

# Boone Hospital Center

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1600 East Broadway  
Columbia, Missouri 65201  
Phone: 573-815-8000

October 5, 2011

US Nuclear Regulatory Commission  
Region III  
Materials Licensing Section  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

License Number: 24-01565-01

Dear NRC Reviewer,

We would like to add Gregory Biedermann, M.D. as an Authorized User of "unsealed byproduct material requiring a written directive" (35.300) to our NRC license. Specifically, we are requesting authorization for administration of I-131 (35.392 and 35.394) and parenteral administration of any beta emitter or photon-emitting radionuclide with a photon energy less than 150keV (35.396).

Dr. Biedermann recently received his American Board of Radiology (ABR) certification and is a diplomat of the Radiation Oncology specialty. His certificate designates that he is "AU Eligible".

Enclosed is NRC Form 313A (AUT) for your review. I completed the table in section 3C to document his supervised clinical experience. The documentation that Dr. Biedermann provided me included two supervising individuals; therefore, there are two copies of table 3C enclosed. I recorded information for three clinical cases *for each type* of authorized use he is requesting. He provided me with documentation of many administrations of 35.300 material he was personally involved in; however, I only recorded the minimum of three. I would be more than happy to submit additional cases if necessary.

Dr. Biedermann's preceptor (Dr. Mark Bryer) is listed as an Authorized User of any 35.300 or 35.400 material on our NRC license no. 24-01565-01.

Please contact me if you need any additional information to show that Dr. Biedermann meets the correct training and experience requirements to be authorized to use 35.300 licensed material.

Sincerely,



Liesje Myers  
Radiation Safety Officer  
Boone Hospital Center  
(573) 815-3729

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BJC HealthCare\*

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

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

Name of Proposed Authorized User

Gregory Biedermann, M.D.

State or Territory Where Licensed

Missouri License (as Medical Physician and Surgeon) #2009010338

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

35.300 Use of unsealed byproduct 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
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- 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.

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

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

Table 3C (#1)

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 Virginia Radiation Oncology Program  Virginia State License # 540-248-1	01/10/2008 01/17/2008 01/23/2008
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

Patrice Rehm, M.D.

Authorized User on Virginia License # 540-248-1

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

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

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 requested authorization:

**For 35.390:**

**Board Certification**

I attest that Gregory Biedermann, M.D. has satisfactorily completed the training and experience requirements in 35.390(a)(1).  
Name of Proposed Authorized User

**OR**

**Training and Experience**

I attest that \_\_\_\_\_ has satisfactorily completed the 700 hours of training and experience, including a minimum of 200 hours of classroom and laboratory training, as required by 10 CFR 35.390 (b)(1).  
Name of Proposed Authorized User

**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

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

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

**Table 3C (#2)**

**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)			
Oral administration of sodium iodide I-131 requiring a written directive 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	3	University of Virginia Radiation Oncology Program Virginia State License # 540-248-1	05/17/2006 05/18/2006 08/16/2006
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

Tyven Rich MD

Authorized User on Virginia License # 540-248-1

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

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

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 requested authorization:

**For 35.390:**

**Board Certification**

I attest that Gregory Biedermann, M.D. has satisfactorily completed the training and experience requirements in 35.390(a)(1).  
Name of Proposed Authorized User

**OR**

**Training and Experience**

I attest that \_\_\_\_\_ has satisfactorily completed the 700 hours of training and experience, including a minimum of 200 hours of classroom and laboratory training, as required by 10 CFR 35.390 (b)(1).  
Name of Proposed Authorized User

**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 Gregory Biedermann, M.D. has satisfactorily completed the 80 hours of classroom  
Name of Proposed Authorized User  
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 Gregory Biedermann, M.D. has satisfactorily completed the 80 hours of classroom  
Name of Proposed Authorized User  
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).

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**Second Section**

I attest that Gregory Biedermann, M.D. has satisfactorily completed the required clinical case  
Name of Proposed Authorized User  
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 beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required
- Parenteral administration of any other radionuclide requiring a written directive

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**Third Section**

I attest that Gregory Biedermann, M.D. has satisfactorily achieved a level of competency to  
Name of Proposed Authorized User  
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 beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring 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 35.690  
Name of Proposed Authorized User

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 Gregory Biedermann, M.D. 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.

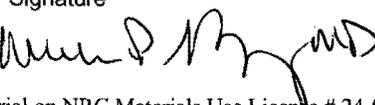
✓ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)

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

✓ Parenteral administration of beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required

Parenteral administration of any other radionuclide requiring a written directive

Name of Preceptor  
Mark Bryer, M.D.

Signature  


Telephone Number  
(573) 442-5525

Date  
10-5-11

License/Permit Number/Facility Name

Authorized User for all 35.300 and 35.400 material on NRC Materials Use License # 24-01565-01

# The American Board of Radiology

*Organized through the cooperation of the  
American College of Radiology, the American Roentgen Ray Society,  
the American Radium Society, the Radiological Society of North America,  
the Section on Radiology of the American Medical Association,  
the American Society for Radiation Oncology, the Association of  
University Radiologists, and the American Association of Physicians in Medicine*  
Hereby certifies that

**Gregory Bruce Biedermann, MD**

*Has pursued an accepted course of graduate study and clinical work; has met certain standards  
and qualifications, including passing the examinations conducted under the authority of  
The American Board of Radiology, demonstrating to the satisfaction of the Board qualification  
to practice; and is therefore awarded the Board's certification in the specialty of*

**Radiation Oncology**

All Eligible

DABR

May 24, 2011

*This diplomate of the American Board of Radiology  
is now permitted to use the **DABR** mark to signify this certification.*



*Gene J. Harris*  
President

*Richard T. Moran*  
Secretary-Treasurer

*Hayden P. ...*  
Executive Director



Certificate No. 60331

Valid through 2021

