RULES FOR MINORS WORKING IN LABORATORIES AND SHOPS

1. Never work alone in any laboratory environment without direct, immediate adult supervision from the sponsor or someone designated by the sponsor.

2. Complete and follow safety training specific to the hazards in the laboratory. At a minimum, anyone who will be in a lab is required to complete the Laboratory Safety Fundamental Concepts class. Additional training requirements may apply depending on the nature of the work that will be conducted in the lab and/or shop.*

3. Always wear the appropriate personal protective equipment (PPE) as directed and dispose of it correctly. PPE includes goggles, gloves, coats/gowns, and other face/body protection as dictated by the hazard being worked with or around. Always remove PPE when leaving the work area. See:
   • Policy 905: Research Laboratory Personal Safety and Protective Equipment (http://www.adminpolicies.ucla.edu/app/Default.aspx?id=905); and

4. Always follow the instructions of the sponsor or laboratory supervisor.

5. Always report any accident (regardless of severity) immediately to the sponsor or laboratory supervisor.

6. Always keep your hands away from your face and wash them well with soap and water prior to leaving any laboratory area and after removing gloves.

7. Never eat, drink, chew gum, apply lip balm, or touch contact lenses while in any laboratory environment.

8. Always wear closed-toe shoes while in any laboratory.

9. Always tie back long hair to keep it out of all the hazards listed above.

10. Always wear clothing that reduces the amount of exposed skin.

11. Always ask questions if you don’t understand the safety requirements.

Parent/Legal Guardian Initials: ______  Date: ___________________

Minor Initials: ______  Date: ___________________

*Note: The EH&S Classroom Training Description and Schedule is found online: http://map.ais.ucla.edu/go/1003938.
### POTENTIAL HAZARDS IN LABORATORIES AND SHOPS

#### INFORMATION SHEET

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<th>Definition</th>
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| **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) | Carcinogens: may cause some sort of cancer with long term exposure - usually many years in the future  
Theratogen: shown to affect the reproductive system of males & females & may cause birth defects in the developing fetus  
Neurotoxins: may affect the nervous system  
Flammables: will burn or explode  
Reactives: will react explosively  
Corrosives: will cause tissue damage with contact through inhalation, eye, skin, etc.  
Toxins: may cause illness or death on exposure | Benzene  
Alcohol, thalidomide, X-rays  
Ethidium Bromide, snake venom  
Acetone, Xylene, Alcohol  
Peroxides, acrylamide  
Acids & bases |
| **Compressed Gases**| High-pressure cylinders that hold gases. These are usually large & heavy. Gas may be harmless, toxic, corrosive, and/or flammable | Physical hazard: Explosion hazard if they rupture  
Asphyxiant hazard if they vent the gas to the workplace & it displaces oxygen | Hydrogen, Oxygen  
Asphyxiant: Nitrogen, helium, any other non-oxygen gas |
| **Radiation/Radioactive Materials** | High energy particles (alpha & beta) or photon (X-rays, gamma) | Tissue & organ damage with high doses | Uranium, Phosphorus32, Sodium35, X-rays |
| **Physical hazards** | Hazards from noise, machinery, heat, cold, etc. | Tissue damage, hearing loss | Scraps, cuts  
Cold: liquid nitrogen, dry ice  
Heat: burners |
<p>| <strong>Lasers</strong>          | Intense, highly directional beam of light | Eye damage and possible skin damage | Class IIIB and IV, and open beam laser operation |</p>
<table>
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<tr>
<td><strong>Biological Agents</strong></td>
<td>Living organisms or products of living organisms such as viruses, bacteria, fungi, prions &amp; parasites. Hazards from infection with these agents are organism-dependent &amp; can range from mild &amp; treatable to severe &amp; untreated. Classification of hazards in four groups called biological safety levels with level 1 as the least hazardous &amp; level 4 as the most hazardous.</td>
<td>Level 1 - Minimum hazard</td>
<td>Baker’s Yeast &amp; E. coli K12</td>
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<td></td>
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<td>Level 2 - Mild to severe illness</td>
<td>Influenza, Polio &amp; Salmonella</td>
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<td>Level 3 – Severe illness &amp; possible death</td>
<td>Tuberculosis &amp; AIDS</td>
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<td></td>
<td></td>
<td>Level 4 – Fatal disease</td>
<td>Hemorrhagic fever</td>
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<tr>
<td><strong>Recombinant DNA</strong></td>
<td>Genetically modified organisms with variations in genes within the organism.</td>
<td>Often unknown consequences once introduced to the human body.</td>
<td>Viral vectors like Adeno &amp; Adeno-associated viruses used to transfect or express genes.</td>
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<tr>
<td><strong>Toxins – Microbial, Plant, Animal</strong></td>
<td>Poisons produced by plants, living organisms or animals.</td>
<td>Tissue &amp; organ damage or death.</td>
<td>Plant – Ricin Animal – Fish &amp; Snake venom Microbial – Staph, Tetanus</td>
</tr>
</tbody>
</table>

