

January 14, 2011



U. S. Nuclear Regulatory Commission  
Region I  
Nuclear Material Section B  
475 Allendale Road  
King of Prussia, PA 19406

Dr 1

RECEIVED  
REGION 1  
2011 JAN 18 AM 11:19

RE: Amendment request  
License No. 07-17618-01  
Docket No. 030-13060  
Nanticoke Memorial Hospital

Gentlemen:

Please amend the above referenced license to remove Louis F. Owens, M.D. as an authorized user and Radiation Safety Officer once Dr. Vennos, the proposed Radiation Safety Officer has been approved. Dr. Vennos is currently Radiation Safety Officer on Maryland Radioactive Material License Number MD-45-021-01 and meets the qualifications of a Radiation Safety Officer as outlined in 10CFR 35.50. Dr. Vennos has received training for 35.400 by the current Authorized User, Dr. Jain. Please also add the following Doctors as authorized users of radioactive material listed under 10 CFR 35.100 and 10 CFR 35.200:

Robert Corcoran, M.D.	Alexander Zito, M.D.	Peter Libby, M.D.
Phillip Hugo, M.D.	David Chung, M.D.	Simmi Chawla, M.D.
Gerard J. F. Hogan, M.D.	Assen Todorov, M.D.	Andrew Vennos, M.D.
Thomas Riccio, M.D.	William Reid, M.D.	Michael Marks, M.D.
Mario Todorov, M.D.	Marvin E. Nielsen, M.D.	

\*Radioactive Materials License attached for State of Maryland

Please also add Dr. DeMasi as authorized users of radioactive material listed under 10 CFR 35.400.

If there are any questions or if additional information is needed regarding the above matter, please contact Marianna La Ragione, CNMT at 302-629-6611, ext. 2385 or Mr. Malek Daneshvar (consultant, Krueger-Gilbert Health Physics, Inc.) at 410-665-5447.

Sincerely,

*Missy Babinski*  
Hospital Administrator

phone (302) 629-6611  
fax (302) 629-2493  
801 Middleford Road  
Seaford, Delaware 19973  
nanticoke.org

574264

NMSS/RGN1 MATERIALS-002

NRC FORM 313A (RSO) (2-2007)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 10/31/2008																													
<b>RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION</b> <b>[10 CFR 35.50]</b>																															
Name of Proposed Radiation Safety Officer <div style="text-align: center; font-family: cursive;">Andrew Vennos, MD</div>																															
Requested Authorization(s) The license authorizes the following medical uses (check all that apply): <div style="display: flex; flex-wrap: wrap;"> <div style="margin-right: 10px;"><input checked="" type="checkbox"/> 35.100</div> <div style="margin-right: 10px;"><input checked="" type="checkbox"/> 35.200</div> <div style="margin-right: 10px;"><input type="checkbox"/> 35.300</div> <div style="margin-right: 10px;"><input checked="" type="checkbox"/> 35.400</div> <div style="margin-right: 10px;"><input checked="" type="checkbox"/> 35.500 (in vitro)</div> <div style="margin-right: 10px;"><input type="checkbox"/> 35.600 (remote afterloader)</div> <div style="margin-right: 10px;"><input type="checkbox"/> 35.600 (teletherapy)</div> <div style="margin-right: 10px;"><input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)</div> <div style="margin-right: 10px;"><input type="checkbox"/> 35.1000 ( )</div> </div>																															
<b>PART I -- TRAINING AND EXPERIENCE</b> <i>(Select one of the four methods below)</i>																															
*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained 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.																															
<input checked="" type="checkbox"/> <b>1. Board Certification</b> a. Provide a copy of the board certification. b. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license. c. Skip to and complete Part II Preceptor Attestation.																															
OR																															
<input checked="" type="checkbox"/> <b>2. Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above</b> a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought. b. Skip to and complete Part II Preceptor Attestation.																															
OR																															
<input type="checkbox"/> <b>3. Structured Educational Program for Proposed Radiation Safety Officer</b> a. Classroom and Laboratory Training																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Description of Training</th> <th style="width: 33%;">Location of Training</th> <th style="width: 17%;">Clock Hours</th> <th style="width: 17%;">Dates of Training*</th> </tr> </thead> <tbody> <tr> <td>Radiation physics and instrumentation</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Radiation protection</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mathematics pertaining to the use and measurement of radioactivity</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Radiation biology</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Radiation dosimetry</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4" style="text-align: center;">Total Hours of Training:</td> </tr> </tbody> </table>	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				Radiation biology				Radiation dosimetry				Total Hours of Training:						
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NRC FORM 313A (RSO)  
(2-2007)

