# College of Medicine Curriculum Vitae

# John M. Buatti, M.D.

March 15, 2021

## Personal

Birth date:	February 12, 1960
Birthplace:	Brooklyn, New York
Home address:	2891 Saddle Club Rd. NE
	Iowa City, IA 52240
Business address:	200 Hawkins Dr.
	Rm. 01626 PFP West Addition
	Iowa City, IA 52242
Phone:	Home: (319) 351-4607
	Business: (319) 356-2699
E-mail:	john-buatti@uiowa.edu
Marital Status:	Married to Ann Marie Buatti
Children:	Philip Michael (April 11, 1993)
	Samuel Jeremiah (May 4, 1995)
	Jacob Saverio (July 26, 1996)
	Isaac Antonio (December 22, 1998)

# I. Educational and Professional History

## Education

Higher Edu	cation		
1978–1982	B.S. (biology & theology)	Georgetown University, Wasl	nington D.C.
		Thesis: Kennedy Institute of	Ethics, Washington, D.C.
1982–1986	M.D.	Georgetown University, Wash	nington D.C.
Postgraduat	e Medical Education		
1986–1989	Internship & Residency	Internal Medicine, Georgetov	vn University
1989–1993	Residency	Radiation Oncology, University of Arizona	
Board Certi	fication and Licensure		
American Boa	ard of Internal Medicine	license 126587	certified September 1991
American Boa	ard of Radiology (Therapeutic)		certified June 1994
Iowa Board o	f Medical Examiners	license 33213	through February 2022
Florida Board	of Medicine	license ME0064017	expired January 2000
Virginia Boar	d of Medicine	license 43317	expired October 1990

## **Professional and Academic Positions**

#### Academic

1993–1998	Assistant Professor, Department of Radiation Oncology, Shands Cancer Center University of Florida, Gainesville, Florida
1997–1999	Joint Appointment, Department of Neurosurgery, Shands Cancer Center University of Florida, Gainesville, Florida
1998–1999	Associate Professor, Department of Radiation Oncology, Shands Cancer Center University of Florida, Gainesville, Florida
1999–2001	Associate Professor, Department of Neurosurgery, Shands Cancer Center University of Florida, Gainesville, Florida
1999–2001	Professor, Department of Radiology Carver College of Medicine, The University of Iowa, Iowa City, Iowa
2001–present	Professor, Department of Radiation Oncology Carver College of Medicine, The University of Iowa, Iowa City, Iowa
2004–present	Secondary Appointment, Department of Otolaryngology Carver College of Medicine, The University of Iowa, Iowa City, Iowa
2009–present	Secondary Appointment, Department of Neurosurgery Carver College of Medicine, The University of Iowa, Iowa City, Iowa

## Administrative

1999–2001	Vice-Chair, Department of Radiology Carver College of Medicine, The University of Iowa, Iowa City, Iowa
1999–2001	Director, Division of Radiation Oncology Carver College of Medicine, The University of Iowa, Iowa City, Iowa
2001–present	Chair, Department of Radiation Oncology Carver College of Medicine, The University of Iowa, Iowa City, Iowa
2008–2012	Deputy Director of Clinical Cancer Care, Holden Comprehensive Cancer Center Carver College of Medicine, The University of Iowa, Iowa City, Iowa
2017-present 2019	Associate Director, Iowa Clinical Translational Science Institute (CTSA) Chair, Clinical Operations Committee
	r , r , r , r , r , r , r , r , r , r ,

## Honors, Awards, Recognitions, and Outstanding Achievements

1992	Chief Resident Radiation Oncology, University of Arizona
1992	Outstanding Oncology Fellow Award (Upjohn Company)
1992	Member, Alpha Epsilon Delta, Pre-Medical Honorary (University of Arizona)
1992	Vernon and Virginia Furrow Award for Innovation in Medical Education
1993	RSNA Scholars Award
1994	American Cancer Society Clinical Career Development Award
1999	Edward Shedd Wells Chair of Neurosurgery, University of Florida
2003-2007	Board Member, International Stereotactic Radiosurgery Society
2003–present	Listed, Best Doctors in America
2006–2008	Medical Imaging – Best of the Best (Medical Imaging Industry's Top 10 Performers)

2007-2008	Listed, Cambridge Who's Who
2006-2010	Selected, America's Top Radiologist in Guide to America's Top Radiologists
2010	Fellow, American College of Radiology
2013	ARRO Educator of the Year Award
2014	ASTRO Fellow (FASTRO)
2015-2016	Council of Deans Fellowship Program (AAMC)
2017-2019	SCAROP Board – Society of Chairs of Academic Radiation Oncology Programs
2019	Nominee – 2020 Daryl and Nancy Granner Distinguished Mentor Award, Carver College of Medicine, University of Iowa
2020	Honorary Member – American Association of Physicists in Medicine
2020	Carver College of Medicine Impact Scholar – Silver Level

# II. Teaching

# **Teaching Assignments**

Year	Classroom, Seminar, or Teaching Lab	Hours
1988–89	Instructor, Indications for Bone Marrow Transplantation and Common Infections and Complications of Bone Marrow Transplantation, University of Arizona	2 hrs per yr
1989	Instructor, Physical Diagnosis	10 hrs per yr
1990–93	Lecturer, Professional Liaison for AED, Pre-Medical Honorary of the University of Arizona	10 hrs per yr
1991–92	Lecturer, <i>Careers in Academic Medicine,</i> Pre-Medical Undergraduates, University of Arizona	1 hr per yr
1992–93	Instructor, Radiation Therapist School, University Arizona	8 hrs per yr
1992–93	Instructor, Introduction to Clinical Oncology Third Year Medical Students, University of Arizona	25 hrs per yr
1993	Lecturer, Radiotherapy and its Implications for Dental Care Dental Surgery Students, University of Arizona	1 hr per yr
1993–1998	Instructor, Radiation Biology Course Radiation Oncology Residents, University of Florida	15 hr per yr
1994	Lecturer, Malignant Gliomas Department of Radiation Oncology, University of Florida	1 hr per yr
1995	Lecturer, Stereotactic Radiosurgery Department of Radiation Oncology, University of Florida	1 hr per yr
1995	Lecturer, General Principles of Radiation Oncology Medical Students, University of Florida	1 hr per yr
1996–2000	Instructor, Treatment Planning for Stereotactic Radiosurgery Surgical Navigation Technologies Training Course University of Florida	12 hrs per yr

Year	Classroom, Seminar, or Teaching Lab	Hours
1998	Lecturer, Low Grade Astrocytomas Radiation Oncology Residents, University of Florida	1 hr per yr
1998	Lecturer, <i>Pituitary Adenomas</i> Radiation Oncology Residents, University of Florida	1 hr per yr
1998	Lecturer, An Overview of Cancer Graduate Student Cancer Biology, University of Florida	1 hr per yr
1998	Lecturer, Introduction to Stereotactic Radiosurgery Nurse training program, University of Florida	1 hr per yr
1998	Lecturer, Image Guided Radiotherapy for Brain Tumors Resident Lecture, University of Florida	1 hr per yr
1999	Lecturer, <i>Principles of Radiation Therapy</i> Neurology Resident Teaching Conference, University of Iowa	1 hr per yr
1999-2001	Instructor, 74:006 Radiology Medical Student Short Clerkship Carver College of Medicine, The University of Iowa	6 hrs per yr
1999-2013	Discussant, R <i>adiation Oncology Case Conference</i> Carver College of Medicine, The University of Iowa	1-3 hrs per wk
2000	Lecturer, <i>Stereotactic Radiotherapy Technique</i> Carver College of Medicine, The University of Iowa	4 hrs per yr
2000-2001	Instructor, Foundations of Clinical Practice II and III Carver College of Medicine, The University of Iowa	2 hrs per wk
2000–2002	Instructor, 74:006 Radiology Medical Student Short Clerkship Carver College of Medicine, The University of Iowa	10 hrs per yr
2001	Mentor, <i>Clinician Mentor Program</i> Carver College of Medicine, The University of Iowa	2 hrs per wk
2001	Instructor, Radiation Therapist Program Carver College of Medicine, The University of Iowa	12 hrs per yr
2001–2008	Lecturer, Molecular and Cell Biology of Cancer (77:288) Carver College of Medicine, The University of Iowa	3 hrs per yr
2001–present	Lecturer, Resident Lecture Series Carver College of Medicine, The University of Iowa	8 hrs per yr
2003–2007	Lecturer, <i>Clinical and Professional Reflections Program</i> Carver College of Medicine, The University of Iowa	9 hrs per yr
2003–2005	Instructor, Neurosurgery Resident Review in Radiation Oncology Carver College of Medicine, The University of Iowa	2 hrs per yr
2005–2008	Instructor, Foundations of Clinical Practice II Carver College of Medicine, The University of Iowa	2 hrs per wk

Year	Classroom, Seminar, or Teaching Lab	Hours
2011	Facilitator – FCP III PCL Core Physical Exam Practice –small group Carver College of Medicine, The University of Iowa	2 hrs per wk
2012 –present	MSTP Mentor, <i>Clinical Connections Program</i> Carver College of Medicine, The University of Iowa	4 half days per Sem
2012 –present	Lecturer, Chair's Teaching Conference Carver College of Medicine, The University of Iowa	7 hrs per yr
2013	Clinical & Professional Skills I-Longitudinal Clinical Mentorship Carver College of Medicine, The University of Iowa	6 hrs/Fall Sem
2016	Small Group Teaching in Preclinical Medical Curriculum, Carver College of Medicine, The University of Iowa	Fall Sem
2016	PBCR Program in CAPS III, Carver College of Medicine, The University of Iowa	20 contact hrs/Fall Sem
2016	Caps III Final Clinical Reasoning Exercise, Carver College of Medicine, The University of Iowa	4hrs/Fall Sem
2017	CAPS III, OSCE, Final Clinical Reasoning Exercise, Carver College of Medicine, The University of Iowa	4hrs/Fall Sem
2017-2018	Case-Based Learning Small Group Teaching Facilitator, M1/PA1, Carver College of Medicine, The University of Iowa	38 Contact Hrs
2018-2019	Clinical and Professional Skills I (CAPS I) MED:8121, M1/PA1, Carver College of Medicine, The University of Iowa	27 Contact Hrs
2019	Pediatric Interest Group – Physician Panel	1 hr
2019-2020	Case-Based Learning Small Group Teaching Facilitator, M1/PA1, Medicine and Society I, Carver College of Medicine, The University of Iowa	36 Contact Hrs
2020-2021	Case-Based Learning Small Group Teaching Facilitator, M1/PA1, Medicine and Society I, Carver College of Medicine, The University of Iowa	36 Contact Hrs
Year	Clinical Teaching	Hours
1993–1996	Shands Cancer Center, University of Florida	6hrs per wk
1996–1999	Shands Cancer Center, University of Florida	20hrs per wk
1999–2003	Outpatient Clinic, University of Iowa Hospitals & Clinics	30hrs per wk
2004–present	Outpatient Clinic, University of Iowa Hospitals & Clinics	20hrs per wk
2001-2011	Head & Neck Multidisciplinary Treatment Planning Conference	2hrs per wk
2014-2016	Early Clinical Experience Program – M1, Carver College of Medicine, University of Iowa	8hrs Fall Semester
2016	Early Clinical Experience Program – M1, Carver College of Medicine, University of Iowa	12hrs Spring Semester

2017	MSTP Clinical Connections Program	16hrs Spring Semester
2017	Early Clinical Experience Program – M1, Carver College of Medicine, University of Iowa	12hrs Spring Semester
2019	Early Clinical Experience Program – M1, Carver College of Medicine, University of Iowa	12hrs Spring Semester
2020	Early Clinical Experience Program – M1, Carver College of Medicine, University of Iowa	12hrs Fall Semester

