

## MATERIALS LICENSE

Amendment No. 15

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

## Licensee

1. Massachusetts Eye and Ear Infirmary  
2. 243 Charles Street  
Boston, Massachusetts 02114

In accordance with application dated  
November 30, 1987,

3. License number 20-01212-10 is amended in  
its entirety to read as follows:

4. Expiration date March 31, 1994

5. Docket or  
Reference No 030-01833

6. Byproduct, source, and/or  
special nuclear material

7. Chemical and/or physical  
form

8. Maximum amount that licensee  
may possess at any one time  
under this license

- A. Hydrogen 3  
B. Carbon 14  
C. Phosphorus 32  
D. Potassium 42  
E. Sulfur 35  
F. Calcium 45  
G. Rubidium 86  
H. Sodium 24  
I. Iodine 125  
J. Phosphorus 33  
K. Chromium 51

- A. Any  
B. Any  
C. Any  
D. Any  
E. Any  
F. Any  
G. Any  
H. Any  
I. Any  
J. Any  
K. Any

- A. 250 millicuries  
B. 20 millicuries  
C. 20 millicuries  
D. 20 millicuries  
E. 20 millicuries  
F. 10 millicuries  
G. 10 millicuries  
H. 10 millicuries  
I. 10 millicuries  
J. 10 millicuries  
K. 20 millicuries

## 9. Authorized use

- A. through K. Research and development as defined in Section 30.4(q) of 10 CFR Part 30;  
animal studies.

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## CONDITIONS

10. Licensed material shall be used only at the licensee's facilities at 243 Charles Street, Boston, Massachusetts.

11. A. Licensed material shall be used by, or under the supervision of, Peter John Anderson, Ph.D., Ross B. Edwards, Ph.D., Dorothy J. Roof, Ph.D., John K. Wolfe, Ph.D., Thaddeus P. Dryja, Ph.D., Joyce Rappaport, B.S., Emil Mitchel Opremcak, M.D., Susan Schmidt, Ph.D., Margaret E. Sherwood, John J. Guinan, Jr., Ph.D., Edward V. Crean, Ph.D., David Yandell, DSc, Terri McGee, Valerie Grandin, Usha P. Andley, Ph.D., or Stanley Schein, M.D.

- B. Licensed material shall be used by, or under the supervision of Peter A. Wells except that Iodine 125 may only be used in sealed source(s) containing less than 2 millicuries per source.

- C. The Radiation Safety Officer for this license is John P. McGillivray.

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MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License number

20-01212-10

Docket or Reference number

030-01833

Amendment No. 13

(Continued)

## CONDITIONS

12. Licensed material shall not be used in or on human beings.
13. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 2 years from the date of each inventory.
14. Experimental animals administered licensed materials or their products shall not be used for human consumption.
15. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:
  - A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
  - B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
16. The licensee shall establish restricted area action levels for removable contamination for low risk beta or photon emitters and high risk beta or photon emitters of no higher than 22,000 disintegrations per minute per 100 square centimeters and 2,200 dpm/100cm<sup>2</sup> respectively. When the established action limits are exceeded the licensee shall take action to decontaminate and resurvey the area until the action limits are not exceeded.
17. The licensee shall maintain at their facilities at 243 Charles Street, Boston, Massachusetts, records of both radioactive contamination and radiation dose rate area surveys to comply with NRC regulations and/or the conditions of this license. Such records shall include the identification of the individual who performed the survey, the date of the survey, and the instrument used to make the survey or analyze the samples, in addition to the results of the survey.

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SUPPLEMENTARY SHEET

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Amendment No. 13

(Continued)

## CONDITIONS

18. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated November 30, 1987
- B. Letter dated February 25, 1988
- C. Letter dated May 10, 1988
- D. Letter dated August 3, 1988
- E. Letter dated December 6, 1988

Date

MAR 10 1989

For the U.S. Nuclear Regulatory Commission

Original Signed By:

By

Thomas K. Thompson

Nuclear Materials Safety Branch  
Region I

King of Prussia, Pennsylvania 19406