



UPMC | University of Pittsburgh  
Medical Center

UPMC Presbyterian Shadyside

June 22, 2006

U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406

P-6

UPMC Presbyterian  
200 Lothrop Street  
Pittsburgh, PA 15213

UPMC Shadyside  
5230 Centre Avenue  
Pittsburgh, PA 15232

RE 10 CFR 35.14 notification letter, License No. 37-02523-01

03003021

Dear Madams/Sirs:

Please consider the attached information in support of the notification under 10 CFR 35.14 for the following authorized user addition to License 37-02523-01. Supporting documentation is enclosed.

**Item 12 B, Authorized Users**

Please add:

- 1 **Ashok Muthukrishnan, M.D.** for byproduct material identified in 10 CFR 35.100, 10 CFR 35.200 and 10 CFR 35.300.

Dr. Muthukrishnan is certified in Nuclear Medicine by the American Board of Nuclear Medicine. Documentation is enclosed. Dr. Muthukrishnan has been named as authorized for use of diagnostic and therapeutic radionuclides encompassing these activities and sources on the University of Pittsburgh radioactive materials license (RSO authorization and preceptor enclosed). Also enclosed is affidavit of approval by James Terwilliger, Vice President UPMC Presbyterian Shadyside.

Should you have any questions regarding this request, please contact me at (412) 623-1052. Thank You.

Sincerely,

Ronald Scala, MS  
Radiation Safety Officer  
UPMC Presbyterian Shadyside Hospital  
License No. 37-02523-01

enclosures

cc: RSC file

2006 JUL -5 AM 7:49  
RECEIVED  
REGION I

**Scala, Ronald**

---

**From:** Reeder, Kathy on behalf of Terwilliger, James  
**Sent:** Wednesday, June 28, 2006 11:37 AM  
**To:** Scala, Ronald  
**Cc:** Terwilliger, James  
**Subject:** Approval

I approve Dr. Ashok Muthukrishnan for human uses of radioactive material and radiation sources.

06/28/2006

# The American Board of Nuclear Medicine

Incorporated 1971

Certifies that

*Ashok Muthukrishnan*

has met the requirements of this Board and is qualified  
during the period of 2005 through 2015 to practice as a Specialist  
in all aspects of Clinical and Laboratory

## Nuclear Medicine

including but not limited to Radiobioassay, Nuclear Imaging,  
In Vivo Measurements & Therapy with Unsealed Radionuclides

*Tom R. Miller*

Chairman

*J. Anthony Parker*

Secretary-Treasurer

07526

Number

United States

**UNIVERSITY OF PITTSBURGH**  
**AUTHORIZED USER CERTIFICATION FOR HUMAN USES OF RADIOACTIVE**  
**MATERIAL AND RADIATION SOURCES**  
**NRC License No. 37-00245-02 and PA License No. PA-190**

☒ New Application

☐ Renewal

**1. PHYSICIAN IDENTIFICATION**

Name: ASHOK MUTHUKRISHNAN Degree: MD, MS  
 Department: Nuclear Medicine, Radiology Title: Asst. Professor  
 Office Location: Room PUH E-177 Building: UPMC Presbyterian  
 Office Phone: (412) 647-0104 E-mail: muthukrishnana@upmc.edu

**2. TRAINING AND EXPERIENCE WITH RADIONUCLIDES AND RADIATION SOURCES**

Submit the following information in support of the qualification requirements for the human use of radioactive material and radiation sources (Required for new applicants only):

- A. Current copy of Curriculum Vitae
- B. Copy of applicable Medical Board Certification(s)
- C. Preceptor/Attestation Statement of physician's classroom, laboratory, and clinical training and experience with radioactive material, signed by the supervising Authorized User (NRC Form 313A).

List recent clinical experience in the use of radionuclides and/or radiation sources for diagnostic and therapeutic procedures (Required for all applicants):

Type of Use	Location	Dates
- Diagnosis (F18-FDG)	UPMC Presbyterian	July 1, 05 till date
- Diagnostic & therapy I-131	UAB Univ. of Alabama	July 2003 - July 2005 <sup>7K 6K</sup>
- Diagnostic (Tc-99m)	UAB Univ. of Alabama	July 2003 - July 2005
- Y-90 zevalin (therapy)	UAB Univ. of Alabama	July 2003 - July 2005

### 3. AUTHORIZED USES

List the types of medical use for which specific authorization is requested:

- A. Radioactive material for diagnostic human use involving uptake, dilution, and excretion studies (10 CFR 35.100)
- B. Radioactive material for diagnostic human use involving imaging and localization studies (10 CFR 35.200)
- C. Radioactive material for diagnostic and therapeutic use in humans for which a written directive is required (10 CFR 35.300)
- D. Y-90 TheraSpheres, Y-90 SIR-Spheres (10 CFR 35.1000)
- E. \_\_\_\_\_
- F. \_\_\_\_\_

### 4. CONDITIONS ON THE USE OF RADIONUCLIDES AND RADIATION SOURCES

- A. This authorization is limited to the use of radionuclides and radiation sources approved under the UPMC Nuclear Medicine Joint Authorization.
- B. All policies, procedures, and conditions contained in the currently approved UPMC Nuclear Medicine Joint Authorization application must be followed.
- C. Physician must complete internal training and instruction requirements for the use of Y-90 TheraSpheres and Y-90 SIR-Spheres.

