



THE
GEORGE
WASHINGTON
UNIVERSITY
MEDICAL CENTER

Washington, D.C. 20037

Office of Research and Sponsored Programs
2300 Eye Street, N.W.
202-676-2995

030-19445

September 13, 1988

U.S. Nuclear Regulatory Commission
Materials License Division
475 Allendale Road
King of Prussia, Pennsylvania 19406

Sir:

We would like to amend our Broad License (# 08-00216-22), our Irradiator License (# 08-00216-23) and our Pacemaker License (# SN 1099) to reflect the departure of Mark Selikson, Ph.D. as Radiation Safety Officer. Brian L. Miller, Assistant Radiation Safety Officer, will be acting Radiation Safety Officer. Attached is his current curriculum vitae. Dr. Alan Wasserman, Chairman of the Radiation Safety Committee for ~~2 years~~, will continue to provide overall program direction. In particular he will interface with faculty and staff concerning program policy issues.

Please contact me on 994-2995 if there are any questions or if you need further information.

Sincerely,

Michael J. Jackson, Ph.D.
Associate Dean of Research
George Washington University Medical Center

MJ/gjh(M5)

9001260047 BB120B
REG1 LIC30 PDR
08-00216-23

Log	Oct 152
Remitter	
Check No.	003 735 48
Amount	\$560
Fee Category	3E - \$120 applied (see 08-00216-22)
Type of Fee	and
Date Check Rec'd	10/14/88
Date Completed	10/21/88
By	Russler

109671

OFFICIAL RECORD COPY ML 10

27 SEP 1988

Brian L. Miller
14100 Weeping Willow Drive, #22
Silver Spring, Maryland 20906
301-871-5912

George Washington University Medical Center
Radiation Safety Office
2300 K Street, N.W., #201
Washington, D.C. 20037
202-994-2630

EMPLOYMENT:

November 1987 to
Present

Assistant Radiation Safety Officer George Washington University Medical Center

Responsible for the day to day maintenance of GWUMC's (a large medical and research, broad license facility) Radiation Safety program. Supervision of full time technical staff and part time support personnel. Development of new procedures and continuing review of existing procedures to ensure compliance with applicable federal and local regulations.

August 1987 to
Present

Consulting Health Physicist Krueger-Gilbert Health Physics, Inc.

Perform x-ray compliance tests. Review and generate survey protocols for clinical nuclear medicine and radiology clients. Assisted in the design of KGHP, Inc.'s radioactive material storage area. Assisted in protocol development for the counting of sealed source leak tests. Presently developing procedures for and assuming complete control of a Radon Testing Division for Krueger-Gilbert Health Physics, Inc.

January 1987 to
November 1987

Health Physics Technologist Health Physics Services, Inc.

Assisted the Washington Hospital Center Radiation Safety Officer and the on-site Health Physicist in maintaining the Radiation Safety program. Responsible for daily and weekly surveys of the Nuclear Medicine Department and related areas. Duties also included: monthly survey of the Hyman Research Building, operating and maintaining records for the personnel monitoring program, assisting with x-ray compliance testing and assuring proper radioactive waste disposal. The Washington Hospital Center is a large medical user of radioisotopes licensed by the N.R.C. under 10 CFR 35. The Hospital Center uses these isotopes for diagnosis, teletherapy, nuclear pacemakers, and limited research.

September 1986 to
January 1987

Laboratory Aid National Health Laboratories

Aided Radio-Immunoassay Technicians in performing blood tests using radioactive labeling techniques. Duties included: Pipetting, operation of gamma counters, data entry, verification of results, performing T₃, T₄ and T₇ tests and documenting Quality Assurance and Control.

TECHNICAL:

July 1987 to
Present

Computerized Health Physics System

Presently developing a computerized system to assist Health Physicists in performing routine tasks such as: X-ray shielding requirements, x-ray and radionuclide dose estimates, x-ray compliance tests and personnel dosimetry.

