

PI Guidance for X-Ray and Laser Equipment in BioRAFT

UMass**Amherst**

Environmental Health & Safety

Welcome to BioRAFT

- Test Lab
 - » **View Lab Profile**
 - » Compliance Dashboard
 - » Manage Members
 - » Send Lab Message
 - » Self Inspections
 - » Manage Lab Forms
- + Research Tools
- + Equipment
- + My Account

Announcements

There are no recent announcements

[View All Announcements](#)

Compliance E-Mail Inbox

05/26/2020 [Lab Inspection Report - 05/26/2020](#)

05/26/2020 [Temporary Account granted for re...](#)

[View Entire Inbox](#)

Compliance Summary for Test Lab

Equipment:



[View Dashboard](#)

ObservNow

See a safety concern?
Click to report it.



Click on View Lab Profile to review/verify your lab group information. Next you will click on the Equipment tab to see what you own.

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[Summary](#) | [Spaces](#) | [Documents](#) | [Forms](#) | [Equipment](#) | [Lab Inspections](#) | [Self Inspections](#)

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Test Lab

Contact Info

Principal Investigator: [EH&S Test](#)
Department: EH&S
Building: Draper Hall
Room Number: 122
Mail Code:
Phone 1: 413-687-4137
Phone 2:
Fax Number:

Compliance Summary

Equipment: 

[View Dashboard](#)

Research Focus

There is no focus filled out.

Lab Categories: [Research Support](#)

Major Hazard Categories: [Chemical](#)

Hazards Last Certified by PI: 05/26/2020

[Edit Hazards](#)

Lab Status: Active

Emergency Shutdown Status: Not Indicated

Click on equipment tab to verify information is correct. Items under each tab will be populated by EH&S as appropriate. You can make corrections as needed.

View

Edit

Dashboard

Members

Summary | Spaces | Documents | Forms | Notes | **Equipment** | Lab Inspections | Self Inspections | Correspondence

Test Lab Equipment



This tab will allow you to view detail about the equipment and remove any equipment you no longer own. These information are important to identify the type of equipment that you have.

Type:

Submit

Type	Manufacturer	Model	Serial Number	Building	Room #	Audit Expiration ▲		
X-Ray Device						N/A	View	Remove

New equipment can be added here. If any lasers or x-ray devices are not listed, you can add here. If you have any questions regarding updating the equipment list contact Radiation Safety at askehs@umass.edu

[Add Equipment](#)

Add Equipment

Please select the type of equipment you would like to add:

[Add Biosafety Cabinet](#)

[Add High Speed Cell Sorter/Analyzer](#)

[Add Eyewash/Shower](#)

[Add Film Developer](#)

[Add Gamma Counter](#)

[Add Gas Cabinet](#)

[Add Hood](#)

[Add Laser](#)

[Add Local Exhaust/Workstation](#)

[Add Scintillation Counter](#)

[Add 3D Printer](#)

[Add Autoclave](#)

[Add Centrifuge](#)

[Add Freezer](#)

[Add Geiger Counter](#)

[Add Incubator](#)

[Add Portable Monitor](#)

[Add Powered Industrial Vehicle](#)

[Add Refrigerator](#)

[Add Satellite Accumulation Area](#)

[Add Sealed Source](#)

[Add Survey Meter](#)

[Add Environmental Monitoring System](#)

[Add High Powered Magnet](#)

[Add X-Ray Device](#)

Click here to add any new lasers that are not listed in your inventory list.

Click here to add any new x-ray generating devices that are at your possession.

View

Edit

Equipment Status History

Equipment History

Laser

Equipment Details

Serial Number:
Manufacturer:
Model:
Laser Type:
Laser Medium:
Laser Usage:
Laser Class:
Fabricated on-site?:
Modified on-site?:

Location & Owner

Building:
Room:
Primary Owner:
Used By:

Laser Specifications

Wavelength:
Tunable:
Beam Diameter:
Beam Divergence:
Beam Divergence
Measurement:
Mode:
Avg. Power Output:
Max. Power Output:
Pulse Duration:
Pulse Frequency:
Avg. Joules/Pulse:
Max. Joules/Pulse:

Additional Information

Asset Tag:
Status: In Service
(Set Status to Out of Service)
Additional Info:

Authorized Users

Name	Designation	Instructed?
	Laser Equipment Manager	N

[Manage Users](#)

Use this tab to make update and or make any corrections as needed.

Enter as much information that you have about the laser. Type N/A if information it not available.

