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COLUMBUS HOSPITAL: ESTABLISHED IN 1892 BY SISTERS OF PROVIDENCE

46:
500 15th AVE. SO. PO. BOX 5013, GREAT FALLS, MT. 59403 (406)727:3333: FEE MGMT. BRANCH

September 24, 1985

Unites States Nuclear Regulatory Commission Region IV 611 Ryan Plaza Dr. Suite 1000 Arlington, TX 76011

Gentlemen:

RE: John Hackethorn, M.D. License #25-02337-03

Columbus Hospital would like to include Dr. John Hackethron, M.D., on its by-products materials license. Enclosed in triplicate are his Preceptor Statement 313M Supplement B, and a Training and Experience Authorized User 313M Supplement A.

Included with this request is a check for \$40.00 to cover the cost of a license amendment.

Sincerely,

William & Downer Jr

Administrator

WJD/bjb Enclosure

Applicant Check No. (28699115 (nc))
Amount Amo.
Date Check Ducgies 1385

SEP 3 0 1985

NRC FORM 313M SUPPLEMENT A

U.S. NUCLEAR REGULATORY COMMISSION

(9-81)

TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER

John Hackethorn, M.D. Lawrence F. Winans, Ph.D., Asst. Professor of Radiology

2 STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE

SPECIALTY BOARD	CATEGORY	MONTH AND YEAR CERTIFIED
Radiology	Diagnostic	June 1985
Orthopedics	General	Sept. 1976

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

			TYPE AND LENGT	TH OF TRAINING
	FIELD OF TRAINING	LOCATION AND DATE(S) OF TRAINING	LECTURE/ LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours)
ð.	RADIATION PHYSICS AND INSTRUMENTATION	Oregon Health Sciences Univ. Dept. of Radiology 1984	100	10
b	RADIATION PROTECTION	Oregon Health Sciences Univ. Dept. of Radiology 1984	30+	N/A
С	MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Oregon Health Sciences Univ. Dept. of Radiology 1984	24+	N/A
d	RADIATION BIOLOGY	Oregon Health Sciences Univ. Dept. of Radiology 1984	32	N/A
*	RADIOPHARMACEUTICAL CHEMISTRY	Veterans' Administration Hosp., Portland, OR: 1 mo. '8' Good Samaritan Hosp., Portland OR: 2 mo. '84	288	192

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

SOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
	*		E 20 To 12 To 10	



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U.S. NUCLEAR REGULATORY COMMISSION

(9-81)

TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER

t. Professor of Radiology 3. CERTIFICATION	PRACTICE MEDICINE
CATEGORY	MONTH AND YEAR CERTIFIED
Diagnostic General	June 1985 Sept. 1976
	3. CERTIFICATION CATEGORY B Diagnostic

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

-			TYPE AND LENGTH OF TRAINING	
	FIELD OF TRAINING	D OF TRAINING LOCATION AND DATE ISL OF TRAINING B		SUPERVISED LABORATORY EXPERIENCE (Hobrs)
ð	RADIATION PHYSICS AND INSTRUMENTATION	Oregon Health Sciences Univ. Dept. of Radiology 1984	100	10
b.	RADIATION PROTECTION	Oregon Health Sciences Univ. Dept. of Radiology 1984	30+	N/A
c	MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Oregon Health Sciences Univ. Dept. of Radiology 1984	24+	N/A
	RADIATION BIOLOGY	Oregon Health Sciences Univ. Dept. of Radiology 1984	32	N/A
	RADIOPHARMACEUTICAL CHEMISTRY	Veterans' Administration Hosp., Portland, OR: 1 mo. '8' Good Samaritan Hosp., Portland OR: 2 mo. '84	288	192

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NRC FORM 313M SUPPLEMENT A

U.S. NUCLEAR REGULATORY COMMISSION

(9-81)

TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER

1	NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER
	John Hackethorn, M.D. Juliant Minans, Ph.D., Asst. Professor of Radiology
	Lawrence F. Winans, Ph.D., Asst. Professor of Radiology
	3. CERTIFICATION

2 STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE

SPECIALTY BOARD	CATEGORY	MONTH AND YEAR CERTIFIED	
Radiology	Diagnostic	June 1985	
Orthopedics	General	Sept. 1976	

