

August 17, 2011

U. S. Nuclear Regulatory Commission Materials Licensing Section 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

Dear Sir or Madam:

Northwest Radiology Network would like to amend its NRC Byproduct Materials License, Number 13-32258-01 to add Vincent L. Flanders, M.D. and Marc P. Underhill as Authorized Users of materials licensed under 10 C.F.R. 35.100, 35.200, and 35.392. Enclosed are copies of Drs. Flanders and Underhill's American Board of Radiology certificate (AU Eligible) as well as USNRC forms 313A(aud) and 313A(aut).

If there are any questions concerning this license amendment, please contact our nuclear medicine physicist, Mr. Patrick J. Byrne, DABR, CHP, DABSNM at 877-317-5811.

Sincerely, Bricke

Lori Bricker

RECEIVED AUG 2 3 2011

The American H ~1 Organized through the cooperation of the . ເມ American College of Radiology, the American Roentgen Ray Society, the American Radium Society, the Radiological Society of North America, the Section on Radiology of the American Medical Association, the American Society for Radiation Oncology, the Association of RADIOLOGY University Radiologists, and the American Association of Physicists in Medicine . Hereby certifies that Marc Patrick Anderhill, MD Has pursued an accepted course of graduate study and clinical work, has met centuin standards and qualifications, including passing the examinations conducted under the authority of The American Board of Radiology, demonstrating to the satisfaction of the Board that he is qualified to practice, AH Fligible and is therefore awarded the Board's certification in the speciality of 7702985 Biagnostic Radiology RESIGNE BOT 10 Effective June 30, 2010 Certificate No. 58715 Balid through 2020 N

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

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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 CER 35 190 35 290 and 35 590]

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

[10 CFR 35.190, 3	5.290, and 35.590]		
ame of Proposed Authorized User	State or Territory Where Lice	nsed	
farc Patrick Underhill, M.D.	Indiana		
equested Authorization(s) (check all that a	pply)	nnann an ann an Anna Anna Anna Anna Ann	,
35.100 Uptake, dilution, and excretion st	udies		
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)		
Training and Experience, including board the date of application or the individual me	certification, must have been obtained with ust have obtained related continuing educat completed. Provide dates, duration, and de	ion and experie	nce since
1. Board Certification			
a. Provide a copy of the board certifica	tion.		
 b. If using only 35.500 materials, stop the Preceptor Attestation. 	here. If using 35.100 and 35.200 materials,	skip to and con	nplete Part II
2. Current 35.390 Authorized User Se	eking Additional 35.290 Authorization		
 a. Authorized user on Materials License State requirements seeking authoriz b. Supervised Work Experience. (If more than one supervising individ copies of this section.) 		·	-
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:	<u>I</u>	
Supervising Individual	License/Permit Number listi authorized user	ng supervising inc	lividual as an
	ow, or equivalent Agreement State requiren	nents <i>(check all</i>	that apply).

NRC FORM 313A (AUD) U.S. NUCLEAR REGULATORY COMMISSION (3-2009) AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued) 3. Training and Experience for Proposed Authorized User a. Classroom and Laboratory Training. Dates of Clock Description of Training Location of Training Training* Hours Radiation physics and instrumentation Radiation protection Mathematics pertaining to the use and measurement of radioactivity Chemistry of byproduct material for medical use (not required for 35.590) Radiation biology **Total Hours of Training:** b. 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.) A & T PE LITER TRANSPORT Omentional Mark Experie

Supervised Work Experience		Total Hours of Experience:		
Description of Experience Must Include:	Location of Experience/Licens Permit Number of Facility	Lonurm	Dates of Experience*	
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys		Yes No		
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		Yes No		

Training and Experience for Propo	sed Authorized User (continu	ed)				
b. Supervised Work Experience. (continued)						
Description of Experience Must Include:	Location of Experience Permit Number of F		Dates of Experience			
Calculating, measuring, and safely preparing patient or human research subject dosages		Yes No				
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		Yes No				
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures		Yes No	• •			
Administering dosages of radioactive drugs to patients or human research subjects		Yes No				
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	e	Yes	· · · · · ·			
Supervising Individual	License/Pern authorized us	nit Number listing supervising ind ser	ividual as an			
Supervisor meets the requirements b 35.190 35.290 5. For 35.590 only, provide documen	35.390 35.390 + ger	nerator experience in 35.290(c	•			
Device	Type of Training	Location and Da	ates			

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d. For 35.500 uses only, stop here. For 35.100 and 35.200 uses, skip to and complete Part II Preceptor Attestation.

NRC FC (3-2009)	ORM 313A (AUD)	USER TRAININ	IG AND EXPERI	ENCE AND PRECEP	U.S. NUCLEAR REGULATORY COMMISSION TOR ATTESTATION (continued)
					· _ ·
PART II – PRECEPTOR ATTESTATION Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the s individual as long as the preceptor provides, directs, or verifies training and experience required. If one preceptor is necessary to document experience, obtain a separate preceptor statement from ex- required to meet training requirements in 35.590)					
				esting that the individ s "general clinical cor	ual has knowledge to fulfill the duties of the npetency."
	ection one of the follow	ving for each u	se requested:		
	35.190				
	Board Certification	on			
	✓ I attest that	 Marc Underhill		has satisfactorily c	ompleted the requirements in
			sed Authorized User		
				l of competency sufficed under 10 CFR 35.1	cient to function independently as an 00.
				OR	
	Training and Exp	perience			
	I attest that			has satisfactorily c	ompleted the 60 hours of training and
		•	sed Authorized User	99 Y	
	35.190(c)(1),	and has achiev	ed a level of com		atory training, required by 10 CFR unction independently as an 00.
For	35.290				
	Board Certification	on			
	✓ I attest that	Marc Underhill		has satisfactorily c	ompleted the requirements in
			sed Authorized User	_	
				l of competency sufficed under 10 CFR 35.1	ient to function independently as an 00 and 35.200.
	Training and Eve	orianaa		OR	
	Training and Exp	<u>berience</u>		has actisfactorily a	empleted the 700 hours of training
1	I attest that	Name of Propo	sed Authorized User	has satisfactorily c	ompleted the 700 hours of training
	CFR 35.290(ce, including a r c)(1), and has a	minimum of 80 hc chieved a level o		laboratory training, required by 10 nt to function independently as an 00 and 35.200.
Secon	d Section	ی وال کا بنا کا کا کا کا کا کا کا ا			
Compl	ete the following	for preceptor a	attestation and s	signature:	
	✓ I meet the red	quirements belo	w, or equivalent <i>i</i>	Agreement State requ	irements, as an authorized user for:
	✔ 35.190	✔ 35.290	\$ 35.390	35.390 + gener	rator experience
Name o	f Preceptor		Signature		Telephone Number Date
Peter A	rfken, M.D.		(SE() A	th NI	(317) 328-5050 8/5/11
License	/Permit Number/Fac	cility Name			······································
13-3225	8-01/Northwest Rad	iology Network			

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NR	C FO	RM 313A (AUT) U.S. NUC	LEAR REGULATORY COMMISSION	
(3-20	U9)	AUTHORIZED USER TRAINING AND AND PRECEPTOR ATTEST (for uses defined under 35 [10 CFR 35.390, 35.392, 35.394, a	ATION .300)	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012
Nai	ne c	of Proposed Authorized User	State or Territory Where License	ed
Ma	rc P	atrick Underhill, M.D.	Indiana	
Re	que	sted Authorization(s) (check all that apply):		
		35.300 Use of unsealed byproduct material for wh	nich a written directive is require	ed
	OR			
	✓	35.300 Oral administration of sodium iodide I-131 1.22 gigabecquerels (33 millicuries)	requiring a written directive in o	quantities less than or equal to
		35.300 Oral administration of sodium iodide I-131 gigabecquerels (33 millicuries)	requiring a written directive in o	quantities greater than 1.22
		35.300 Parenteral administration of any beta-emit than 150 keV for which a written directive		lide with a photon energy less
		35.300 Parenteral administration of any other radi	onuclide for which a written dire	ective is required
			NG AND EXPERIENCE three methods below)	
*	of ex	aining and Experience, including board certification, application or the individual must have related conti perience was completed. Provide dates, duration, a the uses checked above.	nuing education and experience	e since the required training and
	1.	Board Certification		
	a.	Provide a copy of the board certification.		
	b.	For 35.390, provide documentation on supervised be used to document this experience.	clinical case experience. The t	able in section 3.c. may
	C.	For 35.396, provide documentation on classroom a and supervised clinical case experience. The table document this experience.		
	d.	Skip to and complete Part II Preceptor Attestation.		
	2.	Current 35.300, 35.400, or 35.600 Authorized Us	er Seeking Additional Author	ization
	a.	Authorized User on Materials License		er the requirements below or
		equivalent Agreement State requirements (check a	all that apply):	
		35.390 35.392 35.394	35.490 35.69	0
	b.	If currently authorized for a subset of clinical uses required supervised case experience. The table in experience. Also provide completed Part II Precep	section 3.c. may be used to do	
	C.	If currently authorized under 35.490 or 35.690 and documentation on classroom and laboratory trainin clinical case experience. The tables in sections 3. experience. Also provide completed Part II Preception of the tables of ta	ng, supervised work experience a., 3.b., and 3.c. may be used to	, and supervised

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AUTHORIZED USER TRAIN	IING AND EXPERIEN	CE AND PRECEF	TOR ATTESTAT		TORY COMMIS ntinued)
3. <u>Training and Experience for</u>					
a. Classroom and Laboratory Tra		35.392	35.394		35.396 .
Description of Training	Locatio	on of Training		lock ours	Dates of Training
Radiation physics and instrumentation					
Radiation protection					
Mathematics pertaining to the use and measurement of radioactivity					
Chemistry of byproduct material for medical use					
Radiation biology				The second	
	Total Hours of Train	ing:			
If more than one supervising in of this page. Supervised Work Experience	านิเขเนนส์ 18 กษณะจอล y	To document supe Total Ho Experier	ours of		
Description of Experience Must Include:		perience/License umber of Facility	or	onfirm	Dates of Experienc
Ordering, receiving, and unpacking radioactive			· · · · · · · · · · · · · · · · · · ·	Yes	
materials safely and performing				No	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters			•	No Yes No	
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				Yes	
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 Calculating, measuring, and safely preparing patient or human research subject				Yes No Yes	

: FORM 313A (A ⁰⁹⁾ AUTHO		U.S. NUCLEAR REGULATORY COMMISSION
	d Experience for Proposed Auti ed Work Experience (continued)	norized User (continued)
Supervising I	ndividual	License/Permit Number listing supervising individual as an authorized user
	individual meets the requirements	below, or equivalent Agreement State requirements (check all that
apply)**:	With experience administering	dosages of:
35.390 35.392	1 1 2	itten directive in quantities less than or equal to 1.22
35.390 35.392 35.394	Oral Nal-131 requiring a wr gigabecquerels (33 millicuri	itten directive in quantities less than or equal to 1.22
35.390 35.392	 Oral Nal-131 requiring a wr gigabecquerels (33 millicuri Oral Nal-131 in quantities g Parenteral administration of 	itten directive in quantities less than or equal to 1.22 es)

c. Supervised Clinical Case Experience If more than one supervising individual is necessary to document supervised work experience, provide 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)			•
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)			
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			
(List radionuclides)			

3-200	FORM 313A (AUT) 9)	U.S. NUCLEAR REGULATORY COMMISSIO		
	AUTHORIZED USER TRAINING AND	EXPERIENCE AND PRECEPTOR ATTESTATION (continued)		
3.	raining and Experience for Proposed Authorized User (continued)			
	c. Supervised Clinical Case Experience (c	ontinued)		
	Supervising Individual	License/Permit Number listing supervising individual as an authorized user		
	Supervising individual meets the requireme apply)**:	nts below, or equivalent Agreement State requirements (check all that		
	35.390 With experience administerir	ng dosages of:		
	35.392 Oral Nal-131 requiring a gigabecquerels (33 millic	written directive in quantities less than or equal to 1.22 uries)		
	Oral Nal-131 in quantities	s greater than 1.22 gigabecquerels (33 millicuries)		
		of beta-emitter, or photon-emitting radionuclide with a photon / requiring a written directive is required		
	Parenteral administration	of any other radionuclide requiring a written directive		
	** Supervising Authorized User must have experience requesting authorized user status.	e in administering dosages in the same dosage category or categories as the individual		
ote	e: This part must be completed by the indiv	- PRECEPTOR ATTESTATION vidual's preceptor. The preceptor does not have to be the supervising		
		des, directs, or verifies training and experience required. If more than experience, obtain a separate preceptor statement from each.		
	By checking the boxes below, the precept position sought and not attesting to the in	otor is attesting that the individual has knowledge to fulfill the duties of the ndividual's "general clinical competency."		
	t Section ck one of the following for each requeste	d authorization:		
	For 35.390:			
	Board Certification			
	I attest that	has satisfactorily completed the training and experience		
	Name of Proposed Aut	norized User		
	requirements in 35.390(a)(1).			
	requirements in 35.390(a)(1).	OR		
	requirements in 35.390(a)(1). <u>Training and Experience</u>	OR		
		OR has satisfactorily completed the 700 hours of training		
	Training and Experience	has satisfactorily completed the 700 hours of training		

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NRC FORM 313A (AUT)		
AUTHORIZE	D USER TRAINING AND I	EXPERIENCE AND PRECEPTOR ATTESTATION (continued)
Preceptor Attestation	(continued)	
First Section (con	tinued)	
For 35.392 (Identi	cal Attestation Statement	t Regardless of Training and Experience Pathway):
✓ I attest that	Marc Underhill Name of Proposed Authorit	has satisfactorily completed the 80 hours of classroom
	ry training, as required by [·] equired in 35.392(c)(2).	10 CFR 35.392(c)(1), and the supervised work and clinical case
For 35.394 (Identi	cal Attestation Statement	t Regardless of Training and Experience Pathway):
I attest that	Name of Proposed Authoria	has satisfactorily completed the 80 hours of classroom
	ry training, as required by equired in 35.394(c)(2).	10 CFR 35.394 (c)(1), and the supervised work and clinical case
Second Section		
✓ I attest that	Marc Underhill	has satisfactorily completed the required clinical case
	Name of Proposed Authoriz	zed User
experience re	equired in 35.390(b)(1)(ii)G	B listed below:
	131 requiring a written dire uerels (33 millicuries)	ctive in quantities less than or equal to 1.22
Oral Nal-	131 in quantities greater th	an 1.22 gigabecquerels (33 millicuries)
		nitter, or photon-emitting radionuclide with a photon a written directive is required
Parentera	al administration of any oth	er radionuclide requiring a written directive
Third Section		
✓ I attest that	Marc Underhill	has satisfactorily achieved a level of competency to
V Factor that	Name of Proposed Authoriz	
function inde	pendently as an authorized	d user for:
	131 requiring a written dire uerels (33 millicuries)	ctive in quantities less than or equal to 1.22
Oral Nal-	131 in quantities greater th	an 1.22 gigabecquerels (33 millicuries)
Parentera	al administration of beta-em	nitter, or photon-emitting radionuclide with a photon a written directive is required
Parentera	al administration of any oth	er radionuclide requiring a written directive

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NRC FORM 313A (AUT)	
(3-2009)	
	VING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)
Fourth Section	
For 35.396:	
<u>Current 35.490 or 35.690 auth</u>	iorized user:
I attest that	is an authorized user under 10 CFR 35.490 or 35.690
	Proposed Authorized User
laboratory training, as requi	ate requirements, has satisfactorily completed the 80 hours of classroom and red by 10 CFR 35.396 (d)(1), and the supervised work and clinical case 396(d)(2), and has achieved a level of competency sufficient to function ized user for:
	n of any beta-emitter, or photon-emitting radionuclide with a photon energy less a written directive is required
Parenteral administration	n of any other radionuclide for which a written directive is required
	OR
Board Certification:	
I attest that	has satisfactorily completed the board certification
Name of P	Proposed Authorized User
required by 10 CFR 35.396	has satisfactorily completed the 80 hours of classroom and laboratory training (d)(1) and the supervised work and clinical case experience required by eved a level of competency sufficient to function independently as an
	n of any beta-emitter, or photon-emitting radionuclide with a photon energy less a written directive is required
Parenteral adminstration	n of any other radionuclide for which a written directive is required
Fifth Section	
Complete the following for precepto	or attestation and signature:
I most the requirements below	or equivalent Assessment State requirements, on an authorized uppr for
✓ I meet the requirements below,	, or equivalent Agreement State requirements, as an authorized user for:
✓ 35.390 35.392	35.394 35.396
I have experience administering requesting authorization.	g dosages in the following categories for which the proposed Authorized User is
✓ Oral Nal-131 requiring a wri millicuries)	itten directive in quantities less than or equal to 1.22 gigabecquerels (33
✓ Oral Nal-131 in quantities git	reater than 1.22 gigabecquerels (33 millicuries)
Parenteral administration of 150 keV requiring a written of	beta-emitter, or photon-emitting radionuclide with a photon energy less than directive is required
Parenteral administration of	any other radionuclide requiring a written directive
Name of Preceptor	Signature Telephone Number Date,
Peter Arfken, M.D.	(D) (1/ K) (317) 328-5050 8/5/1)
License/Permit Number/Facility Name 13-32258-01/Northwest Radiology Network	
10-02200-01/1101 thinest Maulology Herwork	

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Organized through the cooperation of the Organized through the cooperation of the American Cotlege of Radiology, the American Roentgen Ray Society, the American Radium Society, the Radiological Society of North America, the Section on Radiology of the American Medical Association, the American Society for Radiation Oncology, the Association of University Radiologists, and the American Association of Physicists in Medicine Hereby certifies that

Vincent Corenzo Flanders, MD

Has pursued an accepted course of graduate study and clinical work, has met certain standards and qualifications, including passing the examinations conducted under the authority of The American Board of Radiology,

demonstrating to the satisfaction of the Board that he is qualified to practice, and is therefore awarded the Board's certification in the specialty of

AN Eligible



Diagnostic Radiology

Effective June 30, 2010

Richard 1 Monin

fame A Hupper



Dalid through 2020

Certificate No. 59583

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

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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

[10 CFR 35.190, 3	5.290, and 35.590]		
Name of Proposed Authorized User	State or Territory Where Lice	nsed	
Vincent L. Flanders, M.D.	Indiana		
Requested Authorization(s) (check all that ap	oply)		
✓ 35.100 Uptake, dilution, and excretion str	udies		
✓ 35.200 Imaging and localization studies			
35.500 Sealed sources for diagnosis (spe	ecify device)	
	RT I TRAINING AND EXPERIENCE act one of the three methods below)		
the date of application or the individual mu	certification, must have been obtained with ust have obtained related continuing educa completed. Provide dates, duration, and do ses checked above.	tion and experie	nce since
✓ 1. <u>Board Certification</u>			
a. Provide a copy of the board certificat	tion.		
 b. If using only 35.500 materials, stop h Preceptor Attestation. 	nere. If using 35.100 and 35.200 materials,	, skip to and con	nplete Part II
2. Current 35.390 Authorized User Se	eking Additional 35.290 Authorization		
 a. Authorized user on Materials License State requirements seeking authorize b. Supervised Work Experience. (If more than one supervising individ copies of this section.) 	representation and a second		-
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:		, als
Supervising Individual	License/Permit Number listi authorized user	ng supervising inc	lividual as an
Supervisor meets the requirements belo	ow, or equivalent Agreement State requiren	nents (check all	that apply).
35.290 35.390 + gener	rator experience in 32.290(c)(1)(ii)(G)		

FORM 313A (AUD) AUTHORIZED USER TRAINING A	ND EXPERIENCE AND PRECEPTOR ATT	NUCLEAR REGULA	
. Training and Experience for Propos	sed Authorized User		
a. Classroom and Laboratory Training.			
Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation			
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Chemistry of byproduct material for medical use <i>(not required for</i> 35.590)			
Radiation biology			
	Total Hours of Training:		
(If more than one supervising individu provide multiple copies of this section	·		
Supervised Work Experience	Total Hours of Experience:		
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		Yes	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters		Yes	

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Training and Experience for	Proposed	Authorized U	ser (continued)			
b. Supervised Work Experien						
Description of Experience Must Include:	ce		of Experience/Licer it Number of Facilit		Confirm	Dates of Experience
Calculating, measuring, and sa preparing patient or human resoubject dosages					Yes	
Using administrative controls t prevent a medical event involv use of unsealed byproduct ma	ving the				Yes	
Using procedures to contain s byproduct material safely and proper decontamination proce	using				Yes	
Administering dosages of radio drugs to patients or human res subjects					Yes	
Eluting generator systems app for the preparation of radioacti drugs for imaging and localizar studies, measuring and testing eluate for radionuclidic purity, a processing the eluate with rea- kits to prepare labeled radioac drugs	ive ition g the and igent				Yes	
Supervising Individual	<u></u>		License/Permit Nur authorized user	mber listing su	pervising indi	vidual as an
Supervisor meets the requirem) [] 35	5.390	35.390 + generato	or experience		
Device	-	Type of Traini	ing	Loca	tion and Da	tes
	· · · · · · · · · · · · · · · · · · ·					

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d. For 35.500 uses only, stop here. For 35.100 and 35.200 uses, skip to and complete Part II Preceptor Attestation.

i	AUTHORIZED	USER TRAINING	G AND EXPERI	U.S. NUCLEAR REGULATORY COMMISSION ENCE AND PRECEPTOR ATTESTATION (continued)		
	-					
Note:						
				testing that the individual has knowledge to fulfill the duties of the I's "general clinical competency."		
First S Check	ection one of the follow	ving for each us	se requested:			
For	<u>35.190</u>					
	Board Certification	on				
	✓ I attest that	Vincent Flanders	s ed Authorized User	has satisfactorily completed the requirements in		
		90(a)(1) and has	achieved a leve	el of competency sufficient to function independently as an ed under 10 CFR 35.100.		
				OR		
	Training and Exp	perience				
	I attest that	Name of Propos	ed Authorized User	has satisfactorily completed the 60 hours of training and		
	35.190(c)(1),	ncluding a minim and has achieve	num of 8 hours c ed a level of con	f classroom and laboratory training, required by 10 CFR npetency sufficient to function independently as an ed under 10 CFR 35.100.		
For	35.290					
	Board Certification	<u>on</u>				
	✓ I attest that	Vincent Flanders		has satisfactorily completed the requirements in		
		Name of Propos	ed Authorized User	-		
				el of competency sufficient to function independently as an ed under 10 CFR 35.100 and 35.200.		
				OR		
	Training and Exp	erience				
	I attest that			has satisfactorily completed the 700 hours of training		
	and evention	-	ed Authorized User	our of electrony and loberatory training, required by 10		
	CFR 35.290(c)(1), and has ac	chieved a level o	ours of classroom and laboratory training, required by 10 of competency sufficient to function independently as an ed under 10 CFR 35.100 and 35.200.		
	d Section	nga gan jum nga tan pak pak na gan ing nga na mak na ma				
Compl	ete the following	• •		•		
	✓ I meet the red	quirements below	w, or equivalent	Agreement State requirements, as an authorized user for:		
	✔ 35.190	✔ 35.290	✓ 35.390	35.390 + generator experience		
Name o	f Preceptor		Signature	Telephone Number Date		
Peter A	rfken, M.D.			(317)328-5050 8/5/11		
License	/Permit Number/Fac	ility Name	V			

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NRC FORM 313, (3-2009)	A (AUT) U.S. N	UCLEAR REGULATORY COMMISSION	
,	UTHORIZED USER TRAINING AN AND PRECEPTOR ATTES (for uses defined under 3 [10 CFR 35.390, 35.392, 35.394]	TATION 35.300)	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012
Name of Propo	sed Authorized User	State or Territory Where Licens	ed
Vincent L. Flar	iders, M.D.	Indiana	
Requested A	uthorization(s) (check all that apply):		
35.300	Use of unsealed byproduct material for	which a written directive is require	ed
OR			
✔ 35.300	Oral administration of sodium iodide I-1 1.22 gigabecquerels (33 millicuries)	31 requiring a written directive in	quantities less than or equal to
35.300	Oral administration of sodium iodide I-13 gigabecquerels (33 millicuries)	31 requiring a written directive in	quantities greater than 1.22
35.300	Parenteral administration of any beta-er than 150 keV for which a written directiv		clide with a photon energy less
35.300	Parenteral administration of any other ra	adionuclide for which a written dir	ective is required
		NING AND EXPERIENCE he three methods below)	
of applica experience	and Experience, including board certification ation or the individual must have related con- ce was completed. Provide dates, duration es checked above.	ntinuing education and experience	e since the required training and
✓ 1. <u>Board</u>	Certification		
a. Provi	de a copy of the board certification.		
b. For 3 be us	5.390, provide documentation on supervise ed to document this experience.	ed clinical case experience. The	table in section 3.c. may
and s	5.396, provide documentation on classroor upervised clinical case experience. The ta nent this experience.		
d. Skip t	o and complete Part II Preceptor Attestation	n.	
2. <u>Curre</u>	<u>nt 35.300, 35.400, or 35.600 Authorized l</u>	Jser Seeking Additional Author	rization
a. Autho	rized User on Materials License	und	er the requirements below or
equiv	alent Agreement State requirements (chec	k all that apply):	
3	5.390 35.392 35.394	35.490 35.69	0
requir	ently authorized for a subset of clinical use ed supervised case experience. The table ience. Also provide completed Part II Prec	in section 3.c. may be used to de	
docur clinica	ently authorized under 35.490 or 35.690 an nentation on classroom and laboratory train al case experience. The tables in sections ience. Also provide completed Part II Prec	ning, supervised work experience 3.a., 3.b., and 3.c. may be used t	, and supervised

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FORM 313A (AUT) AUTHORIZED USER TRAININ	NG AND EXPERIENCE AND PRECE		REGULATORY COMMIS
3. <u>Training and Experience for Press</u>	roposed Authorized User		
a. Classroom and Laboratory Train	ning 35.390 35.392	35.394	35.396
Description of Training	Location of Training	Clos Hou	
Radiation physics and instrumentation			
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Chemistry of byproduct material for medical use			
Radiation biology			
Τ	otal Hours of Training:	1	1
b. Supervised Work Experience	35.390 35.392	35.394	35.396
of this page.	lividual is necessary to document sup		/ide multiple copies
Supervised Work Experience	Total H Experie		
Description of Experience Must Include:	Location of Experience/License Permit Number of Facility	e or Confi	irm Dates of Experience
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys		Ye	
Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of		Ye	
survey meters		Ye	
			כ
Calculating, measuring, and safely preparing patient or human research subject dosages Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		No	95

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AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. <u>Training and Experience for Proposed Authorized User</u> (continued)

b. Supervised Work Experience (continued)

Supervising I		License/Permit Number listing supervising individual as an authorized user		
Supervising apply)**:	individual meets the requirements below, or e	equivalent Agreement State requirements (check all that		
35.390	With experience administering dosages of:			
35.392	gigabecquerels (33 millicuries)	e in quantities less than or equal to 1.22		
35.396	Oral Nal-131 in quantities greater than	Oral Nal-131 in quantities greater than 1.22 gigabecquerels (33 millicuries)		
35.390	Parenteral administration of beta-emitte energy less than 150 keV requiring a w	er, or photon-emitting radionuclide with a photon ritten directive is required		
	Parenteral administration of any other r	adionuclide requiring a written directive		

c. Supervised Clinical Case Experience

If more than one supervising individual is necessary to document supervised work experience, provide 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)			
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)			
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			
(List radionuclides)			

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	HORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)
3. Training	and Experience for Proposed Authorized User (continued)
c. Supe	vised Clinical Case Experience (continued)
Supervisi	ng Individual License/Permit Number listing supervising individual as an authorized user
Supervis apply)**:	ng individual meets the requirements below, or equivalent Agreement State requirements (check all that
35.3	0 With experience administering dosages of:
35.3	diabecquerels (33 milliouries)
35.3	Oral Nal-131 in quantities greater than 1.22 globabecquerels (33 millicuries)
L., 00.0	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
	sing Authorized User must have experience in administering dosages in the same dosage category or categories as the individual ing authorized user status.
d. Provi	e completed Part II Preceptor Attestation.
indivi	art must be completed by the individual's preceptor. The preceptor does not have to be the supervising lual as long as the preceptor provides, directs, or verifies training and experience required. If more than receptor is necessary to document experience, obtain a separate preceptor statement from each.
	ecking the boxes below, the preceptor is attesting that the individual has knowledge to fulfill the duties of t n sought and not attesting to the individual's "general clinical competency."
irst Section heck one o	the following for each requested authorization:
For 35.3	<u>10:</u>
Boar	Certification
	ttest that has satisfactorily completed the training and experience
re	quirements in 35.390(a)(1).
	OR
	
	ng and Experience
	ttest that has satisfactorily completed the 700 hours of training
	Name of Proposed Authorized User d experience, including a minimum of 200 hours of classroom and laboratory training, as required by CFR 35.390 (b)(1).

