

Radiation Safety

110 Suffolk Hall Stony Brook, NY 11794-6200 631-632-6410 (Office) 631-632-9683 (Fax)

Serving Stony Brook University, Stony Brook Medicine, & Article 28 facilities

RESEARCH RADIOACTIVE MATERIALS PERMIT APPLICATION

The Research radioactive materials Permit Application is to be filled out by the person who will be responsible for oversight of the use of radioactive materials in the research group, research facility, department/lab or teaching center and meets the requirements of **ERM.EHS.RS 114 Radioactive Materials/X-Ray Research Permit Holder Requirements and Qualifications**. This individual will become the permit holder for the radioactive materials lab. The Permit Holder is also responsible for all users, staff members and/or students who use the registered devices in the laboratory.

Please email any questions or your complete application to radiationsafety@stonybrook.edu

Permit Holders should review, print out and retain copies of the following:

ERM.EHS.RS 114 Radioactive Materials/X-Ray Research Permit Holder Requirements and Qualifications ERM.EHS.RS 118 Research Radioactive Materials, X-ray and Laser Permit Holder Responsibilities

Proposed Permit Holders must submit:

- Permit Holder's most recent Curriculum Vitae (CV) / resume or equivalent showing radioactive materials experience.
 Submission of a Research Permit Holder Radiological Training Record may be used in substitution to demonstrate previous experience and qualifications.
- Completion of Radiation Safety Training (SBRS 001) hosted on SALUTE LMS for the permit holder, staff, and students.
- Research Personnel Radiological Authorization Request for each radioactive materials user (other than the permit holder) working with or in close proximity to radioactive materials. Each form is to be signed by the user and permit holder.
- Diagram / map of all radioactive material locations to be used for radioactive materials research. Include location of radio-isotope storage, waste storage, areas of use, accelerators, etc. Include windows and door locations in each space.
- o This application, completed in its entirety.

SECTION 1: CONTACT INFORMATION

| PERMIT HOLDER | | | | | | |
|---|---|--|--|--|--|--|
| Name | | | | | | |
| Department | | | | | | |
| Office Address | | | | | | |
| Email | | | | | | |
| Office Phone | | | | | | |
| Lab Phone | | | | | | |
| Emergency Contact Phone | | | | | | |
| ALTERNATE CONTACT | | | | | | |
| | | | | | | |
| Name | | | | | | |
| Department Office Address | | | | | | |
| Office Address Email | | | | | | |
| Office Phone | | | | | | |
| Lab Phone | | | | | | |
| Emergency Contact Phone | | | | | | |
| Emergency Contact Phone | | | | | | |
| Radioactive Material: Research: | se: Complete sections 1 – 8, 9 & 12 s 1- 8, 10 & 12 | | | | | |
| Amend Existing Permit (Check a Add / Remove Change isotop | Initial Application Renew Application Please Enter Permit #: Amend Existing Permit (Check all that apply) Please Enter Permit #: Add / Remove Isotope Change isotope possession limit Add / Remove authorized space | | | | | |

SECTION 3: RADIOISOTOPE USE INFORMATION

| Protocol # | Radio- nuclide | Activity/ Experiment (mCi) | Number of Experiments / Month | Maximum Possession Limit Requested (mCi) | Chemical Form | Physical Form (liquid, solid, gas, sealed source) | Will experiment with requested radionuclide result in volatile releases to | If Yes, please indicate activity per experiment will be volatile (uCi/ experiment) |
|------------|-------------------|----------------------------------|-------------------------------------|--|------------------|---|--|--|
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Will any experiments involve special nuclear material or (SNM) and/or nuclear fuel cycle (NFC) related work? If Yes, attach an explanation to this application. Yes No

SECTION 4: EXPERIMENTAL PROTOCOLS

You may enter your experimental protocol(s) here or **append** them to this application, if additional space is needed. Each radioisotope and use must have an associated protocol. Please indicate any hazardous chemical use and/or any hazardous procedure (e.g. potentially explosive, inhalation hazard, etc.). All protocols must include information regarding the PPE that will be utilized, the maximum activity used per experiment (please include the activity contained in the stock vial, if applicable), segregation and storage of radioactive waste (including secondary containment), the use of fume hoods and shielding (as applicable), the frequency of contamination monitoring, and any other protective measures that will be applied in order to ensure that contamination and radiation exposure are kept **ALARA** (**As Low As Reasonably Achievable**).

