fwe

August 11, 2011

U.S. Nuclear Regulatory Commission,
Region IV
Attn: DNMS/NMSBB
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

Re: License No 25-10994-04
Amendment to add authorize users
Amendment requests for ADR EA-10-258

Please find attached for your review and consideration a license amendment to add authorized users to our existing license.

- NRC form 313 Application for Material License
- Authorize User forms 313
- Documentation for amendment requests (EA-10-258)

Thank you for your time and consideration

Sincerely,

Lawrence Slate
Radiation Safety Officer/Medical Physicist
406 522-1626

This application is based on the guidelines NUREG-1556 Volume 9 "Consolidated Guidance About Materials Licenses: Program Specific Guidance About Medical Material Use Licenses."

Item 1 License Application Type

This is an application to amend the facilities present NRC License # 25-10994-04

Item 2 Applicant's Name and Mailing Address

Bozeman Deaconess Hospital
915 Highland Boulevard
Bozeman, Montana 59715

Item 3 Address Where Licensed Material will be Used or Possessed

Bozeman Deaconess Hospital
915 Highland Boulevard
Bozeman, Montana 59715

Item 4 Person to be contacted about the Application

Lawrence J. Slate
Radiation Oncology
Bozeman Deaconess Hospital
915 Highland Boulevard
Bozeman, Montana 59715
406 522-1626

Please find for your review and consideration the documentation to add the following individuals as Authorized users on our license for 10 CFR 100 and 10 CFR 200 and 10 CFR 300:

Kevin Michael Duwe, MD

Albert Paul Meier, MD

Please find for your review and consideration the documentation to add the following individuals as Authorized users on our license for 10 CFR 100 and 10 CFR 200:

Alexander P. Knapik, MD

Please remove Lindy Kurz Paradise from our license.

Also, I would like to request that Daniel F. Alderman, MD be added as 10 CFR 300 instead on Oral administration of sodium iodide I-131.

Documentation for amendment request for ADR EA-10-258

1. Procedures have been written to describe how licensed materials shall be secured from unauthorized removal or access that are stored in controlled or unrestricted areas along with licensed materials not in storage.

4. The training program at Bozeman Deaconess Hospital includes the model training program outlined in NUREG 1556 Volume 9 Rev 2. and 10 CFR 19.12(a).

5. The Radiation Safety Officer candidate will be board certified recognized by the NRC (i.e., ABR, ABMP) physicist. The Radiation Safety Committee will review the candidate's qualifications to insure they are qualified to be considered for the position by the Commission.

6. Bozeman Deaconess Hospital has developed a policy which implements a procedure which enables hospital employees and contractors to bring to light any radiation concerns they may have to hospital management anonymously. The concerns will be reviewed and resolved by the Radiation Safety Officer and or the Radiation Safety Committee within a two week period.

NRC FORM 313 (3-2009) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND
ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S.NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR *(Check appropriate item)*

- [ ] A. NEW LICENSE
- [x] B. AMENDMENT TO LICENSE NUMBER 25-10994-04
- [ ] C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include ZIP code)*

Bozeman Deaconess Hospital
915 Highland Boulevard
Bozeman MT 59715

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Bozeman Deaconess Hospital
915 Highland Boulevard
Bozeman MT 59715

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Lawrence J Slate

TELEPHONE NUMBER

406 522-1626

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number; b. chemical and/or physical form; and c. maiximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES *(See 10 CFR 170 and Section 170.31)*

FEE CATEGORY	AMOUNT ENCLOSED $

13. CERTIFICATION. *(Must be completed by applicant)* THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTANED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE	SIGNATURE	DATE
Lawrence J Slate RSO		8/12/11

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED $	CHECK NUMBER	COMMENTS
APPROVED BY				DATE	

NRC FORM 313 (3-2009) PRINTED ON RECYCLED PAPER

№ 575798

FORM MAT-4 (6/2001) Page 1 of 2

RHODE ISLAND RADIATION CONTROL AGENCY

RADIOACTIVE MATERIAL LICENSE

Pursuant to Title 23, Chapter 1.3 of the General Laws of Rhode Island and the Rules and Regulations for the Control of Radiation, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the Rules and Regulations for the Control of Radiation. This license is subject to all applicable rules, regulations, and orders of the Rhode Island Radiation Control Agency now or hereafter in effect and to any conditions specified below.

LICENSEE	This license is issued in response to letters:
1. Name: Newport Hospital	Dated: **License renewal – See conditions 15A-15C**
	Signed by:
2. Address: 19 Friendship Street Newport, RI 02840-2200	3. License Number **7B-016-01** / Amendment Number **15 Renewal/Corrected Copy**
	PREVIOUS AMENDMENTS ARE VOID
	4. Expiration Date: 31 March 2019

RADIOACTIVE MATERIAL AUTHORIZED

5. Radioisotope	6. Form of Material	7. Maximum Activity	8. Authorized Use
A. Any radioactive material authorized by C.8.28 of the Rules and Regulations for the Control of Radiation.	A. Any	A. As necessary for uses authorized in subitem 8.A.	A. Any uptake, dilution or excretion procedure authorized by C.8.28 of the Rules and Regulations for the Control of Radiation.
B. Any radioactive material authorized by C.8.30 of the Rules and Regulations for the Control of Radiation.	B. Any	B. As necessary for uses authorized in subitem 8.B.	B. Any imaging or localization procedure authorized by C.8.30 of the Rules and Regulations for the Control of Radiation.
C. Xenon 133	C. Free gas or solution	C. 600 mCi	C. Pulmonary function studies and blood flow studies
D. Iodine 131	D. Capsules	D. 40 mCi	D. Treatment of hyperthyroidism.
E. Gadolinium-153	E. Sealed Source (Lunar GD Series)	E. One source not to exceed 16 μCi	E. In storage
F. Samarium-153	F. Quadramet™ (samarium lexidronam pentasodium)	F. 115 mCi	F. & G. Palliation of pain in metastatic bone cancer.
G. Strontium-89	G. Strontium Chloride	G. 6 mCi	

CONDITIONS

9. Licensed material shall be used only at the licensee's facilities located at 19 Friendship Street, Newport, RI.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Ci=Curie(s); mCi=millicurie(s); μCi=microcurie(s)

No. 575798

FORM MAT-4A (6/2001)

RHODE ISLAND RADIATION CONTROL AGENCY

RADIOACTIVE MATERIAL LICENSE

License Number	Amendment Number
7B-016-01	15 Renewal/Corrected Copy

10. Licensed material listed in Item 6 above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized User	Material and Use
Donald B. Fletcher, M.D.	Materials authorized by C.8.28, C.8.30; Xenon 133
Jeffery P. Houston, M.D.	Materials in C.8.28; C.8.30; Xenon 133; Iodine 131 for treatment of hyperthyroidism; Strontium 89 and Samarium 153 for palliation of pain in metastatic bone cancer.
William H. Martland, M.D.	Materials in C.8.28; C.8.30; Xenon 133; Iodine 131 for treatment of hyperthyroidism; Strontium 89 and Samarium 153 for palliation of pain in metastatic bone cancer.

