

From:

07/15/2014 10:59

#437 P.001/016



2800 Clay Edwards Drive
North Kansas City, MO
64116-3281

July 15, 2014

Branch Chief
Nuclear Regulatory Commission Region III
Materials Licensing Branch
2443 Warrenville Road,
Lisle, Illinois 60532-4352

Re: Removal and addition of AUs on North Kansas City Hospital's NRC Materials
License Number 24-18628-01

Dear Sir or Madam:

Please remove the following AU's who have either retired or left North Kansas City
Hospital:

1. Kelly Rhodes-Stark, M.D.
2. Scott C. Cozad, M.D.
3. Patrick W. Townsend, M.D.
4. Robyn M. Hart, M.D.
5. Aaron Notestine, M.D.
6. Kenneth W. Arnett, M.D.
7. Michelle L. Pal, M.D.
8. Charles F. Schwab, D.O.
9. John Stephen Dykstra, D.O.
10. Gerald Finke, D.O.
11. Lee M. Steinberg, D.O.
12. Lawrence Ricci, D.O.
13. Sacrates Jamoulis, D.O.
14. Jean Ellyn Dykstra, D.O.
15. Ashoka Bargava M.S (Authorized Medical Physicist)

Please add Zachary Shafer, MD for use of 10 CFR 35.100, 10 CFR 35.200 and 10 CFR 35.300. Dr. Shafer is certified by the American Board of Radiology. NRC forms 313A (AUD) and 313A (AUT) are enclosed. You will note that page 5 of form 313A (AUT) is omitted. In its place we request consideration of documents that make up enclosure 3. In this enclosure there are two ABR forms labeled Form A and Form B. Form A is a completed ABR Program Director Attestation signed by the program director. It is our understanding that this fulfills the AU eligibility requirements to use all medical radionuclides for imaging and localization studies and for oral administration of Sodium Iodide I-131 requiring a written directive (<33 mCi). Form B documents I-131 experience including three cases with activities greater than 33 mCi.

From:

07/15/2014 11:00

#437 P.002/016

Sincerely,



Matt Foresman
Vice President, Professional Services
North Kansas City Hospital
2800 Clay Edwards Dr.
North Kansas City, MO 64116
Office (816) 691-2096
Email matt.foresman@nkch.org

Martin S. Richman
Radiation Safety Officer
North Kansas City Hospital
2800 Clay Edwards Dr.
North Kansas City, MO 64116
Office (816) 691-5343
Cell (913) 706-9200
Email Martin.Richman@nkch.org

Enclosures:

1. NRC form 313a (AUD)
2. NRC form 313A (AUT)
3. ABR Program Director Attestation (forms A and B)
4. Copy of ABR Certificate

From:

07/15/2014 11:00

#437 P.003/016

NRC FORM 313A (AUT) (05-2012)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3150-0120 EXPIRES: (05/31/2015)	
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]					
Name of Proposed Authorized User <i>Zachary Shafer</i>			State or Territory Where Licensed <i>MO</i>		
Requested Authorization(s) (check all that apply):					
<input type="checkbox"/> 35.300 Use of unsealed byproduct material for which a written directive is required					
OR					
<input checked="" type="checkbox"/> 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)					
<input checked="" type="checkbox"/> 35.300 Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)					
<input type="checkbox"/> 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					
<input type="checkbox"/> 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.					
<input checked="" type="checkbox"/> 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.					
<input type="checkbox"/> 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):					
<input type="checkbox"/> 35.390 <input type="checkbox"/> 35.392 <input type="checkbox"/> 35.394 <input type="checkbox"/> 35.490 <input type="checkbox"/> 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.					

