



APPLICATION FOR RADIOACTIVE MATERIAL USE

(Please TYPE all information. If you have any questions, please call 646-1762)

1. Name of Requesting PI: _____
2. Date of Request: _____
3. Schools and Department: _____
4. Location of Lab: _____
(Building / Room Number)
5. Contact Information: _____
HB Number / Phone

Email address

6. **RADIONUCLIDES REQUESTED:** Radionuclides for which permission is requested (For amount, list the maximum possession in lab at any one time):

Radionuclide	Chemical Form	Total Activity (mCi)	Chemical Reactivity

7. **RADIONUCLIDE USAGE:** Please provide justification for the **requested** amount of each radionuclide. Briefly describe how each radioactive material will be used in your experiments and estimate how often each experiment will be done per week or month. Consider what the minimal ordering requirements may be as well. (e.g., P-32 - 50 uCi of P32-dATP will be to end-label oligo-nucleotide probes. The labeling will be done 1-2 times per month; the total will be approx. 100 uCi.). ***If performing metabolic experiments, please attach a standard operating procedure for contamination control.***

8. **MIXED WASTE GENERATION:**

Will mixed waste be generated, (e.g., radioactive phenol / chloroform, trichloroacetic acid, methanol, ethanol, acetone)?

_____ YES

_____ NO

If yes, please list chemical and isotope combination(s) _____

Please refer to the Dartmouth EHS *Hazardous Waste Guide* for proper radioactive waste management. If there is a likelihood of mixed waste generation, please consult EHS prior to generation.

9. **RADIATION DETECTION:** List radiation detection instruments (e.g., survey meters). All new and re-authorized labs using high energy emitters (greater than 200 keV e.g. P-32 beta) must have a Ludlum model with 44-9 probe.

Rad Monitor Manufacturer	Model	Serial Number	Location of Instrument

Liquid Scintillation Counter: Users of weak beta emitters (e.g., H-3/C-14/S-35) must have access to a liquid scintillation counter for monitoring lab contamination.

Rad Monitor Manufacturer	Model	Serial Number	Location of Instrument

10. **LABORATORY MAP.** Attach a map and indicate the chosen area(s) for radioactive material use experiments; the location of rad material storage (refrigerator / freezer); the location of rad waste storage area(s). Sharing lab space with another Principal Investigator requires the submission of Shared Space Agreement.

Sharing lab space? _____ YES _____ NO

If yes, submit a signed shared space agreement with the PI you are sharing space with.

11. **LABORATORY PERSONNEL:** List ALL coworkers in your laboratory, including those not working with radioactivity. (If necessary, use another sheet for additional names).

NAME	Position Status (PI, Undergrad, Graduate, Reseacher)	List Which Isotopes To Be Used (or NONE)	Will use X-rays? (Y/N)	Years of experience (or NONE)	Has attended training? (Y/N)	Has RAD badge? (Y/N)

12. **Submit and attach** an updated CV for the requesting PI. (This is not necessary if the CV listed in BioRaft® is less than 3 years old.) Ensure the CV submitted lists your previous work experience with radioactive materials.

SCIENTIFIC PEER REVIEW:

All research with radioactive material under the Dartmouth College license (NH 276R) is solely, "To be used in research and training as authorized by the Radiation Safety Committee." Research and training includes but is not limited to, "Theoretical analysis, exploration, experimentation; or the extension of investigative findings." Normally, peer review takes place during the processing of a grant application.

I confirm this scientific research with Radioactive Material as defined in this application will be for the promotion of educational and research purposes.

Signature: _____ **Date:** _____

(Dean of School required for the Thayer School of Engineering and College of Arts and Sciences. Departmental Chair required for the Geisel School of Medicine)

ASSURANCES:

As the Principal Investigator on this protocol, I acknowledge by my signature below:

A. Financial Decommissioning:

I certify that the funding is available for the decommissioning of this laboratory space(s) where the radioactive material use occurred.

B. Duplication of Effort:

I have made a reasonable, good faith effort to ensure that this protocol is not an unnecessary duplication of previous experiments.

C. Radiological, Chemical, Biohazard Safety:

I have taken into consideration, and I have made the proper coordination regarding all applicable rules and regulations regarding radiation protection, chemical and biologic safety, etc., in the preparation of this protocol.

D. Training:

I verify that the personnel performing the experimentations using radioactive material as described in this permit are technically competent and

have been properly trained in accordance with the current EHS policy for radioactive material use. Inexperienced personnel will be supervised. Training can be verified in BioRaft: <https://dartmouth.bioraft.com/>

SIGNATURE: _____ **DATE:** _____
Principal Investigator

Radiation Safety Committee Decision:

APPROVED / DENIED

RSO SIGNATURE: _____ **DATE:** _____

Date of RSC Decision Letter to PI: _____