Hill, Carol

From: Chris <chrisfitz65@hotmail.com>
Sent: Thursday, July 31, 2014 3:13 PM
To: Hill, Carol
Subject: FW: License amendment for 25-07553-01
Attachments: amendment_051314.pdf; ABR certificate.pdf; BC Y90 letter 2013-2014.pdf; Christenson Nucs ABR_cases.pdf; christenson_313a_aud.pdf; christenson_313a_aut.pdf; UCH License Am 45 Redacted.pdf; Y-90 CME course certificate.pdf; Y90 course certificate 12.pdf; Y90 course certificate 22.pdf; Y90 SAM credits.pdf

Carol, here is the orginal email I sent to you. If we could get the approved ASAP that would be very helpful.

Thank you

Chris

From: chrisfitz65@hotmail.com
To: carol.hill@nrc.gov
Subject: License amendment for 25-07553-01
Date: Tue, 13 May 2014 07:26:03 -0700

Good Morning Carol, please accept the attached licensing material for St. Vincent Healthcare, Billings Montana. Can you please let me know you have received? Thank you for your help.

Chris

May 13, 2014

Roberto J. Torres, Senior Health Physicist
U.S. Nuclear Regulatory Commission, Region IV
612 East Larmar Blvd. Suite 400
Arlington, TX 76011-4125

Re: Amendment Request for St. Vincent Healthcare, NRC License Number 25-07553-01

Dear Mr. Torres:

Please amend the above referenced license to include the following:

1. Add Brian Christenson, M.D., as an authorized user for 10 CFR 35.100 and 200 uses. Dr. Christenson is Board Certified by the ABR in Diagnostic Radiology. NRC form 313a (AUD) is attached.
2. Please add Brian Christenson, M.D., as an authorized user for 10 CFR 35.300 uses for oral administration of I-131 of sodium I-131 for quantities less than or equal to 33 mCi and quantities greater than 33 mCi.
3. Please add Brian Christenson, M.D., as an authorized user for 10 CFR 35.1000 for the use of SIR-Spheres and TheraSpheres. The use of Y-90 microspheres will be for medical use, as permitted by 10 CFR 35.1000, in a Sirtex or TheraSpheres medical delivery system.
4. Please add to item 6 Yttrium-90 as permitted by 10 CFR 35.1000. The form will be SIR-Spheres and TheraSpheres. The authorized use will be for medical use, as permitted by 10 CFR 35.1000.
5. Please remove Ann Giuliano, M.D., as an authorized user for 10 CFR 35.100, 200, and 300 uses.

The following documentation for training and experience for training and experience is attached.

- Statement of training during Vascular and Interventional Fellowship from the University of Colorado.
- Statements of training from Society of Intentional Radiology
- University of Colorado Hospital Radioactive materials license documenting AU status for 10 CFR 35.100, 200, 300, and 1000 uses.
- Copy of ABR Certification.

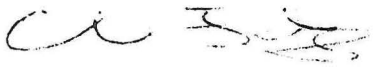
Dr. Christenson is an interventional radiologist who has board certification in diagnostic radiology from the American Board of Radiology. Dr. Christenson is completing a Vascular and Interventional Fellowship at the University of Colorado Hospital. The 80 hours of classroom and laboratory training for byproduct material, including Y-90 microspheres was concurrent with training received during his residency and fellowship. The clinical use training and experience for item B of the licensing guidance are being satisfied by following pathway 2. Dr. Christenson will complete will complete at least the first three hands-on patient cases supervised in the physical presence of a manufacturer representative. In addition, within 30 days of each case, documentation will be submitted to the NRC by St. Vincent Healthcare. The documentation will be from the manufacturer verifying the cases were satisfactorily completed.

Additional training will be provided to all individuals involved in Y-90 microsphere use, commensurate with the individual's duties to be performed.

The license commitments included in the licensing Guidance will be followed for written directives, inventory, patient release, labeling and medical event reporting.

If you have questions or require additional information, please contact Chris Fitz at 925-550-7720.

Thank you for your assistance with this request.



