ENVIRONMENTAL HEALTH & SAFETY

UNIVERSITY of WASHINGTON

Laser Safety Procedure

A. Laser Information

List laser location, specifications, and revision date of the procedure.

Room/Building:	Document date:	
Manufacturer/Model	Wavelength (nm):	
Laser type/Class	Power (W)/Energy/pulse (J	/pulse)
Beam diameter (mm)	Pulse rate (Hz)	
Beam divergence (mrad)	Mode	

B. Laser Application

Outline the application of the laser use in your laboratory/clinic/facility.

C. Laser Safety Training

All users of Class 3B and Class 4 lasers must be registered as a Laser Worker and receive the following laser safety training prior operating any laser.

[1] Laser Safety Training - This basic laser safety course is offered by the EH&S Radiation Safety Office.

[2] Hands-on Training - This training is provided by the PI or an experienced senior researcher in the lab. The training should include the basic operation of the laser, its associated system and a focus on the established Laser Safety Procedures for each laser in the lab.

D. Controls and Personal Protective Equipment (PPE)

Laser eyewear should always be worn during laser operation. Include additional PPE required for other hazard involved.

Laser eyewear (list all types of eyewear) Faceshield UV protected goggle Gloves Protective clothing					
Mfg/Model	Wavelength attenuated (nm)	Optical Density (OD)	Storage location/Qty		

E. Engineering and Administrative Controls

Check the method of hazard controls for your laser system in the lab/clinic/facility. Check all that apply.

	· · · · · · · · · · · · · · · · · · ·		
Illuminated warning light and door posting.	Access control: A	Ill access doors to the lab mu	ust be secured.
Controlled area (curtain, barrier, enclosure, etc.)		
Visitor/Observers (specify control measures):			
Other (specify):			
F. Laser Hazards Information Please list all hazards associated to this laser system(s).			
Beam hazards			
Intrabeam Specular/diffused reflection	lnvisible beam	Ultraviolet (UV)/Blue	Light
Non beam hazards			
Electrical Laser-generated air contamin	ants 🛛 🗌 Fire Hazard	Cryogenics 🗌 Nois	e 🗌 Compressed gasses
Microwave, RF, Extremely Low Frequency, or St	atic Magnetic Fields] X-ray 🛛 Plasma emissio	ns
High Voltage/Capacitors Hazardous Mat	terials/Waste 🔲 Othe	r	
www.ehs.washington.edu 201 Hall Health Center, Box 35440	0 206.543.7262	Radiation Sa	fety Laser Procedure 2016.rev2

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G. Procedures

Enumerate the steps for operating and alignment procedures.

Safety Procedure/Checklist

- Ensure warning sign are posted on the door.
- Verify the main door secured and restricts access to only trained and authorized personnel.
- Ensure the laser curtain/beam ports are closed.
- Turn on the laser warning lights.
- Wear appropriate laser eyewear and other necessary PPE.
- Ensure work are is free of specular reflectors- remove any jewelry, tie tacks, watches, etc.
- Ensure that all beam enclosures and /or beam stops are placed properly in the work area.

Operating Procedures

Alignment Procedures

Emergency Procedures

In the event of a laser incident,

- Shut off the laser system and remove the interlock key.
- Obtain medical assistance immediately in case of eye exposure, suspected exposure to laser radiation or any health threatening injuries.
- In the event of fire, pull the alarm, and contact 9-1-1.
- Inform the your PI and/or laser supervisor following the incident.
- Contact EH&S Laser Safety Officer to report the incident.

Emergency contacts

Principal Investigator		Phone/Email	
Laser Supervisor		Phone/Email	
Laser Safety Officer	Amy Lim	Phone/Email	amylhlim@uw.edu / 206-685-5311

Additional page.

Operating Procedures

Alignment Procedures