

## MATERIALS LICENSE

Amendment No. 18

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, 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 byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

OFFICIAL RECORD COPY

Licensee		In accordance with the letter dated October 16, 1996, 3. License Number 37-18263-01 is amended in its entirety to read as follows:	
1. Allegheny University Hospitals Bucks County Division		4. Expiration Date August 31, 2005	
2. 225 Newtown Road Warminster, Pennsylvania 18974		5. Docket or Reference No. 030-14750/37-28563-01	
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License	
A. Any byproduct material identified in 10 CFR 35.100	A. Any radiopharmaceutical identified in 10 CFR 35.100	A. As needed	
B. Any byproduct material identified in 10 CFR 35.200	B. Any radiopharmaceutical identified in 10 CFR 35.200 except generators	B. As needed	
C. Any byproduct material identified in 10 CFR 35.300	C. Any radiopharmaceutical identified in 10 CFR 35.300	C. 500 millicuries	
D. Any byproduct material identified in 10 CFR 35.500	D. Any diagnostic source identified in 10 CFR 35.500	D. 1.5 curies per source and 6 curies total	
E. Any byproduct material identified in 10 CFR 31.11	E. Prepackaged kits	E. 3 millicuries	
9. Authorized use			
A. Any uptake, dilution and excretion procedure approved in 10 CFR 35.100.			
B. Any imaging and localization procedure approved in 10 CFR 35.200.			
C. Any radiopharmaceutical therapy procedure approved in 10 CFR 35.300 for which the patient can be released under the provisions of 10 CFR 35.75.			
D. Medical use of sealed sources included in 10 CFR 35.500 in compatible devices registered pursuant to 10 CFR 30.32(g). For storage only.			
E. <u>In vitro</u> studies.			
230124		CONDITIONS	
10. Licensed material may be used at the licensee's facilities located at 225 Newtown Road, Warminster, Pennsylvania. Licensed material in 6.A., 6.B. (except gas), 6.C. and 6.E. may also be used at the licensee's facility located at 215 Newtown Road, Warminster, Pennsylvania.			
11. The Radiation Safety Officer for this license is John F. Matthews, M.D.			



ML 10

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

37-18263-01

Docket or Reference Number

030-14750

Amendment No. 18

12. Licensed material listed in Item 6 above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized Users:Material and Use:

Arnold C. Friedman, M.D.

35.100; 35.200; 35.500; In vitro studies

Richard B. Levine, M.D.

35.100; 35.200; 35.500; In vitro studies

Mark Krakovitz, M.D.

35.100; 35.200

Phosphorus 32 for radiopharmaceutical procedures approved in 35.300

Strontium 89 for radiopharmaceutical procedures approved in 35.300

Gold 198 for radiopharmaceutical procedures approved in 35.300

Iodine 131 for treatment of hyperthyroidism and cardiac dysfunction

35.500; In vitro studies

Harry J. Lessig, M.D.

35.100; 35.200

Phosphorus 32 for radiopharmaceutical procedures approved in 35.300

Strontium 89 for radiopharmaceutical procedures approved in 35.300

Gold 198 for radiopharmaceutical procedures approved in 35.300

Iodine 131 for treatment of hyperthyroidism and cardiac dysfunction

35.500; In vitro studies

Joan M. Mack, M.D.

35.100; 35.200

Phosphorus 32 for radiopharmaceutical procedures approved in 35.300

Strontium 89 for radiopharmaceutical procedures approved in 35.300

Gold 198 for radiopharmaceutical procedures approved in 35.300

Iodine 131 for treatment of hyperthyroidism and cardiac dysfunction

35.500; In vitro studies

John F. Matthews, M.D.

35.100; 35.200

Phosphorus 32 for radiopharmaceutical procedures approved in 35.300

Strontium 89 for radiopharmaceutical procedures approved in 35.300

Gold 198 for radiopharmaceutical procedures approved in 35.300

Iodine 131 for treatment of hyperthyroidism and cardiac dysfunction

35.500; In vitro studies

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

37-18263-01

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Amendment No. 18

Paul G. Dupont, M.D. 35.100; 35.200; 35.500; In vitro studies

Robert J. Killian, M.D. 35.100; 35.200; 35.300; 35.500; In vitro studies

Kevin Bufalino, M.D. 35.100; 35.200; 35.300; 35.500; In vitro studies

Ralph Noah, M.D. 35.100; 35.200; 35.300; 35.500; In vitro studies

Christopher Meoli, D.O. 35.100; 35.200; Iodine 131 for the treatment of hyperthyroidism and cardiac dysfunction; 35.500; In vitro studies

13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material so that at no time is a quantity of radioactive material possessed in excess of a quantity which requires decommissioning funding in accordance with 10 CFR 30.35(d), 10 CFR 40.36(b) or 10 CFR 70.25(d).
14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material at a single location to quantities below the limits specified in 10 CFR 30.72 which require consideration of the need for an emergency plan for responding to a release of licensed material.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated January 24, 1995
- B. Letter dated August 21, 1995
- C. Letter dated October 16, 1996
- D. Letter dated November 19, 1996

DEC 10 1996

For the U.S. Nuclear Regulatory Commission

Original Signed By:

Michelle Beardsley

By

Nuclear Materials Safety Branch  
Region I

King of Prussia, Pennsylvania 19406

Date \_\_\_\_\_

DEC 10 1996

Katie Farrell  
Vice President  
Administrative Services  
Allegheny University Hospitals  
Bucks County Division  
225 Newtown Road  
Warminster, PA 18974

Dear Ms. Farrell:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that as part of this amendment, in accordance with 10 CFR 30.36, effective February 15, 1996, the expiration date of your license has been extended by a period of five years. Your new expiration date is stated in Item 4 of the license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Original Signed By:  
Michelle Beardsley

Michelle R. Beardsley  
Division of Nuclear Materials Safety

License No. 37-18263-01  
Docket No. 030-14750  
Control No. 123826

Enclosure:  
Amendment No. 18

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**ML 10**



DOCUMENT NAME: R:\WPS\MLTR\L3718263.01

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OFFICE	DNMS/RI	N	DNMS/RI				
NAME	Beardsley						
DATE	11/26/96	11/ /96	11/ /96	11/ /96			

OFFICIAL RECORD COPY



ALLEGHENY  
UNIVERSITY  
HOSPITALS  
BUCKS COUNTY

225 Newtown Road  
Warminster, PA 18974  
215-441-6600

MS 66  
J-1

November 19, 1996

LICENSE NO. 37-18263-01  
DOCKET NO. 030-14750  
CONTROL NO. 123826

Ms. Michelle R. Beardsley  
Division of Nuclear Materials Safety  
Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

Dear Ms. Beardsley:

Please find enclosed the additional information needed for review of our request for amendment to Nuclear Regulatory Commission License No. 37-18263-01.

