

June 7, 2021

Licensee: The Curators of the University of Missouri

License Number: 24-00513-32

Docket Number: 030-02278

TO: Colleen Carol Casey
Materials Licensing Section
U.S. Nuclear Regulatory Commission, Region III
2443 Warrenville Road, STE 210
Lisle, Illinois 60532-4352

RE: Request for Amendment – Addition of Associate RSO

To whom it may concern:

This letter serves to notify the NRC of our desire to amend the above license as follows:

- 1) Name Dr. Charles A. Wilson, IV, as Associate RSO

Attached is a completed NRC Form 313A (RSO) for Dr. Charles A. Wilson, IV. Dr. Wilson has been affiliated with the University of Missouri since June 1, 2020, when he was hired to take on the role of Deputy Radiation Safety Officer. Dr. Wilson has completed the required §35.50(d) training as noted in the attached NRC Form 313A (RSO) and additional supplemental training forms for §35.100, §35.200, §35.300, §35.400, §35.600 for HDR, §35.1000 for Y-90 SIR-Spheres.

Please contact me at (573) 882-7018 or Mr. Register at (573) 882-0853 if you have any questions. We appreciate your review of our amendment request.

Sincerely,



Todd A. Houts
Director, Environmental Health & Safety



Cade J. Register
Radiation Safety Officer

Cc w/ attachments:

Dr. Silvia Jurisson, Ph.D., Chair RSC

Dr. Talissa Altes, Chair MU RSC Medical Quorum

Attachment A:
NRC Form 313A (RSO) for
Charles A. Wilson, IV



**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION
[10 CFR 35.57, 35.50]**

Name of Individual

☐ RSO

☒ ARSO

Charles A Wilson IV

Requested Authorization(s) *The license authorizes the following medical uses (check all that apply):*

- ☒ 35.100 ☒ 35.200 ☒ 35.300 ☒ 35.400 ☐ 35.500 ☒ 35.600 (remote afterloader)
☐ 35.600 (teletherapy) ☐ 35.600 (gamma stereotactic radiosurgery) ☒ 35.1000 (SIR-spheres)

**PART I -- TRAINING AND EXPERIENCE
(Select one of the five 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 the board certification process has been recognized by the Commission or an Agreement State under 10 CFR 35.50;
 - (i) Go to the table in 5c and describe training provider and dates of training for each type of use for which authorization is sought.
 - (ii) Stop here
- c. If the board certification was issued on or before October 24, 2005 and is listed in 10 CFR 35.57 (a)(2);
 - (i) Provide documentation demonstrating that the individual was using the requested materials and uses on or before October 24, 2005;
 - (ii) Stop here

OR

☐ **2. Current Radiation Safety Officer (RSO) or Associate Radiation Safety Officer (ARSO) Seeking Authorization to Be Recognized as a RSO or ARSO for the Additional Medical Uses Checked Above**

- a. Use the table in section 5.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO or ARSO is sought.
- b. If board certified, provide a copy of the certificate and stop here. If not board certified, skip to and complete Part II Preceptor Attestation.

OR

☐ **3. Authorized User (AU), Authorized Medical Physicist (AMP), or Authorized Nuclear Pharmacist (ANP) identified on a license or permit in accordance with 10 CFR 35.50 (c)(2)**

- a. Provide license number.
- b. Use the table in section 5.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.
- c. If board certified, provide a copy of the certificate and stop here. If not board certified, skip to and complete Part II Preceptor Attestation.

OR

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

☐ **4. Individuals applying simultaneously to be the RSO and AU on a new license**

- ☐ a. Documentation of training and experience to be a new AU is attached
- ☐ b. The new license application is attached.
- c. Stop here.

