

Mary Greeley Medical Center *code 14*

117 Eleventh Street
Ames, Iowa 50010
515-239-2011
Administrator: John D. Worley, Jr.

Writer's Direct Dial Number
515/239-2102

May 15, 1985

Mr. John W. Cooper
Licensing Section
Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60737

RECEIVED BY LFMB	
Date	5/28/85
Log	May 30-TH
By	J.
Orig. To	
Action Compl	5/29/85

Dear Mr. Cooper:

Enclosed in duplicate is the information needed to amend our NRC licenses #14-15797-01 and #14-15797-02 for Mary Greeley Medical Center.

We wish to add Gary Shultz, D.O. (training and experience forms attached) to both licenses and also add the use of any byproduct materials listed in Group VI of schedule A, section 35.100 of 10 CFR 35 with maximum possession limit of one curie, to license #14-15767-01. Recommendation letters for Dr. Shultz from Dr. Tewfik and Dr. Latourette which were to have been included with this application have been sent under separate cover to the N.R.C.

We will be using Appendix L of Regulatory Guide 10.8 with Oct. 1980 revision date for our radiation safety procedures for the Group VI sealed sources. The composition of the Medical Isotopes Committee will be in compliance with part 35.11(b) of 10 CFR 35 and follow Appendix B of Regulatory Guide 10.8 for that Committee.

Diagrams and descriptions are attached of the isotope safe, carrier and cart to be used. The safe will be housed in our present Nuclear Medicine Hot Lab. Protected L block and remote handling tools will be available and TLD badges will be worn by individuals handling or in direct contact with the sources.

Since Mary Greeley Medical Center is a City-owned hospital, we are exempt from payment of license fees (section 170.11(a)(9) of Part 170).

Please let us know if you require additional information.

Sincerely,

John D. Worley Jr.
John D. Worley Jr.
President

Encl.
seb

RECEIVED

MAY 21 1985

REGION III

8511180195 851001
REG3 LIC30
14-15767-02 PDR

code 14
FEE EXEMPT

MAY 21 1985

CONTROL NO. 78999

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

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER Gary Lee Shultz, D.O.	2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE Iowa
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3. CERTIFICATION

SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C

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 Iowa Hospitals and Clinics Radiation Therapy Section July, 1981 - present	110 hr.	20 hr.
b. RADIATION PROTECTION	as above	35 hr.	6 hr.
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	as above	25 hr.	---
d. RADIATION BIOLOGY	as above	50 hr.	---
e. RADIOPHARMACEUTICAL CHEMISTRY	as above	24 hr.	6 hr.

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
P 32 I 131 Au 198 I 125 SR 90 CO 60 CS 137 IR 192-	Amount varied according to usage with patient. Had conventional standards of practice applied to amount. Helped write Isotope Protocol for Human Use	University of Iowa Hospitals and Clinics Radiation Therapy Section	July 1981 to Present April 1985 Residency to June 1985	Teletherapy and Brachytherapy

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		
P-32 (Colloidal)	INTRACAVITARY TREATMENT	5	
I-131	TREATMENT OF THYROID CARCINOMA	4	
	TREATMENT OF HYPERTHYROIDISM	10	
Au-198	INTRACAVITARY TREATMENT		
Co-60 or Cs-137	INTERSTITIAL TREATMENT	8	
	INTRACAVITARY TREATMENT	52	
I-125 or Ir-192	INTERSTITIAL TREATMENT	3	
	TELE THERAPY TREATMENT	393	
Sr-90	TREATMENT OF EYE DISEASE	5	
	RADIOPHARMACEUTICAL PREPARATION		
Mo-99/ Tc-99m	GENERATOR		
Sn-113/ In-113m	GENERATOR		
Tc-99m	REAGENT KITS		
Other Au-198 Seeds		3	

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

July 1981 to April 1985
1179 hours

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

a. NAME OF SUPERVISOR Hamed H. Tewfik, M.D.
Howard Latourette, M.D.
b. NAME OF INSTITUTION University of Iowa
Hospitals and Clinics
c. MAILING ADDRESS
d. CITY Iowa City, Iowa 52242

5. PRECEPTOR'S SIGNATURE

[Signature]
Howard B. Latourette

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

Hamed H. Tewfik, M.D.
Howard Latourette, M.D.

8. DATE

4/30/85
4-15-85

6. MATERIALS LICENSE NUMBER(S)

14-02938-07 (U of I)

FORM NRC-313M-SUPPLEMENT B
(8-78)

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

FULL NAME

Gary L. Shultz, D.O.

STREET ADDRESS

CITY

Ames

STATE

Iowa

ZIP CODE

50010

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.

