U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 55

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.

Licensee	In accordance with letter dated June 22, 2022,	4. Expiration Date: November 30, 2036
1. Children's Mercy Hospital 2. 2401 Gillham Rd. Kansas City, MO 64108	3. License No.: 24-15513-01 is amended in its entirety to read as follows:	5. Docket No.: 030-09259 Reference No.:

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
A. Any byproduct material permitted by 10 CFR 35.100	A. Any	A. As Needed	A. For use in uptake, dilution and excretion studies permitted by 10 CFR 35.100.
B. Any byproduct material permitted by 10 CFR 35.200	B. Any	B. As Needed	B. For use in imaging and localization studies permitted by 10 CFR 35.200.
C. Iodine-131 permitted by 10 CFR 35.300	C. Any	C. 250 millicuries total	C. For any use permitted by 10 CFR 35.300.
D. Phosphorus-32	D. Any	D. 160 millicuries total	D. For use in in vitro laboratory research and development as described in 10 CFR 30.4.

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CONDITIONS

10. Licensed material shall be used or stored at the licensee's facilities located at Children's Mercy Hospital, Adele Hall Campus, 2401 Gillham Rd., Kansas City, Missouri, 64108.

11. The Radiation Safety Officer (RSO) for this license is Nanci A. Burchell, MBA, CNMT, RS (NMTCB), R.T.(N)(ARRT), FSNMMI-TS.

12. Licensed material shall only be used by, or under the supervision of:

A. Individuals permitted to work as authorized users in accordance with 10 CFR 35.13 and 10 CFR 35.14.

B. The following individuals are authorized users for the material and medical uses as indicated:

Authorized User (M.D.,D.O.,etc.)	Material and Use
Sherwin Shiu-Cheung Chan, M.D.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Brent E. Cully, M.D.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Amy Nicole Dahl, M.D.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Aditi Hendi, M.D.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Manish K. Kotecha, M.D.	10 CFR 35.100,10 CFR 35.200
Kay North, D.O.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Brenton D. Reading, M.D.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Doug Rivard, D.O.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)

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Authorized User (M.D.,D.O.,etc.)	Material and Use
Timothy P. Zinkus, M.D.	10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)

C. The following individuals are authorized users for nonmedical uses as indicated:

Non-Medical Use	Material and Use
Daniel Heruth, Ph.D.	Phosphorus-32 for in vitro research and development as permitted by 10 CFR 30.4

13. For licensed material other than under 10 CFR Part 35, 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 biomedical 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.

14. For licensed material other than under 10 CFR Part 35, the licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.

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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 statements, representations, and procedures that are required to be submitted in accordance with the regulations. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence impose on the licensee requirements that are more restrictive than or in addition to the regulations.

A. Application dated June 29, 2021 (ML21183A182)
B. Letter dated November 24, 2021 (ML21330A050)
C. Letter dated June 22, 2022 (ML22174A337)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: August 9, 2022

By: Sara A. Forster

Digitally signed by Sara A. Forster
Date: 2022.08.09 09:54:19 -05'00'

Sara A. Forster
Region III