MedStar Georgetown
University Hospital



Br. 1
08-30577-01
030-36409

April 8, 2013

James Dwyer, Medical Branch Chief
Division of Nuclear Materials Safety
US Nuclear Regulatory Commission Region I
Re: Change of Status at Medstar Georgetown University Hospital

Dear Mr. Dwyer,

Effective April 19, 2013, Medstar Georgetown University Hospital has accepted the resignation for Maxwell Amurao serving as the Radiation Safety Officer (RSO). The MGUH Radiation Safety committee has voted to approve Candi McDowell as the interim RSO. Ms. McDowell has sixteen (16) years of experience. Both her resume and NRC form 313, are enclosed for your review.

Please contact Assistant Vice President Angela M. Jones at 202 444-7419 if you should have any questions regarding this change in status.

Sincerely,

Michael Sachtleben
Chief Operating Officer
Medstar Georgetown University Hospital

**Candi L. McDowell**
[redacted]
Work: (202) 444-4637
E-mail: Candi.L.McDowell@gunet.georgetown.edu

Experience:

Georgetown University Hospital — Washington, DC
**Deputy Radiation Safety Officer** — November 2010 to present

- Performs audits to assure compliance with NRC, JCAHO and ACR regulations and requirements
- Supports radiopharmaceutical therapy program
- Performs general surveillance of Radiation Safety activities including personnel, facility and environmental monitoring
- Provides technical support to departments using radioactive materials throughout the hospital
- Provides consultation support to personnel working with or responsible for practices involving exposure to ionizing radiation, as well as patients and family members as applicable
- Provides Radiation Safety education and training
- Acts as the Radiation Safety Officer (RSO) in the absence of the organizational designated RSO
- Supports organizational RSO during all internal, state, federal and independent audits/inspections to ensure successful result
- Manages the radioactive waste disposal program
- Conducts leak tests and performs sealed source inventories
- Prepares and ships radioactive material
- Oversaw the external monitoring program from November 2010 through March 2012 to include the distribution and return of approximately 600 dosimetry devices, notification of personnel when action levels were exceeded and follow-up investigations when action levels were exceeded
- Licensed in the District of Columbia as a Radiation Physics Consultant

Experience:

University [redacted] Baltimore, Maryland
**Assistant R** [redacted] tober 2002 to March 2004

- Provided coverage for the Broad Scope license in the absence of the Radiation Safety Officer
- Attended Radiation Safety Committee meetings
- Performed radiation protection surveys in Nuclear Medicine and Radiation Oncology
- Prepared detailed reports and recommendations regarding radiation safety programs
- Developed training programs for occupational and ancillary workers
- Conducted in-service training sessions for occupationally exposed personnel
- Provided coverage for therapeutic administrations of radioactive material
- Oversaw the radiation producing machine program at the University to include inspections and registration with state regulators
- Reviewed and develop policies and procedures pertaining to radiation safety
- Completed Hazardous Materials Technician Training
- Completed Federal Emergency Management Agency course entitled "Introduction to Incident Command System."

University of Maryland, Baltimore Baltimore, Maryland
**Health Physicist** March 2001 to October 2002

- Radioactive Material Package Receipt/Distribution
- Performed radiation protection surveys in basic research laboratories, Nuclear Medicine and Radiation Oncology
- Prepared detailed reports and recommendations regarding radiation safety programs
- Developed training programs for occupational and ancillary workers
- Conducted in-service training sessions for occupationally exposed personnel
- Provided coverage for therapeutic administrations of radioactive material
- Involved with the radiation producing machine program at the University
- Reviewed and developed policies and procedures pertaining to radiation safety
- Performed sealed source leak testing

Experience:

[redacted] Krueger-Gilbert Health Physics, Inc. Baltimore, Maryland
[redacted]**sicist** September, 1997 to March, 2001