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

				TYPE AND LENGTH OF TRAINING		
	FIELD OF TRAINING	LOCATION AND DATE COF TRAINING	LECTURE: LABORATORY COURSES (Hours)	SUPERVISED LABORATORY EXPERIENCE (Hobis)		
	RADIATION PHYSICS AND INSTRUMENTATION	Oregon Health Sciences Univ. Dept. of Radiology 1984	100	10		
2)	RADIATION PROTECTION	Oregon Health Sciences Univ. Dept. of Radiology 1984	30+	N/A		
c	MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Oregon Health Sciences Univ. Dept. of Radiology 1984	24+	N/A		
a	RADIATION BIOLOGY	Oregon Health Sciences Univ. Dept. of Radiology 1984	32	N/A		
	RADIOPHARMACEUTICAL CHEMISTRY	Veterans' Administration Hosp., Portland, OR: 1 mo. '8' Good Samaritan Hosp., Portland OR: 2 mo. '84	288	192		

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE

PRECEPTOR STATEMENT

Supplement 8 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 JOHN C. HACKETHORN, MO STREET ADDRESS RADIOLOG, DEPT Columbus Hospital CITY STATE ZIP CODE GREAT FALLS INT 59405

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

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	(Additional information or comments may be submitted in duplicate on separate sheets.)	
	DIAGNOSIS OF THYROID FUNCTION	50		
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	3		
I-131	LIVER FUNCTION STUDIES			
or 1-125	FAT ABSORPTION STUDIES			
	KIDNEY FUNCTION STUDIES	40		
	IN VITRO STUDIES			
OTHER				
1-125	DETECTION OF THROMBOSIS			
_43+	THYROID IMAGING	50		
P-32	EYE TUMOR LOCALIZATION			
Se- 75	PANCREAS IMAGING			
Yb-169	CISTERNOGRAPHY	4		
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	55		
OTHER	Manager and the same of the same	All the same of		
	BRAIN IMAGING	5		
	CARDIAC IMAGING	200		
	THYROID IMAGING	50		
	SALIVARY GLAND IMAGING			
Tc-99m	BLOOD POOL IMAGING	25		
	PLACENTA LOCALIZATION			
	LIVER AND SPLEEN IMAGING	60		
	LUNG IMAGING	55		
	BONE IMAGING	300		
OTHER				

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		R STATEMENT TO	
	2. CLINICAL TRAINING AND EXI		E 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	8	C	0
(Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES		
P-32 (Colloidal)	INTRACAVITARY TREATMENT		
1-131	TREATMENT OF THYROID CARCINOMA		
	TREATMENT OF HYPERTHYROIDISM	4	
Au-198	INTRACAVITARY TREATMENT		
Co-60	INTERSTITIAL TREATMENT		
Or Cs-137	INTRACAVITARY TREATMENT		
I-125 or Ir-192	INTERSTITIAL TREATMENT		
Co-60 or Cs-137	TELETHERAPY TREATMENT		
Sr-90	TREATMENT OF EYE DISEASE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
14 4	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR	35	
Sn-113/ In-113m	GENERATOR	The Man	
Tc-99m	REAGENT KITS	60	
1			
3. DATES	OVER 500 HOURS		ADIOISOTOPE TRAINING
WAS OF	RAINING AND EXPERIENCE INDICATED BTAINED UNDER THE SUPERVISION OF E OF SUPERVISOR	ABOVE	Jeen 7 July
Goo c. MAIL	O SAMARITAN HOSDITAL ING ADDRESS NW 2200 ST		OR'S NAME (Please type or print) P. F. GATES, M.D.
d. CITY	RTLAND OR 97210	8. DATE	22/85
	F - CTI OV - I	1	, , ,

NRC FORM 313M SUPPLEMENT B

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

JOHN C. HACKETHORN, MO

STREET ADDRESS
RADIOLOGI DERT

COLUMBUS HOSPITAL

CITY

STOR 15 TA AUG

STATE | ZIP CODE

GREAT FALLS

MT 59405

KEY TO COLUMN C PERSONAL PARTICIPATION SHOULD CONSIST OF

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- 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

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED	CASES INVOLVING PERSONAL PARTICIPATION	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
i-131 or i-125	DIAGNOSIS OF THYROID FUNCTION	50	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	3	
	LIVER FUNCTION STUDIES		
	FAT ABSORPTION STUDIES		
	KIDNEY FUNCTION STUDIES	40	
	IN VITRO STUDIES		
OTHER			
1-125	DETECTION OF THROMBOSIS		
1194	THYROID IMAGING	50	
P-32	EYE TUMOR LOCALIZATION		
Se- 75	PANCREAS IMAGING		
Yb-169	CISTERNOGRAPHY	4	
Xe-133	PULMONARY FUNCTION STUDIES	55	
OTHER			
	BRAIN IMAGING	5	
	CARDIAC IMAGING	200	
Tc-99m	THYROID IMAGING	50	
	SALIVARY GLAND IMAGING		
	BLOOD POOL IMAGING	25	
	PLACENTA LOCALIZATION		
	LIVER AND SPLEEN IMAGING	60	
	LUNGIMAGING	55	
	BONE IMAGING	300	
OTHER			

