

**HU**  
**HOWARD**  
**UNIVERSITY**  
**HOSPITAL**

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 Washington, D.C. 20060

(202) 865-6100  
 (202) 745-3731 Fax

MSIE  
 K-8

May 20, 2010

Sandy Gabriel, Ph.D.  
 Senior Health Physicist  
 Medical Branch  
 NRC Region 1

License Number: 08-03075-07  
 Docket Number: 03001321  
 Mail Control Number: 144623

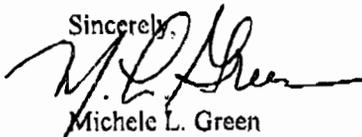
Dear Dr. Gabriel:

As the Management Representative to the Radiation Safety Committee, the attached documents have been reviewed and I am in agreement with the following:

- Amendment No. 15 to New York Department of Health Radioactive Materials License No. 311 which names the new Radiation Safety Officer, Dr. Satya Ranjan Bose, to the license as a Radiation Therapy Physicist; and
- Radiation Safety Officer Training and Experience and Preceptor Attestation [10 CFR 35.50] was completed by Dr. Satya Ranjan and approved on May 17, 2010 by Dr. Manuel G. Dalopc, Radiation Safety Officer of North Medical Radiotherapy, Liverpool New York.

In addition, the contact numbers for the Radiation Safety Office are (202) 806-7216, and fax number (202) 806-5432.

Sincerely,



Michele L. Green  
 Associate Hospital Director &  
 RSC Management Representative

c: Eve J. Higginbotham, S.M., M.D.,  
 Senior Vice President and Executive Dean for Health Sciences

Celia J. Maxwell, M.D., FACP  
 Assistant Vice President for Health Sciences

Larry Warren  
 Chief Executive Officer, Howard University Hospital

Paul Mullings, FACHE  
 Chief Operating Officer & Senior Assoc. Hospital Director, Howard University Hospital

Robert E. Taylor, M.D., Ph.D., FACP  
 Dean, Howard University College of Medicine

Satya Ranjan Bose, Ph.D.  
 Director of Radiation Safety, Howard University Radiation Safety Office

144623

**NMSS/RGN1 MATERIALS-002**

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

Satya Ranjan Bose, Ph.D.

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 ( \_\_\_\_\_ )

**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                              |                      |             |                    |
| Radiation protection   |                      |             |                    |
| Mathematics pertaining to the use and measurement of radioactivity |                      |             |                    |
| Radiation biology  |                      |             |                    |
| Radiation dosimetry  |                      |             |                    |

**Total Hours of Training:**

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**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  
(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/<br>License or Permit Number of Facility | Dates of Training* |
|---|---|--------------------|
| Shipping, receiving, and performing related radiation surveys   |   |                    |
| Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides |   |                    |
| Securing and controlling byproduct material   |   |                    |
| Using administrative controls to avoid mistakes in administration of byproduct material   |   |                    |
| Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures   |   |                    |
| Using emergency procedures to control byproduct material  |   |                    |
| Disposing of byproduct material   |   |                    |
| Licensed Material Used (e.g., 35.100, 35.200, etc.) <sup>+</sup><br>_____<br>_____<br>_____   |   |                    |

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

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**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 |
| This license authorizes the following medical uses:               |  |
| <input type="checkbox"/> 35.100                                   | <input type="checkbox"/> 35.200  |
| <input type="checkbox"/> 35.500                                   | <input type="checkbox"/> 35.600 (remote afterloader)                               |
| <input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery) | <input type="checkbox"/> 35.300  |
|   | <input type="checkbox"/> 35.400  |
|   | <input type="checkbox"/> 35.600 (teletherapy)                                      |
|   | <input type="checkbox"/> 35.1000 ( _____ )   |