U.S. NUCLEAR REGULATORY COMMISSION

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys		
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides		
Securing and controlling byproduct material		
Using administrative controls to avoid mistakes in administration of byproduct material		
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures		
Using emergency procedures to control byproduct material		
Disposing of byproduct material		
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ <div></div> <div></div> <div></div>		

+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

## 3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

## b. Supervised Radiation Safety Experience (continued)

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer
This license authorizes the following medical uses:	
<input type="checkbox"/> 35.100	<input type="checkbox"/> 35.200
<input type="checkbox"/> 35.300	<input type="checkbox"/> 35.400
<input type="checkbox"/> 35.500	<input type="checkbox"/> 35.600 (remote afterloader)
<input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)	<input type="checkbox"/> 35.1000 ( )

## c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	University of Maryland Residency in Diagnostic Radiology	1992-1994
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses	Nanticoke Memorial Hospital Cancer Care Center Dr. Jain - AU for Nanticoke (on NRC license)	12/30/10 Jain mb
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):		

PAGE 3

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

## 3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual If training was provided by supervising RSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)

Dr. Jain

License/Permit Number listing supervising individual

License/Permit lists supervising individual as:

- ☐ Radiation Safety Officer ☒ Authorized User ☐ Authorized Nuclear Pharmacist  
☐ Authorized Medical Physicist

Authorized as RSO, AU, ANP, or AMP for the following medical uses:

- ☐ 35.100 ☐ 35.200 ☐ 35.300 ☒ 35.400  
☐ 35.500 ☐ 35.600 (remote afterloader) ☐ 35.600 (teletherapy)  
☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 ( )

- d. Skip to and complete Part II Preceptor Attestation.

OR

☒ 4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist Identified on the licensee's license

- a. Provide license number.  
b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.  
c. Skip to and complete Part II Preceptor Attestation.

## PART II - PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

## First Section

Check one of the following:

☒ 1. Board Certification

☒ I attest that Dr. Vennos has satisfactorily completed the requirements in  
Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

☐ 2. Structured Educational Program for Proposed Radiation Safety Officers

☐ I attest that \_\_\_\_\_ has satisfactorily completed a structural educational  
Name of Proposed Radiation Safety Officer  
program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

OR

PROFESSION: Physician M.D.

EXPIRATION DATE: 03/31/2011

ISSUED TO: Manoj Jain

MAILING ADDRESS

Manoj Jain

PROFESSIONAL LICENSE

IS CERTIFIED THAT THE PERSON NAMED IS HEREBY LICENSED TO  
PRACTICE OR ENGAGE IN THE PROFESSION INDICATED ABOVE. THIS  
DOCUMENT IS ONLY ISSUED UNDER THE LAWS OF THE STATE OF DELAWARE.

LICENSEE SIGNATURE

183119

*Please review the information on your license and notify us of any changes needed.*

The Division of Professional Regulation is proud of our professional and responsive customer service. Visit our web site at [www.dpr.delaware.gov](http://www.dpr.delaware.gov) for essential reference information and access to online license services 24 hours a day, 7 days a week.

To sign up for online license services, you will need a Registration Code.

Your Registration Code is: 22418417

(Please retain for future use with online services.)



- Need to change your mailing address, email address or phone number? Update your contact information online so that renewal notices and other critical mailings will reach you. (Note: This service is not available for some kinds of licenses, such as facilities.)
- Time to renew? Submit your renewal application and pay your renewal fee by credit card online. We'll send you a notice when the renewal is available on our secure web site.
- Need to check the status of a license? Online license verification, including license status and disciplinary information, is available to the general public on our web site.
- Questions about your profession? Please check our web site first for license law, Rules and Regulations, and frequently asked questions (FAQ's).
- Need a form? Forms such as verification requests are a click away.
- Want to attend a meeting of the board or commission for your profession? Click on the "Meeting Calendar" on your profession's web page.
- Can't find what you need online? Just send an email to [customerservice.dpr@state.de.us](mailto:customerservice.dpr@state.de.us) and let us know what you need.

*If you are required to display your professional license, you may display either the license certificate above or the wallet card below.*

STATE OF DELAWARE  
DIVISION OF PROFESSIONAL REGULATION  
PROFESSIONAL LICENSE  
Physician M.D.  
C1-0007063  
03/31/2011  
Manoj Jain

THIS IS YOUR LICENSE CARD.

CUT THIS PORTION TO  
FIT IN YOUR WALLET.