- Reviewed and coordinated radiation safety programs
- Attended Radiation Safety Committee meetings
- Prepared NRC/state license applications, renewals, amendments
- [redacted]latory interpretation and regulatory responses
- Performed radiation protection surveys
- Prepared detailed reports and recommendations regarding radiation safety programs
- Reviewed and developed policies and procedures pertaining to radiation safety
- Performed sealed source leak testing
- [redacted]
- Performed dose calibrator accuracy and linearity evaluations
- Performed imaging camera quality assurance including SPECT analysis
- Performed well counter and uptake probe calibrations
- Received training on calibration of survey meters and waste monitors
- Conducted performance/compliance testing on CT and radiographic equipment
- [redacted]
- Monitored doses from diagnostic radiology procedures
- Monitored occupational exposure
- Evaluated exposure from environmental/area monitoring
- Performed film processing analysis
- Performed mammography quality assurance surveys
- Performed ultrasound quality assurance
- Developed training programs for occupational workers/hospital staff
- [redacted]
- Conducted in-service training sessions for occupationally exposed personnel. Subject matter included radiation safety and protection, radiation physics, radiation biology, instrumentation, NRC/State regulations, and DOT shipping requirements. Participants include physicians, nurses, technologists, and other facility personnel.
- Computer Skills: Custom computer programs to evaluate dose calibrator linearity data, generate decay charts, compute entrance skin exposure from diagnostic x-ray exams, perform shielding calculations, and prepare graphs and charts.

Sinai Hospital of Baltimore Baltimore, Maryland
**Nuclear Medicine Technologist** September, 1991 to September, 1997

- Prepared and administered radiopharmaceuticals
- Performed quality control on equipment and radiopharmaceuticals
- Performed various nuclear medicine studies
- Performed computer processing on appropriate studies
- Participated in the Employee Forum
- Developed and implemented monthly inservices for the training of physicians regarding the Chest Pain Emergency Room protocol

Education:

Oregon State University — Corvallis, OR
Master of Health Physics [redacted]

- GPA: 3.49

Georgia Institute of Technology — Atlanta, GA [redacted]

- 21 Credit Hours completed towards Masters of Health Physics
- Completed Diagnostic Imaging Physics Course

University of Maryland University College — Adelphi, MD [redacted]

- Completed Masters level classes in Environmental Risk Assessment and Environmental Policy

York College of Pennsylvania — York, PA
**Bachelor of Science** [redacted]

- Graduated Magna Cum Laude
- Member of Alpha Chi Honor Society
- On Dean's List for 4 consecutive semesters
- GPA: 3.71

University of Pittsburgh at Bradford — Bradford, PA [redacted]

- Member of Alpha Lambda Delta Honor Society
- On Dean's List for 4 consecutive semesters

Affiliations:

- Member of the Baltimore Washington Chapter of the Health Physics Society

NRC FORM 313A (RSO) (3-2009) | U.S. NUCLEAR REGULATORY COMMISSION

# RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.50]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 3/31/2012

Name of Proposed Radiation Safety Officer

**Candi L. McDowell, MHP**

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 ( Microspheres )

## PART I -- TRAINING AND EXPERIENCE
*(Select one of the four 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. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

**OR**

☐ **2. Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above**

a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought.

b. Skip to and complete Part II Preceptor Attestation.

**OR**

☑ **3. Structured Educational Program for Proposed Radiation Safety Officer**

a. Classroom and Laboratory Training

| Description of Training | Location of Training | Clock Hours | Dates of Training* |
|---|---|---|---|
| Radiation physics and instrumentation | Oregon State University<br>Nuclear Engineering & Radiation Health Physics<br>Corvallis, OR 97331, Ecampus Master's | 200 | January 2007 - June 2010 |
| Radiation protection | Oregon State University<br>Nuclear Engineering & Radiation Health Physics<br>Corvallis, OR 97331, Ecampus Master's | 450 | January 2007 - June 2010 |
| Mathematics pertaining to the use and measurement of radioactivity | Oregon State University<br>Nuclear Engineering & Radiation Health Physics<br>Corvallis, OR 97331, Ecampus Master's | 60 | January 2007 - June 2010 |
| Radiation biology | Oregon State University<br>Nuclear Engineering & Radiation Health Physics<br>Corvallis, OR 97331, Ecampus Master's | 110 | January 2007 - June 2010 |
| Radiation dosimetry | Oregon State University<br>Nuclear Engineering & Radiation Health Physics<br>Corvallis, OR 97331, Ecampus Master's | 90 | January 2007 - June 2010 |
| | **Total Hours of Training:** | 910.0 | |

3. Structured Educational Program for Proposed Radiation Safety Officer (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 Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| 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 Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| Securing and controlling byproduct material | University of Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| Using administrative controls to avoid mistakes in administration of byproduct material | University of Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures | University of Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| Using emergency procedures to control byproduct material | University of Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| Disposing of byproduct material | University of Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |
| Licensed Material Used (e.g., 35.100, 35.200, etc.)+ 35.300, 35.400, 35.500,<br>35.600 remote afterloader units ,<br>35.600 gamma stereotactic radiosurg<br>35.1000 (Microspheres) | University of Pittsburgh<br>Radiation Safety Office<br>Pittsburgh, PA 15261<br>PA-0190 | July 2, 2007 - November 12, 2010 |