11. **The Radiation Safety Officer for this license is William H. Martland, M.D.**

12. In addition to the possession limits in Item 7, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in paragraph C.5.16(d) of the Rules and Regulations for the Control of Radiation for establishing decommissioning financial assurance.

13. Sealed sources containing licensed material shall not be opened.

14. The licensee is authorized to transport licensed material only in accordance with the provisions of Subpart C.7 of the Rules and Regulations for the Control of Radiation.

15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Radiation Control Agency's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Renewal application dated 25 February 2003, signed by Todd A. Cipriani.
B. Letter dated 23 October 2009, signed by Ninni Jacob, CHP.
C. Letter dated 20 January 2011, signed by Ninni Jacob, CHP.

Date 4 February 2011

For the Rhode Island Radiation Control Agency

By _____

NRC FORM 313A (AUD)
(3-2009)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION
(for uses defined under 35.100, 35.200, and 35.500) [10 CFR 35.190, 35.290, and 35.590]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 3/31/2012

Name of Proposed Authorized User	State or Territory Where Licensed
Alexander P. Knapik	Montana

Requested Authorization(s) *(check all that apply)*

- [X] 35.100 Uptake, dilution, and excretion studies
- [X] 35.200 Imaging and localization studies
- [ ] 35.500 Sealed sources for diagnosis (specify device _____)

PART I – TRAINING AND EXPERIENCE
(Select one of the three methods below)

* Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

- [ ] **1. Board Certification**
  - a. Provide a copy of the board certification.
  - b. If using only 35.500 materials, stop here. If using 35.100 and 35.200 materials, skip to and complete Part II Preceptor Attestation.
- [ ] **2. Current 35.390 Authorized User Seeking Additional 35.290 Authorization**
  - a. Authorized user on Materials License _____ . _____ meeting 10 CFR 35.390 or equivalent Agreement State requirements seeking authorization for 35.290.
  - b. Supervised Work Experience.
    (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience*
Eluting generator systems appropriate for the preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs			

Total Hours of Experience:

Supervising Individual	License/Permit Number listing supervising individual as an authorized user

Supervisor meets the requirements below, or equivalent Agreement State requirements *(check all that apply)*.

[ ] 35.290 [ ] 35.390 + generator experience in 32.290(c)(1)(ii)(G)

NRC FORM 313A (AUD) (3-2009) U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

☐ **3. Training and Experience for Proposed Authorized User**

a. Classroom and Laboratory Training.

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation			
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Chemistry of byproduct material for medical use *(not required for 35.590)*			
Radiation biology			
Total Hours of Training:			

b. Supervised Work Experience (completion of this table is not required for 35.590).
(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervised Work Experience		**Total Hours of Experience:**	
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience*
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys		☐ Yes ☐ No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		☐ Yes ☐ No	

No. 575798

NRC FORM 313A (AUD)
(3-2009)
U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. **Training and Experience for Proposed Authorized User (continued)**

b. Supervised Work Experience. (continued)

Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience*
Calculating, measuring, and safely preparing patient or human research subject dosages		☐ Yes ☐ No	
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		☐ Yes ☐ No	
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures		☐ Yes ☐ No	
Administering dosages of radioactive drugs to patients or human research subjects		☐ Yes ☐ No	
Eluting generator systems appropriate for the preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs		☐ Yes ☐ No	

Supervising Individual	License/Permit Number listing supervising individual as an authorized user

Supervisor meets the requirements below, or equivalent Agreement State requirements *(check one)*.

☐ 35.190 ☐ 35.290 ☐ 35.390 ☐ 35.390 + generator experience in 35.290(c)(1)(ii)(G)

c. For 35.590 only, provide documentation of training on use of the device.

Device	Type of Training	Location and Dates

d. For 35.500 uses only, stop here. For 35.100 and 35.200 uses, skip to and complete Part II Preceptor Attestation.

No 575798

NRC FORM 313A (AUD) (3-2009) U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each. (Not required to meet training requirements in 35.590)

By checking the boxes below, the preceptor is attesting that the individual has knowledge to fulfill the duties of the position sought and not attesting to the individual's "general clinical competency."

First Section
Check one of the following for each use requested:

For 35.190

Board Certification

[X] I attest that Alexander P. Knapik (Name of Proposed Authorized User) has satisfactorily completed the requirements in 10 CFR 35.190(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100.

OR

Training and Experience

[ ] I attest that _____ (Name of Proposed Authorized User) has satisfactorily completed the 60 hours of training and experience, including a minimum of 8 hours of classroom and laboratory training, required by 10 CFR 35.190(c)(1), and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100.

For 35.290

Board Certification

[X] I attest that Alexander P. Knapik (Name of Proposed Authorized User) has satisfactorily completed the requirements in 10 CFR 35.290(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100 and 35.200.

OR

Training and Experience

[ ] I attest that _____ (Name of Proposed Authorized User) has satisfactorily completed the 700 hours of training and experience, including a minimum of 80 hours of classroom and laboratory training, required by 10 CFR 35.290(c)(1), and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100 and 35.200.

Second Section
Complete the following for preceptor attestation and signature:

[X] I meet the requirements below, or equivalent Agreement State requirements, as an authorized user for:

[X] 35.190 [X] 35.290 [ ] 35.390 [ ] 35.390 + generator experience

Name of Preceptor	Signature	Telephone Number	Date
William Martland	William H. Martland for	401 845 1958	7/25/11

License/Permit Number/Facility Name
7B-016-01 Newport Hospital, Newport RI 02840

THE AMERICAN BOARD OF RADIOLOGY
INCORPORATED IN THE DISTRICT OF COLUMBIA 1934

ABR 75 YEARS
THE AMERICAN BOARD OF RADIOLOGY
SERVING THE PUBLIC TRUST

AMERICAN BOARD OF MEDICAL SPECIALTIES

5441 E. Williams Boulevard, Suite 200 · Tucson, Arizona 85711-4493 · Phone (520) 790-2900 · Fax (520) 790-3200
E-mail: information@theabr.org · website: www.theabr.org

June 3, 2009

ABRID 58442 / DR / 10 / 42 Alexander Pawel Knapik, MD

Confirmation # 933F0EF3

Dear Dr. Knapik:

I am pleased to inform you that you passed the oral examination held on May 31 to June 3, 2009. The American Board of Radiology grants you its Certificate in Diagnostic Radiology. This is a ten-year time-limited certificate. In addition, because you received the appropriate training to make you AU-Eligible and passed the NRC-related portions of the nuclear radiology section, you will receive the AU-Eligible designation on your certificate.

