### **CURRICULUM VITAE**

#### Paul B. Geis

Office Address:	Department of Radiation Oncology University Hospitals Case Medical Center 11100 Euclid Ave, LTR 6068 Cleveland, OH 44106
Work Phone:	(216) 844-2702
Home Address:	29099 Fairmount Blvd, Pepper Pike, OH 44124
Place of Birth:	Chicago, Illinois
Education	

Year	Degree	Field of Study	Institution
1994	Ph.D.	Space Physics	Rice University, Houston, Texas
1987	B.S.	Astronomy	Case Western Reserve University, Cleveland, Ohio

# Postdoctoral Training (Medical Physics)

1995 - 1996	Stanford University School of Medicine, Stanford, California
1994 - 1995	University of Texas M.D. Anderson Cancer Center, Houston, Texas

# **Professional Appointments**

2011 - present	Associate Administrative Director and Assistant Professor Department of Radiation Oncology, Case Western Reserve University, University Hospitals, Cleveland, Ohio
2005 - 2011	Clinical Assistant Professor Department of Radiation Oncology, Northeast Ohio Medical University, Rootstown, Ohio
2002 - 2004	Clinical Assistant Professor Department of Radiation Oncology, Drexel University College of Medicine, Philadelphia, Pennsylvania
1998 – 2001	Assistant Professor Department of Radiation Oncology, MCP Hahnemann School of Medicine, Philadelphia, Pennsylvania

1996 - 1998	Clinical Instructor
	Department of Radiation Oncology, Stanford University School of
	Medicine, Stanford, California

# **Employment History**

Oct 2011 - present	Senior Medical Physicist, Department of Radiation Oncology, University Hospitals, Cleveland, Ohio
2005 - 2011	Director of Medical Physics, Department of Radiation Oncology, Summa Health System, Akron, Ohio
2001 - 2004	Director of Medical Physics, Department of Radiation Oncology, Allegheny General Hospital, Pittsburgh, Pennsylvania
1998 - 2000	Senior Medical Physicist, Department of Radiation Oncology, Allegheny General Hospital, Pittsburgh, Pennsylvania
1996 - 1998	Staff Physicist, Department of Radiation Oncology, Stanford University School of Medicine, Stanford, California

## **Professional Certifications**

1998	Board Certification, American College of Radiology, Therapeutic Radiological Physics
2005 - present	Certified Radiation Expert: Therapeutic, Bureau of Radiation Protection, Ohio Department of Health. Responsible for Summa Health System's Radiation Oncology Program (multi-campus)

#### **Society Affiliations and Appointments**

2011 – present	Ohio State Radiological Society
1994 - present	American Association of Physicists in Medicine

#### **Awards and Honors**

1987	Rice Presidential Fellowship, four year salary support award for promising
	graduate researchers, awarded by Rice University, Houston, Texas

### **Editorial Board Member**

2000 - 2007 Associate Guest Editor, Medical Physics

### **Professional Service**

2011- present	Chairman of Physics Subcommittee, Ohio State Radiological Society
2011	Co-Chairman, Joint Committee on Ohio Regulatory Affairs, Penn-Ohio Chapter of the American Association of Physicists in Medicine
2000, 2004	President, Penn-Ohio Chapter of American Association of Physicists in Medicine

# **Committee Appointments**

2005 - 2011	Radiation Safety Committee, Akron City Hospital, Summa Health System
2005 - 2011	Radiation Generating Equipment Committee, Akron City Hospital, Summa Health System
2009 - 2011	Information Technology Coordination Committee, Summa Health System
2009 - 2011	Quality Improvement Committee, Department of Radiation Oncology, Summa Health System
2003 - 2004 2001 - 2004	Information Services Initiatives Committee, Allegheny General Hospital Radiation Safety Committee, Allegheny General Hospital
2003	Resident Selection Committee, Department of Radiation Oncology, Allegheny General Hospital

# Teaching Activities: Resident and Medical Student

2011 - present	Instructor, University Hospitals Radiation Oncology Physics Residency Program, 80 hours/year
2011 - present	Instructor, University Hospitals Radiation Oncology Physician Residency Program, 40 hours/year
2005 - 2011	Radiation Physics and Oncology instruction, medical students, Northeast Ohio Medical University. Two students formally mentored in 2010 during Radiation Oncology electives, 10 - 40 hours/year
2000 - 2003	Physics Coordinator, Allegheny General Hospital Radiation Oncology Physician Residency Program. Duties included didactic and lab teaching, course coordination, and resident evaluation, 40 - 80 hours/year
1998 – 2000	Instructor, Allegheny General Hospital Radiation Oncology Physician Residency Program, 20 - 40 hours/year
1997 - 1998	Instructor, Stanford University Physician Residency Program, 10 - 20 hours/year

# **Grant Support**

1995 - 1996	Radiotherapy Using Computer Controlled Treatment Systems National Research Service Award National Institutes of Health, National Institute of General Medical		
	Sciences, #F32 GM18264-01 Role: Supported Fellow	\$52,300	PI: Arthur Boyer
1991 - 1993	Graduate Fellowship Award Texas Space Grant Consortium, I Administration Role: Supported Fellow	um, National Aeronautics and Space \$15,000	