+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantilies 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 TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

**3. Structured Educational Program for Proposed Radiation Safety Officer (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 |
|---|---|
| Michael Sheetz, MS, CHP, DABMP | PA-0190 |

This license authorizes the following medical uses:

- [x] 35.100
- [x] 35.200
- [x] 35.300
- [x] 35.400
- [x] 35.500
- [x] 35.600 (remote afterloader)
- [ ] 35.600 (teletherapy)
- [x] 35.600 (gamma stereotactic radiosurgery)
- [x] 35.1000 (Microspheres)

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use 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 | Michael Sheetz, MS, CHP, DABMP | July 2, 2007 - November 12, 2010 |
| Radiation safety, regulatory issues, and emergency procedures for 35.300 uses | Michael Sheetz, MS, CHP, DABMP | July 2, 2007 - November 12, 2010 |
| Radiation safety, regulatory issues, and emergency procedures for 35.400 uses | Michael Sheetz, MS, CHP, DABMP | July 2, 2007 - November 12, 2010 |
| 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 | Michael Sheetz, MS, CHP, DABMP | July 2, 2007 - November 12, 2010 |
| Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses | Michael Sheetz, MS, CHP, DABMP | July 2, 2007 - November 12, 2010 |
| Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s): | Michael Sheetz, MS, CHP, DABMP<br>Vendor Training - MDS Nordion | July 2, 2007 - November 12, 2010<br>September 9, 2009 |

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

**3. Structured Educational Program for Proposed Radiation Safety Officer (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, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)* | License/Permit Number listing supervising individual |
|---|---|
| Michael Sheetz, MS, CHP, DABMP | PA-0190 |

License/Permit lists supervising individual as:

☑ Radiation Safety Officer ☐ Authorized User ☐ Authorized Nuclear Pharmacist
☐ Authorized Medical Physicist

Authorized as RSO, 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 (Microspheres)

d. Skip to and complete Part II Preceptor Attestation.

OR

☐ **4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist identified on the licensee's license**

a. Provide license number.

b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. 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**
**Check one of the following:**

☐ **1. Board Certification**

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

☑ **2. Structured Educational Program for Proposed Radiation Safety Officers**

☑ I attest that Candi L. McDowell has satisfactorily completed a structural educational
Name of Proposed Radiation Safety Officer

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).

OR

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

**Preceptor Attestation** (continued)

**First Section** (continued)
**Check one of the following:**

☐ 3. **Additional Authorization as Radiation Safety Officer**

☐ I attest that _____ is an
Name of Proposed Radiation Safety Officer

☐ Authorized User ☐ Authorized Nuclear Pharmacist

☐ Authorized Medical Physicist

identified on the Licensees license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

**AND**

**Second Section**
**Complete for all** ***(check all that apply)*****:**

☑ I attest that Candi L. McDowell has training in the radiation safety, regulatory issues, and
Name of ProposedRadiation Safety Officer

emergency procedures for the following types of use:

| | | |
|---|---|---|
| ☑ | 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 beta-emitter, or a 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 |
| ☑ | 35.400 | |
| ☑ | 35.500 | |
| ☑ | 35.600 | remote afterloader units |
| ☐ | 35.600 | teletherapy units |
| ☑ | 35.600 | gamma stereotactic radiosurgery units |
| ☑ | 35.1000 | emerging technologies, including: Microspheres |

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(3-2009)

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

AND

**Third Section**
**Complete for ALL**

☑ I attest that Candi L. McDowell has achieved a level of radiation safety knowledge
Name of Proposed Radiation Safety Officer

sufficient to function independently as a Radiation Safety Officer for a medical use licensee.

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**Fourth Section**
**Complete the following for Preceptor Attestation and signature**

I am the Radiation Safety Officer for University of Pittsburgh
Name of Facility

License/Permit Number: PA-0190

| Name of Preceptor | Signature | Telephone Number | Date |
|---|---|---|---|
| Michael Sheetz, MS, CHP, DABMP | Michael Sheetz | (412) 624-2729 | 11-12-10 |

This is to acknowledge the receipt of your letter/application dated

04/08/2013, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment (08-30577-01)

☒ There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 580430
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader