



# University of Pittsburgh

Research Conduct and Compliance

Br. 1

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Pittsburgh, PA 15260  
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Fax: 412-624-6903  
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Randy P. Juhl, PhD  
Vice Chancellor

November 10, 2006

Licensing Assistant Section  
Nuclear Materials Safety Branch  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406-1415

RECEIVED  
REGION I  
2006 NOV 16 PM 1:22

Re: Amendment Request to License Nos. 37-00245-02, 37-00245-09, and 37-00245-06 MD (expired)  
03002945 03029419 03014639 RJ

Dear Sir or Madam:

The University of Pittsburgh requests to appoint a new Radiation Safety Officer for its Broad Scope (37-00245-02), Gamma Knife (37-00245-09), and Irradiator (37-00245-06) MD RJ radioactive materials licenses effective January 1, 2007. Jerry Rosen, MS, the current Radiation Safety Officer, has announced his intention to retire at the end of this calendar year (December 31, 2006). We request that Michael Sheetz, MS, be named as the Radiation Safety Officer for the above-referenced licenses and be responsible for the management of the corresponding radiation safety programs. Enclosed is documentation of Mr. Sheetz's training and experience in support of the requirements contained in 10 CFR 35.50 (b)(1), (d), and (e).

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

Randy P. Juhl, PhD

Enclosures

139743/139744  
NMSS/RGNI MATERIALS-002

MICHAEL A. SHEETZ

Home: [REDACTED] Office: (412) 624 - 2726  
Email: sheetz@radsafe.pitt.edu

PROFESSIONAL POSITIONS AND APPOINTMENTS

2003 - Present	Clinical Instructor	Department of Radiology University of Pittsburgh School of Medicine Pittsburgh, Pennsylvania
1982 - Present	Senior Health Physicist	Radiation Safety Office University of Pittsburgh Pittsburgh, Pennsylvania
1982	Scientist-Radiological Controls and Engineering	Westinghouse Bettis Atomic Power Laboratory West Mifflin, Pennsylvania
1978-1980	Nuclear Medicine Technologist	Milton S. Hershey Medical Center Hershey, Pennsylvania

CERTIFICATIONS

1988 (Recertified 1992, 1996, 2000, 2004)	Certified Health Physicist (CHP)	Comprehensive Health Physics American Board of Health Physics
2003	Medical Health Physics	American Board of Medical Physics

EDUCATION

1981	M.S.(Hyg) Radiation Health	University of Pittsburgh Graduate School of Public Health Pittsburgh, Pennsylvania
1981	Health Physics Collaborator	Brookhaven National Laboratory Upton, New York

**PERSONAL INFORMATION WAS REMOVED  
BY NRC. NO COPY OF THIS INFORMATION  
WAS RETAINED BY THE NRC.**

1977	Certificate Nuclear Medicine	South Central Pennsylvania Consortium for Nuclear Medicine Technology Training Harrisburg, Pennsylvania
1976	B.S. Biological Health / Health Planning and Administration	Pennsylvania State University State College, Pennsylvania

### PROFESSIONAL ACTIVITIES AND AFFILIATIONS

1981 - present	Western Pennsylvania Chapter Health Physics Society President 1988 - 1989 President-Elect 1987 - 1988 Secretary-Treasurer 1985 -1986	
1982 - present	Health Physics Society	
1987 - present	Penn-Ohio Chapter American Association of Physicists in Medicine	
2001 - present	Society of Nuclear Medicine	
2001 - present	American Association of Physicists in Medicine	
1990 - present	University of Pittsburgh Radiation Safety Committee	
1990 - present	University of Pittsburgh Radioactive Drug Research Committee / Human Use Subcommittee	
1992 - present	Magee-Womens Hospital Radiation Safety Committee	

### PRESENTATIONS

Radiation Safety Considerations in Lymphatic Mapping and Sentinel Node Biopsy, Training Program in Minimally Invasive Breast Techniques, Department of Radiology, Magee-Womens Hospital/UPCI, Pittsburgh, PA, September 8-9, 2000 and July 22-23, 2001.

Radiation Safety in Diagnostic Radiology, Seminar for Pittsburgh Chapter of American Society of Radiologic Technologists, April 10, 2002.

Regulatory Requirements for Use of Co-60 Gamma Knife, Gamma Knife Training Course, Department of Neurological Surgery, University of Pittsburgh, 1997 - present, course given four times each year.

Comparison of Fetal Exposure from Helical CT and Ventilation Perfusion Scintigraphy for the Diagnosis of Pulmonary Embolism in Pregnant Patients, M. Sheetz, D. Whitt, J. Rosen, R. Shah, J. Sumkin, Oral presentation at 47<sup>th</sup> Annual Meeting of the Health Physics Society, Tampa, FL, June 16-20, 2002.

ABSTRACTS AND PUBLICATIONS

Trials and Tribulations of Using a Mainframe as opposed to a Microcomputer. Maitz A., Durkosh E.D., Sheetz M., Proceedings of The Tenth Biennial Campus Radiation Safety Officers Conference, June 1985.

Radiological Waste. Rosen J., Sheetz M., Guidelines For The Management Of Hazardous Materials in Hospitals. Hospital Shared Services of Western Pennsylvania, May 20, 1986.

Variation In Thyroid Calibration Efficiencies As A Function Of Phantom Design For I-125. Miltenberger R.P., Langille E., Sheetz M., Ricci T., Proceedings of the 32nd Annual Meeting of the Health Physics Society, July 1987.

Neutron Dose Measurements at the Entrance Maze for High Energy Medical Linear Accelerators. A. Wu, M. Sheetz, A. Maitz, K. Blodgett, C. Saw, Presented at the 34<sup>th</sup> Annual Meeting of the American Association of Physicists in Medicine, Calgary, Alberta, Canada, August 22-27, 1992.

Installation of the First B Type Gamma Knife in the United States. A.H. Maitz, M.A. Sheetz, J. Fiedler, L.D. Lunsford, D.S. Kondziolka, J.C. Flickinger, B.E. Pollock, Abstract for 8th International Leksell Gamma Knife Society Meeting, June 1997.

Technical Aspects of Infusing Y-90 TheraSphere in Unresectable Hepatocellular Cancer. Collins L., Brown M., McCook B., Torok F., Zajko A., Sheetz M., Rosen J., France M., Carr B., Poster session at the 48<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Toronto, Ontario, CA, June 23-27, 2001.

Health Physics Aspects in the Use of Y-90 TheraSphere for the Treatment of Hepatocellular Carcinoma, M. Sheetz, J. Rosen, K. Bohner, H. Irwin, D. Whitt, L. Collins, Poster session at the 46<sup>th</sup> Annual Meeting of the Health Physics Society, Cleveland, OH, June 10 - 14, 2001.

Neutron Dose Measurement in Intensity Modulated Radiotherapy of 18 MV Photon Beams, S. Chern, R. Selvaraj, M. Sheetz, A. Wu, Poster session at the 44<sup>th</sup> Annual Meeting of the American Association of Physicists in Medicine, Montreal, Quebec, Canada, July 14-18, 2002.

Variability of Tc-99m MAA Shunt Measurements for Use in TheraSphere Treatment, M. Schnitgen, M. Sheetz, B. McCook, F. Torok, N. Bohnen, A. Zajko, L. Collins, B. Carr, Poster session at the 49<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Los Angeles, CA, June 15-19, 2002.

Comparison of Planar and SPECT Imaging for Measuring Lung Shunting in Hepatocellular Carcinoma with Intrahepatic-Arterial Tc-99m Macroaggregated Albumin, L. Collins, M. Sheetz, B. McCook, F. Torok, N. Bohnen, R. Reissman, P. Murtha, B. Carr, Poster session at the 49<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Los Angeles, CA, June 15-19, 2002.

