



Cardiovascular Associates of Virginia, P.C.

□ 681 Hioaks Road, Suite H  
Richmond, Virginia 23225  
(804) 323-1804 • FAX (804) 272-0306

□ 5875 Bremo Road, Suite 601  
Richmond, Virginia 23226  
(804) 288-3123 • FAX (804) 282-3322

*NMSS2*

September 19, 2007

License Assistance Section  
Nuclear Medicine Safety Branch  
Division of Radiation Safety & Safeguards  
U.S. Nuclear Regulatory Commission, Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

RECEIVED  
REGION 1  
2007 NOV 13 PM 12: 22

*03037192*

RE: Amendment Request  
License Number: 45-31147-01

Dear License Reviewer:

Please amend our byproduct material license to add Shakil Khan, M.D., as an authorized user for all procedures and materials approved on our current license. Dr. Khan is certified by the "Certification Board of Nuclear Cardiology". A copy of his board certification and competency attestation has been enclosed within Attachment A. Please refer to the attached training documentation for details.

In addition, please amend our license to add Matthew Ngo, M.D. as an authorized user for all materials and procedures approved on our current license. Dr. Ngo is certified by the "Certification Board of Nuclear Cardiology". A copy of his clinical training and board certification has been enclosed within Attachment A. Please refer to this section for details.

Please allow this correspondence to confirm that Matthew Minh-Tri Duc Ngo, M.D. is competent to practice as a nuclear cardiologist.

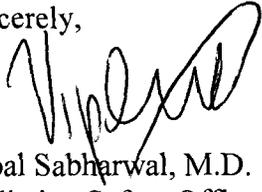
All remaining items referenced on the current license will remain unchanged.

If you have additional questions, please contact Michael W. Lairmore or myself. Mr. Lairmore may be reached at (201) 693-2277.

*141318*

We thank you in advance for your assistance with this licensing action.

Sincerely,

A handwritten signature in black ink, appearing to read 'Vipal Sabharwal', written in a cursive style.

Vipal Sabharwal, M.D.  
Radiation Safety Officer

**Attachment A**



V i r g i n i a C o m m o n w e a l t h U n i v e r s i t y

**Health System**  
MCV Hospitals and Physicians

**MCV Campus**

**Department of Radiology**  
Division of Nuclear Medicine

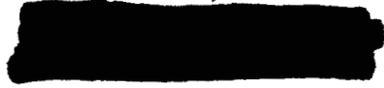
1300 East Marshall Street  
P.O. Box 980001  
Richmond, Virginia 23298-0001

804 828-6828  
Fax: 804 628-0275 Scheduling  
Fax: 804 828-4181  
TDD: 1-800-828-1120

May 18, 2006

Certification Board of Nuclear Cardiology  
19562 Clubhouse Rd  
Montgomery Village, MD 20886

Re: Shakil Khan, M.D.



Dear Sirs:

*I am writing to verify that Shakil Khan, M.D. is qualified to sit for the CBNC exam. During his cardiology fellowship at Virginia Commonwealth University Medical Center, Dr. Khan achieved Level 2 Training in Nuclear Cardiology. This training included pertinent instruction in radiopharmacy, radiation biology, instrumentation, and radiation safety as required by the NRC, as well as the requisite hands-on experience. His training also included Nuclear Cardiology services for over 300 studies, with angiographic correlation in at least 30 of them.*

*In summary, Dr. Khan's training/experience meets the requirements as outlined in the ACC/ASNC COCATS Guidelines. Dr. Khan is competent to independently function as an authorized user under 10 CFR 35.290 uses.*

Sincerely,

Melvin J. Fratkin, MD  
Professor of Radiology & Medicine  
Chairman, Division of Nuclear Medicine  
Vice Chairman, Department of Radiology  
NRC# 45-00048-17

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

MJF/tlb

# Certification Board of Nuclear Cardiology

Incorporated 1996

Certifies That

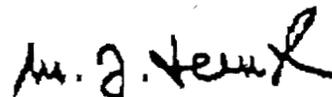
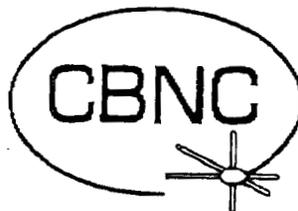
## Shakil A. Khan, MD

