

**Department of Radiation Oncology** 

Virtua Memorial Hospital Burlington County 175 Madison Avenue Mount Holly, NJ 08060 Tel 609.261.7074 Fax 609.265.9303

MMSBI

April 8, 2008

U S Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA

ATTENTION: License Reviewers

03013049

RE:

Materials License 29-17610-01

Dear Sir or Madam:

We would like to apply to adjust our radioactive materials license so as to add as an authorized user the following radiation oncologist: Catherine S. Kim, M.D., for materials listed in 10 CFR 35.400 and for 35.600 HDR brachytherapy remote afterloader treatments. With respect to the latter, Dr. Kim, in addition to receiving an emergency training inservice on our Varian Gammamed Plus HDR unit from myself on 12/28/07 (see attached), has fully participated under the supervision of our authorized users in numerous HDR treatments at this facility. She has also had full participation in multiple supervised LDR Cesium GYN procedures.

Although Dr. Kim has not yet completed her American Board of Radiology certification examinations (she is currently in the process), I have attached copies from her preceptors of an attestation letter and NRC forms 313A detailing her extensive didactic training and supervised usage experience with radioisotopes.

If there are any questions or additional materials that you require, please contact me at 609-261-7074 at your convenience or by e-mail at pvisconti@virtua.org.

Respectfully.

Paula J. Visconti, Ph.D., DABR

Radiation Safety Officer

## VIRTUA MEMORIAL HOSPITAL RADIATION ONCOLOGY

### VARIAN GAMMAMED PLUS HDR UNIT

### **EMERGENCY PROCEDURES INSERVICE**

THIS IS TO RECORD THAT ON THE DATE(s) INDICATED BELOW THE FOLLOWING PERSONNEL RECEIVED AN INSERVICE ON HOW TO HANDLE AN EMERGENCY SITUATION WITH THE GAMMAMED HDR UNIT IN ANY OF THE FOLLOWING CASES:

### A PATIENT IN EXTREMIS SITUATION

AN ERROR IN CORRECT TREATMENT DELIVERY

A SOURCE RETRACTION FAULT

<u>NAME</u>	<u>POSITION</u>	<u>SIGNATURE</u>	<u>DATE</u>
Catherine Kim	Radiation Oncologist	Catherne Fm	) 12/28/07
			,

Paula Visconti, Ph.D. Radiation Safety Officer



March 31, 2008

Thomas Jefferson University Hospitals

Thomas Jefferson University Hospital

Methodist Hospital Division

Jefferson Hospital for Neuroscience

Ford Road Campus

Methodist Hospital Nursing Center RE: Catherine Kim, M.D.

To Whom It May Concern:

Dr. James Galvin (see below) is addressing the use of radioactive materials and linear accelerator training.

I am writing this letter of attestation to verify Dr. Kim's experience and training relative to functioning as an Authorized User of radioactive materials and electronically produced x-ray devices for medical purposes. Specifically, I would like to comment on her abilities to safely use afterloading, teletherapy and gamma stereotactic radiosurgery units, as well as manually placed brachytherapy sources. Referring to NRC regulations as presented in 10 CFR sections 35.690 and 35.490 as a template, I believe that she meets the requirements for a physician trained in radiation oncology that has not yet finished the process of obtaining certification from the American Board of Using the section 35.690 requirements for teletherapy as a template for the use of linear accelerators to treat patients, I would like to affirm her ability to use this radiation therapy modality also. Dr. Kim received her training in the Department of Radiation Oncology here at Jefferson Medical College of Thomas Jefferson University and Thomas Jefferson University Hospitals, Inc. Ours is a four-year residency training program. Her laboratory and classroom training in the areas of radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity, radiation biology, chemistry of byproduct materials, and the use of external beam irradiation devices totaled more than 200 hours.

I am listed as an Authorized Medical Physicist on the Materials License for Thomas Jefferson University Hospital. The number for that license is 37-00148-08.

If you have any questions about this letter of attestation, please do not hesitate to call me at 215-955-8855.