Laser

Equipment Settings

Serial Number: *
Enter the serial number or otherwise uniquely identifying attribute for this piece of equipment.

Building: *
< Select >
What building does this piece of equipment reside in?

Room: *
Enter the room number in that building.

Primary Owner: *
Please assign a Primary Owner to this device. You will be able to add more owners and authorized users later.

Used By: *
Labs/Spaces using this Laser

Manufacturer:
What company manufactures this item?

Model:
Enter the model number or name, as specified by the manufacturer.

Laser Type: *
Please Choose
Select the type of laser

Laser Medium:
Select the medium used by this laser

ANSI Hazard Classification:
Select the IEC 60825-1 classification of this laser

- Laser Usage:**
- Imaging
 - Microscopy
 - Research
 - Spectroscopy

On-site work performed?
Please indicate any work that has been performed on this laser on site at the institution

- Fabricated at institution
- Modified at institution

Sections with the * are required. Fill in all sections.

Laser Specifications

Wavelength(s) (nm):
Enter the wavelength of this laser in nanometers

Tunable: *
Unknown

Beam Diameter (nm):
Enter the beam diameter of this laser in nanometers

Beam Divergence (mrad):
Enter the beam divergence of this laser in milliradians

Beam Divergence Measurement:

Mode:
Select the mode of operation for this laser

Avg. Power Output (Watt):
Enter the average power output of this laser in watts

Max. Power Output (Watt):
Enter the maximum power output of this laser in watts

Pulse Duration (sec):
Enter the pulse duration of this laser in seconds

Pulse Frequency (Hz):
Enter the frequency of the pulse of this laser in hertz

Avg. Joules/Pulse (J):
Enter the average joules in each pulse of this laser

Max. Joules/Pulse (J):
Enter the maximum number of joules per pulse of this laser

Submit Remove

When you are completed click submit to update the information. If you remove any lasers from the list notify the Radiation Safety Officer: hms@ehs.umass.edu

View

Edit

Equipment Status History

Equipment History

X-Ray

Equipment Details

Serial Number:
Machine Name:
Manufacturer:
Model:
Type:

Location & Owner

Building:
Room:
Primary Owner:
Used By:

Registration Information

Machine Type:
Registration ID:

Additional Information

Asset Tag:
Acquisition Date:
Status: In Service
([Set Status to Out of Service](#))
Additional Info:

File Attachments

License/Permit:
Operating Manuals:
Procedures:
Training Manuals:
Other:

Authorized Users

Name	Designation	Instructed?
	X-Ray Equipment Owner	N

[Manage Users](#)

Review information regarding the X-ray device and make any changes as needed.

This form should be completed by any and all information that you have about the x-ray device.

X-Ray

Equipment Settings

Serial Number: *

 Enter the serial number or otherwise uniquely identifying attribute for this piece of equipment.

Building: *
 < Select >
 What building does this piece of equipment reside in?

Room: *

 Enter the room number in that building.

Primary Owner: *

 Please assign a Primary Owner to this device. You will be able to add more owners and authorized users later.

Used By: *

 Labs/Spaces using this X-Ray Device

Manufacturer:

 What company manufactures this item?

Model:

 Enter the model number or name, as specified by the manufacturer.

Asset Tag:

 Enter the asset tag number issued by the inventory control department of your institution.

Additional Information:

 Any additional information you would like to record.

Sections with * are required.
 Fill in all sections.

Equipment Details

Machine Name: *

 The name used to identify this machine e.g. GE MicroCT

Type: *

Purchasing Information

Acquisition Date:

Registration Information

Machine Type:

 The machine type number and/or name used in registering this machine with the state or licensing agency.

Registration ID:

 The official registration number provided by the state or licensing agency for this machine.

File Attachments

License/Permit

Attach new file:
 No file chosen

Operating Manuals

Attach new file:
 No file chosen

Standard Operating Procedures

Attach new file:
 No file chosen

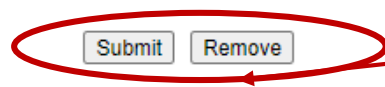
Training Materials

Attach new file:
 No file chosen

Other

Attach new file:
 No file chosen

When completed click the
 "submit" button. If you remove
 any X-ray's from the list, notify the
 Radiation Safety Officer:
hms@ehs.umass.edu



[View](#) [Edit](#) [Dashboard](#) [Members](#)

Members | [Manage Job Activities](#) | [Members History](#)

- + Test Lab
- + Research Tools
- + Equipment
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Test Lab Members

