

NRC FORM 313M

(9-81)

10 CFR 35

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIALS LICENSE - MEDICAL

Approved by OMB

3150-0041

Expires 9-30-86

INSTRUCTIONS - Complete Items 1 through 26 if this is an initial application or an application for renewal of a license. Use supplemental sheets where necessary. Item 26 must be completed on all applications and signed. Retain one copy. Submit original and one copy of entire application to: Director, Office of Nuclear Materials Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Upon approval of this application, the applicant will receive a Materials License. An NRC Materials License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Parts 19, 20 and 35 and the license fee provision of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 26 and the appropriate fee enclosed.

1.a. NAME AND MAILING ADDRESS OF APPLICANT (institution, firm, clinic, physician, etc.) INCLUDE ZIP CODE

Paul S. Friedman, M.D.
Radiology Associates

TELEPHONE NO.: AREA CODE (215) 564-2163

1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (If different from 1.a.) INCLUDE ZIP CODE

1422 Chestnut Street
Philadelphia, PA 19102

L00147
30-28887

2. PERSON TO CONTACT REGARDING THIS APPLICATION

Paul S. Friedman, M.D.

TELEPHONE NO.: AREA CODE (215) 564-2163

3. THIS IS AN APPLICATION FOR: (Check appropriate item)

a. ☐ NEW LICENSE

b. ☐ AMENDMENT TO LICENSE NO. 05

c. ☒ RENEWAL OF LICENSE NO. 37-00147-02

4. INDIVIDUAL USERS (Name individuals who will use or directly supervise use of radioactive material. Complete Supplements A and B for each individual.)

Paul S. Friedman, M.D.

5. RADIATION SAFETY OFFICER (RSO) (Name of person designated as radiation safety officer. If other than individual user, complete resume of training and experience as in Supplement A.)

Paul S. Friedman, M.D.

6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE

| RADIOACTIVE MATERIAL LISTED IN: | ITEMS DESIRED "X" | MAXIMUM POSSESSION LIMITS (In millicuries) | ADDITIONAL ITEMS: | MARK ITEMS DESIRED "X" | MAXIMUM POSSESSION LIMITS (In millicuries) |
|--------------------------------------|----------------------|---|---|---------------------------|---|
| | | | | | |
| 10 CFR 31.11 FOR IN VITRO STUDIES | | | IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM | | |
| 10 CFR 35.100, SCHEDULE A, GROUP I | | AS NEEDED | PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES | | |
| 10 CFR 35.100, SCHEDULE A, GROUP II | | AS NEEDED | PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS. | | |
| 10 CFR 35.100, SCHEDULE A, GROUP III | | | GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS. | | |
| 10 CFR 35.100, SCHEDULE A, GROUP IV | | AS NEEDED | IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA | | |
| 10 CFR 35.100, SCHEDULE A, GROUP V | | AS NEEDED | XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES. | | |
| 10 CFR 35.100, SCHEDULE A, GROUP VI | | | | | |

6.b. RADIOACTIVE MATERIAL FOR USES NOT LISTED IN ITEM 6.a. (Sealed sources up to 3 mCi used for calibration and reference standards are authorized under Section 35.14(d), 10 CFR Part 35, and NEED NOT BE LISTED.)

| ELEMENT AND MASS NUMBER | CHEMICAL AND/OR PHYSICAL FORM | MAXIMUM NUMBER OF MILLICURIES OF EACH FORM | DESCRIBE PURPOSE OF USE |
|--|--|--|-------------------------|
| 8512240373 851028 REG1 LIC30 37-00147-03 PDR | Sept 5 Applicant: ... Check No. 38822 / 38822 / 3911 Amount / Fee Category 1/20 ... 430 (90) Type of Fee Application ... Date Check Rec'd. 9/11/85 Received By: J. ... | ML10 | 19206 |

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(9-81)

9/11/85

"OFFICIAL RECORD COPY"

Postmarked 9/3/85

INFORMATION REQUIRED FOR ITEMS 7 THROUGH 23

For Items 7 through 23, check the appropriate box(es) and submit a detailed description of all the requested information. Begin each item on a separate sheet. Identify the item number and the date of the application in the lower right corner of each page. If you indicate that an appendix to the medical licensing guide will be followed, do not submit the pages, but specify the revision number and date of the referenced guide: Regulatory Guide 10.8, Rev. _____ Date: _____