March 31, 2008

Re: Dr. Catherine Kim

Page 2

Dr. Maria Werner-Wasík (see below) is addressing her 36 months of supervised clinical experience.

Dr. Catherine Kim has successfully completed 36 months of supervised clinical experience which includes examining individuals and reviewing their case histories to determine their suitability for teletherapy, therapy, and selecting the proper does and how it is to be administered, as well as post-administration follow-up and review of case histories.

If you require any additional information, please do not hesitate to contact me by calling 215-955-6700.

Sincerely,

James Galvin, D. Sc.

**Professor** 

Division of Medical Physics

Maria Werner-Wasik, M.D.

Associate Professor and Residency Program Director

MWW:JG:tm

# NRC FORM 313A (AUS) (3-2007) U.S. NUCLEAR REGULATORY COMMISSION

AND PRECE (for uses defined	PTOR ATTESTATION under 35.400 and 35.600) 00, 35.491, and 35.690]	APPROVED B EXPIRES: 10	8Y OMB: NO. 3150-0120 /31/2008
Name of Proposed Authorized User	State or Territory Where Licens	ed	
Catherine Kim			
	nual brachytherapy sources 35.600 Telether	apy unit(s)	
Authorization(s) 35.400 Opi	hthalmic use of strontium-90 🔲 35.600 Gamma	stereotactic n	adiosurgery unit(s)
35.600 Rer	mote afterloader unit(s)		A WALL OF THE LOCAL PROPERTY OF THE LOCAL PR
	PART I TRAINING AND EXPERIENCE (Select one of the three methods below)		
date of application or the individua	g Board Certification, must have been obtained wit il must have obtained related continuing education was completed. Provide dates, duration, and desci s checked above.	and experier	ice since the
1. Board Certification			
a. Provide a copy of the board cer	rtification.		
<ul> <li>For 35.600, go to the table in 3.</li> <li>which authorization is sought.</li> </ul>	e. and describe training provider and dates of train	ning for each	type of use for
c. Skip to and complete Part It Pre	eceptor Attestation.		
2. Current 35,600 Authorized Use	r Requesting Additional Authorization for 35.6	00 Use(s) Ch	ecked Above
a. Go to the table in section 3.e. to	o document training for new device.		
b. Skip to and complete Part II Pre	eceptor Attestation.		
3. Training and Experience for P	roposed Authorized User		
a. Classroom and Laboratory Train	ning 🛚 35.490 🔲 35.491 🛣 35.6	690	
Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and	Thomas Jefferson Univ. Hospital	100	
instrumentation	Philadelphia, PA		07/01/03- 06/30/07
Radiation protection	Thomas Jefferson Univ. Hospital Phila., PA	10	07/01/03-
	INALGA, ED	i i	06/20/07
Mathematics pertaining to the use and measurement of radioactivity	Thomas Jefferson Univ. Hospital Phila., PA	12	07/01/03 - 06/30/07
Radiation biology	Thomas Jefferson Univ. Hospital	70	07/01/03- 06/30/07
	Total Hours of Training:	192	

NRC FORM 313A (AUS) (3-2007)

PRINTED ON RECYCLED PAPER

Training and Experience for Pro	posed Authorized User (continued)		
b. Supervised Work and Clinical Ex necessary to document supervised	xperience for 10 CFR 35.490 (If more than one su d work experience, provide multiple copies of this p	pervising indiv age.)	⁄idual is
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	Thomas Jefferson Univ. Hospital NRC License No. 37-00148-08	∑ Yes ☐ No	07/01/03-
Checking survey meters for proper operation	Thomas Jefferson University Hospita NRC License No. 37-00148-08	1 X Yes	07/01/03 06/30/07
Preparing, implanting, and safely removing brachytherapy sources	Thomas Jefferson Univ. Hospital NRC License No. 37-00148-08	Yes	07/01/03- 06/30/07
Maintaining running inventories of material on hand	Thomas Jefferson Univ. Hospital NRC License No. 37-00148-08	X Yes	07/01/03 <b>-</b> 06/30/07
Using administrative controls to prevent a medical event involving the use of byproduct material	Thomas Jefferson Univ. Hospital NRC no. 37-00148-08	∐ No	07/01/03 06/30/07
Using emergency procedures to control byproduct material	Thomas Jefferson Univ. Hospital NRC License No. 37-00148-08	"XI" GJED □ No	07/01/03- 06/30/07
Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility		Dates of Experience
Approved by:			1
Residency Review Committee for Radiation Oncology of the ACGME	Thomas Jefferson Univ. Hospital NRC No. 37-00148-08		07/01/03- 06/30/07
Royal College of Physicians and Surgeons of Canada			
Committee on Postdoctoral Training of the American Osteopathic Association			
Supervising Individual  Maria Werner-Wasik, M.D.	License/Permit Number listing s Authorized User 37-0014	· -	vidual as an