## **Publications**

#### **Published Papers**

- 1. Stansbery EK, Few AA, **Geis P:** A Global Model of Thunderstorm Electricity, Journal of Geophysical Research 98:16-591, 1993.
- 2. **Geis P,** Boyer AL, Wells NH: Use of a Multileaf Collimator as a Dynamic Missing Tissue Compensator, Medical Physics 23(7): 1199-1205, 1996.
- Followill D, Geis P, Boyer AL: Estimates of Whole-Body Dose Equivalent Produced by Beam Intensity Modulated Conformal Therapy, Int. J. Radiat. Oncol. Biol. Phys. 38(3): 667-672, 1997.
- 4. Boyer AL, **Geis P**, Grant W, Kendall R, Carol M: Modulated Beam Conformal Therapy for Head and Neck Tumors, Int. J. Radiat. Oncol. Biol. Phys. 39(1): 227-36, 1997.
- 5. Ma L, Geis P, Boyer AL: Quality Assurance for Dynamic Multileaf Collimator Modulated Fields Using a Fast Beam Imaging System, Medical Physics 24(8): 1213-1220,1997.
- 6. Adler JR jr, Chang SD, Murphy MJ, Doty J, **Geis P**, Hancock SL: The Cyberknife a Frameless Robotic System for Radiosurgery, Sterotact. Funct. Neurosurg., 68 (1-4 Pt 2): 124-128, 1997.
- Ma L, Boyer AL, Findley D, Geis P, Mok E, Application of a Video-Optical Beam Imaging System for Quality Assurance of Medical Accelerator, Phys. Med. Biol., 43 (12): 3649-3659, 1998.
- 8. Chang SD, Murphy M, **Geis P**, Martin DP, Hancock SL, Doty JR, Adler JR jr. Clinical Experience with Image-Guided Robotic Radiosurgery in the Treatment of Brain and Spinal Cord Tumors, Neurol. Med. Chir., 38 (1): 65-70, 1999.
- 9. Xia P, Geis P, Xing L, Ma C, Findley D, Forster K, Boyer AL: Physical Characteristics of a Miniature Multileaf Collimator: Medical Physics, 26 (1): 65-70, 1999.
- Wu A, Lee C-C, Johnson M, Brown D, Benoit R, Miller R, Cohen J, Geis P, Chen A, Kalnicki. A New Power Law for Determination of Total <sup>125</sup>I Seed Activity for Ultrasound-Guided Prostate Implants: Clinical Evaluations, Int. J. Radiat. Oncol. Biol. Phys. 47(5):1387-1493, 2000.

#### **Poster and Oral Presentations**

- 1. Few AA, Stansbery EK, **Geis P**: Model Calculations of the Integrated Upward Current from Thunderstorms and Thunderstorm Complexes. EOS Trans. AGU, 1988.
- 2. Few AA, **Geis P**, Stansbery EK: Diagnostic Applications of Thunderstorm Electric Monitoring. EOS Trans. AGU, 1989.
- 3. **Geis P**, Blakeslee RJ, Few AA, Stansbery EK, Christian HJ: A Global Model of Thunderstorm Electricity. Presented at the International Conference on Atmospheric Electricity, 1992.
- 4. **Geis P,** Boyer AL: A Comparison of Multileaf Collimator and Dynamic Collimator Field Shaping. Presented at the Southwest American Association of Physicists in Medicine Conference, 1994.
- 5. Grant W, Carol M, **Geis P,** Boyer AL: A Study of Inverse Planning by Simulated Annealing for Photon Beams Modulated by a Multileaf Collimator. Presented at the American Association of Physicists in Medicine Annual Meeting, 1995.
- 6. Boyer A, Xing L, **Geis P**, Curran B, Hill R, Kania A: Theory of Monitor Unit Calculations for X-ray Beam Modulations with a Multileaf Collimator. Presented at the American Association of Physicists in Medicine Annual Meeting, 1997.
- 7. **Geis P,** Forster K, Xia P, Mok E, Xing L, Boyer AL: Physical Characterization of a Multileaf Collimator. Presented at the American Society for Therapeutic Radiology and Oncology Meeting, 1997.
- 8. **Geis P**, Hill R, Siochi A, Kalnicki S, Larson S, Curran B, Wu A: A Comparison of IMRT Leaf-Sequencing Algorithms. Presented at the NOMOS Users' Group Meeting, American Society for Therapeutic Radiology and Oncology, 1998.
- 9. **Geis P**: Intravascular Brachytherapy for Physicists: AGH's Initial Experience. Presented at the Annual AAPM Penn-Ohio Fall Symposium, 2000.
- 10. **Geis P**, Vukich L: Life Without a 'Real' Simulator; AGH's Virtual Simulation Experience. Presented at the Annual AAPM Penn-Ohio Fall Symposium, 2001.
- 11. **Geis P**: IMRT: Coming To A Clinic Near You. Presented at the Tri-State Radiation Oncology Conference, 2001.

- 12. Andrews J, **Geis P**, Blaugrund, Colonias A, Fuhrer R, Vukich L, Miller L, Trombetta M, Parda, D: The Superiority of a 3D Conformal Plan Compared to an IMRT Plan for Squamous Cell Carcinoma of the Paranasal/Nasal Sinus. Poster Presentation at the National Medical Association Annual Convention, 2002.
- 13. **Geis P**, Hill R, Xia P: Intensity Modulated Radiotherapy: Treatment Delivery Systems. Presented at the Annual Siemens User's Meeting, 2002.
- 14. **Geis P**, Vukich L: Conventional Simulation to Virtual Simulation. Presented at the American Society of Radiologic Technologists Radiation Therapy Conference, 2003.

#### **Reviews and Chapters**

1. Contributing Author, 2002 - 2004, Module 5: Physics Fundamentals for Radiation Therapy, Web-Based Dosimetry Training Tool, published by Stanford University, http://www.dosimetrytrainingtool.com