Lab Inspection Form

Date: ________________

Location: ________________

Inspected by: ________________

Lab owner: ________________

Does this lab contain:

- Radiation hazards? Yes  No
- Biological Agents? Yes  No
- Lasers? Yes  No
- Hoods? Yes  No  How many?
- Eye wash? Yes  No
- Safety shower? Yes  No
- Is there a proper hazard notice located at entrance? Yes  No
- Are evacuation signs posted near lab exit? Yes  No
- Are there TAL restricted activities? Yes  No
- Is contact information posted outside room? Yes  No

☐ N/A  I. Chemical Inspection

1. Are reasonable security measures being followed in the lab area?  Y  N
2. Are two exits for the lab area (if necessary)?  Y  N
3. No eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing human food in lab:  Y  N
4. Security
   a. Was the door locked when EHS arrived?  Y  N
   b. If the door was unlocked, was someone present in the lab?  Y  N
5. Are work areas and/or bench tops clean?  Y  N
6. Are pathways clear of obstructions?  Y  N
7. Waste management
   a. Are waste receptacles present?  Y  N
   b. Is there any storage of boxes, old equipment, etc. in lab:  Y  N
   c. Are lab personnel aware of trash procedures?  Y  N
8. Equipment Maintenance
   a. What kind of equipment is present in the lab? 
   b. Is equipment regularly inspected? Y N
   c. Are written records of equipment maintenance and inspections kept readily available? Y N
   d. Is mechanical equipment furnished with guards? Y N
   e. Is shielding in use? Y N
   f. Are there adequate covers and cover locks, where needed? Y N

9. Computers
   a. Is there a computer in the lab area? Y N
   b. Is it used for lab data and results? Y N
   c. Is it networked? Y N
   d. Is any of the lab/research information restricted? Y N

10. Is glassware being used appropriately? Y N

11. Flammables
    a. Is there a flammable cabinet? Y N
    b. Are non-flammable items stored in the flammable cabinet? Y N
    c. Are flammable items stored outside the flammable cabinet? Y N
    d. Does signage restrict open flames? Y N

12. Are plugs grounded and in good condition? Y N

13. Gas cylinders
    a. Are compressed gas cylinders stored upright? Y N
    b. Are compressed gas cylinder caps in place if not connected to equipment? Y N
c. Are compressed gas cylinders mounted and/or chained in place?  Y  N
d. Are compressed gas cylinders stored away from ignition sources? Y N

14. Hoods
   a. Hood type and size (if known):
   b. Have hoods been surveyed recently? (See EHS for data)
   c. Is there a hood flow monitor with alarm?  Y  N

15. Documentation
   a. Does the lab have access to the MSDS for each chemical used or stored?
   b. Is the location/access of MSDS explained or displayed?  Y  N
   c. Is chemical inventory tracked through CEMS?  Y  N
   d. Are lab safety plans, SOP’s, training documentation, etc. in place and available?  Y  N

16. Personal Protection Equipment
   a. Is PPE designated by signage?  Y  N
   b. Is there evidence of PPE being used:  Y  N

17. Cleanup procedures
   a. Is a spill containment kit in the lab?  Y  N
   b. Is it prominently located?  Y  N

18. Unwanted chemicals:
   a. Are there unwanted chemicals in the lab?  Y  N
   b. If so, are they labeled properly?  Y  N
   c. Are there lids on all waste containers?  Y  N