Christopher Fitz, JD, MS, ABSNM
Radiation Safety Officer
St. Vincent Healthcare
Radiology
1233 N 30th Street
Billings, MT 59101

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

Brian M. Christenson, 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

Diagnostic Radiology

AM Eligible

THE AMERICAN BOARD OF RADIOLOGY INCORPORATED IN THE DISTRICT OF COLUMBIA 1934

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

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

DABR

AMERICAN BOARD 1933 OF MEDICAL SPECIALTIES EXCELLENCE OPTIMUS

James P. Borgstede, M.D.
President

Secretary-Treasurer

Executive Director

Certificate No. 63329

Effective: June 12, 2013

Chris Fitz
Radiation Safety Officer
St. Vincent Healthcare
Department of Radiology
1233 N 30th Street
Billings, MT 59101

May 7th, 2014

Mr. Fitz:

The intent of this letter is to document, validate and support the experience of Dr. Brian Christenson in the evaluation and treatment of patients with unresectable liver malignancies with SIRSpheres and TheraSpheres Y-90 microspheres. I am currently an Authorized User Physician on Colorado Radioactive Materials License 828-01 for both SIRSpheres and TheraSpheres and have worked with Dr. Christenson with both modalities. I have worked closely with him over the last year during his Vascular and Interventional Radiology fellowship and feel qualified to render my assessment.

Dr. Christenson has been an active participant in 7 SIRSpheres cases and 3 TheraSpheres cases since 2013, working under close supervision with either myself, or one of other Authorized User physicians in our Interventional Oncology practice. He has been trained in and participated in these cases including preparation of the treatment room and the delivery set to minimize risk of contamination and the delivery of the Y-90 microspheres. To further supplement his knowledge base and experience, Dr. Christenson attended and participated in a comprehensive multiday course (Y-90: The Complete Course) sponsored by the Society of Radiology in Scottsdale, Arizona in February of 2014.

Dr. Christenson is a bright, thoughtful and competent physician and I am confident that he has the necessary training and skills to safely deliver Y-90 microspheres in the treatment of unresectable hepatic malignancies. Please contact me at your convenience if you require further information (mobile – 303-854-4798)

Sincerely,

Matthew Gipson, MD
Assistant Professor
Interventional Radiology
University of Colorado Hospital

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

Brian Christenson — Resident Name
UNIV OF COLORADO — Program
06-02-06-2 — 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.....	☑	☐
This applicant has taken part in ≥ 3 cases of oral administration of I-131 therapy ≤ 33mCi.....	☑	☐
This applicant has taken part in ≥ 3 cases of oral administration of I-131 therapy >33 mCi.....	☑	☐
The resident's log of these therapy experiences (date, dose, and preceptor attestation) is attached.....	☑	☐
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.....	☑	☐
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.....	☑	☐
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.....	☑	☐

DAVID RUBINSTEIN, MD
Residency Program Director
(Print Name)

Program Director
(Signature)

2/15/13
Date

Form B

I-131 Therapy Experience Log

Brian Christenson
Resident Name

UNIV OF COLORADO 06-02-06-2
Program & Number

Date	Dose Administered	Preceptor (AU) Print & Sign Name
≤ 33mCi		
1. 10/13/10	15 mCi	Bill Klingensmith (Print Name) / (Sign Name)
2. 4/18/12	20 mCi	Bill Klingensmith (Print Name) / (Sign Name)
3. 4/18/12	15 mCi	Bill Klingensmith (Print Name) / (Sign Name)

Date	Dose Administered	Preceptor (AU) Print & Sign Name
>33 mCi		
1. 9/30/2010	75 mCi	Bill Klingensmith (Print Name) / (Sign Name)
2. 9/30/2010	100 mCi	Bill Klingensmith (Print Name) / (Sign Name)
3. 10/8/2010	50 mCi	Bill Klingensmith (Print Name) / (Sign Name)

№ 584470

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

U.S. NUCLEAR REGULATORY COMMISSION

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]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: (05/31/2015)

Name of Proposed Authorized User	State or Territory Where Licensed
Brian Christenson, M.D.	CO, MT

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

- [x] 35.100 Uptake, dilution, and excretion studies
- [x] 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.

[x] 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)

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			
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		☐ Yes ☐ No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		☐ Yes ☐ No	

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		☐ Yes ☐ No	
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		☐ Yes ☐ No	
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures		☐ Yes ☐ No	
Administering dosages of radioactive drugs to patients or human research subjects		☐ Yes ☐ 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		☐ Yes ☐ 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)*.

☐ 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.

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)

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 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 _____ 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 Brian Christenson, M.D. 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 _____ 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 ☑ 35.290 ☑ 35.390 ☐ 35.390 + generator experience

Name of Preceptor	Signature	Telephone Number	Date
Phillip Koo, M.D.		720-848-1213	4/23/14

License/Permit Number/Facility Name

University of Colorado, Denver / University of Colorado Hospital 929-01

NRC FORM 313A (AUT) (05-2012) | 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: (05/31/2015)

Name of Proposed Authorized User	State or Territory Where Licensed
Brian Christenson, M.D.	CO, MT

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.