The certificate will be sent to the above address in approximately three months from our printer, Jim Henry, Inc. Your name will appear on the certificate as shown above. If you wish your name to appear differently or you have an address change, please notify the Board office in writing by July 03, 2009. Your name and demographic information will be included in a Directory published by the American Board of Medical Specialties. It is your responsibility to notify other local and state or national organizations of your certification.

Important information about your Maintenance of Certification process is enclosed. Please review it and respond as requested.

Personally and on behalf of the Board of Trustees of The American Board of Radiology, I wish to congratulate you for this distinguished achievement. You have accomplished one of the most significant milestones in your career.

Sincerely,

Gary J. Becker, MD

Enclosures

ARRA-3
February 2008

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

Pursuant to Chapter 4, Title 30, Arizona Revised Statutes, and Title 12, Chapter 1 of the Arizona Administrative Code, and in reliance on statements and representations made to the Agency by the licensee, a license is hereby issued authorizing the acquisition, reception, possession, use and transfer of the radioactive material listed in this license for the purposes and at the places specified. This license is subject to all applicable rules and Agency orders now or hereafter in effect and to the conditions specified. **In accordance with letter dated September 22, 2010, signed by Jennifer Velez, License Number 7-106 is hereby amended in its entirety to read as follows: ALL CHANGES ARE IN BOLD**

LICENSEE

1. **NAME:** Banner Health d/b/a Banner Desert Medical Center
2. **ADDRESS:** 1400 S. Dobson Road Mesa, Arizona 85202

3. a. **LICENSE NUMBER:** 7 - 106
   b. **AMENDMENT NO.:** 102
4. **EXPIRATION DATE:** December 31, 2010
5. **CATEGORY:** B2 - MEDICAL MATERIALS CLASS A

6. Radioactive material (element and mass number)	7. Chemical or physical form	8. Maximum quantity licensee may possess at any time
A. Any radioactive material listed in Group 100 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	A. Any prepared radiopharmaceutical authorized in Group 100 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	A. 37 GBq (1,000 millicuries)
B. Any radioactive material listed in Group 200 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	B. Any prepared radiopharmaceutical authorized in Group 200 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	B. 37 GBq (1,000 millicuries)
C. Any radioactive material listed in Group 300 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	C. Any prepared radiopharmaceutical authorized in Group 300 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	C. 37 GBq (1,000 millicuries)
D. Any radioactive material listed in Group 400 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	D. **Sealed source (Approved for medical use in the Sealed Source and Device Registry)**	D. 14.8 GBq (400 millicuries)
E Any radioactive material listed in Group 500 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7	E. **Sealed source (Approved for medical use in the Sealed Source and Device Registry)**	E. 18.5 GBq (500 millicuries)

POST IN ACCORDANCE WITH R12-1-1002

№ 5757 98

ARRA-3 (Cont.)
January 2008

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 7-106
Amendment Number: 102

F.	Xenon-133	F.	Gas or gas in saline	F.	7.4 GBq (200 millicuries)
G.	Technetium-99m	G.	Technetium Pertechnetate in saline	G.	11.1 GBq (300 millicuries)
H.	Thallium-201	H.	Thallium Chloride	H.	1.11 GBq (30 millicuries)

9. **Authorized Use:**

A. For diagnostic studies involving measurements of uptake, dilution and excretion, not requiring a written directive, authorized in Group 100 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7.

B. For diagnostic studies involving imaging and localizations, not requiring a written directive, authorized in Group 200 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7. PET radiopharmaceutical may be used if the licensee has demonstrated to the Agency that the requirements in R12-1-716 have been met.

C. For medical uses requiring a written directive, as authorized in Group 300 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7.

D. For the use of brachytherapy source for therapeutic medical use as authorized in Group 400 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7.

E. For the use of any sealed source for diagnostic medical use as authorized in Group 500 of Exhibit A, Arizona Administrative Code, Title 12, Chapter 1, Article 7.

F. For blood flow and pulmonary function studies.

G. For use in cardiac studies only.

H. For use in cardiac studies only.

CONDITIONS

10. Radioactive material may be possessed and used only at the licensee's address stated in Item 2 above.

11. The licensee shall comply with the provisions of Title 12, Chapter 1, Arizona Administrative Code, Article 3, "Licensing of Radioactive Materials"; Article 4, "Standards for Protection Against Radiation"; Article 7, "Medical Uses of Radioactive Material"; and Article 10, "Notices, Instructions, and Reports to Ionizing Radiation Workers; Inspections".

POST IN ACCORDANCE WITH R12-1-1002

ARRA-3 (Cont.)
January 2008

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 7-106
Amendment Number: 102

12. A. Radioactive material listed in sub items A, B, and C of Items 6, 7, and 8 shall be used by or under the supervision of the following individuals:

Shirley Chow, M.D.	Stuart B. Cohen, M.D.	Kevin Michael Duwe, M.D.
Scott C. Fleischman, M.D.	Karen Garby, M.D.	Craig E. Hancock, M.D.
Stephen Y. Hu, M.D.	Brian Joseph Igel, M.D.	William T. Jacoby, M.D.
Lari M. Jennings, M.D.	Neal F. Junck, M.D.	Michael Kornreich, M.D.
Neil Kramer, M.D.	James B. Lyons, M.D.	Mark Allen Madsen, M.D.
Steven C. Malchow, M.D.	Katherine E. Martin, M.D.	Steven R. Maxfield, M.D.
Thomas E. McCall, M.D.	Farukh Mian, M.D.	Andrew M. Pohl, M.D.
Seymour G. Rife, M.D.	Brent E. Saunders, M.D.	Joel Corry Schein, M.D.
Mari M. Schenk, M.D.	Tobias Schifter, M.D.	Marvin W. Silvey, M.D.
Mark W. Slepian, M.D.	Elizabeth B. Spencer, M.D.	Sanjeevi Vridhachalam, M.D.
Joseph Edmond Wagner, M.D.	Harold Walker, M.D.	Marc Steven Weinstein, M.D.
E. John Wickman, M.D.	Penny Williams, M.D.	

B. Radioactive materials listed in sub items A, B, C, and F of Item 6, 7, and 8 shall be used by, or under the supervision of, the following individuals:

Stephen Adams, M.D.	Michelle Dorsey, M.D.	Mark Hoffman, M.D.
Amal Jabra, M.D.	David Eric Lawson, M.D.	Asim A. Khwaja, M.D.
Victor Pizzitola, M.D.	Stephanie Wang, M.D.	

