

DEPARTMENT OF THE ARMY

HEADQUARTERS, USA MEDICAL DEPARTMENT ACTIVITY 126 MISSOURI AVENUE FORT LEONARD WOOD, MISSOURI 65473-8952

June 2, 2010

Health Physics Service

U.S. Nuclear Regulatory Commission, Region III Nuclear Materials Licensing Section 801 Warrenville Road Lisle, Illinois 60532-4351

Dear Sir or Madam:

Request that NRC License 24-15095-01 be amended with the following changes: Add Dr. Mustafa Ali-Khan as an Authorized User under 10 CFR 35.100, 35.200, and 35.300, enclosed is his preceptor attestation. This was approved by the facility's Radiation Control Committee.

Point of contact for this action is Captain Shannon J. Malloy, Radiation Safety Officer, commercial phone (573) 329-1907.

Sincerely,

Roman O. Bilynsky, MD

Colonel, U.S. Army

Deputy Commander for Clinical Services Chairman, Radiation Control Committee

Enclosure as

NRC FORM 313A (AUD) (3-2009)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (for uses defined under 35.100, 35.200, and 35.500) [10 CFR 35.190, 35.290, and 35.590]

APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012

Name of Proposed Authorized User	State or Territory Where Licen	sed	
Mustafa Ali-Khun, MD	Missouri		
Requested Authorization(s) (check all that a)	pply)	120-1-0	
√ 35.100 Uptake, dilution, and excretion st	udies		
√i 35,200 Imaging and localization studies			
35.500 Sealed sources for diagnosis (sp	ecify device)	
	RT I TRAINING AND EXPERIENCE ect one of the three methods below)		
the date of application or the individual mu	certification, must have been obtained within ust have obtained related continuing educati completed. Provide dates, duration, and de ses checked above	on and experie	nce since
1. Board Certification			
 Provide a copy of the board certificate 	tion.		
 b. If using only 35.500 materials, stop hereceptor Attestation. 	nere. If using 35.100 and 35.200 materials,	skip to and com	plete Part II
2. Current 35.390 Authorized User Se	eking Additional 35.290 Authorization		
b. Supervised Work Experience. (If more than one supervising individed copies of this section.) Description of Experience	ual is necessary to document supervised we Location of Experience/License or	Clock	Dates of
Description of Experience	Permit Number of Facility	Hours	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 listin authorized user	g supervising ind	ividual as an
Supervisor meets the requirements belo	ow, or equivalent Agreement State requirement	ents (check all i	that apply)
35.290 35.390 + gener	rator experience in 32.290(c)(1)(ii)(G)	·	11.00

Training and Experience for Pr	oposed Authorized User			
a. Classroom and Laboratory Train	ning.			
Description of Training	Location of Training	Clock Hours	Dates of Training*	
Radiation physics and instrumentation	National Naval Medical Center 8901 Wisconsin Avenue Bethesda, Maryland 20889-5600	25	02/23/2009 - 03/06/2009	
Radiation protection	National Naval Medical Center 8901 Wisconsin Avenue Bethesda, Maryland 20889-5600	115	02/23/2009 - 03/06/2009	
Mathematics pertaining to the use and measurement of radioactivity	National Naval Medical Center 8901 Wisconsin Avenue Bethesda, Maryland 20889-5600	10	02/23/2009 - 03/06/2009 02/23/2009 - 03/06/2009	
Chemistry of byproduct material for medical use (not required for 35.590)	National Naval Medical Center 8901 Wisconsin Avenue Bethesda, Maryland 20889-5600	8		
Radiation biology	National Naval Medical Center 8901 Wisconsin Avenue Bethesda, Maryland 20889-5600	22	02/23/2009 - 03/06/2009	
	Total Hours of Training: 80	Ger Gerlay		
	ompletion of this table is not required for 35.590). dividual is necessary to document supervised worketion.) Total Hours of 700 Experience:	k experience,	ann that	
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience	
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys	erials safely and Nuclear Medicine / Nuclear Pharmacy			
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	√ Yes No	07/01/2004 - 06/30/2009	

raining and Experience for Propos	ed Authorized User (continued)		
. Supervised Work Experience (cor	ntinued)		
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience
Calculating, measuring, and safely preparing patient or human research ubject dosages	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	√ Yes No	07/01/2004 - 06/30/2009
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	√ Yes No	07/01/2004 - 06/30/2009
Ising procedures to contain spilled typroduct material safely and using roper decontamination procedures	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	✓ Yes ☐ No	07/01/2004 - 06/30/2009
dministering dosages of radioactive rugs to patients or human research ubjects	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	Yes	07/01/2004 - 06/30/2009
fluting generator systems appropriate or the preparation of radioactive rugs for imaging and localization tudies, measuring and testing the luate for radionuclidic purity, and rocessing the eluate with reagent its to prepare labeled radioactive rugs	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	107/01/2004 - 106/30/2009	
upervising Individual idney R. Hinds II, MD	License/Permit Number listin authorized user License #08-01738-02	g supervising inc	lividual as an
	ow, or equivalent Agreement State requirem 35,390 \$\sigma\$ 35,390 + generator experient ation of training on use of the device.	,	-
Device	Type of Training L	ocation and Da	ates
			e ()

CFR 35	290(C)(I	i), anu	nas acn	ievea	a level of	compet	CIII
authorize	ed user	for the	medical	uses	authorize	d under	10
 							-

Name of Proposed Authorized User

and experience, including a minimum of 80 hours of classroom and laboratory training, required by 10 ncy sufficient to function independently as an

CFR 35 100 and 35 200.

Second Section

Complete the following for preceptor attestation and signature:

√ 35.290

✓ | I attest that Mustafa Ali-Khan, MD

| ✓: I meet the requirements below, or equivalent Agreement State requirements, as an authorized user for:

Name of Preceptor Signature Sidney R. Hinds H, MD

35.390

Telephone Number (202) 782-0169

√ 35,390 + generator experience

has satisfactorily completed the 700 hours of training

06/30/2009

Date

License/Permit Number/Facility Name

License #08-01738-02 / Walter Reed Army Medical Center

NRC FORM 313A (AUT) (3/2009)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (for uses defined under 35.300)

APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012

				5.392, 35.394, and 35.396]	
Na	me	of Propos	ed Authorized User	State or Territory Where Lice	nsed
M	usta	fa Ali-Kha	n, MD	Missouri	
Re	 eque	ested Aut	horization(s) (check all tha	at apply):	
		35.300	Use of unsealed byprodu	duct material for which a written directive is requ	ired
	OF	2			
	✓:	35,300	Oral administration of so 1.22 gigabecquerels (33	odium iodide -131 requiring a written directive i 3 millicuries)	n quantities less than or equal to
	V	35.300	Oral administration of so gigabecquerels (33 million	odium iodide I-131 requiring a written directive i icuries)	n quantities greater than 1.22
	111	35,300		on of any beta-emitter, or photon-emitting radion a written directive is required	uclide with a photon energy less
	1	35,300	Parenteral administration	n of any other radionuclide for which a written o	lirective is required
				PART I TRAINING AND EXPERIENCE Select one of the three methods below)	
	of ex	applicati perience	on or the individual must h	poard certification, must have been obtained wit have related continuing education and experient adates, duration, and description of continuing of	ce since the required training and
-	1.	Board (Certification		
	a	Provide	a copy of the board certif	ification	
	b		390, provide documentation to document this experience to document this experience.	ion on supervised clinical case experience. The ence.	e table in section 3 ₋ c. may
	C	and sup		ion on classroom and laboratory training, super perience. The tables in sections 3,a., 3,b., and 3	
	d,	Skip to	and complete Part II Prec	ceptor Attestation,	
	2.	Current	35.300, 35.400, or 35.60	00 Authorized User Seeking Additional Authorized User Seeking User Seeking Authorized User Seeking Authorized User Seeking User Seeking Authoriz	orization
	a	Authoriz	ed User on Materials Lice	ense un	der the requirements below or
		equival	ent Agreement State requ	uirements (check all that apply):	
		35.3	390 35,392	35,394 35,490 35.6	590
	b	require	d supervised case experie	et of clinical uses under 35,300, provide docum ence. The table in section 3.c. may be used to eted Part II Preceptor Attestation.	
	C	docume clinical	entation on classroom and case experience. The tab	490 or 35.690 and requesting authorization for 3 dilaboratory training, supervised work experient bles in sections 3.a., 3.b., and 3.c. may be used eted Part II Preceptor Attestation.	ce, and supervised

a. Classroom and Laboratory T	r Proposed Authorized User raining 35.390 35.392	√ 35.394	√ 35.396
Description of Training	Location of Training	Cloc	k Dates of
Radiation physics and instrumentation	National Naval Medical Center 8901 Wisconsin Avenue Hotherde Manufaud 2009 5600)18	02/23/2009 - 03/06/2009
Radiation protection	National Naval Medical Center 8901 Wisconsin Avenue	21	02/23/2009 - 03/06/2009
Mathematics pertaining to the use and measurement of radioactivity	National Naval Medical Center 8901 Wisconsin Avenue Bethesda, Maryland 20889-5600	6	02/23/2009 - 03/06/2009
Chemistry of byproduct material for medical use	National Naval Medical Center 8901 Wisconsin Avenue Botherda Manuford 20000 5600	15	02/23/2009 - 03/06/2009
Radiation biology	20	02/23/2009 - 03/06/2009	
	Total Hours of Training:	80	
Description of Experience	Experion Location of Experience/License	9.00	700 Dates of
Description of Experience Must Include:	Location of Experience/License Permit Number of Facility	e or Confir	m Dates of Experience
	Femilia indiliber of Facility		
Ordering, receiving, and unpacking radioactive materials safely and performing	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	[∠̈́] Yes	
Ordering, receiving, and inpacking radioactive materials safely and performing he related radiation surveys Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy	·	07/01/2004 - 106/30/2009
Ordering, receiving, and inpacking radioactive materials safely and performing he related radiation surveys Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters Calculating, measuring, and safely preparing patient or numan research subject	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02 Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy	No √ Yes	07/01/2004 - 106/30/2009 07/01/2004 - 106/30/2009
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02 Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02 Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	No ✓ Yes ✓ Yes	07/01/2004 - 06/30/2009 07/01/2004 - 06/30/2009 07/01/2004 - 06/30/2009

RC FORM 313A (AUT)	INING AND EVER	U.S. NUCLEAR REGUL	
		ENCE AND PRECEPTOR ATTESTATION (c	ontinuea)
 Training and Experience for F Supervised Work Experience 		d Oser (continued)	
Supervising Individual	e (continued)		dividual ac ac
Supervising Individual		License/Permit Number listing supervising in authorized user	dividual as an
Sidney R. Hinds H, MD		License #08-01738-02	
Supervising individual meets the apply)**:	e requirements below	v, or equivalent Agreement State requirements	s (check all that
√ 35.390 With experience	administering dosage	es of:	
√ 35.392 ✓ Oral Nai-131 √ 35.394 gigabecquere	requiring a written di els (33 millicuries)	rective in quantities less than or equal to 1,22	
√. 35.396 √; Oral Nal-131	in quantities greater	than 1,22 gigabecquerels (33 millicuries)	
✓ Parenteral act ✓ Parenteral act		emitter, or photon-emitting radionuclide with a g a written directive is required	photon
1	, ,	ther radionuclide requiring a written directive	
** Supervising Authorized User must he requesting authorized user status.	nave experience in adminis	stering dosages in the same dosage category or categorie	es as the individual
multiple copies of this page. Description of Experience	Number of Cases Involving Personal Participation	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Oral administration of sodium iodide I-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)	 	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	07/01/2004 - 06/30/2009
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)	3	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Plarmacy License #08-01738-02	107/01/2004 - 106/31/2009
Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required		Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	07/01/2004 - 06/30/2009
Parenteral administration of any other radionuclide for which a written directive is required	10	Walter Reed Army Medical Center Nuclear Medicine / Nuclear Pharmacy License #08-01738-02	07/01/2004 - 06/30/2009
(List radionuclides)	1		

	ORM 313A (AU	IT)			U.S. NUCLEAR REGULATORY COMMISSION
(3-2009)	AUTHOR	RIZED USE	R TRAINING AND EXPERI	ENCE AND PRECEPTO	R ATTESTATION (continued)
3.]	raining and	Experien	ce for Proposed Authorized	User (continued)	
c	Supervise	d Clinical C	ase Experience (continued)		
, 8	Supervising In	dividual		License/Permit Number authorized user	er listing supervising individual as an
S	idney R. Hind	s II, MD		License #08-01738-02	
	Supervising in pply)**:	ndividual m	eets the requirements below	, or equivalent Agreemer	nt State requirements (check all that
10	/ 35.390	With expe	erience administering dosage	s of:	
İn	/ 35 392	√ Oral N	Nal-131 requiring a written di	rective in quantities less t	han or equal to 1.22
100	35.394	gigab	ecquerels (33 millicuries)		
16	/ 35.396		lal-131 in quantities greater		
2			teral administration of beta- y less than 150 keV requiring		
			teral administration of any of		
ij.		Authorized Us uthorized user		tering dosages in the same dos	age category or categories as the individual
Vote:	individual	as long as	npleted by the individual's pr	ts, or verifies training and	loes not have to be the supervising lexperience required. If more than ceptor statement from each.
	By checkin	g the boxe		sting that the individual h	ceptor statement from each, las knowledge to fulfill the duties of the ency."
Chec	Section k one of the or 35.390:	following	for each requested authori	zation:	
3					
	Board Cer	rtification			
	attest	that -	Name of Proposed Authorized User	has satisfactorily co	ompleted the training and experience
	require	ments in 3	5.390(a)(1).		
				OR	
	Training a	nd Experi	ence		
	7 attest		stafa Ali-Khan, MD Name of Proposed Authorized User	has satisfactorily co	ompleted the 700 hours of training
		perience, i R 35,390 (b		ours of classroom and la	boratory training, as required by