HAVING MET THE REQUIREMENTS PRESCRIBED BY THIS BOARD  
FOR PHYSICIANS TRAINED IN THE UNITED STATES  
AND HAVING SATISFACTORILY PASSED THE REQUIRED EXAMINATION,  
IS HEREBY DESIGNATED  
A DIPLOMATE CERTIFIED IN THE SUBSPECIALTY OF  
**NUCLEAR CARDIOLOGY**

FOR THE PERIOD 2006 - 2016

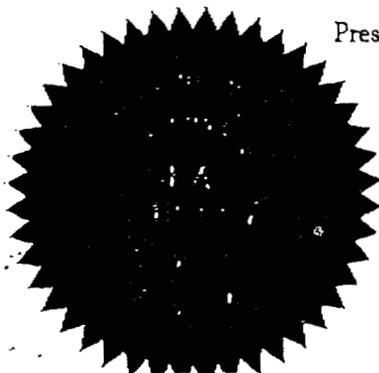


President



Secretary

CERTIFICATE NUMBER: 4816



**THE CERTIFICATION BOARD OF NUCLEAR CARDIOLOGY**

Incorporated 1996

*CERTIFIES THAT*

*Matthew Minh-Trī Duc Ngo, M.D.*

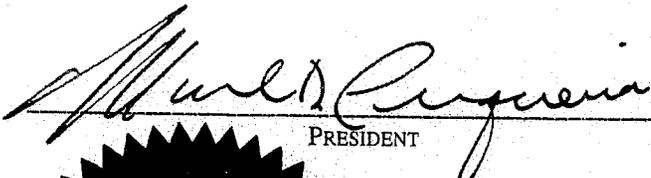
HAVING MET THE REQUIREMENTS PRESCRIBED BY THIS BOARD FOR PHYSICIANS RESIDING  
IN THE UNITED STATES AND HAVING SATISFACTORILY PASSED THE REQUIRED EXAMINATION,

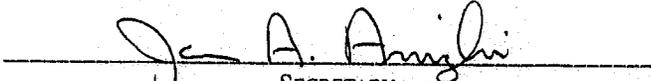
IS HEREBY DESIGNATED

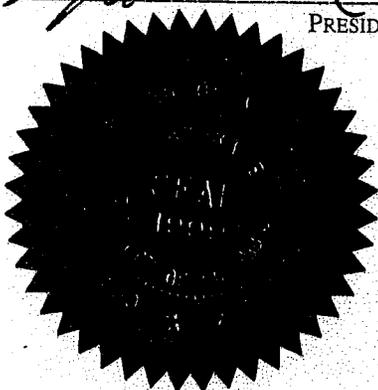
A DIPLOMATE CERTIFIED IN THE SUBSPECIALTY OF

**NUCLEAR CARDIOLOGY**

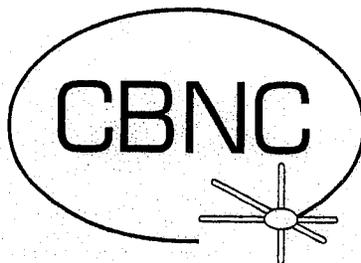
FOR THE PERIOD 2005 THROUGH 2015

  
\_\_\_\_\_  
PRESIDENT

  
\_\_\_\_\_  
SECRETARY



CERTIFICATE #4113



OCTOBER 23, 2005



**FLORIDA DEPARTMENT OF HEALTH  
BUREAU OF RADIATION CONTROL**

**PRECEPTOR/APPLICANT STATEMENT**

Training and experience requirements for medical use of radioactive material are specified in Part VI, Subpart I of Chapter 64E-5, Florida Administrative Code (F.A.C.) (<http://www.doh.state.fl.us/environment/radiation/>). This document is to be completed by the applicant physician, the preceptor and designated individuals at the training medical institution such as Radiation Safety Committee Chairman or other Certifying Official. Use a separate document for each preceptor providing supervision of clinical training. Only clinical training received at a medical institution is acceptable.