No 584470

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: ☐		

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

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

b. Supervised Work Experience (continued)

Supervising Individual	License/Permit Number listing supervising individual as an authorized user

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

☐ 35.390
☐ 35.392
☐ 35.394
☐ 35.396

With experience administering dosages of:

☐ 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

** 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)			
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)			
Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required			
Parenteral administration of any other radionuclide for which a written directive is required (List radionuclides)			

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

c. Supervised Clinical Case Experience (continued)

Supervising Individual	License/Permit Number listing supervising individual as an authorized user

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

☐ 35.390
☐ 35.392
☐ 35.394
☐ 35.396

With experience administering dosages of:

☐ 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

** 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 _____ has satisfactorily completed the training and experience
Name of Proposed Authorized User

requirements in 35.390(a)(1).

OR

Training and Experience

☐ I attest that _____ has satisfactorily completed the 700 hours of training
Name of Proposed Authorized User

and experience, including a minimum of 200 hours of classroom and laboratory training, as required by 10 CFR 35.390 (b)(1).

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 Brian Christenson, M.D. (Name of Proposed Authorized User) has satisfactorily completed the 80 hours of classroom 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 Brian Christenson, M.D. (Name of Proposed Authorized User) has satisfactorily completed the 80 hours of classroom 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 Brian Christenson, M.D. (Name of Proposed Authorized User) has satisfactorily completed the required clinical case 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 Brian Christenson, M.D. (Name of Proposed Authorized User) has satisfactorily achieved a level of competency to function independently as an authorized user for:

- ☑ Oral NaI-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)
- ☑ Oral NaI-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)
- ☐ Parenteral administration of beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required
- ☐ Parenteral administration of any other radionuclide requiring a written directive

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Fourth Section

For 35.396:

Current 35.490 or 35.690 authorized user:

☐ I attest that _____ is an authorized user under 10 CFR 35.490 or 35.690
Name of Proposed Authorized User

or equivalent Agreement State requirements, has satisfactorily completed the 80 hours of classroom and laboratory training, as required by 10 CFR 35.396 (d)(1), and the supervised work and clinical case experience required by 35.396(d)(2), and has achieved a level of competency sufficient to function independently as an authorized user for:

☐ Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☐ Parenteral administration of any other radionuclide for which a written directive is required

OR

Board Certification:

☐ I attest that _____ 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	Signature	Telephone Number	Date
Phillip Koo, M.D.		720-848-1213	4/22/14

License/Permit Number/Facility Name
University of Colorado, Denver / University of Colorado Hospital 529-01

STATE OF COLORADO
RADIOACTIVE MATERIALS LICENSE

Colorado Department of Public Health and Environment

Pursuant to the Colorado Radiation Control Act, Title 25, Article 11, Colorado Revised Statutes, and the State of Colorado Rules and Regulations Pertaining to Radiation Control (the Regulations), and in reliance on statements and representations heretofore made by the licensee designated below; a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive material(s) for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect of the Colorado Department of Public Health and Environment and to any conditions specified below.

1. Licensee: University of Colorado Hospital

2. Mailing Address: AMC, Leprino Office Building, 12401 East 17th Avenue, 5th Floor, Room 5-547, Mailstop L-954, Aurora, Colorado 80045

3. License Number: Colo. 828-01, Amendment Number 45

4. Expiration date: November 30, 2016

5. Authorized Storage/Use Locations:
   A. Anschutz Outpatient Pavilion, 1635 Aurora Court, Aurora, Colorado 80045
   B. Anschutz Cancer Pavilion, 1665 Aurora Court, Aurora, Colorado 80045
   C. Anschutz Inpatient Pavilion, 12605 East 16th Avenue, Aurora, Colorado 80045
   D. UCH Lone Tree Health Center, 9548 Park Meadows Drive, Lone Tree, Colorado 80124
   E. Anschutz Inpatient Pavilion 2, 12505 East 16th Avenue, Aurora, Colorado 80045

6. The Designated Radiation Safety Officer is: Deirdre H. Elder
   The Designated Alternate Radiation Safety Officers are: Steven M. Jones, M.S.; Joel R. McAllister, M.S.

