

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIALS SAFETY SECTION B
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
NUCLEAR MATERIALS SAFETY SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
796 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
NUCLEAR MATERIALS SAFETY SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94586

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER
- C. RENEWAL OF LICENSE NUMBER 21-03646-03

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)

St. Mary's Medical Center
830 S. Jefferson Avenue
Saginaw, MI 48601

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

830 S. Jefferson Avenue
Saginaw, MI 48601

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Terrence J. Dillon, M.S.

TELEPHONE NUMBER

517-776-8115

SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2" x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY 7 C AMOUNT ENCLOSED \$580.00

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN, IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE—CERTIFYING OFFICER

TYPED/PRINTED NAME

TITLE

DATE

Edward A. Napierala

Edward A. Napierala,

Executive Vice President,
Chief Operating Officer

1/25/89

9001250255 890324
REG LIC30
21-03646-03 PDR

FOR NRC USE ONLY

TYPE OF FEE <i>Raw</i>	FEE LOG <i>Feb 6/89</i>	FEE CATEGORY <i>7C</i>	COMMENTS	APPROVED BY <i>CP</i>
AMOUNT RECEIVED <i>\$580</i>	CHECK NUMBER <i>051992</i>	CONTROL NO. 8678 <i>Reel III</i> JAN 27 1989		DATE <i>2/3/89</i>

RADIOACTIVE MATERIALS AND PURPOSE

	<u>Material</u>	<u>Amount</u>
5a	Material in 35.100	As needed
5b	Material in 35.200	As needed
5c	Material in 35.300	As needed
5d	Material in 35.400	2 Curies
5e	Material in 35.500	As needed
5f	Xenon-133 gas or gas in solution	200 millicuries
5g	Strontium-90 sealed source	10 millicuries
5h	Cesium-137 sealed source	200 millicuries
5i	Cesium-137 sealed source	250 microcuries
5j	Barium-133 sealed source	275 microcuries
5k	Cobalt-57 sealed source	5 millicuries

Purpose

6a	Diagnostic medical use
6b	Diagnostic medical use
6c	Therapeutic medical use
6d	Therapeutic medical use
6e	Diagnostic medical use
6f	Blood flow studies. Pulmonary function studies
6g	For use in Nuclear Enterprises, Inc. Model 2503 device for instrument calibration.
6h	For use in Tech/Ops Model 773 device for survey meter calibration.
6i	For accuracy and constancy testing of Nuclear Pharmacy Incorporated Accucal Model 2002 dose calibrator in Radiotherapy Department.
6j	Same as 6i. Dose calibrator testing in Radiotherapy Department.
6k	Same as 6i. Dose calibrator testing in Radiotherapy Department.

CONTROL NO. 8678 1

AUTHORIZED USERS FOR MEDICAL USE

ATT 7.1.1

Radiation Safety Officer

Uses

Terrence J. Dillon, M.S.

5g, 5h, 5i, 5j, 5k

ATT 7.1.2

Authorized Users

Uses

Ziad Al-Amiri, M.D.

5a, and 5b

Jarc G. Bertrand, M.D.

5a, 5b, 5c, 5d, 5e, 5f

Gualberto Buzon, M.D.

5a, 5b, 5c

Roberto B. Cordoba, M.D.

5d

Thomas A. Egleston, M.D.

5a, 5b, 5c, 5d, 5e, 5f

Ram K. Gadam, M.D.

5a, 5b, 5c, 5d, 5e, 5f

Charles A. Guidot, M.D.

5a, 5b, 5c

William T. Knapp, M.D.

5d

Omar A. Majid, M.D.

5d

Note: All above individuals previously authorized on this licence except Ziad Al-Amiri, M.D. whose credentials are enclosed. Please add him to the license.

