University of Florida Environmental Health & Safety Research Services researchsafety@ehs.ufl.edu

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## MINORS REGISTRATION

\*Completed forms must be submitted **ONE WEEK PRIOR** to beginning any hands-on work in the laboratory/facility for an approval to be issued.

Always consult with the <u>Office of Youth Compliance Services</u> first before starting any activity engaging minors under the age of 18. Certain activities may require registration with the <u>Office of Youth Compliance Services</u>. UF personnel engaging or supervising minor activities must have taken the required youth protection training YCS800.

Section 1 – Basic Informat	tion			
Minor's Name:		Minor's Date of Birth:		
Minor's School:				
PI/Sponsor:		Title:		
Department:		Address/Box:		
Office Phone:	Lab Phone:	Email:		
Section 2 – Project Inform 2.1 Name of Supervisor (if Phone:				
2.2 <b>Project Location:</b> Buil	lding(s):	Room(s):		
	<b>check one):</b> Science Fair Project Employment	☐ Volunteering ☐ Other (explain):		
2.4 Project Title (if applica	able):			
2.5 Project Start Date:		Project End Date:		
2.6 <b>Project Description.</b> Provide a description of the project including specific techniques to be used/learned and any potentially hazardous material (see attached description of potential hazards) the minor will be working with. Attach a separate sheet if necessary.				

List Chemicals    Deck all categories of biological material to be used and list the specific material List Biological Material    Completed Bloodborne Pathogen training?   Yes   No
List Biological Material
Completed Bloodborne Pathogen training?  Yes  No
Completed Bloodborne Pathogen training?  Yes No
Completed Bloodborne Pathogen training?  Yes No
uman blood, and other potentially infectious material requires the completion of beginning work.  quires enrollment in the Animal Contact Program prior to beginning work.  k all categories of physically dangerous equipment/material to be used or
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uipment/material and situations they will be used in.  List equipment/material, situations
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Section 3 – Signatures	
adhere to the UF "Minors in Laboratories or Animal requirements as outlined by the Office of Youth Con and specific to, laboratory hazards will be provided. University of Florida safety programs and regulation	my signature below I agree that I have read, understood, and will Facilities." Policy. I will comply with all Youth Protection mpliance Services. Personal protective equipment appropriate for My laboratory is in full compliance with all applicable ins. I will comply with all UF COVID-19 related policies in the UF Research Resumption Plan along with the resources
I have taken the required youth protection training Yes No	YCS800:
I have contacted the Office of Youth Compliance Se	ervices to confirm whether registration is required:
Name of Faculty Sponsor	
Signature	Date
	Minors in Laboratories or Animal Facilities" Policy.  NVID-19 related policies in the laboratory. For more information, ong with the resources available on the EH&S COVID-19
Name of Minor	
Minor's Signature	Date
associated with my child's research project. I agree	ormation Sheet describing the potential risks and dangers and understand that my child's research project may be ersity of Florida and its officers, agents, and employees, if the ers of the University of Florida become a concern.
Name of Parent or Legal Guardian	Phone #
Parent/Legal Guardian's Signature	Date

The completed form must be received by Environmental Health & Safety at least one week prior to the minor's anticipated start date. Incomplete forms will delay the approval process. Send pages 1-3 of the finished registration form to <a href="mailto:researchsafety@ehs.ufl.edu">researchsafety@ehs.ufl.edu</a>. Keep the other pages for your information.

Biosafety Approval:	Date:
Lab Safety Approval:	Date:
Other EH&S Approval:	Date:
IACUC Approval:	Date:
IRB Approval:	

## POTENTIAL HAZARD INFORMATION SHEET

Scientific research involves exposure to various hazards. When deciding to allow your child to participate in research projects conducted in University of Florida laboratories, greenhouses, or animal facilities, you need to be aware of the potential hazards he or she may encounter. The following information provides the most common potential hazards but is not intended to be an exhaustive list of all potential hazards. Questions may be addressed to the minor's specific sponsor.

#### **Definitions**

Allergens – substances capable of producing an allergic reaction.

<u>Carcinogens</u> – substances capable of producing cancer.

<u>Pathogens</u> – bacteria, viruses, prions, fungi, and parasites capable of causing diseases.

<u>Recombinant materials</u> – DNA that has been genetically engineered (altered), usually incorporating DNA from more than one species of organism.

<u>Transgenic</u> – an organism that has had genes from another organism inserted into its genome.

<u>Toxins</u> – poisonous substances produced by living organisms, plants, and animals.

Zoonotic diseases – diseases that can be passed from animals to humans.

#### **Potential Hazards**

Your child's research project may involve one or more of the following potential hazards. A table is attached with examples.

<u>Chemicals</u> – can be unstable, making them reactive and prone to explosion. Potential injuries include skin and eye burns, respiratory problems, allergic reactions, skin, eye, and mucous membrane irritation and illnesses.