OR

☒ **5. Structured Educational Program for Proposed RSO or ARSO**

a. Classroom and Laboratory Training

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	Radiation Detection and Instrumentation (with lab) - Louisiana State University (LSU)	60	Fall 2008
	Environmental Radiation Evaluation and Remediation (with lab) - LSU	45	Spring 2011
	Special Problems in Medical and Health Physics 1, 2 & 3 - LSU	45, 45, 45	Summer 2008 & Fall 2008 & Spring 2009
Radiation protection	Radiation Protection and Exposure Evaluation - LSU	45	Fall 2007
	Radiation Shielding - LSU	45	Spring 2010
	Nuclear Facility Safety - LSU	45	Spring 2010
	Advanced projects in medical and health physics 1 & 2 - LSU	45, 45	Fall 2009 & Summer 2010
Mathematics pertaining to the use and measurement of radioactivity	Radiation Science and Medical Applications - LSU	45	Spring 2007
	Medical and Health Physics Report Investigation - LSU	45	Fall 2010
Radiation biology	Radiation Biology - LSU	45	Spring 2010
	Radiation Therapy Physics - LSU	45	Spring 2010
Radiation dosimetry	Introduction to Medical Imaging - LSU	45	Spring 2009
Total Hours of Training:		690	

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

b. Supervised Radiation Safety Experience

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

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Securing and controlling byproduct material	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Using administrative controls to avoid mistakes in administration of byproduct material	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Using emergency procedures to control byproduct material	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Disposing of byproduct material	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">35.100, 35.200, 35.300, 35.400, 35.600, 35.1000 SIR-spheres</div>	University of Missouri/ NRC License #24-00513-32	6/1/2020 - 5/12/2021

+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

b. Supervised Radiation Safety Experience (continued)

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

Supervising Individual Ron Dobey	License/Permit Number listing supervising individual as a Radiation Safety Officer or Associate Radiation Safety Officer NRC License #24-00513-32
The supervising individual is authorized as the <input checked="" type="checkbox"/> Radiation Safety Officer or the for the following medical uses: <input type="checkbox"/> Associate Radiation Safety Officer	
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input checked="" type="checkbox"/> 35.100</div> <div style="width: 50%;"><input checked="" type="checkbox"/> 35.200</div> <div style="width: 50%;"><input checked="" type="checkbox"/> 35.300</div> <div style="width: 50%;"><input checked="" type="checkbox"/> 35.400</div> <div style="width: 50%;"><input type="checkbox"/> 35.500</div> <div style="width: 50%;"><input checked="" type="checkbox"/> 35.600 (remote afterloader)</div> <div style="width: 50%;"><input type="checkbox"/> 35.600 (teletherapy)</div> <div style="width: 50%;"><input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)</div> <div style="width: 50%;"><input checked="" type="checkbox"/> 35.1000 (Sir-spheres)</div> </div>	

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license for the RSO or types of use for which the ARSO will be listed on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	Amolak Singh, AU / Ron Dobey RSO	8/7/2020-8/27/2020
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses	Amolak Singh, AU / Ron Dobey RSO	8/7/2020-8/27/2020
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses	Amelia Wexler, AMP / Ron Dobey RSO	7/7/2020-8/19/2020
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses	Amelia Wexler, AMP / Ron Dobey RSO	7/7/2020-8/19/2020
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):	SIR-spheres Ryan Davis, AU / Ron Dobey RSO	8/7/2020-8/27/2020

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

<i>Supervising Individual If training was provided by supervising RSO, ARSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</i>	License/Permit Number listing supervising individual
Amelia Wexler	NRC License #24-00513-32

License/Permit lists supervising individual as:

☐ Radiation Safety Officer ☐ Associate Radiation Safety Officer
☐ Authorized User ☐ Authorized Nuclear Pharmacist ☒ Authorized Medical Physicist

Authorized as RSO, ARSO, AU, ANP, or AMP for the following medical uses:

<input type="checkbox"/> 35.100	<input type="checkbox"/> 35.200	<input type="checkbox"/> 35.300	<input checked="" type="checkbox"/> 35.400
<input type="checkbox"/> 35.500	<input checked="" type="checkbox"/> 35.600 (remote afterloader)	<input type="checkbox"/> 35.600 (teletherapy)	
<input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)	<input type="checkbox"/> 35.1000 (_____)		

- d. Skip to and complete 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**Structured Educational Program for Proposed RSO or ARSO**

☒ I attest that Charles A Wilson IV has satisfactorily completed
Name of Proposed RSO/ARSO

a structural educational program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

Second Section

AND

☒ I attest that Charles A Wilson IV has training in
Name of Proposed RSO/ARSO

radiation safety, regulatory issues, and emergency procedures for the following types of use:

Check all that apply:

- | | |
|--|--|
| <input checked="" type="checkbox"/> 35.100 | <input checked="" type="checkbox"/> 35.200 |
| <input checked="" type="checkbox"/> 35.300 | oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required |
| <input checked="" type="checkbox"/> 35.300 | oral administration of greater than 33 millicuries of sodium iodide I-131 |
| <input checked="" type="checkbox"/> 35.300 | Parenteral administration of any radioactive drug that contains a radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy of less than 150 keV, for which a written directive is required |

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

<p>Supervising Individual <i>If training was provided by supervising RSO, ARSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</i></p> <p>Amolak Singh</p>	<p>License/Permit Number listing supervising individual</p> <p>NRC License #24-00513-32</p>
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License/Permit lists supervising individual as:

☐ Radiation Safety Officer ☐ Associate Radiation Safety Officer
☒ Authorized User ☐ Authorized Nuclear Pharmacist ☐ Authorized Medical Physicist

Authorized as RSO, ARSO, AU, ANP, or AMP for the following medical uses:

☒ 35.100 ☒ 35.200 ☒ 35.300 ☐ 35.400
☐ 35.500 ☐ 35.600 (remote afterloader) ☐ 35.600 (teletherapy)
☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 (_____)

- d. Skip to and complete 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

Structured Educational Program for Proposed RSO or ARSO

☒ I attest that Charles A Wilson IV has satisfactorily completed
Name of Proposed RSO/ARSO
 a structural educational program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

AND

Second Section

☒ I attest that Charles A Wilson IV has training in
Name of Proposed RSO/ARSO
 radiation safety, regulatory issues, and emergency procedures for the following types of use:

Check all that apply:

- ☒ 35.100 ☒ 35.200
☒ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required
☒ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131
☒ 35.300 Parenteral administration of any radioactive drug that contains a radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy of less than 150 keV, for which a written directive is required

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual *If training was provided by supervising RSO, ARSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*

Ryan Davis

License/Permit Number listing supervising individual

NRC License #24-00513-32

License/Permit lists supervising individual as:

- ☐ Radiation Safety Officer ☐ Associate Radiation Safety Officer
☒ Authorized User ☐ Authorized Nuclear Pharmacist ☐ Authorized Medical Physicist

Authorized as RSO, ARSO, AU, ANP, or AMP for the following medical uses:

- ☐ 35.100 ☐ 35.200 ☐ 35.300 ☐ 35.400
☐ 35.500 ☐ 35.600 (remote afterloader) ☐ 35.600 (teletherapy)
☐ 35.600 (gamma stereotactic radiosurgery) ☒ 35.1000 (SIR-spheres)

- d. Skip to and complete 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

Structured Educational Program for Proposed RSO or ARSO

☒ I attest that Charles A Wilson IV has satisfactorily completed
Name of Proposed RSO/ARSO

a structural educational program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

Second Section

AND

☒ I attest that Charles A Wilson IV has training in
Name of Proposed RSO/ARSO

radiation safety, regulatory issues, and emergency procedures for the following types of use:

Check all that apply:

- ☒ 35.100 ☒ 35.200
☒ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required
☒ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131
☒ 35.300 Parenteral administration of any radioactive drug that contains a radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy of less than 150 keV, for which a written directive is required

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual *If training was provided by supervising RSO, ARSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*

Ron Dobey

License/Permit Number listing supervising individual

NRC License #24-00513-32

License/Permit lists supervising individual as:

- ☒ Radiation Safety Officer ☐ Associate Radiation Safety Officer
☐ Authorized User ☐ Authorized Nuclear Pharmacist ☐ Authorized Medical Physicist

Authorized as RSO, ARSO, AU, ANP, or AMP for the following medical uses:

- ☒ 35.100 ☒ 35.200 ☒ 35.300 ☒ 35.400
☐ 35.500 ☒ 35.600 (remote afterloader) ☐ 35.600 (teletherapy)
☐ 35.600 (gamma stereotactic radiosurgery) ☒ 35.1000 (SIR-spheres)

- d. Skip to and complete 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

Structured Educational Program for Proposed RSO or ARSO

☒ I attest that Charles A Wilson IV has satisfactorily completed
Name of Proposed RSO/ARSO

a structural educational program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