LICENSEE SIGNATURE

NOT TRANSFERABLE

S04244-02 1/03

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

## Preceptor Attestation (continued)

## First Section (continued)

Check one of the following:

☒ 3. Additional Authorization as Radiation Safety Officer☒ I attest that Dr. Vennos is an  
Name of Proposed Radiation Safety Officer☒ Authorized User☐ Authorized Nuclear Pharmacist☐ Authorized Medical Physicist

identified on the Licensees license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

AND


## Second Section

Complete for all (check all that apply):

☒ I attest that Dr. Vennos has training in the radiation safety, regulatory issues, and  
Name of Proposed Radiation Safety Officer

emergency procedures for the following types of use:

☒ 35.100☒ 35.200☐ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required☐ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131☐ 35.300 parenteral administration of any beta-emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required☐ 35.300 parenteral administration of any other radionuclide for which a written directive is required☒ 35.400☒ 35.500☐ 35.600 remote afterloader units☐ 35.600 teletherapy units☐ 35.600 gamma stereotactic radiosurgery units☐ 35.1000 emerging technologies, including:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NRC FORM 313A (RSO) (2-2007)		U.S. NUCLEAR REGULATORY COMMISSION	
RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)			
AND			
Third Section Complete for ALL			
<input checked="" type="checkbox"/> I attest that <u>Dr. Vennos</u> has achieved a level of radiation safety knowledge <small>Name of Proposed Radiation Safety Officer</small>			
sufficient to function independently as a Radiation Safety Officer for a medical use licensee.			
-----			
Fourth Section Complete the following for Preceptor Attestation and signature			
I am the Radiation Safety Officer for <u>Nantuxke Memorial Hospital</u> <small>Name of Facility</small>			
License/Permit Number: <u>07-17618-01</u>			
Name of Preceptor <u>Loair F. Owens, Jr.</u>	Signature 	Telephone Number <u>302-629-6611</u>	Date <u>1/11/11</u>

# The American Board of Radiology

*Organized through the cooperation of the*  
*American College of Radiology, the American Röntgen Ray Society,*  
*the American Radium Society, the Radiological Society of South America,*  
*the Section on Radiology of the American Medical Association,*  
*the American Society for Therapeutic Radiology and Oncology, the Association of*  
*University Radiologists, and American Association of Physicians in Medicine*  
*They certify that*

## Andrew Dionysios Henmos, M.D.

*Has pursued an accepted course of graduate study*  
*and clinical work, has met certain standards and qualifications and*  
*has passed the examinations conducted under the authority of*

*The American Board of Radiology*

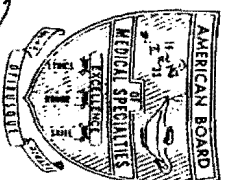
*On this fourth day of November, 1936*

*Thereby demonstrating to the satisfaction of the Board*  
*that he is qualified to practice the specialty of*

**Diagnostic Radiology**



*James E. Anderson, M.D. Robert R. Hooten, M.D. Paul Clegg, M.D.*  
*President Secretary-Treasurer Executive Director*



**MARYLAND DEPARTMENT OF THE ENVIRONMENT**

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O. Malley  
GovernorAnthony G. Brown  
Lieutenant GovernorShari T. Wilson  
SecretaryRobert M. Summers, Ph.D.  
Deputy Secretary

April 19, 2010

Andrew D. Vennos, M.D., Radiation Safety Officer  
Peninsula Imaging, LLC  
1655 Woodbrooke Drive  
Salisbury, MD 21804

**RE: Radioactive Material License # MD-45-021-01**

Dear Dr. Vennos:

Enclosed is your renewed radioactive materials license, which is being issued in accordance with Maryland Radiation Law and Code of Maryland Regulations (COMAR) 26.12.01.01, Regulations for the Control of Ionizing Radiation. This renewal has been prepared based on your application received in this office on September 18, 2009, and all relevant supplemental information received as of March 30, 2010. Please review it carefully to ensure it is complete and accurate.

Licenses are inspected at least once during the 7-year life of the license. Inspections are performed with greater frequency for more complex licenses. If you have any questions or need assistance on any aspect of this license renewal or any other matter regarding radioactive materials, please contact Mr. Raymond E. Manley, of the Radioactive Materials Division at 410-537-3301. You may also reach our office toll-free by dialing 1-800-633-6101 and requesting extension 3301 or via facsimile at 410-537-3198. Finally the MDE web page, which contains information about all MDE areas of interest, can be accessed at <http://www.mde.state.md.us/arma/Programs/Radiolog/radiolog.html>.

