



# MASSACHUSETTS GENERAL HOSPITAL

J. ROBERT BUCHANAN, M.D.  
General Director

030-08948

X

Boston, 02114  
Telephone (617) 726-2425

Cable Address "Massgenral"

August 2, 1988

U.S. Nuclear Regulatory Commission  
Region I  
Nuclear Materials Safety Section  
415 Allendale Road  
King of Prussia, PA 19406

Log	Aug. 12
Remitter	
Check No.	6224378
Amount	\$170
Fee Category	3E
Type of Fee	Renewal
Date Check Rec'd.	8/16/88
Date Completed	8/16/88
By:	S. Kimberly

28 AUG 11 1988

Lic. #20-03814-81  
Expiration date: 30 September 1988  
Program Code: 03510  
Fee: \$170.00

To Whom It May Concern:

In order to simplify our license renewal procedures and to save paper work, we wish to apply for renewal of Cell Irradiator License #20-03814-81 by using the "short form" alternative option as described in your Instructions For Preparation of Applications For License Renewal.

The information requested follows:

- 1.) Review your current license to determine the information concerning radionuclides accurately represents our current and anticipated program;
  - a.) Radionuclides: No change
  - b.) Chemical and/or physical forms of the radionuclides: No change.
  - c.) Quantities we wish to possess: No change.
  - d.) Uses for the radionuclides: No change.
- 2.) Review the documents we have submitted in the past to determine that the information in them is up-to-date and accurately reflects the following;
  - a.) Management control program: (1) The Radiation Safety Office is now a part of the Massachusetts General Hospital (MGH) Safety Department. On 5 July 1988, a new head of this Department

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REG1 LIC30  
20-03814-81 PDR

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109362  
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ML10.

"OFFICIAL RECORD COPY"

began employment. A copy of the announcement memo to the MGH Community from the Radiation Safety Administrator, Ms. Spicer, is contained in Appendix I. As indicated, Mr. Larson has radiation safety experience.

(2) The MGH Radiation Safety Committee now issues permits for cell irradiator authorized users. These permits have a prefix "CI" to differentiate them from permits used under the Broad License. Appendix II illustrates such a permit (#CI-87-1).

b.) Facilities: Amendment No. 05 to this License dated 25 January 1988 refers to a new facility, MGH-East. The phone number of the Radiation Safety Office at this facility is 617-726-5680.

c.) Equipment: No change.

d.) Radiation Safety Procedures: (Reg. Guide 10.9).

(1) License information - No change.

(2) Name and mailing address of applicant - No change.

(3) Locations of Use - No change.

(4) Person to be contacted about application:  
Ms. Maryanne Spicer, Director of Therapeutic Services  
MGH Administration  
Blossom Court  
Boston, Massachusetts 02114  
#617-726-5190

(5) Material to be possessed - No change.

(6) Purpose for which licensed material will be used -  
No change.

(7) Individuals Responsible for radiation safety program; their training and experience - No change.

(8) Training Provided to other users - The MGH has an extensive training program which has previously been described under this license. Recently we have included a practical session for users. Appendix III shows documentation for such training on the "Mark I Cesium Source on White 4." Other cell irradiator permittees have similar training programs.

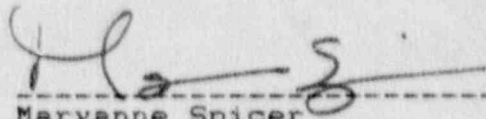
(9) Facilities and Equipment - No change.

(10) Radiation Safety Program - No change.

- (11) Waste Management - No change.
- (12) License Fees - A check for \$170 is enclosed for payment of License #20-03814-81 renewal fee.
- (13) Certification - Ms. Maryanne Spicer, Radiation Safety Administration Representative, has affixed her signature below.

I trust the enclosed material has satisfied the NRC renewal requirements.

Sincerely,

  
-----  
Maryanne Spicer  
Director Of Therapeutic Services

cc: F.P. Castronovo, Jr., Ph.D.  
E.W. Webster, Ph.D.  
S. Larson, M.S.

APPENDIX I

Memo Informing MGH Personnel Of New Safety Director



# MASSACHUSETTS GENERAL HOSPITAL

J. ROBERT BUCHANAN, M.D.  
General Director

Boston, 02114  
Telephone (617) 726-5109

Cable Address "Massgenral"

June 13, 1988

TO: Administrative Representatives, Chiefs of Service,  
Department Heads and Principal Investigators,  
Members of the Safety Committee

FROM: *WMS* Maryanne Spicer, Director of Therapeutic Services

RE: Director of Safety

It is with pleasure that I write to inform you of the appointment of Mr. Stephen B. Larson as Director of Safety to be effective July 5, 1988. Mr. Larson presently holds the position of Director, Environmental Health and Safety, Northeastern University. He is a graduate of the Universities of New Hampshire and Iowa. Previous employments have included University of Texas at Galveston, Medical Branch, University of Massachusetts Medical Center, and the University of Iowa. He is experienced in environmental, biological and radiation safety, hazardous waste management and is an industrial hygienist. His unique combination of comprehensive skills and interests brought his candidacy the enthusiastic support of the search committee representing the many areas of the hospital community. I hope that you will join me in welcoming Mr. Larson and assist him during his introduction to the MGH.