# **Students Supervised**

### PhD and MS Dissertation Committees

Thomas Wagner Optimal delivery techniques for intracranial stereotactic radiosurgery and radiotherapy using circular and multi- Nuclear and Radiologic Engineering, University of Florida	onferred July 2000 leaf collimators
RuiGuo Liu co Geometrically based optimization of extracranial radiosurgery treatment planning Electrical and Computer Engineering, The University of Iowa	nferred May 2004
Marcus Van Tol, MSAn automated tool for PET segmentation of H&N CancersElectrical and Computer Engineering, The University of Iowa	onferred May2015
Ethan Ulrich Longitudinal segmentations for PET FLT imaging	began 2015
Cameron Cushing T2* and QSM MR in Vitamin C detection in vivo Free Radical and Radiation Biology/MR Physics	began 2015
Michele Tamplin Endothelial effects of radiation using a retinal model Free Radical and Radiation Biology/ Physics/Electrical and Computer Engineering	began 2017
Michael Rendleman Machine Learning With The TCGA-HNSC Dataset: Improving Performance By Addressing Inconsistency, S <sub>I</sub> Dimensionality Electrical and Computer Engineering / Center for Bioinformatics	began 2017 barsity, and High-
Clinical & Translational Research Mentorship	
Lionel Bouchet, Ph.D. Post-doctoral research on radiosurgery and planning Department of Neurosurgery, University of Florida	1997–1999
Amanda Mealer, Doris Duke Fellow MnSOD and malignant gliomas Carver College of Medicine, The University of Iowa	2003–2004
Laurent Grignon, Doris Duke Fellow <i>Clinical stereotactic guided therapy</i> Carver College of Medicine, The University of Iowa	2004–2005

Kevin Bylund, Doris Duke Fellow <i>Image guided radiotherapy</i> Carver College of Medicine, The University of Iowa	2007–2008
Maneesh Kumar, Doris Duke Fellow 3'-UTR MRNA binding protein Hur: A molecular 'hotspot' for cancer therapy Carver College of Medicine, The University of Iowa	2007–2008
Ann Morris, M.D. Cone beam localization for positioning of head and neck cancer Carver College of Medicine, The University of Iowa	2008–2009
Kevin Orcutt, Doris Duke Fellow The role of oxidative stress in the cytotoxic effects of erlotinib in human head and neck cancer cells Carver College of Medicine, The University of Iowa	2009–2010
Justin Otis, BS <i>Quantitative Imaging of Tumor Response to Cancer Therapy</i> Creighton University School of Medicine	2010-2011
Audrey Wallace, Doris Duke Fellow Integration of a quantitative imaging and outcomes database for head and neck cancer University of Missouri College of Medicine	2011-2012
Patrick Clerkin, M.D., PhD. MRSI as a predictive Biomarker in Glioblastoma Louisiana State University Medical School	2012
Michael Marquardt, Doris Duke Fellow University of Iowa Carver College of Medicine	2012-2014
Sam Schroeder, Doris Duke Fellow (co-mentor) University of Iowa Carver College of Medicine	2012-2013
Jessica Parkhurst, M4 University of Iowa Carver College of Medicine	2013
Kristin Plichta, M.D., Ph.D. <i>Quantitative Imaging in Head &amp; Neck Cancer</i> University of Iowa Carver College of Medicine	2013-2014
Tangel Chang, DO University of Iowa Carver College of Medicine	2014
Kripa Guram, Medical Student Glioblastoma target volumes and outcomes	2016-2018
Weiren Liu, M1 PET segmentation of the cerebellum University of Iowa Carver College of Medicine	Summer 2018
<i>Residency Mentorship</i> Kellie Condra, M.D. Primary treatment for intracranial meningiomas. Received UF Resident Talk'in Award, UF Clinical Research Conference; paper published	1995
Mark McCord, M.D. Pituitary adenomas: outcome and late sequelae	1996

Received UF Resident Talk'in Award, UF Clinical Research Conference; paper published

Thomas Ellis, M.D. A database for stereotactic radiosurgery. (assisted with WA Friedman). Paper published	1997
Dwelvyn Simmons, M.D. Gangliogliomas	1997
David Marshall, M.D. A Monte-Carlo based model for in vivo dosimetry. Is the dose what we think? Received UF Resident Talk'in Award, UF Clinical Research Conference	1998
Shelaine Mabanta, M.D. Radiosurgery for intracranial metastases	1998
Shelaine Mabanta, M.D. <i>Stereotactic radiotherapy for intracranial germinomas</i> Received UF Resident <i>Talk'in Award</i> , UF Clinical Research Conference; paper published	1999
Shelaine Mabanta, M.D. Linac radiosurgery for non-acoustic schwannoma	2000
Kelly Foote, M.D. Cranial nerve complication analysis for vestibular schwannoma (Assisted with WA Friedman) Received Congress of Neurosurgery Award; Paper published.	1998–1999
Reena Kamath, D.O. Frameless radiosurgery for intracranial metastases	2002–2003
Terese Howes, M.D. Stereotactic positioning in clinical applications	2003–2004
Heather Kaiser, M.D. Extracranial stereotactic radiosurgery of liver tumors	2003–2004
Chandan Reddy, M.D. & Abigail Stockham, M.S. Stereotactic Radiosurgery for Trigeminal Neuralgia	2006
Anna Olson, M.D. F <i>rameless radiosurgery for malignant neoplasms</i>	2007
Arshin Sheybani, M.D. Chordoma of the Skull base	2011-2013
Bryan Allen, M.D., PhD. Ketogenic Diet for Lung Cancer and Pancreatic Cancer	2011-2013
Jessica Parkhurst, MD Parathyroid Adenoma Treatment with Stereotactic Radiosurgery	2014
Darrion Mitchell, M.D., PhD. Epithelial-Mesenchymal Transition as a Therapeutic Target in Prostate Cancer	2013-2014
Andrew Hoover, M.D., Nelfinavir for Adenoid Cystic Carcinoma, PET/CT in Head and Neck Cancer	2013-2014
Sagar Patel, MD The Relevance of PET-CT in Cancer Response Evaluation	2014
Kristen Plichta, MD, PhD Validation of a Just-Enough-Interaction Tool for PET segmentation	2015
Tangel Chang, DO Validation of a Just-Enough-Interaction Tool for PET segmentation	2015

Amir Zahra, DO RPA recursive partitioning analysis for Melanoma Metastases	2017
Kristin Plichta, M.D., Ph.D. Quantitative Imaging in Head & Neck Cancer, and Lung Cancer	2013-2014
Jessica Parkhurst, MD RPA recursive partitioning analysis for Gastrointestinal Metastases	2017
Steven Seyedin, MD Parp inhibitors with High Dose Ascorbate in GI cancers	2018-2019

Cameron Callaghan, MD High Dose Ascorbate with DNA repair inhibitors in Rectal Cancer

### **Other Contributions to Institutional Programs**

### National and International Teaching Programs

1996-2004	Course Co-director Linac Radiosurgery, Orlando, FL
1997-1999	Meeting Coordinator-Spring Research Seminar, Orlando, FL Department of Radiation Oncology, University of Florida
2001	Radiosurgery Training Course – Z-Med
2001	Scientific Program Committee International of Stereotactic Radiosurgery Society, Las Vegas, Nevada
2001	Director, Radiosurgery Practical Course International Society of Stereotactic Radiosurgery, Las Vegas Nevada
2003	Course Director, Annual Meeting ISTRO (Iowa Society of Therapeutic Radiation Oncology)
2009	ASTRO IGRT & SBRT Symposium, H&N Cancer, Miami, FL
2010	ASTRO IGRT IMRT SBRT Symposium, Dallas, TX
2010	Annual Radiation Research Scholars in Training Workshop, Maui, HI
2010-2011	Course Co-Director Linac Radiosurgery, Orlando, FL
2010	Co-Leader, Tumor Imaging Program, National Cancer Institute
2011	AANS Review Course in Stereotactic Radiosurgery, Denver, CO
2012	AANS Review Course in Stereotactic Radiosurgery, Miami, FL
2013	Cranial Radiosurgery Course, 81 <sup>st</sup> AANS Annual Scientific Meeting, New Orleans, LA
2014	AANS Review Course in Stereotactic Radiosurgery, San Francisco, CA
2016	ASTRO Panel, Advanced Quantitative Imaging for the Radiation Oncologist: Response Assessment and Targeting for Clinical Trials and Practice, A View from NCI's Quantitative Imaging Network, Boston MA
2017	Quantitative Imaging in Cancer Therapy Trials – Lung Cancer Work Group Meeting, Alliance Oncology, Chicago
2018	AAPM Panel on Longitudinal Imaging in Cancer Therapy, Nashville TN
2018	NRG Semi-annual Meeting Plenary Session, Quantitative Imaging Tools for Oncology Decision Making in Clinical Trials, Philadelphia, PA
2018	ASTRO Panel, NCI's Quantitative Imaging Network: Development and Integration of Novel Tools for Oncology Clinical Trials and Patient Management, San Antonio, TX

2018-2019

2019-2020	ASTRO Theranostics Workshop $-\frac{1}{2}$ day practical course co-directed with Ana Kiess, MD, PhD
2020	ASTRO -Master Class 01: Radiopharmaceutical Therapy Master Class: Segment I and II. Moderator. Live Webinar, October 24, 2020.

#### Course Materials (samples upon request)

Syllabus, Radiobiology for Residents (a programmed text of radiobiology)

Syllabus and course materials, Radiation Therapy. A Major Role in the Treatment of Meningiomas. A course of the Presidential Categorical Course in Central Nervous System Tumors presented by the American Society of Therapeutic Radiation and Oncology.

#### Teaching Committees & Activities

2000–present	Medical Advisor	UIHC Radiation Therapist Training Program
2001–present	Faculty Participant	Medical Student Community (Boulware)

#### Other Teaching Activities (see invited presentations)

2006	Lecturer: Academic Radiation Oncology A Day in the Life Series for 1 <sup>st</sup> and 2 <sup>nd</sup> yr medical students Carver College of Medicine The University of Iowa
2008-present	Summer Undergraduate MTSP Research (SUMR) Program
2010	University Iowa Mini-Med School Program – Image Guided Radiation Therapy
2014	Summer Physician Diversity Shadowing Program

## III. Scholarship

#### Publications (peer reviewed)

- 1. Wilder RB, **Buatti JM**, Kittelson JM, Shimm DS, Harari PM, Rogoff EE, Cassady JR. Pterygium treated with excision and postoperative beta irradiation. *Int J Radiat Oncol Biol Phys* 1992;23:533-537. PMID: 1612953
- 2. **Buatti JM**, Rivero LR, Jorgensen TJ. Radiation-induced DNA single-strand breaks in freshly isolated human leukocytes. *Radiat Res* 1992;132:200-206. PMID: 1438702
- 3. Stea B, **Buatti JM**, Stringer DE, Gerner EW. Inhibition of polyamine synthesis suppresses growth and gamma-ray-induced sublethal and potentially lethal damage recovery in human tumor cells in culture. *Radiat Oncol Investig* 1993;1:41-49.
- 4. **Buatti JM**, Harari PM, Leigh BR, Cassady JR. Radiation-induced angiosarcoma of the breast. Case report and review of the literature. *Am J Clin Oncol* 1994;17:444-447. PMID: 8092119
- 5. **Buatti JM**, Friedman WA, Bova FJ, Mendenhall WM. Linac radiosurgery for high-grade gliomas: the University of Florida experience. *Int J Radiat Oncol Biol Phys* 1995;32:205-210. PMID: 7721617
- 6. **Buatti JM**, Friedman WA, Bova FJ, Mendenhall WM. Linac radiosurgery for locally recurrent nasopharyngeal carcinoma: rationale and technique. *Head Neck* 1995;17:14-19. PMID: 7883544
- 7. **Buatti JM**, Friedman WA, Bova FJ, Mendenhall WM. Treatment selection factors for stereotactic radiosurgery of intracranial metastases. *Int J Radiat Oncol Biol Phys* 1995;32:1161-1166. PMID: 7607938
- 8. Sarkaria JN, Mehta MP, Loeffler JS, **Buatti JM**, Chappell RJ, Levin AB, Alexander E, 3rd, Friedman WA, Kinsella TJ. Radiosurgery in the initial management of malignant gliomas: survival comparison

with the RTOG recursive partitioning analysis. Radiation Therapy Oncology Group. *Int J Radiat Oncol Biol Phys* 1995;32:931-941. PMID: 7607967