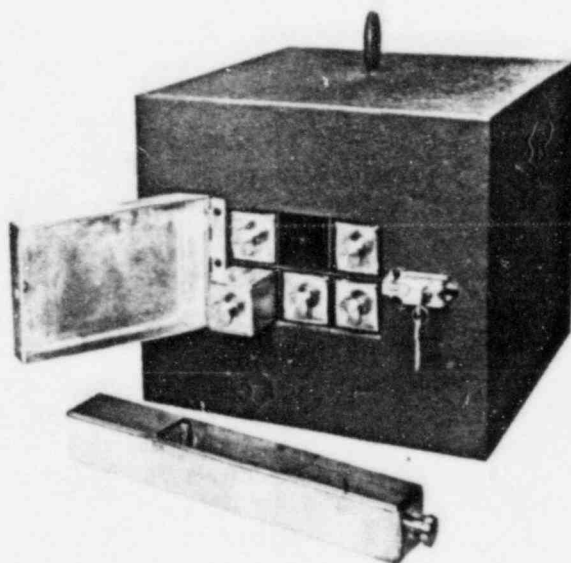
2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED 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	4	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME		
	LIVER FUNCTION STUDIES		
	FAT ABSORPTION STUDIES		
	KIDNEY FUNCTION STUDIES		
	IN VITRO STUDIES		
OTHER			
I-125	DETECTION OF THROMBOSIS		
I-131	THYROID IMAGING	12	
P-32	EYE TUMOR LOCALIZATION		
Se-75	PANCREAS IMAGING		
Yb-169	CISTERNOGRAPHY		
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES		
OTHER			
Tc-99m	BRAIN IMAGING		
	CARDIAC IMAGING		
	THYROID IMAGING		
	SALIVARY GLAND IMAGING		
	BLOOD POOL IMAGING		
	PLACENTA LOCALIZATION		
	LIVER AND SPLEEN IMAGING	18	
	LUNG IMAGING		
	BONE IMAGING	17	
OTHER			

RADIUM AND CESIUM STORAGE SAFE

- Offers maximum protection
- Custom-designed storage drawers available
- Stainless steel drawers
- Keylock & fireproof

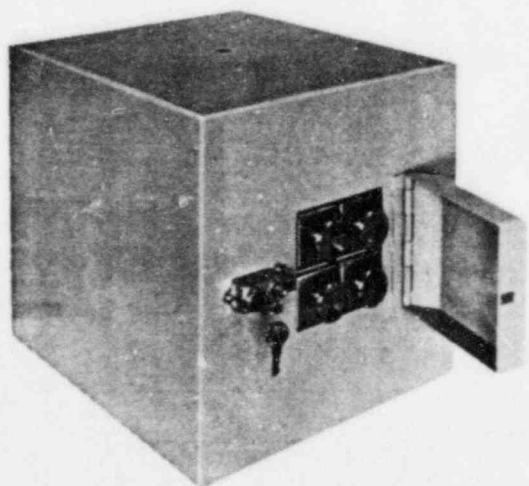
Constructed of steel and shielded with 4" of lead, this Storage Safe provides maximum protection against exposure to radiation. Each safe is fireproof and has a keylock door. The storage area in each drawer is 6" L x 1 3/4" W x 1 7/8" D.



Model RSS-106

Custom-Designed Drawers

For special requirements relating to drawers, source holders or other modifications, a separate quotation will be forwarded upon request.



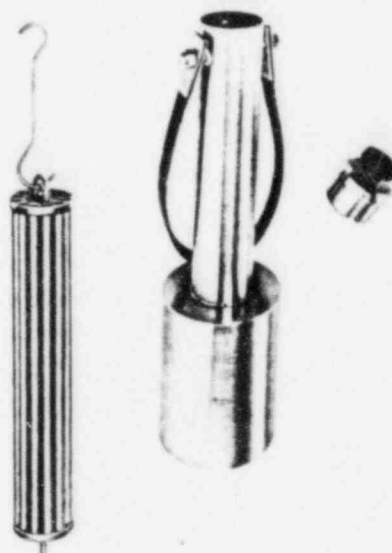
Model RSS-104

Model No.	No. of Drawers	Safe Dimensions	Lead Thickness	Net Weight
RSS-104	4	12 3/4" H x 12 3/4" W x 14 1/2" D	4" (10.2 cm)	950 lbs.
RSS-106	6	12 3/4" H x 15" W x 14 1/2" D	4" (10.2 cm)	1150 lbs.

HEYMAN CARRIER

Model HC-315

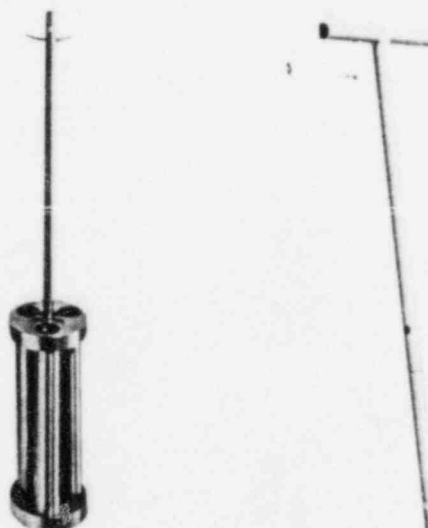
The Heyman Carrier, Model HC-315, has a removable stainless steel core that will hold up to 12 Heyman capsules. The 2" diameter stainless steel carrier provides 1" lead protection. The internal usable depth is 12 inches. Weight: 42 lbs.



