

2800 Tenth Avenue North P.O. Box 37000 Billings, Montana 59107-7000

September 28, 2009

Roberto J. Torres, Senior Health Physicist U.S. Nuclear Regulatory Commission, Region IV 612 E. Lamar Blvd. Suite 400 Arlington, TX 76011 817-860-8188 RECEIVED OCT 1 5 2009 DNMS

Christopher K. Fitz, Medical Physicist/Radiation Safety Officer Billings Clinic Health System Department Of Nuclear Medicine 2800 10<sup>th</sup> Ave. North P.O. Box 37000 Billings, MT 59107

Re: Amendment Request for Billings Clinic License Number 25-01051-01

Mr. Torres, we request to add a new authorized user to our license. Please accept this letter and the supporting material to add Zachary M. Bland, MD, as an authorized user for 10 CFR 35.100, 200, and 300 uses. Dr. Bland is board certified by the American Board of Radiology and AU eligible. NRC 313a (AUD and AUT) have been completed for Dr. Bland.

If you require addition information please call me at 406-672-6756.

Sincerely,

Christopher K. Fitz, JD, MS Medical Physicist/Radiation Safety Officer

ggg Whank

Peggy Wharton VP for Clinic Operations

Aalid through 2019 The American Dart of the advant of the Cogenetion of the Cogenesed through the cooperation of the University Radiologists, and the American Association of Physicists in Medicine A merican College of Rediology, the American Roentgen Ray Society, American College of Rediology, the American Roentgen Ray Society, the American Radium Society, the Radiological Society of North America, the American Society for Radiation Oncology, the Association of and clinical work, has met certain standards and qualifications and the Section on Radiology of the American Medical Association, Face Relation has passed the examinations conducted under the authority of Thereby demonstrating to the satisfaction of the Board Has pursued an accepted course of graduate study that he is qualified to practice the speciality of Zachary M. Tland, MT The American Board of Gadiology On this third day of June, 2009 Diagnostic Radiology Hereby certifies that W. Reed Dennich, M. Richard Marin Dichard Marine Secontry Teresure Certificate No. 55106 AU Fligible CAN BOARD 01UMB/1-

(for uses defined under	AINING AND EXI	N nd 35.500)	APPROVED BY EXPIRES: 3/31/2	OMB: NO. 3150-0120 2012
Name of Proposed Authorized User	Sta	te or Territory Where License	ed	
Zachary M. Bland, M.D.	Мо	ntana		
Requested Authorization(s) (check all that	apply)			
✓ 35.100 Uptake, dilution, and excretion	studies			
✓ 35.200 Imaging and localization studie	S			
35.500 Sealed sources for diagnosis (	specify device		)	
	must have obtained re as completed. Provide	e <i>methods below)</i> have been obtained within elated continuing educatio e dates, duration, and des	n and experien	ce since
✓ 1. Board Certification				
a. Provide a copy of the board certific	action			
<ul> <li>b. If using only 35.500 materials, stop Preceptor Attestation.</li> <li>2. <u>Current 35.390 Authorized User</u></li> <li>a. Authorized user on Materials Licen State requirements seeking authorized</li> </ul>	Seeking Additional 3			
b. Supervised Work Experience. (If more than one supervising indiviculties of this section.)		document supervised wo	rk experience, ,	provide multiple
Description of Experience		perience/License or Imber 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 I	Experience:		
Supervising Individual		icense/Permit Number listing uthorized user	supervising indi	vidual as an
Supervisor meets the requirements b	elow, or equivalent Ag		nts <i>(check all t</i>	hat apply).

<ul> <li><u>Training and Experience for Propose</u></li> <li>a. Classroom and Laboratory Training.</li> </ul>	d Authonzed User		
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			
	otal Hours of Training:		

Supervised Work Experience		Total Hours of Experience:		
Description of Experience Must Include:	Location of Experience/Lic Permit Number of Fac		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		

b. Supervised Work Experience. (contir	ued)		
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 subject dosages		Yes	
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		Yes	
Using procedures to contain spilled byproduct material safely and using proper decontamination procedures		Yes	
Administering dosages of radioactive drugs to patients or human research subjects		Yes	
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		Yes No	
Supervising Individual	License/Permit Number listin authorized user	g supervising indi	ividual as an

## c. For 35.590 only, provide documentation of training on use of the device.

Device	Type of Training	Location and Dates

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

NRC FORM 31	3A (AUD)				U.S. NUCLEAR REGULAT	ORY COMMISSION
(2.2000)		SER TRAININ	G AND EXPERIEN	CE AND PRECEPTO	DR ATTESTATION (con	
			PART II – PRECEF	TOR ATTESTATION		za na manta se na manta a manga da ngang dan mananan da kanga na na mananan na mananan na manana na manana na m
indiv one	idual as long preceptor is r	completed by as the precept necessary to do	the individual's pred or provides, directs	ceptor. The preceptor	r does not have to be the nd experience required. receptor statement from	If more than
				ting that the individua "general clinical comp	al has knowledge to fulfill betency."	the duties of the
First Sectio	n					
		ing for each u	se requested:			
For 35.19	00					
Boa	rd Certificatio	<u>n</u>				
	attest that	Zachary M. Bla	nd, M.D.	has satisfactorily con	mpleted the requirements	s in
لينا		Name of Propo	sed Authorized User			
				of competency sufficie under 10 CFR 35.10	ent to function independe 0.	ntly as an
				OR		
Trai	ning and Expe	<u>erience</u>				
	attest that			has satisfactorily cor	mpleted the 60 hours of t	training and
		Name of Propos	sed Authorized User			-
3	35.190(c)(1), a	and has achiev	ed a level of compe		ory training, required by nction independently as a 0.	
For 35.29	90					
	rd Certificatio	n				
		Zachary M. Blar	nd. M.D.	has satisfactorily cor	npleted the requirements	s in
			sed Authorized User	had ballolactorily ool	npiotod ino roquitoment	
				of competency sufficie under 10 CFR 35.10	ent to function independe 0 and 35.200.	ntly as an
				OR		
Trai	ning and Expe	erience				
	attest that			has satisfactorily cor	mpleted the 700 hours of	ftraining
			sed Authorized User			
(	and experience, including a minimum of 80 hours of classroom and laboratory training, required by 10 CFR 35.290(c)(1), and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under 10 CFR 35.100 and 35.200.					
Second Sec	tion	ی کا	- U N M M M M M M M M M M M M M M M M M M	" 我 我 我 我 我 她 她 她 她 她 她 我 我 我 我 我 我 我 我	医鼓动 化甲基苯基苯基苯基苯基 化化合体 化化合体 化化合体	3 站 腔 腔 题 现 就 微 影 能 法 当 题 职 型 名
Complete th	ne following	for preceptor	attestation and sig	gnature:		
✓ 1	meet the req	uirements belo	w, or equivalent Ag	preement State require	ements, as an authorized	d user for:
	/ 35.190	✔ 35.290	✓ 35.390	✓ 35.390 + genera	tor experience	
Name of Prec	eptor		Signature		Telephone Number	Date
Jeffry O. Lind	lenbaum, M.D.		Gulles	Leur	(406) 237-1350	09/14/2009
License/Perm 25-010151-01	it Number/Faci Billings Clini	•			d	
					unnan en en did Dataman muna an dirikti en en en et an en	PAGE 4