From:

07/15/2014 11:01

#437 P.004/016

NRC FORM 313A (AUT) (05-2012) 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 ☐ 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 byproduct material for medical use			
Radiation biology			
Total Hours of Training: <input type="text"/>			

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

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

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		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Calculating, measuring, and safely preparing patient or human research subject dosages		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures		<input type="checkbox"/> Yes <input type="checkbox"/> No	

From:

07/15/2014 11:02

#437 P.005/016

JG/8/13

NRC FORM 313A (AUT)
(08-2012)

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)

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)**:	
<input type="checkbox"/> 35.390	With experience administering dosages of:
<input type="checkbox"/> 35.392	<input type="checkbox"/> Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
<input type="checkbox"/> 35.394	<input type="checkbox"/> Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)
<input type="checkbox"/> 35.398	<input type="checkbox"/> Parenteral administration of beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required
	<input type="checkbox"/> 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)	43	Baptist Medical Center	7/09-6/13
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)	43	Baptist Medical Center	7/09-6/13
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 <div style="border: 1px solid black; height: 20px; width: 150px; margin-top: 5px;"></div> (List radionuclides)			

From:

07/15/2014 11:03

#437 P.006/016

NRC FORM 313A (AUT) (09-2012) U.S. NUCLEAR REGULATORY COMMISSION

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 _____ 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 _____ 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).

Second Section

☒ I attest that Zachary Slater 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

Third Section

☒ I attest that Zachary Slater 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

NRC FORM 313A (AUT) (09-2012) PAGE 6

From:

07/15/2014 11:04

#437 P.007/016

NRC FORM 313A (AUT)
(05-2012)

U.S. NUCLEAR REGULATORY COMMISSION

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

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 Zachary Shaw 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

From:

07/15/2014 11:04

#437 P.008/016

NRC FORM 313A (AUD) <small>(05-2012)</small>		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO-3150-0120 EXPIRES: (05/31/2015)	
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]					
Name of Proposed Authorized User <i>Anthony Shaffer</i>			State or Territory Where Licensed <i>MO</i>		
Requested Authorization(s) (check all that apply)					
<input checked="" type="checkbox"/> 35.100 Uptake, dilution, and excretion studies					
<input checked="" type="checkbox"/> 35.200 Imaging and localization studies					
<input type="checkbox"/> 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.					
<input checked="" type="checkbox"/> 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.					
<input type="checkbox"/> 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 radionuclide 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).					
<input type="checkbox"/> 35.290 <input type="checkbox"/> 35.390 + generator experience in 32.290(c)(1)(ii)(G)					

From:

07/15/2014 11:05

#437 P.009/016

NRC FORM 313A (AUD) (05-2012)		U.S. NUCLEAR REGULATORY COMMISSION	
AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)			
<input type="checkbox"/> 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		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		<input type="checkbox"/> Yes <input type="checkbox"/> No	

From:

07/15/2014 11:06

#437 P.010/016

NRC FORM 313A (AUD)
(05-2012)

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		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Administering dosages of radioactive drugs to patients or human research subjects		<input type="checkbox"/> Yes <input type="checkbox"/> 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		<input type="checkbox"/> Yes <input type="checkbox"/> 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).			
<input type="checkbox"/> 35.190 <input type="checkbox"/> 35.290 <input type="checkbox"/> 35.390 <input type="checkbox"/> 35.390 + generator experience in 35.290(o)(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.

From:

NRC FORM 313A (AUD) (05-2012)	U.S. NUCLEAR REGULATORY COMMISSION	
AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)		
PART II - PRECEPTOR ATTESTATION		
<p>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)</p> <p>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."</p>		
<p>First Section Check one of the following for each use requested:</p>		
<p><u>For 35.190</u></p> <p><u>Board Certification</u></p> <p><input checked="" type="checkbox"/> I attest that <u>Zachary Shafer</u> has satisfactorily completed the requirements in <small>Name of Proposed Authorized User</small></p> <p>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.</p> <p style="text-align: center;">OR</p> <p><u>Training and Experience</u></p> <p><input type="checkbox"/> I attest that _____ has satisfactorily completed the 60 hours of training and <small>Name of Proposed Authorized User</small></p> <p>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.</p>		
<p><u>For 35.290</u></p> <p><u>Board Certification</u></p> <p><input checked="" type="checkbox"/> I attest that <u>Zachary Shafer</u> has satisfactorily completed the requirements in <small>Name of Proposed Authorized User</small></p> <p>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.</p> <p style="text-align: center;">OR</p> <p><u>Training and Experience</u></p> <p><input type="checkbox"/> I attest that _____ has satisfactorily completed the 700 hours of training <small>Name of Proposed Authorized User</small></p> <p>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.</p>		
<p>Second Section Complete the following for preceptor attestation and signature:</p> <p><input type="checkbox"/> I meet the requirements below, or equivalent Agreement State requirements, as an authorized user for:</p> <p style="text-align: center;"> <input type="checkbox"/> 35.190 <input type="checkbox"/> 35.290 <input type="checkbox"/> 35.390 <input type="checkbox"/> 35.390 + generator experience </p>		
Name of Preceptor <u>Georgianne Sauerborn mp</u>	Signature <u>Gmuerborn</u>	Telephone Number <u>405-951-8030</u>
License/Permit Number/Facility Name <u>OK-11022-01 INTEGRIS Baptist Medical Center</u>		