TECHNICAL:
(continued)

January 1984 to
May 1984

Remote Radiation Detection Project

Responsible for designing and constructing a machine language controlled system enabling the Hero-I robot to recognize and pinpoint radiation sources. Ability to trouble-shoot pre-existing and self-designed hardware and software required. The capacity to change signals from digital to analog and from analog to digital formats essential.

EDUCATION:

**University of Pittsburgh
Pittsburgh, PA:**

Earned 13 credits toward a M.S. in Health Physics
GPA:
3.00

Related Courses: Nuclear Regulatory Concerns and
Medical Physics, Radiochemical Analysis,
Environmental Radiation Analysis, Biological Effects of
Non-ionizing Radiation.

**Pennsylvania State University
University Park, PA:**

B.S. in Engineering
Major: Nuclear Engineering

Graduated: August 1984

Related Courses: Radiological Safety, Computer
Control of Mechanical Systems, Reactor Design.

Member of Alpha Lambda Delta (Freshman Honors
Fraternity)

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

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER

Brian L. Miller

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	See Attachment I		
b. RADIATION PROTECTION	See Attachment I		
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	See Attachment I		
d. RADIATION BIOLOGY	See Attachment I		
e. RADIOPHARMACEUTICAL CHEMISTRY	See Attachment I		

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
		SEE ATTACHMENT II		

**# 4 -- TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING
TECHNIQUES**

FIELD OF TRAINING	LOCATION & DATES OF TRAINING	TYPE & LENGTH OF TRAINING	
		LECTURE/ LABORATORY COURSES (HOURS)	SUPERVISED LABORATORY EXPERIENCE (HOURS)
RADIATION PHYSICS AND INST- RUMENTATION	The Pennsylvania State University The University of Pittsburgh	15 Semester Hours (approx. 225 hours) 3 Semester Hours (approx. 45 hours)	3 Semester Hours (approx. 45 hours)
RADIATION PROTECTION	The Pennsylvania State University The University of Pittsburgh	6 Semester Hours (approx. 90 hours) 3 Semester Hours (approx. 45 hours)	
MATHEMATICS PERTAINING TO THE USE AND MEASURE- MENT OF RADIOACT- TIVITY	The Pennsylvania State University The University of Pittsburgh	6 Semester Hours (approx. 90 hours) 3 Semester Hours (approx. 45 hours)	
RADIATION BIOLOGY	The Pennsylvania State University The University of Pittsburgh	3 Semester Hours (approx. 45 hours) 3 Semester Hours (approx. 45 hours)	
RADIOPHARM- ACEUTICAL CHEMISTRY	The University of Pittsburgh	3 Semester Hours (approx. 45 hours)	1 Semester Hour (approx. 15 hours)

5 -- EXPERIENCE WITH RADIATION

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
235U & 238U	Amounts associated w/ a TRIGA Reactor	The Pennsylvania State University Breazalle Research Reactor	9/82 - 8/84	Operation of and Experiments with a TRIGA type research reactor
Nat U	2500 kg	The Pennsylvania State University Graphite Pile Sub-Critical Reactor	9/83 - 12/83	Experimentation with Subcritical Reactor
PuBe	16 x 4g	The Pennsylvania State University	9/83 - 12/83	Same as Above
Th, U, Pu	μCi amts.	The University of Pittsburgh	9/85 - 12/86	Radiochemical analysis of reactor coolant sludge.
125I	5 mCi (RIA Kits)	National Health Laboratories Vienna Virginia	8/86 - 1/87	RIA (T2, T3, T4) Tests
99Mo - 99mTc	5 to 10 Ci	The Washington Hospital Center Washington D.C.	1/87 - 11/87	Radiation Safety Tests associated with Technetium Generators
137Cs	25 - 70 mCi	Same as above	Same as above	Radiation Safety Tests associated with Brachy Therapy
131I	150 mCi	Same as above	Same as above	Radiation Safety Tests associated with Thyroid ablation Therapy
125I	250 mCi	Same as above	Same as above	Radiation Safety Tests associated with Bone Densitometers.
137Cs	100 mCi	The George Washington University Medical Center	11/87 - Present	Surveymeter Calib. Source
153Gd	1 Ci	Same as above	Same as above	Radiation Safety proc. associated with a Bone mineral analyser
137Cs	2 kCi	Same as above	Same as above	Radiation Safety proc. associated with irradiators.



