

**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, 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.

<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 Street Kirksville, Missouri 63501</p>	<p>In accordance with letter dated <b>March 19, 2015,</b></p> <p>3. License No. 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>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Carbon-14</p> <p>B. Indium-114m</p> <p>C. Hydrogen-3</p> <p>D. Phosphorus-32</p> <p>E. Rubidium-86</p> <p>F. Chromium-51</p> <p>G. Tin-113</p> <p>H. Gadolinium-153</p> <p>I. Niobium-95</p> <p>J. Scandium-46</p> <p>K. Strontium-85</p> <p>L. Ruthenium-103</p> <p>M. Cerium-141</p> <p>N. Iodine-131</p> <p>O. Iodine-125</p> <p>P. Sulfur-35</p> <p>Q. Any byproduct material identified in 10 CFR 31.11</p> <p>R. Technetium-99m</p>	<p>7. Chemical and/or physical form</p> <p>A. Bound/non-volatile</p> <p>B. Bound/non-volatile</p> <p>C. Bound/non-volatile</p> <p>D. Bound/non-volatile</p> <p>E. Bound/non-volatile</p> <p>F. Bound/non-volatile</p> <p>G. Bound/non-volatile</p> <p>H. Bound/non-volatile</p> <p>I. Bound/non-volatile</p> <p>J. Bound/non-volatile</p> <p>K. Bound/non-volatile</p> <p>L. Bound/non-volatile</p> <p>M. Bound/non-volatile</p> <p>N. Bound/non-volatile</p> <p>O. Bound/non-volatile</p> <p>P. Bound/non-volatile</p> <p>Q. Prepackaged kits</p> <p>R. Bound/non-volatile</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 30 millicuries</p> <p>B. 25 millicuries</p> <p>C. 400 millicuries</p> <p>D. 100 millicuries</p> <p>E. 15 millicuries</p> <p>F. 30 millicuries</p> <p>G. 10 millicuries</p> <p>H. 3 millicuries</p> <p>I. 10 millicuries</p> <p>J. 10 millicuries</p> <p>K. 10 millicuries</p> <p>L. 10 millicuries</p> <p>M. 10 millicuries</p> <p>N. 30 millicuries</p> <p>O. 75 millicuries</p> <p>P. 50 millicuries</p> <p>Q. 5 millicuries</p> <p>R. 25 millicuries</p>

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License No.

24-17210-01

Docket or Reference No.

030-12369

**Amendment No. 18**

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 or stored only at the licensee's facilities located at 800 West Jefferson Street, Kirksville, Missouri.
11. The Radiation Safety Officer (RSO) for this license is **Vineet K. Singh, Ph.D.**
12. Licensed material listed in Item 6 above is authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized UserMaterials and Use

Robert Baer, 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

Neil J. Sargentini, Ph.D.

All

Neil R. Chamberlin, Ph.D.

All

William L. Sexton, Ph.D.

All

Melissa K. Stuart, Ph.D.

All

**Vineet K. Singh, Ph.D.****All**

13. Licensed material shall not be used in or on humans except as provided otherwise by specific condition of this license.
14. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.

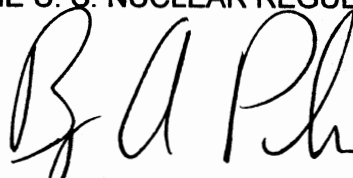
**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License No.  
24-17210-01Docket or Reference No.  
030-12369**Amendment No. 18**

15. 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.
  - B. A record of each such disposal permitted under this license condition shall be retained for three 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 name of the individual who performed the disposal.
16. 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.
17. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
18. 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 10 CFR 30.35(d) for establishing decommissioning financial assurance.
19. 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

Date MAY 21 2015

By

Bryan A. Parker  
Materials Licensing Branch  
Region III