to all applicable equipment by removing any items around or blocking safety equipment.	Prudent Practices in the Laboratory UM Laboratory Safety Manual UM Biosafety Manual

New Training Offerings & Plans

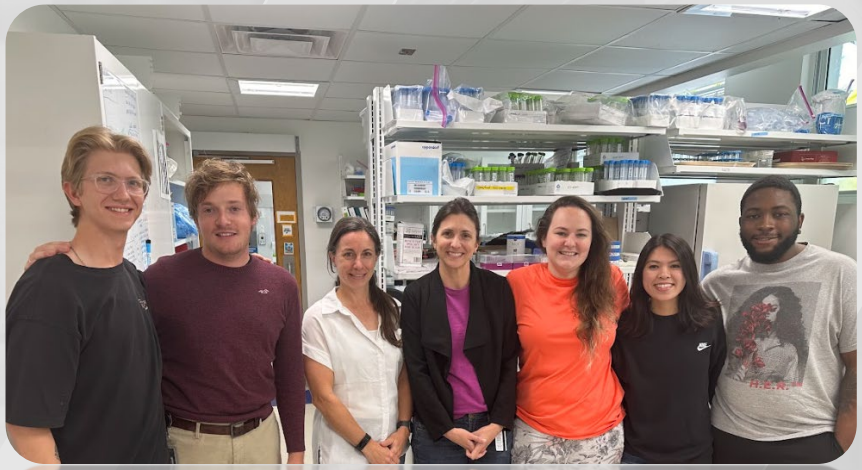
- Full training suite brought to ULearn
- New training offerings this year:
  - Biosafety for Clinicians
  - Recombinant DNA
- End of year new training initiatives
  - Bringing video recordings to Blackboard
  - Bringing new rDNA training to Blackboard
  - Full biosafety training suite offered monthly live via webinar
  - Revamped Bloodborne Pathogens training
- 2025 training initiatives
  - Shipping of Dangerous Goods Revamp
  - Biosafety for Marine Research



Lab of the Year Awards

Awards For 2024

- Lab of the Year Awards
- Criteria is based on nominations and labs that routinely demonstrate an exceptional observance to safety and compliance
- One lab awarded for each major UM campus



Gables Campus

And The Winner Is:

Delia Shelton Laboratory

Medical Campus

And The Winner Is:

Robert Keane and Juan Pablo de Rivero Vaccari Laboratory

RSMAES Campus

And The Winner Is:

Cassandra Gaston Laboratory

Awards in 2025

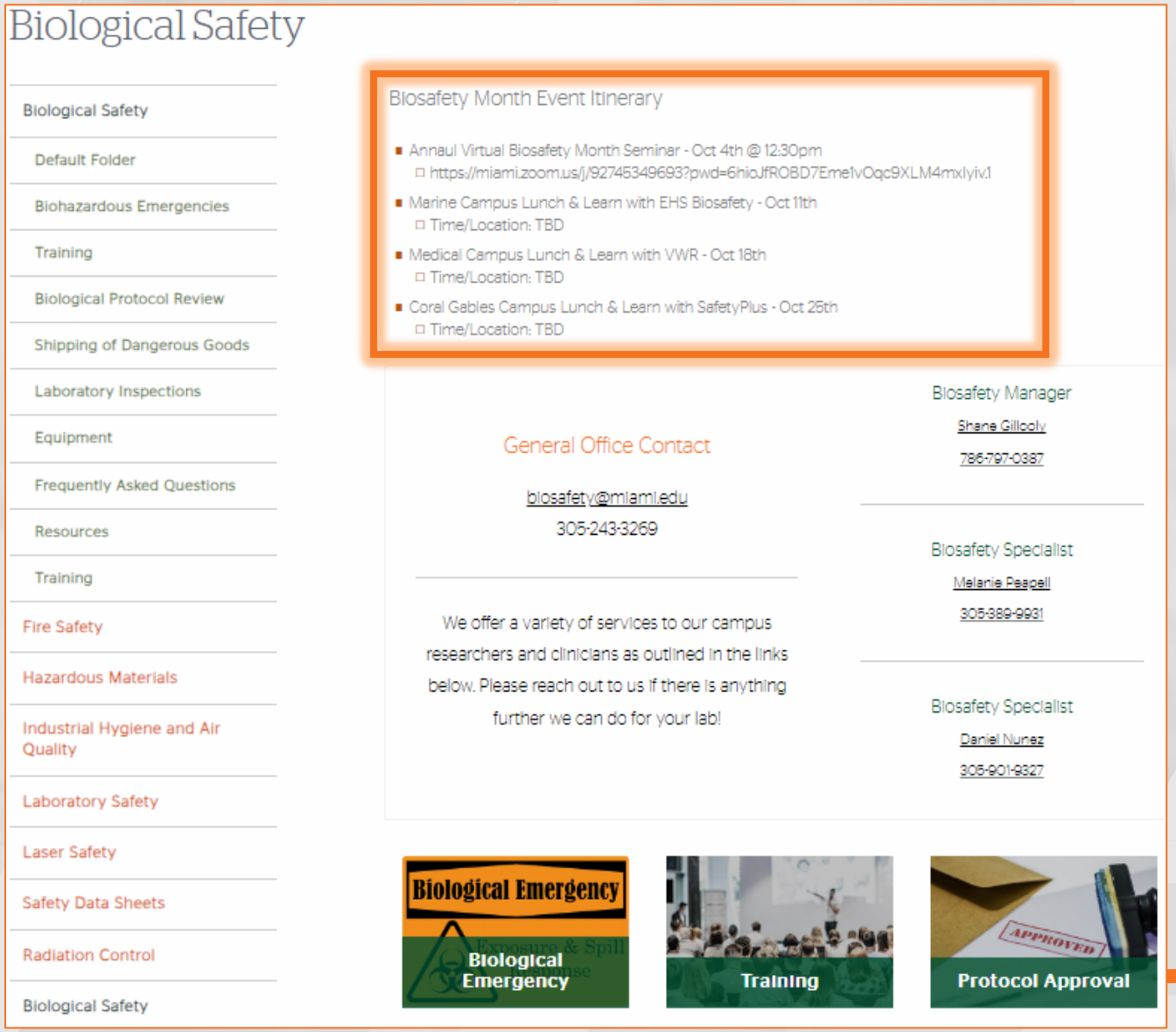
- Didn’t win? That’s okay!
- Winning labs are **not** re-eligible for 3 years
- Nominations are critical