| Check here | e if Protocol(s) are attached: |
|----------------|--------------------------------|
| Protocol #1 | |
| Protocol #2 | |
| Protocol #3 | |
| Protocol #4 | |

SECTION 5: LABORATORY / FACILITY INFORMATION

Areas you are requesting for radioactive authorization.

| Building | | om mber | | Use (e area, e | | stor | age, inventory | storage, col | d room, freeze | r, main work |
|----------------|-----------|------------|---------------|---------------------|-----------------------------|------|---------------------------|-------------------------|-----------------------------|-----------------------------|
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| SECTION 6: | CAEE | TV E | | MENT | ۸\/۸II ۸ 🗈 |) | | | | |
| SECTION 6. | SAFE | | <u> QUIFI</u> | VILIVI | AVAILAD | | • | | | |
| Lab Coats | Glov | es es | | fety wear | Safety Shower Eyewasl | / | Fume Hood | Adsorbent Pads/Paper | Spill Supplies | Remote Handling Tools |
| | | | | | | | | | | |
| SECTION 7: | RADI | ONUC | CLIDE | STOR | AGE SH | EIL | DING & SEC | CURITY | | • |
| Please Descril | be how r | adionu | ıclides | will be | stored, shi | elde | ed (as applicab | le), and secur | ed. | |
| Type of Ma | terial | | | e & Sec | | | Shielding | Туре | Contai | |
| | | (e.g | | gerator, abinet) | freezer, | ((| e.g, Lucite, acr none) | | (e.g., plastic/l box, ca | |
| Sealed Source | es | | | | | | | | | |
| Stock Materia | al | | | | | | | | | |
| Samples | | | | | | | | | | |
| Liquid Waste |) | | | | | | | | | |
| Dm (W = ++= | | | | | | | | | | |
| Dry Waste | | | | | | | | | | |
| Liquid Scint | tillation | | | | | | | | | |

| Other | | | į. | |
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| dditional Commer | nts regarding stora | ge, shielding and/or se | curity | |
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| Check here if | you certify you will | ahide by the Lahorato | ry Waste Management Guide | nrovided as an attachn |
| this application. | you ocitily you will | abide by the Laborator | y waste management Galac | provided as an accomm |
| ECTION 8: RA | DIATION DETE | CTION EQUIPMENT | - | |
| | adiation detection | | - | |
| urvey Meter: | | | | |
| Manufacturer | Model | S/N | Detector Model | Detector S/N |
| | | | | Detector 3/14 |
| | | | | Detector 3/14 |
| | | | | Detector S/N |
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| 'all Monitor: | | | | Detector S/N |
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| /all Monitor: Manufacturer | Model | S/N | Detector Model | |
| | Model | S/N | Detector Model | |

| Well Counter/Automated Counter: Manufacturer Model S/N Building Room # SECTION 9: ANIMAL USE INFORMATION Please complete the section below only if your radioisotope work involves the use of animals and attach a copy of the appro ACUC protocol. Check here if IACUC protocol is attached: Title of Research Project: ACUC Protocol Number: Species Average Weight of Animal Number of Animals/Experiment Year Radioisotope and Chemical Form Weight (grams) Activity per Animal to be injected (uCi) injected per experiment Expected Experiment Location (Building & Room#): Animal Carcass Storage Location: Will radioactive material be injected into the live animal? Y O N O Will the animal be euthanized immediately after injection? Y O N O Please describe the arrangements for animal care and contamination control: | Stony Brook University | r | | | | | Enviror | nmental Health & Saf |
|--|--|-------------|-------------|-----------------|------------|-------------------------|------------|---|
| Manufacturer Model | | | | | | | | |
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Please describe shielding and safety measures for radiation workers/animal handlers.

