

New Jersey Institute of Radiology, PC **Advanced Medical Imaging Center** 630 Broad Street, Carlstadt, NJ 07072 Tel. 201-372-1020, 888-372-1020, Fax 201-372-1028 WWW.NJIRONLINE.COM

August 20th, 2008

Sandra Gabreil Senior Health Physicist Division of Nuclear Materials Safety NRC, Region 1 475 Allendale Raod King of Prussia, PA 19406

03037113

Ref: New Jersey Institute of Radiology: Application for amending NRC license # 29-31119-01.

Dear Ms. Gabriel

This application is submitted to add Shelley Ann Quarless, D.O, Ph.D., authorized user to NRC license #29-31119-01 for diagnostic and radiotherapy under 35.100, 35.200, and 35.300

Dr. Quarless will be providing services as a nuclear medicine physician at this facility. Dr. Quarless is a qualified nuclear medicine physician obtained her residency from John Hopkins University Hospital, Baltimore, MD. She is a licensed physician in New Jersey and board certified by the American Board of Nuclear Medicine (2001).

Dr. Quarless has worked as staff nuclear medicine physician and assistant chief of nuclear medicine from 2002-2005 at Tripler Army Hospital, Honolulu, Hawaii. She was authorized user under the hospital broad license performing diagnostic and therapeutic nuclear medicine studies under 35.100, 35.200 and 35.300. (copy of license is attached). Attached copies of Dr. Quarless credentials, licenses and board certification.

Adel Mustafa, Ph.D., DABR

Director

NRC FORM 313 (10-2005) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2008

APPROVED BY OMB: NO. 3150-0120

Estimated burden per response to comply with this mandatory collection request: 4.4 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

100

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION.

SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO	THE NRC OFFICE SPECIFIED BELOW.			
APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:	IF YOU ARE LOCATED IN:			
DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001 ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:	ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO: MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352			
IF YOU ARE LOCATED IN:	LICE, IL COOL-TOOL			
IF 100 ARE LOCATED IN:				
ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISPIPI, NEW HAMPSHIRE, NEV JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:	ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, V LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:			
LICENSING ASSISTANCE TEAM DIVISION OF NUCLEAR MATERIALS SAFETY U.S. NUCLEAR REGULATORY COMMISSION, REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19408-1415	NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 76011-4005			
PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEA MATERIAL IN STATES SUBJECT TO U.S.NUCLEAR REGULATORY COMMISSION JURISDIC				
THIS IS AN APPLICATION FOR (Check appropriate item)	2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)			
A. NEW LICENSE	New Jersey Institute of Radiology			
B. AMENDMENT TO LICENSE NUMBER 29-31119-01	New Jersey Institute of Radiology 630 Broad St.			
C. RENEWAL OF LICENSE NUMBER	Carlstadt, NJ 07072			
3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED New Tersey Institute & Radio by	4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Adel Mustafa, Ph.B.			
630 Broad St.	TELEPHONE NUMBER			
Carlstadt, NJ 07072	201 372 1020			
SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORM.	ATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.			
 RADIOACTIVE MATERIAL Element and mass number; b. chemical and/or physical form; and c. maiximum amount which will be possessed at any one time. 	6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.			
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.	8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.			
9. FACILITIES AND EQUIPMENT.	10. RADIATION SAFETY PROGRAM.			
11. WASTE MANAGEMENT.	12. LICENSE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY AMOUNT ENCLOSED \$			
13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.				
THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34 CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.	THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN 1, 35 , 36, 39, AND 40, AND THAT ALL INFORMATION CONTANED HEREIN IS TRUE AND			
WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A C ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN	RIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ITS JURIS DICTION.			
CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE	SIGNATURE DATE			
ADEL MUSTAFA, Ph.D. DIRCTOR	Au Luston 8/25/08			
	C USE ONLY CK NUMBER COMMENTS			
FEE CATEGORY AMOUNT RECEIVED CHEC	ACTOMBET OF			
APPROVED BY DATE				
	i e e e e e e e e e e e e e e e e e e e			

SHELLEY A. QUARLESS



EDUCATION:

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

WAS RETAINED BY THE NRC.

Premedical 1978 B.S.

Excelsior College, Albany, New York (Biology)

1980 Ph.D.

International College, Los Angeles, California (Molecular Biology)

Thesis Research: Columbia University, New York, New York

Thesis Advisor: Dr. Charles R. Cantor, Ph.D.

