



**Children's Mercy  
HOSPITALS & CLINICS**

www.childrensmc.org

**Department of Radiology**

2401 Gillham Road  
Kansas City, Missouri 64108  
Phone: (816) 234-3273  
Fax: (816) 983-6912

November 27, 2007

Nuclear Regulatory Commission  
Medical Licensing Division, Region III  
2443 Warrenville Road  
Lisle, IL 60532-4351

To Whom It May Concern:

Please amend our Radioactive Materials License #24-15513-01 (Children's Mercy Hospital; 2401 Gillham Road; Kansas City, MO 64108) to include the following changes:

Dr. Doug Rivard, D.O. has recently joined our team and has completed his training which enables him to be an authorized user. Please see the attached forms 313A AUD and AUT for details about his training.

**We request that Dr. Doug Rivard, D.O. now be placed on our license as an Authorized User for Medical Use described in 35.100 and 35.200 (excluding Xenon-133) and 35.300.**

Your attention in this matter is greatly appreciated.

Sincerely,

Nanci Burchell, BS, CNMT, FSNMTS  
Radiation Safety Officer

Frank P. Morello, MD  
Radiologist-in-Chief  
Katherine M. Gyves-Ray, MD  
Lisa H. Lowe, MD  
Megan E. McDonald, DO  
Charlotte Wough Moore, MD  
Douglas C. Rivard, DO  
Cynthia N.R. Taylor, MD  
Steven T. Welch, MD  
Corliss J. Paris, BA, RT (R),  
Administrative Director

RECEIVED DEC 18 2007

November 27, 2007

Nuclear Regulatory Commission  
Medical Licensing Division, Region III  
2443 Warrenville Road  
Lisle, IL 60532-4351

To Whom It May Concern:

Please amend our Radioactive Materials License #24-15513-01 (Children's Mercy Hospital; 2401 Gilham Road; Kansas City, MO 64108) to include the following changes:

Dr. Doug Rivard, D.O. has recently joined our team and has completed his training which enables him to be an authorized user. Please see the attached forms 313A AUD and AUT for details about his training.

**We request that Dr. Doug Rivard, D.O. now be placed on our license as an Authorized User for Medical Use described in 35.100. and 35.200 (excluding Xenon-133) and 35.300.**

Your attention in this matter is greatly appreciated.

Sincerely,

Nanci Burchell,  
Radiation Safety Officer

NRC FORM 313A (AUD) (3-2007)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0129 EXPIRES: 10/31/2008
<b>AUTHORIZED USER TRAINING AND EXPERIENCE                  AND PRECEPTOR ATTESTATION</b> (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 Doug C. Rivard, D.O.	State or Territory Where Licensed Missouri
--	---

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 32.290(c)(1)(ii)(G)

NRC FORM 313A (AUD)  
(2-2007)

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	Tulsa Regional Medical Center 744 W. 9th St. Tulsa, OK 74127	80	7-1-2002 to 6-30-2006
Radiation protection	Same as Above	21	Same as Above
Mathematics pertaining to the use and measurement of radioactivity	Same as Above	40	Same as Above
Chemistry of byproduct material for medical use (not required for 35.590)	Same as Above	20	Same as Above
Radiation biology	Same as Above	40	Same as Above
<b>Total Hours of Training: 201</b>			

**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	Tulsa Regional Medical Center 744 W. 9th St. Tulsa, OK 74127  35-05860-01	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7-1-2002 to 6-30-2006
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above

NRC FORM 313A (AUD)  
(3-2007) **AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)** U.S. NUCLEAR REGULATORY COMMISSION

**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	Tulsa Regional Medical Center 744 W. 9th St. Tulsa, OK 74127 35-05860-01	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7-1-2002 to 6-30-2006
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above
Administering dosages of radioactive drugs to patients or human research subjects	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above
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	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above

Supervising Individual: Dean Fullingim, D.O.  
License/Permit Number listing supervising individual as an authorized user: 35-05860-01

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.**

NRC FORM 313A (AUD)  
(3-2007)