C. Radioactive materials listed in sub items A, B, and F of Item 6, 7, and 8 shall be used by, or under the supervision of, the following individual:

Caryn A. Doudna, M.D.	Monty Duncan Snow, M.D	Marvin Kai-Hing Tam M.D.
Joel Rainwater, M.D.		

D. Radioactive materials listed in sub items G and H of item 6, 7, and 8 shall be used by, or under the supervision of the following individuals:

POST IN ACCORDANCE WITH R12-1-1002

№ 575798

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 7-106
Amendment Number: 102

D. Continued

Rajiv Ashar, M.D.	Michael D. Barry, D.O.	L. Chapman Bean, M.D.
Mark Berkowitz, M.D.	Micheleanne Celigoj, M.D.	Jean Chatham, M.D.
Joshua Coher, M.D.	Ernesto Cruz, M.D.	Robert Dappen, M.D.
Ziad Elghoul, M.D.	Umaima Fatima, M.D.	Neil J. Goldberg, D.O.
Robert J. Hamburg, M.D.	Duane W. Heinrichs, M.D.	David Kassel, M.D.
Daniel Klee, M.D.	Suntharo Ly, M.D.	Michael O'Meara, M.D.
Mehul Shah, M.D.	Jon Stevenson, M.D.	Arman Talle, M.D.

E. Radioactive material listed under sub items A, B, D, and F of Items 6, 7, and 8 shall be used by or under the supervision of:

John J. McGill, M.D.	Donald Paquet, M.D.	Thuyngoc T. Vo, M.D.

F. Radioactive material listed under sub item D and E of Items 6, 7, and 8 shall be used by or under the supervision of:

Irene Kyin-Aik Taw, M.D.	Cuci Chen, M.D.	Emily J. Grade, M.D.
Gregory A. Maggass, M.D.	Jeffrey G. Richmond, M.D.	Lauren Stegman, M.D.

G. Radioactive material listed under sub item C of Item 6, 7, and 8 shall be used under the supervision of: Sandra Zaky, M.D.

H. The Radiation Safety Officer for this license is: Robert Steigerwald.

I. The Alternate Radiation Safety Officer is: Jennifer Velez. The Alternate Radiation Safety Officer shall administer the Radiation Safety Program under the policy and procedure guidance of the Radiation Safety Officer.

13. The licensee shall perform a semiannual airflow direction check to verify a negative pressure differential within the Nuclear Medicine Department relative to surrounding areas. The licensee shall also perform annual ventilation flow rate measurements within the Department to ensure that radioactive gases in use are properly diluted and exhausted.

14. A. A licensee who releases a patient under A.A.C. R12-1 717 shall do so in accordance with the guidance in Appendix U of NUREG 1556, Volume 9, Rev 2, available on the NRC website.

B. A licensee who releases a patient into a home occupied by children shall include in the public dose calculation of the internal and external exposure to the child as they are summed in Appendix U of NUREG 1556, Volume 9, Rev 2.

POST IN ACCORDANCE WITH R12-1-1002

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 7-106
Amendment Number: 102

C. A licensee, who releases a patient in accordance with R12-1-717, shall maintain on file a copy of Appendix U of NUREG 1556, Volume 9, Rev 2.

D. The licensee is authorized to release patients in accordance with R12-1-717.

15. The licensee may transport radioactive material or deliver material to a carrier for transport in accordance with the provisions of Title 12, Chapter 1, Article 15.

16. A. The licensee shall ensure, in accordance with A.A.C. R12-1-419(D), that an individual participates in a radioiodine bioassay if the individual:

1. Is likely to receive an annual intake in excess 0.1 of the Annual Limits of Intake (ALI) specified in Table 1, Columns 1 and 2 of Appendix B in 12 A.A.C.1, Article 4;

2. Is a minor or declared pregnant woman likely to receive an annual committed effective dose equivalent in excess of 50 mRem, or

3. Has been involved in a spill, an incident, or other occurrence during which radioiodine may have been taken into the body either by inhalation, ingestion, or by absorption through the skin or a wound.

B. The licensee shall ensure that an Individual who is directly involved in a radioiodine therapy, the handling of radioiodine stock solutions, or is involved in iodination's, and meets, as a minimum, any one of the three criteria in Part A above, participates in a bioassay between 6 and 72 hours following the exposure to radioiodine. With Agency approval, the licensee may perform I-131 bioassays up to 4 weeks and I-125 bioassays up to 12 weeks following radioiodine exposure.

C. For any individual whose cumulative annual intake is likely to exceed 0.1 ALI, the licensee shall perform a dosimetric determination based on the results of the bioassay perform under Part B. To assist in determining the total dose equivalent for the individual, the licensee shall add the obtained dose information to the committed dose equivalent information for the exposed individual. For the exposed individual whose bioassay exceeds 0.25 ALI, the licensee shall restrict the exposed individual from further radioiodine exposure until a bioassay indicates the individuals exposure has dropped below 0.1 ALI.

D. For bioassays exceeding 0.1 ALI, the licensee shall investigate the circumstances surrounding the exposed individual's uptake. Records of the investigation and all bioassay measurements shall be maintained as part of the licensee's personnel dosimetry records and shall be available for inspection by the Agency.

17. The licensee is authorized to treat patients on an outpatient basis with iodine-131 in dosages greater than 33 millicuries in accordance with procedures in NRC REG Guide 8.39, *Release of Patients Administered Radioactive Material*, dated April 1997 and letter from the licensee dated October 13, 2004.

18. Prior to initiating a Bexxar (I-131 Tositumomab) therapy the licensee shall complete the following:

1. A 5 mCi I-131 Tositumomab dosimetric step, as described in the Bexxar literature.

2. The authorized user shall have completed the on-site Bexxar training program and pass the post-training test given by Bexxar. An authorized user listed on this license will not be able to administer I-131 Tositumomab unless certified by Bexxar.

POST IN ACCORDANCE WITH R12-1-1002

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 7-106
Amendment Number: 102

3. Administer a blocking agent to prevent thyroid uptake.

4. The authorized user has accurately performed three "consecutive" patient dosimetry calculations out of six patients.

5. Complete for each treated patient the information and Release Determination form as described in letter to the Agency dated October 13, 2004.

19. The licensee shall not use F-18 radiopharmaceuticals until the Agency has approved the licensee's procedures, equipment, and facilities for its use, and amended this license for F-18 use.

20. For purposes of ending the principal activities authorized under this radioactive material license:

A. The license stays in effect beyond the license expiration date. Beyond the expiration date the licensee shall store radioactive material only, until the Agency authorizes its use by license amendment, or the Agency notifies the licensee in writing that the license is terminated.

B. The licensee shall ensure the timeliness of decommissioning of facilities where principal activities are conducted under this license in accordance with Agency requirements.

C. The licensee shall continue to control public access into restricted areas and pay the annual licensing fee until the license is terminated.