RC FORM 313A (AUT) U.S. NUCLEAR REGULATORY COMMISSI	ON
AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)	
receptor Attestation (continued)	
First Section (continued)	
For 35.392 (Identical Attestation Statement Regardless of Training and Experience Pathway):	
√ I attest that Mustafa Ali-Klaan, MD has satisfactorily completed the 80 hours of classroom Name of Proposed Authorized User	
and laboratory training, as required by 10 CFR 35,392(c)(1), and the supervised work and clinical case experience required in 35,392(c)(2).	
For 35.394 (Identical Attestation Statement Regardless of Training and Experience Pathway):	
✓ Lattest that Mustufa Ali-Khan, MD has satisfactorily completed the 80 hours of classroom Name of Proposed Authorized User	
and laboratory training, as required by 10 CFR 35.394 (c)(1), and the supervised work and clinical case experience required in 35.394(c)(2).	
Second Section	
Musta (a Ali-Khan, MD has satisfactorily completed the required clinical case Name of Proposed Authorized User	
experience required in 35.390(b)(1)(ii)G listed below:	
Oral Nal-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)	
Oral Nal-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)	
Parenteral administration of beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required	
Parenteral administration of any other radionuclide requiring a written directive	
Third Section	
I attest that Mustnfa Ali-Khan, MD has satisfactorily achieved a level of competency to Name of Proposed Authorized User	
function independently as an authorized user for:	
¡✓¡ Oral Nal-131 requiring a written directive in quantities less than or equal to 1,22 gigabecquerels (33 millicuries)	
√ i Oral Nal-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)	
Parenteral administration of beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required	
Parenteral administration of any other radionuclide requiring a written directive	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Fourth Section

For 35.396:

Current	35	490	OΓ	35	690	authorized	user:

l attest that

is an authorized user under 10 CFR 35,490 or 35,690

Name of Proposed Authorized User

or equivalent Agreement State requirements, has satisfactorily completed the 80 hours of classroom and laboratory training, as required by 10 CFR 35.396 (d)(1), and the supervised work and clinical case experience required by 35.396(d)(2), and has achieved a level of competency sufficient to function independently as an authorized user for:

Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

Parenteral administration of any other radionuclide for which a written directive is required

OR

Board Certification:

has satisfactorily completed the board certification I attest that

Name of Proposed Authorized User

requirements of 35.396(c), has satisfactorily completed the 80 hours of classroom and laboratory training required by 10 CFR 35.396 (d)(1) and the supervised work and clinical case experience required by 35,396(d)(2), and has achieved a level of competency sufficient to function independently as an authorized user for:

Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

Parenteral administration of any other radionuclide for which a written directive is required

Fifth Section

Complete the following for preceptor attestation and signature:

√ I meet the requirements below, or equivalent Agreement State requirements, as an authorized user for:

√ 35.390

√ 35.392

√ 35.394

35.396

 \mathcal{Y}^{+1} have experience administering dosages in the following categories for which the proposed Authorized User is requesting authorization.

√ l Oral Nal-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33

√ Oral Nal-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)

🗸 Parenteral administration of beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV requiring a written directive is required

Parenteral administration of any other radionuclide requiring a written directive

Name of Preceptor

Signature

Telephone Number (202) 782-0169

:06/30/2009

Sidney R. Hinds H, MD

License/Permit Number/Facility Name

License #08-01738-02 / Walter Reed Army Medical Center

Commander
USA MEDDAC ATTN: MCXP PMD RP
126 Missouri Ave (Box 1232)
Fort Leonard Wood MO 65473-8952



U.S. NUCLEAR REGULATORY COMMISSION, REGION III MATERIAL LICENSING BRANCH 2443 WARRENVILLE ROAD SUITE 210 LISLE, ILL 60532-4351