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)

**First Section**

Check one of the following for each use requested:

For 35.190

Board Certification

I attest that \_\_\_\_\_ 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 Doug C. Rivard, D.O. has satisfactorily completed the 60 hours of training and  
Name of Proposed Authorized User

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 \_\_\_\_\_ 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 Doug C. Rivard, D.O. has satisfactorily completed the 700 hours of training  
Name of Proposed Authorized User

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     35.280     35.390     35.390 + generator experience

Name of Preceptor Dean Fullingm, D.O.	Signature <i>Dean Fullingm</i>	Telephone Number 918-599-5031	Date 11/14/07
License/Permit Number/Facility Name 35-05860-01 Tulsa Regional Medical Center			

NRC FORM 313A (AUT)  
(3-2007)

U.S. NUCLEAR REGULATORY COMMISSION

**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: 10/31/2008

Name of Proposed Authorized User

Doug C. Rivard, D.O.

State or Territory Where Licensed

Missouri

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

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.

NRC FORM 313A (AUT)  
(3-2007)

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	Tulsa Regional Medical Center 744 W. 9th St. Tulsa, OK 74127	80	7-1-2002 to 6-30-2006
Radiation protection	Same as Above	21	Same as Above
Mathematics pertaining to the use and measurement of radioactivity	Same as Above	40	Same as Above
Chemistry of byproduct material for medical use	Same as Above	20	Same as Above
Radiation biology	Same as Above	40	Same as Above
<b>Total Hours of Training: 201</b>			

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	Tulsa Regional Medical Center 744 W. 9th St. Tulsa, OK 74127 35-05880-01	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7-1-2002 to 6-30-2006
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above
Calculating, measuring, and safely preparing patient or human research subject dosages	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures	Same as Above	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Same as Above



NRC FORM 313A (AUT)  
(3-2007)

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  Dean Fullingim, D.O.	License/Permit Number listing supervising individual as an authorized user  35-05860-01
Supervising individual meets the requirements below, or equivalent Agreement State requirements (check all that apply)**:	
<input checked="" type="checkbox"/> 35.390	With experience administering dosages of:
<input checked="" type="checkbox"/> 35.392	<input checked="" type="checkbox"/> Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
<input checked="" type="checkbox"/> 35.394	<input checked="" type="checkbox"/> Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)
<input type="checkbox"/> 35.396	<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)	27	Tulsa Regional Medical Center 744 W. 9th St Tulsa, OK 74127  35-05860-01	7-1-2002 to  6-30-2006
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)	8	Same as Above	Same as Above
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)			

NRC FORM 313A (AUT)  
(3-2007)

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  Dean Fullingim, D.O.	License/Permit Number listing supervising individual as an authorized user  35-05860-01
Supervising individual meets the requirements below, or equivalent Agreement State requirements (check all that apply)**:	
<input checked="" type="checkbox"/> 35.390	With experience administering dosages of:
<input checked="" type="checkbox"/> 35.392	<input checked="" type="checkbox"/> Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
<input checked="" type="checkbox"/> 35.394	<input checked="" 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.	

**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 requested authorization:

**For 35.390:**

**Board Certification**

I attest that \_\_\_\_\_ 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

NRC FORM 313A (AUT)  
(3-2007)

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 Doug C. Rivard, D.O. 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 Doug C. Rivard, D.O. 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 Doug C. Rivard, D.O. 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 Doug C. Rivard, D.O. 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)  
(3-2007)

U.S. NUCLEAR REGULATORY COMMISSION

**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 \_\_\_\_\_ 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

Dean Fullingim, D.O.

Signature

*Dean Fullingim*

Telephone Number

918-599-5031

Date

11/14/07

License/Permit Number/Facility Name

35-05860-01 Tulsa Regional Medical Center

Children's Mercy Hospital  
Department of Radiology  
2401 Gillham Road  
Kansas City, MO 64108



Nuclear Regulatory Commission  
Medical Licensing Division,  
Region III  
2443 Warrenville Road  
Lisle, IL 60532-4351

