

The Cardiovascular Group, P.C.

Fritz H. Andersen, M.D., F.A.C.C. Anthony Chang, M.D., F.A.C.C., F.A.C.P. Nicholas Cossa, M.D., F.A.C.C. Stephen M. Day, M.D. Richard F. Dietz, M.D., F.A.C.C. Robert F. Herron, D.O., F.A.C.C., F.A.C.P. Sara Kulangara, M.D. Warren S. Levy, M.D., F.A.C.C. Carey M. Marder, M.D., F.A.C.C. J. Kenneth Marshall, M.D., F.A.C.C. Francis J. McGrath, M.D., F.A.C.C. Lawrence A. Miller, M.D., F.A.C.C. Diane Mukherjee, M.D., F.A.C.C. Pradeep R. Nayak, M.D., F.A.C.C. Antonio R. Parente, M.D., F.A.C.C. Dean M. Pollock, M.D., F.A.C.C. Stephen P. Rosenfeld, M.D., F.A.C.C. Anne M. Safko, M.D., F.A.C.C. Harry Schwartz, M.D., F.A.C.C. Stuart E. Sheifer, M.D. Robert A. Shor, M.D., F.A.C.C. Joseph M. Smith, M.D., Ph.D., F.A.C.C. Mark P. Tanenbaum, M.D., F.A.C.C.

4660 Kenmore Ave., Suite 1200 Alexandria VA 22304 703-751-8111 ♥ Fax 703-751-1105

1635 N. George Mason Dr., Suite 190 Arlington VA 22205 703-524-7202 ♥ Fax 703-516-4501

611 S. Carlin Springs Rd., Suite 203 Arlington VA 22204 703-671-8200 ♥ Fax 703-379-9767

3700 Joseph Siewick Dr., Suite 102 Fairfax VA 22033 703-648-3266 ❤ Fax 703-648-3264

44055 Riverside Pkwy., Suite 200 Leesburg VA 20176 703-858-3050 ♥ Fax 703-858-3051

1830 Town Center Dr., Suite 201 Reston VA 22090 703-437-5977 ♥ Fax 703-478-2475

130 Park St. SE, Suite 100 Vienna VA 22180 703-281-1265 ♥ Fax 703-255-0571

3289 Woodburn Rd., Suite 375 Annandale VA 22003 703-573-3494 ♥ Fax 573-5353 Br.2

May 15, 2008

Nuclear Regulatory Commission Commercial and R&D Branch Division of Nuclear Materials Safety Region I 475 Allendale Road King of Prussia, Pennsylvania 19406

RE: The Cardiovascular Group
License Amendment
45-25533-01

To Whom It May Concern:

Please amend the above referenced license to add Tariq M. Haddad, M.D. as authorized users to the above referenced license. Documentation in support of these physician's credentials is enclosed.

Any questions regarding this request may be directed to me at (703) 641-0500.

Sincerely,

Neil C. Smarte, C.N.M.T. Radiation Safety Officer.

/III8 AUG 15 PM 12:

REGION 1

NMSS/RGNI MATERIALS-002

AND PRECEPTO	u.s. NUCLEAR REGULATORY COMMISS AINING AND EXPERIENCE OR ATTESTATION 35.100, 35.200, and 35.500) 35.290, and 35.590]		OMB: NO. 3150-012 1/2008
lame of Proposed Authorized User	State or Territory Where Li	censed	
arìq M. Haddad, M.D.	Virginia		
Requested Authorization(s) (check all that	apply)		
35.100 Uptake, dilution, and excretion	studies		
7 35.200 Imaging and localization studies	s		
35.500 Sealed sources for diagnosis (s	specify device)	
	ART I TRAINING AND EXPERIENCE elect one of the three methods below)		
the date of application or the individual i	rd certification, must have been obtained w must have obtained related continuing edu is completed. Provide dates, duration, and uses checked above.	cation and experie	nce since
1. Board Certification			
a. Provide a copy of the board certific	cation.		
 b. If using only 35.500 materials, stop Preceptor Attestation. 	p here. If using 35.100 and 35.200 materia	als, skip to and com	plete Part II
a. Authorized user on Materials Licer State requirements seeking author b. Supervised Work Experience.		₹ 35.390 or equival	-
Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience*
Eluting generator systems appropriate for the preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs	•		
	Total Hours of Experience:		
Supervising Individual	License/Permit Number authorized user	listing supervising inc	dividual as an
	elow, or equivalent Agreement State requi	irements (check all	that apply).

3. Training and Experience for Proposed Authorized User

a. Classroom and Laboratory Training.

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 Nuclear Cardiology Authorized User Course	1. 40 hrs 2. 80 hrs	1. 10/04, 11/4, 2-3/05 2. 4/13-4/15/07
Radiation protection	1. Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 2. Nuclear Cardiology Authorized User Course	1. 40 hrs 2. 80 hrs	1. 10/04,11/04, 2-3/05 2. 4/13-4/15/07
Mathematics pertaining to the use and measurement of radioactivity	Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 Nuclear Cardiology Authorized User Course	1. 40 hrs 2. 80 hrs	1. 10/04, 11/4, 2-3/05 2. 4/13-4/15/07
Chemistry of byproduct material for medical use (not required for 35.590)	Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 Nuclear Cardiology Authorized User Course	1. 40 hrs 2. 80 hrs	1. 10/04, 11/4, 2-3/05 2. 4/13-4/15/07
Radiation biology	Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 Nuclear Cardiology Authorized User Course	1. 40 hrs 2. 80 hrs	1. 10/04, 11/4, 2-3/05 2. 4/13-4/15/07
	Total Hours of Training:	alaan ta kaa aa a	

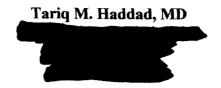
Supervised Work Experience (completion of this table is not required for 35.590).
 (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervised Work Experience		Total Hours of Experience:		
Description of Experience Must Include:	Location of Experien Permit Number		Confirm	Dates of Experience*
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys	Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 Nuclear Cardiology Authoriz	red User Course	✓ Yes	1. 10/04, 11/4, 2-3/05 2. 4/13-4/15/07
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters	Johns Hopkins Hospital Halsted 500 600 North Wolfe Street Baltimore, MD 21287 Nuclear Cardiology Authoriz	zed User Course	Yes No	1. 10/04, 11/4, 2-3/05 2. 4/13-4/15/07

7	raining and Experience for Propos	ed Authorized Us	<u>er</u> (continue	ed)		
b	. Supervised Work Experience. (cor	ntinued)		e ya garan kata na mayan m	AND THE REAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS	The second section of the
	Description of Experience Must Include:		Experience/ Number of F		Confirm	Dates of Experience
р	calculating, measuring, and safely reparing patient or human research ubject dosages	1. Johns Hopkins H Halsted 500 600 North Wolfe 2. Nuclear Cardiolo	Street, Baltin		✓ Yes	1. 10/04, 11/4, 2-3/05 2. 4/
p	Ising administrative controls to revent a medical event involving the se of unsealed byproduct material	1. Johns Hopkins H Halsted 500 600 North Wolfe 2. Nuclear Cardiolo	Street, Baltin		✓ Yes	1. 10/04, 11/4, 2-3/05 2. 4/
b	Ising procedures to contain spilled yproduct material safely and using roper decontamination procedures	Johns Hopkins Halsted 500 600 North Wolfe Nuclear Cardiolo	Street, Baltin	nore, MD 21287 I Use	✓ Yes No	1. 10/04, 11/4, 2-3/05 2. 4/
d	dministering dosages of radioactive rugs to patients or human research ubjects	Johns Hopkins H Halsted 500 600 North Wolfe Nuclear Cardiolo	Street, Baltin		✓ Yes	1. 10/04, 11/4. 2-3/05 2. 4/
for se puk	Eluting generator systems appropriate or the preparation of radioactive trugs for imaging and localization tudies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent its to prepare labeled radioactive trugs	Haisted 500	Street, Baltin	nore, MD 21287 I Use	V Yes No	2-3/05 2. 4/13-4/15/0
C					1	
5	Supervising Individual ewis Becker, M.D.	4	License/Perr authorized u MD# 07-005		supervising ind	dividual as an
5	· · · · · ·	elow, or equivalent	authorized u MD# 07-005	ser 03		
5	ewis Becker, M.D.		authorized u MD# 07-005 Agreement	ser 03	ts (check on	e).
0	ewis Becker, M.D. Supervisor meets the requirements be	35.390	Agreement 35,390 + gel	ser03 State requiremen nerator experience device.	ts (check on	e). c)(1)(li)(G)
0	ewis Becker, M.D. Supervisor meets the requirements be 35.190 35.290 For 35.590 only, provide documen	35.390 tation of training or	Agreement 35,390 + gel	ser03 State requiremen nerator experience device.	ts <i>(check on</i>	e). c)(1)(li)(G)

