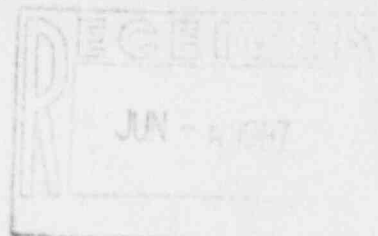


J. DOUGLAS BIRD
President



1233 East Second
Casper, Wyoming 82601
(307) 577-7201

3 June 1987

U.S. Nuclear Regulatory Commission Region IV
611 Ryan Plaza Dr., Suite 1000
Arlington, TX 76011

Nuclear Materials Section

RE: Materials License #49.00152.02 for Wyoming Medical Center

Attention: Mr. C.L. Cain

This letter is to request to amend our material license
#49.00152.02

We wish to add Dr. Steven R. Horn to the above license under each
group he is qualified for.

Please see the enclosed 313 M form and the copy of the license
from the Air Force Academy Hospital in Colorado where he was
previously licensed.

Also, we would like to inform the commission of the recent
addition to our Nuclear Medicine Department of a second Gamma
Camera computer. The camera is a Siemens L.E.M. portable and the
computer an A.D.A.C. 3300.

If you have any further questions please call our Radiation
Safety Officer, Warren Strayer at (307)-577-2397.

We wish to thank you for your time and attention to this matter.

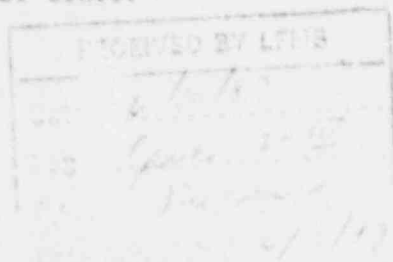
Sincerely,

J. Douglas Bird, President
Wyoming Medical Center

JDB/kem

FEE EXEMPT

170.11(4)(b) Cont'd



8801250119 870724
REG4 LIC30
49-00152-02 PDR

Partner - VHA/Mtn. States
Affiliate of the Voluntary Hospitals of America System

461529



DEPARTMENT OF THE AIR FORCE
WILFORD HALL USAF MEDICAL CENTER (AFSC)
LACKLAND AIR FORCE BASE, TEXAS 78236

REPLY TO:
ATTN OF: SCHOR

10 April 1985

SUBJECT: Radionuclide Training and Experience

TO: WHOM IT MAY CONCERN

The following supplementary information is provided relative to items 4 and 5 of NRC-313M Supplement A, Radioisotope Training and Experience, received by Dr. Steven R. Horn during his three year residency in Diagnostic Radiology at Wilford Hall.

a. His training in basic radioisotope handling techniques covered all of the elements of training given in paragraph 4 of NRC-313M Supplement A as part of a three year diagnostic radiology residency. This residency was fully accredited by the Accreditation Council for Graduate Medical Education of the American Medical Association and included three months of rotation through the Nuclear Medicine Service.

b. During his three month rotation through Nuclear Medicine, he obtained over 500 hours of experience with radiation, including personal participation in radioisotope generator elution, radiopharmaceutical reagent kit preparation, radioisotope package monitoring, radiation protection surveys, survey for removable contamination, quality control of dose calibrator, and calculation, preparation and calibration of patient doses.

Frederick L. Weiland
FREDERICK L. WEILAND, Lt Col, USAF, MC
Chief, Nuclear Medicine Service

461529

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

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	See attached sheet		
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
		See attached sheet		

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

FULL NAME

Steven R. Horn

STREET ADDRESS

Wilford Hall USAF Medical Center

CITY STATE ZIP CODE

Lackland AFB, Texas 78236

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.

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

ISOTOPE	CONDITIONS DIAGNOSED OR TREATED	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION	COMMENTS <i>(Additional information or comments may be submitted in duplicate on separate sheets.)</i>
A	B	C	D
I-131 or I-125	DIAGNOSIS OF THYROID FUNCTION	0	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	8	
	LIVER FUNCTION STUDIES	0	
	FAT ABSORPTION STUDIES	0	
	KIDNEY FUNCTION STUDIES	0	
	IN VITRO STUDIES	0	
OTHER		0	
I-125	DETECTION OF THROMBOSIS	0	
I-131	THYROID IMAGING	0	
P-32	EYE TUMOR LOCALIZATION	0	
Se-75	PANCREAS IMAGING	0	
Yb-169	CISTERNOGRAPHY	0	
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	76	
OTHER	Ga67, Tl201, I123	321	
Tc-99m	BRAIN IMAGING	28	
	CARDIAC IMAGING	154	
	THYROID IMAGING	0	
	SALIVARY GLAND IMAGING	2	
	BLOOD POOL IMAGING	17	
	PLACENTA LOCALIZATION	0	
	LIVER AND SPLEEN IMAGING	362	
	LUNG IMAGING	62	
	BONE IMAGING	757	
OTHER	Renal, GI Bleed, Disida, ect	355	

PRECEPTOR STATEMENT (Continued)