**INSTRUCTIONS:**

**Applicants with Radiological Specialty Board Certification or Accreditation for Graduate Medical Education Training in Nuclear Medicine needs to complete page 1 only.**

**OTHERWISE:**

**An applicant wishing authorization only for diagnostic procedures needs to complete pages 1 – 4.**  
(Examples are imaging of the brain, liver, heart, lungs, etc, or thyroid uptake.)

**An applicant wishing authorization only for therapy procedures needs to complete pages 2 and, 5 – 7.**  
(Example: treatment of thyroid cancer or hyperthyroidism, bone pain, or brachytherapy procedures to include permanent implants for treatment of prostate cancer, temporary implants for treatment of ovarian cancer, high dose rate remote afterloader devices (HDR) for treatment of ovarian caners or teletherapy sources.)

An applicant wishing authorization for both diagnostic and therapy procedures needs to complete pages 1 – 7.

	MATTHEW	NGO	M	<input checked="" type="checkbox"/>	M.D. D.O.
	First	Last	MI		

RADIOLOGICAL SPECIALTY BOARD CERTIFICATION (Attach photocopy of certificate)	DATE OF CERTIFICATE
American Board of Nuclear Medicine – Nuclear Medicine	
American Board of Radiology – Diagnostic Radiology, Rad. Oncology, Radiology or Therapeutic Radiology	
American Osteopathic Board of Radiology – Diagnostic Radiology, Radiology or Radiation Oncology	
American Osteopathic Board of Nuclear Medicine – Nuclear Medicine	
British Fellow of the Faculty of Radiology or Royal College of Radiology – Radiotherapy	
Canadian Royal College of Physicians and Surgeons – Therapeutic Radiology	
<i>An applicant with one of the above certifications is not required to complete this document if a copy of the board certificate applicable to the requested uses is provided. If the applicant has completed training in uses other than those covered by the board certification, then this document needs to be completed to show the additional training and experience</i>	

– OR –

ACCREDITATION COUNCIL FOR GRADUATE MEDICAL EDUCATION (ACGME) TRAINING IN NUCLEAR MEDICINE (Attach photocopies of provider certificates documenting completion of training. Some ACGME program numbers may be found using the search feature and reports tab at <a href="http://www.acgme.org/adspublic/">http://www.acgme.org/adspublic/</a> )				
Institution Name & AGME Provider Number	Affiliated Hospital & Address	Directors Name	Director's Phone # Director's Fax #	Dates of Training From – To
			Phone: Fax	
			Phone: Fax	

– OR –

# PRECEPTOR/APPLICANT STATEMENT

## SEALED SOURCES FOR DIAGNOSIS (64E-5.651 F.A.C.)

SOURCE AND DEVICE MANUFACTURER AND MODEL NUMBER	CLINICAL TRAINING/DEVICE SPECIFIC	TOTAL CLINICAL HOURS TRAINED
	<input type="checkbox"/> 2 hours of training in use of the device as specified in 64E-5.654(2)(c), F.A.C.	_____ (min. of 8 hrs.)

## DIAGNOSTIC TRAINING VERIFICATION

Hours of specific training for diagnostic procedures must include both radiation safety and patient-related topics as specified in 64E-5.649 – 64E-5.654, F.A.C., as applicable. All information in Items 2 – 7 and 9 or 11 must be completed and legibly printed or typed. Items 9 and 10 may be completed by the radiation safety committee (RSC) chair. – OR – Items 11 and 12 may be completed by a certifying official for the preceptoring medical institution. A certifying official is a corporate officer or other individual authorized to make legally binding statements for the institution. If training was performed at more than one institution, obtain a separate, completed statement from each.