Medical

1996 D.O. Des Moines University-Osteopathic Medical Center, College of Osteopathic Medicine

Des Moines, Iowa

POSTGRADUATE MEDICAL EDUCATION:

07/96-06/97 Resident, Department of Pathology, Rhode Island Hospital, Brown University School of

medicine, Providence, Rhode Island

07/97-02/98 Research Fellow, Department of Pathology, Brigham and Women's Hospital, Harvard Medical

School, Boston, Massachusetts

03/98-03/99 Intern, Department of Medicine, Johns Hopkins University/Sinai Hospital Program, Baltimore,

Maryland

07/99-06/00 Clinical Fellow (PET Imaging), Department of Radiology, Division of Nuclear Medicine, Johns

Hopkins Hospital, Baltimore, Maryland

07/00-06/02 Resident, Department of Radiology, Division of Nuclear Medicine, Johns Hopkins Hospital,

Baltimore, Maryland

HOSPITAL APPOINTMENTS:

12/02-11/05

Staff Physician and Assistant Chief of Nuclear Medicine, Dept. of Radiology, Tripler Army

Medical Center, Honolulu, Hawaii

-CAPT U.S. Army Medical Corp 09/02-10/03 -MAJ U.S. Army Medical Corp 10/03-11/05

CERTIFICATION:

United States Medical Licensing Examination (USMLE)

Step I - September, 1994 - Passed

Step II- March, 1996 - Passed

Step III-May, 1997-Passed

Diplomate, American Board of Nuclear Medicine-September 8, 2001-#07192

MEDICAL LICENSE: Massachusetts: #155420, full-inactive (issued September 24, 1997)

New Jersey: #25MB07992700, full-active (issued October 5, 2005)

AWARDS:

2005

The Army Commendation Medal, for meritorious service as Assistant Chief, Nuclear Medicine

Service Dept. of Radiology, Tripler Army Medical Center, Hawaii

Shelley A. Quarless

Publications:

<u>Quarless SA.</u>, Cantor CR. Analysis of RNA structure by ultraviolet crosslinking and denaturation gel electrophoresis. Anal. Biochem. 1985; 147:296-300

Quarless SA. Coupled endo-exodeoxyribonuclease activity from HeLa cell nuclei interacts with specific regions of the SV40 mini chromosome. Biochem. Biophys. Res. Commun. 1985; 126:805-11

Quarless SA. Coupled endo-exodeoxyribonuclease activity from HeLa cell nuclei can function in an excision repair mode in vitro. Biochem. Biophys. Res. Commun. 1985; 126:812-17

Quarless SA. Identification of an ionic strength sensitive nuclear protein kinase activity from the cervical carcinoma HeLa. Biochem. Biophys. Res. Commun. 1985; 133:981-87

Quarless SA. Identification of a deoxyribonuclease activity in the nuclei of the cervical carcinoma HeLa. Cancer Biochem. Biophys 1986; 8:211-20

Quarless SA., Heinrich G. The use of complementary RNA and S1 nuclease for the detection and quantitation of low abundance m RNA transcripts. BioTechniques 1986; 4:344-38

Quarless SA., Heinrich G. Regulation of nerve growth factor gene expression in primary brain monolayer cultures: Effect of dibutyryl cyclic AMP and sodium butyrate. Brain Res. 1987; 2:235-42

<u>Quarless SA.</u> Chloriquine enhances the cytotoxicity of cis-diaminedichloroplatinum II. Cancer Biochem. Biophys. 1988; 10:11-15

Quarless SA., Lam DMK. The expression of high molecular weight astroglial extracellular proteins is altered by growth environment. Glia 1989; 2:403-11

Cataldo AM, Barnett JL, Berman SA, Li J, Quarless S, Bursztajn S, Lippa C, Nixon RA. Gene expression and cellular content of cathepsin D in Alzheimer's disease brain:evidence for early up-regulation of the endosomal-lysosomal system. Neuron 1995; 14:671-80

Quarless SA., Wells CN. Bochdalek hernia, incidental finding on sestamibi parathyroid scan. Clin Nucl Med 2005;30:436-439

James B, Chandler NC, and <u>Quarless SA</u>. Extraosseous uptake of Tc-99m along the radiation therapy port for recurrent squamous cell carcinoma of the lung. Clin Nucl Med 2005;30:555-7

Engles JM, Quarless SA, Mambo E, Ishimori T, Cho SY and Wahl RL. Stunning and its effect on FDG uptake and key gene expression in breast cancer cells undergoing chemotherapy treatment. J. Nucl. Med. 2006; 47:603-8

PRESENTATIONS:

<u>Quarless SA.</u>, Wahl RL. The Effect of Chemotherapy Agents on the Expression of mRNA for Glucose Transporter-1 and Hexokinase Type-II: An in vitro Evaluation. Society of Nuclear Medicine, 50th Annual Meeting, June 21-25, 2003, New Orleans, LA

ABSTRACTS:

Quarless SA., Wahl RL. The Effect of Chemotherapy Agents on the Expression of mRNA for Glucose Transporter-1 and Hexokinase Type-II: An in vitro Evaluation. J. Nucl. Med. 2003; 44(suppl):80P, 259

The American Board of Nuclear Medicine,

Certifiesthat

Shelley Ann Quarless

has met the requirements of this Board and is qualified during the period of 2 0 0 1 through 2 0 1 1 to practice as a Specialist in all aspects of Clinical and Laboratory

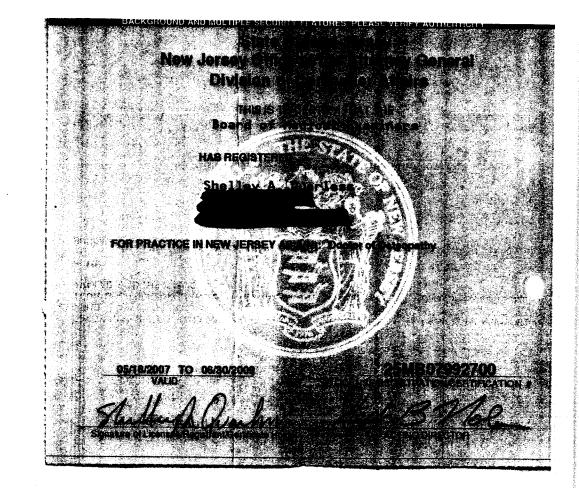
Nuclear Medicine

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

Ronald L Neufran



heady - bushing



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



The American Board of Nuclear Medicine

A Member Board of the American Board of Medical Specialties

Chairman Ronald L. Van Heertum, M.D. New York, New York

Vice Chairman Andrew T. Taylor, M.D. Atlanta, Georgia

Secretary-Tressurer Martin L. Nusynowitz, M.D. Galveston, Texas

Directors Robert F. Carretta, M.D. Rossville, California

Michael M. Graham, M.D. Iowa City, Iowa

Lawrence E. Holder, M.D. Baltimore, Maryland

Alen H. Maurer, M.D. Philedolphia, Pennsylvania

Tom R. Miller, M.D., Ph.D. St. Louis, Misseuri

Christopher J. Palestro, M.D. New Hyde Pack, New York

David C. Price, M.D. San Francisco, California

Edward B. Silberasia, M.D. Cincianati, Obio

S. Ted Treves, M.D. Boston, Massachusetts

Executive Director William H. Blahd, M.D. Los Angeles, California

Associate Executive Director Heinrich R. Scheibert, M.D. Los Angeles, California

Administrator Gloria W. Gorden, M.P.H. Los Angeles, California

Assistant Administrator Gregory S. Vaugha, M.P.H. Los Angeles, California

Please Address All Communication To:

900 Voteren Avenue Los Angeles, CA 90024-1786 Telephone (310) 825-6787 Fax (310) 794-4821 October 10, 2001

7192

QUARLESS, SHELLEY ANN

Dear Doctor:

With great pleasure the American Board of Nuclear Medicine informs you that you have passed its September 8, 2001 certifying examination in the broad field of nuclear medicine and are now recognized as a certified specialist in nuclear medicine. A certificate indicating this recognition will be sent to you in the near future. The American Board of Nuclear Medicine congratulates you upon your achievement and this recognition.

The scores below indicate your performance in the nine content areas of the certification examination. Your percent correct score and the percent correct score for all candidates is shown. This provides the opportunity to compare your performance with all candidates in 2001. The Board hopes this information will be useful to you.

Content Area	Percent Answered Correctly	Mean % Correct For All Takers
Bas.Sci./Rad.Hlth-NMR	53	62
Cardiovascular	63	65
Endocrine	67	60
Gastrointestinal	71	70
Hematology/Oncology	70	65
Neurology	65	65
Pulmonary	52	67
Renai	56	66
Musculo-skeletal	59	65

Very sincerely yours,

Ronald L. Van Heertum, MD

Chairman



This certifies that

Shelley Ann Quarless, **D.O**.

has served on the Resident Staff of The Johns Hopkins Hospital as Assistant Resident, Resident on the

Radiology and Auclear Medicine Service

from July 1, 2000 to June 30, 2002

RIML WSUJ CHEF OF SERVICE Romen R. Peter

CHAIRMAN BOARD OF TRUSTEES

Tripler Army Medical Center Health Physics Office Fax: (808) 433 2440



To: A	TTN Dr. ML	STSA		Frome	SSG John Irace	-
Phones		! !		Phone:		
Fax:				Pages:	6, including cover	sheet
Date:				CC:		
Re:			•			
□ Urgent	x For R	oview	🗆 Please Co	mment	☐ Please Reply	☐ Please Recycle
• Com	ments					
			r. Shelly Quarles			
Included: 3	h etmonos l	ocuments	1 adding her to	list of auth	orized user 1 deletin	o, and 1 as a user.

POC is Mr. Michael A. Diodato, Security Specialist at (808) 433-1418

AUTHORIZATION TO USE RADIOACTIVE MATERIALS

(For use of this form refer to TAMC Reg 40-37)

Date: 5 October 2005

THRU: Radiation Safety Officer Health Physics Section Tripler Army Medical Center

TO: Radiation Sufety Committee Tripler Army Medical Center FROM: (Principal User and Organization) Jerry M. Brown, COL, MC (1,2,3) Nuclear Medicine Service Tripler Army Medical Center

Ph: 433-6583

Fax: 433-6255

List of Authorized/Supervised Users

Authorized Users

Breitweser, James (1, 2) Delaplain, Calvin B. (1, 2, 3) Quarless, Shelley Ann (1,2,3)

Prager, Douglas A. (1,2,3) Gorcia-Pona, Edna

Click, Michael E. (1, 2)

Supervised Users

Akau, Bryan Ashcraft, James Frew, Robert J. Genzalez, Javier Kawaoka, Edward Rushing, Michael S.

Towne, David B. Williams, John

Authorization Conditions

Human Use: Diagnostic and Therapeutic Use in Patients

- (1) Use of unsealed byproduct material for uptake, dilution, and excretion studies IAW 10 CFR 35.100.
- (2) Use of unsealed byproduct material for imaging and localization studies IAW 10 CFR 35.200.
- (3) Use of unsealed byproduct material for therapeutic administration IAW 10 CFR 35.300.

X **Human Use**

Non-Human Use

	<u> </u>	
	feach radionuclide.)	
X Unsealer	1	X Sculed Sources
Carbon-14	1.0 mCi	Americium-241 15.0 mCi
Chromium-51	5.0 inCi	Barium-133 1.0 mCi
Coboli-57	5.0 mCi	Cesium-137 20 60 niCi ***
Cobolt-58	5.0 mCi	Cesium-137 1.0 mCi
Fluorino-18	200 mCi	Cobalt-57 50 mCi
Gallium-67	50.0 mCi	Cobalt-60 1.0 mCi
Indium-111	50.0 mCi *	Europium-152 0.5 uCi ****
Indium-111	1.0 Cf **	Cadolinium-153 600 mCi
lodine-123	3.0 mCi	Germanium-68 50.0 mCi
lodino-125	250 uCi !	Radium-226 5.0 uGi mg
iodine-131	600 mCi	Strontium-90 25 mCi
Molybdenum-99	6.0 Ci	
Phasphanus-12	50.0 mCi	
Samarium-153	200 mCi	*For imaging, localization, uptake, dilution and excretion studies.
Stroatium-89	50 mCi	**For therapeutic use.
Technetium-99m	5.0 Ci	***Maximum activity per source is 30 mCi (NRC License Item #N6H).
Thallium-201	75 mCi	****The maximum amount per housing is 300 mCi.
Yttrium-90	100 mCi	
Podiosethus Materia	111 1	

Radioactive Material Use Areas

NMS Rooms: Pharmacy (3A-104), Wash Sink (3A104), Dose Room (3A-105), Triple Head Spect Picker 3000 (3A-151), Uptake Probe (3A-153), Bone Density QDR4500A (3A-157), Body Scanner SIEMENS (3A-159), Picker 2000 (3A-161), Argus ADAC Single Head (3A160), ADAC Single Head ARGUS (3A-158), VERTEX ADAC (3A-156), Treadmill Room (4A102A)

Radioactive Material Storage Areas

Pharmacy (3A-104), Storage Rm (3A-102), Siemuna Body Scan (3A-159), ADAC VERTEX (3A-156), Dose Room (3A-105), Storage Rm (3A-005)

AUTHORIZATION TO USE RADIOACTIVE MATERIALS (For use of this form robit to TARIC Heg 40-97) Oate: 08 July 3004 THRU: Radiation Salety Officer FROM: (Principal User and Organization) Health Physics Section Strong Ann Quarters, WAL MCCLAST Tripler Army Medical Conter Suchear Medicine Service TO: Radiation Salpty Committee Tripper Army Medical Center Tripler Army Medical Center List of Authorized/Supervised Users Ph 4 Chess. Fax: 433-625 Authorized Users Behjan, Khrosrow (1, 2, 3) Supervised Users Breitweser, James (1. 2) Akau, Bryan Asherate James Click, Michael E. (1, 2) Delaplain, Caivin B. (1, 2, 3) विकास के क्षिप्रदेश अपने वह कर कर है. Colonial States, Later 1919, Fren. Robert J. Toney, Marakinyo A. O. (1/2, 3) Gonzalez, Javice Garcia-Pens, Edns Kawaoka, Edward Bushird Augir-A. Amhorization Conditions Williams, John Human Use: Diagnostic and Therapeuric Use in Patients (1) Use of miscaled byproduct material for uptake, dilution, and exerction studies IAW 10 CFR 35, 100. (2) Use of unscaled hyproduct material for imaging and localization studies IAW 10 CFR 35.200 (3) Use of unsealed by product moverial for therapeuric administration IAW 10 CFR 35,300, Human Use X Non-Human Use Maximum Activity (of each radionuclide.) X Unsealed X Sealed Sources afering d 13-9C Christian and M Atted of the 241 2 ft :jn . inhair. Burgariss Lit me i Street : South sy Company 15 2.0 r.s. 1; Til mi : Charment & Court 5 50 m(*) Darme : Mary 6" 1 male is. firm(; Million. Indaur.-: 🗀 50 tr 10; .. 11 5 W/1 labanana a a Caldonnamer : things test in 150. 40 ig tight and Germanner 29 0 mC1 Street ? Racing .. De. lent part 25 SN W. Tou at's ا تي ياموا Ministrative 25 mg/s odklynersk Malyhdennya na nit it Mesopholog 32 42.71 MI Williams 1) "Late terratering "October 18-15" Street among No : 100 : were strongered and Perateries in respense 50 C • • • Махинит цень бу фа этегс, то 30 лест Thaffigache "Sax i कर के किए मान्यभावतम् अस्तिवास प्रकार विभावनाम् कि निर्मात वर्षः المهارس بالماثالا IN all Radiouctive Melectal Use Areas NASS Room N. Priestancy of A. 1984. Wight State J. A. 1944. Lating Record to A. 1964. Triple Head Special Parket Higher A.A. 1984. Conductive of the A. 1884. House State State State. Herean Olikastila (2), 1574, Redy Second St. MENN (3A-159), Probe Substance of the Area Area Single Head (5), mon attack Single Head

Oburracy (3A) (114), Suring Rin (1A) (10), Surings Body Stan (5A) (58), Albac VLR(FX+A) (50), Labor Briting (A+1), Surings Brit (2A-005)

Radiouctive Material Storage Arous

Later and infanter are instrument		The second section of the section of th
1 .	(Use additional sheets where necessary)	
Callinguage	:	
	er) fis we say a shall be persurted source ame however	min-12 laters of axion dig of withinfacing endichannancing calculations of conce
	sto Courterly historically shall be partitioned for all the	as workers an openified in EAAAC REG 416.77
eg i park Chi penin	Card express of the George Stable areas will be deviced	actualistics with the model protochere perspected in SBC Regulatory Cylife
	1102 Shi Ropphiary Giron test Argondis C.	
i ki si nk	•	
	energentung Ingga	his historium in er un comen et ademater e ethioriu envenez the sover system
	निवासिक विवास स्थापन क्षेत्रकार होता है। जाने के स्थापन क्षेत्रक के जाने हैं। असके का कार्यक स्थापन का स्थापन के स्थापन	or the server systems in completa popular of surface procession. Checomology activity
eda (Prihereija		
e ea a artar eta	out An HPS Sulpher shall be shaung concern only	ring any esolution
		a to tallimed one about the instance of an incline, will in according to with the
(5) Package Receipt (Purhape recent within in accordance with 5407 Reg	Courte 1013, rappy nervees K and I
tel Propanence one of	Limitation of QMI reductioning arises Comme	one can explore the exercises for Abyt Statem on advantage and with the closes.
		or Mr. Bryan Akas, or Mr. Bette and Rawanka, and a qualified Nucleus Medicine
Transping Suppli	s of reducerose materials is pur authorized.	
Wil Company A code of Arts on the		
ent of the desired	Osed User Appharszásou. – 195 Buszanows et Aeres almanis más endidous sessi	consuppressed by the PASS (1998) and temporarily audinorated acrossly as
	- multiplicated decreated and partial and to exceed their ter-	nseidins a memins. 5 "Supers sond lends", widd ddiry bins, calebook the appropriate radication, ladely.
M Appartians - Pro- "supervised uses"	lagran ni supervision od a Mediennikol dia ni by 40 Mau	thitisent weed shad he commonweate with the experience and naming of the
		Summary
List of Aut		of pullus, main must be Kum a fix. Ma and other ton
	i setteration in the second of	
•	Calatiga S. S. Bajanes	Sergiand User's Sergie Tunqueline L. Donic in Jacqualine i
•	Maximum Activity:	
Radio	esclive Material Use Areas:	
Radioactive Ma	terial Storage Areas:	•
	idilai ettitge Piete.	
	Conditions of Use:	
Asknowledgement	of responsibilities:	Approved
57.1	Langet Carrienten	
SHELLL	Y ASN QUARLESS, MALINC	JAMES A. BREITWESER, COL. MC
	Principal User	Agministrative Official
pproved:		Approved: - 2 - 22
Jane Land	The state of the s	AM Same
JACKETH .	URR. MORTON, MAJ, MS	BERRY, KEVING, CAPT, MC, USN
1.	Radiation Solety Offices	RSC Chairperton
Authorization No.		ar dan daggi yang sagagan dir spir sa tang nang nagtah daggi sagatah samanan gan hangsapat da tang sagatah sang

	REQUEST FOR USE OF RADIOACTIVE MATERIALS			Date	: 29 OCT 02	
	(For use of this	form refer to TAMC Reg	140-37)		<u> </u>	
THRU	: Radiation Safety Offi	cer	FROM: (F	rinciple User and Org	janization)	•
	Health Physics Office	9		Sun Y. Kim (1, 2, 3))	
Tripler Army Medical Center		Center	Nuclear Medicine Service			
			i	Tripler Army Medic	al Center	
TO	: Radiation Safety Cor	nmittee				
	Tripler Army Medical	Center				
	<u> </u>		Ph: 433-6	583	Fax: 433-6255	
	and Organizations					
Authorized Use	- !			Supervised Users	•	
Behjati, Khrosrov				Akau, Bryan		
Breitweser, Jame				Gonzalez, Javier		
Caravalho, Jose	•			Graham, Richard J		
lick, Michael E.	• • •			Kawaoka, Edward		
elaplain, Calvin				Noboa, Leonard		
Quarless, Shelle	•			Sanford, Angle A.		
	o A. O. (1, 2, 3)			Shultz, Robert D		
Ourkin, Robert J				Williams, John		
uthorization Conditi	lone					
	ions ostic and Therapeutic Us	es in Pations				
•		plake, dilution, and extre	ulon strukuu	IAW/ 10 OED 05 100		
		naging and localization s				
		erapautic administration				
		each which may be pos				
X Unsealed		•		•	X Sea	led Sources
arbon-14	1.0 mCi				Americium-241	
hromium-51	5.0 mCi		•	•	Barium-133	1.0 mCi
obolt-57	5,0 mCi				Cesium-137	*70 mCi
oboit-58	5.0 mCi				Cobalt-57	50 mCi
luorin e 18	200 mCi				Cobalt-60	1.0 mCi
iallium-67	50.0 mCi				Europium-152	0.5 uCi
dium-111	**50.0 mCi				Gadolinium-153	***600 mCi
dine-123	3.0 mCi				Germanium-68	50.0 mCi
90.0 .49	250 uCi				Radium-226	5.0 uCi
					HOUIGHTEZO	
odine-125	<600 mCi				Strontium-90	25 mCi
odine-125 odine-131	≈600 mCi 6.0 Ci					
odine-125 odine-131 folybdenum-99						
odine-125 odine-131 folybdenum-99 hosphorus-32	6.0 Ci			ource is 30 mCi.	Strontium-90	25 mCi
odine-125 odine-131 lolybdenum-99 hosphorus-32 amarium-153 trontium-89	6.0 Ci 50.0 mCi	**The maximu	ım amoun	t for imaging or loc	Strontium-90 alization studie	25 mCi es is 50 mCl, the
odine-125 odine-131 folybdenum-99 hosphorus-32 amarium-153 trontium-89 echnetium-99m	6.0 Ci 50.0 mCi 200 mCi	**The maximu maximum ame	ım amoun ount for ra	t for imaging or loc diopharmaceutical	Strontium-90 alization studie therapy is 1.0	25 mCi es is 50 mCl, the
odine-125 odine-131 olybdenum-99 hosphorus-32 amarium-153 trontium-89 achnetium-99m	6.0 Ci 50.0 mCi 200 mCi 50 mCi	**The maximu maximum ame	ım amoun ount for ra	t for imaging or loc	Strontium-90 alization studie therapy is 1.0	25 mCi es is 50 mCl, the
dine-125 dine-131 diybdenum-99 nosphorus-32 amarium-153 trontium-89 schnetium-99m nallium-201 trium-90	6.0 Ci 50.0 mCi 200 mCi 50 mCi 5.0 Ci 75 mCi 200 mCi 100 m Ci	**The maximu maximum ame	ım amoun ount for ra	t for imaging or loc diopharmaceutical	Strontium-90 alization studie therapy is 1.0	25 mCi es is 50 mCl, the
dine-125 dine-131 olybdenum-99 nosphorus-32 amarium-153 rrontium-89 echnetium-99m nallium-201 trium-90 reas of Radioactiv MS Rooms: Pharma NO (3A-151), Uptak A-157), Body Scani	6.0 Ci 50.0 mCi 200 mCi 50 mCi 5.0 Ci 75 mCi 200 mCi 100-mCi e Material Use acy (3A-104), Wash Sini ie Prohe (3A-153), Ports ner SIEMENS (3A-159)	""The maximum ame """The maxim k (3A104), Dose Room (able General Electric (3A Picker 2000 (3A-161), >	um amoun ount for ra um amoud (3A-105), Tri (A-155), Bone Ke Room Arg	t for imaging or loc diopharmaceutical at per housing is 30 ble Head Spect Picker Density QDR4500A gus ADAC Single Head	Strontium-90 alization studie therapy is 1.0 00 mCi.	25 mCi es is 50 mCl, the
odine-125 odine-131 folybdenum-99 thosphorus-32 tamarium-153 trontium-89 echnetium-99m hallium-201 ttrium-90 reas of Radioactiv MS Rooms: Pharma 000 (3A-181), Uptak 3A-157), Body Scani	6.0 Ci 50.0 mCi 200 mCi 50 mCi 5.0 Ci 75 mCi 200 mCi 100-mCi e Material Use acy (3A-104), Wash Sini ie Prohe (3A-153), Ports ner SIEMENS (3A-159)	""The maximum ame maximum ame """The maxim (3A104), Dose Room (able General Electric (3A	um amoun ount for ra um amoud (3A-105), Tri (A-155), Bone Ke Room Arg	t for imaging or loc diopharmaceutical at per housing is 30 ble Head Spect Picker Density QDR4500A gus ADAC Single Head	Strontium-90 alization studie therapy is 1.0 00 mCi.	25 mCi es is 50 mCi, the Ci.
odine-125 odine-131 Alolybdenum-99 Phosphorus-32 damarium-153 drontium-99 dechnetium-99m hallium-201 (trium-90 ureas of Radioactivi (MS Rooms: Pharma 000 (3A-181), Uptak 3A-157), Body Scant A160, ADAC Single	6.0 Ci 50.0 mCi 200 mCi 50 mCi 5.0 Ci 75 mCi 200 mCi 100 mCi e Material Use acy (3A-104), Wash Sinter Prohe (3A-153), Portaner SIEMENS (3A-158) Head ARGUS (3A-158)	""The maximum ame """The maxim k (3A104), Dose Room (able General Electric (3A Picker 2000 (3A-161), >	um amoun ount for ra um amoud (3A-105), Tri (4-155), Bone Ke Room Arg 56), Treadm	t for imaging or loc diopharmaceutical at per housing is 30 ble Head Spect Picker Density QDR4500A gus ADAC Single Head till Room (4A102A)	Strontium-90 alization studie therapy is 1.0 00 mCi.	25 mCi es is 50 mCi, the Ci.