**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               | Univ. of Virginia, Univ. of Arizona, UPMC- Latrobe Area Hospital, Latrobe, Jefferson Hospital, Arnold Palmer Cancer Pav. | From 1986 through 2006                |
| Radiation safety, regulatory issues, and emergency procedures for 35.300 uses                                   | University of Virginia, Charlottesville, VA  | 1997-2000                             |
| Radiation safety, regulatory issues, and emergency procedures for 35.400 uses                                   | Radiotherapy Associates, Upstate, N.Y.<br>UPMC Latrobe Area Hospital, Latrobe, PA<br>UPMC Magee Women Hospital, PA,      | 2009 & 2010<br>2002-2003<br>2002-2005 |
| Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses                     | Radiotherapy Associates, Upstate, N.Y.<br>UPMC Latrobe Area Hospital, Latrobe, PA<br>UPMC Magee Women Hospital, PA,      | 2009 & 2010<br>2002-2003<br>2002-2005 |
| Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses              | Radiotherapy Associates, Upstate, N.Y.<br>UPMC Latrobe Area Hospital, Latrobe, PA<br>UPMC Magee Women Hospital, PA,      | 2009 & 2010<br>2002-2003<br>2002-2005 |
| Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses | Saint Francis Hospital, Topeka, KS   | 2001                                  |
| Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):                      |  |                                       |

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(3-2009)

U.S. NUCLEAR REGULATORY COMMISSION

**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

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 ( \_\_\_\_\_ )

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 Satya Ranjan Bose 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 \_\_\_\_\_ 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

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(3-2009)

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## 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 Satya Ranjan Bose has training in the radiation safety, regulatory issues, and

Name of Proposed Radiation 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:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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(3-2009)

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

**AND**

**Third Section  
Complete for ALL**

I attest that Satya Ranjan Bose 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.

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

I am the Radiation Safety Officer for North Medical Radiotherapy, Liverpool, New York  
Name of Facility

License/Permit Number: NYS Dept. of Health Radioactive Material License# 3111

Name of Preceptor  
Manuel G. Dalope, M.D.

Signature  
*Manuel G. Dalope*

Telephone Number  
(315) 452-2424

Date  
5/17/10

**NEW YORK STATE DEPARTMENT OF HEALTH  
RADIOACTIVE MATERIALS LICENSE**

License Number 3111

Amendment Number 15

DH Number 09-540

North Medical Radiotherapy  
5116 West Taft Road  
Liverpool, New York 13088

Attention: Manuel G. Dalope, M.D.  
Radiation Safety Officer

Dear Licensee:

In accordance with the request dated May 13, 2009, signed by Manuel G. Dalope, M.D., New York State Department of Health Radioactive Materials License No. 3111 is amended as follows:

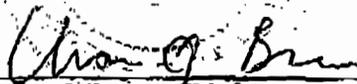
Change Condition No. 10 to Read:

10. A. Radioactive material listed in Item 6 shall only be used by:
- Manuel G. Dalope, M.D.
  - Maria Arsyl Dulay DeJesus, M.D.
  - Nabila A. Elbadawi, M.D.
  - Muhammad Zafar Iqbal, M.D.
- B. Radioactive material listed in Item 6 shall be used by Manuel G. Dalope, M.D., as appropriate to fulfill the responsibilities of the Radiation Safety Officer.
- C. The Radiation Therapy Physicists for this license are Satya Ranjan Bose, Ph.D., and Robert Graves, Ph.D. Only these persons may perform full calibrations of the brachytherapy unit and provide decay-corrected output values.

FOR THE NEW YORK STATE DEPARTMENT OF HEALTH

Date: JUN 06 2009  
CJB/MGH:ks

By

  
Charles J. Burns, Chief  
Radioactive Materials Section  
Bureau of Environmental Radiation Protection

**DOH** STATE OF NEW YORK  
DEPARTMENT OF HEALTH

Flanigan Square 547 River Street Troy, New York 12180-2216

Richard F. Dalnes, M.D.  
Commissioner

Wendy E. Saunders  
Executive Deputy Commissioner

North Medical Radiotherapy  
5116 West Taft Road  
Liverpool, New York 13088

**JUN 08 2009**

Attention: Manuel G. Dalope, M.D.  
Radiation Safety Officer

Re: NYS Dept. of Health Radioactive  
Materials License No. 3111  
DH No. 09-540

Dear Dr. Dalope:

Enclosed is Amendment No. 15 to New York State Department of Health Radioactive Materials License No. 3111, which names Satya Ranjan Bose, Ph.D., to the license as a Radiation Therapy Physicist.

If I may be of assistance, please contact this office at (518) 402-7590 or:

New York State Department of Health  
Bureau of Environmental Radiation Protection  
Radioactive Materials Section  
Flanigan Square - Room 530  
547 River Street  
Troy, New York 12180-2216

Sincerely,



Michael G. Harmon  
Associate Radiological Health Specialist

CJB/MGH

Enclosure: Amendment No. 15