



June 19, 1985

John Glenn  
Nuclear Materials and Safeguard Branch  
Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

RE: License number 20-21227-01MD (Boston)

Dear Dr. Glenn:

Please amend license number 20-21227-01MD to show John Heavin III as an authorized user. Copies of his training and work history are enclosed.

A Two hundred thirty dollar check is enclosed.

Thank you for your assistance in this matter.

Sincerely,

NUCLEAR PHARMACY, INC.

*Robert O. McClintock*  
Robert O. McClintock  
Vice President of Regulatory Affairs

ROM/gav

Enclosures

cc: Central File  
Reading File  
License File  
Jeff Steffey  
Steve Dessel

*July-1 - I*

Applicant	
Check No.	002343
Amount/Fee Category	\$230.30
Type of Fee	Amend
Date Check Rec'd	7/15/85
Received By	Jacques

U.S. N.R.C.  
LIC. FEE MGMT. BRANCH

'85 JUL -5 PM 2:25

RECEIVED

"OFFICIAL RECORD COPY"

8508300086 850813  
REG1 LIC30  
20-21227-01MD PDR

JUN 1985

ML10

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JUN 24 1985

nuclear pharmacy incorporated

P.O. Box 25141 Albuquerque, New Mexico 87125 505/345-3551 1-800-545-6554

TRAINING AND EXPERIENCE  
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER  John William Heavin III		2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE		
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	Mercer Univ. School of Pharmacy April 8 - May 10, 1985	68	17	
b. RADIATION PROTECTION	Mercer Univ. April 8 - May 10 1985	31	14	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Mercer Univ. April 8 - May 10 1985	16	04	
d. RADIATION BIOLOGY	Mercer Univ. April 8 - May 10 1985	20		
e. RADIOPHARMACEUTICAL CHEMISTRY	Mercer Univ. April 8 - May 10 1985	30		
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)				
ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE

# MERCER

Southern School of Pharmacy  
Department of Pharmaceutical Sciences

Date: May 10, 1985

## TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

Name: John Heavin, III

Field of Training	Location and Date(s) of Training	Type and Length of Training	
		Lecture/ Laboratory Courses (Hours)	Supervised Laboratory Experience (Hours)
	Mercer University South- ern School of Pharmacy Atlanta, Georgia 30312		
A. Radiation Physics and Instrumentation	April 8 - May 10, 1985	68	17
B. Radiation Protection	April 8 - May 10, 1985	31	14
C. Mathematics Pertain- ing to the use and Measurement of Radio- activity	April 8 - May 10, 1985	16	04
D. Radiation Biology	April 8 - May 10, 1985	20	
E. Radiopharmaceutical Chemistry	April 8 - May 10, 1985	30	

TOTALS:

MERCER UNIVERSITY  
345 Boulevard, NE  
Atlanta, Georgia 30312  
(404) 688-6291

165 hrs. 35 hrs.

*Michael P. Kavula, Jr.*  
Michael P. Kavula, Jr., Pharm.D.  
Associate Professor of Pharmaceu-  
tical Sciences

John Heavin, III

FIGURE 2. DOCUMENTING RADIOISOTOPE HANDLING EXPERIENCE

EXPERIENCE WITH RADIOACTIVE MATERIAL. (Actual Use of Radioisotopes Under the Supervision of an Authorized User)

ISOTOPE	MAXIMUM AMOUNT USED AT ONE TIME (mCi)	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE (actual clock hours)	TYPES OF USE 1, 2, 3, 4, 5, 6 (see key below)
Tc99m	15,000	Nuclear Pharmacy, Inc. (Phoenix, AZ)	Full time employ- ment with NPI ( > 900 hrs)	456
Mo99	16,000			1456
I131	150			1456
I123	2.5			13456
Xe133	1,400			13456
P32	5			1456
I125	0.05			13456
Co57	5			2
Ba133	0.01			2
Cs137	0.2			2
Tl201	20			1456
Ga67	20			1456
In111	3			13456

Key for "Type of Use"

The number or numbers entered under "Type of Use" correspond to experience in the following activities:

1. Ordering, receiving, and unpacking radioactive materials safely, including performance of related radiation surveys.
2. Calibration of dose calibrators, scintillation detectors, and survey meters.
3. Calculation, dispensing, and calibration of patient doses, including proper use of radiation shields.
4. Appropriate internal control procedures to prevent mislabeling errors.
5. Emergency procedures to handle and contain spilled materials safely, including related decontamination procedures, surveys, and wipe tests.
6. Elution of technetium-99m generator systems, assay and testing of the eluate for molybdenum-99 contamination, and processing the eluate with reagent kits to prepare technetium-99m labeled radiopharmaceuticals.