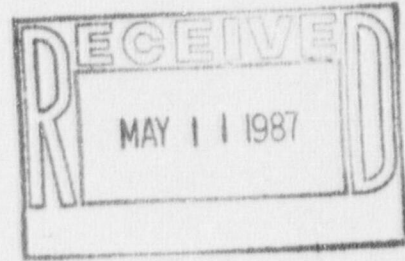


Deaconess.
Medical
Center

8 May 87



Jack Whitten
Nuclear Regulatory Commission
Material Radiation Section
Region #4
Arlington, Texas 76011

FEE NOT REQUIRED
Con't of 461341

DATE	5/13/87
BY	Thay-3-IV
REMARKS	hussier
DATE	5/13/87

Dear Jack -

Enclosed is the entire copy of my application for being added to Deaconess Med Center license (#25-01051-01). I can't understand why all this material wasn't submitted - unfortunately, J.R. Hub - the coordinator of the application at the hospital, isn't in today - and I want to get the material to you ASAP.

If there are questions - or if this material needs further amplification, please let me know.

Thanks for your interest and help.

Sincerely,
Rich Umfried
Rich Umfried MD

461503

8710050221 870514
REG4 LIC30
25-01051-01 PDR

Deaconess
Medical Center
of Billings, Inc.

Broadway at
Ninth Ave. North
Billings MT 59103
P.O. Box 2547

Telephone 406-657-4000

Content: Application for Materials License-Nuclear Cardiology

1. Summary of experience; formal and informal
2. NRC-Form 313M (pages 1-4)
3. Supplement A (page 5) and supporting documentation
 - a. Transcript from Rutgers University (Master of Science Degree in Radiation Physics, 1969-1971)
 - b. Course descriptions of coursework undertaken for MS in Radiation Physics (from Rutgers University- Graduate School Course Catalog)
 - c. Transcript from University of Pennsylvania School of Medicine (MD, 1975)
 - d. Course description-from University of Pennsylvania School of Medicine Course Catalog
4. Supplement B, with preceptor statement
5. Curriculum Vitae
6. Professional certifications and state medical licensure
 - a. Internal Medicine
 - b. Cardiovascular Diseases
 - c. Montana State Medical License

461503

Summary of Experience-

1. 9/64-8/69: US Naval Advanced Nuclear Propulsion Program(Naval Reactors)
 - a. 9/64-4/65: Officer's Advanced Course; Bainbridge, Md.
(Nuclear Theory and Applications).
 - b. 5/65-11/65:Nuclear reactor prototype qualification as a reactor plant supervisor and engineering plant supervisor at General Electric D1G Nuclear Reactor prototype; Ballston Spa, NY.
 - c. 9/67-8/69: duty aboard USS George C. Marshall (SSBN-654)
2. 9/69-8/71: MS in Radiation Physics; Rutgers University; New Brunswick, NJ
 - see attached transcript of grades and course descriptions
 - Dr. F. Haughey, course director and Dr. A. Appleby, advisor
3. 1/73: Nuclear Medicine; one month full time course at University of Pennsylvania School of Medicine; Philadelphia, Pa.
 - see attached transcript and course description
 - Dr. David Kuhl, course director
4. 7/78-6/80: Cardiovascular Disease Fellowship; Bethesda Naval Hospital; Bethesda, Md.; initial two hour lecture in theory of x-ray generation and radiation safety; nuclear cardiology scan reading sessions for one hour per week
 - Dr. W. Baker/Dr. F. Corcoran-program directors
5. 1/85: Nuclear Cardiology:Read with the Experts
 - a course at the American College of Cardiology Heart House Learning Center; Bethesda, Md.
 - Dr. D. Berman, Cedars Sinai Medical Center, Los Angeles, course director.
6. 7/84-4/86: Deaconness Medical Center, Billings; informal reading of nuclear cardiology scans
7. 5/86-8/86: Deaconness Medical Center, Billings; formal, supervised interpretation of nuclear cardiology scans; preceptor-Walter C. Degnan, MD.

NRC FORM 313M (9-81) 10 CFR 35	U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE – MEDICAL	Approved by OMB 3150-0041
---	---	------------------------------

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 Deaconess Medical Center 2813- 9th Ave. North Billings, Montana 59101 TELEPHONE NO.: AREA CODE() _____	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 Dr. Gene L. O'Hara Vice President-Professional Services TELEPHONE NO.: AREA CODE() _____	3. THIS IS AN APPLICATION FOR: (Check appropriate item) a. <input type="checkbox"/> NEW LICENSE b. <input checked="" type="checkbox"/> AMENDMENT TO LICENSE NO. <u>2501051-01</u> 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.) Add: R.P. Umfrid MD for Nuclear Cardiology, only	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.)

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 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

24. PERSONNEL MONITORING DEVICES

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

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
(See Section 170.31, 10 CFR 170)

b. APPLICANT OR CERTIFYING OFFICIAL *(Signature)*

(1) NAME *(Type of Print)*

(1) LICENSE FEE CATEGORY:

(2) TITLE

(2) LICENSE FEE ENCLOSED: \$

c. DATE

461503

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER

Richard P. Umfrid, MD

2. STATE OR TERRITORY IN
WHICH LICENSED TO
PRACTICE MEDICINE

Montana

3. CERTIFICATION

SPECIALTY BOARD
ACATEGORY
BMONTH AND YEAR CERTIFIED
CInternal Medicine
Cardiovascular Dis.September, 1978
November, 1981

#

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	Rutgers Univ. (1969-1971) Univ. of Pennsylvania (1973)	150	90
b. RADIATION PROTECTION	"	20	20
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	"	40	---
d. RADIATION BIOLOGY	"	70	60
* e. RADIOPHARMACEUTICAL CHEMISTRY	"	80	60

5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
1. Tc ^{99m}	25 mc	Deaconness Med. Ctr.	} greater than 500 hours	1. bench lab, and experimental work
2. Tl ²⁰¹	2 mc	Deaconness Med. Ctr.		2. formal course work
3. See "supervised laboratory experience"-part 4, above				3. clinical nuc- lear cardiology studies

Date Terminated

1964

S.S.

U.S. Naval Academy

THE GRADUATE SCHOOL

112633

UNFRIC RICHARD P III
1000
1000

Date of Admission 9/69

805 QUEEN STREET
CAPE MAY NEW JERSEY 08204

08/11/42

Student Address

Student	Course Title	Grade	Section	Course Number	Grade	Section	Course Title
---------	--------------	-------	---------	---------------	-------	---------	--------------

FALL 1969 16-ND-375 20 112633 101
GENERAL BIOLOGY
PRINCIPLES OF BIOLOGY SCI
CELLULAR BIOLOGY SCI
SEM IN RADIOLOGY SCI
PAGNERADIOACTIVITY

SPRING 1970 16-ND-375 20 112633 102
GENERAL BIOLOGY
PRINCIPLES OF BIOLOGY SCI
CELLULAR BIOLOGY SCI
SEM IN RADIOLOGY SCI
PAGNERADIOACTIVITY

FALL 1970 16-ND-375 20 112633 792
GENERAL BIOLOGY
PRINCIPLES OF BIOLOGY SCI
CELLULAR BIOLOGY SCI
SEM IN RADIOLOGY SCI
PAGNERADIOACTIVITY

FALL 1971 16-ND-375 20 112633 337
GENERAL BIOLOGY
PRINCIPLES OF BIOLOGY SCI
CELLULAR BIOLOGY SCI
SEM IN RADIOLOGY SCI
PAGNERADIOACTIVITY

SPRING 1971 16-ND-375 20 112633 338
GENERAL BIOLOGY
PRINCIPLES OF BIOLOGY SCI
CELLULAR BIOLOGY SCI
SEM IN RADIOLOGY SCI
PAGNERADIOACTIVITY

OFFICE OF THE REGISTRAR
RUTGERS - THE STATE UNIVERSITY

CAMPUS R 3 1000 NEWARK N J 07102

George R. Pappas
RECORDED
CONFIDENTIAL - DO NOT RELEASE
FBI A THUG PARTY
Oct. 1, 1971
M.S.

NOV 10 1969

- X Environmental Science 791, 792. ENVIRONMENTAL SCIENCE RESEARCH
Both terms. Variable credit. Mr. Kaplovsky and Staff
 Water pollution, water and waste water treatment, air pollution, aquatic microbiology, or conservation.

- X [990:311. Histology. 1½ units (5 credits).
Lecture, three hours; laboratory, four hours.
Prerequisite: two terms of biological science.

X Environmental Science 517, 518. PRINCIPLES OF ENVIRONMENTAL SCIENCE

Both terms. Three credits. Lecture 3 hours. Mr. Kaplovsky and Staff
 Examination of principles and interactions associated with the air environment, water environment, and environmental health, including air resources management, water resources management, and their impact on man; consideration is given to related fundamentals of environmental chemistry, biology, and physics.

X Environmental Science 598. SPECIAL TOPICS IN RADIOLOGICAL HEALTH

Spring term. Three credits. Lecture 3 hours. Prerequisite: consent of instructor. Mr. Haughey

Advanced topics of current interest treated intensively; environmental radioactivity, treatment and disposal of radioactive wastes, exposure from radioisotopes within the body, medical radiation exposures and protection, and space radiation problems.

X Environmental Science 589, 590. SEMINAR IN RADIATION SCIENCE

One credit each term. Lecture 2 hours. Prerequisite: consent of instructor. Staff

Discussion of topics of current interest.

X Environmental Science 503. ENVIRONMENTAL CHEMISTRY AND ANALYSES

Fall term. Three credits. Lecture 2 hours; laboratory 3 hours. Prerequisite: Environmental Sciences 405 or consent of instructor. Mr. Hunter

Theory and techniques of analytical procedures applicable to research in environmental science.

X 160.337.338 ORGANIC CHEMISTRY (Cr. 3, 3.)

Prerequisite: Chem. 103, 104; corequisite: Chem. 339, 340.

A study of the methods of preparation, properties, and reactions of the principal classes of the compounds of carbon. Modern theories of organic chemistry are stressed.

X 160.339.340 ORGANIC CHEMISTRY LABORATORY (Cr. 2, 2.)

Corequisite: Chem. 337, 338.

Lab. deposit \$25.00. Lab. 5 hours.

Reactions of organic compounds studied, and representative substances prepared and purified. The second term's work includes qualitative analysis.

X Environmental Sciences 589, 590. SEMINAR IN RADIATION SCIENCE

One credit each term. Lecture 2 hours. Prerequisite: consent of instructor. Staff

Discussion of topics of current interest.

X Environmental Sciences 591. RADIATION AND RADIOACTIVITY

Fall term. Four credits. Lecture 3 hours; laboratory 3 hours. Prerequisites: minimum of one year of college physics and chemistry, and mathematics through calculus. Mr. Haughey

Atomic theory, nuclear structure, nuclear radiation, radioactivity, interaction of radiation with matter, detection methods, statistics, neutron activation analysis, radiochemical separations, hot atom and radiation chemistry, isotope exchange.

X Environmental Sciences 596. RADIATION INSTRUMENTATION AND DOSIMETRY

Spring term. Four credits. Lecture 2 hours; laboratory 3 hours. Mr. Chandler

Radiation dose measurement; principles of operation and application of all important types of radiation detectors; counting statistics; instrument calibration.

Environmental Sciences 791, 792. ENVIRONMENTAL SCIENCE RESEARCH

Both terms. Variable credit.

Mr. Kuplovsky and Staff

Water pollution, water and waste water treatment, air pollution, aquatic microbiology, or conservation.

X Environmental Sciences 580. INTRODUCTION TO RADIATION CHEMISTRY

Spring term. Three credits. Prerequisites: physical chemistry and consent of instructor. Mr. Appleby

A study of the interaction of all types of ionizing radiation with matter and the resulting radiation-induced chemical reactions; excitation, ionization, free radical formation, and recombination; relationship of radiation chemistry to photochemistry.

X Environmental Sciences 582. RADIATION BIOLOGY

Spring term. Three credits. Lecture 2 hours; laboratory 3 hours. Prerequisites: a course in general biology, and Environmental Sciences 591 or a course in radioisotope techniques. Mr. Gunckel and Mr. Hopper

Ionization radiations; methods of exposure, radiation biochemistry and mechanisms of energy transfer, tolerance levels, factors influencing radio-sensitivity, the biochemical, physiological, and morphological aspects of their effects on plants and animals, and practical applications.

X Environmental Sciences 517, 518. PRINCIPLES OF ENVIRONMENTAL SCIENCE

Both terms. Three credits. Lecture 3 hours.

Mr. Kuplovsky and Staff

Examination of principles and interactions associated with the air environment, water environment, and environmental health, including air resources management, water resources management, and their impact on man; consideration is given to related fundamentals of environmental chemistry, biology, and physics.

X Environmental Sciences 422. AIR SAMPLING AND ANALYSIS

Spring term. Two credits. Lecture 1 hour; laboratory 3 hours. Prerequisite: Environmental Sciences 421 or equivalent. Mr. Manganelli

X GENERAL BIOLOGY. (Cr. 4,4)

12-120-101-102

Professors Foster and Reid. A co-operative course given by the Departments of Botany and Zoology.

The basic principles of biology with emphasis upon their importance to man and civilization.

UNIVERSITY OF PENNSYLVANIA MEDICAL CENTER

SCHOOL OF MEDICINE
PHILADELPHIA, PENNSYLVANIA 19104

Date of matriculation— 9/1/71

Degree— 5/18/75 M.D.

Record of RICHARD PAUL UMFRID 3RD1971-1972

AA-100A* Gross Anatomy
 AA-100B* Histology
 PA-100* Intro. to Pathology
 PH-100* Medical Physiology
 ID-103* Integrated Clin. Prog.
 BC-100* Intro. to Biochem.
 OG-150 Intro. to Reproduction
 ID-100* Neurobiology
 ID-102* Cell Biology
 MG-150* Medical Genetics
 PR-100* Intro. to Pharm.
 RA-250* Basic Radiology
 CM-152* Princ. of Screening
 ID-151 Emergency First Aid
 SU-200* Core Course in Surgery

P
 exempt
 P
 P
 P
 P
 P
 P(H)
 P
 P
 P
 P
 P
 P
 P(H)

1972-1973

PR-200 Systemic & Clin. Pharm.
 ID-202 Mechanisms of Infection
 PA-201 Autopsy Pathology
 ID-201 Anat. of the Extremities
 & the Back
 ID-157 Pulmonary Disease
 ID-205 Applied Physiology
 PA-203 Clinical Pathology
 PE-200* Basic Clin. Pediatrics
 NE-201 Clin. Neurology Precept.
 PS-200A* Basic Clin. Psychiatry
 ME-200* Clin. Clerk. in Medicine

P
 P
 P
 P
 P
 P
 P
 P
 P
 P
 P

1973-1974

OG-200A* Intro. to Gynecology
 ME-330 Gastroenterology Extern.
 OP-300 Clinical Ophthalmology
 OG-200B Intro. to Obstetrics
 RA-210 Nuclear Medicine
 ME-314C Clinical Cardiology
 ID-302 Emergency Management
 RA-300 Intro. to Radiology
 ME-300 Extern. in Ger. Medicine
 ME-342A Clin. Precept. in Nephrology
 ME-392A Clin. Endocrinology & Meta.

P
 P
 P
 P(H)
 P(H)
 P
 P
 P
 P(H)
 P(H)
 P

1974-1975

ME-384A Clinical Rheumatology
 DE-300 Outpatient Clinic in Derma.
 ME-364B Clinical Pulmonary Disease
 ME-300D Receiving Ward Medicine
 ME-324A Clin. Hematology & Oncology
 OR-150 Applied Clin. Orthopaedics
 ME-414B Adv. Clinical Cardiology
 ID-200* Clinical Specialties
 ME-301 The Practice of Medicine
 ME-354 Infectious Diseases

P
 P
 P(H)
 P(H)
 P
 P
 P
 P
 P
 P

70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

Univ of Pennsylvania - Med School
Course Catalog - 1972/73

96/Radiology

201. Special Procedures in Radiology.

4 or 16 weeks; fall, spring and summer; full time. 1-4 c. u. Prerequisites: Anatomy 100, Neurobiology, Physiology 100 or 101, and Pharmacology 100. Drs. Mishkin, Chait and Zimmerman.

Participation in interpretation of studies performed in the Special Studies section of the Department of Radiology along with observation of procedures and techniques is offered. These procedures have in recent years become a more and more common part of the examination of patients with various diseases and student familiarization with their value and applications will be of value. Students may participate in ongoing research projects.

210. Nuclear Medicine (HUP).

First 4 weeks of spring term, full time. 1 c.u. Prerequisites: Medical Physiology 100 (or equivalent), Pharmacology 100, and Integrated Clinical Program (Interdepartmental 103). Dr. Kuhl and Staff.

Seminar format with assigned readings, demonstrations, interpretation sessions, and a laboratory program. Systematic survey of the basic science and medicine associated with the diagnostic and therapeutic use of radioactive compounds in clinical practice and investigation. Teaching staff includes representatives of a wide range of clinical disciplines.

211. Introduction to Clinical Nuclear Medicine (HUP).

4 weeks; fall and spring terms and summer; half time, mornings. 1/2 c.u. Prerequisites: None. Dr. Kuhl and Staff.

Daily examination and interpretation of scanning and other isotopic studies of currently hospitalized patients. Informal discussion of principles and applications of nuclear physics to clinical problems.

*250. Basic Radiology (HUP).

First 6 weeks of summer session. T., Th. 10-12 A.M. Prerequisites: Basic Science Core Courses. Dr. Chamberlain and Staff.

Basic principles of radiology and role of radiology in clinical practice with emphasis on diagnostic radiology and nuclear medicine. Lectures supplemented by conferences in small groups.

252a. Radiological Physics I.

14 weeks; fall term. One 1 1/2 hour lecture per week. Th. 9-10:30 A.M. Prerequisites: Radiology 250. Dr. Hale.

Review of basic physics; electricity and magnetism; atomic and nuclear physics; electro-magnetic and particulate radiation and its interaction with matter; elements of Dosimetry.

252b. Radiological Physics II (HUP).

14 weeks; spring term. 1 1/2 hours lecture per week. Th. 9-10:30 A.M. Prerequisite: Radiology 252a. Dr. Hale.

The physics of diagnostic radiology and nuclear medicine. Equipment; image quality; special techniques.

253. Radiology Case Review (HUP).

Fall and spring; W., 5-6 P.M. Dr. Miller.

Films of currently hospitalized patients which are interesting

from a radiological viewpoint are presented and a student is asked to discuss each case. Formal registration is unnecessary. Students are welcome to attend whenever free to do so.

254a. Diagnostic Radiology Rounds (HUP).

4-32 weeks; fall and spring terms. 8:15-8:45 A.M. daily. Prerequisites: None. Dr. Chamberlain and Staff.

Interesting cases presented and discussed by the radiology staff and residents. Radiologic manifestations of various disease entities are presented and examined in depth at certain sessions.

254b. Diagnostic Pediatric Radiology Rounds (CHOP).

4-8 weeks; fall, spring and summer; M., T., W., F. 10:15-11 A.M. Prerequisites: None. Dr. H.J. Kaufmann and Staff.

All new cases on pediatric services are discussed. This offers insight into the radiologic manifestations of medical disorders during infancy and childhood.

255. Therapeutic Radiology.

4 weeks; fall and spring terms; half time, mornings 1/2 c.u. Prerequisites: Pathology 100 and Integrated Clinical Program (Interdepartmental 103). Drs. Davis, Woodward, and Littman.

Students will participate in the care of patients undergoing radiation therapy for malignant disease. Conferences will be held concerning the course, prognosis and management of cancer at its common sites. Direct experience with patients will provide insight into the clinical approach to the patient with a potentially fatal illness.

300. Introduction to Radiology (HUP).

4 weeks; full time only; fall, spring and summer except July and August. 1 c. u. Prerequisite: Medicine 200 or Surgery 200. Dr. Friedman and Staff.

Preceptorship covering all aspects of Radiology including film interpretation, fluoroscopy, nuclear medicine, special studies and joint conferences of the Radiology Department with other specialties. Includes Radiology 254A. Includes opportunity to study at length Programmed Seminars in Diagnostic Radiology prepared by Dr. Lucy Squire. Daily one-hour conference on film interpretation and radiologic examinations utilizing material selected specifically for medical students.

301. Clinical Roentgen Diagnosis.

4-8 weeks; full time or half time, mornings or afternoons; fall, spring and first half of summer. 1/2-2 c.u. Prerequisite: Medicine 200 or Surgery 200. Dr. Tuddenham and Dr. Campbell—PH, full time only; Dr. Fisher—PGH; Dr. Stein and Dr. Roy—PUPMC, mornings or full time only.

Observation of the various aspects of radiographic and fluoroscopic studies. Supervised film reading. Daily conferences.

302. Pediatric Radiology (CHOP).

4-8 weeks; fall and spring; full time. 1-2 c.u. Prerequisites: Pediatrics 200. Dr. H.J. Kaufmann and Staff.

Active participation in all the daily activities of the department.

303. Gastrointestinal Radiology (PH).

4-8 weeks; fall, spring and first half of summer; half time,

mornings.

year student

Designed f

gastroente

testinal flu

the term

gastrointe

considered

and high

mental lit

Student a

800. Rese

By arrang

802. Inve

8 or 16 w

and summ

logic or

denham.

SURGER

Deaver, J

(Clinic

Engel, G

Farrell, R

Groff, R

(Neuro

461503

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.

1. APPLICANT PHYSICIAN'S NAME AND ADDRESS			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.
FULL NAME			
Richard P. Umfrid, MD			
STREET ADDRESS			
P.O. Box 35100			
2825 8th Ave. North			
CITY	STATE	ZIP CODE	
Billings	Mt.	59107	

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 or comments may be submitted in duplicate on separate sheets.) D
I-131 or I-125	DIAGNOSIS OF THYROID FUNCTION		1. From 9/85-4/86, Dr. Umfrid interpreted, with intermittent supervision: Tc Blood Pool Scans-59 Tl perfusion scans-167
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME		
	LIVER FUNCTION STUDIES		
	FAT ABSORPTION STUDIES		
	KIDNEY FUNCTION STUDIES		
	IN VITRO STUDIES		
OTHER			2. Experience obtained 5/86-9/86, with Dr. Umfrid the principal interpreter of the studies, with the immediate supervision of preceptor, Dr. Degnan.
I-125	DETECTION OF THROMBOSIS		
I-131	THYROID IMAGING		
P-32	EYE TUMOR LOCALIZATION		
Se-75	PANCREAS IMAGING		
Yb-169	CISTERNOGRAPHY		
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES		
OTHER	Tl-201 myocdl perfusion scans	94	
Tc-99m	BRAIN IMAGING		
	CARDIAC IMAGING	4	
	THYROID IMAGING		
	SALIVARY GLAND IMAGING		
	BLOOD POOL IMAGING	30	
	PLACENTA LOCALIZATION		
	LIVER AND SPLEEN IMAGING		
	LUNG IMAGING		
	BONE IMAGING		
OTHER			

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 comments may be submitted in duplicate on separate sheets.)
A	B	C	D
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES		
P-32 (Colloidal)	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		
Sr-90	TREATMENT OF EYE DISEASE		
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR	5	
Sn-113/ In-113m	GENERATOR		
Tc-99m	REAGENT KITS	5	
Other			

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

- July 1984-September 1986
- Greater than 400 hours in Clinical Radioisotope Training

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

a. NAME OF SUPERVISOR Walter C. Degnan, MD	
b. NAME OF INSTITUTION Deaconness Medical Center	
c. MAILING ADDRESS 2813 9th Ave. North	
d. CITY Billings, Montana	59101
5. MATERIALS LICENSE NUMBER(S)	

5. PRECEPTOR'S SIGNATURE

Walter C Degnan MD

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

Walter C. Degnan, MD

8. DATE

10-21-86