ORM 313A (AUS) AUTHORIZED USER TRAINING	AND EXPERIENCE AND PRECEPTO	u.s. nuclear regula R ATTESTATION (co	
Fraining and Experience for Propos			
: Supervised Clinical Experience for	10 CFR 35.491		
Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience
Use of strontium-90 for ophthalmic treatment, including: examination of each individual to be treated; calculation of the dose to be administered; administration of the dose; and follow up and review of each individual's case history			i
Supervising Individual	License/Permit Numb Authorized User	per listing supervising indi	ividual as an
Commission of the decay Olinical Evans	f = 40 OFF 25 800		
<ul> <li>Supervised Work and Clinical Expe</li> <li>Remote afterloader unit(s)</li> </ul>		Gamma stereotactic ra	diosurgery uni
	La released with the second	Jaming Go. Go. Go. Go. G. C.	шион, <u>у</u>
Supervised Work Experience	Total Hours Experience		
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility		Dates of Experience
Reviewing full calibration measurements and periodic spot-checks		Yes No	
Preparing treatment plans and calculating treatment doses and times		Yes	
Using administrative controls to prevent a medical event envolving the use of byproduct		Yes	
material		No	i I
mplementing emergency procedures to be followed in the event of the abnormal operation of the medical unit or console		Yes No	
Checking and using survey neters		Yes	
Selecting the proper dose and		Yes	:

FORM 313A (AUS)	HÇED TBAINII	NG AND EYPER	IENCE AND		S. NUCLEAR REGULATION (CO	
Training and Expe	<u> </u>				120 17 11011 (00)	
d. Supervised Work			•			
Clinical experience oncology as part of formal training	f an approved	L		perience/Licensomber of Facility	e or	Dates of Experience*
Approved by:  Residency Revi Committee for F Oncology of the Royal College of and Surgeons of	Radiation ACGME of Physicians					
Committee on F Training of the A Osteopathic As	American					
Supervising Individua	ı <b>l</b>			o/Permit Number (i zed User	isting supervising indi	; vidual as an
e. For 35.600, des sought.	cribe training p	rovider and dates	s of training fo	or each type of u	se for which author	ization is
Description of Training	Training Provider and Dates					
	Remote	Afterloader	1	Feletherapy		Stereotactic surgery
Device operation	Maria Werner-Wasik, M.D. Associate Professor and Director of Residency 07/01/03-06/30/07					
Safety procedures for the device use	11	n				
Clinical use of the device	n	11				
Supervising Individual Individual (If more than to document supervised	one supervising in	dividual is necessary			supervising Individua	i as an
copies of this page.)		,	37-	00148-08		
	~ <sup>7</sup> 77. /	Jak., may				
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NRC FORM 313A (AUS)		U.S. NUCLEAR REGULATORY COMMISSION
(3-2007)	SER TRAINING AND EXPERIENC	E AND PRECEPTOR ATTESTATION (continued)
	PART II - PRECEPT	OR ATTESTATION
individual as long a one preceptor is n	as the preceptor provides, directs, c	ptor. The preceptor does not have to be the supervising or verifies training and experience required. If more than obtain a separate preceptor statement from each.
First Section Check one of the following	ng for each requested authorizati	on:
For 35.490:		
Board Certification		
I attest that		has satisfactorily completed the requirements in
<b></b>	Name of Proposed Authorized User	·
		ncy sufficient to function independently as an for the medical uses authorized under 10 CFR 35.400.
	OF	र
Training and Experie	<u>auce</u>	
XXX I attest that	Catherine Kim, M.D. Name of Proposed Authorized User	has satisfactorily completed the 200 hours of
clinical experie level of compet	laboratory training, 500 hours of sunce in radiation oncology, as requir	upervised work experience, and 3 years of supervised ed by 10 CFR 35.490(b)(1) and (b)(2), and has achieved a dently as an authorized user of manual brachytherapy CFR 35.400.
For 35.491:		
I attest that		has satisfactorily completed the 24 hours of
has used stron	tium-90 for ophthalmic treatment of el of competency sufficient to function	e medical use of strontium-90 for ophthalmic radiotherapy, 5 individuals, as required by 10 CFR 35.491(b), and has on independently as an authorized user of strontium-90 for
********		
Second Section		
<u>For 35.690:</u>		
<b>Board Certification</b>		
I attest that	Name of Proposed Authorized User	has satisfactorily completed the requirements in
35,690(a)(1).		
<u>Training and Exper</u>	OF	र
Training and Exper		
💢 I attest that	CAHOLINE KIM M.D.	has satisfactorily completed 200 hours of classroom
	y training, 500 hours of supervised radiation therapy, as required by 1	work experience, and 3 years of supervised clinical 0 CFR 35.690(b)(1) and (b)(2).
	ANi	D