Sincerely,

Roland G. Fletcher, Manager IV  
Radiological Health Program  
Air and Radiation Management Administration

  
RGF/BJP/DKM/cc

Enclosures: License amendment renewal (10)  
Code (02201)



Department of the Environment  
RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE

Page 1 of 4

Pursuant to the Maryland Radiation Act, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. The license is subject to all applicable rules, regulations and orders of the Maryland State Department of the Environment, now or hereinafter in effect and to any conditions specified below.

1. Name: Peninsula Imaging, LLC	3. License No.: MD-45-021-01
2. Address: 1655 Woodbrooke Drive, Salisbury, Maryland 21804	4. Amendment No.: 10 RENEWAL; Code 02201
	5. Expiration Date: April 30, 2017

6. Radioactive material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of activity which licensee may possess at any one time
A. Any radioactive material listed in COMAR 26.12.01.01 § G.100	A. Any form listed in COMAR 26.12.01.01 § G.100	A. As needed to perform diagnostic studies
B. Any radioactive material listed in COMAR 26.12.01.01 § G.200	B. Any form listed in COMAR 26.12.01.01 § G.200	B. As needed to perform diagnostic studies
C. Fluorine-18	C. Fluorodeoxyglucose	C. As needed to perform diagnostic studies
D. Cobalt-57	D. Sealed Source	D. No source to exceed 15 millicuries
E. Cesium-137	E. Sealed Source: IPL CS-20 HEG-0111	E. 20 millicuries each; no more than 2 sources on site
F. Technetium-99m	F. Pertechnetate	F. As needed
G. Sodium-22	G. Sealed Source: IPL NA-0.15 GF-0227	G. 0.15 millicuries each; no more than 2 sources on site
H. Germanium-68	H. Sealed Source	H. No source to exceed 1.5 millicuries (55MBq); no more than 2 sources on site

## 9. Authorized Use(s):

A. Any uptake, dilution and excretion procedure listed in COMAR 26.12.01.01 § G.100;



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE

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License Number: MD-45-021-01

Amendment Number: 10

## CONDITIONS

- B. Any imaging and localization procedure listed in COMAR 26.12.01.01 § G.200;
- C. Diagnostic imaging;
- D. Reference and/or calibration source, dose calibrator quality control;
- E. Instrument quality control and calibration;
- F. Transmission source.

10. The authorized place of use is the address in item 2. The licensee must notify the Radiological Health Program 30 days prior to vacating a permanent use address.

11A. The radiation protection program shall be under the supervision of Andrew D. Vennos, M.D.

11B. Radioactive material shall be used by or under the supervision of:

Name	Authorized Use	Name	Authorized Use
Robert Corcoran, M.D.	G.100, G.200, 6A-AF	Assen Todorov, M.D.	G.100, G.200, 6A-AF
Alexander Zito, M.D.	G.100, G.200, 6A-AF	Andrew Vennos, M.D.	G.100, G.200, 6A-AF
Peter Libby, M.D.	G.100, G.200, 6A-AF	Thomas Riccio, M.D.	G.100, G.200, 6A-AF
Phillip Hugo, M.D.	G.100, G.200, 6A-AF	William Reid, M.D.	G.100, G.200, 6A-AF
David Chung, M.D.	G.100, G.200, 6A-AF	Michael Marks, M.D.	G.100, G.200, 6A-AF
Simmi Chawla, M.D.	G.100, G.200, 6A-AF	Mario Todorov, M.D.	G.100, G.200, 6A-AF
Gerard J. F. Hogan, M.D.	G.100, G.200, 6A-AF	Marvin E. Nielsen, M.D.	G.100, G.200, 6A-AF

12. The licensee shall comply with all appropriate provisions of COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation," and shall possess a copy of these regulations.

13A. Each sealed source containing radioactive material, other than Hydrogen-3 with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested. If there is reason to suspect that a sealed source might have been damaged, or might be leaking, it shall be tested for leakage before further use.

13B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of a device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate.

RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE

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License Number: MD-45-021-01

Amendment Number: 10

## CONDITIONS

- 13C. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.
- 13D. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Administrator, Radiological Health Program, 1800 Washington Boulevard, Baltimore, Maryland 21230, describing the equipment involved, the test results, and the corrective action taken.
- 13E. Test for leakage and/or contamination shall be performed by Krueger-Gilbert Health Physics, or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.
- 13F. Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
- 13G. Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been tested within six months prior to the date of use or transfer.
- 14. Sealed sources containing radioactivity shall not be opened.
- 15. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three (3) years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
- 16. The licensee may use Calicheck or Lincator Device for doing linearity tests of his dose calibrator provided he follows the procedures in the respective manual.
- 17. Food and beverage containers shall not be discarded in radioactive or normal trash containers in licensee's areas utilizing radioactive materials.
- 18. The licensee shall not transfer ownership and/or control of this license to any person or entity without providing required information regarding the transfer for the agency's review and without receiving written authorization for the transfer by the agency.
- 19A. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices. Additionally, the licensee shall not falsify, tamper with, or render inaccurate any monitoring device or method.

RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE

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License Number: MD-45-021-01

Amendment Number: 10

## CONDITIONS

- 19A. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices. Additionally, the licensee shall not falsify, tamper with, or render inaccurate any monitoring device or method.
- 19B. Violation of any term, condition, or regulation could subject the licensee to administrative or civil penalty or criminal prosecution, as specified in Title 8, Radiation, of the Article Environment of the Annotated Code of Maryland.
20. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material authorized by this license in accordance with statements representations, and procedures contained in:
- Renewal application dated September 15, 2009, with attachments;
  - Letter dated September 17, 2009, revising dose calibrator linearity testing procedures;
  - Facsimile dated March 26, 2010;
  - Facsimile dated March 30, 2010.

COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation" shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

Roland G. Fletcher, Manager IV  
Radiological Health Program

March 30, 2010

DKM DM 3/30/10

**MDE****MARYLAND DEPARTMENT OF THE ENVIRONMENT**

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O' Malley  
GovernorAnthony G. Brown  
Lieutenant Governor

MAR 29 2010

Shari T. Wilson  
SecretaryRobert M. Summers, Ph.D.  
Deputy Secretary

Andrew D. Vennos, M.D., Radiation Safety Officer  
Peninsula Imaging, LLC  
1655 Woodbrooke Drive  
Salisbury, MD 21804

**Re: IRI- 09-01 MARYLAND ENDORSEMENT OF NRC "EXEMPTION FROM 10  
CFR PART 32 AND 10 CFR PART 35 REQUIREMENTS ON PROCUREMENT  
AND TRANSFER OF TECHNETIUM-99M, AND CALIBRATION OF  
INSTRUMENTATION USING TECHNETIUM-99M"**

Dear Dr. Vennos:

The Maryland Department of the Environment's (MDE) Radiological Health Program (RHP) is issuing this Information and Regulatory Interpretation Notice (IRI) 09-01 to inform diagnostic medical licensees of RHP's endorsement of the July 16, 2009 United States Nuclear Regulatory Commission's exemption titled, "**EXEMPTION FROM 10 CFR PART 32 AND 10 CFR PART 35 REQUIREMENTS ON PROCUREMENT AND TRANSFER OF TECHNETIUM-99M, AND CALIBRATION OF INSTRUMENTATION USING TECHNETIUM-99M.**" In Maryland the exemption will be specific to COMAR 26.12.01.01 Part C and Part G requirements.

The recent shutdown of key nuclear reactors has demonstrated the fragility of molybdenum-99 production and has resulted in a current shortage and potential future shortage of technetium-99m. The reality of aging reactors has prompted the Nuclear Regulatory Commission to publish exemptions to 10 CFR Parts 32 and 35 concerning the transport of Technetium-99m and the performance of dose calibrator linearity. The Radiological Health Program has decided to allow Maryland licensees affected by the technetium-99m shortage to be covered by these exemptions, with the caveat that those licensees fully understand the licensing and documentation requirements needed to implement the exemptions.

Dr. Vennos  
Page Two

The NRC exemption document (attached) should be carefully examined for application to your licensed activities. A basic summary of the exemptions as applied in Maryland is listed below:

**1. Transportation of Technetium-99m or Technetium-99m**

Transportation of technetium-99m and technetium-99m radiopharmaceuticals is allowed between medical licensees, and licensees are exempted from commercial distribution regulations. **This exemption applies in times of shortages only, and the material must be prepared and transported in accordance with radioactive**

**materials transportation requirements using adequate shielding, appropriate containers, and the proper shipping labels. Proper documentation must be maintained.**

**2. Dose Calibrator Linearity**

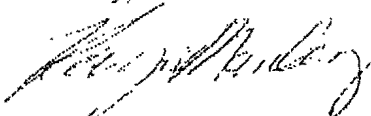
Quarterly dose calibrator linearity may be postponed if certain conditions are met:

- a. **The licensee must request an amendment to the license requesting the exemption from performing quarterly linearity if a shortage prevents it, but with the provision that as soon as technetium should become available, the linearity will be performed.**
- b. The supplier must provide documentation to the licensee that the supplier is unable to provide technetium -99m for linearity.
- c. Time-dependent linearity can be performed with reduced activity in times of shortage.
- d. Time-dependent linearity can be postponed until sufficient activity can be obtained.
- e. Time-dependent linearity must be performed as soon as the supplier is able to provide sufficient activity
- f. Those with lead-sleeved linearity devices should be able to perform linearity measurements and use the technetium-99m used for performing linearity for patient dosing.