- 9. Mendenhall WM, Parsons JT, **Buatti JM**, Stringer SP, Million RR, Cassisi NJ. Advances in radiotherapy for head and neck cancer. *Semin Surg Oncol* 1995;11:256-264. PMID: 7638513
- 10. Mendenhall WM, Friedman WA, Parsons J, **Buatti JM**, Bova FJ. Radiation therapy and stereotactic radiosurgery for temporal bone tumors. *Operative Techniques in Otolaryngology-Head and Neck Surgery* 1996;7:208-218.
- 11. Parsons J, Mendenhall WM, **Buatti JM**, Stringer S, Million R, Cassisi N. Advances in radiotherapy for head and neck cancer. In: Shah JP, editor. The 4th International Conference on Head and Neck Cancer in Toronto. Pittsburgh PA: American Head & Neck Society; 1996. pp. 224-230.
- 12. Auchter RM, Lamond JP, Alexander E, **Buatti JM**, Chappell R, Friedman WA, Kinsella TJ, Levin AB, Noyes WR, Schultz CJ, Loeffler JS, Mehta MP. A multiinstitutional outcome and prognostic factor analysis of radiosurgery for resectable single brain metastasis. *Int J Radiat Oncol Biol Phys* 1996;35:27-35. PMID: 8641923
- 13. Mendenhall WM, Friedman WA, **Buatti JM**, Bova FJ. Preliminary results of linear accelerator radiosurgery for acoustic schwannomas. *J Neurosurg* 1996;85:1013-1019. PMID: 8929489
- 14. **Buatti JM**, Friedman WA, Theele DP, Bova FJ, Mendenhall WM. The lazaroid U74389G protects normal brain from stereotactic radiosurgery-induced radiation injury. *Int J Radiat Oncol Biol Phys* 1996;34:591-597. PMID: 8621283
- 15. Friedman WA, Blatt DL, Bova FJ, **Buatti JM**, Mendenhall WM, Kubilis PS. The risk of hemorrhage after radiosurgery for arteriovenous malformations. *J Neurosurg* 1996;84:912-919. PMID: 8847584
- 16. **Buatti JM**, Marcus RB, Mendenhall WM, Friedman WA, Bova FJ. Accelerated hyperfractionated radiotherapy for malignant gliomas. *Int J Radiat Oncol Biol Phys* 1996;34:785-792. PMID: 8598354
- 17. **Buatti JM**, Mendenhall WM, Bova FJ, Friedman WA. In response to Firlik et al: Radiosurgery for recurrent cranial base cancer arising from the head and neck. *Head Neck* 1996;18:166.
- 18. **Buatti JM**, Meeks SL, Marcus RB, Jr., Mendenhall NP. Radiotherapy for pediatric brain tumors. *Semin Pediatr Neurol* 1997;4:304-319. PMID: 9447623
- Bova FJ, Buatti JM, Friedman WA, Mendenhall WM, Yang CC, Liu C. The University of Florida frameless high-precision stereotactic radiotherapy system. *Int J Radiat Oncol Biol Phys* 1997;38:875-882. PMID: 9240657
- 20. **Buatti JM**, Marcus RB, Jr. Pituitary adenomas: current methods of diagnosis and treatment. *Oncology (Williston Park)* 1997;11:791-796; discussion 798, 803-794. PMID: 9189937
- 21. **Buatti JM**, Parsons JT, Mendenhall WM, Meeks SL. Fractionated stereotactic radiotherapy for choroidal melanoma. *Radiother Oncol* 1997;45:99. PMID: 9364639
- 22. Salzman KL, Rojiani AM, **Buatti J**, Quisling RG, Marcus RB, Jr., Maria BL, Mickle JP, Kedar A. Primary intracranial germ cell tumors: clinicopathologic review of 32 cases. *Pediatr Pathol Lab Med* 1997;17:713-727. PMID: 9267886
- 23. Condra KS, **Buatti JM**, Mendenhall WM, Friedman WA, Marcus RB, Jr., Rhoton AL. Benign meningiomas: primary treatment selection affects survival. *Int J Radiat Oncol Biol Phys* 1997;39:427-436. PMID: 9308947
- 24. McCord MW, **Buatti JM**, Fennell EM, Mendenhall WM, Marcus RB, Jr., Rhoton AL, Grant MB, Friedman WA. Radiotherapy for pituitary adenoma: long-term outcome and sequelae. *Int J Radiat Oncol Biol Phys* 1997;39:437-444. PMID: 9308948

- 25. McLaughlin MP, **Buatti JM**, Marcus RB, Jr., Maria BL, Mickle PJ, Kedar A. Outcome after radiotherapy of primary spinal cord glial tumors. *Radiat Oncol Investig* 1998;6:276-280. PMID: 9885944
- 26. Meeks SL, **Buatti JM**, Bova FJ, Friedman WA, Mendenhall WM. Treatment planning optimization for linear accelerator radiosurgery. *Int J Radiat Oncol Biol Phys* 1998;41:183-197. PMID: 9588933
- 27. del Charco JO, Bolek TW, McCollough WM, Maria BL, Kedar A, Braylan RC, Mickle JP, **Buatti JM**, Mendenhall NP, Marcus RB, Jr. Medulloblastoma: time-dose relationship based on a 30-year review. *Int J Radiat Oncol Biol Phys* 1998;42:147-154. PMID: 9747832
- 28. Bova FJ, Meeks SL, Friedman WA, **Buatti JM**. Optic-guided stereotactic radiotherapy. *Med Dosim* 1998;23:221-228. PMID: 9783275
- 29. **Buatti JM**, Friedman WA, Meeks SL, Bova FJ. The radiobiology of radiosurgery and stereotactic radiotherapy. *Med Dosim* 1998;23:201-207. PMID: 9783273
- 30. Meeks SL, Bova FJ, Friedman WA, **Buatti JM**, Mendenhall WM. Linac scalpel radiosurgery at the University of Florida. *Med Dosim* 1998;23:177-185. PMID: 9783271
- 31. Meeks SL, **Buatti JM**, Bova FJ, Friedman WA, Mendenhall WM, Zlotecki RA. Potential clinical efficacy of intensity-modulated conformal therapy. *Int J Radiat Oncol Biol Phys* 1998;40:483-495. PMID: 9457839
- 32. Ellis TL, Friedman WA, Bova FJ, Kubilis PS, **Buatti JM**. Analysis of treatment failure after radiosurgery for arteriovenous malformations. *J Neurosurg* 1998;89:104-110. PMID: 9647180
- 33. McLaughlin MP, Marcus RB, Jr., **Buatti JM**, McCollough WM, Mickle JP, Kedar A, Maria BL, Million RR. Ependymoma: results, prognostic factors and treatment recommendations. *Int J Radiat Oncol Biol Phys* 1998;40:845-850. PMID: 9531369
- 34. Meeks SL, Bova FJ, Friedman WA, **Buatti JM**, Moore RD, Mendenhall WM. IRLED-based patient localization for linac radiosurgery. *Int J Radiat Oncol Biol Phys* 1998;41:433-439. PMID: 9607362
- 35. **Buatti JM**, Bova FJ, Friedman WA, Meeks SL, Marcus RB, Jr., Mickle JP, Ellis TL, Mendenhall WM. Preliminary experience with frameless stereotactic radiotherapy. *Int J Radiat Oncol Biol Phys* 1998;42:591-599. PMID: 9806519
- 36. Corn BW, Mehta MP, **Buatti JM**, Wolfson AH, Greven KM, Kim RY, Dunton CJ, Loeffler JS. Stereotactic Irradiation: potential new treatment method for brain metastases resulting from ovarian cancer. *Am J Clin Oncol* 1999;22:143-146. PMID: 10199447
- 37. Foote KD, Friedman WA, **Buatti JM**, Bova FJ, Meeks SA. Linear Accelerator Radiosurgery In Brain Tumor Management. *Neurosurg Clin N Am* 1999;10:203-242. PMID: 10099089
- Mabanta SR, Buatti JM, Friedman WA, Meeks SL, Mendenhall WM, Bova FJ. Linear Accelerator Radiosurgery For Nonacoustic Schwannomas. *Int J Radiat Oncol Biol Phys* 1999;43:545-548. PMID: 10078635
- 39. Shafron DH, Friedman WA, **Buatti JM**, Bova FJ, Mendenhall WM. Linac Radiosurgery For Benign Meningiomas. *Int J Radiat Oncol Biol Phys* 1999 Jan 15;43(2):321-327. PMID: 10030256
- 40. Meeks SL, Bova FJ, Maryanski MJ, Kendrick LA, Ranade MK, **Buatti JM**, Friedman WA. Image Registration Of BANG Gel Dose Maps For Quantitative Dosimetry Verification. *Int J Radiat Oncol Biol Phys* 1999;43:1135-1141. PMID: 10192365
- 41. Meeks SL, Bova FJ, Kim S, Tome WA, **Buatti JM**, Friedman. Dosimetric characteristics of a doublefocused miniature multileaf collimator. *Med Phys* 1999;26:729-733. PMID: 10360533
- 42. Meeks SL, Bova FJ, **Buatti JM**, Friedman WA, Eyster B, Kendrick LA. Analytic characterization of linear accelerator radiosurgery dose distributions for fast optimization. *Phys Med Biol* 1999;44:2777-2787. PMID: 10588284

- 43. Meeks SL, Williams RO, Bova FJ, Mendenhall WM, **Buatti JM**. The midline dose distribution for a three-field radiotherapy technique. *Med Dosim* 1999;24:91-98. PMID: 10379506
- 44. **Buatti JM**, Friedman WA, Theele D, Bova FJ, Mendenhall WM. Radioprotection of normal brain tissue by the lazaroid U74389G is not improved by dose escalation. In: Kondziolka D, editor. Radiosurgery 1999. Vol 3. Basel: Karger; 2000. pp. 153-160.
- 45. Mabanta S, **Buatti JM**, Meeks SL, Friedman WA, Bova FJ. Stereotactic radiotherapy integrated with conventional radiotherapy for intracranial germinomas. In: Kondziolka D, editor. Radiosurgery 1999. Vol 3. Basel: Karger; 2000. pp. 257-261.
- 46. Meeks SL, Bova FJ, **Buatti JM**, Friedman WA, Kim S. Clinical dosimetry considerations for a doubled-focused miniature multileaf collimator. In: Kondziolka D, editor. Radiosurgery 1999. Vol 3. Basel: Karger; 2000. pp. 83-90.
- 47. Meeks SL, Bova FJ, Maryanski MJ, Kendrick LA, Ranade MK, **Buatti JM**, Friedman WA. Quantitative verification of dose distributions for linac radiosurgery and fractionated stereotactic radiotherapy. In: Kondziolka D, editor. Radiosurgery 1999. Vol 3. Basel: Karger; 2000. pp. 13-22.
- 48. Mayr NA, Yuh WT, Arnholt JC, Ehrhardt JC, Sorosky JI, Magnotta VA, Berbaum KS, Zhen W, Paulino AC, Oberley LW, Sood AK, **Buatti JM**. Pixel analysis of MR perfusion imaging in predicting radiation therapy outcome in cervical cancer. *J Magn Reson Imaging* 2000;12:1027-1033. PMID: 11105046
- 49. Wagner TH, Yi T, Meeks SL, Bova FJ, Brechner BL, Chen Y, **Buatti JM**, Friedman WA, Foote KD, Bouchet LG. A geometrically based method for automated radiosurgery planning. *Int J Radiat Oncol Biol Phys* 2000;48:1599-1611. PMID: 11121667
- 50. **Buatti JM**, Meeks SL, Friedman WA, Bova FJ. Stereotactic radiosurgery: techniques and clinical applications. *Surg Oncol Clin N Am* 2000;9:469-487, viii. PMID: 10853137
- 51. Tome WA, Meeks SL, **Buatti JM**, Bova FJ, Friedman WA, Li Z. A high-precision system for conformal intracranial radiotherapy. *Int J Radiat Oncol Biol Phys* 2000;47:1137-1143. PMID: 10863087
- 52. Meeks SL, **Buatti JM**, Foote KD, Friedman WA, Bova FJ. Calculation of cranial nerve complication probability for acoustic neuroma radiosurgery. *Int J Radiat Oncol Biol Phys* 2000;47:597-602. PMID: 10837941
- 53. Meeks SL, Bova FJ, Wagner TH, **Buatti JM**, Friedman WA, Foote KD. Image localization for frameless stereotactic radiotherapy. *Int J Radiat Oncol Biol Phys* 2000;46:1291-1299. PMID: 10725643
- 54. **Buatti JM**, Friedman WA, Meeks SL, Bova FJ. RTOG 90-05: the real conclusion. *Int J Radiat Oncol Biol Phys* 2000;47:269-271. PMID: 10802348
- 55. Mayr NA, Taoka T, Yuh WT, Zhen WK, Paulino AC, Sorosky JI, **Buatti JM**. Magnetic resonance imaging in the assessment of radiation response in cervical cancer: regarding Hatano K *et al*. IJROBP 1999; 45:399-344. *Int J Radiat Oncol Biol Phys* 2000;48:910-912. PMID: 11183740
- 56. Meeks SL, Bova FJ, Friedman WA, **Buatti JM**. Therapeutic, hardware, and software limitations of fractionated stereotactic radiotherapy. *Automedica* 2001;20:135-162.
- 57. Paulino AC, **Buatti JM**. Adjuvant chemotherapy for ependymoma: is it necessary for all children under five years of age? *J Clin Oncol* 2001;19:3588-3589. PMID: 11481371
- 58. Lester NV, Hopkins AL, Bova FJ, Friedman WA, **Buatti JM**, Meeks SL, Chrisman CL. Radiosurgery using a stereotactic headframe system for irradiation of brain tumors in dogs. *J Am Vet Med Assoc* 2001;219:1562-1567, 1550. PMID: 11759994
- 59. Ryken TC, Meeks SL, Traynelis V, Haller J, Bouchet LG, Bova FJ, Pennington EC, **Buatti JM**. Ultrasonographic guidance for spinal extracranial radiosurgery: technique and application for metastatic spinal lesions. *Neurosurg Focus* 2001;11:e8. PMID: 16464000