19. Chemical storage
   a. Are hazardous chemicals labeled properly (Including special hazards, identification of contents, etc)?  Y  N
b. Are chemicals stored properly (Including segregation and secondary containers, etc)?  Y  N

c. Are proper precautions utilized for hazardous chemicals?  Y  N

d. Is bench top storage restricted?  Y  N

e. Are all chemicals stored below six feet?  Y  N

20. If animals are evident in lab, is there proper signage for allergens, hazards, etc?

21. NOTES:
Agents in use: ____________________________

Lab type: Research  Teaching  Graduate  Undergraduate

□ N/A  II. Biological Inspection

1. Biosafety Level 1-Standard Microbiological Practices
   a. Lab access is limited/restricted when experiments or work with cultures/specimens are in progress.  Y  N
   b. Lab personnel wash hands after handling viable materials, removing gloves, or leaving lab.  Y  N
   c. No eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing human food in lab.  Y  N
   d. Contact lens users wear safety glasses, goggles, or face shields.  Y  N
   e. Food is stored outside lab in designated cabinets/refrigerators.  Y  N
   f. Mechanical pipetting devices are used (no mouth pipetting).  Y  N
   g. Sharps handling policies/practices in place.  Y  N
   h. Procedures are in place to minimize splashes/aerosols.  Y  N
   i. Work surfaces are decontaminated at least daily and/or at completion of work.  Y  N
   j. Work surfaces are decontaminated after any spill/splash of viable material.  Y  N
   k. Cultures/stocks/regulated wastes are decontaminated by approved method (e.g., autoclaving) before disposal.  Y  N
   l. Materials decontaminated outside of lab are transported in durable, leak-proof, closed containers.  Y  N
   m. Biohazard signage posted at lab entrance when infectious agents are present (signage lists agents and PI name/phone).  Y  N
   n. Insect/rodent control program in effect.  Y  N
   o. Lab workers are aware of and enforce security restrictions to the lab at all times.  Y  N
2. Biosafety Level 1-Safety Equipment
   a. Lab coats, gowns, and uniforms are worn.  Y  N
   b. Gloves are worn if skin on hands is broken or has rash.  Y  N
   c. Safety glasses are worn when performing procedures that pose a splash risk outside of a BSC.  Y  N

3. Biosafety Level 1-Laboratory Facilities
   a. Lab has adequate lighting.  Y  N
   b. Lab has doors for access control.  Y  N
   c. Lab has a sink for hand washing.  Y  N
   d. Lab designed to be easily cleaned (e.g., no carpets/rugs, spaces between cabinets/equipment/furniture are accessible, etc.).  Y  N
   e. Bench tops are impervious to water and resistant to heat, organic solvents, acids, alkalis, and disinfectants.  Y  N
   f. Lab furniture/equipment is suitable for intended use/loads.  Y  N
   g. Lab windows that open to the outside are fitted with fly screens.  Y  N

4. Biosafety Level 2 ONLY-Standard Microbiological Practices
   a. Disinfectants are labeled for agents being used.  Y  N

5. Biosafety Level 2 ONLY-Special Practices
   a. Personnel at risk of acquiring infections or for whom infections may have serious consequences are denied access to lab.  Y  N
   b. All personnel are advised of potential hazards prior to entering/working in lab.  Y  N
   c. Posted biohazard signage includes biosafety level, required immunizations, required PPE, and required lab exit procedures.  Y  N
   d. Lab personnel are appropriately immunized against or tested for the agents being used (e.g., HBV vaccinations, TB skin test).  Y  N
   e. Baseline and periodic serum samples are collected/stored as required.  Y  N
f. Lab director has incorporated biosafety procedures into lab SOP’s or has adopted/prepared a lab-specific Biosafety Manual.  Y  N

g. Lab personnel have read and follow biosafety procedures/practices.  Y  N

h. Lab personnel are trained on the potential hazards, precautions to prevent exposures, and evaluation procedures.  Y  N

i. Lab personnel receive annual refresher training and/or additional training as necessary.  Y  N

j. Needle/syringe use is kept to absolute minimum.  Y  N

k. Only needle-locking syringes or syringes with permanently affixed needles are used for injection/aspiration of infectious materials.  Y  N

l. Syringes that “re-sheath” the needle or needless systems are used when appropriate.  Y  N

m. Disposable needles are not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated prior to disposal.  Y  N

