

NRC FORM 313M (9-81) 10 CFR 35	U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE – MEDICAL	Approved by OMB 3150-0041
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INSTRUCTIONS – Complete Items 1 through 26 if this is an initial application or an application for renewal of a license. Use supplemental sheets where necessary. Item 26 must be completed on all applications and signed. Retain one copy. Submit original and one copy of entire application to: Director, Office of Nuclear Materials Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Upon approval of this application, the applicant will receive a Materials License. An NRC Materials License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Parts 19, 20 and 35 and the license fee provision of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 26 and the appropriate fee enclosed.

1.a. NAME AND MAILING ADDRESS OF APPLICANT (institution, firm, clinic, physician, etc.) INCLUDE ZIP CODE McCullough-Hyde Memorial Hospital, Incorporated 110 North Poplar Street Oxford, Ohio 45056 TELEPHONE NO.: AREA CODE 513 523-2111	1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (if different from 1.a.) INCLUDE ZIP CODE Same
2. PERSON TO CONTACT REGARDING THIS APPLICATION Joseph Brandabur, M.D. TELEPHONE NO.: AREA CODE 513 523-2111	3. THIS IS AN APPLICATION FOR: (Check appropriate item) a. <input type="checkbox"/> NEW LICENSE b. <input checked="" type="checkbox"/> AMENDMENT TO LICENSE NO. 34-18728-01 c. <input type="checkbox"/> RENEWAL OF LICENSE NO.
4. INDIVIDUAL USERS (Name individuals who will use or directly supervise use of radioactive material. Complete Supplements A and B for each individual.) Mary C. Moebius, M.D. Joseph Brandabur, M.D.	5. RADIATION SAFETY OFFICER (RSO) (Name of person designated as radiation safety officer. If other than individual user, complete resume of training and experience as in Supplement A.) Joseph Brandabur, M.D.

6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE			
RADIOACTIVE MATERIAL LISTED IN:	ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)	ADDITIONAL ITEMS:
10 CFR 31.11 FOR IN VITRO STUDIES			IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM
10 CFR 35.100, SCHEDULE A, GROUP I		AS NEEDED	PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES
10 CFR 35.100, SCHEDULE A, GROUP II		AS NEEDED	PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.
10 CFR 35.100, SCHEDULE A, GROUP III			GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.
10 CFR 35.100, SCHEDULE A, GROUP IV		AS NEEDED	IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA
10 CFR 35.100, SCHEDULE A, GROUP V		AS NEEDED	XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES.
10 CFR 35.100, SCHEDULE A, GROUP VI			

6.b. RADIOACTIVE MATERIAL FOR USES NOT LISTED IN ITEM 6.a. (Sealed sources up to 3 mCi used for calibration and reference standards are authorized under Section 35.14(d), 10 CFR Part 35, and NEED NOT BE LISTED.)			
ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	MAXIMUM NUMBER OF MILLICURIES OF EACH FORM	DESCRIBE PURPOSE OF USE
B507230452 B50604 REG3 LIC30 34-18728-01	PDR		<div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Applicant: <i>June 1st</i></p> <p>Check No.: <i>313497150</i></p> <p>Amount: <i>75</i></p> <p>Type of Fee: <i>anal</i></p> <p>Date Check Rec'd: <i>6/3/85</i></p> <p>Received By: <i>[Signature]</i></p> <p style="font-size: 1.5em; font-weight: bold; text-align: center;">FEE EXEMPT</p> <p style="text-align: center;">CONTROL NO. 79041</p> </div>

INFORMATION REQUIRED FOR ITEMS 7 THROUGH 23

For Items 7 through 23, check the appropriate box(es) and submit a detailed description of all the requested information. Begin each item on a separate sheet. Identify the item number and the date of the application in the lower right corner of each page. If you indicate that an appendix to the medical licensing guide will be followed, do not submit the pages, but specify the revision number and date of the referenced guide: Regulatory Guide 10.8 , Rev. _____ Date: _____

7. MEDICAL ISOTOPES COMMITTEE		15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL (Check One)	
<input type="checkbox"/>	Names and Specialties Attached; and	<input type="checkbox"/>	Appendix G Rules Followed; or
<input type="checkbox"/>	Duties as in Appendix B; or _____ (Check One)	<input type="checkbox"/>	Equivalent Rules Attached
<input type="checkbox"/>	Equivalent Duties Attached	16. EMERGENCY PROCEDURES (Check One)	
8. TRAINING AND EXPERIENCE		<input type="checkbox"/>	Appendix H Procedures Followed; or
<input checked="" type="checkbox"/>	Supplements A & B Attached for Each Individual User; and for each user previously forwarded	<input type="checkbox"/>	Equivalent Procedures Attached
<input type="checkbox"/>	Supplement A Attached for RSO.	17. AREA SURVEY PROCEDURES (Check One)	
9. INSTRUMENTATION (Check One)		<input type="checkbox"/>	Appendix I Procedures Followed; or
<input type="checkbox"/>	Appendix C Form Attached; or	<input type="checkbox"/>	Equivalent Procedures Attached
<input type="checkbox"/>	List by Name and Model Number	18. WASTE DISPOSAL (Check One)	
10. CALIBRATION OF INSTRUMENTS		<input type="checkbox"/>	Appendix J Form Attached; or
<input type="checkbox"/>	Appendix D Procedures Followed for Survey Instruments; or _____ (Check One)	<input type="checkbox"/>	Equivalent Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached; and	19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS (Check One)	
<input type="checkbox"/>	Appendix D Procedures Followed for Dose Calibrator; or _____ (Check One)	<input type="checkbox"/>	Appendix K Procedures Followed; or
<input type="checkbox"/>	Equivalent Procedures Attached	<input type="checkbox"/>	Equivalent Procedures Attached
11. FACILITIES AND EQUIPMENT		20. THERAPEUTIC USE OF SEALED SOURCES	
<input type="checkbox"/>	Description and Diagram Attached	<input type="checkbox"/>	Detailed Information Attached; and
12. PERSONNEL TRAINING PROGRAM		<input type="checkbox"/>	Appendix L Procedures Followed; or _____ (Check One)
<input type="checkbox"/>	Description of Training Attached	<input type="checkbox"/>	Equivalent Procedures Attached
13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL		21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon - 133)	
<input type="checkbox"/>	Detailed Information Attached	<input type="checkbox"/>	Detailed Information Attached
14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS (Check One)		22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS	
<input type="checkbox"/>	Appendix F Procedures Followed; or	<input type="checkbox"/>	Detailed Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached	23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b	
<input type="checkbox"/>		<input type="checkbox"/>	Detailed Information Attached

24. PERSONNEL MONITORING DEVICES

TYPE <small>(Check appropriate box)</small>		SUPPLIER	EXCHANGE FREQUENCY
a. WHOLE BODY	FILM		
	TLD		
	OTHER (Specify)		
b. FINGER	FILM		
	TLD		
	OTHER (Specify)		
c. WRIST	FILM		
	TLD		
	OTHER (Specify)		

d. OTHER (Specify)

25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL			
NAME OF HOSPITAL		b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR.	
MAILING ADDRESS		c. WHEN REQUESTING THERAPY PROCEDURES, ATTACH A COPY OF RADIATION SAFETY PRECAUTIONS TO BE TAKEN AND LIST AVAILABLE RADIATION DETECTION INSTRUMENTS.	
CITY	STATE	ZIP CODE	

26. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 1a certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Parts 30 and 35, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

a. LICENSE FEE REQUIRED <small>(See Section 170.31, 10 CFR 170)</small>	b. APPLICANT OR CERTIFYING OFFICIAL (Signature)
(1) LICENSE FEE CATEGORY:	(1) NAME (Type of Print)
10 CFR 170.31 7.C Amendment	Richard A. Daniels
(2) LICENSE FEE ENCLOSED: \$ 150.00	(2) TITLE
	Hospital Administrator
	c. DATE
	May 23, 1985

COPIES OF NRC FORM 313M
REGION III
MVA 58 J062
RECEIVED

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313M. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S)** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30-36 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES** The information may be used: (a) to provide records to State health departments for their information and use; and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for a NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you. A copy of the license issued will routinely be placed in the NRC's Public Document Room, 1717 H Street, N.W., Washington, D.C.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed.
5. **SYSTEM MANAGER(S) AND ADDRESS** Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

University of Cincinnati
Medical Center



College of Medicine

Department of Radiology
University Hospital

Mail Location 742
234 Goodman Street
Cincinnati, Ohio 45267
Phone (513) 872-4396

May 21, 1985

Ms. Lynn Brown
Department of Radiology
McCullough Hyde Memorial Hospital
110 N. Poplar Street
Oxford, Ohio 45056

Dear Ms. Brown:

The discrepancy in the number of hours listed in Supplement A, #4 on the revised form is explained by the fact that I neglected to include a series of lectures given on these topics over the course of Dr. Moebius' three year radiology residency (7-1-81 thru 6-30-84).

The additional clinical and didactic material of 160 hours listed at the bottom of the page is in addition to the hours listed in #4. These lectures occurred during her four months of nuclear medicine training in our lab.

If additional information is needed, please feel free to refer any questions to me.

Sincerely,

Edward B. Silberstein, M.D.
Professor of Radiology and Medicine

University of Cincinnati
Medical Center

University Hospital

234 Goodman Street
Cincinnati, Ohio 45267-0577

Mary C. Moebius
Eugene L. Saenger Radioisotope Laboratory
Mail Location #577
TELEPHONE (513) 872-4282

March 27, 1985

Department of Radiology
McCullough Hyde Memorial Hospital
110 N. Poplar Street
Oxford, Ohio 45056

Attention: Ms. Lynn Brown

Dear Ms. Brown:

This letter is to certify that Mary C. Moebius, M.D. has had the enclosed listed training encompassing 720 hours in Nuclear Medicine.

Sincerely,

Edward B. Silberstein
Edward B. Silberstein, M.D.
Professor of Radiology and Medicine

EBS:snm
enclosure
#6

**TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER**

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER Mary C. Moebius, M.D.			2. STATE, TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE	
3. CERTIFICATION				
SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C		
General Radiology	Nuclear Medicine 3/1/82 - 4/30/82 5/1/83 - 6/30/83			
4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES				
FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING		
		LECTURE LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours) D	
a. RADIATION PHYSICS AND INSTRUMENTATION	UNIVERSITY OF CINCINNATI HOSPITAL	148	20	
b. RADIATION PROTECTION		30	--	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY		20	--	
d. RADIATION BIOLOGY		33	--	
e. RADIOPHARMACEUTICAL CHEMISTRY		20	10	
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent) <i>E. B. [Signature]</i>				
ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
Tc-99m	1.5 curie per elution (approx.)	University of Cincinnati	720 hours Clinical Nuclear Medicine - University of Cincinnati Hosp.	generator elution; kit preparations - more than 20 including: Tc-MAA Tc-sulfur colloid Tc-MDP Tc-DTPA Tc-glucoheptonate

Additional clinical and didactic material - 160 hours:

Clinical Nuclear Medicine Lectures - 50 hours
Clinical Nuclear Medicine Conferences - 60 hours

Radioisotope Physics - 30 hours
Research Conferences - 20 hours

PRECEPTOR'S 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.

1. APPLICANT PHYSICIAN'S NAME AND ADDRESS

FULL NAME

Mary C. Moebius, M.D.

STREET ADDRESS

5877 Shadymist Lane (#2)

CITY

Cincinnati,

STATE

Ohio

ZIP CODE

45239

KEY TO COLUMN C

PERSONAL PARTICIPATION SHOULD CONSIST OF:

- 1 Supervised examination of patients to determine the suitability for radionuclide 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 radionuclide dose, related measurements and plotting of data.
- 3 Adequate period of training to enable a physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information on conditions may be submitted in duplicate on separate sheets.) D
I-131 or I-125	DIAGNOSIS OF THYROID FUNCTION	2	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	5	
	LIVER FUNCTION STUDIES	-	
	FAT ABSORPTION STUDIES	-	
	KIDNEY FUNCTION STUDIES	24	
	IN VITRO STUDIES	-	
OTHER			
I-125	DETECTION OF THROMBOSIS	8	
I-131	THYROID IMAGING	-	
P-32	EYE TUMOR LOCALIZATION	-	
Ga-75	PANCREAS IMAGING	-	
Yb-169	CISTERNOGRAPHY	2	
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	82	
OTHER			
Tc-99m	BRAIN IMAGING	15	
	CARDIAC IMAGING (Pyp)	28	
	THYROID IMAGING	6	
	SALIVARY GLAND IMAGING	2	
	BLOOD POOL IMAGING	180	
	PLACENTA LOCALIZATION	-	
	LIVER AND SPLEEN IMAGING	350	
	LUNG IMAGING	102	
	BONE IMAGING	320	
OTHER			

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 on separate sheet)
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	3	
P-32 (Colloid)	INTRACAVITARY TREATMENT	-	
I-131	TREATMENT OF THYROID CARCINOMA	3	
	TREATMENT OF HYPERTHYROIDISM	10	
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	TELETHERAPY TREATMENT	-	
Sr-90	TREATMENT OF EYE DISEASE	0	
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR	More than 5	
Sn-113/ In-113m	GENERATOR	-	
Tc-99m	REAGENT KITS	More than 10	
Other:			
In-111	Cisternography	9	
In-111	White blood cell labeling	24	
Cr-51	Red cell volume and survival		
Fe-59	Iron turnover study	1	
I-123	Thyroid scan, uptake	60	

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

March and April, 1982, 1982
May and June, 1983, 1983

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

a. NAME OF SUPERVISOR

Edward B. Silberstein, M.D.

b. NAME OF INSTITUTION

University of Cincinnati Medical Center

E. L. Scanger Radioisotope Laboratory

c. MAILING ADDRESS
Cincinnati, Ohio 45267

d. CITY

Mail Location 577

5. MATERIALS LICENSE NUMBER(S)

34-06903-05

6. PRECEPTOR'S SIGNATURE

Edward B. Silberstein

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

Edward B. Silberstein, M.D.
Professor of Radiology and Medicine

8. DATE

March 27, 1985



THE McCULLOUGH-HYDE MEMORIAL HOSPITAL, INC.
OXFORD, OHIO 45056 • PHONE (513) 523-2111

Mr. Ralph Meyer
Materials Licensing Section
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois

January 15, 1985

Re: Materials License #34-18728-01

Dear Mr. Meyer,

Please find enclosed the necessary information and fee to amend our materials license for two additional users, Mary C. Moebius, M.D. and Joseph H. Brandabur, M.D. We would also like to amend our license to indicate Joseph H. Brandabur, M.D. as our Radiation Safety Officer. Dr. Brandabur is currently named specifically as a user on N.R.C. Materials License #34-13663-01, Mercy Hospital, 116 Dayton Street, Hamilton, Ohio 45011, a copy is enclosed. If any additional information is necessary to amend our license for these physicians, please contact us.

In addition, our materials license #34-18728-01 expires in May, 1985. We would like to begin preparation on our license renewal application as soon as possible. We would greatly appreciate any information, amended instructions, current forms, fee schedules, etc., that you could send us, or direct us to. Our first quarter Radiation Safety Committee meeting is March 21, 1985, and we would like to have any information available for discussion at that time.

Thank you very much for your assistance.

8503280498 850315
REG 3 LIC 30
34-18728-01 PDR

RECEIVED

JAN 21 1985

REGION III

Sincerely,

Carole Ritzi
Carole Ritzi, CRMT, ARRT
Nuclear Medicine Dept.

14795
Enclosures: 21

cc: Joseph H. Brandabur, M.D.

Mary C. Moebius, M.D.

Richard Daniels, Hospital Administrator

CONTROL NO. 78150

EXHIBIT A

FORM NRC-313M (8-78) 10 CFR 35	U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE - MEDICAL	Approved GAO R0557			
INSTRUCTIONS - Complete items 1 through 26 if this is an initial application or an application for renewal of a license. Use supplemental sheets where necessary. Item 26 must be completed on all applications and signed. Retain one copy. Submit original and one copy of entire application to: Director, Office of Nuclear Materials Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Upon approval of this application, the applicant will receive a Materials License. An NRC Materials License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30 and the Licensee is subject to Title 10, Code of Federal Regulations, Parts 19, 20 and 26 and the license fee provision of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in item 26 and the appropriate fee enclosed.					
1.a. NAME AND MAILING ADDRESS OF APPLICANT (institution, firm, clinic, physician, etc.) INCLUDE ZIP CODE McCullough-Hyde Memorial Hospital 110 North Poplar Street Oxford, Ohio 45056 TELEPHONE NO. AREA CODE: 513-523-2111		1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (if different from 1.a.) INCLUDE ZIP CODE			
2. PERSON TO CONTACT REGARDING THIS APPLICATION Lynn Brown, R.T. TELEPHONE NO. AREA CODE: 513-523-2111		3. THIS IS AN APPLICATION FOR: (Check appropriate item) a. <input type="checkbox"/> NEW LICENSE b. <input checked="" type="checkbox"/> AMENDMENT TO LICENSE NO. 34-18728-01 c. <input type="checkbox"/> RENEWAL OF LICENSE NO.			
4. INDIVIDUAL USERS (Name individuals who will use or directly supervise use of radioactive material. Complete Supplements A and B for each individual.) Joseph H. Brandabur, M.D. Mary C. Moebius, M.D.		5. RADIATION SAFETY OFFICER (RSO) (Name of person designated as radiation safety officer. If other than individual user, complete resume of training and experience as in Supplement A.) Joseph H. Brandabur, M.D.			
6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE					
RADIOACTIVE MATERIAL LISTED IN:	ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)	ADDITIONAL ITEMS:	MARK ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)
10 CFR 31.11 FOR IN VITRO STUDIES			IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM		
10 CFR 35.100, SCHEDULE A, GROUP I		AS NEEDED	PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES		
10 CFR 35.100, SCHEDULE A, GROUP II		AS NEEDED	PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS		
10 CFR 35.100, SCHEDULE A, GROUP III			GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS		
10 CFR 35.100, SCHEDULE A, GROUP IV		AS NEEDED	IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA		
10 CFR 35.100, SCHEDULE A, GROUP V		AS NEEDED	XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES		
10 CFR 35.100, SCHEDULE A, GROUP VI					
6.b. RADIOACTIVE MATERIAL FOR USES NOT LISTED IN ITEM 6.a. (Sealed sources up to 2 mCi used for calibration and reference standards are authorized under Section 35.14(d), 10 CFR Part 35, and NEED NOT BE LISTED.)					
ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	MAXIMUM NUMBER OF MILLCURIES OF EACH FORM	DESCRIBE PURPOSE OF USE		
Applicant: <i>[Signature]</i> Check K: <i>30880</i> Amount: <i>10</i> Time of fee: <i>any</i> Date Check Rec'd: <i>8/1/55</i> Received By: <i>[Signature]</i>					

FORM NRC-313M (8-78)

 8503280502 850315
 REGS LIC30
 34-18728-01 PDR

CONTROL NO. 78150

MAR 15 1985

McCullough-Hyde Memorial Hospital, Inc.
ATTN: Richard A. Daniels
Hospital Administrator
110 North Poplar Street
Oxford, OH 45056

Gentlemen:

Enclosed is Amendment No. 02 to your NRC License No. 34-18728-01 in accordance with your request.

As discussed with Mrs. Lynn Brown, Radiology Department Head, on March 11, 1985, we have not added Dr. Moebius at this time as requested. After receipt and approval of the additional information requested in my call on March 1, 1985, she may be added to your license.

Please review the enclosed document carefully and be sure that you understand all conditions. You must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address.
5. Request and obtain appropriate amendment if you plan to change ownership of your organization, change locations of radioactive material, or make any other changes in your facility or program which are contrary to your license conditions or representations made in your license application and any supplemental correspondence with NRC. Any amendment request should be accompanied by the appropriate fee specified in 10 CFR Part 170.
6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.

34-14095
8503280486 850315
RECD LIC30
34-18728-01

McCullough-Hyde Memorial
Hospital, Inc.

2

7. Request termination of your license if you plan to permanently discontinue activities involving radioactive material prior to your expiration date.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions and representations in your license application will result in enforcement action against you in accordance with the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

If you have any questions or require clarification of any of the above stated information, contact us at (312) 790-5625.

Sincerely,

Original Signed By
George M. McCann
Materials Licensing Section

Enclosure(s): Amendment No. 02

R111

Handwritten: 3/13/85

McCann/cm
3/12/85

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

PAGE	1	OF	1	PAGES
License number	34-18728-01			
Docket or Reference number	030-14095			
Amendment No.	02			

McCullough-Hyde Memorial Hospital, Inc.
110 North Poplar Street
Oxford, OH 45056

In accordance with letter dated January 15, 1985, License Number 34-18728-01 is amended as follows:

Condition 12. is amended to read:

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

Joseph H. Brandabur, M.D.

Groups I, II and III
Iodine-131 for treatment of
hyperthyroidism, cardiac
dysfunction and thyroid carcinoma

Thomas Glynn, M.D.

Groups I, II, III, IV and V



~~8503280454~~

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