7. Radiation Safety Officer Contact Number: (720) 848-6549

8. Fee Category: 7.C and 3.E

9. Reference Number: IC, NSTS, PET, Compliance Order No. 12-06-25-01

CONDITIONS

10. Authorized Radioactive Material and Uses:

A. The licensee is authorized to possess and use any unsealed radioactive material for uptake, dilution, or excretion studies which has been prepared for medical use in accordance with the requirements of Section 7.30 of the Regulations. The licensee shall not possess more than 370 GBq (10 Ci) of these materials at any one time.

B. The licensee is authorized to possess and use any unsealed radioactive material for imaging and localization studies which has been prepared for medical use in accordance with the requirements of Section 7.32 of the Regulations. The licensee shall not possess more than 370 GBq (10 Ci) of these materials at any one time.

   i. This authorization includes radioactive aerosols and gases in accordance with Section 7.34 of the Regulations.
   ii. This authorization includes positron-emitting isotopes.

C. The licensee is authorized to possess any unsealed radioactive material for which a written directive is required which has been prepared for medical use in accordance with the requirements of Section 7.36 of the Regulations. The licensee shall not possess more than 370 GBq (10 Ci) of these materials at any one time. The licensee is authorized to use these materials as per the following authorized subsections of Section 7.36 only:

   i. Use of any unsealed radioactive material for diagnostic or therapeutic medical use for which a written directive is required in accordance with Section 7.36.2 of the Regulations.
   ii. Use limited to oral administration of ≤ 1.22 GBq (33 mCi) of I-131 Sodium Iodide in accordance with Section 7.36.3 of the Regulations.
   iii. Use limited to oral administration of > 1.22 GBq (33 mCi) of I-131 Sodium Iodide in accordance with Section 7.36.4 of the Regulations.
   iv. Use limited to parenteral administration in accordance with Section 7.36.5 of the Regulations.

D. The licensee is authorized to possess and use sealed sources in accordance with Section 7.42 of the Regulations for manual brachytherapy. The licensee shall not possess more than 370 GBq (10 Ci) of these materials at any one time.

E. The licensee is authorized to possess and use 2 sealed sources in accordance with Section 7.48 of the Regulations for use in a Varisource iX High Dose Rate (HDR) Remote Afterloading Brachytherapy Unit. The total activity shall not exceed 777 GBq (21 Ci) of Ir-192. The source activity may not exceed 407 GBq (11 Ci) at the time of installation.

F. The licensee is authorized to possess and use not more than a total of 44.84 GBq (1.32 Ci) of I-125 for use in a GliaSite Brachytherapy (GSB) Device in accordance with Section 7.62 of the Regulations to deliver intracavity radiation therapy in patients following malignant brain tumor resection surgery.

G. The licensee is authorized to possess and use no more than 42 GBq (1.135 Ci) of Y-90 microspheres for use in a Sirtex SIR-Spheres (MS-SIR) brachytherapy afterloader system in accordance with Section 7.62 of the Regulations. The total activity of Y-90 contained in each vial shall not exceed 7.0 GBq (189 mCi).

H. The licensee is authorized to possess and use no more than 100 GBq (2.703 Ci) of Y-90 microspheres for use in a MDS Nordion TheraSphere (MS-TS) therapy device in accordance with Section 7.62 of the Regulations. The total activity of Y-90 contained in each vial shall not exceed 20 GBq (540 mCi).

I. The licensee is authorized to possess and use sealed sources for patient attenuation corrections and for Positron Emission Tomography (PET) camera quality control as part of the General Electric PET/CT scanner. Each sealed source contains not more than 56 MBq (1.5 mCi) of Ge-68. The total activity of all such sources shall not exceed 185 MBq (5 mCi) of Ge-68.

J. The licensee is authorized to possess and use any radioactive materials specified in Section 7.19 of the Regulations for check, calibration, and reference use.

K. [redacted]

L. The licensee is authorized to possess and use one Gd-153 sealed source and one Co-57 sealed source contained in a Siemens Symbia T16 SPECT/CT unit for calibration and quality control. Activities of these sources shall not exceed 30 mCi as per section 7.19 of the Regulations.