21. A. In lieu of weekly wipe surveys the licensee may perform daily contamination surveys in all radiation use areas. The Licensee shall perform the survey using a survey instrument and probe that can easily detect contamination levels that are commonly observed when performing wipe survey in contaminated work areas.

B. To facilitate the contamination survey, the licensee shall establish a contamination survey action level appropriate for the chosen survey instrument and probe in Part (A).

C. The licensee shall perform a wipe survey following:

1. Any known incident involving spilled radioactive material that may result in contamination of work areas.

2. Contamination surveys that exceed the licensee's contamination survey action level established under Part (B).

22. Except as specifically provided otherwise by this license, the licensee shall possess and use the radioactive material described in Items 6, 7 and 8 of this license in accordance with the statements, representations and procedures contained in:

1. Application dated October 27, 2005, signed by Sabinus Ekeh, MS.
2. Letter with attachments, dated October 13, 2004, signed by Sabinus Ekeh, MS.
3. E-mail dated November 30, 2005 from Sabinus Ekeh.
4. Letter with attachments, dated April 17, 2007, signed by Robert Steigerwald.
5. Letter with attachments, dated February 25, 2008, signed by Jennifer Velez.

POST IN ACCORDANCE WITH R12-1-1002

ARRA-3 (Cont.)
January 2008

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 7-106
Amendment Number: 102

The most recent statements, representations, and procedures shall govern if they conflict with previously submitted documents, unless otherwise specified by a license condition; and the Agency's rules shall govern the licensee's statements in applications or letters.

AUBREY V. GODWIN, DIRECTOR

PRK:AVG:pjp

DATE ISSUED:

SEP 2 0 2010

POST IN ACCORDANCE WITH R12-1-1002

RPR 2A. RESPONSIBLE USER'S TRAINING & EXPERIENCE

(Please type or print legibly)

Surname: Meier Initials: AP UNID: u0533595

Training in Basic Radiation Sciences		Type and Hours of Training	
Subjects	**Location and Dates**	**Formal Courses (Hours)**	**Supervised On-the-Job (Hours)**
Radiation Physics and Instrumentation	7/1/06 - 6/30/10	153	
Radiation Protection		↓	
Mathematics of Radioactivity		↓	
Biological Effects of Radiation		↓	
Radiopharmaceutical Chemistry (Medical users only)		↓	

Work or Practical Experience With Radiation			
Description of Experience	**Name of Supervising Individual**	**Location and Materials License Number**	**Dates and Numbers of Hours of Experience**
7/1/06 - 6/30/10	Kathryn Morton	UT 1800001	560

All applicants who will use radiation on or in humans must also complete RPR 2D and Utah Form DRC-02A.

The information above is accurate and complete.

Signature Pat C Date 6/17/10

RPR 2D. APPLICATION FOR USE OF RADIATION IN OR ON HUMANS

Surname: Meier Initials: APM UNID: u0533595

In addition to the RESPONSIBLE USER'S TRAINING & EXPERIENCE form (RPR 2A) and the RADIATION USER PERSONAL DATA form (RPR 1A), submit the following:

*Check each category and type of **clinical** use of radiation for which you are applying, and for each checked category provide evidence of board certification and Authorized Training and Experience and Preceptor Attestation form* (DRC-02A).

☐	**Radiation Producing Machines**		☐	**Sealed Source Use**	
	☐	Operator of diagnostic x-ray equipment (R313-28-350)		☐	Use of manual brachytherapy sources (10 CFR 35.490)
	☐	Use of diagnostic x-rays for healing arts screening (R313-28-400)		☐	Ophthalmic use of strontium-90 (10 CFR 35.491)
	☐	Therapeutic use of linear accelerator, Physician (R313-30-3)		☐	Use of sealed sources for diagnosis (10 CFR 35.590)
	☐	Radiation Therapy Physicist (R313-30-3)		☐	HDR therapeutic medical devices (10 CFR 35.690)
☒	**Unsealed Byproduct Material**			☐	Microsphere Brachytherapy (10 CFR 35.1000)
	☒	Uptake, dilution and excretion studies (10 CFR 35.190)	☐	Other Medical Uses of Byproduct Material (10 CFR 35.1000) Describe Proposed Use:	
	☒	Imaging and localization studies (10 CFR 35.290)	☐		
	☒	Therapeutic use of radiopharmaceuticals (10 CFR 35.390)	☐		
	☒	Treatment of hyperthyroidism (10 CFR 35.392)	☒	Authorized user (10 CFR 35.2 and 59)	
	☒	Treatment of thyroid carcinoma (10 CFR 35.394)	☐	Authorized medical physicist (10 CFR 35.51 and 59)	
	☐	Parenteral administrations of unsealed byproduct material (10 CFR 35.396)	☐	Authorized nuclear pharmacist (10 CFR 35.55 and 59)	

*Check each category of **research** use of radiation in or on humans for which you are applying;* separate applications for each new protocol or project must be submitted to the Radioactive Drug Research Committee - Human Use Subcommittee.

☐ Research using radioactive materials

☐ Research using machine-generated radiation (i.e., x-rays, electrons)

Acknowledgement:

I have read the University's Radiation Safety Manual and understand the conditions and regulations contained in it. With respect to the requested radiation sources and proposed uses, I acknowledge and accept the responsibility for:

(a) radiation protection instruction for all involved personnel;
(b) acquisition of the equipment, supplies and/or services necessary for radiation protection;
(c) notification of the RSO of any medical event (10 CFR 35.3045 and 3047), accident or abnormal incident.

Signature of Responsible User: [signature] Date: 4/15/2010

THE AMERICAN BOARD OF RADIOLOGY
INCORPORATED IN THE DISTRICT OF COLUMBIA 1934

ABR
THE AMERICAN BOARD OF RADIOLOGY
EXCELLENCE · PROFESSIONALISM · PUBLIC TRUST · EST. 1934

AMERICAN BOARD OF MEDICAL SPECIALTIES 1933 EXCELLENCE

5441 E. Williams Boulevard, Suite 200 · Tucson, Arizona 85711-4493
Phone (520) 790-2900 · Fax (520) 790-3200 · www.theabr.org

May 26, 2010

ABRID 58485 / DR / 4 / 41 Albert Paul Meier, MD

Confirmation # 90C5C3E5

Dear Dr. Meier:

I am pleased to inform you that you passed the oral examination held on May 23-26, 2010. The American Board of Radiology grants you its Certificate in Diagnostic Radiology. This ten-year time-limited certificate is valid through 2020. In addition, because you received the appropriate training to make you AU-Eligible and passed the NRC-related portion of the nuclear radiology category, you will receive the AU-Eligible designation on your certificate.

Your certificate will be sent by our professional printing vendor, Jim Henry, Inc. to the above address in approximately four months. Your name will appear on the certificate as shown above. If you wish your name to appear differently or you have an address change, please notify the Board office in writing by June 25, 2010. Your name and demographic information will be included in a Directory published by the American Board of Medical Specialties. It is your responsibility to notify other local and state or national organizations of your certification.

Important information about your Maintenance of Certification process is enclosed. Please review it and respond as requested. Please remember to notify the board immediately of any change of address.

Personally, and on behalf of the Board of Trustees of the American Board of Radiology, I wish to congratulate you for this distinguished achievement.

Sincerely,

Gary J. Becker, MD
Executive Director

Enclosures

No 5 7 5 7 9 8

FORM DRC-02A (AUD)
07/2007

Utah Division of Radiation Control

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION
(for uses defined under 10 CFR 35.100, 35.200, and 35.500)
[10 CFR 35.190, 35.290, and 35.590]

Note: All references to "35.XXX, " or "10 CFR 35.XXX" contained within this form refer to the incorporation by reference of 10 CFR Part 35 in R313-32.

Name of Proposed Authorized User	State or Territory Where Licensed
Albert Paul Meier	UT

Requested Authorization(s) *(check all that apply)*

- ☒ 35.100 Uptake, dilution, and excretion studies
- ☒ 35.200 Imaging and localization studies
- ☐ 35.500 Sealed sources for diagnosis (specify device _____)

PART I -- TRAINING AND EXPERIENCE
(Select one of the three methods below)

Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☒ 1. **Board Certification**

a. Provide a copy of the board certification.

b. If using only 35.500 materials, stop here. If using 35.100 and 35.200 materials, skip to and complete Part II Preceptor Attestation.

☐ 2 **Current 35.390 Authorized User Seeking Additional 35.290 Authorization**

a. Authorized user on Materials License _____ meeting 10 CFR 35.390 or equivalent Agreement State requirements seeking authorization for 35.290.

b. Supervised Work Experience.
(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience*
Eluting generator systems appropriate for the preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs			
	Total Hours of Experience:		

Supervising Individual	License/Permit Number listing supervising individual as an authorized user

Supervisor meets the requirements below, or equivalent Agreement State requirements *(check all that apply)*

☐ 35.290 ☐ 35.390 + generator experience in 35.290(c)(1)(ii)(G)

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

☐ **3. Training and Experience for Proposed Authorized User**

a. Classroom and Laboratory Training.

Description of Training		Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation				
Radiation protection				
Mathematics pertaining to the use and measurement of radioactivity				
Chemistry of radioactive material for medical use *(not required for 35.590)*				
Radiation biology				
		Total Hours of Training:		

b. Supervised Work Experience (completion of this table is not required for 35.590).

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervised Work Experience		**Total Hours of Experience:**	
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience*
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys		☐ Yes ☐ No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		☐ Yes ☐ No	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Training and Experience for Proposed Authorized User (continued)

b. Supervised Work Experience. (continued)

Description of Experience	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience*
Calculating, measuring, and safely preparing patient or human research subject dosages		☐ Yes ☐ No	
Using administrative controls to prevent a medical event involving the use of unsealed radioactive material		☐ Yes ☐ No	
Using procedures to contain spilled radioactive material safely and using proper decontamination procedures		☐ Yes ☐ No	
Administering dosages of radioactive drugs to patients or human research subjects		☐ Yes ☐ No	
Eluting generator systems appropriate for the preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs		☐ Yes ☐ No	

Supervising Individual	License/Permit Number listing supervising individual as an authorized user

Supervisor meets the requirements below, or equivalent Agreement State requirements *(check one)*.

☐ 35.190 ☐ 35.290 ☐ 35.390 ☐ 35.390 + generator experience in 35.290(c)(1)(ii)(G)

c. For 35.590 only, provide documentation of training on use of the device.

Device	Type of Training	Location and Dates

d. For 35.500 uses only, stop here. For 35.100 and 35.200 uses, skip to and complete Part II Preceptor Attestation.

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each. (Not required to meet training requirements in 35.590)

First Section
Check one of the following for each use requested:

For 35.190

Board Certification

☒ I attest that Albert Paul Meier has satisfactorily completed the requirements in
Name of Proposed Authorized User

10 CFR 35.190(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100.

OR

Training and Experience

☐ I attest that _____ has satisfactorily completed the 60 hours of
Name of Proposed Authorized User

training and experience, including a minimum of 8 hours of classroom and laboratory training, required by 10 CFR 35.190(c)(1), and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100.

For 35.290

Board Certification

☒ I attest that Albert Paul Meier has satisfactorily completed the requirements in
Name of Proposed Authorized User

10 CFR 35.290(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100 and 35.200.

OR

Training and Experience

☐ I attest that _____ has satisfactorily completed the 700 hours of
Name of Proposed Authorized User

training and experience, including a minimum of 80 hours of classroom and laboratory training, required by 10 CFR 35.290(c)(1), and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100 and 35.200.

Second Section
Complete the following for preceptor attestation and signature:

☒ I meet the requirements below, or equivalent Agreement State requirements, as an authorized user for:

☒ 35.190 ☒ 35.290 ☒ 35.390 ☒ 35.390 + generator experience

Name of Preceptor	Signature	Telephone Number	Date
Kathryn Morton	[signature]	801-581-7553	6/17/2010

License/Permit Number/Facility Name
UT 1800001, University of Utah

FORM DRC-02A (AUT)
07/2007

Utah Division of Radiation Control

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION
(for uses defined under 10 CFR 35.300)
[10 CFR 35.390, 35.392, 35.394, and 35.396]

Note: All references to "35.XXX, " or "10 CFR 35.XXX" contained within this form refer to the incorporation by reference of 10 CFR Part 35 in R313-32.

Name of Proposed Authorized User	State or Territory Where Licensed
Albert Paul Meier	UT

Requested Authorization(s) (check all that apply):

☐ 35.300 Use of unsealed radioactive material for which a written directive is required

OR

☒ 35.300 Oral administration of sodium iodide I-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)

☒ 35.300 Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)

☐ 35.300 Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☐ 35.300 Parenteral administration of any other radionuclide for which a written directive is required

PART I -- TRAINING AND EXPERIENCE
(Select one of the three methods below)

*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☒ **1. Board Certification**

a. Provide a copy of the board certification.

b. For 35.390, provide documentation on supervised clinical case experience. The table in section 3.c. may be used to document this experience.

c. For 35.396, provide documentation on classroom and laboratory training, supervised work experience, and supervised clinical case experience. The tables in sections 3.a., 3.b., and 3.c. may be used to document this experience.

d. Skip to and complete Part II Preceptor Attestation.