Dr. Vennos  
Page Three

Exemptions to the COMAR 26.12.01.01 Section G.60.B(b)(3) will be examined during inspections. Should you have any questions regarding this information notice, please contact Barbara Park or me at (410) 537-3301. You may also reach our office toll-free by dialing 1-800-633-6101 and requesting extension 3301. Also, you may contact this office via facsimile at (410) 537-3198.

Sincerely,



Raymond E. Manley, Chief  
Radioactive Material Licensing  
Compliance Division  
Air and Radiation Management Administration

Radioactive Material Use Codes: 02110, 02120, 02201, 02220, and 02200

Enclosure(s): NRC Exemption Notice dated July 16, 2009 titled, "EXEMPTION FROM 10 CFR PART 32 AND 10 CFR PART 35 REQUIREMENTS ON PROCUREMENT AND TRANSFER OF TECHNETIUM-99M, AND CALIBRATION OF INSTRUMENTATION USING TECHNETIUM-99M.

<div style="display: flex; justify-content: space-between;"><div>NRC FORM 313A (AUS) <small>(3-2009)</small></div><div>U.S. NUCLEAR REGULATORY COMMISSION</div></div> <div style="text-align: center; padding: 10px;"><b>AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION</b> (for uses defined under 35.400 and 35.600) [10 CFR 35.490, 35.491, and 35.690]</div>		<div>APPROVED BY OMB: NO. 3150-0120 EXPIRES: 3/31/2012</div>																								
<div style="display: flex;"><div style="flex: 1;">Name of Proposed Authorized User <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Dr. Vincenzo DeMasi</div></div><div style="flex: 1;">State or Territory Where Licensed <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Delaware</div></div></div>																										
<div>Requested Authorization(s) (check all that apply)</div> <div style="display: flex; flex-wrap: wrap;"><div style="width: 50%;"><input checked="" type="checkbox"/> 35.400 Manual brachytherapy sources</div><div style="width: 50%;"><input type="checkbox"/> 35.600 Teletherapy unit(s)</div><div style="width: 50%;"><input type="checkbox"/> 35.400 Ophthalmic use of strontium-90</div><div style="width: 50%;"><input type="checkbox"/> 35.600 Gamma stereotactic radiosurgery unit(s)</div><div style="width: 50%;"><input type="checkbox"/> 35.600 Remote afterloader unit(s)</div></div>																										
<div style="text-align: center;"><b>PART I – TRAINING AND EXPERIENCE</b> (Select <u>one</u> of the three methods below)</div> <p>* Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained 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.</p> <div><input checked="" type="checkbox"/> <b>1. Board Certification</b><div style="margin-left: 20px;"><p>a. Provide a copy of the board certification.</p><p>b. For 35.600, go to the table in 3.e. and describe training provider and dates of training for each type of use for which authorization is sought.</p><p>c. Skip to and complete Part II Preceptor Attestation.</p></div></div> <div><input type="checkbox"/> <b>2. Current 35.600 Authorized User Requesting Additional Authorization for 35.600 Use(s) Checked Above</b><div style="margin-left: 20px;"><p>a. Go to the table in section 3.e. to document training for new device.</p><p>b. Skip to and complete Part II Preceptor Attestation.</p></div></div> <div><input type="checkbox"/> <b>3. Training and Experience for Proposed Authorized User</b><div style="margin-left: 20px;"><p>a. Classroom and Laboratory Training    <input type="checkbox"/> 35.490    <input type="checkbox"/> 35.491    <input type="checkbox"/> 35.690</p></div></div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"><thead><tr><th style="width: 35%;">Description of Training</th><th style="width: 35%;">Location of Training</th><th style="width: 15%;">Clock Hours</th><th style="width: 15%;">Dates of Training*</th></tr></thead><tbody><tr><td>Radiation physics and instrumentation</td><td></td><td></td><td></td></tr><tr><td>Radiation protection</td><td></td><td></td><td></td></tr><tr><td>Mathematics pertaining to the use and measurement of radioactivity</td><td></td><td></td><td></td></tr><tr><td>Radiation biology</td><td></td><td></td><td></td></tr><tr><td colspan="4" style="text-align: right; padding-top: 10px;"><b>Total Hours of Training:</b></td></tr></tbody></table>			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				Radiation biology				<b>Total Hours of Training:</b>			
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AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

b. Supervised Work and Clinical Experience for 10 CFR 35.490 (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)