From:

07/15/2014 11:08

#437 P.012/016

Form A



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>

Zachary Shafer, MD
Resident Name

*Diagnostic
Radiology
Residency*
Program

4203912158
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, 35.392, and 35.394.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
This applicant has taken part in ≥ 3 cases of oral administration of I-131 therapy $\leq 33\text{mCi}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
This applicant has taken part in ≥ 3 cases of oral administration of I-131 therapy $>33\text{ mCi}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The resident's log of these therapy experiences (date, dose, and preceptor attestation) is attached.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The work 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.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The work 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.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The work experience cited above for § 35.394 was obtained under the supervision of an Authorized User (AU) who meets the requirements under § 35.390 or 35.394 or equivalent Agreement State requirements.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

J. M. EVANS

Residency Program Director
(Print Name)

J. M. EVANS

Program Director
(Signature)

2/25/13

Date

From:

07/15/2014 11:09

#437 P.013/016

Form B

I-131 Therapy Experience

Zoe Sh...
Resident Name

Program & Number

	<u>Date</u>	<u>Dose Administered</u>
Low Dose 1.	<u>3/24/10</u>	<u>20.1 mCi</u>
2.	<u>3/4/10</u>	<u>7.5 mCi</u>
3.	<u>5/14/10</u>	<u>26.2 mCi</u>

Preceptor (AU) Print & Sign Name

Vincent Farhood
Print Name
[Signature]
Sign Name

Vincent Farhood
Print Name
[Signature]
Sign Name

Vincent Farhood
Print Name
[Signature]
Sign Name

High Dose ① 5/26/10 102.0 mCi

Dr. Snowden
Print Name
[Signature]
Sign Name

② 7/5/10 101.8 mCi

Dr. Gelzer
[Signature]

③ 12/27/11 158.0 mCi

Dr. Snowden
[Signature]

From:

07/15/2014 11:09

#437 P.014/016

The preceding ABR forms do not have to be completed for a resident to take the ABR exam including the Nuclear Medicine section of the exam. Completing the form documents the training and allows the candidate to receive authorized user (AU)-eligible designation on his/her certificate.

Candidates who fulfill all the requirements listed on Form A and Form B and who pass all their ABR exams will receive an ABR certificate that contains the additional designation "AU-eligible". This means that the person is eligible through the ABR pathway to be approved by the NRC as an AU of medical radionuclides for imaging and localization studies and for oral administration of sodium iodide I-131 requiring a written directive ($\leq 33\text{mCi}$). NRC approval is obtained upon written application to the NRC/Agreement State and also requires submission of an NRC preceptor form which has been completed and signed by the preceptor who must be an AU. The forms are available on the NRC website.

From:

07/15/2014 11:10 #437 P.015/016



May 30, 2014

To Whom It May Concern:

This letter serves as documentation that Zachary Shafer, MD attended the Physics of Diagnostic Radiology, Nuclear Medicine and Radiation Biology Review Course at UC Davis in Sacramento, CA.

Please feel free to contact me if you have any questions.

Thank you,

A handwritten signature in black ink, appearing to read "Shannon Thompson".

Shannon Thompson
Diagnostic Radiology Residency
Program Coordinator
405-951-8030