Parent/Legal Guardian Initials:  ______  Date: ___________________

Minor Initials:     ______  Date: ___________________
RELEASE OF LIABILITY, WAIVER OF CLAIMS, EXPRESS ASSUMPTION OF RISKS, AND HOLD HARMLESS AGREEMENT

I HAVE READ, UNDERSTAND, and INITIALED the Potential Hazards in Laboratories and Shops Information Sheet describing the potential risks and dangers associated with my minor child’s research project, and the Rules for Minors Working in Laboratories and Shops. I fully understand that there are potential risks and hazards associated with exposure to hazardous materials or substances, and I have carefully discussed them with my minor child.

I AGREE TO ALLOW my minor child to work in University of California laboratories and shops and freely accept and assume all associated risks and hazards. I expressly agree that my minor child may suffer injury, illness, or even death from his/her activities or presence in the laboratory/shop. I ALSO AGREE AND UNDERSTAND that my child’s research project may be suspended at any time, at the discretion of the University of California and its officers, agents, and employees, if the safety of my child, University of California employees, students, and/or other volunteers at the University of California become a concern.

I, for my minor child, myself and his/her and/or my estate, heirs, administrators, executors, and assigns, hereby release and hold harmless the State of California, the UC Board of Regents, and their officers, directors, employees, representatives, agents, and volunteers (collectively, the “Releasees”), from any and all liability and responsibility whatsoever, however caused, for any and all damages, claims, or causes of action that I, my minor child, his/her and/or my estate, heirs, administrators, executors, or assigns may have for any loss, illness, personal injury, death, or property damage arising out of, connected with, or in any manner pertaining to my child’s activities in University of California laboratories, whether caused by the negligence of Releasees or otherwise. I further hereby agree to defend, indemnify and hold harmless the Releasees from any judgment, settlement, loss, liability, damage, or costs, including court costs and attorney fees that Releasees may incur.

In signing this agreement, I acknowledge and represent that I have read and understand it and that I sign it voluntarily and for full and adequate consideration, fully intending to be bound by the same. My minor child and I expressly agree that this Release is intended to be as broad and inclusive as permitted by the laws of California, by which it shall be governed and interpreted. My minor child and I agree that in the event that any clause or provision in this Release shall be held to be invalid by any court of competent jurisdiction, the invalidity of such clause or provision shall not otherwise affect the remaining provisions of this Release, which shall continue to be enforceable.

____________________________________  ____________________________________
Signature of Parent/Legal Guardian     Printed Name of Parent/Legal Guardian

____________________________________  ____________________________________
Signature of Minor       Printed Name of Minor

____________________________________  ____________________________________
Date         D.O.B. of Minor
CONSENT TO BE PHOTOGRAPHED: MINOR RELEASE

If you agree to grant the Regents of the University of California and their appointed agents, the California NanoSystems Institute and the Sci|Art Nanolab, permission to photograph, video record, video stream and publish for educational purposes portraits, pictures, or videos of the minor or in which the minor may be included, date and sign below.

By signing this form, you waive any right the minor or you may have to inspect or approve photographs or video of the minor prior to publication, or to inspect and approve any printed or broadcast matter that may be used in connection with the photograph or video.

*I warrant that I am of full age and have every right to contract for the minor in the above regard. I state further that I have read the above authorization and release agreement and that I am fully familiar with its contents.*

Date

Minor’s Name (please print)

Minor’s Street

Minor’s City, State, Zip Code

Signature of  ☐ Father / ☐ Mother / ☐ Guardian (please check one)

Parent/Guardian Name

Parent/Guardian’s Street

Parent/Guardian’s City, State, Zip Code

Witness Signature

Witness Name