FLETCHER SUIT

Model FC-320

The Fletcher Suit, Model FC-320, is an after-load carrier core for use with the Heyman Carrier.

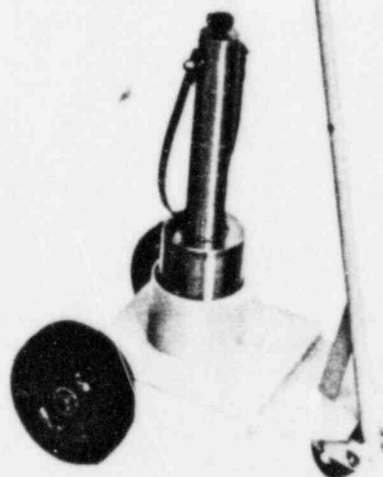


HEYMAN CART

Model HC-335

The Heyman Cart, Model HC-335, is designed to accommodate the Heyman Carrier, Model HC-315. The two 8" wheels and one 3" caster facilitate movement of the cart. A 40" handle permits easy towing of carrier. Weight: 14 lbs.

Photo shows Heyman Cart with removable Heyman Carrier in place.



RADIUM AND CESIUM SHIELDED WORK STATION

- Provides optimum working conditions when using radium and cesium
- Designed for maximum protection and versatility

The Radium and Cesium Shielded Work Station is the ideal vehicle for the safe storage of radium and cesium. It provides optimum protection to personnel from radiation exposure when storing sources, and has sufficient work and storage area to allow flexibility when using its contents. Optional heavy-duty 5" swivel casters lend mobility to the work station and permit easy transport of sources to the point of use under hazardous free conditions.

As a guide to determine maximum isotope content for a desired surface radiation level, the following Tenth-Value-Layers (in lead) are provided.*

Radium	5.5 cm	Cesium-137	2.2 cm
Cobalt-60	4.1 cm	Iridium-192	2.0 cm
		Gold-198	1.1 cm

Shielded Storage Safe

Constructed of steel and shielded with lead, these safes provide maximum protection from radiation exposure. Keylocked and fireproof. Stainless steel storage drawers. (4-drawer unit shown).

(See facing page for complete details.)

Steel Table Model ST-101

Provides solid support surface for components of work station. Smooth bevel-edged worktop offers adequate area for tool and instrument placement. Table support frame is solid steel with welded corner joints for maximum strength. 4" x 4" floor supports.

Dimensions: 28" x 36" x 33 3/4" High. Weight: 120 lbs.

L-Block Lead Shield Model Pb-212

Solid, heavy (410 lbs.) lead shielding (5.0 cm thick) protects head and torso from radiation. Tilted lead glass window (4" x 8") permits safe, unobstructed viewing of work area. Dimensions: 22" H x 14" W x 16 1/2" L.

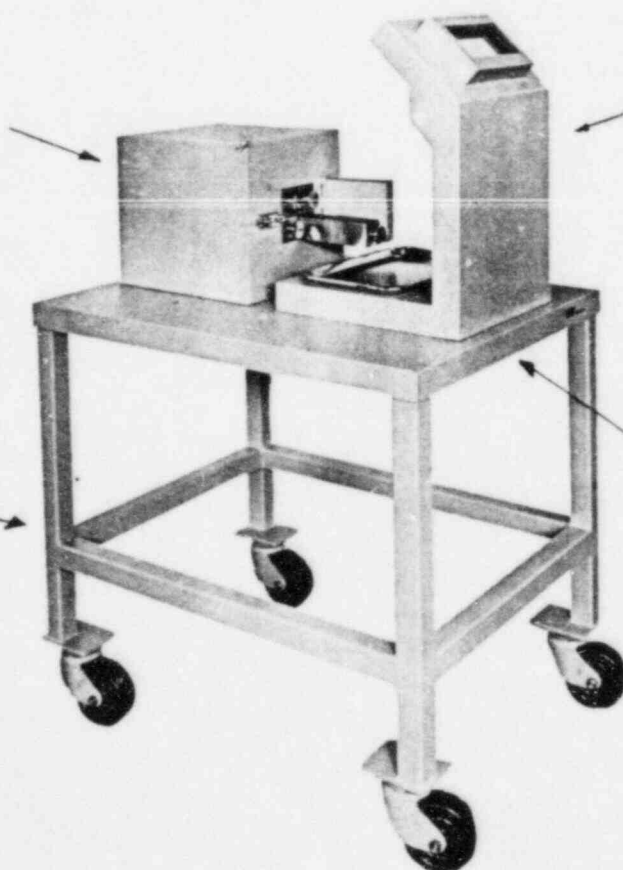
An optional 13 1/2" x 9 3/4" x 3/4" high Stainless Steel Tray, Model T-15F, for use with L-Block Shield is available.

Storage Drawer (optional) Model OSD-101

Fits under worktop. Dimensions: 24" L x 19 1/2" W x 7" H.

Swivel Casters (optional) Model OSC-101

Heavy duty, 5" casters provide complete mobility to the work station.



*National Council on Radiation Protection and Measurements. Report No. 40, "Protection Against Radiation from Brachytherapy Sources."