THE
GEORGE
WASHINGTON
UNIVERSITY
MEDICAL CENTER

The H. B. Burns Memorial Building / 2150 Pennsylvania Avenue, N.W. / Washington, D.C. 20037

*Department of Medicine
Division of Cardiology
(202) 994-0213*

September 19, 1988

U.S. Nuclear Regulatory
Materials License Division
475 Allendale Road
King of Prussia, Pennsylvania 19406

Sir:

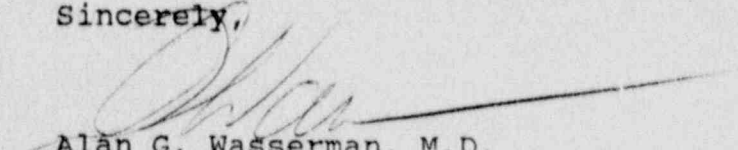
I am writing in support of the appointment of Mr. Brian L. Miller as Acting Radiation Safety Officer at George Washington University. I have been chairman of the Radiation Safety Committee at George Washington University for the past 2 years. As you have been informed, Dr. Mark Selikson will be leaving our University on October 1, 1988. The Executive Committee of the Radiation Safety Committee on September 14, 1988 unanimously approved the selection of Mr. Miller as acting Safety Officer.

I have known Mr. Miller for approximately one year during his tenure as the Assistant Radiation Safety Officer. He has been responsible for the supervision of the technical staff and instrumental in ensuring compliance with federal and local regulations. We feel that he has the education and background to handle this new position without difficulty.

To guarantee his success while we actively recruit a permanent replacement for Dr. Selikson, I have told Mr. Miller that he will have mine and the Committees full support. I will be readily available for consultation at anytime and will spend as much time as needed in ensuring that our Radiation Safety program remains one of excellence.

I would hope you will review this request favorably and I would be glad to discuss this further if necessary.

Sincerely,


Alan G. Wasserman, M.D.
Chairman,
Radiation Safety Committee



THE
GEORGE
WASHINGTON
UNIVERSITY
MEDICAL CENTER

Washington, D.C. 20037

Office of Research and Sponsored Programs
2300 Eye Street, N.W.
202-676-2995

September 23, 1988

U.S. Nuclear Regulatory
Materials License Division
475 Allendale Road
King of Prussia, Pennsylvania 19406

Sir:

As you have been informed, Dr. Mark Selikson will be leaving our University. While we actively recruit a permanent replacement for Dr. Selikson, we would like to appoint Mr. Brian L. Miller as acting Radiation Safety Officer.

Mr. Miller has been employed at George Washington University Medical Center for approximately one (1) year as Assistant Radiation Safety Officer. During this period he has been responsible for the supervision of the Radiation Safety Office's technical staff and has played an integral part in the policy review and development undertaken by the Radiation Safety Office.

I concur with the Radiation Safety Committee Executive Group's unanimous decision to nominate Mr. Miller as acting Radiation Safety Officer. In order that his tenure in this position proceed as smoothly as possible, the chairman of the Radiation Safety Committee, Dr. Alan Wasserman, and I have pledged our full support for him. In addition, we are willing to devote as much time as necessary to ensure continued smooth operation of the radiation safety program.

It is my sincere hope that you will respond favorably to this request and allow Mr. Miller's appointment as acting Radiation Safety Officer. I would be glad to discuss this further if necessary.