MAS:lh

APPENDIX II

Typical Form Used To Document Practical Experience With A  
Cell Irradiator

TO: Frank Castronovo  
Radiation Safety Office  
WEH-3  
Massachusetts General Hospital

FROM: Karla Stenger  
Transplantation Unit  
White-4  
Massachusetts General Hospital

Date 7/18/88

The following individuals have undergone training and received safety instructions for the Mark I Cesium Source on White 4.

1. Tatsukiko Hayashi
  2. Robin Lincoln
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_
  6. \_\_\_\_\_
  7. \_\_\_\_\_
  8. \_\_\_\_\_
- } Si. Hauser permit 7/16/88

Sincerely,

*Karla S. Stenger*  
Karla Stenger

KS/kcd

APPENDIX III

Cell Irradiator Permit



## MASSACHUSETTS GENERAL HOSPITAL

Cs-137 Cell Irradiator Permit  
(Non-Human Use)

A permit is hereby issued authorizing the individual(s) named herein to receive, acquire, own, possess, transfer and import radioisotopes listed below and to use such radioisotopes for the purpose(s) and at the place(s) designated below. This permit is subject to all applicable rules and regulations of the Hospital and in particular to the provisions of Title 10, Part 20, Code of Federal Regulations, Chapter 1 "Standards for Protection Against Radiation," and of the Rules and Regulations to Control the Radiation Hazards of Radioactive Materials and of Machines which Emit Ionizing Radiation adopted by the Department of Public Health, Commonwealth of Massachusetts. Radioisotopes specified herein shall be used only on the Hospital premises and by, or under the supervision of, the named individuals.

Radioisotopes for use in humans shall be acquired from a supplier who certifies the pharmaceutical quality and assay of such material. If radioisotopes are prepared within the Hospital for human use, the methods of establishing pharmaceutical quality shall be approved by the Pharmacy Committee.

## INDIVIDUAL USER(S)

- |  |                                  |  |
|--|----------------------------------|--|
| 1. Name                                    |                                  | 3. Permit Number                             |
| Hugh Auchincloss, M.D.                     |                                  | CI-87-1                                      |
| 2. Department or Laboratory                | Location(s)                      | 4. Expiration Date                           |
| Transplant Unit                            | Cox 634                          | 11-30-89                                     |
| 5. Radioisotopes (element and mass number) | 6. Chemical and/or physical form | 7. Maximum possession amount at any one time |
| a. Cesium-137                              | a. sealed source                 | a. 1200 Curies                               |

## 8. Authorized Use

Purpose: treatment of lymphoid cells for use as in vitro stimulators.

Others Working on Project: R. Pierson, R. Ghobrial, S. Shea and L. Borud

Irradiator: Gammacell  
Model: 1000  
Manufacturer: AECL

Approved by:

  
Chairman, RSC/RDRC Committees

  
General Director, Mass. General Hospital

Date Issued: November 20, 1987

Hugh Auchincloss, M.D.

MASSACHUSETTS GENERAL HOSPITAL  
Cs-137 Cell Irradiator Permit  
(Non-Human Use)

Page 1 of 1

Permit No. CI-87-1

Supplementary Sheet

Amendment No. 1

5. Radioisotopes (element  
and mass number)

6. Chemical and/or  
physical form

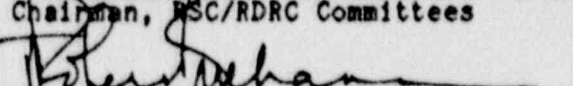
7. Maximum possession  
amount at any one time

This permit is amended to include the use of the Cesium-137 Irradiator on White 4.

Irradiator: Mark I  
Model: G810  
Activity: 1600 curies  
Manufacturer: Shepherd

Approved by:

  
Chairman, RSC/RDRC Committees

  
General Director, Mass. General Hospital

Date: December 18, 1987

MASSACHUSETTS GENERAL HOSPITAL  
Cs-137 Cell Irradiator Permit  
(Non-Human Use)

"PERSONNEL REVISION"

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Permit #CI-87-1

Permit Holder: Hugh Auchincloss, M.D.

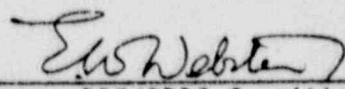
Authorized Users Under This Permit

R. Pierson  
R. Ghobrial  
S. Shea

Deletions

L. Borud

Approved by:

  
Chairman, RSC/RDRC Committees

Date: FEB 26 1988

109362

(FOR LFMS USE)  
INFORMATION FROM LTS  
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BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

: PROGRAM CODE: 03510  
: STATUS CODE: 2  
: FEE CATEGORY: 3E  
: EXP. DATE: 19880930  
: FEE COMMENTS: -----  
: .....

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED  
APPLICANT/LICENSEE: MASSACHUSETTS GENERAL HOSPITAL  
RECEIVED DATE: 880803  
DOCKET NO: 3008948  
CONTROL NO.: 109362  
LICENSE NO.: 20-03894-81  
ACTION TYPE: RENEWAL

2. FEE ATTACHED  
AMOUNT: \$170  
CHECK NO.: 6214578

3. COMMENTS

SIGNED [Signature]  
DATE 8/8/88

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

1. FEE CATEGORY AND AMOUNT: 3E \$170

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:  
AMENDMENT -----  
RENEWAL / -----  
LICENSE -----

3. OTHER -----  
-----

SIGNED [Signature]  
DATE 8/16/88