- Bouchet LG, Meeks SL, Goodchild G, Bova FJ, Buatti JM, Friedman WA. Calibration of threedimensional ultrasound images for image-guided radiation therapy. *Phys Med Biol* 2001;46:559-577. PMID: 11229734
- Mayr NA, Yuh WT, Oberley LW, Spitz D, Sorosky JI, Buatti JM. Serial changes in tumor oxygenation during the early phase of radiation therapy in cervical cancer-are we quantitating hypoxia change? Re: Lying et al., IJROBP 2000; 46:935-946. Int J Radiat Oncol Biol Phys 2001;49:282-289. PMID: 11271075
- 62. Foote KD, Friedman WA, **Buatti JM**, Bova FJ. radiosurgical techniques for pituitary adenomas. *Techniques in Neurosurgery* 2001;6:289-298.
- Simon JH, Zhen W, McCulloch TM, Hoffman HT, Paulino AC, Mayr NA, Buatti JM. Esthesioneuroblastoma: the University of Iowa experience 1978-1998. *Laryngoscope* 2001;111:488-493. PMID: 11224781
- 64. Ryken TC, Meeks SL, Pennington EC, Hitchon P, Traynelis V, Mayr NA, Bova FJ, Friedman WA, **Buatti JM**. Initial clinical experience with frameless stereotactic radiosurgery: analysis of accuracy and feasibility. *Int J Radiat Oncol Biol Phys* 2001;51:1152-1158. PMID: 11704340
- 65. Tome WA, Meeks SL, McNutt TR, **Buatti JM**, Bova FJ, Friedman WA, Mehta M. Optically guided intensity modulated radiotherapy. *Radiother Oncol* 2001;61:33-44. PMID: 11578726
- 66. Wagner TH, Meeks SL, Bova FJ, Friedman WA, **Buatti JM**, Bouchet LG. Isotropic beam bouquets for shaped beam linear accelerator radiosurgery. *Phys Med Biol* 2001;46:2571-2586. PMID: 11686276
- 67. Sanghavi SN, Miranpuri SS, Chappell R, **Buatti JM**, Sneed PK, Suh JH, Regine WF, Weltman E, King VJ, Goetsch SJ, Breneman JC, Sperduto PW, Scott C, Mabanta S, Mehta MP. Radiosurgery for patients with brain metastases: a multi-institutional analysis, stratified by the RTOG recursive partitioning analysis method. *Int J Radiat Oncol Biol Phys* 2001;51:426-434. PMID: 11567817
- 68. Foote KD, Friedman WA, **Buatti JM**, Meeks SL, Bova FJ, Kubilis PS. Analysis of risk factors associated with radiosurgery for vestibular schwannoma. *J Neurosurg* 2001;95:440-449. PMID: 11565866
- 69. Bouchet L, Meeks SL, Bova FJ, **Buatti JM**, Friedman WA. Three-dimensional ultrasound image guidance for high-precision extracranial radiosurgery and radiotherapy. In: Kondziolka D, editor. Radiosurgery. Vol 4. Basel: Karger; 2002. pp. 262-278.
- 70. Meeks SL, Ryken TC, Pennington EC, Bova FJ, Friedman WA, **Buatti JM**. Testing and initial clinical experience with an image-guided system for frameless stereotactic radiosurgery. In: Kondziolka D, editor. Radiosurgery. Vol 4. Basel: Karger; 2002. pp. 254-261.
- 71. Lee CK, de Magalhaes-Silverman M, Hohl RJ, Hayashi M, **Buatti J**, Wen BC, Schlueter A, Strauss RG, Gingrich RD. Prophylactic T cell infusion after T cell-depleted bone marrow transplantation in patients with refractory lymphoma. *Bone Marrow Transplant* 2002;29:615-620. PMID: 11979313
- 72. Paulino AC, Wen BC, **Buatti JM**, Hussey DH, Zhen WK, Mayr NA, Menezes AH. Intracranial ependymomas: an analysis of prognostic factors and patterns of failure. *Am J Clin Oncol* 2002;25:117-122. PMID: 11943886
- 73. Mayr NA, Taoka T, Yuh WT, Denning LM, Zhen WK, Paulino AC, Gaston RC, Sorosky JI, Meeks SL, Walker JL, Mannel RS, **Buatti JM**. Method and timing of tumor volume measurement for outcome prediction in cervical cancer using magnetic resonance imaging. *Int J Radiat Oncol Biol Phys* 2002;52:14-22. PMID: 11777618
- 74. Sneed PK, Suh JH, Goetsch SJ, Sanghavi SN, Chappell R, **Buatti JM**, Regine WF, Weltman E, King VJ, Breneman JC, Sperduto PW, Mehta MP. A multi-institutional review of radiosurgery alone vs. radiosurgery with whole brain radiotherapy as the initial management of brain metastases. *Int J Radiat Oncol Biol Phys* 2002;53:519-526. PMID: 12062592

- 75. **Buatti JM**, Friedman WA. Temporary ventricular drainage and emergency radiotherapy in the management of hydrocephalus associated with germinoma. *J Neurosurg* 2002;96:1020-1022. PMID: 12066901
- 76. Tome WA, Mehta MP, Meeks SL, **Buatti JM**. Fractionated stereotactic radiotherapy: a short review. *Technol Cancer Res Treat* 2002;1:153-172. PMID: 12622509
- 77. Paulino AC, Mayr NA, Simon JH, **Buatti JM**. Locoregional control in infants with neuroblastoma: role of radiation therapy and late toxicity. *Int J Radiat Oncol Biol Phys* 2002;52:1025-1031. PMID: 11958898
- 78. Meeks SL, Paulino AC, Pennington EC, Simon JH, Skwarchuk MW, **Buatti JM**. *In vivo* determination of extra-target doses received from serial tomotherapy. *Radiother Oncol* 2002;63:217-222. PMID: 12063012
- 79. Simon JH, Paulino AC, Smith RB, **Buatti JM**. Prognostic factors in head and neck rhabdomyosarcoma. *Head Neck* 2002;24:468-473. PMID: 12001077
- 80. **Buatti JM**, Meeks SL, Ryken TC, Carlisle TL. Low-grade gliomas: answering one question in a myriad of new questions. *J Clin Oncol* 2002;20:2223-2224. PMID: 11980992
- 81. Bhatia S, Paulino AC, **Buatti JM**, Mayr NA, Wen BC. Curative radiotherapy for primary orbital lymphoma. *Int J Radiat Oncol Biol Phys* 2002;54:818-823. PMID: 12377334
- 82. Simon JH, Paulino AC, Ritchie JM, Mayr NA, **Buatti JM**. Presentation, prognostic factors and patterns of failure in adult rhabdomyosarcoma. *Sarcoma* 2003;7:1-7. PMID: 18521362
- 83. Wahle A, Lopez JJ, Pennington EC, Meeks SL, Braddy KC, Fox JM, Brennan TMH, Buatti JM, Rossen JD, Sonka M. Estimating the actual dose delivered by intravascular coronary brachytherapy using geometrically correct 3D modeling. In: Galloway Jr. RL, editor. Medical imaging 2003: Visualization, image-guided procedures, and display. Vol 5029. Bellingham WA: SPIE; 2003. pp. 129-137.
- 84. Wahle A, Lopez JJ, Pennington EC, Meeks SL, Braddy KC, Fox JM, Brennan TMH, **Buatti JM**, Rossen JD, Sonka M. Effects of vessel geometry and catheter position on dose delivery in intracoronary brachytherapy. *IEEE Transactions on Biomedical Engineering* 2003;50:1286-1295.
- 85. Foote KD, Friedman WA, Ellis TL, Bova FJ, **Buatti JM**, Meeks SL. Salvage retreatment after failure of radiosurgery in patients with arteriovenous malformations. *J Neurosurg* 2003;98:337-341. PMID: 12593620
- Paulino AC, Wen BC, Mayr NA, Tannous R, Loew TW, Goldman FD, Meeks SL, Ryken TC, Buatti JM. Protracted radiotherapy treatment duration in medulloblastoma. *Am J Clin Oncol* 2003;26:55-59. PMID: 12576926
- 87. Lee CK, deMagalhaes-Silverman M, Hohl RJ, Hayashi M, **Buatti J**, Wen BC, Schlueter A, Strauss RG, Gingrich RD. Donor T-lymphocyte infusion for unrelated allogeneic bone marrow transplantation with CD3+ T-cell-depleted graft. *Bone Marrow Transplant* 2003;31:121-128. PMID: 12621494
- 88. Meeks SL, **Buatti JM**, Bouchet LG, Bova FJ, Ryken TC, Pennington EC, Anderson KM, Friedman WA. Ultrasound-guided extracranial radiosurgery: technique and application. *Int J Radiat Oncol Biol Phys* 2003;55:1092-1101. PMID: 12605989
- Wahle A, Lopez JJ, Pennington EC, Meeks SL, Braddy KC, Fox JM, Brennan TM, Buatti JM, Rossen JD, Sonka M. Effects of vessel geometry and catheter position on dose delivery in intracoronary brachytherapy. *IEEE Trans Biomed Eng* 2003;50:1286-1295. PMID: 14619999
- 90. Wagner TH, Bova FJ, Friedman WA, Buatti JM, Bouchet LG, Meeks SL. A simple and reliable index for scoring rival stereotactic radiosurgery plans. *Int J Radiat Oncol Biol Phys* 2003;57:1141-1149. PMID: 14575847

- 91. Adli M, Mayr NA, Kaiser HS, Skwarchuk MW, Meeks SL, Mardirossian G, Paulino AC, Montebello JF, Gaston RC, Sorosky JI, Buatti JM. Does prone positioning reduce small bowel dose in pelvic radiation with intensity-modulated radiotherapy for gynecologic cancer? *Int J Radiat Oncol Biol Phys* 2003;57:230-238. PMID: 12909238
- 92. Hoffman H, Yao M, Menda Y, Graham MM, Smith RB, Funk G, Chang K, Dornfeld K, Skwarchuk M, **Buatti JM**. Evaluation and management of the N+ neck after treatment with irradiation. In: The 6th International Conference on Head and Neck Cancer. Washington DC: American Head & Neck Society; 2004.
- 93. Menezes A, **Buatti JM**. In response to Noël et al: Radiotherapeutic factors in the management of cervical-basal chordomas and chondrosarcomas. *Neurosurgery* 2004;55:1261-1262.
- 94. Yao M, Dornfeld KJ, **Buatti JM**. In regard to Lee et al. Intensity-modulated radiation therapy for headand-neck cancer: the UCSF experience focusing on target volume delineation. (Int J Radiat Oncol Biol Phys 2003;57:49-60). *Int J Radiat Oncol Biol Phys* 2004;58:1639; author reply 1639-1640. PMID: 15050350
- 95. Zhen W, Karnell LH, Hoffman HT, Funk GF, **Buatti JM**, Menck HR. The National Cancer Data Base report on squamous cell carcinoma of the base of tongue. *Head Neck* 2004;26:660-674. PMID: 15287033
- 96. Hoffman HT, **Buatti J**. Update on the endoscopic management of laryngeal cancer. *Curr Opin Otolaryngol Head Neck Surg* 2004;12:525-531. PMID: 15548912
- 97. Yao M, Graham MM, Smith RB, Dornfeld KJ, Skwarchuk M, Hoffman HT, Funk GF, Graham SM, Menda Y, **Buatti JM**. Value of FDG PET in assessment of treatment response and surveillance in headand-neck cancer patients after intensity modulated radiation treatment: a preliminary report. *Int J Radiat Oncol Biol Phys* 2004;60:1410-1418. PMID: 15590172
- 98. Hoffman HT, Robinson RA, Spiess JL, **Buatti J**. Update in management of head and neck sarcoma. *Curr OpinOncol* 2004;16:333-341. PMID: 15187888
- 99. Yao M, Graham MM, Hoffman HT, Smith RB, Funk GF, Graham SM, Dornfeld KJ, Skwarchuk M, Menda Y, Buatti JM. The role of post-radiation therapy FDG PET in prediction of necessity for postradiation therapy neck dissection in locally advanced head-and-neck squamous cell carcinoma. *Int J Radiat Oncol Biol Phys* 2004;59:1001-1010. PMID: 15234033
- 100. Liu R, Wagner TH, **Buatti JM**, Modrick J, Dill J, Meeks SL. Geometrically based optimization for extracranial radiosurgery. *Phys Med Biol* 2004;49:987-996. PMID: 15104321
- 101. Yao M, Smith RB, Hoffman HT, Funk GF, Graham MM, **Buatti JM**. Merkel cell carcinoma: two case reports focusing on the role of fluorodeoxyglucose positron emission tomography imaging in staging and surveillance. *Am J Clin Oncol* 2005;28:205-210. PMID: 15803018
- 102. Kamath R, Ryken TC, Meeks SL, Pennington EC, Ritchie J, **Buatti JM**. Initial clinical experience with frameless radiosurgery for patients with intracranial metastases. *Int J Radiat Oncol Biol Phys* 2005;61:1467-1472. PMID: 15817352
- 103. Yao M, **Buatti JM**, Dornfeld KJ, Graham MM, Smith RB, Funk GF, Hoffman HT. Can post-RT FDG PET accurately predict the pathologic status in neck dissection after radiation for locally advanced head and neck cancer? In regard to Rogers et al. (Int J Radiat Oncol Biol Phys 2004;58:694-697). *Int J Radiat Oncol Biol Phys* 2005;61:306-307; author reply 307. PMID: 15629631
- 104. Meeks SL, Tome WA, Willoughby TR, Kupelian PA, Wagner TH, **Buatti JM**, Bova FJ. Optically guided patient positioning techniques. *Semin Radiat Oncol* 2005;15:192-201. PMID: 15983944
- 105. Howes TL, Buatti JM, O'Dorisio MS, Kirby PA, Ryken TC. Atypical teratoid/rhabdoid tumor case report: treatment with surgical excision, radiation therapy, and alternative medicines. J Neurooncol 2005;72:85-88. PMID: 15803380

- 106. Yao M, Smith RB, Graham MM, Hoffman HT, Tan H, Funk GF, Graham SM, Chang K, Dornfeld KJ, Menda Y, Buatti JM. The role of FDG PET in management of neck metastasis from head-and-neck cancer after definitive radiation treatment. *Int J Radiat Oncol Biol Phys* 2005;63:991-999. PMID: 16099601
- 107. El-Deiry M, Funk GF, Nalwa S, Karnell LH, Smith RB, **Buatti JM**, Hoffman HT, Clamon GH, Graham SM, Trask DK, Dornfeld KJ, Yao M. Long-term quality of life for surgical and nonsurgical treatment of head and neck cancer. *Arch Otolaryngol Head Neck Surg* 2005;131:879-885. PMID: 16230590
- 108. Yao M, Dornfeld KJ, Buatti JM, Skwarchuk M, Tan H, Nguyen T, Wacha J, Bayouth JE, Funk GF, Smith RB, Graham SM, Chang K, Hoffman HT. Intensity-modulated radiation treatment for head-andneck squamous cell carcinoma--the University of Iowa experience. *Int J Radiat Oncol Biol Phys* 2005;63:410-421. PMID: 16168834
- 109. Dou X, Wu X, Bayouth JE, Buatti JM. The matrix orthogonal decomposition problem in intensitymodulated radiation therapy. In: Chen DZ, Lee D, editors. Computing and Combinatorics: 12th Annual International Conference, COCOON 2006, Taipei, Taiwan, August 15-18, 2006, Proceedings. Vol 4112. Berlin Heidelberg: Springer-Verlag; 2006. pp. 156-165.
- 110. Smith MC, Ryken TC, **Buatti JM**. Radiotoxicity after conformal radiation therapy for benign intracranial tumors. *Neurosurg Clin N Am* 2006;17:169-180, vii. PMID: 16793508
- 111. Kaiser HS, Paulino AC, **Buatti JM**. Scheduling for radiotherapy simulation in children with a renal mass. *Pediatr Hematol Oncol* 2006;23:275-276. PMID: 16517544
- 112. Yao M, Nguyen T, **Buatti JM**, Dornfeld KJ, Tan H, Wacha J, Bayouth JE, Clamon GH, Funk GF, Smith RB, Chang K, Hoffman HT. Changing failure patterns in oropharyngeal squamous cell carcinoma treated with intensity modulated radiotherapy and implications for future research. *Am J Clin Oncol* 2006;29:606-612. PMID: 17148999
- 113. Mayr NA, Yuh WT, Taoka T, Wang JZ, Wu DH, Montebello JF, Meeks SL, Paulino AC, Magnotta VA, Adli M, Sorosky JI, Knopp MV, **Buatti JM**. Serial therapy-induced changes in tumor shape in cervical cancer and their impact on assessing tumor volume and treatment response. *AJR Am J Roentgenol* 2006;187:65-72. PMID: 16794157
- 114. Howes TL, **Buatti JM**, Kirby PA, Carlisle TL, Ryken TC. Radiation induced adult medulloblastoma: a case report. *J Neurooncol* 2006;80:191-194. PMID: 16710747
- 115. Liu R, Buatti JM, Howes TL, Dill J, Modrick JM, Meeks SL. Optimal number of beams for stereotactic body radiotherapy of lung and liver lesions. *Int J Radiat Oncol Biol Phys* 2006;66:906-912. PMID: 16904842
- 116. Yao M, Nguyen T, Hansen MR, Anderson K, **Buatti JM**. Optically guided stereotactic radiotherapy for facial nerve paralysis secondary to occult malignant neoplasms. *Otolaryngol Head Neck Surg* 2006;135:657-659. PMID: 17011440
- 117. Rogers LR, Rock JP, Sills AK, Vogelbaum MA, Suh JH, Ellis TL, Stieber VW, Asher AL, Fraser RW, Billingsley JS, Lewis P, Schellingerhout D, Shaw EG, Brain Metastasis Study Group (Buatti JM). Results of a phase II trial of the GliaSite radiation therapy system for the treatment of newly diagnosed, resected single brain metastases. *J Neurosurg* 2006;105:375-384. PMID: 16961129
- 118. Wu X, Dou X, Bayouth JE, Buatti JM. New Algorithm for field splitting in radiation therapy. In: Tokuyama T, editor. Algorithms and Computation: 18th International Symposium, ISAAC 2007, Sendai, Japan, December 17-19, 2007. Proceedings Vol 4835. Berlin Heidelberg: Springer-Verlag; 2007. pp. 692-703.
- 119. Yao M, Chang K, Funk GF, Lu H, Tan H, Wacha J, Dornfeld KJ, **Buatti JM**. The failure patterns of oral cavity squamous cell carcinoma after intensity-modulated radiotherapy-the university of iowa experience. *Int J Radiat Oncol Biol Phys* 2007;67:1332-1341. PMID: 17276613

- 120. Yao M, Karnell LH, Funk GF, Lu H, Dornfeld K, Buatti JM. Health-related quality-of-life outcomes following IMRT versus conventional radiotherapy for oropharyngeal squamous cell carcinoma. *Int J Radiat Oncol Biol Phys* 2007;69:1354-1360. PMID: 17689885
- 121. Dornfeld K, Simmons JR, Karnell L, Karnell M, Funk G, Yao M, Wacha J, Zimmerman B, **Buatti JM**. Radiation doses to structures within and adjacent to the larynx are correlated with long-term diet- and speech-related quality of life. *Int J Radiat Oncol Biol Phys* 2007;68:750-757. PMID: 17418971
- 122. Yao M, Hoffman HT, Chang K, Funk GF, Smith RB, Tan H, Clamon GH, Dornfeld K, **Buatti JM**. Is planned neck dissection necessary for head and neck cancer after intensity-modulated radiotherapy? *Int J Radiat Oncol Biol Phys* 2007;68:707-713. PMID: 17379453
- 123. Yao M, Luo P, Hoffman HT, Chang K, Graham MM, Menda Y, Tan H, **Buatti JM**. Pathology and FDG PET correlation of residual lymph nodes in head and neck cancer after radiation treatment. *Am J Clin Oncol* 2007;30:264-270. PMID: 17551303
- 124. Simons AL, Fath MA, Mattson DM, Smith BJ, Walsh SA, Graham MM, Hichwa RD, **Buatti JM**, Dornfeld K, Spitz DR. Enhanced response of human head and neck cancer xenograft tumors to cisplatin combined with 2-deoxy-D-glucose correlates with increased 18F-FDG uptake as determined by PET imaging. *Int J Radiat Oncol Biol Phys* 2007;69:1222-1230. PMID: 17967311
- 125. Bayouth JE, Kaiser HS, Smith MC, Pennington EC, Anderson KM, Ryken TC, **Buatti JM**. Imageguided stereotactic radiosurgery using a specially designed high-dose-rate linac. *Med Dosim* 2007;32:134-141. PMID: 17472892
- 126. Lu H, Yao M, Anderson K, **Buatti J**. Optically guided stereotactic radiotherapy for lacrimal sac tumors: a report on two cases. *Technol Cancer Res Treat* 2008;7:35-40. PMID: 18198922
- 127. Dornfeld K, Hopkins S, Simmons J, Spitz DR, Menda Y, Graham M, Smith R, Funk G, Karnell L, Karnell M, Dornfeld M, Yao M, **Buatti J**. Posttreatment FDG-PET uptake in the supraglottic and glottic larynx correlates with decreased quality of life after chemoradiotherapy. *Int J Radiat Oncol Biol Phys* 2008;71:386-392. PMID: 18164842
- 128. Bylund KC, Bayouth JE, Smith MC, Hass AC, Bhatia SK, **Buatti JM**. Analysis of interfraction prostate motion using megavoltage cone beam computed tomography. *Int J Radiat Oncol Biol Phys* 2008;72:949-956. PMID: 19014783
- 129. Iseli TA, Karnell LH, Preston TW, Graham SM, Funk GF, **Buatti JM**, Gupta AK, Robinson RA, Hoffman HT. Facial nerve sacrifice and radiotherapy in parotid adenoid cystic carcinoma. *Laryngoscope* 2008;118:1781-1786. PMID: 18758382
- 130. **Buatti J**, Ryken TC, Smith MC, Sneed P, Suh JH, Mehta M, Olson JJ. Radiation therapy of pathologically confirmed newly diagnosed glioblastoma in adults. *J Neurooncol* 2008;89:313-337. PMID: 18712283
- 131. **Buatti JM**, Graham MM. Imaging: the most critical tool for future radiotherapy. *Imaging Decisions MRI* 2008;12:1-2. https://doi.org/10.1111/j.1617-0830.2008.00120.x
- 132. Bylund KC, Bayouth JE, **Buatti JM**. Author reply to Analysis of interfraction prostate motion using megavoltage cone beam computed tomography by Bylund et al. *Int J Radiat Oncol Biol Phys* 2009;73:1284.
- 133. Song Q, Wu X, Liu Y, Smith M, Buatti J, Sonka M. Optimal graph search segmentation using arcweighted graph for simultaneous surface detection of bladder and prostate. *Med Image Comput Comput Assist Interv* 2009;12:827-835. PMID: 20426188
- 134. Sato TS, Kirby PA, **Buatti JM**, Moritani T. Papillary tumor of the pineal region: report of a rapidly progressive tumor with possible multicentric origin. *Pediatr Radiol* 2009;39:188-190. PMID: 19037636

