



CAPITAL REGION MEDICAL CENTER

In partnership with the University of Missouri Health Sciences Center

P.O. Box 1128
Jefferson City, Missouri 65102-1128
573/632-5000

April 25, 2008

U.S. Nuclear Regulatory Commission
Nuclear Materials Licensing Section
2443 Warrenville Road
Suite 210
Lisle, IL. 60532

Re: Amendment application for the purpose of adding an authorized user to Capital Region Medical Center's NRC License, 24-12699-01

Capital Region Medical Center, license 24-12699-01, requests Joy A. Johnson, M.D. be added as an authorized user for Materials and Use in 10 CFR 35.100 , 35.200 and 35.300.

Dr. Johnson is currently listed as an authorized user for Materials and Use on License Number 19-B383-01 State of Kansas Radioactive Materials License.

I have enclosed a copy of the license for Saint John's Hospital , license 19-B 383-01, and Capital Region Medical Centers' License.

You may direct any questions to Ron Thompson, Supervisor of Nuclear Medicine, at 573-632-5286.

Sincerely,

Janet Weckenborg,
Vice President, Operations and Administrative Representative Radiation Safety
Committee

STATE OF KANSAS

RADIOACTIVE MATERIALS LICENSE

Pursuant to the Nuclear Development and Radiation Control Act (L. 1963, Ch. 290) and Kansas Annotated Regulations numbers 28-35-133 through 28-35-363 inclusive, and in reliance on statements and representations made to this agency by the licensee designated below, a license is hereby issued authorizing the licensee to transfer, receive, possess, and use the radioactive material or materials listed below; and to use such materials at the place or places listed below; and to use the material for the purpose or purposes listed below. This license is subject to all applicable rules, regulations, and orders now in effect or placed in effect by the Department of Health and Environment and any conditions specified below.

Amendment No. 26

Licensee		3. License number
1. Name	Saint John Hospital	19-B383-01
2. Address	3500 South Fourth Street Leavenworth KS 66048	4. Expiration date September 30, 2006
		5. Reference number
6. Radioactive materials (element and mass number) 7. Chemical and/or physical form 8. Maximum quantity licensee may possess at any one time		
See Page No. 2		See Page No. 2
		See Page No. 2

CONDITIONS

9. Authorized use. (Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.)
 - A. Any diagnostic procedure listed in Groups I and II, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.
 - B. Any therapeutic procedure listed in Group IV, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.
 - C. through H. To be used for instrument calibration and quality control.
10. Radioactive materials shall only be used at 3500 South Fourth Street, Leavenworth, KS.
11. The radiation safety officer in this program shall be Joy A. Johnson, M.D.
12. Radioactive material shall be used by, or under the supervision of, Jeffrey L. Borders, M.D., John M. Bramble, M.D., Joy A. Johnson, M.D., Caprice M. Olomon, M.D., and John McMillan, M.D.

STATE OF KANSAS

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RADIOACTIVE MATERIALS LICENSE

Supplementary Sheet

License number: 19-B383-01

6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
A. Any radioactive material listed in Groups I and II, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	A. Any radiopharmaceutical listed in Groups I and II, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	A. As necessary for uses authorized in Subitem 9.A
B. Any radioactive material listed in Group IV, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	B. Any radiopharmaceutical listed in Group IV, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	B. 100 millicuries of each radioactive material authorized in Subitem 6.B.
C. Cobalt-57	C. Sealed source (DuPont NES-206, NES-391, NES-392, NES-8012, NES-8300, NES-8400, NES-8450; Amersham CTR-Q1 series; North American Scientific MED3550, MED3700-3749; Isotope Products FL series, NES series, RV-057; International Isotopes BM-01 series, BM-02 series, BM-04 series, BM-05 series, BM-06 series, BM-09 series)	C. No single source to exceed 25 millicuries
D. Cesium-137	D. Sealed source (DuPont NES-356; Amersham CDC.VI)	D. No single source to exceed 250 microcuries
E. Barium-133	E. Sealed source (DuPont NES-358; Amersham BDC.VI)	E. No single source to exceed 250 microcuries

