



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

October 19, 2000

Docket No. 03002978
Control No. 128711

License No. 37-01230-03

Michael E. Moreland
Director
VA Pittsburgh Health Care System
Veterans Affairs Medical Center
University Drive C
Pittsburgh, PA 15240

SUBJECT: VA PITTSBURGH HEALTH CARE SYSTEM, VA MEDICAL CENTER,
ISSUANCE OF CORRECTED COPY OF LICENSE, CONTROL NO. 128711

Dear Mr. Moreland:

Enclosed is the Corrected Copy of Amendment No. 66 for License No. 37-01230-03. In accordance with the telephone call from Gary Williams on October 17, 2000, the Amendment No. has been corrected along with the possession limit for Gadolinium 153. In addition, Condition No. 24 has been corrected to list your letter dated February 1, 2000, as was approved in Amendment No. 65.

We apologize for any inconvenience this error may have caused.

Sincerely,

Original signed by Thomas K. Thompson

Mohamed M. Shanbaky, Chief
Nuclear Materials Safety Branch 1
Division of Nuclear Materials Safety

Enclosure:
Corrected Copy of Amendment No. 66

cc:
E. Lynn McGuire, Director, VA National Health Physics Program

DOCUMENT NAME: C:\137-01230-03.128711.10202000.wpd

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OFFICE	DNMS/RI	N	DNMS/RI		DNMS/RI			
NAME	MShanbaky/tkt for /s/							
DATE	10/19/2000							

OFFICIAL RECORD COPY

CORRECTED COPY**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. VA Pittsburgh Health Care System Veterans Affairs Medical Center</p> <p>2. University Drive C Pittsburgh, Pennsylvania 15240</p>	<p>In accordance with the letter dated September 26, 2000,</p> <p>3. License number 37-01230-03 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date September 30, 2004</p> <hr/> <p>5. Docket No. 030-02978/37-28084-02 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. Any byproduct material identified in 10 CFR 35.100 | A. Any radiopharmaceutical identified in 10 CFR 35.100 | A. As needed |
| B. Any byproduct material identified in 10 CFR 35.200 | B. Any radiopharmaceutical identified in 10 CFR 35.200 | B. As needed |
| C. Any byproduct material identified in 10 CFR 35.300 | C. Any radiopharmaceutical identified in 10 CFR 35.300 | C. As needed |
| D. Any byproduct material identified in 10 CFR 31.11 | D. Prepackaged Kits | D. As needed |
| E. Hydrogen 3 | E. Tritiated Oleate and Tritiated Glucose | E. 25 millicuries |
| F. Hydrogen 3 | F. Any | F. 2 curies |
| G. Carbon 14 | G. Any | G. 500 millicuries |

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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 |
| H. Phosphorus 32 | H. Any | H. 150 millicuries |
| I. Phosphorus 33 | I. Any | I. 100 millicuries |
| J. Sulfur 35 | J. Any | J. 500 millicuries |
| K. Chromium 51 | K. Any | K. 100 millicuries |
| L. Iodine 125 | L. Any | L. 100 millicuries |
| M. Calcium 45 | M. Any | M. 100 millicuries |
| N. Cesium 137 | N. Sealed sources | N. Not to exceed 170 millicuries per source, 300 millicuries total |
| O. Gadolinium 153 | O. Sealed sources (North American Scientific Model MED 3601) | O. Not to exceed 300 millicuries per source and 2 curies total |

9. Authorized use:

- A. Any uptake, dilution and excretion procedure approved in 10 CFR 35.100.
- B. Any imaging and localization procedure approved in 10 CFR 35.200.
- C. Any radiopharmaceutical therapy procedure approved in 10 CFR 35.300.
- D. In vitro studies.
- E. For use in human research to study the effect of visceral obesity on muscle FFA utilization.
- F. through M. Research and development as defined in 10 CFR 30.4, including animal studies; student instruction.
- N. For instrument calibration using Tech Ops Model 773 or Nuclear Associates Model 64-764.
- O. For use in an ADAC Laboratories Model Vantage device for patient attenuation correction during S.P.E.C.T. imaging.

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CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at the Veterans Affairs Medical Center, University Drive C, Pittsburgh, Pennsylvania and the Veterans Affairs Medical Center, Building 13, Rooms 103, 105, 106, 107, 108, 109, 111, and 121, Highland Drive, Pittsburgh, Pennsylvania.
11. The Radiation Safety Officer for this license is Yingchieh Hsu, Ph.D.
12. Licensed material listed in Item 6 above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized Users

Material and Use

Manuel L. Brown, M.D.	35.100; 35.200; 35.300; <u>In vitro</u> studies; Gadolinium 153
Herbert Klein, M.D., Ph.D.	35.100; 35.200; 35.300; <u>In vitro</u> studies; Gadolinium 153
Ajit Shah, M.D.	35.100; 35.200; 35.300; <u>In vitro</u> studies; Gadolinium 153
Martin Charron, M.D.	35.100; 35.200; 35.300; <u>In vitro</u> studies; Gadolinium 153
Andrew Scott La Pidus, M.D.	35.100; 35.200; 35.300; <u>In vitro</u> studies; Gadolinium 153
Frank A. Mino, M.D.	35.100; 35.200; 35.300; <u>in vitro</u> studies
Janet A. Amico, M.D.	Phosphorus 32; Sulfur 35; Iodine 125
Patricia A. Craven, Ph.D.	Hydrogen 3; Carbon 14; Phosphorus 32; Sulfur 35; Chromium 51; Iodine 125