There has been no change of ownership for the organization. Only the name of the institution has been changed as stated in our original letter of October 16, 1996.

Enclosures with this letter include:

- A copy of the closeout survey of the original treadmill room, and
- Copies of the ABR and AOBR certifications for all of the physicians to be added as authorized users.

I hope that this sufficiently clarifies the situation. If you have any questions, please do not hesitate to contact me.

Sincerely,

Katie Farrell  
Vice President  
Administrative Services

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ML 10

123826  
NOV 25 1996

**MEDICAL  
COLLEGE OF  
PENNSYLVANIA AND  
HAHNEMANN  
UNIVERSITY**

Interim Name

*Nuc Medicine  
#2*


Division of Radiation Physics  
and Safety

RECEIVED APR 5 1995

East Falls Campus  
3300 Henry Avenue  
Philadelphia, PA 19129  
Telephone (215) 842-6000  
Fax (215) 843-5734

Center City Campus  
Broad & Vine  
Mail Stop 102  
Philadelphia, PA 19102-1192  
Telephone (215) 762-8768  
Fax (215) 762-7683

**M E M O R A N D U M**

**TO:** Janice Van Dolsen  
**FROM:** Theodore Villafana, Ph.D.   
**DATE:** April 5, 1996  
**RE:** Treadmill Room Decommissioning

---

This is to verify that the previously used treadmill room adjacent to the nuclear medicine scan area has been surveyed for purposes of decommissioning.

This survey consisted of both a radiation level survey as well as a swipe survey to determine presence of removable radioactive contamination. Swipe points were at various places along the floor and on the existing desk in that area. Results of survey indicated no detectable levels of contamination. This room can now be released for any other purpose.

TV:dmt

cc: John Matthews, M.D.  
Katie Farrell  
Vice President, Admin. Services

# The American Board of Radiology

Organized through the cooperation of the  
American College of Radiology, the American Roentgen Ray Society,  
the American Radiological Society, the Radiological Society of North America,  
the Section on Radiology of the American Medical Association,  
the American Society for Therapeutic Radiology and Oncology,  
and the Association of University Radiologists  
Noble certifies that

**John Francis Matthews, M.D.**

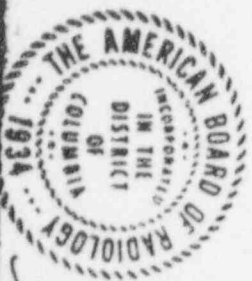
Has pursued an accepted course of graduate study  
and clinical work, has met certain standards and qualifications and  
has passed the examinations conducted under the authority of

The American Board of Radiology

On this twenty-fifth day of November, 1991

Noble demonstrates to the satisfaction of the Board  
that he is qualified to practice the specialty of

**Diagnostic Radiology**



*Henry J. Noble, Secretary*





# The American Board of Radiology

Organized through the cooperation of the  
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 Therapeutic Radiology and Oncology, the Association of  
University Radiologists, and American Association of Physicists in Medicine  
Thereby certifies that

**Kevin Thomas Bufalino, 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 seventh day of June, 1995

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

**Diagnostic Radiology**



*Charles Maynard*  
President

*William Russell MD*  
Secretary Treasurer

*Paul Carr*  
Executive Director



# The American Board of Radiology

Organized through the cooperation of the  
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 Therapeutic Radiology and Oncology, the Association of  
University Radiologists, and American Association of Physicists in Medicine

Hereby certifies that

**Ralph Noah, 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 seventh day of November, 1995

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

**Diagnostic Radiology**



*Angela Maynard*      *William J. Smith, MD*      *Dr. Paul Capp, M.D.*

President

Secretary

Executive Director

# The American Board of Radiology

Organized through the cooperation of the  
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 Therapeutic Radiology and Oncology, the Association of  
University Radiologists, and American Association of Physicians in Medicine  
Hereby certifies that

**Paul G. Dupont**

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 ninth day of June, 1934

Hereby demonstrating to the satisfaction of the Board  
that he is qualified to practice the specialty of  
Diagnostic Radiology

*Lea Rogers MD*

*Scott J. Allen MD*

*W. Paul Cuthbert*

M.D.



# The American Board of Radiology

Organized through the cooperation of the  
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 Therapeutic Radiology and Oncology, the Association of  
University Radiologists, and American Association of Physicians in Medicine  
Hereby certifies that

**Robert J. Killian**

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 ninth day of June, 1994

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



*Lea Rogers MD* *Scott J. Pitt* *Mr. Paul C. Smith*  
President Secretary Executive Director M.D.





American Osteopathic  
Board of Radiology

PAMELA A. SMITH  
EXECUTIVE DIRECTOR



(Approved by the American Osteopathic Association)

119 East Second Street • Milan, MO 63556-1331 • (816) 265-4011

May 17, 1992

Christopher J. Meoli, D.O.  
Rt. 3, Box 170  
Clinton, MO 64735

Dear Dr. Meoli

It is my pleasure to notify you that you have successfully passed the examination for recertification in Diagnostic Roentgenology conducted by the American Osteopathic Board of Radiology on May 15, 16, and 17, 1992, in Southfield, Michigan.

The American Osteopathic Board of Radiology will submit your name for recertification to the Advisory Board for Osteopathic Specialists at its meeting on June 12.

Again, congratulations on this accomplishment.

Sincerely

*Michael K. Willman, D.O.*

Michael K. Willman, D.O.  
Secretary/Treasurer

MKW/dp

cc George O. Faerber, D.O., Chairman  
Pamela A. Smith, Executive Director

CONGRAT/RECEXAM



20 AUG 1996

225 Newtown Road  
Warminster, PA 18974  
215-441-6600

ALLEGHENY  
UNIVERSITY  
HOSPITALS

BUCKS COUNTY

July 23, 1996

American Osteopathic Association  
Department of Education  
Division of Certification  
142 East Ontario Street  
Chicago, IL 60611

Re: Practitioner: Christopher J. Meoli, D.O.  
Certification: Osteopathic Radiology  
Date Certified: 07-01-78

The aforementioned practitioner has recently applied for a Medical Staff appointment at Medical College Hospitals - Bucks County Campus and has indicated the above information. Please verify the following information and provide any additional details that you believe will assist us in appraising this practitioner's request [use reverse side of form].

