

March 8, 2012

U.S. Nuclear Regulatory Commission Region III
Radioactive Materials Licensing Section
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

RE: NRC License 24-08960-02

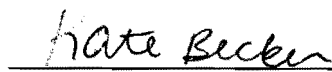
To Whom It May Concern,

We wish to amend our radioactive materials license, in compliance with 10 CFR 35.13, to add Patrick Meek, MS as an Authorized Medical Physicist.

He has satisfied all the training and experience requirements under 10 CFR 35.51 for Iridium-192 remote afterloading units. Enclosed is NRC Form 313A (APM): Authorized Medical Physicist Training and Experience and Preceptor Attestation.

If you have any questions regarding this matter, please do not hesitate to call one of our medical physicists, Lindsay Launius, at 314-768-8267.

Sincerely,



Kate Becker, President
St. Mary's Health Center

Enclosure

**AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION
[10 CFR 35.51]**APPROVED BY OMB: NO. 3150-0120
EXPIRES: 3/31/2012

Name of Proposed Authorized Medical Physicist

Requested Authorization(s)
(check all that apply) ☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

PART I -- TRAINING AND EXPERIENCE
(Select one of the three methods below)

*Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ **1. Board Certification**

- a. Provide a copy of the board certification.
- b. Go to the table in 3.c. and describe training provider and dates of training for each type of use for which authorization is sought.
- c. Skip to and complete Part II Preceptor Attestation.

☐ **2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above**

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

☒ **3. Education, Training, and Experience for Proposed Authorized Medical Physicist**

- a. Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university.

| | |
|-----------------------|-----------------|
| Degree | Major Field |
| Masters Degree | Medical Physics |
| College or University | |
| Purdue University | |

- b. Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

- ☒ Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of Colleen DesRosiers who meets the requirements for an Authorized Medical Physicist.

AND

- ☒ Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of Lindsay Lannicus Mobley who meets the requirements for an Authorized Medical Physicist.

+ Peter Situ

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

| Description of Training/Experience | Location of Training/License or Permit Number of Training Facility/Medical Devices Used+ | Dates of Training* | Dates of Work Experience* |
|--|---|-----------------------|---------------------------|
| Medical Physics - Lab @ Clinical Veterinary Site on Campus | Purdue University Radiation Oncology Physics Lab Course # HSCI 570R | Aug-Dec .09 | |
| Performing sealed source leak tests and inventories | | | |
| Performing decay corrections | Purdue University Radiation Instrumentation Lab (HSCI 571) Radiation Onc Physics (HSCI 572) | Jan '10 - May '10 | |
| Performing full calibration and periodic spot checks of external beam treatment unit(s) | | | |
| Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s) | | | |
| Performing full calibration and periodic spot checks of remote afterloading unit(s) | Purdue University - Memorial Medical Center Springfield, IL Clinical Rotation (HSCI 690) | June '10 - Aug '10 | |
| Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s) | Purdue University - Memorial Medical Center Springfield, IL Clinical Rotation (HSCI 690) | June '10 - Aug '10 | |

Supervising Individual**



License/Permit Number listing supervising individual as an authorized Medical Physicist

13-02752-03

for the following types of use:

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

+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST 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.

First Section

Check one of the following:

1. Board Certification

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Medical Physicist
10 CFR 35.51(a)(1) and (a)(2).

OR

2. Education, Training, and Experience

☒ I attest that Patrick Heek has satisfactorily completed the 1-year of full-time
Name of Proposed Authorized Medical Physicist
training in medical physics and an additional year of full-time work experience as required by 10 CFR 35.51(b)(1).

AND

Second Section

Complete the following:

☒ I attest that PATRICK MBBX has training for the types of use for which authorization
Name of Proposed Authorized Medical Physicist
is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system.