Long-Term Clinical Results for 65 Unresectable Hepatocellular Carcinoma Patients Treated with <sup>90</sup>Y Microspheres, B.I. Carr, B. McCook, F. Torok, D. Buck, K. Haarer, R. Akindele, N. Amesur, P. Orons, A. Zajko, M. Sheetz, D. Geller, Presented at the 29<sup>th</sup> Annual Meeting of the Society of Interventional Radiology, Phoenix, AZ, March 25-30, 2004.

No Interruption of Lactation Is Needed After [C-11]WAY 100635 or [C-11]Raclopride Positron Emission Tomography Studies, Moses-Kolko EL, Meltzer CC, Helsel JC, Sheetz M, Mathis CA, Ruszkiewicz J, Bogen D, Confer AL, Wisner KL, Journal of Nuclear Medicine; 46(10):1765.

# American Board of Health Physics

Be it known that

*Michael A. Sheetz*

has satisfactorily met the professional standards established by the

## American Board of Health Physics

and is hereby certified in  
the comprehensive practice of

### HEALTH PHYSICS

and is entitled to be identified as a *Diplomate*  
of the American Board of Health Physics



*Frazier Bronson*  
Chairman

*Howard W. Dickson*  
Vice-Chairman

*Robert J. Hill*  
Secretary-Treasurer

*Danny P. Kirner*  
Chairman, Panel of Examiners

*October 1988*  
Date

The American Board of Medical Physics  
**ABMP**

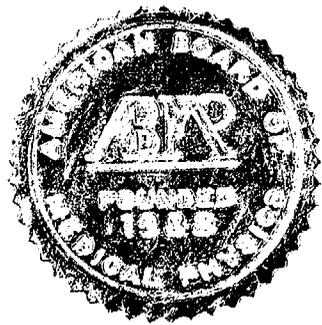
Hereby certifies that

**Michael A. Sheetz, M.S.**

*Has satisfactorily met the professional standards  
and clinical experience requirements  
in medical physics to qualify for*

**Certification in Medical Physics**

*with special competence in*  
**Medical Health**



*April 13, 2003*  
DATE

*L. E. Lester*  
CHAIRPERSON

*Kenneth J. Miller*  
SECRETARY

**MEDICAL USE TRAINING AND EXPERIENCE  
AND PRECEPTOR ATTESTATION**

**PART I -- TRAINING AND EXPERIENCE**

**Note:** Descriptions of training and experience must contain sufficient detail to match the training and experience criteria in the applicable regulation (10 CFR Part 35)

1. Name of Individual, Proposed Authorization (e.g., Radiation Safety Officer), and Applicable Training Requirements (e.g., 10 CFR 35.50)

Michael A. Sheetz, Radiation Safety Officer, 10 CFR 35.50

2. For Physicians, Podiatrists, Dentists, Pharmacists -- State or Territory Where Licensed

**3. CERTIFICATION**

- a. Provide a copy of the board certification. (Stop here if applying under 10 CFR Part 35, Subpart J or 35.590(a); continue if applying under other subparts.)
- b. Provide documentation in appropriate items 4 through 10 of training or clinical case work required by 35.50(e); 35.51(c); 35.290(c)(1)(ii)(G) for AU seeking 35.200 authorization; 35.390(b)(1)(ii)(G); 35.396(d)(1) and 35.396(d)(2); 35.590(c); or 35.690(c).
- c. Provide completed Part II Preceptor Attestation, Items 11a through 11d.  
Stop here after completing items 3a, 3b, and 3c when using board certification to meet 10 CFR Part 35 training and experience requirements.