Certification Status: DIAGNOSTIC ROENTGENOLOGY

Certification Date: 7-12-78

Recertification Status: 5-17-92 ACTIVE IN Good Standing

Certification Expiration Date: LIFETIME

Thank you in advance for your response. The attached "Release of Information" form signed by the practitioner authorizes you to furnish this information. A self-addressed stamped envelope has been provided for your convenience and prompt response.

If you have any questions, please feel free to contact me at (215) 441-6915.

Sincerely,

*Kathy Reinhart*

Kathy Reinhart  
Clinical Staff Services

*Diana Wordlaw*  
Signature of Person Providing Information

*Diana Wordlaw*  
Name Printed or Typed

8-15-96  
Date

*CERT. DIV. Secy*  
Title

NOV 12 1996

License No. 37-18263-01  
Docket No. 030-14750  
Control No. 123826

Katie Farrell  
Vice President Administrative Services  
Medical College Hospitals  
Bucks County Campus  
225 Newtown Road  
Warminster, PA 18974

Dear Ms. Farrell:

This is in reference to your letter dated October 16, 1996 requesting to amend Nuclear Regulatory Commission License No. 37-18263-01. In order to continue our review, we need the following additional information:

1. It appears from your letter that a possible change of ownership has occurred. 10 CFR 30.34(b) requires NRC consent prior to a change of ownership. Provide the following information:
  - a. Any planned changes in personnel having control over licensed activities (e.g., officers of the corporation) and any changes in personnel named in the license such as the radiation safety officer, authorized users, or any other persons identified in previous license applications as responsible for radiation safety of use of licensed material.
  - b. A complete, clear description of the transaction. The description should include any transfer of stocks or assets, mergers, etc.
  - c. Confirmation that the transferee or successor company agree to abide by all constraints, conditions, requirements, commitments and representations identified in the existing license. These include, but are not limited to: maintaining decommissioning records required by 10 CFR 30.35(g); implementing decontamination activities and decommissioning of the site; and completing corrective actions for open inspection items and enforcement actions. If not, the transferee must provide a description of its program to assure compliance with the license and regulations.

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**ML 10**

K. Farrell  
Medical College Hospitals-  
Bucks County Campus

-2-

- d. Documentation that both the transferor and the transferee agree to the change in ownership or control of the licensed material and activity, and the conditions of transfer, and that the transferee has been made aware of all open inspection items and possible resulting enforcement actions.
2. Please submit a copy of the closeout survey of the original treadmill room for our review in order to approve this area for unrestricted use.
3. Please submit copies of the ABR and AOER certifications for all of the physicians that you wish to be authorized on your license.

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I Office and refer to Mail Control No. 123826. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-6942.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

Original Signed By:  
Michelle Beardsley

Michelle R. Beardsley  
Division of Nuclear Materials Safety

License No. 37-18263-01  
Docket No. 030-14750  
Control No. 123826

DOCUMENT NAME: R:\WPS\DLTR\13718263.01

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OFFICE	DNMS/RI	<input checked="" type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	Beardsley	MB					
DATE	11/12/96	11/	/96	11/	/96	11/	/96

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225 Newtown Road  
Warminster, PA 18974  
215-441-6600

ALLEGHENY  
UNIVERSITY  
HOSPITALS  
BUCKS COUNTY

October 16, 1996

Nuclear Materials Safety Branch  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission  
Region I  
475 Alleandale Road  
King of Prussia, PA 19406-1415

Re: NRC License #37-18263-01

Dear Sir/Madam:

This is to inform you of the below listed changes at our hospital nuclear medicine facility at the Allegheny University Hospitals, Bucks County Division. Changes are illustrated in supplement attached.

- Institution name was changed from "Medical College Hospitals, Bucks County Campus" to "Allegheny University Hospitals, Bucks County Division".
- The gamma camera replaced with a Siemens MultiSpect dual head system.
- The original treadmill room was decommissioned and a new treadmill room commissioned closer to gamma camera area.
- Original well counter site room was decommissioned. Moved to area adjacent to new treadmill site.
- Hot lab expanded. Procedures will remain as before including security measures.
- New physicians to be added to license as authorized users:

-Paul G. Dupont, M.D.  
-Robert J. Killian, M.D.  
-Kevin Bufalino, M.D.  
-Ralph Noah, M.D.  
-Christopher Meoli, D.O.

123826  
OCT 23 1996

Allegheny Health, Education and Research Foundation

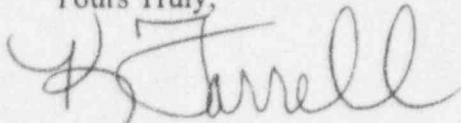
Allegheny General Hospital • Allegheny Integrated Health Group • Allegheny University of the Health Sciences • Allegheny University Hospitals • St. Christopher's Hospital for Children

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Page 2  
Medicine (cont.)

These physicians all hold certification by the American Board of Radiology, except for Dr. Meoli who is certified by the American Osteopathic Board of Radiology. Preceptor forms and new room drawings enclosed.

Yours Truly,

A handwritten signature in cursive script, appearing to read "Katie Farrell".

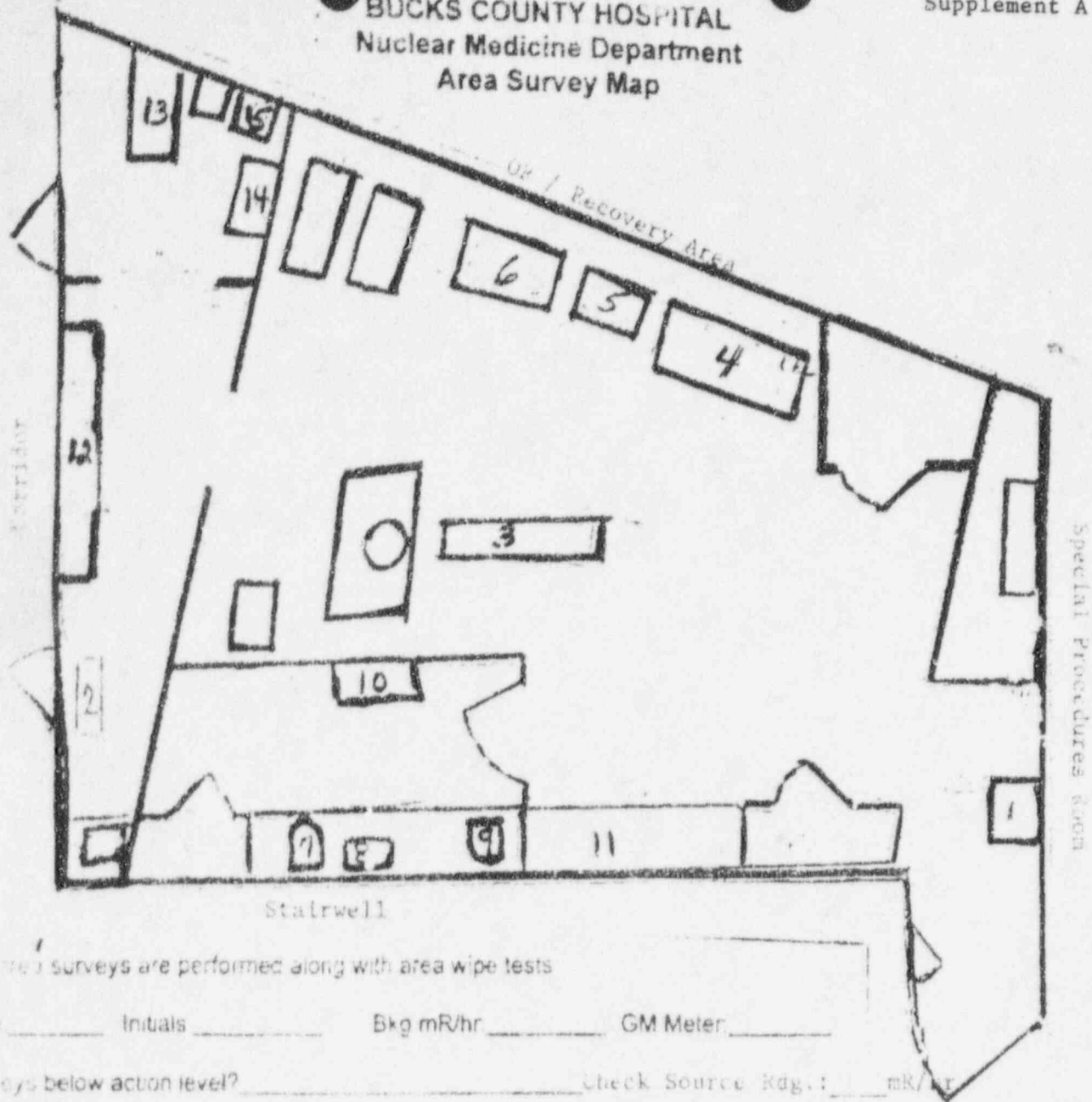
Katie Farrell  
Vice President Administrative Services

TV:lhf:med96

c: John Matthews, M.D.

BUCKS COUNTY HOSPITAL  
Nuclear Medicine Department  
Area Survey Map

Supplement A



All area surveys are performed along with area wipe tests

Date \_\_\_\_\_ Initials \_\_\_\_\_ Bkg mR/hr \_\_\_\_\_ GM Meter \_\_\_\_\_

Surveys below action level? \_\_\_\_\_ Check Source Rdg.: \_\_\_\_\_ mR/hr

Date \_\_\_\_\_ Initials \_\_\_\_\_ Bkg dpm \_\_\_\_\_ Wipes below Action level? \_\_\_\_\_

1 \_\_\_\_\_ dpm 6 \_\_\_\_\_ dpm 11 \_\_\_\_\_ dpm

2 \_\_\_\_\_ dpm 7 \_\_\_\_\_ dpm 12 \_\_\_\_\_ dpm

3 \_\_\_\_\_ dpm 8 \_\_\_\_\_ dpm 13 \_\_\_\_\_ dpm

4 \_\_\_\_\_ dpm 9 \_\_\_\_\_ dpm 14 \_\_\_\_\_ dpm

5 \_\_\_\_\_ dpm 10 \_\_\_\_\_ dpm 15 \_\_\_\_\_ dpm

**STAIRWELL SURVEY:**

GM Meter: \_\_\_\_\_

BKG mR/hr: \_\_\_\_\_

mR/hr: \_\_\_\_\_

**ACTION LEVELS:**

Wipe tests ..... 200 dpm

Area surveys ..... 2x background

1. Xenon System
2. Thyroid Uptake / W.
3. Camera / Stretcher
4. Computer
5. Desk
6. Helios
7. Lead "wing. of man"
8. Dose Calibrator
9. "Hot" Sink
10. Desk / Table
11. Counter
12. Counter / stress lab
13. Treadmill
14. Stretcher
15. Stress Lab Table

**EXHIBIT 3  
SUPPLEMENT B**

SUPPLEMENT		U. S. NUCLEAR REGULATORY COMMISSION	
PRECEPTOR STATEMENT			
<p><i>Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.</i></p>			
<b>1. PROPOSED PHYSICIAN USER'S NAME AND ADDRESS</b> FULL NAME <u>Paul G. Dupont</u> STREET ADDRESS <u>138 New State Rd</u> CITY <u>Andalusia</u> STATE <u>PA</u> ZIP CODE <u>19020</u>		<b>KEY TO COLUMN C</b> <b>PERSONAL PARTICIPATION SHOULD CONSIST OF:</b> 1. Supervised examination of patients to determine the suitability for radioactive diagnosis and/or treatment and recommendation for prescribed dosage. 2. Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and setting of dose. 3. Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.	
<b>2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN</b>			
ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comment is only to be furnished in duplicate on separate sheet.) D
	Thyroid scan	14	
	Thyroid uptake	16	
	Lung perfusion scan	31	
	Xenon ventilation study	5	
	Aerosol ventilation scan	24	
	Renal flow scan	87	
	Breast scan	18	
	Liver/spleen scan	12	
	Bone scan	113	
	Gastroesophageal study		
	Leveson shunt study		
	Cystogram		
	Dacryocystogram		
	Cardiac perfusion scan.		
	Cardiac stress ventriculogram	3	
	Cardiac rest ventriculogram	38	
	Calcium scan	6	
		Schillings	7
Adrenal		2	
Bowel Gastric Emptying		7	
Dual X-ray		146	
Biliary		14	
White Blood Cell		3	
Myocardial Perfusion		53	
Blood Volume		4	
G.I. Blood Loss		3	

3 EXH-5



# EXHIBIT 3 (Continued)

PROPOSED PHYSICIAN USER			
PRECEPTOR STATEMENT (Continued)			
2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)			
ISOTOPE	CONDITIONS DIAGNOSED OR TREATED	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION	COMMENTS (Additional information or experience may be submitted in duplicate on separate sheets.)
A	B	C	D
P-32 (Sodium)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES		
P-32 (Calcium)	INTRACAVITARY TREATMENT		
I-131	TREATMENT OF THYROID CARCINOMA		
	TREATMENT OF HYPERTHYROIDISM		
Au-198	INTRACAVITARY TREATMENT		
Co-60 or Cs-137	INTERSTITIAL TREATMENT		
	INTRACAVITARY TREATMENT		
I-125 or Ir-192	INTERSTITIAL TREATMENT		
Co-60 or Cs-137	TELE THERAPY TREATMENT		
Er-60	TREATMENT OF EYE DISEASE		
	RADIOPHARMACEUTICAL PREPARATION		
Na-22/ Te-125m	GENERATOR		
Sr-90/ In-113m	GENERATOR		
Ta-182m	REAGENT KITS		
Other			

3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING		
LOCATION	DATES	CLOCK HOURS OF EXPERIENCE
Division of Nuclear Medicine SUNY Health Science Center Syracuse, New York	June 1992 Jan. 1993 Jan, Feb, May 1994	1006 HRS.

4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:		5. PRECEPTOR'S SIGNATURE
a. NAME OF SUPERVISOR F. Deaver Thomas, M.D.		<i>F. Deaver Thomas MD</i>
b. NAME OF INSTITUTION SUNY Health Science Center		
c. MAILING ADDRESS 750 E. Adams Street		7. PRECEPTOR'S NAME (Please type or print)
d. CITY Syracuse, New York 13210		F. DEAVER THOMAS MD.
e. PHYSICIAN LICENSE NUMBER 47-15		8. DATE June 27, 1996

EXH-7

EXHIBIT 2  
SUPPLEMENT A

SUPPLEMENT		U.S. NUCLEAR REGULATORY COMMISSION	
TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER			
1. NAME OF PROPOSED AUTHORIZED USER OR RADIATION SAFETY OFFICER <i>Paul G. Dupont, MD</i>		2. FOR PHYSICIANS, STATE OR TERRITORY WHERE LICENSED <i>PA, NY</i>	
3. CERTIFICATION			
SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C	
<i>Diagnostic Radiology</i>		<i>6/94</i>	
4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES			
FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING	
		CLOCK HOURS IN LECTURE OR LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE
a. RADIATION PHYSICS AND INSTRUMENTATION	<i>SUNY HSC SYR NY</i>	<i>100</i>	<i>10</i>
b. RADIATION PROTECTION		<i>20</i>	<i>10</i>
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY		<i>20</i>	<i>10</i>
d. RADIATION BIOLOGY		<i>20</i>	<i>0</i>
e. RADIOPHARMACEUTICAL CHEMISTRY		<i>10</i>	<i>10</i>
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)			
ISOTOPE	NCI USED AT ONE TIME	LOCATION	CLOCK HOURS
Full range of radioisotopes used in nuclear medicine		in human applications	

EXH-5

EXHIBIT 3  
SUPPLEMENT B

SUPPLEMENT		U. S. NUCLEAR REGULATORY COMMISSION	
PRECEPTOR STATEMENT			
Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.			
<b>1. PROPOSED PHYSICIAN USER'S NAME AND ADDRESS</b>  FULL NAME <u>ROBERT K. LIAN</u>  STREET ADDRESS <u>325</u> <u>NEEDHAM RD</u> CITY <u>WARMINGSTER</u> STATE <u>PA</u> ZIP CODE <u>18974</u>		<b>KEY TO COLUMN C</b> <b>PERSONAL PARTICIPATION SHOULD CONSIST OF:</b>  1. Supervised examination of patients in determining the suitability for radiologic diagnosis and/or treatment and recommendation for prescribed dosage.  2. Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data.  3. Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.	
<b>2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN</b>			
ISOTOPE <small>A</small>	CONDITIONS DIAGNOSED OR TREATED <small>B</small>	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION <small>C</small>	COMMENTS <small>(Additional information or comments may be submitted in duplicate on separate sheets.)</small> <small>D</small>
	Thyroid scan	730	
	Thyroid uptake	730	
	Lung perfusion scan	780	
	Xenon ventilation study	780	
	Aerosol ventilation scan	Ø	
	Renal flow scan	740	
	Brain scan	715	
	Liver/spleen scan	730	
	Bone scan	7100	
	Gastroesophageal study	710	
	LeYeen shunt study	75	
	Cystogram	75	
	Dacryocystogram	Ø	
	Cardiac perfusion scan.	770	
	Cardiac stress ventriculogram	720	
	Cardiac rest ventriculogram	720	
	Gallium scan	730	
		<u>Indium scan</u>	75

## EXHIBIT 3 (Continued)

PROPOSED PHYSICIAN USER

*ROBERT KILLIAN*

## PRECEPTOR STATEMENT (Continued)

## 2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
P-32 (Sodium)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	0	
P-32 (Calcium)	INTRACAVITARY TREATMENT	0	
I-131	TREATMENT OF THYROID CARCINOMA	13	
	TREATMENT OF HYPERTHYROIDISM	15	
Au-198	INTRACAVITARY TREATMENT	0	
Co-60 or Cs-137	INTERSTITIAL TREATMENT	0	
	INTRACAVITARY TREATMENT	0	
I-125 or Ir-192	INTERSTITIAL TREATMENT	0	
Co-60 or Cs-137	TELETHERAPY TREATMENT	0	
Sr-90	TREATMENT OF EYE DISEASE	0	
	RADIOPHARMACEUTICAL PREPARATION	0	
Mo-99/ Tc-99m	GENERATOR	0	
Sr-90/ Y-90	GENERATOR	0	
Tl-201	REAGENT KITS	225	
Other			

## 3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING

6 months during residency 7/90-7/94  
at MOUNT SINAI HOSPITAL, CHICAGO IL 60608  
+ TRUMAN MEDICAL CENTER

LOCATION: DATES: 7/90-7/94 CLOCK HOURS OF EXPERIENCE: 960 hours

## 4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:

a. NAME OF SUPERVISOR

*KENNETH ALFIERI*

b. NAME OF INSTITUTION

*TRUMAN MEDICAL CENTER*

c. MAILING ADDRESS

*2301 Holmes ST.*

d. CITY

*KANSAS CITY*

e. MATERIALS LICENSE NUMBER(S)

## 5. PRECEPTOR'S SIGNATURE

*Kenneth M. Alfieri M.D.*

## 7. PRECEPTOR'S NAME (Please type or print)

*Kenneth M. Alfieri M.D.*

## 8. DATE

*6/30/96*



EXHIBIT 2  
SUPPLEMENT A

SUPPLEMENT		U.S. NUCLEAR REGULATORY COMMISSION	
TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER			
1. NAME OF PROPOSED AUTHORIZED USER OR RADIATION SAFETY OFFICER <i>ROBERT J. KILLIAN, M.D.</i>		2. FOR PHYSICIANS, STATE OR TERRITORY WHERE LICENSED <i>FLORIDA, PENNSYLVANIA</i>	
3. CERTIFICATION			
SPECIALTY BOARD <i>A</i>	CATEGORY <i>B</i>	MONTH AND YEAR CERTIFIED <i>C</i>	
<del>DIAGNOSTIC RADIOLOGY</del> <i>AMERICAN BOARD OF RADIOLOGY</i>	<i>DIAGNOSTIC RADIOLOGY</i>	<i>6/94</i>	
4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES <i>(INCLUDING HOME STUDY)</i>			
FIELD OF TRAINING <i>A</i>	LOCATION AND DATE(S) OF TRAINING <i>B</i>	TYPE AND LENGTH OF TRAINING	
		CLOCK HOURS IN LECTURE OR LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE
a. RADIATION PHYSICS AND INSTRUMENTATION	<i>HUNT SINAI HOSPITAL, CHICAGO, ILLINOIS and TRUMAN MEDICAL CENTER, KANSAS CITY, MISSOURI</i>	<i>90</i>	<i>10</i>
b. RADIATION PROTECTION	<i>as above.</i>	<i>30</i>	<i>10</i>
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	<i>as above.</i>	<i>30</i>	<i>—</i>
d. RADIATION BIOLOGY	<i>as above.</i>	<i>30</i>	<i>—</i>
e. RADIOPHARMACEUTICAL CHEMISTRY	<i>as above.</i>	<i>5</i>	<i>5</i>
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)			
ISOTOPE	mCi USED AT ONE TIME	LOCATION	CLOCK HOURS
<i>FULL RANGE OF ISOTOPES APPLICATIONS</i>		<i>IN NUCLEAR MEDICINE</i>	<i>USED IN HUMAN</i>



EXHIBIT 3  
SUPPLEMENT B

U. S. NUCLEAR REGULATORY COMMISSION

## SUPPLEMENT

**PRECEPTOR STATEMENT**

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

KEY TO COLUMN C

1. PROPOSED PHYSICIAN USER'S NAME AND ADDRESS

**FULL NAME**

KEVIN Bufalino, M.O

SYMBOL ADDRESS

225 Newtown Road

CITY

Warrington PA 174

KEY TO COLUMN C

PERSONAL PARTICIPATION SHOULD CONSIST OF:

- 1-Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage.
- 2-Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data.
- 3-Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

[illegible]

EXHIBIT 3 (Continued)

PROPOSED PHYSICIAN USER <b>KEVIN BYCALINO, M.D.</b>			
PRECEPTOR STATEMENT (Continued)			
2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)			
ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	0	
P-32 (Colloid)	INTRACAVITARY TREATMENT	0	
I-131	TREATMENT OF THYROID CARCINOMA	15	
	TREATMENT OF HYPERTHYROIDISM	15	
Au-198	INTRACAVITARY TREATMENT	0	
Co-60 or Co-137	INTERSTITIAL TREATMENT	0	
	INTRACAVITARY TREATMENT	0	
I-125 or I-192	INTERSTITIAL TREATMENT	0	
	TELETHERAPY TREATMENT	0	
Sr-90	TREATMENT OF EYE DISEASE	0	
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/Tc-99m	GENERATOR	0	
Sn-113/In-113m	GENERATOR	0	
Tc-99m	REAGENT KITS	720	
Other			
3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING			
LOCATION Medical College of PA 3300 Henry Ave Philadelphia, PA 19129		DATES 6 mos during residency 1991-1995	CLOCK HOURS OF EXPERIENCE ≥ 960
4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:		5. PRECEPTOR'S SIGNATURE Joan Mack MD	
a. NAME OF SUPERVISOR JOAN MACK, M.D.		7. PRECEPTOR'S NAME (Please type or print) Joan Mack	
b. NAME OF INSTITUTION Medical College of PA			
c. MAILING ADDRESS 3300 Henry Ave			
d. CITY Phila PA 19129		8. DATE 9/20/96	
e. MATERIALS LICENSE NUMBER(S)			

**EXHIBIT 2  
SUPPLEMENT A**

SUPPLEMENT		U.S. NUCLEAR REGULATORY COMMISSION	
<b>TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER</b>			
1. NAME OF PROPOSED AUTHORIZED USER OR RADIATION SAFETY OFFICER <i>KEVIN Bufalino, M.D.</i>		2. FOR PHYSICIANS, STATE OR TERRITORY WHERE LICENSED <i>PA</i>	
3. CERTIFICATION			
SPECIALTY BOARD <i>A</i>	CATEGORY <i>B</i>	MONTH AND YEAR CERTIFIED <i>C</i>	
<i>(Diagnostic Radiology) American Board of Radiology)</i>	<i>Diagnostic Radiology</i>	<i>6/1995</i>	
4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES <i>including this study</i>			
FIELD OF TRAINING <i>A</i>	LOCATION AND DATE(S) OF TRAINING <i>B</i>	TYPE AND LENGTH OF TRAINING	
		CLOCK HOURS IN LECTURE OR LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE
a. RADIATION PHYSICS AND INSTRUMENTATION	<i>Medical College of PA 3300 Henry Ave Phila, PA</i>	<i>90</i>	<i>10</i>
b. RADIATION PROTECTION	<i>1991 - 1995</i>	<i>30</i>	<i>10</i>
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	<i> </i>	<i>30</i>	<i>—</i>
d. RADIATION BIOLOGY	<i> </i>	<i>30</i>	<i>—</i>
e. RADIOPHARMACEUTICAL CHEMISTRY	<i>↓</i>	<i>5</i>	<i>5</i>
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)			
ISOTOPE	HC1 USED AT ONE TIME	LOCATION	CLOCK HOURS
			TYPE OF USE
<i>Full range Application</i>	<i>of</i>	<i>RADIOISOTOPES IN human Nuclear medicine.</i>	

EXHIBIT 3  
SUPPLEMENT B

U. S. NUCLEAR REGULATORY COMMISSION

**SUPPLEMENT**

PRECEPTOR STATEMENT

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

KEY TO COLUMN C

## 1. PROPOSED PHYSICIAN USER'S NAME AND ADDRESS

FULL NAME

RALPH NOAH, M.D.

STREET ADDRESS

604 S. WASH St #117

CITY

STATE	ZIP CODE
-------	----------

PHILA, PA 19106

KEY TO COLUMN C

PERSONAL PARTICIPATION SHOULD CONSIST OF:

1. Supervised examination of patients to determine the suitability for radiotelepo diagnosis and/or treatment and recommendation for prescribed dosage.
2. Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data.
3. Adequate period of training to enable physician to manage radiotelepo patients and follow patients through diagnosis and/or course of treatment.

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

[illegible]

## EXHIBIT 3 (Continued)

PROPOSED PHYSICIAN USER

RALPH NOAH, M.D.

## PRECEPTOR STATEMENT (Continued)

## 2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	0	
P-32 (Colloidal)	INTRACAVITARY TREATMENT	0	
I-131	TREATMENT OF THYROID CARCINOMA	15	
	TREATMENT OF HYPERTHYROIDISM	15	
Au-198	INTRACAVITARY TREATMENT	0	
Co-60 or Cs-137	INTERSTITIAL TREATMENT	0	
	INTRACAVITARY TREATMENT	0	
I-125 or I-192 or Cs-137	INTERSTITIAL TREATMENT	0	
	TELETHERAPY TREATMENT	0	
Sr-90	TREATMENT OF EYE DISEASE	0	
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR	0	
Sr-90/ Y-90	GENERATOR	0	
Tc-99m	REAGENT KITS	220	
Other			

## 3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING

LOCATION	DATES	CLOCK HOURS OF EXPERIENCE
Medical College of PA 3300 Henry Avenue Philadelphia, PA 19129	6 mos. during residency 1991-1995	≥ 960

## 4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:

a. NAME OF SUPERVISOR

JOAN MACK M.D.

b. NAME OF INSTITUTION

MEDICAL COLLEGE OF PA

c. MAILING ADDRESS

3300 HENRY AVE

d. CITY

PHILA, PA 19129

e. MATERIALS LICENSE NUMBER(S)

6. PRECEPTOR'S SIGNATURE

Joan Mack

7. PRECEPTOR'S NAME (Please type or print)

JOAN MACK

8. DATE

9/20/96



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Form AEC-313a  
(2-73)  
Page 3UNITED STATES ATOMIC ENERGY COMMISSION  
**APPLICATION FOR BYPRODUCT MATERIAL LICENSE—MEDICAL**  
SUPPLEMENT A—PRECEPTOR STATEMENT

This page is to be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each. Page 2 may be used for comments and additional information.

10. NAME AND ADDRESS OF APPLICANT PHYSICIAN (Include ZIP Code) **CHRISTOPHER MEOLI D.O.**  
**PROFESSIONAL BUILDING NORTH 2700 HOSPITAL DRIVE SUITE 220**  
**NORTH KANSAS CITY MO. 64116**

## 11. CLINICAL TRAINING AND EXPERIENCE OF PHYSICIAN NAMED IN ITEM 10 ABOVE

(A) ISOTOPE	(B) CONDITIONS DIAGNOSED OR TREATED	(C) No. Cases Observed (See 1 in key below)	(D) No. Cases Involving Personal Participation (See 2 in key below)
I-131 or I-125	Diagnosis of thyroid function	150	80
	Determination of blood and blood plasma volume	10	8
	Liver function studies	30	17
	Fat absorption studies	3	2
	Kidney function studies	50	30
	In vitro studies	25	20
Cr-51	Gastrointestinal protein loss studies	3	2
	Determination of red blood cell volume and studies of red blood cell survival	15	10
Fe-59	Iron turn over studies	6	4
Co-58 or Co-60	Intestinal absorption studies	15	10
K-42	Potassium space determinations		
I-131	Thyroid imaging	200	150
	Brain tumor localization and cardiac imaging		
	Cisternography	15	10
	Lung imaging	10	8
	Liver imaging	30	20
	Kidney imaging		
	Placenta localization	8	8
Cr-51	Placenta localization		
	Spleen imaging	2	1
Au-198	Liver imaging	10	8
Hg-197	Brain imaging	10	7
	Kidney imaging	10	7
Hg-203	Brain imaging	5	2
Sr-85	Bone imaging	2	2
Tc-99m	Brain imaging	200	150
	Thyroid imaging	150	100
	Salivary gland imaging	6	4
	Blood pool imaging	18	8

Page 4

# APPLICATION FOR BYPRODUCT MATERIAL LICENSE—MEDICAL SUPPLEMENT A—HUMAN USE

(A) ISOTOPE	(B) CONDITIONS DIAGNOSED OR TREATED	(C) No. Cases Observed (See 1 in key below)	(D) No. Cases Involving Personal Participation (See 2 in key below)
Tc-99m	Placenta localization	30	20
	Liver and spleen imaging	150	90
	Lung imaging	250	225
	Bone imaging	150	130
Xe-133	Blood flow studies and pulmonary function studies	50	35
Se-75	Pancreas imaging	14	7
P-32	Treatment of polycythemia, leukemia, and Bone metastases		
	Intracavitary treatment	3	3
I-131	Treatment of thyroid carcinoma		
	Treatment of hyperthyroidism and cardiac condition	20	15
Au-198	Intracavitary treatment		
Co-60 or CO-137	Interstitial treatment		
	Intracavitary treatment		
Ir-192	Interstitial treatment		
Co-60 CO-137	Teletherapy treatment		
Sr-90	Treatment of eye disease		

## Key to Column (C) and (D) above

- Observation should consist of observing radioisotope administration techniques and discussion with preceptor the case histories to establish most appropriate diagnostic and/or therapeutic procedure, limitation, contraindications, etc.
- Personal participation should consist of (a) supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation on dosage to be prescribed; (b) collaboration in calibration of the dose and the actual administration of the dose to the patient, including calculation of the radiation dose, related measurements, and plotting of data; and (c) adequate period of training to enable the physician to manage radioactive patients and to follow patients through diagnosis and/or the course of treatment.

12. DATES AND TOTAL NUMBER OF HOURS OF CLINICAL RADIOISOTOPE TRAINING 900 HRS BETWEEN 7-74 AND 7-76

13. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF PAUL J CHATE DO.

JOHN F. KENNEDY MEM. HOSP.  
AT STRATFORD NEW JERSEY  
(Institution) Name and Address

29-12167-01  
(Byproduct Material License Number)

*Paul J. Chate DO*  
(Signature of Preceptor)

EXHIBIT 2  
SUPPLEMENT A

SUPPLEMENT		U.S. NUCLEAR REGULATORY COMMISSION		
TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER				
1. NAME OF PROPOSED AUTHORIZED USER OR RADIATION SAFETY OFFICER <i>CHRISTOPHER MEDLI, D.O.</i>		2. FOR PHYSICIANS, STATE OR TERRITORY WHERE LICENSED <i>PA, NJ, MO, KS</i>		
3. CERTIFICATION				
SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C		
<i>AOBR (Diagnostic Radiology)</i>		<i>July 1978 April 1992 (recertified)</i>		
4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES				
FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING		
		CLOCK HOURS IN LECTURE OR LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE	
a. RADIATION PHYSICS AND INSTRUMENTATION	<i>UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA</i>	<i>95</i>	<i>5</i>	
b. RADIATION PROTECTION	<i>"</i>	<i>25</i>	<i>15</i>	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	<i>"</i>	<i>15</i>	<i>5</i>	
d. RADIATION BIOLOGY	<i>"</i>	<i>20</i>	<i>5</i>	
e. RADIOPHARMACEUTICAL CHEMISTRY	<i>"</i>	<i>15</i>	<i>5</i>	
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)				
ISOTOPE	mCi USED AT ONE TIME	LOCATION	CLOCK HOURS	TYPE OF USE
		<i>Full range of radioisotopes used in human applications in nuclear medicine.</i>		



Christopher Meoli, D.O.

## UNIVERSITY of PENNSYLVANIA

DAVID E. KUHLM, M.D.  
*Professor of Radiology*

Nuclear Medicine Division  
Department of Radiology  
Hospital of the University  
of Pennsylvania G1  
Philadelphia  
Pennsylvania 19104  
215-662-3095

CHRISTOPHER MEOLI, D.O.

has successfully completed Nuclear Medicine 210, a course under my direction covering the basic science and principles of nuclear medicine. This course extended from 13 January 1975 to 10 February 1975 at the Hospital of the University of Pennsylvania, and included 59 hours of lecture, 45 hours of laboratory, and graded examinations. Subjects included the basic principles of radiation physics, instrumentation, radiopharmaceuticals, in vivo studies, in vitro studies, and therapeutic uses of radionuclides.

---

David E. Kuhl, M.D.  
10 February 1975

original signed by  
Dr. D.E. Kuhl.



## LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH  
DIVISION OF ACCOUNTING AND FINANCE  
OFFICE OF THE CONTROLLER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001MEDICAL COLLEGE HOSPITALS  
ATTN: KATIE FARRELL  
225 NEWTON ROAD  
WARMINSTER, PA 18974

## TYPE OF ACTION

- ☐ NEW LICENSE  
☐ RENEWAL OF LICENSE  
☒ AMENDMENT TO LICENSE

REQUESTED DATE

10-16-96

LICENSE NUMBER

37-18263-01

CONTROL NUMBER

123826

## I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
7C	\$	\$	\$ 440.00
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE	\$	440.00
PAYMENT RECEIVED	\$	0.00
AMOUNT DUE	\$	440.00

- ☒ Your request was received without the prescribed application fee.
- ☐ We received your Check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_. Payment of the additional fee noted above is required.
- ☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

## II. FEE NOT REQUIRED

- ☐ Enclosed is Check No. \_\_\_\_\_ which accompanied your request. The fee is not required because:
- ☐ We received your Check No. \_\_\_\_\_ in payment of the fee.
- ☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated \_\_\_\_\_, Control No. \_\_\_\_\_.
- ☐ Your request was combined, prior to review, with your request, Control No. \_\_\_\_\_.

## III. CHECK RETURNED

- ☐ Enclosed is Check No. \_\_\_\_\_ which was returned to us by the bank for:
- ☐ INSUFFICIENT FUNDS
- ☐ ACCOUNT CLOSED
- ☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

## IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

- ☐ License No. \_\_\_\_\_ Amendment No. \_\_\_\_\_, issued on \_\_\_\_\_, was issued without the required fee being collected. The fee required is noted in Section I of this form.
- ☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section I of this form. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section I of this form.

SIGNATURE - LICENSE FEE ANALYST

LFDCB

LFDCB

Distribution:

DATE

BRENDA BROWN (301-415-6055)

11/8/96

Region I LFARS R/F  
Pending OC/DAF R/F  
BBrown OC/DAF S/F (LF-3.2.7)

11-8-96

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)  
INFORMATION FROM LTS

PROGRAM CODE: 02120  
STATUS CODE: 0  
FEE CATEGORY: 7C  
EXP. DATE: 20050831  
FEE COMMENTS: \_\_\_\_\_  
DECOM FIN ASSUR REQD: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: MEDICAL COLLEGE HOSPITALS  
RECEIVED DATE: 961023  
DOCKET NO: 3014750  
CONTROL NO.: 123826  
LICENSE NO.: 37-18263-01  
ACTION TYPE: AMENDMENT

2. FEE ATTACHED

AMOUNT: \_\_\_\_\_  
CHECK NO.: \_\_\_\_\_

3. COMMENTS

SIGNED  
DATE

*Rebecca J. Brown*  
*10/31/96*

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED ☒)

1. FEE CATEGORY AND AMOUNT: 7C \$440

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:

AMENDMENT \_\_\_\_\_  
RENEWAL \_\_\_\_\_  
LICENSE \_\_\_\_\_

3. OTHER \_\_\_\_\_

SIGNED  
DATE

\_\_\_\_\_  
\_\_\_\_\_

Log	<i>Oct 11</i>
Remitter	<i>ALLEGANY HEALTH EDUC. &amp; RESEARCH</i>
Check No.	<i>212001018</i>
Amount	<i>\$440</i>
Fee Category	<i>7C</i>
Type of Fee	<i>AMD</i>
Check Rec'd	<i>11/8/96</i>
Completed	<i>12/9/96</i>
	<i>AB</i>

1996 NOV -5 PM 1:43