

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.  
Photocopy this page or follow this format for each person.

NAME		POSITION TITLE	
Dr. Martin Fuss, MD		Professor	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Kurfuerst Friedrich Gymnasium, Heidelberg, Germany	Matura	1974-1983	
Ruprecht Karls University, Heidelberg, Germany		1985	History/Germanistik
Ruprecht Karls University, Heidelberg, Germany	M.D.	1986-1994	Medical school
Ruprecht Karls University, Heidelberg, Germany	Ph.D.	1998	Human Imaging

RESEARCH AND PROFESSIONAL EXPERIENCE: Concluding with present position, list, in chronological order, previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. If the list of publications in the last three years exceeds two pages, select the most pertinent publications. **DO NOT EXCEED TWO PAGES.**

1994-1998 Resident, Dept. of Radiation Oncology and Medical Oncology, Univ. of Heidelberg and Dept. of Radiological Diagnostic and Therapy, German Cancer Research Center (dkfz), Heidelberg

8/1998-7/99 Fellowship: Loma Linda University Medical Center, Proton Radiation Therapy, Loma Linda, California

8/1999-6/00 Dept. of Radiation Oncology and Medical Oncology, Univ. of Heidelberg

7/2000 7/01 Research Fellow: Dept. of Radiation Oncology, University of Texas Health Science Center at San Antonio, San Antonio, Texas

8/2001-11/03 Assistant Professor, Dept. of Radiation Oncology, The University of Texas Health Science Center at San Antonio, San Antonio, Texas

10/2001- Member of the Graduate Faculty in Radiological Sciences, The University of Texas Health Science Center at San Antonio, San Antonio, Texas

12/2003-7/06 Associate Professor, Dept. of Radiation Oncology, The University of Texas Health Science Center at San Antonio, San Antonio, Texas

8/2006- Professor (adjunct), Director Program in Image-guided Radiation Therapy, Dept. of Radiation Medicine, Oregon Health & Science University, Portland, Oregon

7/2007 Professor, Dept. of Radiation Medicine, Oregon Health & Science University, Portland, Oregon

## Selected peer-reviewed publications

1. Fuller CD, Forthuber B, Choi M, Rajagiriyl, Slater BJ, **Fuss M**. Standard fractionation intensity-modulated radiation therapy (IMRT) for primary and recurrent glioblastoma multiforme. Radiation Oncology 2007;2(26):1-7.
2. Wang SJ, Choi M, Fuller CD, Salter BJ, **Fuss M**. Intensity-Modulated Radiosurgery for Patients with Brain Metastases: A Mature Outcomes Analysis. TCRT 2007;6:161-168.
3. **Fuss M**, Salter BJ. Intensity-modulated radiosurgery: improving dose gradients and maximum dose using post inverse-optimization interactive dose shaping. TCRT 2007;6:197-204.
4. **Fuss M**, Boda-Heggemann J, Papanikolaou N, Salter BJ. Image-guidance for Stereotactic Body Radiation Therapy. Medical Dosimetry 2007;32(2):102-10.
5. Achanta P, Thompson KJ, **Fuss M**, Martinez JL. Gene Expression Changes in the Rodent Hippocampus Following Whole Brain Irradiation. Neuroscience Letters 2007;418(2):143-7.
6. Tanyi JA, **Fuss M**, Varchena V, Lancaster JL, and Salter BJ. Phantom investigation of three-dimensional motion-dependent volume aliasing during computed tomography simulation for radiation therapy planning. Radiation Oncology 2007;2:1-15.

