



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

January 9, 2007

Docket No. 03010568
Control No. 139944

License No. 07-16199-01

Grace M. Hobson
Radiation Safety Officer
Alfred I. DuPont Hospital for Children
Nemours Biomedical Research
P.O. Box 269
Wilmington, DE 19899

SUBJECT: ALFRED I. DUPONT HOSPITAL FOR CHILDREN, LICENSE AMENDMENT,
CONTROL NO. 139944

Dear Dr. Hobson:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Toolkit Index Page**. Or you may obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Thank you for your cooperation.

Sincerely,

Original signed by Todd J. Jackson, CHP

Todd J. Jackson, CHP
Senior Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 14

G. Hobson
Alfred I. DuPont Hospital for Children

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cc:
Thomas P. Ferry, Chief Executive Officer

DOCUMENT NAME: C:\FileNet\ML070090652.wpd

SUNSI Review Complete: T Jackson

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NAME	TJackson/TJJ						
DATE	1/9/2007						

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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. Alfred I. duPont Hospital for Children of the Nemours Foundation</p> <p>2. 1600 Rockland Road P. O. Box 269 Wilmington, Delaware 19899</p>	<p>In accordance with the letter dated June 30, 2006,</p> <p>3. License number 07-16199-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date June 30, 2013</p> <hr/> <p>5. Docket No. 030-10568 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. Hydrogen 3	A. Any	A. 500 millicuries
B. Carbon 14	B. Any	B. 500 millicuries
C. Sodium 24	C. Any	C. 100 millicuries
D. Phosphorus 32	D. Any	D. 500 millicuries
E. Phosphorus 33	E. Any	E. 500 millicuries
F. Sulfur 35	F. Any	F. 300 millicuries
G. Potassium 42	G. Any	G. 100 millicuries
H. Calcium 45	H. Any	H. 100 millicuries
I. Chromium 51	I. Any	I. 50 millicuries
J. Iron 59	J. Any	J. 20 millicuries
K. Rubidium 86	K. Any	K. 500 millicuries
L. Molybdenum 99	L. Any	L. 2 curies
M. Technetium 99m	M. Any	M. 2 curies
N. Iodine 125	N. Any	N. 100 millicuries
O. Iodine 131	O. Any	O. 100 millicuries

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
07-16199-01Docket or Reference Number
030-10568

Amendment No. 14

9. Authorized use:

A. through O. Research and development as defined in 10 CFR 30.4; animal studies.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at 1600 Rockland Road, Wilmington, Delaware and Rockland 1 Center, 1701 Rockland Road, Wilmington, Delaware.
11. A. Licensed material shall be used by, or under the supervision of, Robert Akins, Ph.D.; George Dodge, Ph.D.; Vicky Funanage, Ph.D.; Zhaoping He, Ph.D.; Grace M. Hobson, Ph.D.; Leslie Krueger, Ph.D.; Robert Mason, Ph.D.; Stephen McGeady, M.D.; Carolyn Schanen, M.D., Ph.D.; Jeffery Twiss, M.D., Ph.D.; and Wenlan Wang, Ph.D.
- B. The Radiation Safety Officer for this license is Grace M. Hobson, Ph.D.
12. Licensed material shall not be used in or on human beings.
13. The licensee shall not use licensed material in field applications where activity is released 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.
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. Waste to be disposed of in this manner shall be held for decay a minimum of ten half-lives.
- B. 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.
- C. 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 the name of the individual who performed the disposal.
16. The licensee may transport licensed material in accordance with the provisions of 10 CFR 71, "Packaging and Transportation of Radioactive Material."

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17. 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 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 16, 2003 [ML030210108]
 - B. Letter received June 27, 2003 [ML031810467]
 - C. Letter dated September 13, 2004 [ML042650100]
 - D. Letter dated June 30, 2006 [ML061860479]



For the U.S. Nuclear Regulatory Commission

Date January 9, 2007

By Original signed by Todd J. Jackson, CHP
Todd J. Jackson, CHP
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406