

#### 4.18. Shared Space Policy

Ideally, each principal investigator who is authorized for radionuclide use should work in a separate laboratory and keep separate logs of radionuclide receipt, storage, use and disposal. However, in practice, P.I.'s with separate authorizations may occasionally need or find it desirable to share laboratory space and use different radionuclides in the same room(s). According to the State and NRC Guidelines, "shared space" means any two or more authorized investigators who are in the same room (as defined by a space fully enclosed by walls and doors), whether or not bench space and/or equipment within the room is actually shared. For example, if two P.I.'s have separate bench space within the same room, it is "shared" even if the space is divided by lab bench or invisible line that is never crossed by personnel from either lab. The Radiation Safety Committee must formally approve such arrangements and the Radiation Safety Officer is authorized to deny use of radionuclides by P.I.'s involved in such space arrangements until a proposal for sharing space has been submitted to and approved by the RSC. The principal purpose of such shared space arrangements is to ensure the safety of personnel who may be working for one P.I. but who are exposed to radionuclides from another P.I.'s radionuclide activities as a result of sharing space within the same room. Personnel in each lab must have a mechanism to be informed about and protected from the radiation activities of other labs. Thus, even if only one of the two or more P.I.'s who are sharing space is authorized for radionuclides, all parties must enter into a shared space agreement.

After reviewing the guidelines listed below with all parties involved, complete the form and submit to the RSO. All involved parties must sign this agreement which certifies that the guidelines put for will be adhered to by all participants.

*The guidelines for P.I.'s who are proposing use of radionuclides in a shared laboratory space are as follows:*

- A proposal must be submitted to the RSC at least two weeks prior to its next meeting describing the protocols for sharing laboratory space. The proposal should be developed, written and co-signed by all P.I.'s involved in the shared space arrangement. A cover letter also co-signed by the participants should briefly justify the need for the shared lab space and include responses to all the information requested in these guidelines.
- The proposal must include diagrams of all involved laboratory space, indicating the specific locations for radionuclide use, storage of stock vials, waste storage and disposal.
- Each laboratory will keep separate logbooks recording receipt of stocks, storage and use of radionuclides, disposal of stock vials and waste, swipe tests and personal exposures.
- A specific designated individual in each laboratory must be named and will be responsible for keeping the records and monitoring radiation exposure and use for each P.I. These individuals will be kept informed of any spills or other mishaps

involving radionuclides and will report any incidents to the other designated individuals, to the P.I.'s of each laboratory, and to the Radiation Safety Officer. The Environmental Health & Office should be notified if the status of the designated individual(s) is changed.

- A joint laboratory meeting of all personnel is encouraged to conduct an annual review of radiation use, safety procedures and laboratory space arrangements.
- If one or more of the participating laboratories is using radionuclides in the shared space that require personal monitoring (e.g., quarterly dosimeters) all personnel in each participating laboratory may also be monitored.
- Following any spill, mishap, or elevated swipe test results, a joint laboratory meeting of all personnel will be conducted. The incident will be discussed and radiation safety procedures will be reviewed.
- Prior to instituting any major changes in radionuclide use or the shared space agreement, a proposal by the participating laboratories must be submitted to the RSC for its approval.
- If any bench or other work space and/or equipment are actually shared among labs within the shared space, the following also applies: In addition to normal swipe testing, swipe testing of the entire shared space will be conducted for the month that radioactive material is used. These results will be recorded in each laboratory's records. The entire shared space will be surveyed after any aberrant readings and the results recorded in each laboratory's log book. If this section does not apply, a statement to that effect should be included in the cover letter.
- If any bench or other workspace and/or equipment are actually shared by personnel within the shared room(s), the following also applies: A rational physical plan for safe and minimal radionuclide use in the room should be developed. One of two models should be considered in designating the radionuclide areas to be used. One approach would be to separate areas of use by type of radionuclide, e.g., one area for  $^{32}\text{P}$ , another area for  $^{51}\text{Cr}$ . Particularly with radionuclides requiring special monitoring and/or shielding, this model may work best for multiple radioinclide laboratories. A second model would be to cluster all radionuclide use to one or a few areas of the space, leaving the rest of the laboratory "clean". This model may also have advantages in certain cases. Whichever arrangement is chosen, justify the choice in the proposal and describe how records and safety procedures will be maintained. If this section does not apply, a statement to that effect should be included in the cover letter.
- Other arrangements may also be specified by the P.I. or by the RSC and/or the Radiation Safety Officer following their review, as deemed necessary.

DARTMOUTH COLLEGE SHARED SPACE AGREEMENT

Date: \_\_\_\_\_

**Laboratories and Designated Individuals participating in the Shared Space Arrangement  
(print or type)**

\*Principal Investigator 1: \_\_\_\_\_  
*(primary contact person)*

Designated Individual: \_\_\_\_\_

Principal Investigator 2: \_\_\_\_\_

Designated Individual: \_\_\_\_\_

Principal Investigator 3: \_\_\_\_\_

Designated Individual: \_\_\_\_\_

Principal Investigator 4: \_\_\_\_\_

Designated Individual: \_\_\_\_\_

Principal Investigator 5: \_\_\_\_\_

Designated Individual: \_\_\_\_\_

Building: \_\_\_\_\_ Laboratory Room No(s): \_\_\_\_\_

January, 2016