11. Authorized Users:

A. Radioactive material authorized in Item 10 shall be used by or under the supervision of the following authorized users as specified:

Name of Authorized User	Authorized Use(s)
Brian Bagrosky, M.D.	7.30, 7.32, 7.36.3, 7.36.4, 7.36.5
Janette D. Durham, M.D.	7.62(MS-SIR), 7.62(MS-TS)
Christine M. Fisher, M.D.	7.42.2, 7.48(HDR)
Lauric E. Gaspar, M.D.	7.42.2, 7.48(HDR), 7.62(GSB), 7.62(MS-SIR), 7.62(MS-TS)
Matthew G. Gipson, M.D.	7.30, 7.32, 7.62(MS-SIR), 7.62(MS-TS)
Sana D. Karam, M.D., Ph.D.	7.42.2, 7.48(HDR)
Brian D. Kavanagh, M.D.	7.42.2, 7.48(HDR), 7.62(GSB)
Phillip Koo, M.D.	7.30, 7.32, 7.36.2
Jennifer Kwak, M.D.	7.30, 7.32, 7.36.2
Arthur K. Liu, M.D.	7.42.2, 7.48(HDR)
Jamaluddin Moloo, M.D.	7.30, 7.32
Robert A. Quaife, M.D.	7.30, 7.32, 7.36.2
David Raben, M.D.	7.42.2, 7.48(HDR)
Rachel A. Rabinovitch, M.D.	7.42.2, 7.48(HDR)
Tracey E. Schefter, M.D.	7.42.2, 7.48(HDR), 7.62(MS-SIR), 7.62(MS-TS)

B. The following individuals are designated as authorized medical physicists:

Name of Authorized Medical Physicist	Authorized Use
Mustafa Altunbas, Ph.D.	7.42.2, 7.48(HDR), 7.62(MS-SIR), 7.62(MS-TS)
Adam L. Kesner, Ph.D.	7.62(MS-SIR), 7.62(MS-TS)
Moyed Miften, Ph.D.	7.42.2, 7.48(HDR), 7.62(MS-SIR)
Francis Newman, M.S.	7.42.2, 7.48(HDR), 7.62(MS-SIR), 7.62(MS-TS)
Leah Schubert, Ph.D.	7.42.2, 7.48(HDR)
Kelly Stuhr, M.S.	7.42.2, 7.48(HDR), 7.62(MS-TS)
David Westerly, Ph.D.	7.42.2, 7.48(HDR)

C. Radioactive material specified in Section 7.19 of the Regulations may be used by or under the supervision of any of the authorized users listed above, by the designated Radiation Safety Officer or alternate Radiation Safety Officer, and by any authorized medical physicist listed on this license.

D. Authorized users of radioactive materials in Item 10.F shall have completed initial training by the manufacturer prior to their initial use of the GliaSite Brachytherapy Device.

E. Radioactive material authorized in Item 10.I and 10.L may be used by or under the supervision of any of the authorized users listed above and by the designated Radiation Safety Officer or alternate Radiation Safety Officer and by any authorized medical physicist listed on this license.

F. Radioactive material authorized in Item 10.K shall be used by or under the supervision of Ronald Lepoff, M.D.

G. Radioactive materials authorized in Items 10.A, 10.B, and 10.C which will be administered to human subjects or used to intentionally expose human subjects to radiation for research, shall only be used by or under the supervision of individuals, listed as Authorized Users in Item 11.A and who have been designated as Principal Investigators by the University of Colorado Denver Committee on Ionizing Radiation, after research protocols have been approved by an Institutional Review Board, prior informed consent from the human subjects has been obtained, and the University of Colorado Hospital Radiation Safety Committee has approved the human use research project.

H. The Radiation Safety Officer shall maintain documentation of the training and experience for each authorized user of radioactive materials. This documentation shall include for each user: a copy of the applicable board certifications, preceptor statements, and any other relevant training documents.

12. General Requirements:

A. The licensee shall comply with all applicable provisions of the Regulations including: Part 1, "General Provisions"; Part 3, "Licensing of Radioactive Material"; Part 4, "Standards for Protection Against Radiation"; Part 7, "Use of Radionuclides in the Healing Arts"; Part 10, "Notices, Instructions and Reports to Workers; Inspections"; and Part 17, "Transportation of Radioactive Material".

B. The Radiation Safety Officer shall maintain documentation of the training and experience for each person who uses radioactive materials under the supervision of an authorized user.

C. Radioactive material authorized in Item 10.B shall be used for medical diagnosis and research in humans in accordance with any applicable Food and Drug Administration (FDA) requirements.

D. Each person who uses radioactive material under the supervision of an authorized user shall be supervised and receive instruction in accordance with the requirements of Section 7.10 and Section 10.3 of the Regulations.

E. The licensee shall not transfer possession and/or control of radioactive materials or items contaminated with radioactive material except: by transfer of waste to an authorized recipient; by transfer to a specifically licensed recipient; or, as provided otherwise by specific condition of this license pursuant to the requirements of Part 3, Section 3.22 of the Regulations.

F. Radioactive material authorized by Item 10 of this license shall be stored and used in a manner that will preclude possession or use by unauthorized personnel.

