

THE  
University of Vermont  
MEDICAL CENTER

February 2, 2017

Nuclear Materials Safety Section  
Division of Radiation Safety and Safeguards  
United States Nuclear Regulatory Commission Region I  
2100 Renaissance Boulevard  
King of Prussia, PA 19406

RE: The University of Vermont Medical Center  
License # 44-10187-03 *103003289*

Please amend our radioactive materials license to add Carl Nelson, M.D. as an Authorized User for 35.600, specifically for Iridium 192 for use in a High Dose Rate Remote Afterloader Unit. Please find attached a copy of Dr. Nelson's preceptor statement signed by Dr. H. James Wallace III, Authorized User on the University of Vermont Medical Center license # 44-10187-03. Included is a copy of Dr. Nelson's American Board of Radiology board certification.

Thank you for your attention to this. If you have questions please contact Brian Oyadomari, M.S., Radiation Safety Officer, at (802) 847-4897. All correspondence should be copied to Brian Oyadomari, M.S., Garden Pavilion, ACC 2, University of Vermont Medical Center.

Sincerely,



Eileen Whalen, R.N.  
President and Chief Operating Officer  
The University of Vermont Medical Center



Brian Oyadomari, M.S.  
Radiation Safety Officer and Medical Physicist  
The University of Vermont Medical Center

Attachments:

1. NRC Form 313A (AUS) Preceptor Attestation for Dr. Carl Nelson with ABR certificate

*593031*  
The University of Vermont Medical Center | 111 Colchester Avenue, Burlington, VT 05401 | (802) 847-0000

REC'D IN LOT *12/14/2017*

**AUTHORIZED USER TRAINING AND EXPERIENCE  
AND PRECEPTOR ATTESTATION**  
(for uses defined under 35.400 and 35.600)  
[10 CFR 35.490, 35.491, and 35.690]APPROVED BY OMB: NO. 3150-0120  
EXPIRES: 06/30/2019

Name of Proposed Authorized User

Carl Nelson, M.D.

State or Territory Where Licensed

Vermont

**Requested****Authorization(s)**

(check all that apply)

☐

35.400 Manual brachytherapy sources

☐

35.600 Teletherapy unit(s)

☐

35.400 Ophthalmic use of strontium-90

☐

35.600 Gamma stereotactic radiosurgery unit(s)

☒

35.600 Remote afterloader unit(s)

**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. For 35.600, go to the table in 3.e. and describe training provider and dates of training for each type of use for which authorization is sought.
- c. Skip to and complete Part II Preceptor Attestation.

☐**2. Current 35.600 Authorized User Requesting Additional Authorization for 35.600 Use(s) Checked Above**

- a. Go to the table in section 3.e. to document training for new device.
- b. Skip to and complete Part II Preceptor Attestation.

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

- a. Classroom and Laboratory Training ☐ 35.490 ☐ 35.491 ☐ 35.690

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			
Radiation biology			

Total Hours of Training:

**AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)****3. Training and Experience for Proposed Authorized User (continued)**

b. Supervised Work and Clinical Experience for 10 CFR 35.490 (If more than one supervising individual is necessary to document supervised work experience, 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	
Checking survey meters for proper operation		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Preparing, implanting, and safely removing brachytherapy sources		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Maintaining running inventories of material on hand		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using emergency procedures to control byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
<b>Approved by:</b> <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		

Supervising Individual

License/Permit Number listing supervising individual as an Authorized User

**AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)**

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

**c. Supervised Clinical Experience for 10 CFR 35.491**

Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience*
Use of strontium-90 for ophthalmic treatment, including: examination of each individual to be treated; calculation of the dose to be administered; administration of the dose; and follow up and review of each individual's case history			
Supervising Individual		License/Permit Number listing supervising individual as an Authorized User	

**d. Supervised Work and Clinical Experience for 10 CFR 35.690**

☐ Remote afterloader unit(s)      ☐ Teletherapy unit(s)      ☐ Gamma stereotactic radiosurgery unit(s)

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*
Reviewing full calibration measurements and periodic spot-checks		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Preparing treatment plans and calculating treatment doses and times		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Implementing emergency procedures to be followed in the event of the abnormal operation of the medical unit or console		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Checking and using survey meters		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Selecting the proper dose and how it is to be administered		<input type="checkbox"/> Yes <input type="checkbox"/> No	

## AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

## d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
<b>Approved by:</b> <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual	License/Permit Number listing supervising individual as an Authorized User	

## e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation	December 2016 by James Goodwin, authorized medical physicist		
Safety procedures for the device use	December 2016 by James Goodwin, authorized medical physicist		
Clinical use of the device	November 2016 by H. James Wallace, M.D. authorized user		

Supervising Individual. (If training provided by Supervising Individual (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)

License/Permit Number listing supervising individual as an Authorized User

H. James Wallace, M.D.

NRC 44-10187-03

Authorized for the following types of use:

☒ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

## f. Provide completed 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.

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 35.490:**

**Board Certification**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the requirements in  
Name of Proposed Authorized User

35.490(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy sources for the medical uses authorized under 10 CFR 35.400.

**OR**

**Training and Experience**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the 200 hours of  
Name of Proposed Authorized User

classroom and laboratory training, 500 hours of supervised work experience, and 3 years of supervised clinical experience in radiation oncology, as required by 10 CFR 35.490(b)(1) and (b)(2), and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy sources for the medical uses authorized under 10 CFR 35.400.

**For 35.491:**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the 24 hours of  
Name of Proposed Authorized User

classroom and laboratory training applicable to the medical use of strontium-90 for ophthalmic radiotherapy, has used strontium-90 for ophthalmic treatment of 5 individuals, as required by 10 CFR 35.491(b), and has achieved a level of competency sufficient to function independently as an authorized user of strontium-90 for ophthalmic use.

**Second Section**

**For 35.690:**

**Board Certification**

☒ I attest that Carl Nelson, M.D. \_\_\_\_\_ has satisfactorily completed the requirements in  
Name of Proposed Authorized User

35.690(a)(1).

**OR**

**Training and Experience**

☐ I attest that \_\_\_\_\_ has satisfactorily completed 200 hours of classroom  
Name of Proposed Authorized User

and laboratory training, 500 hours of supervised work experience, and 3 years of supervised clinical experience in radiation therapy, as required by 10 CFR 35.690(b)(1) and (b)(2).

**AND**

**AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)**

**Preceptor Attestation (continued)**

**Third Section**

**For 35.690: (continued)**

☒ I attest that Carl Nelson, M.D. has received training required in 35.690(c) for device  
Name of Proposed Authorized User  
 operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought, as  
 checked below.

☒ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

**AND**

**Fourth Section**

☒ I attest that Carl Nelson, M.D. has achieved a level of competency sufficient to  
Name of Proposed Authorized User  
 achieve a level of competency sufficient to function independently as an authorized user for:

☒ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

**Fifth Section**

**Complete the following for preceptor attestation and signature:**

☒ I meet the requirements in 10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as  
 an authorized user for:

☒ 35.400 Manual brachytherapy sources ☐ 35.600 Teletherapy unit(s)

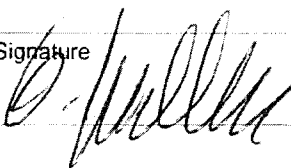
☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

☒ 35.600 Remote afterloader unit(s)

Name of Preceptor

H. James Wallace, M.D.

Signature



Telephone Number

(802) 847-3506

Date

02/01/2017

License/Permit Number/Facility Name

NRC 44-10187-03, University of Vermont Medical Center

# 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,  
the American Association of Physicists in Medicine, and the Society of Interventional Radiology,  
the American Board of Radiology hereby certifies that*

**Carl Julius Nelson, 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*

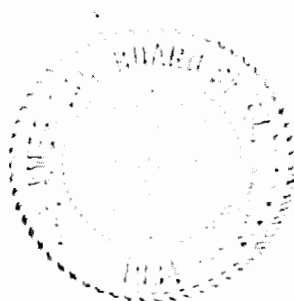
## Radiation Oncology

**All Eligible**

*Ongoing validity of this certificate is contingent upon  
meeting the requirements of Maintenance of Certification.*

**DAWR**

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



*James P. Brantley, MD*  
President

*C. Thomas*  
Secretary-Treasurer

*Harry J. Roberts, MD*  
Executive Director

**Certificate No. 63407**

**Effective: May 20, 2011**