Pathogens – found in human, animal, and plant tissue and can cause infections and acute or chronic illnesses.

<u>Recombinant materials/technology</u> – can interact with the human body and its cells and produce potentially hazardous results.

<u>Mechanical/electrical equipment and instrumentation</u> – can cause electrocution, burns, cuts, scrapes, and injuries from pinch points. High noise levels can cause hearing loss.

Radiation/irradiation – can cause skin and eye damage, cellular damage, and long-term health problems.

<u>Animals</u> – can bite, scratch, and transmit zoonotic diseases such as rabies, toxoplasmosis, pox virus, cat bite fever, rat bite fever, and various parasitic infections or release allergens.

<u>Gas cylinders/compressed gases</u> – gas cylinders with compressed gases can explode, causing injury from high-speed projectiles. Released gases can cause eye and skin irritations, respiratory problems, light-headedness, asphyxiation, and fainting.

# **Potential Hazards Table**

	Definition	Hazards	Examples
Chemicals	Refined compound that could be in the form of a solid, liquid, or gas. These may or may not be hazardous. Some compounds may have numerous hazard classifications (e.g.: flammable, toxin, & carcinogen.	Carcinogen: may cause some sort of cancer with long-term exposure, usually many years in the future.	Benzene
		Teratogen: shown to affect the reproductive system of males & females. May cause birth defects in the developing fetus.	Alcohol, thalidomide, X-rays
		Neurotoxin: may affect the nervous system	Ethidium bromide, snake venom
		Flammables: will burn or explode	Acetone, xylene, alcohol
		Reactives: will react explosively	Peroxides, acrylamide
		Corrosives: will cause tissue damage with contact through inhalation, eye, skin, etc.	Acids & bases
	caremogen.	Toxins: may cause illness or death on exposure	Cyanide
products of living organisms such as viruses, bacteria, fungi, prions, & parasites.  Hazards from infection with these agents are organism dependent and can range from mild & treatable to severe & untreatable.  Agents are classified into four groups called biological safety levels with level 1 as the least	organisms such as viruses, bacteria,	Level 1 – minimal hazard in healthy human adults	Baker's yeast, <i>E. coli</i> K12 strains
	parasites.  Hazards from infection with these agents are organism-dependent and can range from mild & treatable to severe & untreatable.  Agents are classified into four groups called biological safety levels with level 1 as the least hazardous & level 4 as the most	Level 2 – Mild to moderate hazard	Influenza, Polio, Salmonella
		Level 3 – May cause severe illness and possibly death	Tuberculosis, HIV
		Level 4 – Extreme hazard, often cause fatal illness. Level 4 agents are not allowed at the University of Florida.	Hemorrhagic fever
Recombinant DNA	DNA that has been altered by joining genetic material from two different sources. Usually involves putting a gene from one organism into the genome of a different organism.	Often unknown consequences once introduced to the human body.	Viral vectors like Adeno- and Adeno-associated viruses used to express genes in a cell line or mammalian host.
Biological Toxins	Poisons produced by plants, microbial organisms, or animals	Tissue & organ damage or death.	Plant – Ricin Microbial – Staph enterotoxins, tetanus toxin Animal – Fish & snake venom

Compressed Gases	High pressure cylinders that hold gases. These are usually large & heavy. Gas may be harmless, toxic, corrosive, flammable.	Physical: explosion hazard if they rupture Asphyxiant: may vent gas to the workplace and displace oxygen.	Asphyxiant: Nitrogen, helium, any other non- oxygen gas Flammable: Hydrogen Toxic: Ammonia
Radiation/Radioactive Materials	High energy particles (alpha & beta) or waves (x-rays)	Tissue and organ damage with high doses.	Uranium, Phosphorous32, Sodium35, X-rays
Physical Hazards	Hazards from noise, machinery, heat, cold, etc.	Tissue damage, hearing loss	Scrapes, cuts Cold: Liquid nitrogen, dry ice Heat: burners

## Rules for Minors Working in Laboratories and Animal Facilities

- 1. Never work alone in any laboratory environment without direct, immediate adult supervision from the sponsor or someone designated by the sponsor.
- 2. Always follow the instructions of the sponsor or laboratory supervisor.
- 3. Always report any accident (regardless of severity) immediately to the sponsor or the laboratory supervisor.
- 4. Always wear the personal protective equipment as directed and dispose of it appropriately. This personal protective equipment includes glasses, gloves, coats/gowns, and other face/body protection as dictated by the hazard being worked with or around.
- 5. Always keep your hands away from your face and wash them well with soap and water prior to leaving any laboratory area.
- 6. Never eat, drink, chew gum, apply lip balm, or touch contact lenses while in any laboratory environment.
- 7. Always tie back long hair to keep it away from any hazards that exist in the laboratory.
- 8. Always wear clothing that reduces the amount of exposed skin.
- 9. Closed toed shoes must be worn at all times in the laboratory.
- 10. Always ask questions if you do not understand the safety requirements.