7. **Fuss M**, Wong A, Fuller CD, Salter BJ, Fuss C, Herman TS, Thomas CR Jr. Image-guided intensity-modulated radiation therapy for pancreatic carcinoma. *Gastrointestinal Cancer Research* 2007;1(1):2-11.
8. Fuller CD, Thomas CR, Wong A, Voeltz L, Salter BJ, **Fuss M**. Thermo-luminescent dosimeter evaluation of extra-target dose in intensity modulated sequential tomotherapy for pancreatic cancer. *J Radiotherapy in Practice* 2006;5, 173-176.
9. **Fuss M**, Shi, C, Papanikolaou N. Tomotherapeutic Stereotactic Body Radiation Therapy: Techniques and Comparison between Modalities. *Acta Oncologica* 2006;45(7);953-960.
10. Joyner M, Salter BJ, **Fuss M**. Stereotactic Body Radiation Therapy for Centrally located Lung Lesions. *Acta Oncologica* 2006;45(7);802-807.
11. Rassiah P, Salter BJ, Fuller D, Blough M, Papanikolaou N, **Fuss M**. Monte Carlo Characterization of Target Doses in Stereotactic Body Radiation Therapy (SBRT). *Acta Oncologica* 2006;45(7);989-994.
12. Fuller CD, Thomas CR Jr., Salter BJ, Herman TS, **Fuss M**. Preliminary endpoint analysis of daily ultrasound-based image-guided IMRT in the treatment of cancers of the gallbladder. *Radiotherapy Oncology* 2006;81:65-72.
13. Yang G, Wagner T, **Fuss M**, Thomas CR Jr. Multimodality Approaches for Pancreatic Cancer. *CA A Cancer Journal for Clinicians* 2005;55(6):352-367.
14. Cavanaugh SX, Fuller CD, Kupelian PA, Reddy C, Bradshaw P, Pollock BH, **Fuss M**. Time and PSA Threshold Model Predicts Long-Term Overall and Disease Specific Survival in Prostate Cancer Patients as Early as Three Months after External Beam Radiation Therapy. *Prostate Cancer and Prostatic Diseases* 2005;8(4):353-358.
15. **Fuss M**, Salter BJ, Caron JL, Vollmer DG, Herman TS. Intensity-modulated radiosurgery for childhood arteriovenous malformations. *Acta Neurochirurgica* 2005;147(11):1141-1150.
16. Cheek D, Holder A, **Fuss M**, Salter BJ. The relationship between the number of shots and the quality of Gamma Knife radiosurgeries. *Optimization and Engineering* 2005;6(4):449-462.
17. **Fuss M**, Salter BJ, Herman TS, Thomas CR Jr. External beam radiation therapy for hepatocellular carcinoma: Potential of intensity-modulated and image-guided radiation therapy. *Gastroenterology* 2004;127(5 Suppl 2):S206-17.
18. **Fuss M**, Salter BJ, Cavanaugh SX, Fuss C, Sadeghi A, Fuller CD, Ameduri A, Hevezi JM, Herman TS, Thomas CR Jr. Daily ultrasound-based image-guided targeting for radiotherapy of upper abdominal malignancies. *Int J Radiat Oncol Biol Phys* 2004;59(4):1245-1256.
19. Cavanaugh SX, Kupelian PA, Reddy C, Bradshaw P, Pollock BH, **Fuss M**. Early PSA kinetics following prostate cancer radiotherapy: prognostic value of a Time and PSA threshold model. *Cancer* 2004;101:96-105.
20. **Fuss M**, Salter BJ, Cheek D, Sadeghi A, Hevezi JM, Herman TS. Repositioning accuracy of a commercially available thermoplastic mask system. *Radiother Oncol* 2004;71(3):339-345.
21. **Fuss M**, Thomas CR Jr. Stereotactic body radiation therapy: an ablative treatment option for primary and secondary liver tumors. *Ann Surg Oncol* 2004;11(2):130-138.
22. **Fuss M**, Salter BJ, Rassiah P, Cheek D, Cavanaugh SX, Herman TS. Repositioning accuracy of a commercially available double-vacuum whole body immobilization system. *Technol Cancer Res Treat* 2004;3(1):59-67.
23. Steinvorth S, Welzel G, **Fuss M**, Debus J, Wildermuth S, Wannemacher M, Wenz F. Neuropsychological outcome after fractionated stereotactic radiotherapy (FSRT) for base of skull meningiomas: a prospective one-year follow-up. *Radiother Oncol* 2003;69(2):177-182.
24. Wenz F, Tiefenbacher U, **Fuss M**, Lohr F. Should patients with locally advanced, non-metastatic carcinoma of the pancreas be irradiated? *Pancreatol* 2003;3:359-366.
25. **Fuss M**, Cavanaugh SX, Fuss C, Cheek DA, Salter BJ. Daily stereotactic ultrasound prostate targeting: inter user-variability. *Technol Cancer Res Treat* 2003;2(2):161-170.