Last Confirmed: 05/26/2020 ⓘ

Name	Email	Designation	
Test, EH&S	respirators@umass.edu	Principal Investigator	Edit
PI, Test	assessments@umass.edu	Instructor	Edit Remove

[Confirm List](#)

[Definitions and Policies](#)

Add a member

Name:

Designation:

Select ▼

Optional Access in BioRAFT

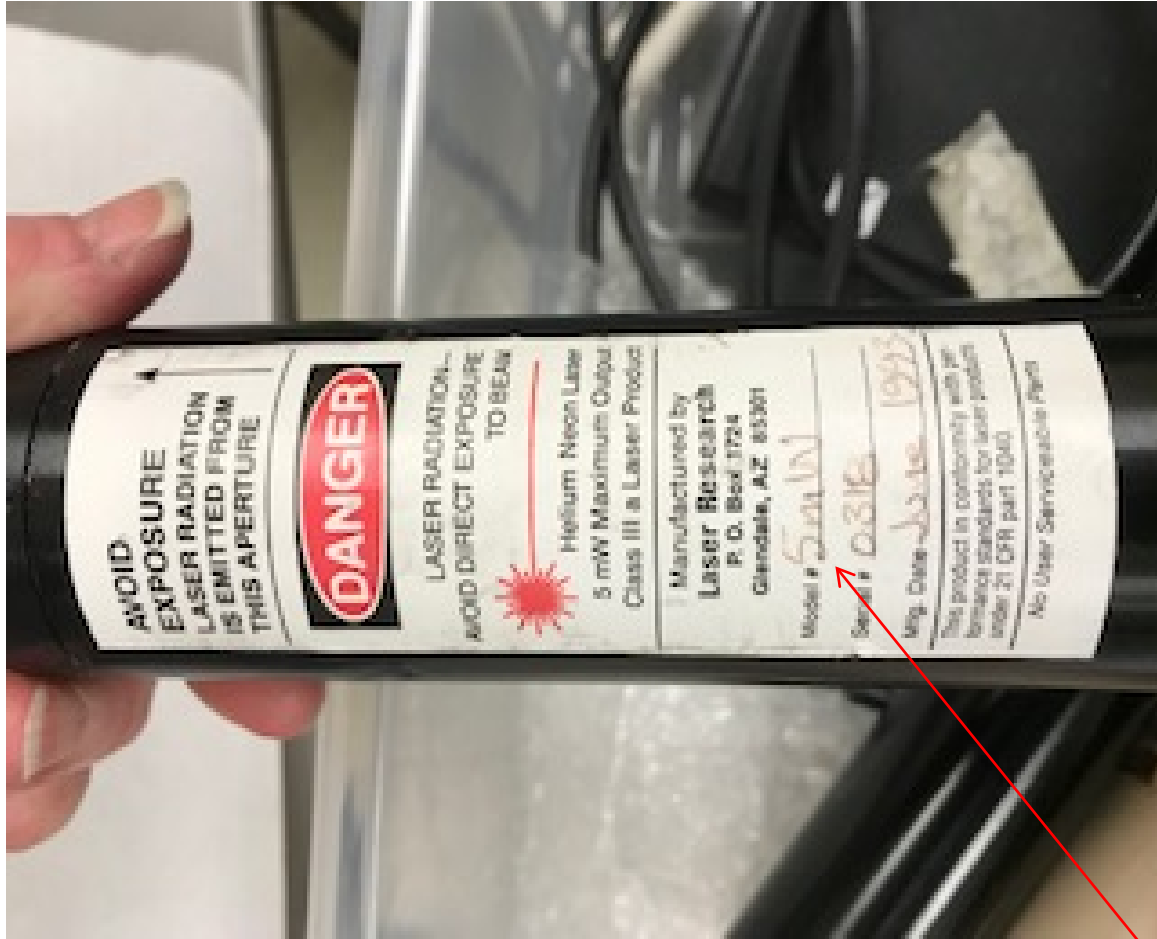
- Edit Basic Group Information ⓘ
- Edit Group Equipment Inventory ⓘ
- Group Compliance Liaison ⓘ

If you grant this access to other lab members, they can also edit equipment in your lab space.

Please find more detailed guidance for editing lab members in [Guidance for PI Lab Setup](#).

More information of BioRAFT is available here: <https://ehs.umass.edu/bioraft>

Examples of labels on lasers



Laser specifications can be found on these labels. Depending on the laser you may have more labels put on by the manufacturer.