| Stony Brook University | | | | Enviror | nmental Health & Safet |
|-------------------------|-----------------------|----------------------|---------------------|------------------------|---|
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| Please describe the wa | | sposal procedures f | or excretions, bedd | ing, cages and e | uthanized |
| animals/tissue, as app | ropriate. | | | | |
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| SECTION 10: ACC | ELERATOR INF | <u>FORMATION</u> | | | |
| 10A. FACILITY MANAG | GER INFORMATION | N | | | |
| Name | | | | | |
| Office Address | | | | | |
| Email | | | | | |
| Office Phone | | | | | |
| Lab Phone | | | | | |
| Emergency Contact | Phone | | | | |
| 10B: Please Identify ea | Model / Serial No. | Location | Type of Device | Purpose of Accelerator | Number of Targets (if applicable) |
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| 10C: Please check any | / additional hazards | s associated with yo | our accelerator | | |
| Magnetic Field | Radio Freque | ency Field Neu | utrons | | |
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| SECTION 10D: PROP | OSED USE OF ACC | ELERATOR | | | |
| Please describe how yo | | | entory above. A ger | neral summary is | acceptable. |
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| | lease indicate laboratory personnel who will be operating radiation producing devices in your laboratory. All operators mus | Please indicate laboratory personnel who will be operating radiation producing devices in your laboratory. All operators mus | Please indicate laboratory personnel who will be operating radiation producing devices in your laboratory. All operators mus | Please indicate laboratory personnel who will be operating radiation producing devices in your laboratory. All operators mus | |
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| complete appropriate training and be formally authorized before operating any accelerator. | ment appropriate training and 20 formary dution 200 political operating any deconstration. | | complete appropriate training and be formally authorized before operating any accelerator. | | complete appropriate training and be formally authorized before operating any accelerator. |
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^{*}Please attached training documentation to this permit application

SECTION 11: HUMAN RADIOACTIVE RESEARCH FACILITY

11A. FACILITY MANAGER INFORMATION

| Name | |
|-------------------------|--|
| Office Address | |
| Email | |
| Office Phone | |
| Lab Phone | |
| Emergency Contact Phone | |

11B. (Areas requesting for radioactive authorization)

| Building | Room Number | Use (e.g Patient holding, camera room, source storage, metabolite lab, etc.) |
|----------|----------------|--|
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11C. HUMAN SUBJECT IMAGING CAMERA INFORMATION

| MODEL | TYPE (PET/SPECT, etc.) | SERIAL NO. |
|-------|------------------------|------------|
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11D: PHYSICIAN AUTHORIZED USER INFORMATION

| Name (Last, First, MI) | NYS Medical License # | HAS THE PHYSICIAN-AUTHORIZED USER BEEN APPROVED TO ORDER RADIOPHARMECEUTICAL INJECTION AS PER 10 NYCRR 16.123? |
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11E: CERTIFIED NUCLEAR MEDICINE TECHNOLOGIST INFORMATION

| Name (Last, First, MI) | NYS NMT License # | NYS License Expiration Date | |
|------------------------|-------------------|-----------------------------|--|
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SECTION 12: PERMIT HOLDER CERTIFICATION

| By checking this box: | |
|---|--|
| regulations, in addition to SBU, Office of Environment conditions and within the limits of this applies | active materials shall be in accordance with pertinent State and Federal ent, Health and Safety and Radiation Safety Program policies, procedures, ication. I certify that I have reviewed and understand the requirements as I. I understand that any changes or amendments to this permit application ication and approved by the RSO. |
| Principal Investigator: | Date: |
| | |

SECTION 13: REVIEW - DO NOT USE

13A. PERMIT MODIFICATIONS REQUIRED

THE ABOVE APPLICATION HAS BEEN REVIEWED BY THE RADIATION SAFETY OFFICER AND THE RADIATION PROTECTION COMMITTEE AND IS NOT APPROVED UNTIL MODIFICATIONS ARE COMPLETED AS DETAILED BELOW.

| Comment # | Modifications Required |
|-----------|------------------------|
| | |

13B. PERMIT APPROVAL

- 1. THE ABOVE APPLICATION HAS BEEN REVIEWED BY THE RADIATION SAFETY OFFICER AND THE RADIATION PROTECTION COMMITTEE AND IS HERBY APPROVED.
- 2. THE PRINCIPAL INVESTIGATOR MUST ABIDE BY ALL THE CONDITIONS OF THE PERMIT.
- 3. THE PERMIT SHALL BE ACTIVE FOR A PERIOD OF FIVE (5) YEARS FROM THE APPROVAL DATE INDICATED.
- 4. FAILURE TO ABIDE BY THE CONDITIONS OF THE PERMIT AND/OR APPLICABLE REGULATIONS CAN RESULT IN THE SUSPENTION OR REVOKATION OF THE PERMIT

| Date Approved | Permit Number | Expiration Date | |
|---------------|---------------|-----------------|--|
| | | | |

cc. Principal Investigator
Radiation Safety File
Department Chair\
University Radiation Protection Committee (URPC)

| PERMIT CONDITIONS: | | | | | |
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