NRC FORM 313A (AUS)			U.S. NUCLEAR REGULA	TORY COMMISSION
(3-2007) AUTHORIZED USE	R TRAINING AND EXPE	RIENCE AND PREC	CEPTOR ATTESTATION (CO	ntinued)
Preceptor Attestation (conf	tinued)		W.	
Third Section				
For 35.690: (continued)				
X lattest that Cat	Cherine Kim, M.D. Name of Proposed Authorized U		ed training required in 35.690	(c) for device
operation, safety checked below.	procedures, and clinical u	ise for the type(s) of	use for which authorization is	sought, as
Remote afterl	oader unit(s) Teleth	erapy unit(s)	Gamma stereotactic radiosurg	gery unit(s)
<b></b>	# <b>* * * * * * * * * * *</b> * * * * * * * *	AND		
Fourth Section				
	Catherine Kim, M.D.  Name of Proposed Authorized U of competency sufficient to	Jser	ed a level of competency suff atty as an authorized user for:	ficient to
ان المحادث عالم المحادث المح	<u></u>		Gamma stereotactic radiosur	rerv unit(s)
				=======
Fifth Section				
Complete the following fo	or preceptor attestation a	and signature:		
I meet the require an authorized us		, 35.491, 35.690, or e	equivalent Agreement State n	equirements, as
XX 35.400 Manua	al brachytherapy sources	35.600 Telether	rapy unit(s)	
35.400 Ophth	nalmic use of strontium-90	35.600 Gamma	stereotactic radiosurgery uni	it(s)
⅓∑ 35.600 Remo	ote afterloader unit(s)			
Name of Preceptor Maria Worner-Wasik,	13 - 0	~5 (~~	Telephone Number 215-955-6700	Date 03/31/08
License/Permit Number/Facility		"		
Thomas Jefferson U	aiv. nospilai.	#37-00148-	-00	

PAGÉ B

This is to acknowledge the receip	
includes an administrative review	, and to inform you that the initial processing which has been performed.
	760-01 omissions. Your application was assigned to a ote that the technical review may identify additional al information.
Please provide to this office w	vithin 30 days of your receipt of this card
	orwarded to our License Fee & Accounts Receivable parately if there is a fee issue involved.
	Mail Control Number 142309. s action, please refer to this control number. 98, or 337-5260.
NRC FORM 532 (RI) (6-96)	Sincerely, Licensing Assistance Team Leader