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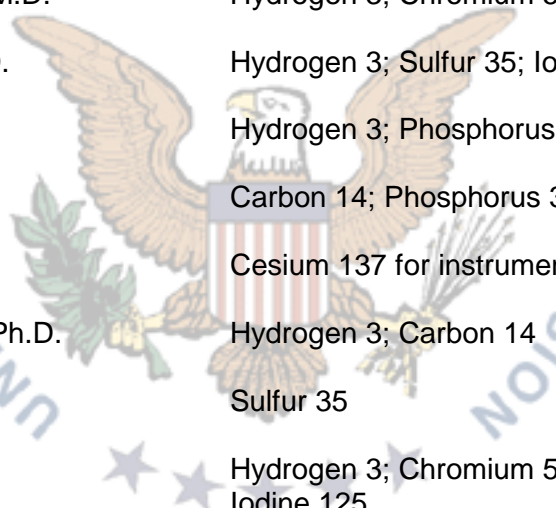
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James H. Dauber, M.D.	Hydrogen 3
Jau-Shyong Deng, M.D.	Hydrogen 3; Phosphorus 32; Sulfur 35; Chromium 51
Patricia K. Eagon, Ph.D.	Hydrogen 3; Carbon 14; Iodine 125; Phosphorus 32
Howard D. J. Edington, M.D.	Hydrogen 3; Chromium 51
Christopher Evans, Ph.D.	Hydrogen 3; Sulfur 35; Iodine 125
Gene G. Finley, M.D.	Hydrogen 3; Phosphorus 32; Sulfur 35; Iodine 125
Roy A. Frye, M.D., Ph.D.	Carbon 14; Phosphorus 32; Phosphorus 33; Sulfur 35
Yingchieh Hsu, Ph.D.	Cesium 137 for instrument calibration
Yisrael Isaacson, M.D., Ph.D.	Hydrogen 3; Carbon 14
Richard Kim, M.D.	Sulfur 35
Mark L. Jordan, M.D.	Hydrogen 3; Chromium 51; Phosphorus 32; Carbon 14; Iodine 125
David E. Kelly, M.D.	Tritiated Oleate and Tritiated Glucose for human research; Hydrogen 3; Carbon 14; Iodine 125
Arnold Meisler, M.D.	Hydrogen 3; Phosphorus 32; Sulfur 35; Iodine 125

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John W. Mellors, M.D. Hydrogen 3; Phosphorus 32; Sulfur 35

Harry E. Rubash, M.D. Hydrogen 3

David C. Whitcomb, M.D., Ph.D. Hydrogen 3; Sulfur 35; Phosphorus 32; Iodine 125

Chandrashekhhar Gandhi, Ph.D. Hydrogen 3; Carbon 14; Phosphorus 32; Sulfur 35;
Calcium 45; Iodine 125

Rebecca K. Studer, Ph.D. Hydrogen 3; Phosphorus 32; Sulfur 35

Jeffrey Yao, Ph.D. Hydrogen 3; Carbon 14; Phosphorus 32; Sulfur 35;
Iodine 125

Steven H. Graham, M.D. Hydrogen 3; Carbon 14; Phosphorus 32; Phosphorus 33;
Sulfur 35; Iodine 125

13. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
14. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.
15. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
16. 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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17. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed three months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

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- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the appropriate U. S. Nuclear Regulatory Commission, Regional Office referenced in Appendix D of 10 CFR Part 20. The report shall specify the source or detector cell involved, the test results, and corrective action taken.
- G. The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
18. The licensee shall conduct a physical inventory every three months to account for all sealed sources and devices containing licensed material received and possessed pursuant to 10 CFR 35.59, 35.400 and 35.500 and every six months for all other sealed sources and devices.
19. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
20. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.
21. A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperatures from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.

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- B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
22. 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. 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.
23. Radioactive waste generated shall be stored in accordance with the statements, representations, and procedures included with the waste storage plan described in the licensee's letter dated August 17, 1994.

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24. 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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. 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 April 11, 1991
- B. Application dated November 20, 1992
- C. Letter dated January 27, 1993
- D. Letter dated April 29, 1993
- E. Letter dated May 7, 1993
- F. Letter dated June 4, 1993
- G. Letter dated October 27, 1993
- H. Letter dated August 17, 1994
- I. Letter received September 7, 1994
- J. Letter dated September 21, 1994
- K. Letter dated September 22, 1994
- L. Letter dated November 1, 1996
- M. Letter dated January 23, 1997
- N. Letter dated December 4, 1997
- O. Letter dated February 1, 2000

For the U.S. Nuclear Regulatory Commission

Original signed by Michelle BeardsleyDate October 19, 2000

By _____

Michelle Beardsley
Nuclear Materials Safety Branch 1
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406