1. Applicant Physician's Name (print): MATTHEW M. NGO, MD Phone: 305-585-5525 Extension:	4. Applicant Physician's Signature: Date: 12/2/2004
2. Name and Address of Preceptoring Medical Institution:  Mount Sinai Medical Center 4300 ALTON ROAD MIAMI BEACH, FL 33140  Phone: 305-674-2416 Extension:	5. Dates of Training: From: 7/15/2004 To: 12/1/2004
	6. Total Number of Clinical Hours in Training: 500
	7. Preceptoring Medical Institution's Radioactive Materials License No.: 64-3
3. Name of Medical Director of Residency Program (print): ROBERT J. MYERBURG, MD Phone: 305-585-5525 Extension:	8. Preceptoring Physician's Name (print): WILLIAM SMOAK, MD Phone: 305-674-2416 Extension:
9. Preceptoring Physician's Signature: Date: 12/2/04	

Florida requires documentation of clinical training from the RSC of the preceptoring medical institution. The signature of the RSC chair or a certifying official for the medical institution may be used to satisfy this requirement. A certifying official refers to a corporate officer or other individual authorized to make legally binding statements for the institution.

10. Name of Preceptoring Institution's RSC Chair (print): KAREN HERMANSON Phone: 305-674-2589 Extension:	11. Radiation Safety Committee Chair's Signature: Date: 1/28/05
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- OR -

12. Name of Medical Institution's Certifying Official (print):  Phone: _____ Extension: _____	13. Certifying Official's Signature:  Date: _____
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## PRECEPTOR/APPLICANT STATEMENT

An applicant physician who does not hold one of the above listed board certifications or who has not completed a 6-month ACGME-accredited program **must** submit documentation of didactic training and clinical experience. Complete the following didactic training table, and then complete the subsequent pages to document clinical experience. Include all required signatures.

<b>INSTRUCTION IN BASIC RADIONUCLIDE HANDLING TECHNIQUES (DIDACTIC TRAINING)</b>			
(Attach photocopies of any other documents such as letters or certificates that demonstrate completion of didactic training)			
<b>DIDACTIC TRAINING PROVIDER</b> (include name, address, telephone number and radioactive material license number)	<b>TOPICS</b> (Required hours are for 64E-5.627 authorization: fewer hours are needed for 64E-5.626 or 64E-5.631 procedures)	<b>TRAINING DATES</b>  FROM: - TO:	<b>TOTAL HOURS TRAINED</b>
INSTITUTE FOR Nuclear Medical Education, Inc. 5660 AIRPORT BLVD, Suite 101 Boulder, Colorado 80301 303-541-0044	<b>Radiation Physics and Instrumentation</b> (15 hours required for 64E-5.626) (100 hours required for 64E-5.627) (25 hours required for 64E-5.630) (6 hours required for Sr-90 eye applicator) (110 hours required for 64E-5.632 and .634) (3 hours required for 64E-5.631)	12/4/2004 TO 12/12/2004	100
"	<b>Radiation Protection</b> (10 hours required for 64E-5.626) (30 hours required for 64E-5.627) (25 hours required for 64E-5.630) (6 hours required for Sr-90 eye applicator) (40 hours required for 64E-5.632 and .634) (2 hours required for 64E-5.631)	9/18/2004 TO 9/22/2004	30
")	<b>Mathematics Pertaining to the Use and Measurement of Radioactivity</b> (5 hours required for 64E-5.626) (20 hours required for 64E-5.627) (10 hours required for 64E-5.630) (4 hours required for Sr-90 eye applicator) (25 hours required for 64E-5.632 and .634) (3 hours required for 64E-5.631)	9/22/2004 TO 9/26/2004	20
")	<b>Radiopharmaceutical Chemistry</b> (5 hours required for 64E-5.626) (30 hours required for 64E-5.627) (No hours required for 64E-5.630) (No hours required for Sr-90 eye applicator) (No hours required for 64E-5.632 and .634) (No hours required for 64E-5.631)	9/22/2004 TO 9/26/2004	30
")	<b>Radiation Biology</b> (5 hours required for 64E-5.626) (20 hours required for 64E-5.627) (20 hours required for 64E-5.630) (8 hours required for Sr-90 eye applicator) (25 hours required for 64E-5.632 and .634) (3 hours required for 64E-5.631)	9/18/2004 TO 9/22/2004	20
")	<b>TOTAL Hours from above</b> (40 hours required for 64E-5.626) (200 hours required for 64E-5.627) (80 hours required for 64E-5.630) (24 hours required for Sr-90 eye applicator) (200 hours required for 64E-5.632 and .634) (8 hours required for 64E-5.631)		200