| | | | |
|--|--|--|---|
| 7. MEDICAL ISOTOPES COMMITTEE | | 15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL <i>(Check One)</i> | |
| <input type="checkbox"/> | Names and Specialties Attached; and | <input type="checkbox"/> | Appendix G Rules Followed; or |
| <input type="checkbox"/> | Duties as in Appendix B; or _____ <i>(Check One)</i> | <input type="checkbox"/> | Equivalent Rules Attached |
| <input type="checkbox"/> | Equivalent Duties Attached | 16. EMERGENCY PROCEDURES <i>(Check One)</i> | |
| 8. TRAINING AND EXPERIENCE | | <input type="checkbox"/> | Appendix H Procedures Followed; or |
| <input type="checkbox"/> | Supplements A & B Attached for Each Individual User; and | <input type="checkbox"/> | Equivalent Procedures Attached |
| <input type="checkbox"/> | Supplement A Attached for RSO. | 17. AREA SURVEY PROCEDURES <i>(Check One)</i> | |
| 9. INSTRUMENTATION <i>(Check One)</i> | | <input type="checkbox"/> | Appendix I Procedures Followed; or |
| <input type="checkbox"/> | Appendix C Form Attached; or | <input type="checkbox"/> | Equivalent Procedures Attached |
| <input type="checkbox"/> | List by Name and Model Number | 18. WASTE DISPOSAL <i>(Check One)</i> | |
| 10. CALIBRATION OF INSTRUMENTS | | <input type="checkbox"/> | Appendix J Form Attached; or |
| <input type="checkbox"/> | Appendix D Procedures Followed for Survey Instruments; or _____ <i>(Check One)</i> | <input type="checkbox"/> | Equivalent Information Attached |
| <input type="checkbox"/> | Equivalent Procedures Attached; and | 19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS <i>(Check One)</i> | |
| <input type="checkbox"/> | Appendix D Procedures Followed for Dose Calibrator; or _____ <i>(Check One)</i> | <input type="checkbox"/> | Appendix K Procedures Followed; or |
| <input type="checkbox"/> | Equivalent Procedures Attached | <input type="checkbox"/> | Equivalent Procedures Attached |
| 11. FACILITIES AND EQUIPMENT | | 20. THERAPEUTIC USE OF SEALED SOURCES | |
| <input type="checkbox"/> | Description and Diagram Attached | <input type="checkbox"/> | Detailed Information Attached; and |
| 12. PERSONNEL TRAINING PROGRAM | | <input type="checkbox"/> | Appendix L Procedures Followed; or _____ <i>(Check One)</i> |
| <input type="checkbox"/> | Description of Training Attached | <input type="checkbox"/> | Equivalent Procedures Attached |
| 13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL | | 21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon - 133) | |
| <input type="checkbox"/> | Detailed Information Attached | <input type="checkbox"/> | Detailed Information Attached |
| 14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS <i>(Check One)</i> | | 22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS | |
| <input type="checkbox"/> | Appendix F Procedures Followed; or | <input type="checkbox"/> | Detailed Information Attached |
| <input type="checkbox"/> | Equivalent Procedures Attached | 23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b | |
| <input type="checkbox"/> | | <input type="checkbox"/> | Detailed Information Attached |

24. PERSONNEL MONITORING DEVICES

| TYPE <small>(Check appropriate box)</small> | | SUPPLIER | EXCHANGE FREQUENCY |
|--|-----------------|----------|--------------------|
| a. WHOLE BODY | FILM | | |
| | TLD | | |
| | OTHER (Specify) | | |
| b. FINGER | FILM | | |
| | TLD | | |
| | OTHER (Specify) | | |
| c. WRIST | FILM | | |
| | TLD | | |
| | OTHER (Specify) | | |

d. OTHER (Specify)

25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL

NAME OF HOSPITAL

Hahnemann Medical College and Hospital

MAILING ADDRESS

Broad and Vine Streets

CITY

Philadelphia,

STATE

PA

ZIP CODE

b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR.

c. WHEN REQUESTING THERAPY PROCEDURES, ATTACH A COPY OF RADIATION SAFETY PRECAUTIONS TO BE TAKEN AND LIST AVAILABLE RADIATION DETECTION INSTRUMENTS.

26. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 1a certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Parts 30 and 35, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

a. LICENSE FEE REQUIRED
(See Section 170.31, 10 CFR 170)

b. APPLICANT OR CERTIFYING OFFICIAL (Signature)

(1) NAME (Type of Print)

Paul S. Friedman, M.D.

(2) TITLE

Radiologist

c. DATE

August 30, 1985

(1) LICENSE FEE CATEGORY:

(2) LICENSE FEE ENCLOSED: \$ 120.00

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313M. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S)** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30-36 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES** The information may be used: (a) to provide records to State health departments for their information and use; and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for a NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you. A copy of the license issued will routinely be placed in the NRC's Public Document Room, 1717 H Street, N.W., Washington, D.C.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed.
5. **SYSTEM MANAGER(S) AND ADDRESS** Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