Second Section

AND

☒ I attest that Charles A Wilson IV has training in
Name of Proposed RSO/ARSO

radiation safety, regulatory issues, and emergency procedures for the following types of use:

Check all that apply:

- ☒ 35.100 ☒ 35.200
☒ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required
☒ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131
☒ 35.300 Parenteral administration of any radioactive drug that contains a radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy of less than 150 keV, for which a written directive is required

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

PART II – PRECEPTOR ATTESTATION (continued)

Check all *that apply*:

- ☒ 35.400
- ☐ 35.500
- ☒ 35.600 remote afterloader units
- ☐ 35.600 teletherapy units
- ☐ 35.600 gamma stereotactic radiosurgery units
- ☒ 35.1000 emerging technologies, including:

SIR-spheres

Third Section

AND

☒ I attest that

Charles A Wilson IV

Name of Proposed Radiation Safety Officer or Associate Radiation Safety Officer

is able to independently fulfill the radiation safety-related duties as:

☐ A Radiation Safety Officer for a medical use licensee.

OR

☒ An Associate Radiation Safety Officer for a medical use licensee.

Fourth Section

Complete the following for Preceptor Attestation and signature

☒ I am the Radiation Safety Officer for

☐ I am the Associate Radiation Safety Officer for

Name of Facility: University of Missouri

License/Permit Number: NRC License #24-005130-32

Name of Preceptor (Typed or printed)

Ron Dobey, RSO

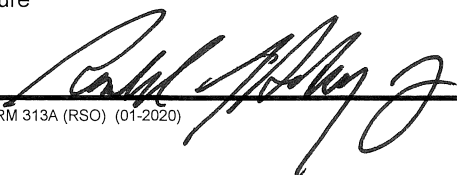
Telephone Number

573 808-1256

Date

6/4/21


Signature

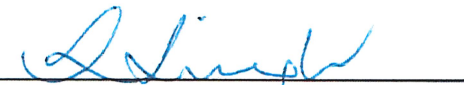


**Supplemental Medical Use Training Form for Charles Wilson
§35.100, §35.200, §35.300 and §35.500**

Medical Use	Review of NRC Regulations	Review of NRC Guidance	Procedure Review and Observations at MU	Emergency Training
§35.100	Date: 8/20/2020, 8/26/2020 Supr: Dobey, RSO	Date: 8/20/2020, 8/26/2020 Supr: Dobey, RSO	Date: 8/20/2020, 8/26/2020 Supr: Singh, AU	Date: 8/20/2020, 8/26/2020 Supr: Singh, AU
§35.200	Date: 8/27/2020 Supr: Dobey, RSO	Date: 8/27/2020 Supr: Dobey, RSO	Date: 8/27/2020 Supr: Singh, AU	Date: 8/27/2020 Supr: Singh, AU
§35.300	Date: 8/7/2020 Supr: Dobey, RSO	Date: 8/7/2020 Supr: Dobey, RSO	Date: 8/7/2020 Supr: Singh, AU	Date: 8/7/2020 Supr: Singh, AU

Overall training completed: 8/27/2020
Date


Ronald J Dobey, Jr., CHP RSO

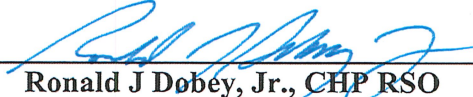

Amolak Singh, AU

Training Supervisors (Supr): Ronald Dobey, Jr, CHP, RSO; Amolak Singh, AU

**Supplemental Medical Use Training Form for Charles Wilson
§35.400 and §35.600 (HDR)**

Medical Use	Review of NRC Regulations	Review of NRC Guidance	Procedure Review and Observations at MU	Emergency Training
§35.400	Date: 7/7/2020 Supr: Dobey, RSO	Date: 7/7/2020 Supr: Dobey, RSO	Date: 7/7/2020 Supr: Wexler, AMP	Date: 7/7/2020 Supr: Wexler, AMP
§35.600 (HDR)	Date: 7/14/2020, 8/19/2020 Supr: Dobey, RSO	Date: 7/14/2020, 8/19/2020 Supr: Dobey, RSO	Date: 7/14/2020 Supr: Wexler, AMP	Date: 8/19/2020 Supr: Wexler, AMP

Overall training completed: 8/19/2020
Date


Ronald J Dobey, Jr., CHP RSO


Amelia Wexler, AMP

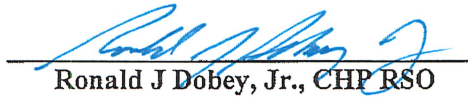
Training Supervisors (Supr): Ronald Dobey, Jr, CHP, RSO; Amelia Wexler, AMP

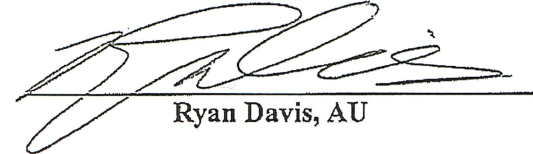
Training Supervisors (Supr): Ronald Dobey, Jr, CHP, RSO; Amolak Singh, AU; Ryan Davis, AU; or Amelia Wexler, AMP

**Supplemental Medical Use Training Form for Charles Wilson
§35.1000 (SIR-Spheres)**

Medical Use	Review of NRC Regulations	Review of NRC Guidance	Procedure Review and Observations at MU	Emergency Training
§35.1000 (SIR-Spheres)	Date: 8/25/2020 Supr: Dobey, RSO	Date: 8/25/2020 Supr: Dobey, RSO	Date: 8/25/2020 Supr: Davis, AU	Date: 8/25/2020 Supr: Davis, AU

Overall training completed: 8/25/2020
Date


Ronald J Dobey, Jr., CHP RSO


Ryan Davis, AU

Training Supervisors (Supr): Ronald Dobey, Jr, CHP, RSO; Ryan Davis, AU

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

b. Supervised Radiation Safety 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 Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Securing and controlling byproduct material	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Using administrative controls to avoid mistakes in administration of byproduct material	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Using emergency procedures to control byproduct material	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Disposing of byproduct material	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">35.100, 35.200, 35.300, 35.400, 35.600, 35.1000 SIR-spheres</div>	University of Missouri/ NRC License #24-00513-32	5/13/2021- Present

+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

b. Supervised Radiation Safety Experience (continued)

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

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer or Associate Radiation Safety Officer
Cade Register	NRC License #24-00513-32
The supervising individual is authorized as the for the following medical uses:	
<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> 35.100 <input checked="" type="checkbox"/> 35.200 <input checked="" type="checkbox"/> 35.300 <input type="checkbox"/> 35.500 <input checked="" type="checkbox"/> 35.600 (remote afterloader) <input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery) </div> <div> <input checked="" type="checkbox"/> Radiation Safety Officer or the <input type="checkbox"/> Associate Radiation Safety Officer <input checked="" type="checkbox"/> 35.400 <input type="checkbox"/> 35.600 (teletherapy) <input checked="" type="checkbox"/> 35.1000 (Sir-spheres) </div> </div>	

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license for the RSO or types of use for which the ARSO will be listed on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	Amolak Singh, AU / Ron Dobey RSO	8/7/2020-8/27/2020
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses	Amolak Singh, AU / Ron Dobey RSO	8/7/2020-8/27/2020
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses	Amelia Wexler, AMP / Ron Dobey RSO	7/7/2020-8/19/2020
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses	Amelia Wexler, AMP / Ron Dobey RSO	7/7/2020-8/19/2020
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):	SIR-spheres Ryan Davis, AU / Ron Dobey RSO	8/7/2020-8/27/2020

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

5. Structured Educational Program for Proposed RSO or ARSO (continued)

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual <i>If training was provided by supervising RSO, ARSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</i>	License/Permit Number listing supervising individual
Cade Register	NRC License #24-00513-32

License/Permit lists supervising individual as:

☒ Radiation Safety Officer ☐ Associate Radiation Safety Officer
☐ Authorized User ☐ Authorized Nuclear Pharmacist ☐ Authorized Medical Physicist

Authorized as RSO, ARSO, AU, ANP, or AMP for the following medical uses:

<input checked="" type="checkbox"/> 35.100	<input checked="" type="checkbox"/> 35.200	<input checked="" type="checkbox"/> 35.300	<input checked="" type="checkbox"/> 35.400
<input type="checkbox"/> 35.500	<input checked="" type="checkbox"/> 35.600 (remote afterloader)	<input type="checkbox"/> 35.600 (teletherapy)	
<input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)	<input checked="" type="checkbox"/> 35.1000 (SIR-spheres)		