# PRECEPTOR/APPLICANT STATEMENT

NAME OF APPLICANT/PHYSICIAN	MATTHEW	NGO	M	<input checked="" type="checkbox"/> M.D. <input type="checkbox"/> D.O.
	First	Last	MI	

## INTAKE, DIUCTION OR EXCRETION STUDIES

<p>Mark each box as applicable:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Examined patients and reviewed their case histories to determine their suitability for radionuclide diagnosis, including limitations or contraindications</li> <li><input checked="" type="checkbox"/> Selected the suitable radiopharmaceutical and calculated and measured the dosage</li> <li><input checked="" type="checkbox"/> Administered dosages to patients using syringe radiation shields</li> <li><input checked="" type="checkbox"/> Performed patient follow-up</li> </ul>	<hr style="width: 80%; margin: 0 auto;"/> (Minimum of 20 hours)
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## IMAGING AND LOCALIZATION STUDIES

Mark each box as applicable to indicate clinical experience:	
RADIONUCLIDE	CARDIAC-ONLY/RENAL STUDIES
<input checked="" type="checkbox"/> Tl-201 and/or Tc-99m	Cardiac Imaging
<input type="checkbox"/> Xe-133 or Xe-127	Blood Flow Studies and Pulmonary Function Studies
<input type="checkbox"/> F-18	Cardiac Positron Emission Tomography (PET)
<input type="checkbox"/> Other:	Other Cardiac Studies
<input type="checkbox"/> Other:	Renal Studies
RADIONUCLIDE	NON-CARDIAC STUDIES
<input type="checkbox"/> F-18	Non-Cardiac Positron Emission Tomography (PET)
<input type="checkbox"/> Other:	Non-Cardiac Imaging and Localization
RADIONUCLIDE	GENERATORS AND REAGENT KITS
<input checked="" type="checkbox"/> Mo-99/Tc-99m Generator	Eluted Tc-99m from generator, assayed and tested the eluate for Mo-99 and alumina contamination as specified in 64E-5.650, F.A.C.
<input type="checkbox"/> Sr-82/Rb-82 Generator	Eluted Rb-82 from generator, assayed and tested the eluate for Sr-82 and tin contamination
<input checked="" type="checkbox"/> Tc-99m Reagent Kits	Processed reagent kits to prepare Tc-99m labeled radiopharmaceuticals
<input type="checkbox"/> Other:	

## DIAGNOSTIC RADIOPHARMACEUTICAL CLINICAL TRAINING (64E-5.650)

<p>Completed 500 hours of work experience and 500 hours of clinical experience concurrently under the supervision of an authorized user at a medical institution, as specified in 64E-5.650(2)(b) and (c), F.A.C., including the following:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Ordered, received and unpacked radioactive materials safely and performed the related radiation surveys</li> <li><input checked="" type="checkbox"/> Calibrated dose calibrators and diagnostic instruments and performed checks for proper operation of survey meters</li> <li><input checked="" type="checkbox"/> Calculated and prepared patient dosages and used administrative controls to prevent misadministration</li> <li><input checked="" type="checkbox"/> Used emergency procedures to contain spilled radioactive material and used proper decontamination procedures</li> <li><input checked="" type="checkbox"/> Eluted Tc-99m from generator systems, assaying and testing the elute for Mo-99 and alumina contamination, and processing the elute with reagent kits to prepare Tc-99m-labeled radiopharmaceuticals</li> <li><input checked="" type="checkbox"/> Examined patients and reviewed each case history to determine their suitability for radionuclide diagnosis, including limitations or contraindications</li> <li><input checked="" type="checkbox"/> Selected the suitable radiopharmaceutical and calculated and measured the dosages; administered dosages to patients and used syringe radiation shields; collaborated with the authorized user in the interpretation of radionuclide test results; patient follow-up</li> </ul>
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To knowingly make false statements to a public servant is a violation of section 837.06, Florida Statutes, and is punishable by fine or imprisonment.

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

9/17/2007 (<sup>RECEIVED</sup> 11/13/2007) and to inform you that the initial processing which includes an administrative review has been performed.

ATL 610-45-31147-01  
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** 141318.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.