n. Plastic ware is substituted for glassware whenever possible.  Y  N

o. Sharps containers are labeled, conveniently located, and puncture resistant.  Y  N

p. Non disposable sharps containers are hard-walled and leak proof.  Y  N

q. Broken glassware is only handled by mechanical means.  Y  N

r. Sharps containers are decontaminated (e.g., autoclaved) prior to disposal or reprocessing.  Y  N

s. Cultures, tissues, specimens, or infectious wastes are kept in covered, leak-proof containers during collection, handling, processing, storage, transport, or shipment.  Y  N

t. Lab equipment and work surfaces decontaminated on routine basis with effective disinfectant.  Y  N

u. Lab equipment is decontaminated prior to sending it for repair/maintenance, or packaging it for shipment.  Y  N

v. Spills/accidents are immediately reported to the lab director.  Y  N

w. Animals not involved in work are not allowed in lab.  Y  N
6. Biosafety Level 2 ONLY-Safety Equipment
   a. Lab coats, gowns, or uniforms are removed and left in lab before leaving for non-lab areas.  Y  N
   b. Protective clothing is either disposed of in the lab or laundered on-site by the institution.  Y  N
   c. Gloves are worn if hands are at risk on contacting infectious materials, infected animals, or contaminated surfaces/equipment.  Y  N
   d. Gloves are not worn outside lab or when touching “clean” surfaces (e.g., telephones, keyboards, elevator buttons, etc.).  Y  N
   e. Gloves are disposed of when overtly contaminated, work with infectious materials is completed, or integrity is compromised.  Y  N
   f. Disposable gloves are not reused.  Y  N
   g. Goggles or face shield used when performing procedures that pose a splash risk outside of a BSC.  Y  N
   h. Class II BSC or equivalent are used for procedures that have potential to create aerosols or splashes.  Y  N
   i. Class II BSC or equivalent are used for work with high concentrations (>10^8 cfu/ml) or large volumes (>1 liter) of infectious agent.  Y  N

7. Biosafety Level 2 ONLY-Laboratory Facilities
   a. Labs where “select agents” are used or stored have lockable doors.  Y  N
   b. No fabric upholstered/covered furniture or chairs.  Y  N
   c. Labs are located away from public areas.  Y  N
   d. BSC not located near doors or windows that can be opened.  Y  N
   e. Eyewash station and safety shower is readily available.  Y  N

8. NOTES:
III. Laser Inspection

1. Laser-Specific Data
   a. CEMS inventory number?  Y  N
   b. Location in lab: __________________________
   c. Type: __________________________
   d. Manufacturer: __________________________
   e. Make: __________________________
   f. Model: __________________________
   g. Class: __________________________
   h. Serial number: __________________________
   i. Wavelengths (nm): __________________________
   j. Output (max/used): __________ W or J
   k. Pulsed?  Y  N  If yes:
      i. Pulse energy (J): __________________________
      ii. Pulse length (s): __________________________
      iii. Repetition rate (Hz): __________________________
      iv. Pulse time envelope (s): __________________________
   l. Beam diameter (mm): __________________________
   m. Beam divergence (mrad): __________________________
   n. Output irradiance $E$ (W/cm²): __________________________
   o. MPE: __________________________
   p. Minimum OD: __________________________
   q. Laser Q-switched or mode locked: __________________________
   r. Laser active or inactive: __________________________
2. Warning signs and labels:
   a. Are warning signs properly posted at entrances?  Y  N
   b. What type of signs are posted? ____________________________
   c. Is room security adequate?  Y  N
   d. Is there a door interlock system?  Y  N
   e. Is there a laser status indicator outside room?  Y  N
   f. Is there a laser class label in place?  Y  N
   g. Is there a laser hazard label in place?  Y  N
   h. Is there a laser aperture label in place?  Y  N
   i. Is there a key control for on/off switch (class 3b and 4 only)?  Y  N
   j. Is the key removed when laser is off?  Y  N
   k. Is the key secured when not in use?  Y  N
   l. Is there an activation indicator on laser?  Y  N
   m. Is there a power indicator on laser?  Y  N
   n. Are there protective housing interlocks?  Y  N
   o. Are the protective housing interlocks functioning?  Y  N
   p. Is the protective housing intact:  Y  N  If no:
      i. Is access restricted and the area controlled?  Y  N
      ii. Is PPE available?  Y  N
      iii. Are there barriers, curtains, beam stops, etc?  Y  N
      iv. Is this addressed in SOP?  Y  N