NRC FORM 313A  
(10-2005)

U.S. NUCLEAR REGULATORY COMMISSION

## MEDICAL USE TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

## 10. SUPERVISING INDIVIDUAL -- IDENTIFICATION AND QUALIFICATIONS

The training and experience indicated above was obtained under the supervision of (if more than one supervising individual is needed to meet requirements in 10 CFR Part 35, provide the following information for each):

A. Name of Supervisor

JAMES M. MOUNTZ, MD, PhD

B. Supervisor is:



Authorized User



Authorized Medical Physicist



Radiation Safety Officer



Authorized Nuclear Pharmacist

C. Supervisor meets requirements of Part 35, Section(s)

for medical uses in Part 35, Section(s)

35.100, 35.200, 35.300

D. Address

UPMC Presbyterian  
200 Lothrop St.  
Pittsburgh, PA 15213

E. Materials License Number

37-00245-02

## PART II -- PRECEPTOR ATTESTATION

**Note:** This part must be completed by the individual's preceptor. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each. This part is not required to meet training requirements in 35.590 or Part 35, Subpart J (except 35.980).

I attest the individual named in Item 1:

11a.



has satisfactorily completed the requirements in Part 35, Section(s) and Paragraph(s) 390, as documented in section(s) of this form.

11b. Select one

meets the requirements in ☐ 35.50(a) ☐ 35.51(c) ☐ 35.390(b)(1)(ii)(G) ☐ 35.690(c) for

N/A types of use, as documented in section(s) of this form.

11c.

has achieved a level of competency sufficient to independently operate a nuclear pharmacy (for 35.980); **OR**

has achieved a level of competency sufficient to function independently as an authorized User for 35.100, 200, 300 uses (or units); **OR**



has achieved a level of radiation safety knowledge sufficient to function independently as a Radiation Safety Officer for a medical use licensee; **OR**



N/A

11d.

I am an Authorized Nuclear Pharmacist; **OR** ☐ I am a Radiation Safety Officer; **OR**

I meet the requirements of 35.390 section(s) of 10 CFR Part 35

or equivalent Agreement State requirements to be a preceptor ☒ AU or ☐ AMP

for the following byproduct material uses (or units): 35.100, 200, 300

A. Address

B. Materials License Number

JAMES MOUNTZ MD PhD

C. NAME OF PRECEPTOR (print clearly)

D. SIGNATURE - PRECEPTOR

E. DATE

6-20-06

**Ashok Muthukrishnan, MD, MS**

200 Lothrop St  
Department of Radiology,  
University of Pittsburgh Medical center  
Pittsburgh, PA 15213  
☎ 412-329-4286  
[muthukrishnana@upmc.edu](mailto:muthukrishnana@upmc.edu)

---

**BIOGRAPHICAL**

---

NAME: Ashok Muthukrishnan [REDACTED]  
Home Address: [REDACTED]  
Home Phone: [REDACTED]  
Business Address: 200 Lothrop Street E-mail: [muthukrishnana@upmc.edu](mailto:muthukrishnana@upmc.edu)  
Pittsburgh, PA 15213  
Business Phone: 412-647-0104

---

**EDUCATION AND TRAINING**

---

**GRADUATE**

*August 1989 - December 1993*

Medical education and training- Chingleput Medial College, The Tamilnadu Dr.MGR Medical University, Madras INDIA

*January 1994 - January 1995*

Internship, Chingleput Medial College Hospital, The Tamilnadu Dr.MGR Medical University, Madras INDIA

**POSTGRADUATE**

*January 1995 - December 1997*

Postgraduate training in Internal Medicine, Stanley Medical College & Hospital, Chennai 600 001 INDIA.

**PERSONAL INFORMATION WAS REMOVED  
BY NRC. NO COPY OF THIS INFORMATION  
WAS RETAINED BY THE NRC.**

**January 1998 - July 2000**

Postgraduate training in nuclear medicine – Dept. of Nuclear Medicine, Christian Medical College & Hospital, Vellore 632004 INDIA

**August 2001- June 2003**

Master of Science Health Informatics (Health Information Management), Dept. of Health Services Administration, School of Health Related Professions, University of Alabama at Birmingham, AL 35294 USA

**July 2003 – July 2005**

Post graduate training in Nuclear Medicine, University of Alabama at Birmingham Medical Center/ Birmingham Veteran Affairs Hospital, Birmingham, AL 35249 USA

**July 2005 – July 2006**

Clinical Fellowship in P.E.T./ Nuclear medicine, Department of Radiology, University of Pittsburgh medical center, Pittsburgh, PA 15213 USA

---

**APPOINTMENTS**

---

**August 2000 - August 2001**

Nuclear medicine Physician- Dept. of Nuclear Medicine, Govt. General Hospital, Pondicherry 605001 INDIA.

---

**CERTIFICATIONS AND LICENSURE**

---

**SPECIALTY CERTIFICATION****Certifying Board****Year**

American Board of Nuclear Medicine  
(ABNM, certification # 07526)  
ECFMG/USMLE

2005 valid until 2015  
1996 indefinitely valid

**MEDICAL LICENSURE:****Country/State****License #****Year**

Michigan (unrestricted)  
Pennsylvania (unrestricted)  
India (unrestricted)

4301086679  
MD428793  
55552

2005  
2006  
1995