**4. INDIVIDUALS IDENTIFIED ON A LICENSE OR PERMIT AS RADIATION SAFETY OFFICERS (RSO), AUTHORIZED USERS (AU), AUTHORIZED MEDICAL PHYSICISTS (AMP), OR AUTHORIZED NUCLEAR PHARMACISTS (ANP) SEEKING ADDITIONAL AUTHORIZATIONS**

- a. Provide a copy of the license or broadscope permit listing the current authorization **and** (b) or (c)
- b. Complete items 6c (and 10 when training is provided by an RSO, AMP, ANP, or AU) and preceptor items 11b through 11d to meet requirements for: RSO in 35.50(c)(2) or 35.50(e); or AU in 35.290(c)(1)(ii)(G) or 35.390(b)(1)(ii)(G) or 35.590(c) or 35.690(c); or AMP under 35.51(c).
- c. Complete items 5, 6a, 6b, 10, and Preceptor items 11a through 11d to meet AU requirements in 35.396(a).

**5. DIDACTIC OR CLASSROOM AND LABORATORY TRAINING (optional for Medical Physicists)**

Description of Training	Location	Clock Hours	Dates of Training
Radiation Physics and Instrumentation	University of Pittsburgh Graduate School of Public Health Pittsburgh, PA 15261	240	August 1980 to December 1981
Radiation Protection	"	300	"
Mathematics Pertaining to the Use and Measurement of Radioactivity	"	90	"
Radiation Biology	"	240	"
Chemistry of Byproduct Material for Medical Use	"	120	"
OTHER Radiation Dosimetry	"	120	"

MEDICAL USE TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

6a. WORK OR PRACTICAL EXPERIENCE WITH RADIATION

Description of Experience	Name of Supervising Individual(s)	Location and Corresponding Materials License Number	Dates and/or Clock Hours of Experience
Shipping, receiving, and performing related radiation surveys	Jerry C. Rosen	See Item 10	July 1982 to July 2006 (Over 2000 hrs)
Using and performing checks of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides	"	"	"
Securing and controlling radioactive material	"	"	"
Using administrative controls to avoid mistakes in the administration of radioactive material	"	"	"
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	"	"	"
Using emergency procedures to control radiation exposures and radioactive material	"	"	"
Disposing of radioactive material	"	"	"

6b. SUPERVISED CLINICAL CASE EXPERIENCE (describe experience elements in 6a)

Radionuclide	Type of Use	No. of Cases Involving Personal Participation	Name of Supervising Individual	Location and Corresponding Materials License Number	Dates and/or Clock Hours of Experience
N/A					

**MEDICAL USE TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)**

**6c. TRAINING FOR SECTIONS 35.50(e), 35.51(c), 35.590(c), or 35.690(c)**

Training Element	Type of Training *	Location and Dates
Radiation safety, regulatory issues, and emergency procedures for uses under 35.100, 200, 300, and 500	Supervised work experience	See Item 10 for location July 1982 to July 2006 (Over 2000 hrs)
Radiation safety, regulatory issues, and emergency procedures for uses under 35.400 and 600 (HDR and GSR units)	Supervised work experience and vendor training	See Item 10 for location August 1987 to July 2006 (Over 2000 hrs)
Radiation safety, regulatory issues, and emergency procedures for uses under 35.1000 (IVB and Y-90 microspheres)	Supervised work experience and vendor training	See Item 10 for location May 2001 to July 2006 (Over 500 hrs)
Radiation safety, regulatory issues, and emergency procedures for linear accelerators	Supervised work experience	See Item 10 for location July 1982 to July 2006 (Over 2000 hrs)

\* Types of training may include supervised (complete item 10 for 35.50(e), 35.51(c), and 35.690(c)), didactic, or vendor training.

**7. FORMAL TRAINING Physicians (for uses under 35.400 and 35.600) and Medical Physicists**

Degree, Area of Study or Residency Program	Name of Program and Location with Corresponding Materials License Number	Dates	Name of Organization that Approved the Program (e.g., Accreditation Council for Graduate Medical Education) and the Applicable Regulation (e.g., 10 CFR 35.490)
N/A			

**8. RADIATION SAFETY OFFICER (RSO) – ONE-YEAR FULL-TIME EXPERIENCE**

YES Completed 1 year of full-time radiation safety experience (in areas identified in item 6a) under supervision.  
 N/A of Jerry C. Rosen the RSO for License No. 37-00245-02.