G. The licensee shall ensure that information listed in this license is correct and accurate. The licensee shall notify the Department in writing within ten (10) days whenever the information contained in Items 1 through 7 above is no longer current or determined to be incorrect.

H. The licensee may transport radioactive material or deliver radioactive material to a carrier for transport in accordance with the provisions of Part 17 of the Regulations and the requirements of U.S. Department of Transportation (49 CFR).

I. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices.

13. Specific Radiation Safety Requirements:

A. Each sealed source authorized in Item 10 of this license or in Section 7.19 of the Regulations shall be tested for leakage and/or contamination in accordance with the

requirements of Section 7.20.2 of the Regulations, and Part 4, Section 4.16 of the Regulations, at intervals not to exceed six (6) months.

B. The licensee shall acquire and maintain a current copy of the applicable Sealed Source and Device Registry Evaluation for each brachytherapy device/source in use by the licensee. Unless alternative operating procedures are specifically authorized by this license, the licensee shall comply with the safety precautions and limitations established in the applicable device registry evaluation.

C. Source installation and maintenance of the HDR device authorized in Item 10.E shall be performed in accordance with Section 7.49 of the Regulations.

D. An authorized user designated in license condition 11 of this license shall perform the Iotrex administration procedures and shall remove activity from the RTS balloon.

E. Authorized users of radioactive materials in Item 10.G and any authorized users subsequently approved for use, shall complete the Sirtex SIR-Spheres training prior to initial use.

F. The Sirtex SIR-Spheres therapy device shall be used with the Delivery Set and Delivery Box in accordance with the manufacturer's instructions.

G. Authorized users of radioactive materials in Item 10.H and any authorized users subsequently approved for use, shall complete the MDS Nordion TheraSphere Radiotherapy System training program prior to initial use.

H. The MDS Nordion TheraSphere system shall be used with the Administration Set and Accessory Kit in accordance with the manufacturer's instructions. Only an inflation syringe capable of delivering a liquid volume of 20cc with a minimum pressure of 10 psig should be used with the Administration Set in accordance with the manufacturer's instructions.

I. The MDS Nordion TheraSphere Radiotherapy System is approved by the U.S. Food and Drug Administration under the provisions of a Humanitarian Device Exemption (HDE No. H9800006). Therefore, an Institutional Review Board is required to approve and monitor the use of the TheraSphere device.

14. Special License Requirements:

A. Installation, relocation, maintenance, repair, leak testing and initial survey of devices that contain radioactive material and replacement, and disposal of sealed sources that contain radioactive material that is used in devices shall be performed only by the manufacturer, or by other persons who are specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State having jurisdiction over the possession and use of accelerator produced radioactive material.

B. The licensee shall establish, implement, and maintain provisions as necessary to comply with the Increased Controls (IC) requirements contained in:

i. The Department's Increased Controls Bulletin 2009-01; and
ii. Annex A to this license.

C. The licensee shall notify the Department at (303) 877-9757 and the NRC's Headquarters Operations Office at (301) 816-5100 within 24 hours if the results from any Increased Controls criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.

D. Unless prohibited by this license, the licensee shall:
i. Report any manufacture, transfer, receipt, disassembly, or disposal of a nationally tracked source, as specified in Annex B to this license; and

E. Report annually to the NSTS database as specified in Annex B to this license.

15. Licensee Commitments and Reference Documents:

The State of Colorado Rules and Regulations Pertaining to Radiation Control shall govern unless the licensee's statements, representations, and procedures contained in the application and correspondence are more restrictive than the Regulations. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Item 10 of this license in accordance with the statements, representations, and procedures contained in:

A. the application and attachments dated October 13, 2011; and

B. the license correspondence and attachments dated March 1, 2012; March 21, 2012; May 4, 2012; July 27, 2012; August 13, 2012; August 23, 2012 (email); August 30, 2012 (email); August 31, 2012 (email); December 3, 2012; January 7, 2013; February 20, 2013; March 4, 2013; March 7, 2013; April 24, 2013 (email); June 26, 2013; July 12, 2013; August 13, 2013; August 21, 2013 (email); November 19, 2013; February 4, 2014;

C. the University of Colorado Hospital Radiation Safety Manual: Policies and Procedures dated August 2011; and

D. Compliance Order No. 12-06-25-01 dated June 25, 2012.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Date: March 4, 2014 By: Jennifer T. Opila

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SOCIETY OF INTERVENTIONAL RADIOLOGY

Enhanced care through advanced technology

PHYSICIAN PARTICIPANT CERTIFICATE OF CONTINUING EDUCATION

Â

SIR certifies that

Brian M. Christenson

participated in the

2014 Y-90: The Complete Course

February 6-9, 2014
Scottsdale, Arizona

Brian M. Christenson received a total of **21.25** *AMA PRA Category 1 Credits™*.

The Society of Interventional Radiology is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide Continuing Medical Education for physicians.

Â

The Society of Interventional Radiology designates this enduring material CMEÂ activityÂ for a maximum of 21.25 *AMA PRA Category 1 Credits™*.

Â

Physicians should only claim credit commensurate with the extent of their participation in the activity.

Note: If the recipient of this CME Certificate is not a physician (MD or DO), this certificate is null and void. SIR can only provide AMA PRA Category 1 Credit™ CME Certificates to physicians.

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Jennifer L. Rowley

Jennifer L. Rowley
Senior Manager, Professional Education and Certification

Society of Interventional Radiology | 3975 Fair Ridge Drive, Suite 400 North | Fairfax, VA 22033
Tel: 703.691.1805 | Fax: 703.691.1855 | E-mail: CME@SIRweb.org | www.SIRweb.org

CertificateNumber: 209642C_U1605_A4926_O1_T1

No 584470

SOCIETY OF
INTERVENTIONAL
RADIOLOGY

Enhanced care through advanced technology®

The Society of Interventional Radiology
Certificate of Completion

Brian M. Christenson

has completed 21.5 hours of course work and successfully passed a formal examination in the following areas during the Society of Interventional Radiology's Y90: The Complete Course, held February 6-9, 2014, in Scottsdale, Arizona. The course content was based upon the Nuclear Regulatory Commission's Microsphere Brachytherapy Sources and Devices, Licensing Guidance - TheraSphereÂ® and SIR-SpheresÂ® Yttrium-90 Microspheres, revised January 2011 as related to Authorized Use (AU) status for intra-arterial Y90 in the treatment of hepatic malignancies.

In witness whereof, we have hereunto affixed our signatures Society of Interventional Radiology - Fairfax, Virginia, March 1, 2014

Matthew S. Johnson, MD, FSIR
Y90 Program Coordinator

Robert J. Lewandowski, M.D., FSIR
Northwestern Memorial Hospital
Chicago

Daniel Sze, M.D., PhD, FSIR
Stanford University Medical
Center Stanford, Califf

Course content of the SIR Y90: The Advanced Course includes the following topic areas:

Historical Perspective on Liver Cancer

State of the Art: Treatment Strategies
- HCC
- Metastatic Colon and Rectal Carcinoma
- Liver Dominant Metastatic Disease
- Hepatobiliary Surgery for Malignancy

Basic Principles of Radiation Physics for Y-90
- Fundamentals of Radiation Physics and Instrumentation
- Radiation Protection
- Mathematics Pertaining to the Use and Measurement of Radioactivity
- Brachytherapy

Radiation Biology
- Basic Radiation Concepts
- Radiation Chemistry

Hepatic Radiation Biology

Y90 Patient Selection and Outcomes - HCC
- Diagnosis of HCC and Guidelines
- Outcomes of Y90

Y90 Patient Selection and Outcomes – Metastic Disease
- Colorectal Cancer
- Neuroendocrine Tumors
- Role of Y90 in Other Primaries

The Initial Clinic Visit

Pretreatment Anglo and MAA Shunt Study for Y90

Advanced Anglo for Y90
- Complex Anomalies
- Advanced Coil Embolization Strategies
- Mitigating Complications
- Cone Beam CT

Y90 Dosimetry Simplified
- Mathematical calculations for doses for TheraSphere
- Mathematical calculations for doses for SIR-Sphere

Comparing Y90 Devices

AU Requirements

Health Policy and Economics
- Professional Coding and Reimbursement Strategies
- National Health Policy and Liver Cancer: Where Should Y90 Fit in?