#### Book chapters

1. **Fuss M**, Salter BJ. Case study in liver SBRT: Dose optimization via inverse treatment planning. In: *Stereotactic Body Radiation Therapy*. Ed. Kavangh/Timmerman. Lippincott Williams & Wilkins 2005.
2. Herfarth K, **Fuss M**. SBRT for liver tumors. Ed. Solberg/Slotman. *Stereotactic body radiation therapy textbook*. Taylor and Francis Books 2006.

3. Salter BJ, **Fuss M**. Serial Tomotherapeutic Approaches to Stereotactic Body Radiation Therapy. Ed. Solberg/Slotman. Stereotactic body radiation therapy textbook. Taylor and Francis Books 2006.

Research support

1. CCRC 02-173, Start-up support for the development of a non-invasive PET imaging assessment of radiation-induced brain tissue damage in rats. Children's Cancer Research Center, San Antonio, TX, \$160,000 (April 2002-March 2004). Closed
2. RSNA (Radiological Society of North America) Medical Student Departmental Grant #MSD0205, Executive Control Function as a Measure of Cognitive Function in Patients Receiving Cranial Irradiation. \$ 15,000 over five years (October 2002–September 2006). Closed
3. RSNA Leonard B. Holman Resident Research Grant. <sup>11</sup>C acetate PET staging in newly diagnosed high-risk prostate cancer patients. Holman Resident and PI: Sean X. Cavanaugh, MD, PhDc. Scientific mentor: Martin Fuss, MD. \$30,000 (July 2003-June 2005). Closed
4. CCC (Cancer Center Council San Antonio at CTRC, San Antonio, TX), Prospective clinical study to assess tumor response of childhood brain tumors following cranial irradiation using positron emission tomography (PET). \$20,000 for one year (June 2003-May 2004). Closed
5. SALS (San Antonio Life Sciences Institute), Radiation-induced changes in hippocampal functioning. \$167,000 for one year (June 2004-June 2006). PI's Fuss M (UTHSCSA) and Martinez J (UTSA). Closed
6. CCC (Cancer Center Council San Antonio at CTRC, San Antonio, TX), <sup>11</sup>C-acetate PET for prostate cancer. \$18,000 for one year (June 2004-May 2005). Closed
7. Nomos Corp. (Cranberry Township, PA). Unrestricted educational grant. \$15,000 for one year. PI Fuss M (May 2004-April 2005). Closed
8. Equipment grant from Nomos, Cranberry Township, PA: Corvus inverse treatment planning stations for education and research. PI Fuss M. (2005/2006)
9. San Antonio Neuroscience Alliance (SANA). Radiation-induced changes in hippocampal functioning. Awardee Pragathi Achanta. UTSA mentor J. Martinez, UTHSCSA mentor M. Fuss. Stipend support (June 2006 to June 2007). Active.
10. 1 R01 LM009362-01. Physics-Based Patient Respiration Modeling, NIH R01 grant application in response to PAR-03-106 has been submitted in 2/06 (PI Xu G, Dept. of Mechanical, Aerospace & Nuclear Engineering, Rensselaer, Troy, NY, Fuss M, Co-investigator – effort 10%). Priority score 146, percentile: 8.9, preliminary notice of funding received 12/22/2006.
11. Equipment grant from GE Medical System, Milwaukee, WI: Four-dimensional CT (4D-CT) imaging for radiation therapy planning and daily image-guidance. PI Fuss M. (2007)
12. Equipment grant from Imaging3, Burbank, CA: Clinical evaluation of a mobile cone-beam CT unit for radiation therapy image-guidance. PI Fuss M. (2007)