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		R STATEMENT IC	
	2. CLINICAL TRAINING AND EX	PERIENCE OF ABOVE	NAMED PHYSICIAN (Continued)
SOTOPE	CONDITIONS DIAGNOSED OR TREATED	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION	(Additional information or comments may be submitted in duplicate on separate sheets,)
A	8	С	0
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA. LEUKEMIA, AND BONE METASTASES		
P.32 Colloidall	INTRACAVITARY TREATMENT		
	TREATMENT OF THYROID CARCINOMA		
1-131	TREATMENT OF HYPERTHYROLDISM	4	
Au- 198	INTRACAVITARY TREATMENT		
00-60	INTERSTITIAL TREATMENT		
or Cs-137	INTRACAVITARY TREATMENT		
1-125 or ir-192	INTERSTITIAL TREATMENT		
Co-60 or Cs-137	TELETHERAPY TREATMENT		
Sr-90	TREATMENT OF EYE DISEASE		
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR	35	
Sn-113/	GENERATOR	1	
In-113m Tc-99m	REAGENT KITS	60	
1			
	OVER 500 HOURS	s	
WAS O	RAINING AND EXPERIENCE INDICATED BTAINED UNDER THE SUPERVISION OF THE OF SUPERVISOR THE GATES, M.D. THE OF INSTITUTION TO SAMARITAN HOSDITAL LING ADDRESS TO NW 2276 ST	7. PRECEPTO	DR'S NAME IPIE SE TYPE OF PRINTIPE ST. GATES, M.D.
Po	RTLAND, OR 97210	2/	22/85

GREAT FALLS

PRECEPTOR STATEMENT

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PERSONAL PARTICIPATION SHOULD CONSIST OF

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MT 59405

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1-131 or 1-125	DIAGNOSIS OF THYROID FUNCTION	50		
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	3		
	LIVER FUNCTION STUDIES	34.10.105		
	FAT ABSORPTION CTUDIES			
	KIDNEY FUNCTION STUDIES	40		
	IN VITRO STUDIES			
OTHER				
1-125	DETECTION OF THROMPOSIS			
-1614	THYROID IMAGING	50		
P-32	EYE TUMOR LOCALIZATION			
Se- 75	PANCREAS IMAGING			
Yb-169	CISTERNOGRAPHY	4		
Xe-133	PULMONARY FUNCTION STUDIES	55		
OTHER				
	BRAIN IMAGING	5		
	CARDIAC IMAGING	200		
Tc 99m	THYROID IMAGING	50		
	SALIVARY GLAND IMAGING			
	BLOOD POOL IMAGING	25		
	PLACENTA LOCALIZATION			
	LIVER AND SPLEEN IMAGING	60		
	LUNG IMAGING	55		
	BONE IMAGING	300		
OTHER		1		

NRC FORM 313M SUPPLEMENT B

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	PRECEPTO	R 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 comments may be submitted in duplicate on separate sheets,)			
Α	В	С	D			
(Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES					
P-32 (Colloidal)	INTRACAVITARY TREATMENT					
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Co-60 or Cs-137	TELETHERAPY TREATMENT					
51-90	TREATMENT OF EYE DISEASE					
	RADIOPHARMACEUTICAL PREPARATION					
Mo-99/ Tc-99m	GENERATOR	35				
Sn-113/ In-113/n	GENERATOR	I I I A LET				
Tc-99m	REAGENT KITS	60				
1						
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WAS O	RAINING AND EXPERIENCE INDICATED BTAINED UNDER THE SUPERVISION OF THE OF SUPERVISOR	MOOVE	Jeen F July			
Goo MAI	O SAMARITAN HOSPITAL LING ADDRESS T NW 2276 ST		POR'S NAME (Please type or print) Ry F. GATES, M.D.			
Por 5. MATER OA	RTLAND OR 97210 TALS LICENSE NUMBERIS) RE - CTO 08-1 313M SUPPLEMENT B		22/85			

(9-81)