☐ **2. Current 35.300, 35.400, or 35.600 Authorized User Seeking Additional Authorization**

a. Authorized User on Materials License _____ under the requirements below or equivalent Agreement State requirements (check all that apply):

☐ 35.390 ☐ 35.392 ☐ 35.394 ☐ 35.490 ☐ 35.690

b. If currently authorized for a subset of clinical uses under 35.300, provide documentation on additional required supervised case experience. The table in section 3.c. may be used to document this experience. Also provide completed Part II Preceptor Attestation.

c. If currently authorized under 35.490 or 35.690 and requesting authorization for 35.396, provide documentation on classroom and laboratory training, supervised work experience, and supervised clinical case experience. The tables in sections 3.a., 3.b., and 3.c. may be used to document this experience. Also provide completed Part II Preceptor Attestation.

№ 5 7 5 7 9 8

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

☐ **3. Training and Experience for Proposed Authorized User**

a. Classroom and Laboratory Training. ☐ 35.390 ☐ 35.392 ☐ 35.394 ☐ 35.396

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation			
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Chemistry of radioactive material for medical use			
Radiation biology			
Total Hours of Training:			

b. Supervised Work Experience ☐ 35.390 ☐ 35.392 ☐ 35.394 ☐ 35.396

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervised Work Experience		**Total Hours of Experience:**	
Description of Experience	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience*
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys		☐ Yes ☐ No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		☐ Yes ☐ No	
Calculating, measuring, and safely preparing patient or human research subject dosages		☐ Yes ☐ No	
Using administrative controls to prevent a medical event involving the use of unsealed radioactive material		☐ Yes ☐ No	
Using procedures to contain spilled radioactive material safely and using proper decontamination procedures		☐ Yes ☐ No	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Training and Experience for Proposed Authorized User (continued)

b. Supervised Work Experience. (continued)

Supervising Individual	License/Permit Number listing supervising individual as an authorized user
Kathryn Morton	UT 1800001

Supervising individual meets the requirements below, or equivalent Agreement State requirements *(check all that apply)***:

- ☒ 35.390
- ☒ 35.392
- ☒ 35.394
- ☒ 35.396

With experience administering dosages of:

- ☒ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
- ☒ Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)
- ☒ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required
- ☒ Parenteral administration of any other radionuclide requiring a written directive

** Supervising Authorized User must have experience in administering dosages in the same dosage category or categories as the individual requesting authorized user status.

c. Supervised Clinical Case Experience
If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.

Description of Experience	Number of Cases Involving Personal Participation	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Oral administration of sodium iodide I-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)	3	University of Utah UT 1800001	7/1/06 – 6/30/10
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)	3	University of Utah UT 1800001	7/1/06 – 6/30/10
Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required			
Parenteral administration of any other radionuclide for which a written directive is required _____ (List radionuclides)			

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Training and Experience for Proposed Authorized User (continued)

c. Supervised Clinical Case Experience (continued)

Supervising Individual	License/Permit Number listing supervising individual as an authorized user
Kathryn Morton	UT 1800001

Supervising individual meets the requirements below, or equivalent Agreement State requirements *(check all that apply)***:

☒ 35.390 ☒ 35.392 ☒ 35.394 ☒ 35.396	With experience administering dosages of: ☒ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries) ☒ Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries) ☒ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required ☒ Parenteral administration of any other radionuclide requiring a written directive

** Supervising Authorized User must have experience in administering dosages in the same dosage category or categories as the individual requesting authorized user status.

d. Provide completed Part II Preceptor Attestation.

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section
Check one of the following for each use requested:

For 35.390

Board Certification

☒ I attest that Albert Paul Meier has satisfactorily completed the requirements in
Name of Proposed Authorized User

10 CFR 35.390(a)(1).

OR

Training and Experience

☐ I attest that _____ has satisfactorily completed the 700 hours of
Name of Proposed Authorized User

training and experience, including a minimum of 200 hours of classroom and laboratory training, required by 10 CFR 35.390(b)(1).

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

First Section (continued)

For 35.392 (Identical Attestation Statement Regardless of Training and Experience Pathway):

☑ I attest that Albert Paul Meier (Name of Proposed Authorized User) has satisfactorily completed the 80 hours of classroom and laboratory training, as required by 10 CFR 35.392(c)(1), and the supervised work and clinical case experience required in 35.392(c)(2).

For 35.394 (Identical Attestation Statement Regardless of Training and Experience Pathway):

☒ I attest that Albert Paul Meier (Name of Proposed Authorized User) has satisfactorily completed the 80 hours of classroom and laboratory training, as required by 10 CFR 35.394 (c)(1), and the supervised work and clinical case experience required in 35.394(c)(2).

Second Section

☑ I attest that Albert Paul Meier (Name of Proposed Authorized User) has satisfactorily completed the required clinical case experience required in 35.390(b)(1)(ii)G listed below:

- ☒ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
- ☑ Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)
- ☐ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required
- ☐ Parenteral administration of any other radionuclide requiring a written directive

Third Section

☑ I attest that Albert Paul Meier (Name of Proposed Authorized User) has satisfactorily achieved a level of competency to function independently as an authorized user for:

- ☒ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
- ☑ Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)
- ☐ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required
- ☐ Parenteral administration of any other radionuclide requiring a written directive

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Fourth Section

For 35.396:

Current 35.490 or 35.690 authorized user:

☐ I attest that _____ is an authorized user under 10 CFR 35.490 or
Name of Proposed Authorized User

35.690 or equivalent Agreement State requirements, has satisfactorily completed the 80 hours of classroom and laboratory training, as required by 10 CFR 35.396 (d)(1), and the supervised work and clinical case experience required by 35.396(d)(2), and has achieved a level of competency sufficient to function independently as an authorized user for:

☐ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☐ Parenteral administration of any other radionuclide for which a written directive is required

OR

Board Certification:

☐ I attest that _____ has satisfactorily completed the board certification
Name of Proposed Authorized User

requirements of 35.396(c), has satisfactorily completed the 80 hours of classroom and laboratory training required by 10 CFR 35.396 (d)(1) and the supervised work and clinical case experience required by 35.396(d)(2), and has achieved a level of competency sufficient to function independently as an authorized user for:

☐ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☐ Parenteral administration of any other radionuclide for which a written directive is required

Fifth Section

Complete the following for preceptor attestation and signature:

☒ I meet the requirements below, or equivalent Agreement State requirements, as an authorized user for:

☒ 35.390 ☒ 35.392 ☒ 35.394 ☒ 35.396

☒ I have experience administering dosages in the following categories for which the proposed Authorized User is requesting authorization.

☒ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)

☒ Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)

☒ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☒ Parenteral administration of any other radionuclide requiring a written directive

Name of Preceptor	Signature	Telephone Number	Date
Kathryn Morton		801-581-7553	6/17/10

License/Permit Number/Facility Name
UT1800001

Form A

fax en 2/26/10 T. Clayson

American Board of Radiology – Program Director Attestation

COMPLIANCE WITH NRC TRAINING AND EXPERIENCE REQUIREMENTS

More information can be found at the following link:
http://www.nrc.gov/reading-rm /doc-collections/cfr/part035/part035-0290.html

Albert Paul Meier	Univ. of Utah	4601042
Resident Name	Program	Program #

	YES	NO
By the time of the ABR oral examination, this applicant will have successfully completed the hours of training and experience as outlined in 10 CFR 35.290 and 35.392	☒	☐
This applicant has taken part in ≥ 3 cases of oral administration of I-131 therapy (≤ 33mCi)	☒	☐
The resident's logbook of these therapy experiences (date, dose, and preceptor) is attached	☒	☐
The work and experience cited above for § 35.290 was obtained under the supervision of an Authorized User (AU) who meets the requirements under relevant sections of § 35.290 or equivalent Agreement State requirements	☒	☐
The work and experience cited above for § 35.392 was obtained under the supervision of an Authorized User (AU) who meets the requirements under § 35.390, 35.392 or 35.394 or equivalent Agreement State requirements	☒	☐

H. Christian Davidson, MD	[signature]	2/26/10
Residency Program Director (Print Name)	Program Director (Signature)	Date

№ 575798

Form B

I-131 Therapy Experience

PAUL MEIER
Resident Name

University of Utah 4601042
Program & Number

	Date	Dose Administered	Preceptor (AU) Print & Sign Name
1.	10/22/09	150.1 mCi	Kathryn A. Morton (Print Name) / (Sign Name)
2.	11/3/09	23.15 mCi	Kathryn A. Morton (Print Name) / (Sign Name)
3.	11/5/09	99.2 mCi	Kathryn A. Morton (Print Name) / (Sign Name)
4.	11/6/09	175 mCi	Kathryn A. Morton (Print Name) / (Sign Name)
5.	11/12/09	31.5 mCi	Kathryn A. Morton
6.	11/12/09	17 mCi	Kathryn A. Morton

Nuclear Medicine Hours

Didactic:

	Total hours	Dates
AM Conference	56	(on didactic worksheet)
Noon Conference	46	(on didactic worksheet)
1st year AM conference	3	(on didactic worksheet)
Special 3/4th year AM Conf	1	(on didactic worksheet)
Physics nucs	5	(on didactic worksheet)
Physics dosimetry	1	(on didactic worksheet)
Physics radbio	4	(on didactic worksheet)
Physics matter and radiatio	3	(on didactic worksheet)
radioisotope safety course	6	#########
radiopharmacy	7	11/2009 5/19/2010
senior review	21	

Total Lecture Hours	153
ACGME/NRC Requirement	80
Hours needed	-73

Clinical Rotation Dates

Rotation	Dates	Rotation Length	Days absent	Days on Service	Hours (1d = 8hrs)
U-Nucs	12/18/2006-1/14/2007	20	6	14	112
VA-Nucs	2/11/2008-3/9/2008	20	5	15	120
VA-Nucs	3/9/2009-4/5/2009	20	2	18	144
U-Nucs	10/19/2009-11/15/2009	20		20	160
U-Nucs	3/8/2010-3/11/2010	3	0	3	24
					0

Total Clinical Hours	560
Total Lecture Hours	153
Total Hours	713
ACGME/NRC Requirement	700
Hours needed	-13
Days needed	-1.857142857

Didactic Nuclear Medicine Hours

2006-2007	TOTAL HOURS			DATI
AM Conference	16	10/16-18,20	11/20-22	1/10-12
Noon Conference	10	*DATES		
1st year AM conference	3	7/17,18-rad safety	7/30 intro nucs	
Senior Review				
Physics nucs				
Physics dosimetry				
Physics radbio				
Physics matter and radiation				

2007-2008	TOTAL HOURS			DATI
AM Conference	13	10/15-17, 19		
Noon Conference	14	7/23	**10/9-guest** 10/22	**11/8-JI** 12/17 1/14
1st year AM conference	3	7/27 intro to nucs	8/1,8/3 radiation safety	
Senior Review				
2007 Physics nucs	5	*DATES		
2007 Physics dosimetry	1	*DATES		
2007 Physics radbio	4	*DATES		
2007 Physics matter and radiation	3	*DATES		

ES		
3/5, 3/7-9	4/9, 13	

ES			
2/4, 2/6-8	4/21-25		
2/11	3/3-gue 4/7	5/5	6/2

AUG 15 2011

DATE

This is to acknowledge the receipt of your letter/application dated AUG 11 2011, and to inform you that the initial processing, which includes an administrative review, has been performed.

☑ There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card:

The action you requested is normally processed within 90 days.

☐ A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** No. 575798
When calling to inquire about this action, please refer to this mail control number.
You may call me at 817-860-8103.

Sincerely,

Carol L. Heise

Licensing Assistant

NRC FORM 532 (RIV)
(10-2006)

BETWEEN:

Accounts Receivable/Payable
and
Regional Licensing Branches

[FOR ARPB USE]
INFORMATION FROM LTS

Program Code: 02230
Status Code: Pending Amendment
Fee Category: 7C
Exp. Date:
Fee Comments:
Decom Fin Assur Reqd: N

License Fee Worksheet - License Fee Transmittal

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee:	BOZEMAN DEACONESS FOUNDATION
Received Date:	08/15/2011
Docket Number:	3033305
Mail Control Number:	575798
License Number:	25-10994-04
Action Type:	Amendment

2. FEE ATTACHED

Amount: /

Check No.: /

3. COMMENTS

Signed: Carol L Heer

Date: 8/15/11

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment: _____

Renewal: _____

License: _____

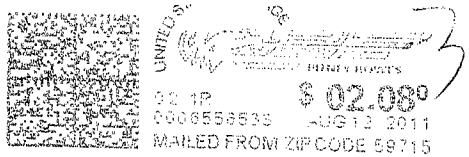
3. OTHER _____

_____

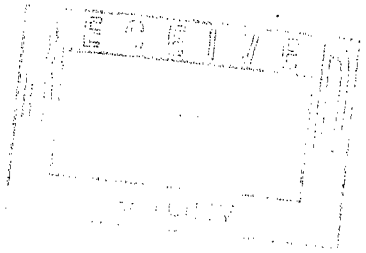
Signed: _____

Date: _____

Bozeman Deaconess Cancer Center
931 Highland Blvd., Suite 3130
Bozeman, MT 59715



U.S. Nuclear Regulatory Commission
Region IV
Attn: DNMS/NMSBB
612 E. Lamar Blvd. Suite 400
Arlington TX 76011-4125



RECEIVED
AUG 15 2011
DNMS

4575798