

MATERIALS LICENSE

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, 36, 37, 39, 40, 70 and 71, 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.

<p style="text-align: center;">Licensee</p> <p>1. Department of Health & Human Services National Hansen's Disease Program USPHS, Laboratory Research Branch at LSU-SVM</p> <p>2. Skip Bertman Drive Baton Rouge, LA 70803</p>		<p>In accordance with letter dated February 02, 2018</p>	<p>4. Expiration Date: July 31, 2022</p>
		<p>3. License number: 17-14996-01 is amended in its entirety to read as follows:</p>	<p>5. Docket No.: 030-08380 Reference No.:</p>
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Hydrogen-3</p> <p>B. Carbon-14</p> <p>C. Iodine-131</p> <p>D. Iodine-125</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Any</p> <p>D. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 100 millicuries total</p> <p>B. 90 millicuries total</p> <p>C. 10 millicuries total</p> <p>D. 20 millicuries total</p>	<p>9. Authorized use</p> <p>A. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.</p> <p>B. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.</p> <p>C. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.</p> <p>D. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.</p>

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
17-14996-01

Docket or Reference Number
030-08380

Amendment No. 25

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	9. Authorized use
E. Phosphorus-32	E. Any	E. 10 millicuries total	E. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.
F. Sulfur-35	F. Any	F. 10 millicuries total	F. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.
G. Chromium-51	G. Any	G. 10 millicuries total	G. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.
H. Phosphorus-33	H. Any	H. 30 millicuries total	H. To be used in in vitro laboratory and diagnostic studies, chemical synthesis of labeled compounds, protein labeling, and animal studies.
I. Cesium-137	I. Sealed Sources	I. 100 microcuries total	I. To be used in instrument calibration.

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at Laboratory Research Branch, National Hansen's Disease Programs at Louisiana State University, Skip Bertman Drive, Baton Rouge, Louisiana, 70803.
11. Licensed material shall only be used by, or under the supervision of, Linda B. Adams, Ph.D., Ramanuj Lahiri, Ph.D., or Maria T. Pena, D.V.M., Ph.D.
12. The Radiation Safety Officer (RSO) for this license is Ramanuj Lahiri, Ph.D.

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13. Experimental animals, or the products from experimental animals, that have been administered licensed material shall not be used for human consumption.
14. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.
15. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
16. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 3 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
17. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash provided:
- A. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated, except for radiation labels on materials that are within containers and that will be managed as biohazard waste after they have been released from the licensee.
 - B. A record of each such disposal permitted under this license condition shall be retained for 3 years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.