Approved by OMB
3150-0041
Expires 9-30-86

| | |
|--|--|
| 1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER | 2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE |
|--|--|

| 3. CERTIFICATION | | |
|----------------------|---------------|-------------------------------|
| SPECIALTY BOARD A | CATEGORY B | MONTH AND YEAR CERTIFIED C |
| | | |

| 4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES | | | |
|---|---------------------------------------|---|--|
| FIELD OF TRAINING A | LOCATION AND DATE(S) OF TRAINING B | TYPE AND LENGTH OF TRAINING | |
| | | LECTURE/ LABORATORY COURSES (Hours) C | SUPERVISED LABORATORY EXPERIENCE (Hours) D |
| a. RADIATION PHYSICS AND INSTRUMENTATION | | | |
| b. RADIATION PROTECTION | | | |
| c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY | | | |
| d. RADIATION BIOLOGY | | | |
| e. RADIOPHARMACEUTICAL CHEMISTRY | | | |

| 5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience) | | | | |
|--|----------------|-----------------------------|------------------------|-------------|
| ISOTOPE | MAXIMUM AMOUNT | WHERE EXPERIENCE WAS GAINED | DURATION OF EXPERIENCE | TYPE OF USE |
| | | | | |

PRECEPTOR STATEMENT

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

| | | |
|---|---------------------|---|
| 1. APPLICANT PHYSICIAN'S NAME AND ADDRESS | | KEY TO COLUMN C PERSONAL PARTICIPATION SHOULD CONSIST OF: 1-Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage. 2-Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data. 3-Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment. |
| FULL NAME | | |
| STREET ADDRESS | | |
| CITY | STATE ZIP CODE | |

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

| ISOTOPE A | CONDITIONS DIAGNOSED OR TREATED B | NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C | COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D |
|----------------------|---|---|---|
| I-131 or I-125 | DIAGNOSIS OF THYROID FUNCTION | | |
| | DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME | | |
| | LIVER FUNCTION STUDIES | | |
| | FAT ABSORPTION STUDIES | | |
| | KIDNEY FUNCTION STUDIES | | |
| | IN VITRO STUDIES | | |
| OTHER | | | |
| I-125 | DETECTION OF THROMBOSIS | | |
| I-131 | THYROID IMAGING | | |
| P-32 | EYE TUMOR LOCALIZATION | | |
| Se-75 | PANCREAS IMAGING | | |
| Yb-169 | CISTERNOGRAPHY | | |
| Xe-133 | BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES | | |
| OTHER | | | |
| Tc-99m | BRAIN IMAGING | | |
| | CARDIAC IMAGING | | |
| | THYROID IMAGING | | |
| | SALIVARY GLAND IMAGING | | |
| | BLOOD POOL IMAGING | | |
| | PLACENTA LOCALIZATION | | |
| | LIVER AND SPLEEN IMAGING | | |
| | LUNG IMAGING | | |
| | BONE IMAGING | | |
| OTHER | | | |

PRECEPTOR STATEMENT (Continued)

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)

| ISOTOPE A | CONDITIONS DIAGNOSED OR TREATED B | NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C | COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D |
|-----------------------|--|--|--|
| P-32 (Soluble) | TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES | | |
| P-32 (Colloidal) | INTRACAVITARY TREATMENT | | |
| I-131 | TREATMENT OF THYROID CARCINOMA | | |
| | TREATMENT OF HYPERTHYROIDISM | | |
| Au-198 | INTRACAVITARY TREATMENT | | |
| Co-60 or Cs-137 | INTERSTITIAL TREATMENT | | |
| | INTRACAVITARY TREATMENT | | |
| I-125 or Ir-192 | INTERSTITIAL TREATMENT | | |
| | TELETHERAPY TREATMENT | | |
| Sr-90 | TREATMENT OF EYE DISEASE | | |
| | RADIOPHARMACEUTICAL PREPARATION | | |
| Mo-99/ Tc-99m | GENERATOR | | |
| Sn-113/ In-113m | GENERATOR | | |
| Tc-99m | REAGENT KITS | | |
| Other | | | |

3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING

4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:

a. NAME OF SUPERVISOR

b. NAME OF INSTITUTION

c. MAILING ADDRESS

d. CITY

5. MATERIALS LICENSE NUMBER(S)

6. PRECEPTOR'S SIGNATURE

7. PRECEPTOR'S NAME (Please type or print)

8. DATE



THE HAHNEMANN MEDICAL COLLEGE & HOSPITAL OF PHILADELPHIA
TWO-THIRTY NORTH BROAD STREET PHILADELPHIA, PENNSYLVANIA 19102

OFFICE OF THE VICE PRESIDENT AND DEAN
(215) 448-7804

December 16, 1980

Paul S. Friedman, M.D.
8107 Cedar Road
Elkins Park, PA 19117

Dear Doctor Friedman:

Your appointment to the Faculty of Hahnemann Medical College as Visiting Professor gives me great pleasure. At a recent meeting of the Academic Affairs Council, your appointment was officially confirmed by the Faculty.

Medical teaching has always emphasized the need for direct teacher-student contact, and this type of teaching is being expanded by new programs in medical education which are being developed. Thus, there is a need for us to enlarge our Faculty by appointing individuals who are trained in the various medical sciences and who have interest in participating in our teaching and research endeavors. In this spirit, I welcome you most cordially to this Faculty.

Cordially yours,

Joseph R. DiPalma, M.D.
Vice President and Dean

JRD:rs

cc: Dr. Luther Brady