Sincerely,

Michael J. Jackson, Ph. D.
Associate Dean of Research
George Washington University Medical Center

MJJ/gjh (EC5)



THE
GEORGE
WASHINGTON
UNIVERSITY
MEDICAL CENTER

Warwick Building / 2300 K Street, N.W. / Washington, D.C. 20037

Radiation Safety Office
(202) 994-2630

September 22, 1988

U.S. Nuclear Regulatory Commission
Materials License Division
475 Allendale Road
King of Prussia, Pennsylvania 19406

Sir:

The enclosed check number 373948 represents payment for the amendmends to our Broad and Irradiation License as stated in our letter of September 19, as well as payment for an inspection for which we were billed under invoice number 1389B in the amount of \$320.00. Please process accordingly.

If there are any questions or problems, please contact us on (202) 994-2630.

Sincerely,

Glenda Hall
Executive Aide
Radiation Safety Office
George Washington University Medical Center

GJH (O9)

Enclosure

UNITED STATES
NUCLEAR REGULATORY COMMISSION
INSPECTION FEE INVOICE

INVOICE NUMBER
1389B

INVOICE DATE
09-12-1988

LICENSEE NAME AND ADDRESS
GEORGE WASHINGTON UNIVERSITY MED
2300 K ST N.W.
WASHINGTON DC 20037
ATT: DR.MARK SELIKSON RSO

LICENSE NUMBER
08-00216-23

<u>DATE OF INSPECTION</u>	<u>INSPECTION REPORT NO.</u>	<u>LIC. FEE CATEGORY</u>	<u>CODE</u>	<u>AMOUNT DUE</u>
01/22/88	8801	3E	AA905 INS-NR	\$ 320.00

TERMS AND CONDITIONS ARE ATTACHED.

MAKE CHECKS PAYABLE TO :

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF RESOURCE MANAGEMENT
DIVISION OF ACCOUNTING AND FINANCE
WASHINGTON D.C. 20555

OFFICIAL RECORD COPY ML 10

109671

27 SEP 1988



THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, D.C. 20052

62-26
311

CHECK NO
00373948

373948

003-08

FIVE HUNDRED SIXTY DOLLARS NO CENTS

PAY TO THE ORDER OF
US NUCLEAR REGULATORY COMM
OFFICE OF RESOURCE MANAGEMENT
DIVISION OF ACCT&FINANCE
WASHINGTON DC 20555

DATE
9-20-88

CHECK AMOUNT
*****560.00

Charles E. Dill
VICE PRESIDENT AND TREASURER

THE RIGGS NATIONAL BANK
WASHINGTON, D.C.
DRAWN ON
MANUFACTURERS' HANOVER BANK (DELAWARE)
919 MARKET STREET
WILMINGTON, DELAWARE 19801

⑈00373948⑈ ⑆031100267⑆ 6301830034 508⑈

THE GEORGE WASHINGTON UNIVERSITY
ACCOUNTS PAYABLE OFFICE
WASHINGTON, D.C. 20052
(202) 994-6540

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW
IF NOT CORRECT, PLEASE NOTIFY US PROMPTLY

DATE
9-20-88
CHECK NO
00373948
GW P1 0009000295

DATE	INVOICE OR CREDIT MEMO NUMBER	TYPE	DESCRIPTION	REFERENCE NO.	GROSS	AMOUNTS DISCOUNTS	NET
91288	1389B			9455013	32000		32000
91288	091288			9455012	24000		24000
TOTAL ▶					56000		56000

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03510
STATUS CODE: 0
FEE CATEGORY: 3E
EXP. DATE: 19920131
FEE COMMENTS: -----
.....

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

LICENSE FEE TRANSMITTAL

A. REGION Y

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: GEORGE WASHINGTON UNIV. MEDICAL CTR
RECEIVED DATE: 880927
DOCKET NO: 3019445
CONTROL NO.: 109671
LICENSE NO.: 08-00216-23
ACTION TYPE: AMENDMENT

2. FEE ATTACHED \$560
AMOUNT: 560
CHECK NO.: 00373948

3. COMMENTS

See 109670, 71, + 72
SIGNED DJ
DATE 10/17/88

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED 1 1)

1. FEE CATEGORY AND AMOUNT: 3E (8/10)

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT ✓
RENEWAL _____
LICENSE _____

3. OTHER _____

SIGNED M. Russell
DATE 10/2/88