AND

Third Section

Complete the following:

☒ I attest that PATRICK MBBX has achieved a level of competency sufficient to
Name of Proposed Authorized Medical Physicist
function independently as an Authorized Medical Physicist for the following:

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

AND

Fourth Section

Complete the following for preceptor attestation and signature:

☒ I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized Medical Physicist for the following:

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

Name of Preceptor

Signature

Telephone Number

Date

COURN DESPRES

COURN

3179441316

3/7/12

License/Permit Number/Facility Name

13-02752-03

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)**3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)****b. Supervised Full-Time Medical Physics Training and Work Experience (continued)**

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

| Description of Training/ Experience | Location of Training/License or Permit Number of Training Facility/Medical Devices Used+ | Dates of Training* | Dates of Work Experience* |
|---|---|-----------------------|------------------------------|
| Medical Physics | Hulston Cancer Center, Springfield MO / 24-01143-06 | | March 2011-Sept 2011 |
| Performing sealed source leak tests and inventories | Hulston Cancer Center, Springfield MO / 24-01143-06 | | March 2011-Sept 2011 |
| Performing decay corrections | Hulston Cancer Center, Springfield MO / 24-01143-06 | | March 2011-Sept 2011 |
| Performing full calibration and periodic spot checks of external beam treatment unit(s) | | | |
| Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s) | | | |
| Performing full calibration and periodic spot checks of remote afterloading unit(s) | Hulston Cancer Center, Springfield MO / 24-01143-06 | | March 2011-Sept 2011 |
| Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s) | Hulston Cancer Center, Springfield MO / 24-01143-06 | | March 2011-Sept 2011 |
| Supervising Individual** | License/Permit Number listing supervising individual as an authorized Medical Physicist 24-01143-06 | | |
| Peter D. Situ, PhD | | | |

for the following types of use:

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

+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

| Description of Training | Training Provider and Dates | | |
|--|---|-------------|---------------------------------|
| | Remote Afterloader | Teletherapy | Gamma Stereotactic Radiosurgery |
| Hands-on device operation | Peter Situ, PhD March-Sept 2011. | | |
| Safety procedures for the device use | Nucletron [Mason, Box], March, June and September 2011. Peter Situ, PhD March-Sept 2011. | | |
| Clinical use of the device | Peter Situ, PhD March-Sept 2011. | | |
| Treatment planning system operation | Nucletron March 2011. Victor Jacome, MSc; Peter Situ, PhD March-Sept 2011. | | |
| Supervising Individual <small>If training is provided by Supervising Medical Physicist, (if more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</small> | License/Permit Number listing supervising individual as an authorized Medical Physicist | | |
| Peter Situ, PhD | 24-01143-06 | | |

for the following types of use:

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

If Applicable:

| Authorization Sought | Device | Training Provided By | Dates of Training |
|---------------------------------------|--------|----------------------|-------------------|
| 35.400 Ophthalmic Use of strontium-90 | | | |

d. Skip to and complete Part II Preceptor Attestation.

AUTHORIZED MEDICAL PHYSICIST 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.

First Section

Check one of the following:

1. Board Certification

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Medical Physicist
10 CFR 35.51(a)(1) and (a)(2).

OR

2. Education, Training, and Experience

☐ I attest that _____ has satisfactorily completed the 1-year of full-time
Name of Proposed Authorized Medical Physicist
training in medical physics and an additional year of full-time work experience as required by 10 CFR 35.51(b)(1).

AND

Second Section

Complete the following:

☒ I attest that Patrick Meek, MSc has training for the types of use for which authorization
Name of Proposed Authorized Medical Physicist
is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system.

AND

Third Section

Complete the following:

☒ I attest that Patrick Meek, MSc has achieved a level of competency sufficient to
Name of Proposed Authorized Medical Physicist
function independently as an Authorized Medical Physicist for the following:

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

AND

Fourth Section

Complete the following for preceptor attestation and signature:

☒ I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized Medical Physicist for the following:

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

Name of Preceptor

Signature

Telephone Number

Date

Peter Situ, PhD



(417) 269-8935

02/16/2012

License/Permit Number/Facility Name

24-01143-06 / Huston Cancer Center ; Cox-South, Springfield MO 65807

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

| Description of Training/ Experience | Location of Training/License or Permit Number of Training Facility/Medical Devices Used+ | Dates of Training* | Dates of Work Experience* |
|---|--|-----------------------|------------------------------|
| Medical Physics | St. Mary's Health Center / 24-08960-02 / Nucletron V3 DePaul Health Center / 24-02490-03 / Nucletron V2 | | Sept 2011- present |
| Performing sealed source leak tests and inventories | | | |
| Performing decay corrections | St. Mary's Health Center / 24-08960-02 / Nucletron V3 DePaul Health Center / 24-02490-03 / Nucletron V2 | | Sept 2011- present |
| Performing full calibration and periodic spot checks of external beam treatment unit(s) | St. Mary's Health Center / 24-08960-02 / Varian iX DePaul Health Center / 24-02490-03 / Varian EX | | Sept 2011- present |
| Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s) | | | |
| Performing full calibration and periodic spot checks of remote afterloading unit(s) | St. Mary's Health Center / 24-08960-02 / Nucletron V3 DePaul Health Center / 24-02490-03 / Nucletron V2 | | Sept 2011- present |
| Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s) | St. Mary's Health Center / 24-08960-02 / Nucletron V3 DePaul Health Center / 24-02490-03 / Nucletron V2 | | Sept 2011- present |

Supervising Individual**

Lindsay Launius-Mobley

License/Permit Number listing supervising individual as an
authorized Medical Physicist

24-08960-02

for the following types of use:

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

+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

| Description of Training | Training Provider and Dates | | |
|--|--|--|---------------------------------|
| | Remote Afterloader | Teletherapy | Gamma Stereotactic Radiosurgery |
| Hands-on device operation | Lindsay Launius-Mobley Sept 2011 - present | | |
| Safety procedures for the device use | Lindsay Launius-Mobley Sept 2011 - present Chris Sidwell (Nucletron) Feb 2012 | | |
| Clinical use of the device | Lindsay Launius-Mobley Sept 2011 - present | | |
| Treatment planning system operation | Lindsay Launius-Mobley Sept 2011 - present | | |
| Supervising Individual <small>If training is provided by Supervising Medical Physicist, (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</small> Lindsay Launius-Mobley | | License/Permit Number listing supervising individual as an authorized Medical Physicist 24-08960-02 | |
| for the following types of use: | | | |
| <input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s) | | | |

If Applicable:

| Authorization Sought | Device | Training Provided By | Dates of Training |
|---------------------------------------|--------|----------------------|-------------------|
| 35.400 Ophthalmic Use of strontium-90 | | | |

d. Skip to and complete Part II Preceptor Attestation.

AUTHORIZED MEDICAL PHYSICIST 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.

First Section

Check one of the following:

1. Board Certification

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Medical Physicist
10 CFR 35.51(a)(1) and (a)(2).

OR

2. Education, Training, and Experience

☒ I attest that Patrick Meek has satisfactorily completed the 1-year of full-time
Name of Proposed Authorized Medical Physicist
training in medical physics and an additional year of full-time work experience as required by 10 CFR 35.51(b)(1).

AND

Second Section

Complete the following:

☒ I attest that Patrick Meek has training for the types of use for which authorization
Name of Proposed Authorized Medical Physicist
is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system.

AND

Third Section

Complete the following:

☒ I attest that Patrick Meek has achieved a level of competency sufficient to
Name of Proposed Authorized Medical Physicist
function independently as an Authorized Medical Physicist for the following:

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

AND

Fourth Section

Complete the following for preceptor attestation and signature:

- ☒ I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized Medical Physicist for the following:
- ☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

| | | | |
|--|--|---|-----------------------|
| Name of Preceptor <u>Lindsay Laurius Mobley</u> | Signature <u>Lindsay Laurius Mobley</u> | Telephone Number <u>314-768-8267</u> | Date <u>3-8-12</u> |
| License/Permit Number/Facility Name <u>24-08960-02 St. Mary's Health Center</u> | | | |

St. Mary's Health Center
6420 Clayton Rd.
St. Louis, MO 63117



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U.S. Nuclear Regulatory Commission Region III
Radioactive Materials Licensing
2443 Warrenville Rd. Suite 210
Lisle, IL 60532-4352