- 135. Menda Y, Boles Ponto LL, Dornfeld KJ, Tewson TJ, Watkins GL, Schultz MK, Sunderland JJ, Graham MM, Buatti JM. Kinetic analysis of 3'-deoxy-3'-(18)F-fluorothymidine ((18)F-FLT) in head and neck cancer patients before and early after initiation of chemoradiation therapy. *J Nucl Med* 2009;50:1028-1035. PMID: 19525472
- 136. Gupta AK, Lee JH, Wilke WW, Quon H, Smith G, Maity A, **Buatti JM**, Spitz DR. Radiation response in two HPV-infected head-and-neck cancer cell lines in comparison to a non-HPV-infected cell line and relationship to signaling through AKT. *Int J Radiat Oncol Biol Phys* 2009;74:928-933. PMID: 19480971
- 137. Yao M, Smith RB, Hoffman HT, Funk GF, Lu M, Menda Y, Graham MM, **Buatti JM**. Clinical significance of postradiotherapy [18F]-fluorodeoxyglucose positron emission tomography imaging in management of head-and-neck cancer-a long-term outcome report. *Int J Radiat Oncol Biol Phys* 2009;74:9-14. PMID: 18930358
- 138. Gupta AK, Wilke WW, Taylor EN, Bodeker KL, Hoffman HT, Milhem MM, **Buatti JM**, Robinson RA. Signaling pathways in adenoid cystic cancers: implications for treatment. *Cancer Biol Ther* 2009;8:1947-1951. PMID: 19729990
- Iseli TA, Karnell LH, Graham SM, Funk GF, Buatti JM, Gupta AK, Robinson RA, Hoffman HT. Role of radiotherapy in adenoid cystic carcinoma of the head and neck. J Laryngol Otol 2009;123:1137-1144. PMID: 19573256
- 140. Mayr NA, Yuh WT, Jajoura D, Wang JZ, Lo SS, Montebello JF, Porter K, Zhang D, McMeekin DS, Buatti JM. Ultra-early predictive assay for treatment failure using functional magnetic resonance imaging and clinical prognostic parameters in cervical cancer. *Cancer*. 2010;116:903-912. PMID: 20052727
- 141. Ding K, Bayouth JE, Buatti JM, Christensen GE, Reinhardt JM. 4DCT-based measurement of changes in pulmonary function following a course of radiation therapy. *Med Phys.* 2010 Mar;37(3):1261-1272. PMID: 20384264
- 142. Menda Y, Ponto LL, Dornfeld KJ, Tewson TJ, Watkins GL, Gupta AK, Anderson C, McGuire S, Schultz MK, Sunderland JJ, Graham MM, Buatti JM. Investigation of the pharmacokinetics of 3'-deoxy-3'[18F]fluorothymidine uptake in the bone marrow before and early after initiation of chemoradiation therapy in head and neck cancer. *Nucl Med Biol.* 2010 May;37(4):433-8. PMID: 20447554
- 143. Boles Ponto LL, Menda Y, Dornfeld K, Tewson TJ, Watkins GL, Sunderland J, Graham MM, Buatti JM. Stability of 3'-deoxy-3'-[18F]fluorothymidine standardized uptake values in head and neck cancer over time. *Cancer Biother Radiopharm*. 2010 Jun;25(3):361-3. PMID: 20578842.
- 144. McGuire S, Menda Y, Ponto L, Gross B, **Buatti JM**, Bayouth JE. 3'-deoxy-3'-[18F]FLT PET Quantification of Bone Marrow Response to Radiation Dose. *Int J Radiat Oncol Biol Phys.* 2011;81(3):888-893. PMID: 21300484
- 145. Bayouth JE, Casavant TL, Graham MM, Sonka M, Muruganandham M, **Buatti JM**. Image-Based Biomarkers in Clinical Practice. *Semin Radiat Oncol*. 2011 Apr;21(2):157-66. PMID: 21356483
- 146. Han D, Bayouth J, Song Q, Taurani A, Sonka M, Buatti J, Wu X. Globally Optimal Tumor Segmentation in PET-CT Images: a Graph-Based Co-Segmentation Method. *Inf Process Med Imaging*. 2011;22:245-256. PMID: 21761661.
- 147. Anderson S, Sato Y, Kirby P, Buatti JM, Menezes A. Disseminated subarachnoid chordoma: long-term favorable follow-up of a pediatric patient. *Pediatric Radiology*. 2012 Jul;42(7):878-880. PMID 21984317.
- 148. Yao M, Lu M, Savvides PS, Rezaee R, Zender CA, Lavertu P, **Buatti JM**, Machtay M. Distant Metastases in Head and Neck Cancer Squamous Cell Carcinoma Treated with Intensity-Modulated

Radiotherapy. Int J Radiat Oncol Biol Phys. 2012 Jun 1;83(2):684-9. 2011 Dec 12. [Epub ahead of print] PMID: 22169673

- 149. de la Garza GO, Ismail AF, Anderson CM, WIlke WW, Milhem MM, Hoffman HT, Buatti JM. Nelfinavir Treatment of Adenoid Cystic Carcinoma: A Case Report. *Pract Radiat Oncol.* 2012 Oct-Dec;2(4):e129-32. doi: 10.1016/j.prro.2011.09.003. Epub 2011 Oct 26. PMID:24674175
- 150. Anderson C, Jacobson G, Bhatia S, **Buatti JM**. Book Review: Atlas of Diagnostic Oncology (4th edition). *Int J Radiat Oncol Biol Phys.* 2011;81(1):314.
- 151. Bauer C, Sun S, Sun W, Otis J, Wallace A, Smith BJ, Sonka M, **Buatti JM**, Beichel RR. Automated Measurement of Uptake in Cerebellum, Liver, and Aortic Arch in Full-body FDG PET/CT Scans. *Med Phys.* 2012 Jun;39(6):3112-23. PMID: 22755696
- 152. Anderson C, Morris A, **Buatti JM**, Alt D, Bayon R. Intensity-Modulated Radiation Therapy for Permanent Alopecia of Unwanted Palatal Hair. *Journal of Radiation Oncology*. 2012 Dec;1(4): 411–414. doi:10.1007/s13566-012-0051-x.
- 153. Kurland BF, Gerstner ER, Mountz JM, Schwartz LH, Ryan CW, Graham MM, Buatti JM, Fennessy FM, Eikman EA, Kumar V, Forster KM, Wahl RL, Lieberman FS. QIN. Promise and Pitfalls of Quantitative Imaging in Oncology Clinical Trials. *Magn Reson Imaging*. 2012 Nov;30(9):1301-12. Epub 2012 Aug 13. PMID:22898682
- 154. Fedorov A, Beichel R, Kalpathy-Cramer J, Finet J, Fillion-Robin JC, Pujol S, Bauer C, Jennings D, Fennessy F, Sonka M, Buatti JM, Aylward S, Miller JV, Peiper S, Kikinis R. QIN. 3D Slicer as an Image Computing Platform for the Quantitative Imaging Network. *Magn Reson Imaging*. 2012 Nov;30(9):1323-41 Epub 2012 Jul 6. PMID:22770690
- 155. Welsh JL, Bodeker K, Fallon E, Bhatia S, Buatti JM, Cullen JJ. Comparison of RECIST vs. Volumetric Measurements for Estimation of Tumor Burden in Pancreatic Adenocarcinoma and Hepatocellular Carcinoma. *The American Journal of Surgery*. 2012 Nov;204(5):580-5. Epub 2012 Aug 14. PMID:22902100
- 156. Song Q, Bai J, Garvin MK, Sonka M, **Buatti JM**, Wu X. Optimal Multiple Surface Segmentation with Shape and Context Priors. *Institutue of Electrical and Electronics Engineers*. Trans Med Imaging. 2013 Feb;32(2):376-86. Epub 2012 Nov 15. PMID:23193309
- 157. Jacobson GM, Bhatia SK, Smith BJ, Button AM, Bodeker KL, **Buatti JM**. Randomized Trial Of Pentoxifylline And Vitamin E vs Standard Follow-Up After Breast Irradiation To Prevent Breast Fibrosis, Evaluated By Tissue Compliance Meter (TCM). *Int J Radiat Oncol Biol Phys.* 2013 Mar 1;85(3):604-8. Epub 2012 Jul 28. PMID:22846413
- 158. Dou X, Kim Y, Bayouth JE, **Buatti JM**, Wu X. Optimal Field Splitting Algorithm in Intensity-Modulated Radiotherapy (IMRT): Evaluations Using Head-and-Neck and Female Pelvic IMRT Cases. *Medical Dosimetry*. 2013 Spring;38(1):12-7. Epub 2012 Jul 25. PMID 22835649
- 159. Menda Y, **Buatti JM**. Invited Perspective: PET During Radiotherapy of Head and Neck Cancer. *Journal of Nuclear Medicine* 2013 Apr;54(4):497-8. Epub 2013 Mar 15. PMID:23503730
- 160. Song Q, Bai J, Han D, Bhatia S, Sun W, Rockey W, Bayouth JE, Buatti JM, Wu X. Optimal Cosegmentation of Tumor in PET-CT Images with Context Information. *IEEE Transactions on Medical Imaging*. 2013 May 16. PMID:23693127
- 161. Allen BG, Bhatia SK, Buatti JM, Brandt KE, Lindholm KE, Button AM, Szweda LI, Smith BJ, Spitz DR, Fath M. Ketogenic Diets Enhance Oxidative Stress and Radio-Chemo-Therapy Responses in Lung Cancer Xenografts. *Clin Cancer Res.* 2013 Jul 15;19(14):3905-13. PMID:23743570
- 162. Wu X, Dou X, Bayouth JE, Buatti JM. An Almost Linear Time Algorithm for Field Splitting in Radiation Therapy. Computational Geometry: Theory and Application. 2013 Aug 1;46(6):673-687. PMID:24999294