	. i		1		
	*.	cts where necessary; list re sposal, counting or assay p			
Authorization Conditions					
Non- Human Use: Calibrati	ion and Testin	g of Equipment			
(1) Bioassays	:				
(a) Bi	oassays shall	be performed some time betw	een 6-72 hours of as	saying or administering radio	pharmacoulical doses
(b) Q	uarterly bloass	ays shall be performed for all	rad workers as speci	fied in TAMC REG 40-37 Cha	pter 6-4.n.(1)(a).
(2) Dose Calibrator - Calibra	ations of the D	ose Calibrators will be done in	accordance with the	model procedure contained i	n NRC Regulatory Guide
10.2 NRC Regulatory Guid	le 10.8 Append	dix C.			
(3) Sink	;				
(a) A	disposal logisl m on a daily b	hall be maintained by the labo	ratory to document th	e amount of radioactive efflue	entering the sewer
		Ci radioactive material shall e	nter the sewer system	n through approved sinks per	month.
I	:	plassware contains one percer			
(4) Ordering	į				
		opharmaceuticals shall be limi .8, Appendix K.	ed to radioisotopes s	specified in this authorization,	and in accordance with
(b) Ar	n HPO Numbe	r shall be obtained prior to ord	ering any isotopes.		
(5) Package Receipt - Pack	age receipt wi	Il be in accordance with NRC	Reg Guide 10.8, App	endices K and L.	
(6) Preparation and adminis	stration of OMF	radiopharmaceuticals - Ther	soeutic rediopharma	ceuticals will be drawn or adm	inistared with the direct
involvement of the authorize	ed Nuclear Ph	armacist, or Mr. Bryan Akau, o	r Mr. Edward Kawao	ka, and a qualified Nuclear M	edicine Physician.
(7) Shipping - Shipping of ra	adioactive mate	erials is not authorized.			
(8) Temporary Supervised	i				
		ents/students and radiology re	sidenis approved by	the TAMC HPS are temporar	ilv authorized to work as
*supe	rvised users" f	or a period not to exceed two	consecutive months.		
		tudents are not allowed to wor		rs" until they have received th	e appropriate radiation
, and the second	- 1	Sosimetry devices from the TA			
(9) Supervision - The degre- of the "supervised user".	e of supervisio	on of a "supervised user" by ar	"authorized user" sh	all be commensurate with the	experience and training
		Revision	Descriptions		
The conditions of the p	previous aut	thorization are still applic	able with the follo	owing revisions:	
Principle	User:			•	
Authorized U	Jsers:	ADD: Quarless, Shelle	y Ann		
Supervised U	lsers:	ADD: Sanford, Angle	Ä.		
	;				
	į				
	i				
Maximum Ac		Radioactive Ma	terial Use Areas	B:	
Radioactive Storage					
Description of	f use:				
i acknowledge my respon:	sibilities 📢 🗹	Hicipie User:	Administrat	ive Approval:	و
•	2115:17	/55 "		A news.	7
S	UN Y. KIM.	LTC, MC	J)	<u>AMES A. BREITWESEF</u>	R, COL, MC
	Signati			Signature	
	TA	MC RADIATION SAFET	Y COMMITTEE	APPROVAL	
APPROVED:		APPROVED:	10	1	Authorization No.
(KA	-	/.1//			F76.NQ1
ARTHUR R. MORT	LUANT MO	MS RICARD	D JEPHES	CAPT, MC, USN	Expires
Radiation Safe			ASC Chairper		30-Oct-03
	<u> </u>		<u> </u>		

This is to acknowledge	e receipt of your letter/application dated
plining	
J J J U 100	, and to inform you that the initial processing which
	e review has been performed.
VI - Amendme	trative omissions. Your application was assigned to a
technical reviewer	ease note that the technical review may identify additional
omissions or require	
·	
Please provide to thi	office within 30 days of your receipt of this card
	
	been forwarded to our License Fee & Accounts Receivable you separately if there is a fee issue involved.
Branch, who will contac	you separately intriere is a fee issue involved.
	igned Mail Control Number
	pout this action, please refer to this control number.
rou may can us on (610	337-5398, or 337-5260.
NRC FORM 532 (RI)	Sincerely,
(6-96)	Licensing Assistance Team Leader