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Amendment No. 21

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 licensee 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	4. Expiration Date: June 30, 2025	
1. Nemours - Alfred I. duPo	ont Hospital for Children	December 14, 2017		
2. 1600 Rockland Road Wilmington, DE 19803		3. License number: 07-16199-02 is amended in its entirety to read as follows:	5. Docket No.: 030-19939 Reference No.:	
Byproduct, source, and/or special nuclear material	7. Chemical and/or physical fo	rm - 8. Maximum amount that licens may possess at any one time this license		
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	C. Any	C. 1 curie total	C. For any use permitted by 10 CFR 35.300 for which the patient can be released under the provisions of 10 CFR 35.75.	
D. Technetium-99m	D. Any	D. 100 millicuries total	 D. For verification of shielding at the licensee's facility. 	
E. Fluorine-18	E. Any	E. 1 curie total	E. For research and development as defined in 10 CFR 30.4.	

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CONDITIONS

- 10. Licensed material may be used or stored at the licensee's facilities located at 1600 Rockland Road, Wilmington, Delaware.
- 11. The Radiation Safety Officer (RSO) for this license is Kelly A. Sciole, CNMT.
- 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 CER 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
Mark Finklestein, D. O.	10 CFR 35:100,10 CFR 35:200
Kerry Allison Bron, M. D.	10 CFR 35.100,10 CFR 35.200
Harry Chugani, M.D.	10 GFR 35.100,10 CFR 35.200,F-18
Thang Ngo, M.D.	35.100, 35.200, Oral administration of sodium iodide I-131
David Dinan, M.D.	10 CFR 35.100,10 CFR 35.200
Steven Blummer, M.D.	10 CFR 35.100,10 CFR 35.200
Mona Yasrebi, M.D.	35.100, 35.200, Oral administration of sodium iodide I-131

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C. The following individuals are authorized Users Marc A. Felice Harry Chugani, M.D. 13. In addition to the possession limits in Itel minimum limit specified in 10 CFR 30.35	Material and Use Technetium 99m for shielding verific Fluorine 18 for research defined by m/8, the licensee shall further restrict the (d) for establishing decommissioning fin	cation 10 CFR 30.4 possession of licensed material	to quantities below the

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- 14. 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 31, 2014 [ML15016A086].
 - B. Letter dated April 27, 2015 [ML15149A367]
 - C. Letter received June 23, 2015 [ML15201A572]
 - D. Letter dated December 14, 2016 [ML17010A141]
 - E. Letter dated January 6, 2017 [ML17013A574]
 - F. Letter dated February 5, 2017 [ML17067A461]
 - G. Letter dated February 28, 2017 [ML17076A194]

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Bv:

Farrah Gaskins

Region 1

Date: March 21, 2017