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

ISOTOPE	CONDITIONS DIAGNOSED OR TREATED	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.)
A	B	C	D
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	0	
P-32 (Colloidal)	INTRACAVITARY TREATMENT	2	
I-131	TREATMENT OF THYROID CARCINOMA	3	
	TREATMENT OF HYPERTHYROIDISM	10	
Au-198	INTRACAVITARY TREATMENT	0	
Co-60 or Cs-137	INTERSTITIAL TREATMENT	0	
	INTRACAVITARY TREATMENT	0	
I-125 or Ir-192	INTERSTITIAL TREATMENT	0	
Co-60 or Cs-137	TELETHERAPY TREATMENT	0	
Sr-90	TREATMENT OF EYE DISEASE	0	
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR	5	
Sn-113/ In-113m	GENERATOR	0	
Tc-99m	REAGENT KITS	5	
Other			

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

December 1983
January 1984
November 1984
December 1984
Total of 520 hours

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

a. NAME OF SUPERVISOR

Frederick L. Weiland

b. NAME OF INSTITUTION

Wilford Hall USAF Medical Center

c. MAILING ADDRESS

Lackland AFB, Tx 78236

d. CITY

San Antonio

e. MATERIALS LICENSE NUMBER(S)

42-02682-01

5. PRECEPTOR'S SIGNATURE

Frederick L. Weiland

FREDERICK L. WEILAND, LT COL, USAF, MC 9386R

7. PRECEPTOR'S ADDRESS (print)

274 22 4304, CWL, Nuclear Medicine
Wilford Hall USAF Med Cen 403-384

Frederick L. Weiland

8. DATE

9 April 1985

FORM NRC-313M-SUPPLEMENT C
(8-78)

RADIOACTIVE MATERIAL PERMIT

USAF RADIOISOTOPE COMMITTEE

PAGE 1 OF 4 PAGES

Pursuant to the authority stated in AFR 161-16, Control of Radioactive Material, and in reliance on statements made by the applicant, permission is hereby granted to receive, possess, and store radioactive materials listed below, and to use this material for the purpose and at the places listed below.

1. ORGANIZATION (Name and Address) USAF Academy Hospital/SGHH USN Academy Colorado Springs, Colorado 80840-5300	2. PERMIT NO. 05-126. 2-2AFP	3. AMENDMENT NO.
	4. EXPIRATION DATE 31 Mar 1988	
	5. DOCKET NO. 030-01236	

6. RADIOACTIVE MATERIAL (Element and Mass Numbers)	7. CHEMICAL/PHYSICAL FORM (NSN or Model Number)	8. MAXIMUM QUANTITY AUTHORIZED
A. Any byproduct material listed in Groups I and II, Schedule A, 10 CFR 35.100	A. Any radiopharmaceutical listed in Groups I and II, Schedule A, 10 CFR 35.100	A. As necessary for uses authorized in Subitem 9.A.
B. Any byproduct material listed in Group III, Schedule A, 10 CFR 35.100	B. Any form listed in Group III, Schedule A, 10 CFR 35.100	B. As necessary for uses authorized in Subitem 9.B.
C. Xenon 133	C. Gas or Gas in saline	C. 160 millicuries
D. Strontium 90	D. Sealed source 3M Model 601A	D. 50 millicuries
E. Cobalt 57	E. Cyanocobalamin; sealed sources	E. 7.5 millicuries
F. Gallium 67	F. Gallium citrate	F. As needed
G. Iodine 123	G. Sodium iodide	G. As needed
H. Thallium 201	H. Thallous chloride	H. As needed
I. Indium 111	I. Any	I. As needed
J. Any accelerator produced material	J. Any	J. As needed
K. Iodine 131	K. Sodium iodide	K. As needed

9. Authorized use
- A. Any diagnostic procedure listed in Groups I and II, Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.
 - B. Preparation and use of radiopharmaceuticals for any diagnostic procedure listed in Group III, Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.
 - C. Blood flow and pulmonary function studies.
 - D. Storage only.
 - E. Schillings test.
 - F. Whole body imaging.
 - G. Diagnosis of thyroid function; imaging.
 - H. Myocardial perfusion imaging.
 - I. Imaging.
 - J. Any FDA approved procedure.
 - K. Therapy.

CONDITIONS

10. The authority for this permit is U.S. Nuclear Regulatory Commission (NRC) Broad Scope License No. 42-23539-01AF issued to the USAF Radioisotope Committee and AFR 161-16.

RADIOACTIVE MATERIAL PERMIT
USAF RADIOISOTOPE COMMITTEE
SUPPLEMENTARY SHEET

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PERMIT NO.

05-12629-2AFP

AMENDMENT NO.

DOCKET NO.

030-01236

CONDITIONS

11. The permittee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections", Part 20, "Standards for Protection Against Radiation", and Part 35, "Human Uses of Byproduct Material".
12. The permitted material shall be used only at permittee's facilities at USAF Academy, Colorado Springs, Colorado.
13. The permitted material listed in Item 6 above is authorized for use by the following individual(s) for the materials and uses indicated:

NAME

USES

Joseph R. Miranda, MD
Stephen Ray Horn, MD

As specified in Item 9 A-K
As specified in Item 9 A-K

14. Joseph R. Miranda, MD is designated Radiation Protection Officer.
15. Radioactive gases as free gas or in solution to be administered to humans shall be procured from a supplier which distributes the product indicated for human use in accordance with the Federal Food, Drug, and Cosmetic Act.
16. Only FDA approved radiopharmaceuticals shall be administered to humans after assay and radiopharmaceutical quality have been established. Any proposed use of investigational radiopharmaceuticals, or approved radiopharmaceuticals for unlabeled purposes, must be submitted to the USAF Surgeon General's Clinical Investigational Committee in accordance with AFR 169-6.
17. A. (1) Each sealed source acquired from another person and containing permitted material, other than Hydrogen 3, with a half-life greater than 30 days and in any form other than gas shall be tested for contamination and/or leakage before use. In the absence of a certificate from a transferor indicating that a test has been made within 6 months before the transfer, a sealed source received from another person shall not be put into use until tested.
(2) Notwithstanding the periodic leak test required by this condition, any permitted sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
(3) Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within 6 months before the date of use or transfer.

**RADIOACTIVE MATERIAL PERMIT
USAF RADIOISOTOPE COMMITTEE
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PERMIT NO.
05-12629-2AFP

AMENDMENT NO.

DOCKET NO.
030-01236

CONDITIONS

17. continued

- B. Each sealed source containing permitted material, other than Hydrogen 3, with a half-life greater than 30 days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed 6 months except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed 3 months.
 - C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the NRC, the USAF Radioisotope Committee, or the Medical Directorate of the Air Force Inspection and Safety Center (AFISC), Norton AFB, California 92409-7001.
 - D. Test sample(s) shall be collected by the permittee or forwarded to the Radioanalytical Services Branch of the USAF Occupational and Environmental Health Laboratory (USAFOEHL/RZA), Brooks AFB, Texas 78235-5501 for evaluation.
 - E. If the test required by Subsection A. or B. of this condition reveals the presence of 0.005 microcurie or more of removable contamination, the permittee shall immediately withdraw the sealed source from use and shall decontaminate it and either repair or dispose of it in accordance with NRC regulations and Air Force directives. A report shall be filed within 5 days of the test with the USAF Radioisotope Committee (Address: HQ AFOMS/SGPR, Brooks AFB, Texas 78235-5000) describing the equipment involved, the test results, and the corrective action taken.
18. The permittee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:
- A. Radioactive waste to be disposed of in this manner shall be held for decay for a minimum of 10 half-lives.
 - B. Prior to disposal as normal waste, radioactive waste shall be monitored to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
 - C. Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.
19. The permittee may use the Calicheck device for doing linearity tests of its dose calibrator provided it follows the procedures in the Calcorp, Inc., Manual dated March 2, 1982.
20. Patients containing Iodine 131 for the treatment of thyroid carcinoma or patients containing therapeutic quantities of Gold 198 shall remain hospitalized until the residual activity is 30 millicuries or less.

RADIOACTIVE MATERIAL PERMIT
USAF RADIOISOTOPE COMMITTEE
SUPPLEMENTARY SHEET

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PERMIT NO.

05-12629-2AFP

AMENDMENT NO.

DOCKET NO.

030-01236

CONDITIONS

21. For period not to exceed 60 days in any calendar year, a visiting physician is authorized to use permitted material for human use under the terms of this permit, provided the visiting physician:
- A. Has the prior written permission of the hospital's Administrator and Radioisotope/Radiation Safety Committee, and
 - B. Is specifically named as a user on a USAF Radioactive Material Permit, a U.S. Nuclear Regulatory Commission license, or an Agreement State license authorizing human use, and
 - C. Performs only those procedures for which he/she is specifically authorized to perform by a USAF Radioactive Material Permit, a U.S. Nuclear Regulatory Commission license, or an Agreement State license.
- The permittee shall maintain for inspection by the USAF Radioisotope Committee, copies of the written permission specified in A. above and of the permit(s)/license(s) specified in B. and C. above for a period of 5 years from the date the permission is granted above.
22. A copy of the minutes of each Radiation Safety Committee meeting shall be forwarded to the USAF Radioisotope Committee within 30 days of the meeting.
23. The permittee shall ensure that a qualified Air Force medical physicist conducts a medical physics assistance visit at intervals not to exceed 12 months. A copy of the assistance visit report will be forwarded to the USAF Radioisotope Committee within 30 days of report publication.
24. Except as specifically provided otherwise by this Permit, the possession and use of the radioactive material described in Items 6, 7, and 8 above shall be in accordance with the statements, representations, and procedures contained in renewal application dated 20 Feb 1985 (reference previous permit number 05-20007-4AFP) and renewal application dated 12 May 1986 and 17 Jul 1986 (reference permit number 05-12629-2AFP). The Nuclear Regulatory Commission's regulations and United States Air Force directives shall govern the permittee's statements in applications or letters, unless the statements are more restrictive than the regulations and directives.

Date 22 AUG 1986

FOR THE USAF RADIOISOTOPE COMMITTEE

By

Lawrence Donovan

LAWRENCE DONOVAN, Captain, USAF, BSC
USAF Radioisotope Committee
Office of the Surgeon General