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		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Checking survey meters for proper operation		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Preparing, implanting, and safely removing brachytherapy sources		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Maintaining running inventories of material on hand		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using emergency procedures to control byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	

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*
<b>Approved by:</b> <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual	License/Permit Number listing supervising individual as an Authorized User	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

c. 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			
Supervising Individual		License/Permit Number listing supervising individual as an Authorized User	

d. Supervised Work and Clinical Experience for 10 CFR 35.690

☐ Remote afterloader unit(s)      ☐ Teletherapy unit(s)      ☐ Gamma stereotactic radiosurgery unit(s)

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*
Reviewing full calibration measurements and periodic spot-checks		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Preparing treatment plans and calculating treatment doses and times		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Implementing emergency procedures to be followed in the event of the abnormal operation of the medical unit or console		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Checking and using survey meters		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Selecting the proper dose and how it is to be administered		<input type="checkbox"/> Yes <input type="checkbox"/> No	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

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: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual		License/Permit Number listing supervising individual as an Authorized User

e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation			
Safety procedures for the device use			
Clinical use of the device			
Supervising Individual. If training provided by Supervising Individual (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)		License/Permit Number listing supervising individual as an Authorized User	
Authorized for the following types of use: <input type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

f. Provide completed Part II Preceptor Attestation.

**AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR 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 supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

By checking the boxes below, the preceptor is attesting that the individual has knowledge to fulfill the duties of the position sought and not attesting to the individual's "general clinical competency."

**First Section**

Check one of the following for each requested authorization:

**For 35.490:**

**Board Certification**

☒ I attest that Dr. Vincenzo DeMasi has satisfactorily completed the requirements in  
Name of Proposed Authorized User

35.490(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy sources for the medical uses authorized under 10 CFR 35.400.

**OR**

**Training and Experience**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the 200 hours of  
Name of Proposed Authorized User

classroom and laboratory training, 500 hours of supervised work experience, and 3 years of supervised clinical experience in radiation oncology, as required by 10 CFR 35.490(b)(1) and (b)(2), and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy sources for the medical uses authorized under 10 CFR 35.400.

**For 35.491:**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the 24 hours of  
Name of Proposed Authorized User

classroom and laboratory training applicable to the medical use of strontium-90 for ophthalmic radiotherapy, has used strontium-90 for ophthalmic treatment of 5 individuals, as required by 10 CFR 35.491(b), and has achieved a level of competency sufficient to function independently as an authorized user of strontium-90 for ophthalmic use.

**Second Section**

**For 35.690:**

**Board Certification**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the requirements in  
Name of Proposed Authorized User  
35.690(a)(1).

**OR**

**Training and Experience**

☐ I attest that \_\_\_\_\_ has satisfactorily completed 200 hours of classroom  
Name of Proposed Authorized User

and laboratory training, 500 hours of supervised work experience, and 3 years of supervised clinical experience in radiation therapy, as required by 10 CFR 35.690(b)(1) and (b)(2).

**AND**

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

Third Section

For 35.690: (continued)

☐ I attest that \_\_\_\_\_ has received training required in 35.690(c) for device  
Name of Proposed Authorized User

operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought, as checked below.

☐ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

☐ I attest that \_\_\_\_\_ has achieved a level of competency sufficient to  
Name of Proposed Authorized User

achieve a level of competency sufficient to function independently as an authorized user for:

☐ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

Fifth Section

Complete the following for preceptor attestation and signature:

☒ I meet the requirements in 10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as an authorized user for:

☒ 35.400 Manual brachytherapy sources ☐ 35.600 Teletherapy unit(s)

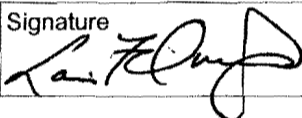
☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

☐ 35.600 Remote afterloader unit(s)

Name of Preceptor

Louise F. Owens, F.M.D.