Radiation Safety Issues Treatment and Follow-up

Dosimetry

Advanced Concepts in Y90: Round Table Panel Discussion
- Y90 Re-treatment
- Segmectomy/Lobectory
- Adjuvant Chemo Therapy, Metastatic Disease
- Sorafenib and Y90, HCC
- Re-section Following Y90
- Re-distribution
- Shunt Over 20 Percent and Portal Thrombosis
- Recognizing Radiation Hepatitis
- Managing GI Complaints
- Nuances of Y90 for Neuroendocrine Cancer
- Chemo and Combination Therapy, Metastases

Practice Models: Strategies for Success
- AU From an Academic Perspective
- AU From a Private Practice Perspective
- Unified Multispecialty Practice
- Benefits of AU Status
- Achieving AU Status

Novel Concepts in Y90
- Novel Interventional Approaches to Safe Y90 Delivery
- Using Y90 After XRT to the Liver
- Moffitt Cancer Center; Experience with Cholangiocarcinoma and Neuroendocrine Tumors
- Clinical Trials with Y90: Current Status
- Anti-Reflux Catheters

Review of SIR and ASTRO Consensus Guidelines

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SOCIETY OF INTERVENTIONAL RADIOLOGY

Enhanced care through advanced technology

PHYSICIAN PARTICIPANT CERTIFICATE OF CONTINUING EDUCATION

SIR certifies that

Brian M. Christenson

has received 10.25Â SAM credits Â at theÂ

2014 Y-90: The Complete Course

February 6-9, 2014
Scottsdale, Arizona

The Society of Interventional Radiology (SIR) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide medical education for physicians.
Â

This program has been approved for 10.25 self-assessment module (SAM) credit by the Society of Interventional Radiology (SIR). SIR is awarded Deemed Status by the American Board of Radiology (ABR). The SAMs offered at this live meeting meet the ABR's criteria for a self-assessment toward the purpose of fulfilling requirements in the ABR Maintenance of Certification (MOC) Program.Â

Approved: December 13, 2013

The Society of Interventional Radiology designates this educational activity for a maximum ofÂ 21.25Â *AMA PRA Category 1 Credits™*. These credits have already been calculated in the Y-90: The Complete Course CME Certificate.

Physicians should claim only the credit commensurate with the extent of their participation in the activity

Date of Completion: February 9, 2014

Jennifer L. Rowley

Â

Jennifer Rowley
Senior Manager of Professional Education and Certification

Society of Interventional Radiology | 3975 Fair Ridge Drive, Suite 400 North | Fairfax, VA 22033
Tel: 703.691.1805 | Fax: 703.691.1855 | E-mail: CME@SIRweb.org | www.SIRweb.org

CertificateNumber: 0987759C_U1605_A4926_O1_T6

№ 584470

NRC FORM 532
(1-2012)

U. S. NUCLEAR REGULATORY COMMISSION

DATE

07/31/2014

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE	LICENSE NUMBER
St. Vincent Healthcare ATTN: Christopher K. Fitz Radiation Safety Officer P.O. Box 35200 Billings, Montana 59107-5200	25-07553-01
	MAIL CONTROL NUMBER 584470
	LICENSING AND/OR TECHNICAL REVIEWER CH

This is to acknowledge the receipt of your:

☑ LETTER and/or ☐ APPLICATION DATED: 05/13/2014

The initial processing, which included an administrative review, has been performed.

☑ AMENDMENT ☐ TERMINATION ☐ NEW LICENSE ☐ RENEWAL

☐ There were no administrative omissions identified during our initial review.

☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

☐ Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER.** When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV
U. S. Nuclear Regulatory Commission
DNMS/NMSB - B
1600 E. Lamar Boulevard
Arlington, TX 76011-4511
(817) 200-1103 or (817) 200-1140

NRC FORM 532
(1-2012)

U. S. NUCLEAR REGULATORY COMMISSION

DATE

07/31/2014

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE	LICENSE NUMBER
St. Vincent Healthcare ATTN: Christopher K. Fitz Radiation Safety Officer P.O. Box 35200 Billings, Montana 59107-5200	25-07553-01
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1600 E. Lamar Boulevard
Arlington, TX 76011-4511
(817) 200-1103 or (817) 200-1140

NRC FORM 532
(1-2012)

√ 7/31/14

BETWEEN:

Accounts Receivable/Payable
and
Regional Licensing Branches

[FOR ARPB USE]
INFORMATION FROM WBL

Program Code: 02230
Status Code: Pending Amendment
Fee Category: 7C
Exp. Date: 04/30/2015
Fee Comments:
Decom Fin Assur Reqd: N

License Fee Worksheet - License Fee Transmittal

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee:	ST. VINCENT HEALTHCARE
Received Date:	05/13/2014
Docket Number:	3002396
Mail Control Number:	584470
License Number:	25-07553-01
Action Type:	Amendment

2. FEE ATTACHED

Amount: _____

Check No.: _____

3. COMMENTS

Signed: Carol L Hess

Date: 7/31/14

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment: _____

Renewal: _____

License: _____

3. OTHER _____

_____

Signed: _____

Date: _____