CONTROL NO. 86781

<u>ITEM</u>	<u>TOPIC</u>
8.1	Training Program will follow Appendix A in Regulatory Guide 10.8.
9.1	Annotated Drawings previously submitted and ATT 9.1
9.2	Survey Instrument Calibration as in Appendix B, Reg. Guide 10.8.
9.3	Dose Calibrator Calibration as in Appendix C, Reg. Guide 10.8.
9.4	Personnel Monitor Program as in Appendix D, Reg. Guide 10.8.
9.5	NA
9.6	NA
10.1	Radiation Safety Committee/Radiation Safety Officer We will follow Appendix F in Regulatory Guide 10.8.
10.2	ALARA Program will follow Appendix G, Reg. Guide 10.8.
10.3	Leak Test Procedures will follow Appendix H, Reg. Guide 10.8.
10.4	Safe Use of Radiopharmaceuticals will follow Appendix I, Regulatory Guide 10.8.
10.5	Spill Procedures will follow Appendix J, Reg. Guide 10.8.
10.6	Ordering and Receiving Procedures will follow Appendix K, Regulatory Guide 10.8.
10.7	Opening Packages Procedures will follow Appendix L, Regulatory Guide 10.8.
10.8	Records of Unit Dosage Use will follow Appendix M.1, Regulatory Guide 10.8.
10.9	Records of Multidose Vial Use will follow Appendix M.2, Regulatory Guide 10.8.
10.10	Measuring and Recording Molybdenum Concentration will follow Appendix M.3, Regulatory Guide 10.8.
10.11	Keeping an Inventory of Implant Sources will follow Appendix M.4, Regulatory Guide 10.8.
10.12	Area Survey Procedures will follow Appendix N, Reg. Guide 10.8.
10.13	Air Concentration Control, see previous application, letter dated November 15, 1982.
10.14	Radiopharmaceutical Therapy Safety Procedures will follow Appendix P, Regulatory Guide 10.8.
10.15	Implant Therapy Safety Procedures will follow Appendix Q, Regulatory Guide 10.8.

ITEM TOPIC

11.1 Waste Disposal Procedures will follow Appendix R,
Regulatory Guide 10.8.

Note: All references to Regulatory Guide 10.8 are from Revision 2,
August 1987.

ATT 9.1

Radiotherapy Department

Survey Meter Calibration with Tech/Ops Model 773 Device is performed in the Radiotherapy Department Biomedical Workroom (#0109 on blueprints). The device is stored in the same room as the Cesium-137 brachytherapy sources and is transported to the Biomedical workroom for survey meter calibration.

This is the same location where the Accucal 2002 dose calibrator is used to verify manufacturers activity specifications for radioisotopes used in interstitial implants.

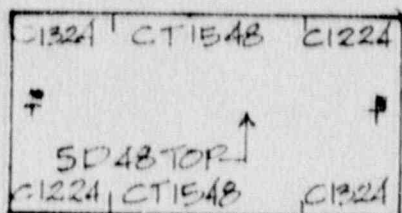
The drawing scale is 1/4 inch = 1 foot.

ATT 9.1

BIOMEDICAL WORKROOM
0109

HOOD H2172 W/LGTF
W/GABO TOP ON
BASE UNITS

(Lead Bricks)
Tech/Ops 773 Survey Meter Calibration
Device



STRETCHER
ALCOVE
0110

OFFICE
0108

STENOGRAPHIC
SERVICES
0106

SCALE
1/4" = 1 Foot

Dose
Calibrator
AccuCal
2002

NORTH ↑

12' A-B

11'-0"

20'-2"

W1236

S527

W1236

S529

L M

BL
C

18" DEEP 3 1/2" HIGH
SHELVING
OF O.I.