- 163. Liu F, Okunieff P, Bernhard E, Stone H, Yoo S, Coleman CN, Vikram B, Brown M, Buatti JM, Guha C and workshop participants. Lessons Learned from Radiation Oncology Clinical Trials. *Clin Cancer Res.* 2013 Nov 15;19(22):6089-100. Epub 2013 Sep 16. PMID:24043463
- 164. Sheybani A, Ahmed R, TenNapel M, Pennington E, Hyer DE, Anderson KM, Menezes AH, Hitchon P, Buatti JM. Preliminary Experience in Treating Skull Based Chordomas with High-Dose Hyperfractionated Stereotactic Photon Radiation Therapy. *Journal of Radiation Oncology*, 2013; 10.1007/s13566-013-0122-7.
- 165. Parkhurst J, Erickson S, Wenqing S, Funk G, Anderson C, **Buatti JM**. Parathyroid Adenoma: Report of a patient successfully treated with stereotactic body radiation therapy. *Pract Radiat Oncol.* 2014 Jan-Feb;4(1):55-57. PMID:24621424
- 166. Li H, Bai J, Wu X, Bhatia SK, Abu-Hejleh T, Sun W, TenNaple MJ, Menda Y, Mart CJ, McGuire SM, Flynn RF, Buatti JM, Kim Y. Semi-Automated Co-Segmentation of Tumor Volume Using Multimodality Pet-Ct in Non-Small Cell Lung Cancer (NSCLC). *Austin J Cancer Clin Res.* 2014 May 28;1(3):1-6.
- 167. Anderson C, Buatti JM. Response to "Where Do Patients with Cancer in Iowa Receive Radation Therapy". J Oncol Pract. 2014 Jul;10(4):e283. doi: 10.1200/JOP.2014.001425. Epub 2014 May 13. No abstract available. PMID: 24824540
- 168. Mountz JM, Yankeelov TE, Rubin DL, Buatti JM, Erikson BJ, Fennessy FM, Gillies RJ, Huang W, Jacobs MA, Kinahan PE, Laymon CM, Linden HM, Mankoff DA, Schwartz LH, Shim H, Wahl RL. Letter to Cancer Center Directors: Progress in Quantitative Imaging As a Means to Predict and/or Measure Tumor Response in Cancer Therapy Trials. *J Clin Oncol.* 2014 Jul 1;32(19):2115-6. doi: 10.1200/JCO.2014.55.8866. Epub 2014 May 27. PMID: 24868025
- 169. Ryu S, Buatti JM, Morris A, Kalkanis SN, Ryken TC, Olson JJ. The Role of Radiotherapy in the Management of Progressive Glioblastoma: a systematic review and evidence-based clinical practice guideline. J Neurooncol. 2014 Jul;118(3):489-99. doi: 10.1007/s11060-013-1337-6. Epub 2014 Apr 12. PMID: 24728785
- 170. Ryken TC, Kalkanis SN, Buatti JM, Olson JJ. The Role of Cytoreductive Surgery in the Management of Progressive Glioblastoma; A Systematic Review and Evidence-Based Clinical Practice Guideline. J Neurooncol. 2014 Jul;118(3):479-88. doi:10.1007/s11060-013-1336-7. Epub 2014 Apr 23. PMID: 24756348
- 171. Sheybani A, Lack W, Hyer DE, TenNapel MJ, Noiseux N, Miller B, Nepola J, **Buatti JM** and Jacobson GM. Radiation Induced Malignancy with Heterotopic Ossification Prophylaxis: A Case Control Analysis. IJROBP, 2014; Jul 89(3):584-9
- 172. Lo SS, Gore EM, Bradley JD, Buatti JM, Germano I, Ghafoori AP, Henderson MA, Murad GJA, Patchell RA, Patel SH, Robbins JR, Robins HI, Vassil AD, Wippold FJ, Yunes MJ, Videtic GMM. Expert Panel on Radiation Oncology-Brain Metastases. ACR Appropriateness Criteria® Pre-Irradiation Evaluation and Management of Brain Metastases. J Palliat Med. 2014 Aug; 17(8):880-6. doi:10.1089/jpm.2014.9417. Epub 2014 Jun 27. PMID: 24971478
- 173. Allen BG, Bhatia SK, Anderson CA, Eichenberger-Gilmore JM, Sibenaller ZA, Mapuskar KA, Schoenfeld JD, Buatti JM, Spitz DR, Fath MA. Ketogenic Diets as an Adjuvant Cancer Therapy: History and Potential Mechanism. *Redox Biology*. 2014 Aug 7; 2C: 963-970. doi:10.1016/j.redox.2014.08.002. PMID: 25460731
- 174. Muruganandam M, Clerkin PP, Smith BJ, Anderson CM, Morris A, Capizzano AA, Magnotta V, McGuire SM, Smith MC, Bayouth JE, Buatti JM. 3-Dimensional Magnetic Resonance Spectroscopic Imaging at 3Tesla for Early Response Assessment of Glioblastoma Patients during External Beam Radiation Therapy. *Int J Radiat Oncol Biol Phys.* 2014 Sep 1; 90(1): 181-9. doi: 10.1016/j.ijrobp.2014.05.014. Epub 2014 Jun 28. PMID: 24986746.

- 175. Anderson CM, Sun W, **Buatti JM**, Maley JE, Policeni Bruno, Mott SL, Bayouth JE. Interobserver and Intermodality Variability in GTV Delineation on Simulation CT, FDG-PET, and MR Images of Head and Neck Cancer. *Jacobs J Radiat Oncol.* 2014 Sep;1(1):006 PMID: 25568889
- 176. Ahmed R, Sheybani A, Menezes AH, Buatti JM, Hitchon PW. Disease Outcomes for Skull Base and Spinal Chordomas: A Single Center Experience. *Clin Neurol Neurosurg*. 2015 Mar; 130:67-73. doi: 10.1016/j.clineuro.2014.12.015. Epub 2014 Dec 29. PMID: 25590662
- 177. Wang D, Dirksen B, Hyer DE, Buatti JM, Sheybani A, Dinges E, Felderman N, Tennapel M, Bayouth JE, Flynn RT. Impact of Spot Size on Plan Quality of Spot Scanning Proton Radiosurgery for Peripheral Brain Lesions. *Med Phys.* 2014 Dec; 41(12):121705. doi: 10.1118/1.4901260. PMID: 25471952
- 178. Anderson CM, Chang T, Graham MM, Marquardt MD, Button A, Smith BJ, Menda Y, Sun W, Pagedar NA, Buatti JM. Change of Maximum Standardized Update Value Slope in Dynamic Triphasic [(18)F]-Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography Distinguishes Malignancy from Postradiation Inflammation in Head-and-Neck Squamous Cell Carcinoma: A Prospective Trial. Int J Radiat Oncol Biol Phys. 2015 Mar 1;91(3):472-9. doi: 10.1016/j.ijrobp.2014.11.002. Epub 2015 Jan 30. PMID: 25680593
- 179. Dinges E, Felderman N, McGuire S, Gross B, Bhatia S, Mott, S, Buatti, JM, Wang D. Bone Marrow Sparing in Intensity Modulated Proton Therapy for Cervical Cancer: Efficacy and Robustness under Range and Setup Uncertainties. *Radiother Oncol.* 2015 June: 115(3):373-378. doi: 10.1016/j.radonc.2015.05.005. [Epub ahead of print] PMID: 25981130
- 180. Hoover AC, Milhem MM, Anderson CM, Sun W, Smith BJ, Hoffman HT, Buatti JM. Efficacy of Nelfinavir as Monotherapy in Refractory Adenoid Cystic Carcinoma: Results of a Phase II Clinical Trial. *Head and Neck.* 2015 May;37(5):722-6. doi: 10.1002/hed.23664. Epub 2014 Jun 18. PMID: 24596143
- 182. McGuire S, Bhatia S, Sun W, Menda Y, Ponto L, Gross B, Buatti JM. A Novel IMRT Planning Technique to Spare Sacral Bone Marrow in Pelvic Cancer Patients, *Medical Physics*. 2015 June;42(6):3293. PMID:26127518.
- 183. Wang D, Nixon E, Oldham A, Flynn R, Buatti JM. Personalized Imaging in Radiation Oncology. In Regard to Zhang et al. *Int J Radiat Oncol Biol Phys.* 2015 Sep 1;93(1):211. doi: 10.1016/j.ijrobp.2015.04.014. PMID: 26279039.
- Holland MT, Noller J, Buatti JM, He W, Hitchon PW. The Cost Effectiveness of Surgery for Trigeminal Neuralgia in Surgically Naïve Patients; A Retrospective Study. *Clin Neurol Neurosurg*. 2015 Oct;137:34-7. doi: 10.1016/j.clineuro.2015.06.011. Epub 2015 Jun 18. PMID: 26123528.
- 185. Liu Y, Flynn RT, Kim Y, Dadkhah H, Bhatia SK, Buatti JM, Xu W, Wu X. Paddle-Based Rotating-Shield Brachytherapy. *Medical Physics*. 2015 Oct;42(10):5992-6003. doi: 10.1118/1.4930807. PMID: 26429274
- 186. Mapuskar KA, Schoenfeld JD, Sibenaller ZA, Riley DP, Strack S, Goswami PC, Buatti JM, Spitz DR, Allen BG. Increased DNA Damage and Reactive Oxygen Species Mediate Age-Associated Differential Susceptibility of Normal Dermal Fibroblasts to Chemotherapy and Radiation. *Free Radical Biology Medicine*.87(Supplement1);October2015:S130-S131. http://dx.doi.org/10.1016/j.freeradbiomed.2015.10.340
- 187. Ryken TC, Parney I, Buatti JM, Kalkanis SN, Olson JJ. The Role of Radiotherapy in the Management of Patients with Diffuse Low Grade Glioma. A Systematic Review and Evidence-Based Clinical Practice Guideline. J Neurooncol. 2015 Dec;125(3):551-83. doi:10.1007/s11060-015-1948-1. Epub 2015 Nov 3. PMID: 26530266
- 188. Yankeelov TE, Mankoff DA, Schwartz L, Lieberman F, **Buatti JM**, Mountz JM, Erickson B, Fennessy F, Huang W, Kalpathy-Cramer J, Wahl R, Linden H, Zhao B, Rubin D. Quantitative Imaging in Cancer

Clinical Trials. *Clin Cancer Res.* 2016 Jan 15;22(2):284-90. doi:10.1158/1078-0432.CCR-14-3336. Review. PMID: 26773162.

- 189. Mitchell DL, Tracy CR, Buatti JM, Smith MC, Snow AN, Henry MD, Vaena DA, Tewfik HH, Watkins JM. Individualization of Adjuvant Therapy Following Radical Prostatectomy for Clinically Localized Prostate Cancer: Current Status and Future Directions. *Clin Genitourin Cancer*, 2016 Feb;14(1):12-21. doi: 10.1016/j.clgc.2015.07.022. Epub 2015 Aug 6. PMID: 26341039.
- 190. Fedorov A, Clunie D, Ulrich E, Bauer C, Wahle A, Brown B, Onken M, Riesmeier J, Pieper S, Kikinis R, Buatti JM, Beichel RR. DICOM For Quantitative Imaging Biomarker Development: a Standards Based Approach To Sharing Clinical Data And Structured PET/CT Analysis Results in Head and Neck Cancer Research. *PeerJ.* 2016 May 24;4:e2057. doi: 10.7717/peerj.2057. eCollection 2016. PMID: 27257542
- 191. Beichel RR, Van Tol M, Ulrich EJ, Bauer C, Chang T, Plichta KA, Smith BJ, Sunderland JJ, Graham MM, Sonka M, Buatti JM. Semi-automated Segmentation of Head and Neck Cancers in 18F-FDG PET Scans: A Just-Enough-Interaction Approach. *Medical Physics*. 2016 Jun;43(6):2948. doi: 10.1118/1.4948679. PMID: 27277044
- 192. Kaelberer JB, O'Donnell MJ, Mitchell DL, Mott SL, Snow AN, Buatti JM, Smith MC, Watkins JM. Incidental Prostate Cancer Diagnosed At Radical Cystoprostatectomy For Bladder Cancer: Disease-Specific Outcomes And Survival. *Prostate Int.* 2016 Sep;4(3):107-12. doi: 10.1016/j.prnil.2016.06.002. Epub 2016 Jun 23. PMID: 27689068
- 193. McGuire, SM, Bhatia S, Sun W, Jacobson G, Menda Y, Ponto LL, Smith, BJ, Gross BA, Bayouth J, Sunderland J, Graham M, Buatti JM. Using FLT PET To Quantify And Reduce Hematologic Toxicity Due To Chemoradiation Therapy For Pelvic Cancer Patients. *Int. Journal of Radiation Oncology, Biology, Physic.* 2016 September;96(1): 228-239. pii: S0360-3016(16)30112-2. doi: 10.1016/j.ijrobp.2016.04.009. [Epub ahead of print] PMID: 27319286
- 194. Zahra A, Chang T, AbuHejleh T, Furqan M, Clamon GH, Bhatia SK, Watkins JM, Mott SL, Spitz DR, Buatti JM, Allen BG. Once Daily High-dose Radiation (≥60 Gy) Treatment in Limited Stage Small Cell Lung Cancer. *Journal of Oncology Translational Research*. November 2016. 2(1);108; 1-7. PMID: 27981260
- 195. Mitchell DL, Russo JK, Mott SL, Tracy CR, Smith MC, **Buatti JM**, Watkins JM. Can high-grade prostate cancer (Gleason 8-10) be cured with definitive local therapy without testosterone suppression? Disease control and survival outcomes after up-front radical prostatectomy in patients with high-grade clinically localized disease. *Clin Oncol* August 25, 2016;1:1057.
- 196. Farahani K, Kalpathy-Cramer J, Chenevert TL, Rubin DL, Sunderland JJ, Nordstrom RJ, Buatti JM, Hylton N. Computational Challenges and Collaborative Projects in the NCI Quantitative Imaging Network. *Tomography*, December 2016. 2(4): 242-249 DOI: 10.18383/j.tom.2016.00265 PMID: 28798963, PMCID: PMC5548142
- 197. Kurland BF, Aggarwal S, Yankeelov TE, Gerstner ER, Moutnz JM, Linden HM, Jones EF, Bodeker KL, Buatti JM. Accrual Patterns for Clinical Studies Involving Quantitative Imaging: Results of an NCI Quantitative Imaging Network (QIN) Survey. *Tomography*. December 2016. 2(4): 276-282 DOI: 10.18383/j.tom.2016.00169
- 198. Beichel RR, Smith BJ, Bauer C, Ulrich EJ, Ahmadvand P, Budzevich MM, Gillies RJ, Goldgof D, Grkovski M, Hamarneh G, Huang Q, Kinahn PE, Laymon CM, Moutnz JM, Muzi JP, Muzi M, Nehmeh S, Oboski MJ, Tan Y, Zhao B, Sunderland JJ, Buatti JM. Multi-site quality and variability analysis of 3D FDG PET segmentations based on phantom and clinical image data. *Medical Physics*. 16 February 2017 online. 2017 Feb;44(2):479-496 DOI: 10.1002/mp.12041 PMID: 28205306
- 199. Watkins JM, Mitchell DL, Russo JK, Mott SL, Tracy CR, Smith MC, **Buatti JM**. Gleason ≤ 6 prostate Cancer at Radical Prostatectomy: Does a High-Risk Setting Truly Exist? A Recursive Partitioning