NRC FORM 313A ( (3-2009)	AUT) U.S. NUCLE	EAR REGULATORY COMMISSION	n en finsk finde fan in de ser in en ser de finder in de ser generale de finder en en en en ser de ser en en s	
	JTHORIZED USER TRAINING AND AND PRECEPTOR ATTESTA (for uses defined under 35.3 [10 CFR 35.390, 35.392, 35.394, an	TION 800)	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012	
Name of Propose	ed Authorized User	State or Territory Where License	ed	
Zachary M. Blan	d, M.D.	Montana		
Requested Aut	horization(s) (check all that apply):			
✓ 35.300	Use of unsealed byproduct material for whic	ch a written directive is require	ed	
OR				
35.300	Oral administration of sodium iodide I-131 ro 1.22 gigabecquerels (33 millicuries)	equiring a written directive in o	quantities less than or equal to	
35.300	Oral administration of sodium iodide I-131 rogigabecquerels (33 millicuries)	equiring a written directive in	quantities greater than 1.22	
35.300	Parenteral administration of any beta-emittee than 150 keV for which a written directive is		clide with a photon energy less	
35.300	Parenteral administration of any other radio	nuclide for which a written dire	ective is required	
		G AND EXPERIENCE hree methods below)	na ann an an an ann an ann ann ann ann	
of applicati experience to the uses	* Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.			
	$\checkmark$ 1. <u>Board Certification</u>			
b. For 35	<ul> <li>a. Provide a copy of the board certification.</li> <li>b. For 35.390, provide documentation on supervised clinical case experience. The table in section 3.c. may be used to document this experience.</li> </ul>			
c. For 35 and su	<ul> <li>c. For 35.396, provide documentation on classroom and laboratory training, supervised work experience, and supervised clinical case experience. The tables in sections 3.a., 3.b., and 3.c. may be used to document this experience.</li> </ul>			
d. Skip to	and complete Part II Preceptor Attestation.			
2. <u>Curren</u>	t 35.300, 35.400, or 35.600 Authorized Use	r Seeking Additional Author	rization	
	zed User on Materials License		er the requirements below or	
equiva	lent Agreement State requirements (check al.	l that apply):		
35.	390 35.392 35.394	35.490 35.69	00	
require	b. If currently authorized for a subset of clinical uses under 35.300, provide documentation on additional required supervised case experience. The table in section 3.c. may be used to document this experience. Also provide completed Part II Preceptor Attestation.			
docum clinical	c. If currently authorized under 35.490 or 35.690 and requesting authorization for 35.396, provide documentation on classroom and laboratory training, supervised work experience, and supervised clinical case experience. The tables in sections 3.a., 3.b., and 3.c. may be used to document this experience. Also provide completed Part II Preceptor Attestation.			
NRC FORM 313A (AUT)	(3-2009) PRINTED ON REC	CLED PAPER	PAGE 1	

AUTHORIZED USER TRAIN	ING AND EXPERIENCE AND PRECEPTO	OR ATTESTATION (	continued)
3. <u>Training and Experience for</u>			
a. Classroom and Laboratory Tra	aining 35.390 35.392	35.394	35.396
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			
Radiation biology			
	Total Hours of Training:		
of this page.	35.390 35.392 Individual is necessary to document supervis	35.394 sed training, provide	35.396 multiple copies
Supervised Work Experience	Total Hours 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 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	
Calculating, measuring, and safely preparing patient or human research subject dosages		Yes	
Using administrative controls to prevent a medical event involving the use of unsealed byproduct material		Yes	
		Yes	

NRC FORM 313A (AUT) (3-2009) U.S. NUCLEAR REGULATORY COMMISSION

#### AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

### 3. Training and Experience for Proposed Authorized User (continued)

b. Supervised Work Experience (continued)

Supervising Individual		License/Permit Number listing supervising individual as an authorized user
Supervising apply)**:	individual meets the requirements below, o	r equivalent Agreement State requirements (check all that
35.390 35.392 35.394 35.396	gigabecquerels (33 millicuries) Oral Nal-131 in quantities greater tha Parenteral administration of beta-em energy less than 150 keV requiring a	ctive in quantities less than or equal to 1.22 an 1.22 gigabecquerels (33 millicuries) itter, or photon-emitting radionuclide with a photon
	Authorized User must have experience in administer authorized user status.	ng dosages in the same dosage category or categories as the individual

#### 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)			

NRC FORM 313A (AUT) 3-2009)	U.S. NUCLEAR REGULATORY COMMISSION
	ERIENCE AND PRECEPTOR ATTESTATION (continued)
3. Training and Experience for Proposed Authori	ized User (continued)
c. Supervised Clinical Case Experience (continu	ied)
Supervising Individual	License/Permit Number listing supervising individual as an authorized user
Supervising individual meets the requirements be <i>apply</i> )**:	elow, or equivalent Agreement State requirements (check all that
35.390 With experience administering dos	ages of:
35.392 Oral Nal-131 requiring a writter gigabecquerels (33 millicuries)	n directive in quantities less than or equal to 1.22
35.396 Oral Nal-131 in quantities grea Parenteral administration of be energy less than 150 keV requ	ater than 1.22 gigabecquerels (33 millicuries) eta-emitter, or photon-emitting radionuclide with a photon iring a written directive is required
Parenteral administration of an	ny other radionuclide requiring a written directive
** Supervising Authorized User must have experience in adr requesting authorized user status.	ministering dosages in the same dosage category or categories as the individual
Note: This part must be completed by the individual individual as long as the preceptor provides, d one preceptor is necessary to document expe	ECEPTOR ATTESTATION 's preceptor. The preceptor does not have to be the supervising directs, or verifies training and experience required. If more than rience, obtain a separate preceptor statement from each.
By checking the boxes below, the preceptor is position sought and not attesting to the individual	attesting that the individual has knowledge to fulfill the duties of th ual's "general clinical competency."
First Section Check one of the following for each requested aut	horization:
<u>For 35.390:</u>	
Board Certification	
✓ I attest that Zachary M. Bland, M.D. Name of Proposed Authorized 0	has satisfactorily completed the training and experience
requirements in 35.390(a)(1).	
	OR
Training and Experience	
I attest that Name of Proposed Authorized	has satisfactorily completed the 700 hours of training
and experience, including a minimum of 20 10 CFR 35.390 (b)(1).	00 hours of classroom and laboratory training, as required by

NRC FORM 313A (AUT) (3-2009)	U.S. NUCLEAR REGULATORY COMMISSION		
	AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)		
Preceptor Attestation (continued)			
First Section (continued)			
For 35.392 (Identical Attestation State	ement Regardless of Training and Experience Pathway):		
I attest that Name of Proposed	has satisfactorily completed the 80 hours of classroom		
-	d by 10 CFR 35.392(c)(1), and the supervised work and clinical case		
For 35.394 (Identical Attestation State	ement Regardless of Training and Experience Pathway):		
I attest that	has satisfactorily completed the 80 hours of classroom		
and laboratory training, as required experience required in 35.394(c)(2	d by 10 CFR 35.394 (c)(1), and the supervised work and clinical case 2).		
Second Section			
I attest that	has satisfactorily completed the required clinical case		
Name of Proposed /	Authorized User		
experience required in 35.390(b)(1	1)(ii)G listed below:		
Oral Nal-131 requiring a writter gigabecquerels (33 millicuries)	n directive in quantities less than or equal to 1.22		
Oral Nal-131 in quantities grea	ater than 1.22 gigabecquerels (33 millicuries)		
	eta-emitter, or photon-emitting radionuclide with a photon iring a written directive is required		
Parenteral administration of an	ny other radionuclide requiring a written directive		
Third Section			
I attest that	has satisfactorily achieved a level of competency to		
	function independently as an authorized user for:		
Oral Nal-131 requiring a writter gigabecquerels (33 millicuries)	n directive in quantities less than or equal to 1.22		
Oral Nal-131 in quantities grea	ater than 1.22 gigabecquerels (33 millicuries)		
	eta-emitter, or photon-emitting radionuclide with a photon iring a written directive is required		
Parenteral administration of an	y other radionuclide requiring a written directive		

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NRC FORM 313A (AUT)	an a	an an ann an an ann	U.S. NUCLEAR REGULA	ATORY COMMISSION
(3-2009) AUTHORIZED USER TRAIN	IING AND EXPERI	ENCE AND PRE	CEPTOR ATTESTATION (co	ontinued)
Fourth Section	an ing i linne ang kanganan kang kini kini kang kang kang kang kang kang kang kang		ar na za	an a
For 35.396:				
Current 35.490 or 35.690 auth	orized user:			
I attest that	roposed Authorized User	is an author	zed user under 10 CFR 35.4	90 or 35.690
or equivalent Agreement Standard Stan Standard Standard Stan	ate requirements, h red by 10 CFR 35.3 96(d)(2), and has a	396 (d)(1), and the	ompleted the 80 hours of class supervised work and clinical f competency sufficient to fun	case
Parenteral administration than 150 keV for which a			ting radionuclide with a photo	n energy less
Parenteral administration	n of any other radio	nuclide for which	a written directive is required	
		OR		
<b>Board Certification:</b>				
I attest that		has satisfac	torily completed the board ce	rtification
than 150 keV for which a Parenteral adminstration	a written directive is	s required	ting radionuclide with a photo a written directive is required	n energy less
Complete the following for precepto		-		_
✓ I meet the requirements below.	or equivalent Agre	ement State requ	irements, as an authorized us	ser for:
✓ 35.390 35.392	35.394	35.396		
I have experience administerin requesting authorization.	g dosages in the fo	llowing categories	s for which the proposed Auth	orized User is
Oral Nal-131 requiring a wr millicuries)	itten directive in qua	antities less than	or equal to 1.22 gigabecquere	els (33
✓ Oral Nal-131 in quantities g	reater than 1.22 gig	gabecquerels (33	millicuries)	
Parenteral administration of 150 keV requiring a written			ionuclide with a photon energ	y less than
Parenteral administration of	any other radionuo	clide requiring a w	ritten directive	
Name of Preceptor Jeffry O. Lindenbaum, M.D., Ph.D.	Signature	Led	Telephone Number (406) 237-1350	Date 09/14/2009
License/Permit Number/Facility Name	/	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
25-010151-01 Billings Clinic	an taxa ta ang a pagina an ang ang ang ang ang ang ang ang an	27.7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	a lan manang di sa ang akang mang mang kang kang mang kang kang kang kang kang kang kang k	PAGE

# ACCEPTANCE REVIEW MEMO (ARM)

Licensee:	Billings Clinic	License: 25-01051-01							
Docket:	030-02389	Mail Control: 472449							
Type of Action: Amend		Date of Requested Action: 9/28/09							
Reviewer Assigned:	Rachel	ARM reviewer(s): Torres							
Response	Deficiencies Noted During Acceptance Review								
<ul> <li>[ ] Confirm with licensee if they have NARM material.</li> <li>[ ] Change of contact information (RSO), send request to update IC database. Reviewer: Board Certification not adequate for 35.300 material. Have preceptor complete NRC Form 313a(AUT) for alternate pathway.</li> </ul>									
Reviewer's Initials: Partial for 35,00+ 35,200 with T+E is Recured, Date: 15/12/17/09									
$\Box$ Yes $\Box$ No Request for unrestricted release Group 2 or >. Consult with Bravo Branch.									
$\Box$ Yes $\Box$ No Termination request < 90 days from date of expiration									
□Yes □No	1 1	ergency, no RSO, location of use/storage not on ession not on license, other)							
Yes No TAR needed to complete action.									
Branch Chief's and/or HP's Initials: Date:									

SUNSI Screening according to RIS 2005-31							
☐ Yes ℤNo Sensitive and Non-Publicly Available if <u>any</u> item below is checked							
General guidance:							
RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule Exact location of RAM [suite #, bldg. #, location different from mailing address] (whether = or > than Category 3 or not)							
Design of structure and/or equipment (site specific)							
Detailed design drawings and/or performance information Emergency planning and/or fire protection systems							
Specific guidance for medical, industrial and academic (above Category 3): RAM guantities and inventory							
Manufacturer's name and model number of sealed sources & devices Site drawings with exact location of RAM, description of facility RAM security program information (locks, alarms, etc.)							
Emergency Plan specifics (routes to/from RAM, response to security events)Vulnerability/security assessment/accident-safety analysis/risk assess							
Mailing lists related to security response Branch Chief's and/or HP's Initials: Date: 10/30/09							

Signed	3. OTHER	2. Correct Fee Paid. Application may be processed for: Amendment Renewal License	1. Fee Category and Amount:	B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone O3 is entered //)	Signed Collecter IV Juddhäm Date 10-21-09	3. COMMENTS	2. FEE ATTACHED Amount: Check No.:	1. APPLICATION ATTACHED Applicant/Licensee: BILLINGS CLINIC Received Date: 20091015 Docket No: 3002389 Control No.: 472449 License No.: 25-01051-01 Action Type: Amendment	A. REGION	LICENSE FEE TRANSMITTAL	ETWEEN: Hite Management Branch, ARM Regional Licensing Sections Constant Sections Hite Status Code: 0 Status Code: 0 Sta	
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