2'-0"

23'-7 1/2"

1'-0"

RE G/A

X-AC

B

9'-0"

11 1/2"



1'-2"

1'-0"

1'-0"

ZIAD AL-AMIRI, M.D.
4503 Elm Branch Drive
Arlington, Texas 76017
(817) 478-7079

PERSONAL DATA

BIRTHDATE : 6/18/56
MARITAL STATUS: Married
UNITED STATES CITIZEN

EDUCATION

1974 - 1980 ALEPPO UNIVERSITY
Undergraduate work and Medical School
Damascus, Syria

MEDICAL TRAINING

1981 - 1982 Internship
UNIVERSITY OF LOUISVILLE
Louisville, Kentucky
1982 - 1986 Radiology Residency
PROVIDENCE HOSPITAL
Southfield, Michigan
1986 - 1987 Fellowship in CT, US, MRI
BAYLOR COLLEGE OF MEDICINE
Houston, Texas

CERTIFICATIONS

1980 ECFMG
1982 FLEX
1986 American Board of Radiology

LICENSURE

Michigan -
Texas -

RESEARCH WORK

1984 Fine Needle Biopsy Assessment
1985 CT Lipid Cystography

SOCIETY MEMBERSHIP

Radiological Society of North America
American Medical Association
Tarrant County Medical Society
Texas Medical Society

(next page, please)

CONTROL NO. 86781

PROFESSIONAL EXPERIENCE

July, 1987 Radiologist
PRESENT ROSEDALE RADIOLOGY
Fort Worth, Texas
(817) 336 3846

REFERENCES

PROVIDENCE HOSPITAL
Southfield, Michigan
(313) 424-3043

Max Clark, M.D.
Philip Perkins, M.D.
John Temple, M.D.
James Reese, M.D.
James Karo, M.D.

BAYLOR COLLEGE OF MEDICINE
(713) 799-6362

Patricia Athey, M.D.
Yogish Shah, M.D.
J. E. Madewell, M.D.

INSURANCE COMPANY

Medical Protective Company
Fort Wayne, Indiana 46885
(219) 485-9622
Policy Number 571251

The American Board of Radiology

Organized through the cooperation of the
American College of Radiology, the American Roentgen Ray Society,
the American Radium Society, the Radiological Society of North America,
the Section on Radiology of the American Medical Association
and the American Society of Therapeutic Radiologists

Hereby certifies that

Ziad Al-Amiri, M.D.

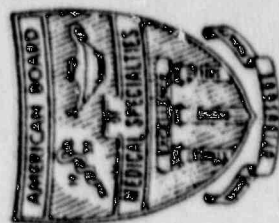
Has pursued an accepted course of graduate study
and clinical work, has met certain standards and qualifications and
has passed the examinations conducted under the authority of

The American Board of Radiology

On this sixth day of June, 1986

Thereby demonstrating to the satisfaction of the Board
that he is qualified to practice the specialty of

Diagnostic Radiology



Arthur W. Brady, M.D.
President

James M. L. Fadden, M.D.
Secretary

Baylor College of Medicine



Affiliated Hospitals Residency Program Houston, Texas

Ziad Al-Amiri, M.D.

has served satisfactorily as a resident in

Diagnostic Radiology
Body Imaging

12 months from 1986 to 1987

Ben Taub General Hospital
Jefferson Davis Hospital
St. Luke's Episcopal Hospital

Texas Children's Hospital
The Institute for Rehabilitation and Research
The Methodist Hospital
Veterans Administration Medical Center

CONTROL NO. 8678

v. G. Howell (M.D.)

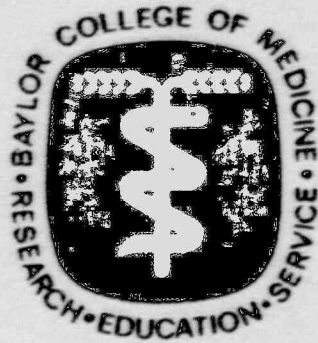
Jan 17 1987

11:20 AM

Department of Radiology
Baylor College of Medicine

Houston, Texas

June 30, 1987



Certifies that

ZIAD AL-AMIRI, M.D.

Served for 12 Months as
Postdoctoral Fellow in

DIAGNOSTIC RADIOLOGY

BODY IMAGING

Chairman, Department of Radiology

Chief of
Body Imaging

Director of Radiologic Education

Jan C. Maxwell, Sr. MD

Patricia A. Almy MD

J. G. [Signature]

CONTROL NO. 86786