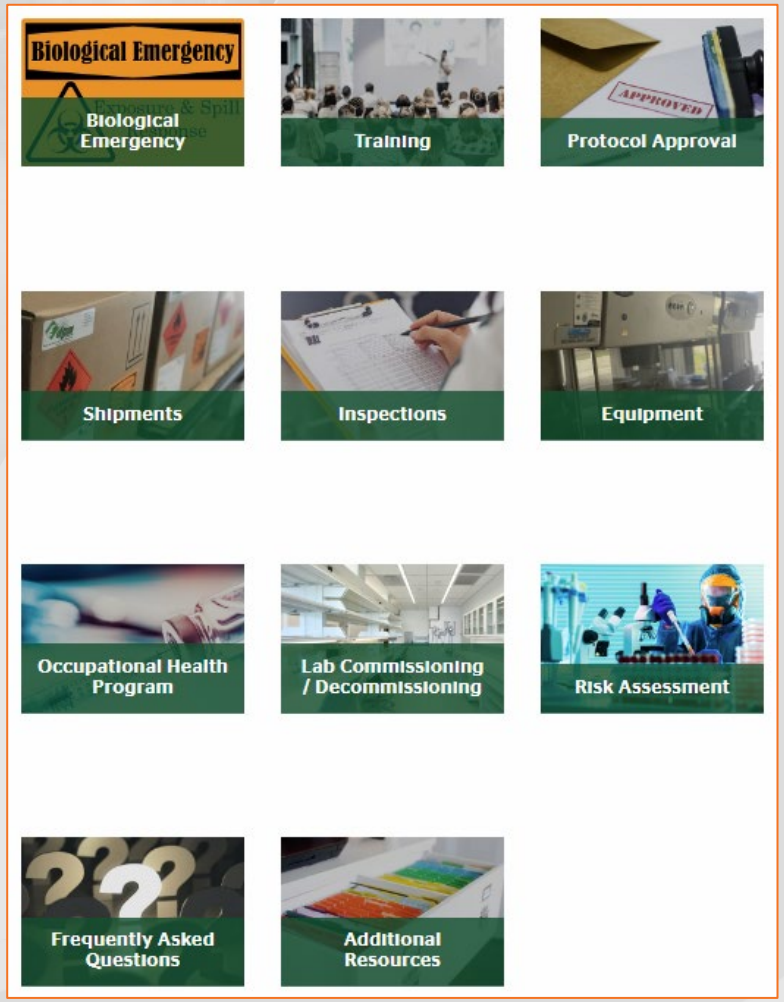
Wrap Up & Upcoming Events

Lunch & Learn Safety Talks

- Safety talks featuring commonly used vendors
  - And did we mention free food and more prizes!
- Marine Campus L&L with EHS Biosafety
  - October 11th
- Medical L&L with VWR
  - October 18th
- Coral Gables L&L with SafetyPlus
  - October 25th
- Room locations and times to be announced soon
- Check EHS Biosafety page for updates
- Don't forget to RSVP!

EHS Biosafety Website





ehs.miami.edu/biosafety

Questions

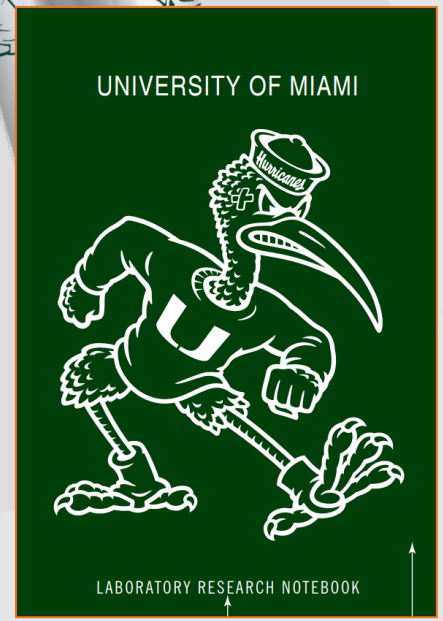
- Contact the Biosafety Office:
  - 305-243-3269
  - biosafety@miami.edu
- Contact Shane directly:
  - 786-797-0387
  - sxg1519@med.miami.edu
- Visit our Website!
  - ehs.miami.edu/biosafety

Quiz & Prizes!


Fish/Embryos
Lab Coats
Gloves
Bad Vibes


Hurrica
M
HURRICANES


Lab Safety
Jessica Salinas and Amy Osborne
VWR Sales Representatives for UM
avantor


UNIVERSITY OF MIAMI
Hurricanes
LABORATORY RESEARCH NOTEBOOK

Quiz & Prizes!

Biosafety Month 2024

Now let's see how well you were paying attention!

Start | Stop

https://play.myquiz.org/p/00890231

Open QR-code in full screen

Quiz code:

00890231

Quiz link:

https://play.myquiz.org/p/00...

0	100	0
Active users	Limit	All users

Prize Winners

- Send your SECRET WORD to me at:
  - sxg1519@miami.edu

- There's still hope if you lost!
  - A few lucky winners will also be chosen randomly
  - We will contact you separately

- Recognition of Exceptional Lab Safety Effort
  - Lab Safety Manual Giveaway Prizes
    - Valerie Chavez of Merchan Lab
    - Margie Roach of Pahwa Lab