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Supplementary Sheet

License number: 19-B383-01

6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
F. Cobalt-60	F. Sealed source (DuPont NES-354)	F. No single source to exceed 100 microcuries

13. A. (1) Each sealed source containing radioactive material, other than Hydrogen-3, with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
- (2) Notwithstanding the periodic leak test required by this condition, any radioactive sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
- (3) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six (6) months prior to the date of use or transfer. Sources in storage shall be physically inventoried every six months and listed in the radioactive materials inventory.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcurie and maintained for inspection by the Department.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Radiation Control Program, Bureau of Air and Radiation, Kansas Department of Health and Environment, Topeka, Kansas, describing the equipment involved, the test results and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Department, the United States Nuclear Regulatory Commission, or an Agreement State to perform such services.
14. The use of radioactive material in or on humans shall be by a physician.

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Supplementary Sheet

License number: 19-B383-01

15. Sealed sources containing radioactive material shall not be opened.
16. A. Radiopharmaceuticals dispensed and/or distributed for human use shall be either:
- (1) Repackaged from prepared radiopharmaceuticals that are the subject of an FDA-approved "New Drug Application" (NDA) or for which FDA has accepted a "Notice of Claimed Investigational Exemption for a New Drug" (IND), or
 - (2) Prepared from generators and reagent kits that are the subject of an FDA-approved NDA or for which FDA has accepted an IND.
- B. Prepared radiopharmaceuticals for which FDA has accepted an IND and radiopharmaceuticals prepared from generators or reagent kits for which FDA has accepted an IND shall be dispensed and/or distributed:
- (1) In accordance with the directions provided by the sponsor of the IND, and
 - (2) Only to physicians who have been accepted by the sponsor of the IND to participate in clinical evaluation of the drug.

The licensee shall inform, in writing, each physician who participates in an IND evaluation, that the physician is responsible to the sponsor of the IND for use of the drug in accordance with protocols established by the sponsor and for reporting to the sponsor the clinical information obtained through use of the drug.

17. 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.
18. The licensee may transport radioactive material or deliver radioactive material to a carrier for transport, in accordance with the provisions of Kansas Radiation Protection Regulations 28-35-196a, "Preparation of Radioactive Material for Transport".
19. The licensee shall comply with the provisions of Kansas Radiation Protection Regulations, Part 4, "Standards for Protection Against Radiation" and Part 10, "Notices, Instructions and Reports to Workers; Inspections."

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Supplementary Sheet

License number: 19-B383-01

20. The licensee shall possess and use radioactive material described in Items 6, 7 and 8 of this license according to the most restrictive of; the Kansas Radiation Protection Regulations, this license or statements, representations, and procedures contained in the following documents:
- (a) The letter dated September 24, 1998, signed by Greg Fitts, with attachments.
 - (b) Facsimile dated November 17, 1998, signed by David Buller.
 - (c) Curriculum vitae, training and experience documentation for Jeffrey L. Borders, M.D., Caprice M. Olomon, M.D., John M. Bramble, M.D., Joy A. Johnson, M.D., received on January 15, 1999.
 - (d) Facsimile dated February 2, 1998 and received February 2, 1999, signed by Dave Buller, with attachments.
 - (e) The letter dated April 19, 2001, signed by Mary Jo McLear.
 - (f) The letter dated June 18, 2002, signed by Mary Jo McLear.
 - (g) The letter dated April 1, 2003, signed by Joy A. Johnson, MD, with attachments.
 - (h) The letter dated March 23, 2004, signed by Laurie McIntosh.
 - (i) **The letter dated August 31, 2004, signed by J. A. Johnson, MD.**

OCT 21 2004

Date _____

FOR THE STATE DEPARTMENT OF HEALTH AND ENVIRONMENT

By: _____

Thomas A. Conley, CHP
Radiation Control Program

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.

<p style="text-align: center;">Licensee</p> <p>1. Capital Region Medical Center Nuclear Medicine Department</p> <p>2. 1125 Madison P.O. Box 1128 Jefferson City, MO 65102</p>	<p>In accordance with letter dated January 16, 2008,</p> <p>3. License number 24-12699-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date June 30, 2015</p> <hr/> <p>5. Docket No. 030-02375 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material permitted by 10 CFR 35.100</p> <p>B. Any byproduct material permitted by 10 CFR 35.200</p> <p>C. Any byproduct material permitted by 10 CFR 35.300</p> <p>D. Any byproduct material permitted by 10 CFR 35.400</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Any</p> <p>D. Sealed Sources (Theragenics Corporation I-Seed Model 125.S06; Bard Brachytherapy Inc. Model STM 125-1; Theragenics Corporation Model 200; 3M Health Physics Services Model 6711; BEBIG GmbH Model 125.S06; Best Industries Model Nos. 2301 and 2335; Implant Sciences Corp., Model 3500; International Brachytherapy, Inc. Model Nos. Intersource 1251L and 1032P; IsoAid, LLC Model IAI--125A; Mills Biopharmaceuticals, Inc. Model Nos. 125SL and 125SH; North American Scientific, Model Nos. Med 3631 and 3633.)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. As needed</p> <p>B. As needed</p> <p>C. As needed (not to exceed 1 curie of iodine-131)</p> <p>D. 2 curies of palladium-103, 2 curies of iodine-125, 4 curies total.</p>

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
24-12699-01

Docket or Reference Number
030-02375

Amendment No. 62

9. Authorized use:

- A. Any uptake, dilution and excretion study permitted by 10 CFR 35.100.
- B. Any imaging and localization study permitted by 10 CFR 35.200.
- C. Any diagnostic study or therapy procedure permitted by 10 CFR 35.300.
- D. Any manual brachytherapy procedure permitted by 10 CFR 35.400.

CONDITIONS

- 10. Licensed material may be used or stored only at the licensee's facilities located at 1125 Madison, Jefferson City, Missouri.
- 11. The Radiation Safety Officer for this license is Kenneth L. Andrews, M.S., DABR.
- 12. Licensed material is only authorized for use by, or under the supervision of:
 - A. Individuals permitted to work as an authorized user in accordance with 10 CFR 35.13 and 35.14.
 - B. The following individuals are authorized users for medical use as indicated:

Authorized Users

Material and Use

D. J. Hawes-Davis, D.O.	10 CFR 35.100, 35.200 and 35.300 (Any diagnostic study or oral administration of sodium iodide-131 in quantities less than or equal to 33 millicuries.)
H. Jerry Murrell, D.O.	10 CFR 35.400.
S. J. Westgate, M.D.	10 CFR 35.400.
Conrad Balcer, D.O.	10 CFR 35.100 and 35.200.
Mark Phillip Bryer, M.D.	10 CFR 35.300 and 35.400.
William L. Schlegel, D.O.	10 CFR 35.100 and 35.200.
Rodney Adkison, D.O.	10 CFR 35.100, 35.200 and 35.300.
Joseph M. Bean, M.D.	10 CFR 35.300 and 10 CFR 35.400.
James Russell Allen, M.D.	10 CFR 35.300 and 35.400.
Patrick J. Morello, M.D.	10 CFR 35.100 and 35.200.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
24-12699-01Docket or Reference Number
030-02375

Amendment No. 62

13. 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.
14. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
15. 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. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. Additionally, this license condition does not limit the licensee's ability to make changes to the radiation protection program as provided for in 10 CFR 35.26. 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 December 6, 2004; and
- B. Facsimile letters dated May 26, 2005, June 6 and 7, 2005 and March 8, 2006.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date FEB 26 2008By James R. Mullauer
James R. Mullauer, M.H.S.
Materials Licensing Branch
Region III



**CAPITAL REGION
MEDICAL CENTER**

University of Missouri Health Care

P.O. Box 1128
Jefferson City, Missouri 65102-1128

RETURN SERVICE REQUESTED



U.S. Nuclear Regulatory Commission
Nuclear Materials Licensing Section
2443 Warrenville Road
Suite 210
Lisle, IL 60532