Analysis. *Clin Genitourin Cancer*. 2017 Apr;15(2):242-247 Epub 2016 May 29. doi: 10.1016/j.clgc.2016.05.016. PMID: 27338519

- 200. Rountree CA, Zahra A, Russo JK, O'Keefe J, Andresen NS, Mott SL, Herr D, Allen BG, Sharma AK, Bhatia SK, Buatti JM, Watkins JM. Once- (QD) Versus Twice-Daily (BID) Radiation Therapy (RT) Plus Concurrent Chemotherapy for Limited-Stage (LS) Small-Cell Lung Cancer (SCLC): A Comparative Outcomes Analysis. *Int J Radiat Oncol Biol Phys.* 2017 May 1;98(1):243-244. doi: 10.1016/j.ijrobp.2017.01.180. No abstract available. PMID: 28587025
- 201. Zahra A, Fath MA, Opat E, Bhatia SK, Ma DC, Rodman SN, Snyders TP, Chenard CA, Eichenberger-Gilmore JM, Bodeker KL, Ahmann L, Smith BJ, Vollstedt SA, Brown HA, Abu Hejleh T, Clamon GH, Berg DJ, Spitz DR, **Buatti JM**, Allen BG. Consuming a Ketogenic Diet while Receiving Radiation and Chemotherapy for Locally Advanced Lung and Pancreatic Cancer: The University of Iowa Experience of Two Phase I Clinical Trials. *Radiation Research*. 2017 Jun;187(6):743-754. doi: 10.1667/RR14668.1. Epub 2017 Apr 24. PMID: 28437190.
- 202. Andresen NS, Buatti JM, Tewfik HH, Pagedar NA, Anderson CM, Watkins JM. Radioiodine Ablation following Thyroidectomy for Differentiated Thyroid Cancer: Literature Review of Utility, Dose, and Toxicity. *European Thyroid Journal*. 2017 July;6(4):187-96 doi: 10.1159/000468927. Epub 2017 Mar 23. Review. PMID: 28868259.
- 203. Kim Y, Patwardhan KA, Beichel RR, Smith BJ, Mart C, Plichta KA, Chang T, Sonka M, Graham MM, Magnotta V, Casavant T, Buatti JM. Development of a Radiobiological Evaluation Tool to Assess the Expected Clinical Impacts of Contouring Accuracy between Manual and Semi-Automated Segmentation Algorithms\* 39<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society. *Conf Proc IEEE Eng Med Biol Soc.* 2017 Jul;2017:3409-3412. doi: 10.1109/EMBC.2017.8037588. PMID: 29060629
- 204. Schoenfeld JD, Sibenaller ZA, Mapuskar KA, Wagner BA, Cramer-Morales KL, Furqan M, Sandhu S, Carlisle TL, Smith MC, AbuHejleh T, Berg DJ, Zhang J, Keech J, Parekh KR, Bhatia S, Monga V, Bodeker KL, Ahmann L, Vollstedt S, Brown, H, Shanahan Kauffman EP, Schall ME, Hohl RJ, Clamon GH, Greenlee JD, Howard MA, Schultz MK, Smith BJ, Riley DP, Domann FE, Cullen JJ, Buettner GR, **Buatti JM**, Spitz D, Allen, BG. O2\*- and H2O2-Mediated Disruption of Fe Metabolism Causes the Differential Susceptibility of NSCLC and GBM Cancer Cells to Pharmacological Ascorbate. *Cancer Cell.* 2017 Aug 14;32(2):268. doi: 10.1016/j.ccell.2017.07.008. No abstract available. PMID: 28810149
- 205. Plichta KA, Camden NB, Furqan M, Abuhejleh T, Clamon G, Zhang J, Flynn RT, Bhatia SK, Smith MC, Buatti JM, Allen BG. SBRT to Adrenal Metastases Provides High Local Control with Minimal Toxicity Advances in Radiation Oncology. *Advances in Radiation Oncology*. 2017 Aug 4;2(4):581-587. doi: 10.1016/j.adro.2017.07.011. eCollection 2017 Oct-Dec. PMID: 29204525
- 206. Mapuskar KA, Flippo KH, Schoenfeld JD, Riley DP, Strack S, Abu Hejleh T, Furqan M, Domann FE, Buatti JM, Goswami PC, Spitz DR, Allen BG. Mitochondrial Superoxide Mediates Age-Associated Increases in Susceptibility of Dermal Fibroblasts to Radiation and Chemotherapy. *Cancer Res.* 2017 Sep 15;77(18):5054-5067. doi: 10.1158/0008-5472.CAN-17-0106. Epub 2017 Aug 1. PMID: 28765155
- 207. Zhong Z, Kim Y, Buatti JM, Wu X. (2017) 3D Alpha Matting Based Co-segmentation of Tumors on PET-CT Images. In: Cardoso M. et al. (eds) Molecular Imaging, Reconstruction and Analysis of Moving Body Organs, and Stroke Imaging and Treatment. CMMI 2017, SWITCH 2017, RAMBO 2017. Lecture Notes in *Computer Science*, vol 10555 pp 31-42. Springer, Cham https://doi.org/10.1007/978-3-319-67564-0 4.
- 208. Holland MT, Teferi N, Noeller J, Swenson A, Smith MC, **Buatti JM**, Hitchon PW. Stereotactic Radiosurgery and Radio Frequency Rhizotomy for Trigeminal Neuralgia in Multiple Sclerosis: A Single

Institution Experience. *Clin Neurol Neurosurg*. 2017 Nov;162:80-84. doi: 10.1016/j.clineuro.2017.09.004. Epub 2017 Sep 7. PMID: 28972890

- 209. Mohiuddin IH, Furqan M, Clamon G, Keech J, Anderson CM, Smith MC, **Buatti JM**, Allen BG. A Single-Institution Analysis of Thymic Carcinoma Treated with Multi-Modality Therapy. *Annals of Radiation Therapy and Oncology*. 2017 Nov; Vol 1; Issue 3; Article 1011.
- 210. Byrd D, Christopfel R, Buatti JM, Moros E, Nehmeh S, Opanowski A, Kinahan P. Multi-center Survey of PET/CT Protocol Parameters That Affect Standardized Uptake Values. *Journal of Medical Imaging*. 5(1), 011012 (January 2018), doi: 10.1117/1.JMI.5.1.011012. (SPIE Digital Library December 8, 2017.)
- 211. Ulrich EJ, Sunderland JJ, Smith BJ, Mohiuddin IH, Parkhurst JR, Plichta KA, Buatti JM, Beichel RR. Automated Model-based Quantitative Analysis of Phantoms with Spherical Inserts in FDG PET Scans. Medical Physics 2018 Jan;45(1):258-276. doi: 10.1002/mp.12643. Epub 2017 Nov 23. PMID: 29091269
- 212. Anderson CM, Sonis ST, Lee CM, Adkins D, Allen BG, Sun W, Agarwala SS, Venigalla ML, Chen Y, Zhen W, Mould DR, Holmlund JT, Brill JM, Buatti JM. Phase 1b/2a Trial of the Superoxide Dismutase Mimetic GC4419 to Reduce Chemoradiotherapy-Induced Oral Mucositis in Patients With Oral Cavity or Oropharyngeal Carcinoma. *Int J Radiat Oncol Biol Phys.* 2018 Feb 1;100(2):427-435. doi: 10.1016/j.ijrobp.2017.10.019. Epub 2017 Oct 16. PMID: 29174131
- 213. Marquardt M, Anderson CM, Buatti JM, Ginader T, Parkhurst J, Pagedar N, Clamon G, Hoover A, Bayon R. Utility of 3-month Surveillance F-18 FDG PET/CT in Surgically Resected Oral Squamous Cell Carcinoma. Annals of Otology, Rhinology & Laryngology. 2018 Mar;127(3):185-191. doi: 10.1177/0003489417751474. Epub 2018 Jan 9. PMID: 29313371
- 214. Wu X, Zhong Z, Buatti JM, Bai J. Multi-Scale Segmentation Using Deep Graph Cuts: Robust Lung Tumor Delineation In MVCBCT. Proceedings - International Symposium on Biomedical ImagingVolume 2018-April, 23 May 2018, Pages 224-227. 15th IEEE International Symposium on Biomedical Imaging, ISBI 2018; Washington; United States; 4 April 2018 through 7 April 2018; Category number CFP18BIS-ART; Code 136682
- 215. Zhong Z, Kim Y, Zhou L, Plichta K, Allen BG, Buatti JM, Wu X. Improving Tumor Co-Segmentation On PET-CT Images With 3D Co-Matting. Proceedings - International Symposium on Biomedical Imaging Volume 2018-April, 23 May 2018, Pages 224-227 15th IEEE International Symposium on Biomedical Imaging, ISBI 2018; Washington; United States; 4 April 2018 through 7 April 2018; Category number CFP18BIS-ART; Code 136682.
- 216. Zhong Z, Kim Y, Zhou L, Plichta K, Allen BG, Buatti JM, Wu X. 3D Fully Convolutional Networks For Co-Segmentation Of Tumors On PET-CT Images. Proceedings - International Symposium on Biomedical Imaging Volume 2018-April, 23 May 2018, Pages 228-23.115th IEEE International Symposium on Biomedical Imaging, ISBI 2018; Washington; United States; 4 April 2018 through 7 April 2018; Category number CFP18BIS-ART; Code 136682.
- 217. Sperduto PW, Deegan BJ, Li J, Jethwa KR, Brown PD, Lockney N, Beal K, Rana NG, Attia A, Tseng CL, Sahgal A, Shanley R, Sperduto WA, Lou E, Zahra A, Buatti JM, Yu JB, Chiang V, Molitoris JK, Masucci L, Roberge D, Shi DD, Shih HA, Olson A, Kirkpatrick JP, Braunstein S, Sneed P, Mehta MP. Effect of Targeted Therapies on Prognostic Factors, Patterns of Care, and Survival in Patients with Renal Cell Carcinoma and Brain Metastases. *Int J Radiation Onc Bio Physics*. 2018 Jul 15;101(4):845-853. doi: 10.1016/j.ijrobp.2018.04.006. Epub 2018 Apr 12. PMID: 29976497
- 218. Press RH, Shu HG, Shim H, Mountz JM, Kurland BF, Wahl RL, Jones EF, Hylton NM, Gerstner ER, Nordstrom RJ, Henderson L, Kurdziel KA, Vikram B, Jacobs MA, Holdhoff M, Taylor E, Jaffray DA, Schwartz LH, Mankoff DA, Kinahan PE, Linden HM, Lambin P, Dilling TJ, Rubin DL, Hadjiiski L, Buatti JM. The Use of Quantitative Imaging in Radiation Oncology: A Quantitative Imaging Network (QIN) Perspective. *Int J Radiation Onc Bio Physics*. 2018 Nov 15;102(4):1219-1235. doi: 10.1016/j.ijrobp.2018.06.023. Epub 2018 Jun 30. Review. PMID: 29966725

- 219. Sperduto PW, Deegan BJ, Li J, Jethwa KR, Brown PD, Lockney N, Beal K, Rana NG, Attia A, Tseng CL, Sahgal A, Shanley R, Sperduto WA, Lou E, Zahra A, Buatti JM, Yu JB, Chiang V, