UF Environmental Health and Safety
UNIVERSITY of FLORIDA

Laser Microscope Re-Classification

INTRODUCTION

Laser microscopes are sometimes classified as Class 3B/4 laser systems. The UF Laser Safety Program has determined that some of these laser microscopes may be re-classified to Class 1. Microscopes that are re-classified must still be registered with UF EH&S, but during normal operation the laser microscope will be exempt from operational requirements of a Class 3B/4 laser lab.

REQUIREMENTS

In order to be re-classified, the laser microscope must be seen by EH&S Radiation Safety personnel. If it is determined that there are no special hazards, a re-classification notice will be provided to the lab. The lab will be revisited yearly to ensure safe use. As part of this re-classification, the following requirements will need to be met:

- Operators of the re-classified microscope must have hands-on training.
- Operators of the re-classified microscope must take the online laser safety training (UF_EHS833_OLT).
- The re-classification notice must be attached to the SOP for the microscope.
- The SOP must include a statement on the hazard of laser light.
- The SOP must include guidelines for safe use specific to the microscope.
- The SOP must be signed and printed by all operators.

RESOURCES

Example Hazard Statements

Class 3B	Class 4
This laser microscope utilizes a Class 3B laser. Class 3B lasers can cause eye injuries if viewed directly or if a specular reflection is viewed directly.	This laser microscope utilizes a Class 4 laser. Class 4 lasers can cause eye injuries if viewed directly. Diffuse reflections of Class 4 lasers can also cause eye damage. With direct skin exposures, a Class 4 laser can cause burns.

Example Guidelines

1) Do not manipulate the sample when the laser is on except with stage controls
2) Do not place objects on the sample stage while the laser is on
3) Do not place reflective objects in the path of the laser
4) Do not open any laser housings
5) Do not allow a non-authorized person to operate the microscope

Links and Contacts

Registration, training information and UF's Laser Safety Manual may be found at the UF EH&S Laser Safety website: http://www.ehs.ufl.edu/programs/rad/laser/

Contact lso@ehs.ufl.edu or 392-7359 with any questions.