- d. Skip to and complete 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

Structured Educational Program for Proposed RSO or ARSO

☒ I attest that Charles A Wilson IV has satisfactorily completed
Name of Proposed RSO/ARSO
 a structural educational program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

Second Section

AND

☒ I attest that Charles A Wilson IV has training in
Name of Proposed RSO/ARSO
 radiation safety, regulatory issues, and emergency procedures for the following types of use:

Check all that apply:

- | | |
|--|--|
| <input checked="" type="checkbox"/> 35.100 | <input checked="" type="checkbox"/> 35.200 |
| <input checked="" type="checkbox"/> 35.300 | oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required |
| <input checked="" type="checkbox"/> 35.300 | oral administration of greater than 33 millicuries of sodium iodide I-131 |
| <input checked="" type="checkbox"/> 35.300 | Parenteral administration of any radioactive drug that contains a radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy of less than 150 keV, for which a written directive is required |

**RADIATION SAFETY OFFICER OR
ASSOCIATE RADIATION SAFETY OFFICER
TRAINING, EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.57, 35.50] (continued)**

PART II – PRECEPTOR ATTESTATION (continued)

Check all *that apply*:

- ☒ 35.400
- ☐ 35.500
- ☒ 35.600 remote afterloader units
- ☐ 35.600 teletherapy units
- ☐ 35.600 gamma stereotactic radiosurgery units
- ☒ 35.1000 emerging technologies, including:

SIR-spheres

Third Section

AND

☒ I attest that

Charles A Wilson IV

Name of Proposed Radiation Safety Officer or Associate Radiation Safety Officer

is able to independently fulfill the radiation safety-related duties as:

☐ A Radiation Safety Officer for a medical use licensee.

OR

☒ An Associate Radiation Safety Officer for a medical use licensee.

Fourth Section

Complete the following for Preceptor Attestation and signature

☒ I am the Radiation Safety Officer for

☐ I am the Associate Radiation Safety Officer for

Name of Facility: University of Missouri

License/Permit Number: NRC License #24-005130-32

Name of Preceptor (Typed or printed)

Cade Register, RSO

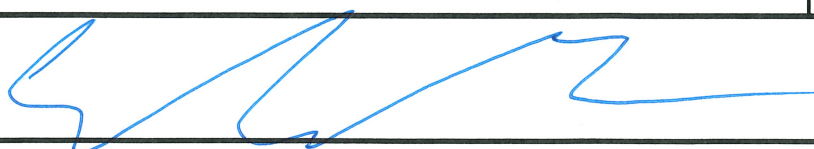
Telephone Number

573-882-0853

Date

6/7/21

Signature



Pavon, Sandy

From: Casey, Colleen
Sent: Monday, June 07, 2021 4:12 PM
To: Tomczak, Tammy; Song, Taehoon; Pavon, Sandy
Subject: Please place in ADAMS....FW: NRC Amendment Request - University of Missouri
Attachments: Amendment Packet - 6-7-2021.pdf

This is a new amendment request. Please place it in ADAMS, send the 665 to me and Bob can assign it to me if he wishes.

Thanks,
Colleen

From: Register, Cade <cjrpk2@missouri.edu>
Sent: Monday, June 07, 2021 2:24 PM
To: Casey, Colleen <Colleen.Casey@nrc.gov>
Cc: Houts, Todd A. <houtst@missouri.edu>; Jurisson, Silvia S. <JurissonS@missouri.edu>; Altes, Talissa A. <altest@health.missouri.edu>; Wilson, Charles <cawhmc@missouri.edu>
Subject: [External_Sender] NRC Amendment Request - University of Missouri

Colleen,

Attached you will find our amendment request to add Dr. Charles A. Wilson, IV, to our Broad Scope License (24-00513-32) as an Associate RSO. Please let me or Mr. Houts know if you have any questions or require additional information.

Sincerely,

Cade Register

*Associate Director, Environmental Health & Safety
Radiation Safety Officer*

900 E Stadium Blvd | 180 GSB | Columbia MO 65211
O: 573-882-0853 | E: cregister@missouri.edu



University of Missouri