3. Laser unit safety controls:
   a. Is there a beam shutter present?  Y  N
   b. Is the beam shutter functioning?  Y  N
   c. Is there a beam power meter?  Y  N
   d. Is emergency shutoff available?  Y  N
4. Is the manufacturer’s operational manual available?  Y  N
5. Is the laser sublicense up to date and available?  Y  N
6. Is the SOP written, available, and up to date (last revision date: )? Y  N
7. Have all users and sublicensees completed initial training?  Y  N
8. Have all applicable users and sublicensees completed annual training?  Y  N
9. Is documentation of training maintained in the laser safety program notebook? Y  N
10. Are authorized users and training dates listed?  Y  N
11. Is documentation of training available?  Y  N
12. Does training include general safety precautions & NHZ descriptions?  Y  N
13. Does it outline personal protective equipment requirements and use (including approved eyewear)?  Y  N
14. Does it describe start-up, use, and shut down procedures?  Y  N
15. Does it describe alignment procedures?
16. Does it include emergency procedures?  Y  N
17. Are current laser safety guidelines posted?  Y  N
18. Is laser safety policy manual available?  Y  N
19. Is all documentation maintained in the laser safety program notebook?  Y  N
20. Are all injuries reported to PI and EHS?  Y  N
21. Are all injuries investigated by LSO?  Y  N
22. Is the laser secured to table?  Y  N
23. Are laser optics secured to prevent stray beams?  Y  N
24. Is the laser at eye level?  Y  N
25. Is the beam enclosed?  Y  N
26. Bare beam barriers in place?  Y  N
27. Are beam stops in place?  Y  N
28. Can you view the beam remotely?  Y  N
29. Is the beam condensed or enlarged?  Y  N
30. Is the beam focused?  Y  N
31. Is the beam intensity reduced through filtration?  Y  N
32. Are fiber optics used?  Y  N
33. Are the windows in the room covered?  Y  N
34. Are reflective materials kept out of beam path?  Y  N
35. Is beam management documented?  Y  N
36. Is there any physical evidence of stray beams?  Y  N
37. If laser is a class 4, is there a diffuse reflection hazard?  Y  N
38. Is the entire room/lab designated as a laser control area?  Y  N
39. Is the beam visible?  Y  N

40. Other Laser Safety Measures:
   a. Is an eye exam required?  Y  N
   b. If required, are eye exams completed?  Y  N
   c. Is there proper laser eye protection available?  Y  N
   d. Is the required manufacturer information for eyewear maintained?  Y  N
   e. Is eyewear inspected and cleaned periodically?  Y  N
   f. Is proper skin protection available?  Y  N
   g. Is there eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing human food in the lab?  Y  N

41. Non Beam Hazards:
   a. Is toxic laser media in use?  Y  N
   b. Is a fume hood available if needed?  Y  N
   c. Are cryogens in use?  Y  N
   d. Are compressed gasses in use?  Y  N
   e. Is there a high voltage power hazard?  Y  N
f. Are optical tables properly grounded?  Y  N  
g. Is there a collateral radiation hazard?  Y  N  
h. Is there an explosion hazard?  Y  N  
i. Is there a fire hazard?  Y  N  
j. Are there any airborne contaminant hazards?  Y  N  
k. Is there adequate housekeeping?  Y  N  
l. Is there any LGAC production?  Y  N  
m. NOTES:  

IV. Security Issues  

V. Physical Hazards  