

U.S. NUCLEAR REGULATORY COMMISSION

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, 39, 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.

PL 03620

317439

<p style="text-align: center;">Licensee</p> <p>1. Kirksville College of Osteopathic Medicine A. T. Still University of Health Sciences</p> <p>2. 800 West Jefferson Kirksville, MO 63501</p>	<p>In accordance with letter dated August 27, 2008,</p> <p>3. License number 24-17210-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date May 31, 2015</p> <hr/> <p>5. Docket No. 030-12369 Reference No.</p>
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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. Carbon-14	A. Bound/non-volatile	A. 30 millicuries
B. Indium-114m	B. Bound/non-volatile	B. 25 millicuries
C. Hydrogen-3	C. Bound/non-volatile	C. 400 millicuries
D. Phosphorus-32	D. Bound/non-volatile	D. 100 millicuries
E. Rubidium-86	E. Bound/non-volatile	E. 15 millicuries
F. Chromium-51	F. Bound/non-volatile	F. 30 millicuries
G. Tin-113	G. Bound/non-volatile	G. 10 millicuries
H. Gadolinium-153	H. Bound/non-volatile	H. 3 millicuries
I. Niobium-95	I. Bound/non-volatile	I. 10 millicuries
J. Scandium-46	J. Bound/non-volatile	J. 10 millicuries
K. Strontium-85	K. Bound/non-volatile	K. 10 millicuries
L. Ruthenium-103	L. Bound/non-volatile	L. 10 millicuries
M. Cerium-141	M. Bound/non-volatile	M. 10 millicuries
N. Iodine-131	N. Bound/non-volatile	N. 30 millicuries
O. Iodine-125	O. Bound/non-volatile	O. 75 millicuries
P. Sulfur-35	P. Bound/non-volatile	P. 50 millicuries
Q. Any byproduct material identified in 10 CFR 31.11	Q. Prepackaged Kits	Q. 5 millicuries

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
21-32536-01

Docket or Reference Number
030-36661

Amendment No. 17

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|---|----------------------------------|--|
| 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 |
| R. Technetium-99m | R. Bound/non-volatile | R. 25 millicuries |
| S. Phosphorus-33 | S. Bound/non-volatile | S. 10 millicuries |

9. Authorized Use:

A. through S. To be used for laboratory research, animal studies and in-vitro studies.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 800 West Jefferson Street, Kirksville, Missouri.
11. A. Licensed material listed shall be used by, or under the supervision of the following individuals for the materials and uses indicated:

Authorized Users

Material and Use

Richard Cenedella, Ph.D.	All
Lex Towns, Ph.D	All
John R. Martin, Ph.D.	H-3
Orin Mock, Ph.D.	All
Robert Baer, Ph.D	All
Nandor Uray, Ph.D.	All
Charles Fleschner, Ph.D.	All
James Lewis Cox, Ph.D.	All (excluding iodine-125 and iodine-131)
Timothy P. Geisbuhler, Ph.D.	All
James Rhodes, Ph.D.	All
Neil J. Sargentini, Ph.D.	All
Neil R. Chamberlin, Ph.D.	All
William L. Sexton, Ph.D.	All

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
24-17210-01Docket or Reference Number
030-12369

Amendment No. 16

Melissa K. Stuart, Ph.D.

All

- B. The Radiation Safety Officer for this license is Neil J. Sargentini, Ph.D.
12. Licensed material shall not used in or on human beings except as provided otherwise by specific condition of this license.
13. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
14. The licensee is authorized to hold radioactive material with physical half-life of less than 120 days for decay-in-storage before disposal in ordinary trash provided:
- A. the waste is held in storage until the radiation exposure rate cannot be distinguished from background radiation levels;
 - B. the waste is monitored at the container's surface and with no interposed shielding;
 - C. the waste is monitored with the appropriate radiation detection instrument set at its most sensitive scale;
 - D. all radiation labels are removed or obliterated (except labels on materials that are within containers and will be managed as biomedical waste after release from the licensee); and
 - E. records of the disposal are maintained.
15. Pursuant to 10 CFR 20.1302(b) and 10 CFR 20.2002, the licensee is authorized to dispose of licensed material by incineration, provided the gaseous effluent from incineration does not exceed limits specified for air in Appendix B, Table II, 10 CFR Part 20.
16. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
17. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10CFR 30.35(d) for establishing decommissioning financial assurance.

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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 U.S. 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.

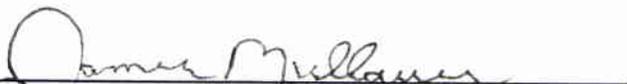
- A. Application dated January 7, 2005; and
- B. Letter dated August 27, 2008.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

OCT 07 2008

Date _____

By



James R. Mullauer, M.H.S.
Materials Licensing Branch
Region III