



Southern Illinois University  
School of Medicine  
P.O. Box 3926  
Springfield, Illinois 62708

May 10, 1984

Patricia J. Whiston  
Materials Licensing Section  
U.S. Nuclear Regulatory Commission; Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Re: License #12-18470-01, Control #76537

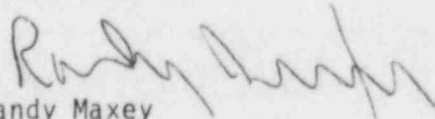
Dear Ms. Whiston:

Enclosed is information requested concerning our March 22, 1984  
license amendment request:

1. The information requested concerning the experience of Allen Nickols, Ph.D., and Jill W. Sullivan, M.D., is enclosed. All materials listed are in unsealed form.
2. All three new Radiological Control Committee members are voting members.
3. Krishna B. Singh, M.D., and Che Su, Ph.D., are no longer members of the Radiological Control Committee.

If you have any questions concerning this additional information,  
please contact me at (217) 788-3267.

Sincerely,

  
Randy Maxey  
Radiation Safety Officer

RM/je

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NMS LIC30  
12-18470-01 PDR

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MAY 15 1984

REGION III

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TRAINING AND EXPERIENCE  
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER Dr. Jill White Sullivan	2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE
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3. CERTIFICATION

SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C
American Board of Radiology	Diagnostic Radiology	June - 1982

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	Mallinkrodt Institute of Radiology July-1979 - June 1982	125 hrs.	
b. RADIATION PROTECTION	Same as above	50 hrs.	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Same as above	80 hrs.	
d. RADIATION BIOLOGY	Same as above	40 hrs.	
e. RADIOPHARMACEUTICAL CHEMISTRY	Same as above	50 hrs.	

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.	I-131	15mCi	Same as above	1980-1982	Therapy
2.	Xe-133	20mCi	"	"	Diagnostic
3.	Tc-99m	15mCi	"	"	"
4.	I-123	2mCi	"	"	"
5.	In-111	1.5mCi	"	"	"
6.	Tl-201	5mCi	"	"	"
7.	Ga-67	10mCi	"	"	"

RCC - A. Nickols

Experience at:

1) University of Missouri 1973-77

- Isotopes: a)  $^{131}\text{I}$  for iodinations 1-3 mCi each time.  
b)  $^{125}\text{I}$  for iodinations 1-3 mCi each time.  
all c)  $[\alpha\text{-}^{32}\text{P}]\text{-ATP}$  for adenylate cyclase measurement - performed  
unsealed twice weekly. Monthly usage  $\approx$  100-300  $\mu\text{Ci}$ .  
d)  $[\text{}^3\text{H}]\text{-cAMP}$  for adenylate cyclase measurements - performed  
twice weekly. Monthly usage  $\approx$  10-50  $\mu\text{Ci}$ .

2) University of Virginia 1977-80

- Isotopes: a)  $^{125}\text{I}$  for iodinations 1-3 mCi each time.  
b)  $[\alpha\text{-}^{32}\text{P}]\text{-ATP}$  for adenylate cyclase measurements - twice  
weekly. Monthly usage  $\approx$  100-300  $\mu\text{Ci}$ .  
c)  $[\text{}^3\text{H}]\text{-cAMP}$  for adenylate cyclase measurements - twice weekly.  
Monthly usage  $\approx$  10-50  $\mu\text{Ci}$ .  
d)  $[\text{}^{125}\text{I}]\text{-cAMP}$  for cAMP measurements. Performed daily.  
Monthly usage  $\approx$  100-200  $\mu\text{Ci}$ .  
e)  $[\text{}^{125}\text{I}]\text{-cGMP}$  for cGMP measurements. Performed weekly.  
Monthly usage  $\approx$  20-60  $\mu\text{Ci}$ .  
f)  $[\text{}^{14}\text{C}]\text{-leucine}$  - for protein turnover measurements.  
Performed twice monthly. Monthly usage  $\approx$  2-10  $\mu\text{Ci}$ .  
g)  $[\text{}^{32}\text{P}]\text{ orthophosphate}$  - for protein phosphorylation  
studies. Monthly usage  $\approx$  200  $\mu\text{Ci}$ .

3) Southern Illinois University 1980-84

- Isotopes: a)  $^{125}\text{I}$  for iodinations 1-3 mCi each time.  
b)  $[\alpha\text{-}^{32}\text{P}]\text{-ATP}$  for adenylate cyclase measurements - twice  
all weekly. Monthly usage  $\approx$  100-300  $\mu\text{Ci}$ .  
unsealed c)  $[\text{}^3\text{H}]\text{-cAMP}$  for adenylate cyclase measurements - twice weekly.  
Monthly usage  $\approx$  10-50  $\mu\text{Ci}$ .  
d)  $[\text{}^{125}\text{I}]\text{-cAMP}$  for cAMP measurements. Performed daily.  
Monthly usage  $\approx$  100-200  $\mu\text{Ci}$ .  
e)  $[\text{}^{125}\text{I}]\text{-cGMP}$  for cGMP measurements. Performed weekly.  
Monthly usage  $\approx$  20-60  $\mu\text{Ci}$ .  
f)  $[\text{}^{125}\text{I}]\text{-6-ketoprostaglandin F}_{1\alpha}$  for measurement of  
prostacyclin. To be performed weekly. Monthly usage  $\approx$   
50-100  $\mu\text{Ci}$ .

Contamination record - absolutely none at any of the above institutions.