NRC FO (3-2007)	ORM 313A (AUD) AUTHORIZED US	SER TRAININ	G AND EXPERIEN	ICE AND PRECEPTO	u.s. nuclear regulation (cor	
			PART II - PRECE	PTOR ATTESTATION	N .	
Note:	individual as long	as the precept necessary to do	tor provides, directs ocument experienc	s, or verifies training a	or does not have to be the and experience required. Preceptor statement from	If more than
	Section cone of the followi	· · · · · · · · · · · · · · · · · · ·	·			
		ing for each u	se requesteu:			
<u> </u>	r 35.190 Board Certification	-				
		Ū		t tinfontarily and	Cota di dia mandiframani	· •
	I attest that	Name of Propo	sed Authorized User	has satisfactorily cor	mpleted the requirement	is in
		90(a)(1) and ha	is achieved a level	of competency sufficied under 10 CFR 35.10	ent to function independe	ently as an
				OR		
	Training and Expe	<u>erience</u>				
İ	I attest that			has satisfactorily cor	mpleted the 60 hours of	training and
			osed Authorized User	-1	a and the transfer and an observation of the co	10.0ED
	35.190(c)(1), a	and has achiev	ved a level of comp		tory training, required by nction independently as 00.	
For	r 35.290					
	Board Certification	n				
	I attest that			has satisfactorily co	mpleted the requirement	ts in
		90(a)(1) and ha		of competency sufficie d under 10 CFR 35.10	ent to function independe 00 and 35.200.	ently as an
	Training and Expe	erienc <u>e</u>		OR		
	✓ I attest that	Tariq M. Hadda	ad, M.D.	has satisfactorily con	mpleted the 700 hours o	of training
	CFR 35.290(c	ce, including a l	minimum of 80 hou achieved a level of	urs of classroom and la competency sufficient d under 10 CFR 35.10	aboratory training, requir t to function independent 00 and 35.200.	ed by 10 ly as an
	nd Section		And also have specified made also shall made any made from the way made and the way and	. 化甲基苯甲基甲基苯甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲	# 15 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	,
Comp	lete the following t	for preceptor	attestation and si	ignature:		
	I meet the rec	quirements bek	ow, or equivalent A	greement State requir	rements, as an authorize	ed user for:
	35.190	√ 35.290	35.390	35.390 + genera	ator experience	
Name	of Preceptor	Market and the second s	Signature ((Telephone Number	Date
Lewis f	Becker, M.D.		Jens L	Deak	410-955-5997	08/06/2008
Licens	e/Permit Number/Faci	ility Name	<u> </u>			
Johns I	Hopkins Hospital MD	J# 07-00503				

 $(1-\beta_{1})^{2} = (1-\beta_{1})^{2} + (1-\beta_{1})^{2$



PROFESSIONAL EXPERIENCE:

The Cardiovascular Group, PC: Fairfax, VA Cardiologist July 2007-present

EDUCATION:

National Heart, Lung, & Blood Institute, National Institutes of Health, Bethesda, MD Cardiac MRI/CT Imaging Fellowship, July 2005- June 2007
•Level 3 training in cardiac CT and cardiac MRI

Johns Hopkins University Hospital, Baltimore, MD

Cardiology Fellowship, July 2003- June 2007

•Level 2 training in nuclear cardiology (anticipated), TTE, TEE, diagnostic cardiac catheterization, & stress echocardiography

University of Virginia Hospital, Charlottesville, VA Internal Medicine Residency, June 2000-June 2003

Cornell University Medical College, New York, NY Doctor of Medicine, August 1996-May 2000

Duke University, Durham, NC BA *magna cum laude* (biochemistry), August 1992-May 1996

HONORS/AWARDS:

- •Phi Beta Kappa at Duke University (1996)
- •Teaching Grant from the Association of Teachers of Preventive Medicine (1998)
- •University of Virginia Resident Teaching Award (2003)

BOARD CERTIFICATION:

- •American Board of Internal Medicine, board certified in internal medicine August 2003.
- •American Board of Internal Medicine, board eligible in cardiology (will take exam 2008)

RESEARCH/WORK EXPERIENCE:

Lead Associate Clinical Investigator. Laboratory of Cardiac Energetics, National Heart, Lung, & Blood Institute, NIH

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

Clinical Investigator. Laboratory of Cardiac Energetics, National Heart, Lung, & Blood Institute, NIH

•Conducted clinical study with the guidance of Dr. Andrew Arai investigating the accuracy of quantitative cardiac MRI perfusion for detecting coronary disease during dipyridamole cardiac MRI stress testing of patients with suspected coronary disease.(July 2005-present)

Clinical Investigator. Division of Cardiology, University of Virginia Hospital.