Signature



Telephone Number

302-429-6611

Date

1/11/11

License/Permit Number/Facility Name

07-17618-01 Nanticoke Memorial Hospital

C1-0004062

STATE OF DELAWARE  
DIVISION OF PROFESSIONAL REGULATION  
H&M Bldg. 1000 2nd  
Cen. Bldg. Suite 205  
Dover DE 19901-3047

NOT TRANSFERABLE

Physician M.D.

EXPIRATION DATE 03/31/2011

Vincenzo DeMasi

MAILING ADDRESS

Vincenzo DeMasi

PROFESSIONAL LICENSE

THE PERSON NAMED IS HEREBY LICENSED TO  
PRACTICE IN THE PROFESSION INDICATED ABOVE. THIS  
LICENSE IS ISSUED UNDER THE LAWS OF THE STATE OF DELAWARE.

LICENSEE SIGNATURE

192391

Please review the information on your license and notify us of any changes needed.

Division of Professional Regulation is proud of our professional and responsive customer service. Visit our web site at [pr.delaware.gov](http://pr.delaware.gov) for essential reference information and access to online license services 24 hours a day, 7 days a week.

To sign up for online license services, you will need a Registration Code.

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Need to change your mailing address, email address or phone number? Update your contact information online so that renewal notices and other critical mailings will reach you. (Note: This service is not available for some kinds of licenses, such as utilities.)

Need to renew? Submit your renewal application and pay your renewal fee by credit card online. We'll send you a notice when renewal is available on our secure web site.

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Questions about your profession? Please check our web site first for license law, Rules and Regulations, and frequently asked questions (FAQ's).

Need a form? Forms such as verification requests are a click away.

Want to attend a meeting of the board or commission for your profession? Click on the "Meeting Calendar" on your profession's web page.

Can't find what you need online? Just send an email to [customerservice.dpr@state.de.us](mailto:customerservice.dpr@state.de.us) and let us know what you need.

As required to display your professional license, you may display either the license certificate above or the wallet card below.

STATE OF DELAWARE  
DIVISION OF PROFESSIONAL REGULATION  
PROFESSIONAL LICENSE  
Physician M.D.  
C1-0004062  
03/31/2011

Vincenzo DeMasi

THIS IS YOUR LICENSE CARD.

NANTICOKE MEMORIAL HOSPITAL  
Initial Delineation Form  
DEPARTMENT OF RADIOLOGY  
RADIATION ONCOLOGY

Name: VINCENZO DE MASI 12/10/09 to 08/01/2011

Radiation Oncology is the branch of Radiology which deals with the therapeutic applications of high energy radiation in the management of disease, especially malignant tumors.

Applicants for clinical privileges in Radiation Oncology must:

- 1. Be certified by the American Board of Radiology (or in the certification process)

Advancement Requirements: Ten (10) case reviews will be required for consideration of advancement from provisional staff to full privileges with at least one (1) case for initial consult while an inpatient.

CATEGORY I - II      Physicians with these privileges must have satisfactorily completed a training program in Radiation Oncology

History	Notes	PRIVILEGE	Privileges Requested	Privileges Approved
X		Provide consultations for patients and direct course of treatment for conditions for which the patients are admitted.	✓	✓
X		Comprehensive evaluation of patients with cancer and related disorders	✓	✓
X		Prescribe/supervise radiation therapy procedures	✓	✓
X		Summarize/authenticate reports	✓	✓
X		Endoscopies (indirect laryngoscopy, nasopharyngoscopy, fiber optic laryngoscopy)	✓	✓

History	Notes	PRIVILEGE	Privileges Requested	Privileges Approved
X		Computer tumor simulation and treatment planning	✓	✓
X		Use of linear accelerator for external beam patient treatment	✓	✓
X		Perform intraluminal, endocavitary and interstitial implants	✓	✓
X		Low Dose Rate (LDR) Brachytherapy	✓	✓

*[Signature]*  
11/16/09

**NANTICOKE MEMORIAL HOSPITAL**  
Initial Delineation Form  
**DEPARTMENT OF RADIOLOGY**  
**RADIATION ONCOLOGY**

Name: VINCENTZO DE MARI 12/10/09 to 08/01/2011

**CATEGORY III** Includes Category I and II: Physicians with these privileges are expected to have training, experience and competence on a level commensurate with that provided by specialty training, although not necessarily at the level of a subspecialist. Board certification is key benchmark.

**Note:** These procedures require proof of additional training and competence beyond residency training, as well as separate requirements for proctoring and/or observation (minimum three cases each).

Request	Request	Request	Request	Request	Request
X		Prostate Seed Implant	✓	✓	

Signature

Date

7/22/09

11/16/09

Department Chief of Radiology

Date

LCLP Chairperson

Date