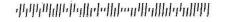
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(3-2009)		U.S. NUCLEAR REGULATORY COMM
AUTHORIZE	D USER TRAINING AND	EXPERIENCE AND PRECEPTOR ATTESTATION (continued)
Preceptor Attestation	n (continued)	
First Section (cor	ntinued)	
For 35.392 (Identi	ical Attestation Statemen	t Regardless of Training and Experience Pathway):
✓ I attest that	Vincent Flanders Name of Proposed Author	has satisfactorily completed the 80 hours of classrool
	ory training, as required by required in 35.392(c)(2).	10 CFR 35.392(c)(1), and the supervised work and clinical case
For 35.394 (Identi	ical Attestation Statemen	t Regardless of Training and Experience Pathway):
I attest that	Name of Proposed Authori	has satisfactorily completed the 80 hours of classroom
	ory training, as required by required in 35.394(c)(2).	10 CFR 35.394 (c)(1), and the supervised work and clinical case
Second Section		
✓ I attest that	Marc Underhill	has satisfactorily completed the required clinical case
	Name of Proposed Authori	zed User
experience r	equired in 35.390(b)(1)(ii)	B listed below:
	-131 requiring a written dire querels (33 millicuries)	ective in quantities less than or equal to 1.22
	101 in availting constants	nan 1.22 gigabecquerels (33 millicuries)
Oral Nal-	- 13 Fin quantities greater tr	
Parenter	al administration of beta-en	nitter, or photon-emitting radionuclide with a photon a written directive is required
Parenter energy le	al administration of beta-er ess than 150 keV requiring	a written directive is required
Parenter energy le	al administration of beta-er ess than 150 keV requiring	
Parenter energy le Parenter	al administration of beta-er ess than 150 keV requiring	a written directive is required
Parenter energy le	al administration of beta-er ess than 150 keV requiring	a written directive is required
Parenter energy le Parenter	al administration of beta-en ess than 150 keV requiring al administration of any oth Vincent Flanders	a written directive is required er radionuclide requiring a written directive has satisfactorily achieved a level of competency to
Parenter energy le Parenter Third Section I attest that	al administration of beta-en ess than 150 keV requiring al administration of any oth Vincent Flanders Name of Proposed Author	a written directive is required her radionuclide requiring a written directive has satisfactorily achieved a level of competency to
Parenter energy le Parenter Third Section I attest that	al administration of beta-en ess than 150 keV requiring al administration of any oth Vincent Flanders	a written directive is required her radionuclide requiring a written directive has satisfactorily achieved a level of competency to
Parenter energy le Parenter Third Section I attest that function inde V Oral Nal-	al administration of beta-energy sthan 150 keV requiring al administration of any oth Vincent Flanders Name of Proposed Authorite pendently as an authorized	a written directive is required her radionuclide requiring a written directive has satisfactorily achieved a level of competency to
Parenter energy le Parenter Third Section I attest that function inde gigabecq	al administration of beta-energy sthan 150 keV requiring al administration of any other vincent Flanders Vincent Flanders Name of Proposed Authorities 131 requiring a written direct 131 requiring a written direct	a written directive is required ler radionuclide requiring a written directive has satisfactorily achieved a level of competency to zed User d user for:
Parenter energy le Parenter Third Section I attest that function inde gigabeco Oral Nal- gigabeco	al administration of beta-energies than 150 keV requiring al administration of any other Vincent Flanders Name of Proposed Authorit ependently as an authorized 131 requiring a written direct uerels (33 millicuries) 131 in quantities greater there al administration of beta-energies	a written directive is required ler radionuclide requiring a written directive has satisfactorily achieved a level of competency to zed User d user for: ective in quantities less than or equal to 1.22

NRC FORM 313A (AUT)				U.S. NUCLEAR REGULATORY COMMISSI
(3-2009) AUTHORIZ	ED USER TRAIN	ING AND EXPERIE	ENCE AND PR	RECEPTOR ATTESTATION (continued)
Fourth Section				
For 35.396:				
Current 35.49	0 or 35.690 autho	orized user:		
I attest that		oposed Authorized User	is an auth	orized user under 10 CFR 35.490 or 35.690
laboratory t experience	nt Agreement Sta raining, as require	te requirements, ha ed by 10 CFR 35.3 96(d)(2), and has a	96 (d)(1), and t	completed the 80 hours of classroom and the supervised work and clinical case I of competency sufficient to function
		of any beta-emitte written directive is		nitting radionuclide with a photon energy less
Parente	ral administration	of any other radior	nuclide for whic	ch a written directive is required
			OR	
Board Certific	ation:			
I attest that		oposed Authorized User	has satisfa	actorily completed the board certification
required by	10 CFR 35.396 (), and has achiev	d)(1) and the super	vised work and	hours of classroom and laboratory training d clinical case experience required by nt to function independently as an
		of any beta-emitter written directive is		nitting radionuclide with a photon energy less
Parente	ral adminstration	of any other radion	uclide for whicl	h a written directive is required
Fifth Section				
Complete the follow	ing for precepto	r attestation and s	ignature:	
✓ I meet the requ	uirements below,	or equivalent Agree	ement State rec	quirements, as an authorized user for:
✔ 35.390	35.392	35.394	35.396	
✓ I have experience requesting aut		dosages in the foll	owing categori	es for which the proposed Authorized User is
✓ Oral Nal-13 millicuries)	1 requiring a writ	ten directive in qua	ntities less thar	n or equal to 1.22 gigabecquerels (33
🖌 Oral Nal-13	1 in quantities gro	eater than 1.22 giga	abecquerels (3	3 millicuries)
		beta-emitter, or pho irective is required	oton-emitting ra	adionuclide with a photon energy less than
Parenteral	administration of a	any other radionucl	ide requiring a	written directive
Name of Preceptor		Signature A	$\langle \rangle \rangle$	Telephone Number Date
Peter Arfken, M.D.		1000	'IN	(311)328-5050 8/5/1/
icense/Permit Number	-	\smile		, , ,
3-32258-01/Northwest F	adiology Network			

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