



Biotherapeutics™

Tri-State Biotherapeutics, Ltd.

Suite 211 • 2800 Winslow Avenue • Cincinnati, Ohio 45206 • (513) 559-1101

June 24, 1988

Evelyn R. Matson
Materials Licensing Section
U.S. NRC
Region III
799 Roosevelt Road
Glen Allyn, Ill. 60137

Re: Licence #34-25858-01

Please make the following amendments to the above Materials License. Remove Nancy Larson, add Dr. John Michael Kilpatrick as the Radiation Safety Officer, and Dr. Suzanne K. Beckner as an authorized user of radioactive materials (summary of formal training and experience enclosed).

Enclosed is a check for \$60.00 for the fee required in 10 CFR part 170, Section 107.31.

Sincerely,

Shirley A. Viner
Administrative Assistant

Enclosures

RECEIVED
JUN 27 1988
REGION III

July 24
1104
\$60.00
3 P
and
1/7/88
By: [Signature]

SEARCHED
SERIALIZED
INDEXED
FILED
Date Completed
By:

8905040322 880714
REG3 LIC30
34-25858-01 PDC

CONTROL NO. 85667

JUN 27 1988

Suzanne Beckner, Ph.D.

Ph.D., Biochemistry, 1980, Georgetown University

B.S., Biology, 1971, Hood College

A. Formal Training:

1971 - University of Virginia Radiation Safety Course - 16 hours.

1975 - Frederick Cancer Research Facility, National Cancer Institute
Radiation Safety Course - 8 hours.

1979 - Georgetown University, Radiation Safety, Health Physics Course -
Graduate Level - 26 hours.

1980 - National Institute of Health Radiation Safety Course - 8 hours.

1985 - Frederick Cancer Research Facility, National Cancer Institute
Radiation Safety Course - 8 hours

B. Experience:

1971-1975 University of Virginia
 Charlottesville, Va.
 Research Associate

^3H (1mCi/month)-metabolic labelling of nucleotides with
 cultured cells, cell fractionation

^{14}C (250uCi/month)-metabolic labelling of proteins in
 cultured cells, gel electrophoreses, in vitro
 protein synthesis

1975-1977 Frederick Cancer Research Facility
 National Cancer Institute
 Frederick, Md.
 Research Associate

^{32}P (2mCi/month)-viral nucleotide hybridization,
 isolation, gel electrophoresis

^3H (1mCi/month)-metabolic labelling of nucleotides in
 cultured cells

1977-1980 Georgetown University
 Washington, D.C.
 Graduate Student

^{125}I (3mCi/month)-iodination, purification of radio-
 labelled hormones, radioreceptor measurements,
 radio immune assay (RIA)

^{32}P (500uCi/month)-ADP-ribosylation of cell membrane
 proteins, gel electrophoresis, protein isolation and
 purification

^{14}C (1mCi/month)-metabolic labelling of proteins in
 cultured cells, isolation

CONTROL NO. 85567

1980-1985	National Institute of Arthritis, Diabetes, Digestive & Kidney Diseases National Institutes of Health Bethesda, Md. Senior Staff Fellow
^{125}I	(3mCi/month)-iodination, purification of radio- labelled hormones, radioreceptor measurements, radioimmune assays (RIA)
^{32}P	(2mCi/month)-biochemical measurements of ATP dependent enzymes in membrane preparations, product fractionation, isolation of phosphorylated proteins by gel electrophoresis and column chromatography
^3H	(100uCi/month)-metabolic labelling of nucleotides in cultured cells, radioimmune assay (RIA)
^{14}C	(500uCi/month)-metabolic labelling of proteins and sugars in cultured cells, isolation, thin layer chromatography
1985-1987	Frederick Cancer Research Facility National Cancer Institute Frederick, Md. Senior Scientist Principle Investigator on license for LAK cell Group
^{51}Cr	(1mCi/month)-measurement of cytotoxicity in intact cells (as in proposed use)
^{45}Ca	(100uCi/month)-measurement of Ca flux into intra- cellular organelles
^{32}P	(100uCi/month)-quantitation of nucleotide binding to subcellular organelles, isolation, fractionation
^3H	(100uCi/month)-metabolic labelling of nucleotides in cultured cells
^{125}I	(10uCi/month)-radioimmune assay RIA

SUPPLEMENT

U.S. NUCLEAR REGULATORY COMMISSION

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

1. NAME OF PROPOSED AUTHORIZED USER OR RADIATION SAFETY OFFICER John Michael Kilpatrick, Ph.D.	2. FOR PHYSICIANS, STATE OR TERRITORY WHERE LICENSED
---	--

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	
		CLOCK HOURS IN LECTURE OR LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE
a. RADIATION PHYSICS AND INSTRUMENTATION	University of South Carolina - 1973 Med. University of S. Carolina - 1977 University of Alabama at Birmingham - 1982	5	12 12
b. RADIATION PROTECTION	University of South Carolina - 1973 Med. University of S.C. - 1977, 1986 University of Alabama at Birmingham - 1982	5 3	12 8
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	University of South Carolina - 1973 Med. University of S. C. - 1977 University of Alabama at Birmingham - 1982	3	8 8
d. RADIATION BIOLOGY	Savannah River Ecology Lab Medical University of S.C. - 1977 University of Alabama at Birmingham - 1982	2 16	24 8 4
e. RADIOPHARMACEUTICAL CHEMISTRY			

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

ISOTOPE	mCi USED AT ONE TIME	LOCATION	CLOCK HOURS	TYPE OF USE
H ³	5	Medical Univ. of S.C.	50	Enzymatic assays, cytotoxicity assays
Cr ⁵¹	.5	Medical Univ. of S.C. Univ. of Alabama at Birmingham	10 20	Cytotoxicity assays
I ¹²⁵	1	Medical Univ. of S.C. Univ. of Alabama at Birmingham	1040 850	RIA, Protein Clearance in vivo, Protein structure studies
I ¹³¹	1	Univ. of Alabama at Birmingham	70	Protein Structure Studies

CONTROL NO. 85667