•Conducted clinical study with the guidance of Drs. John Dent and George Beller investigating the efficacy of using C-reactive protein for additional risk stratification of low/intermediate risk unstable angina/NSTEMI patients in the emergency room setting. (April 2001-July 2003)

Clinical Investigator. Department of Internal Medicine, University of Virginia Hospital.

•Worked with Dr. Michael Scheld on an ongoing multi-center, NIH-funded clinical trial assessing the cycling of broad-spectrum antibiotics in the intensive care unit setting and its effects on antibiotic resistance patterns.(Fall 2000- January 2003)

Editor/Abstractor, M2 Communications.

•Generated and edited abstracts of major diabetes mellitus and gastroenterology journal articles for the medical newsletters Informed Diabetes and Informed Hepatology.(1999-2002)

Clinical Researcher. Department of Internal Medicine, NY Presbyterian Hospital-Cornell.

•Conducted outcomes study with Dr. Mark Callahan comparing the management of acute ST-elevation myocardial infarction at five hospitals in the New York/Presbyterian Hospital network.(Spring 1997)

PUBLICATIONS/PRESENTATIONS:

- •Results of ST-elevation MI outcomes study presented at the Society of General Internal Medicine national meeting in Boston, MA in June 1999.
- •Quantitative cardiac MRI perfusion data submitted as an abstract for the 2006 American Heart Association national conference (pending review)

PERSONAL:

- •Fluent in the Arabic language.
- •Additional interests include tennis, basketball, hiking, bicycling, and jogging.

•Organized and conducted a clinical study with the guidance of Dr. Andrew Arai investigating the use of cardiac MRI and echocardiography to more accurately predict responders and non-responders to cardiac resynchronization therapy.(July 2005-present)

CHERTMENT OF HEA TO HADEESEN BY

Current Active Medicine & Surgery Number Issued: 92/89/2007 Experts 08/31/2010 Tang M. Huddad, Mill 130 Park St. #100 Victima VA 22180 For Native* Address Changes, Mail in Department of Health Professions Co Board of Medicine 9900 Mayland Drive, Same 300	e de la companya de l
Expires 08/31/2010 Tang M. Haddad, Mill 130 Park 5: 8100 Vienna V.A. 22180 Por Namer Address Changes, Mant to Department of Health Professions Co Board of Medicare 2000 Mayland Drive, Since 300	er en
For Name * Address Changes, Mail to Department of Health Professions Co Board of Medicare **Soo Mayland Drive, State 300	
130 Park 5: #100 Vienna VA 2218i) For Name* Address Changes, Man to Department of Health Professions #200 Mayland Drive, Since 300	and the second s
N100 Vienna VA 22180 For Name* Address Changes, Mail to Department of Health Professions Colloard of Medicine 9900 Mayland Drive, Since 300	a va a a a a a a a a a a a a a a a a a
Victima V.A. 22180 For Name* Address Changes, Mad to Department of Health Professions 10 Board of Medicane 2000 Mayland Drive, Some 300	on our The Control of
For Name* Address Changes, Mail to Department of Health Professions to Board of Medicine 2000 Mayland Drive, Some 300	Specific Country
Department of Health Professions 1.0 Board of Medicine 9900 Mayland Drive, Since 300	a na 7
Department of Health Professions 0.0 Board of Medicine 9900 Mayland Drive, Suite 300	egeno, co. como
Co Board of Medicine 9900 Mayland Drive, Since 700	
9900 Mayland Drive, State 700	
3	
The State of the S	٠
Richmond, VA 23233, 1463	
STORY CONTRACTOR CONTR	
My New Name 18.	:
My New Address is.	**************************************
City, State Zap Code	

Acatea Northwood of Change of Adarest Required Within 36 Days of Owngr

"Name Change Request Must be Accompanied by a Photocopy of Marriage License of Chan Order

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF HEALTH PROFESSIONS

Sandra Whitley Ryals, Director

William L. Harp, M.D. Execusive Director (804) 367-4600

BOARD OF MEDICINE

9960 Maydand Orive, Suite 390 Richmond, VA 23233-1463 www.dbp.vergensa.gov/medisanr

License to Practice Medicine & Surgery

Tariq M. Haddad, MD

Issued 02/09/2007 Expires 08/31/2010 Number 0101241229

To Provide Information or File a Complaint About a Licenses, Call: 1-800-533-1560

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