**9. MEDICAL PHYSICIST -- ONE-YEAR FULL-TIME TRAINING/WORK EXPERIENCE**

YES Completed 1 year of full-time training (for areas identified in item 6a) in therapeutic radiological physics (35.961) or medical physics (35.51) under the supervision of \_\_\_\_\_  
 N/A who is a medical physicist (35.961) or meets requirements for Authorized Medical Physicists (35.51);

**and**

YES Completed 1 year of full-time work experience (at location providing radiation therapy services described and for topics identified in item 6a) for (specify use or device) \_\_\_\_\_  
 N/A under the supervision of \_\_\_\_\_ who is a medical physicist (35.961) or meets requirements for Authorized Medical Physicists (35.51) (specify use or device) \_\_\_\_\_.

**MEDICAL USE TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)**

**10. SUPERVISING INDIVIDUAL -- IDENTIFICATION AND QUALIFICATIONS**

The training and experience indicated above was obtained under the supervision of (if more than one supervising individual is needed to meet requirements in 10 CFR Part 35, provide the following information for each) :

A. Name of Supervisor Jerry C. Rosen

B. Supervisor is:  
 Authorized User       Authorized Medical Physicist  
 Radiation Safety Officer       Authorized Nuclear Pharmacist

C. Supervisor meets requirements of Part 35, Section(s) 35.57  
 for medical uses in Part 35, Section(s) 35.100, 200, 300, 400, 500, 600, and 1000

D. Address University of Pittsburgh, Radiation Safety Office  
 G-7 Parran Hall, 130 DeSoto St.  
 Pittsburgh, PA 15261

E. Materials License Number 37-00245-02

**PART II -- PRECEPTOR ATTESTATION**

**Note:** This part must be completed by the individual's preceptor. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each. This part is not required to meet training requirements in 35.590 or Part 35, Subpart J (except 35.980).

I attest the individual named in Item 1:

11a.  
 has satisfactorily completed the requirements in Part 35, Section(s) and Paragraph(s) 35.50(b)(1),  
 as documented in section(s) 5 and 6a of this form.

11b. Select one  
 meets the requirements in  35.50(e)  35.51(c)  35.390(b)(1)(ii)(G)  35.690(c) for \_\_\_\_\_  
 N/A types of use, as documented in section(s) 6c of this form.

11c.  
 has achieved a level of competency sufficient to independently operate a nuclear pharmacy (for 35.980); **OR**  
 has achieved a level of competency sufficient to function independently as an authorized \_\_\_\_\_  
 for \_\_\_\_\_ uses (or units); **OR**  
 has achieved a level of radiation safety knowledge sufficient to function independently as a Radiation Safety  
 Officer for a medical use licensee ; **OR**  
 N/A

11d.  
 I am an Authorized Nuclear Pharmacist; **OR**  I am a Radiation Safety Officer; **OR**  
 I meet the requirements of \_\_\_\_\_ section(s) of 10 CFR Part 35  
 or equivalent Agreement State requirements to be a preceptor  AU or  AMP  
 for the following byproduct material uses (or units): \_\_\_\_\_

A. Address University of Pittsburgh, Radiation Safety Office  
 G-7 Parran Hall, 130 DeSoto St.  
 Pittsburgh, PA 15261

B. Materials License Number 37-00245-02

C. NAME OF PRECEPTOR (print clearly) Jerry C. Rosen	D. SIGNATURE -- PRECEPTOR 	E. DATE <u>5/1/06</u>
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This is to acknowledge the receipt of your letter/application dated

11/10/2006, and to inform you that the initial processing which includes an administrative review has been performed.

Amendments 37-60245-02 and 37-00245-09  
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 139743/139744  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.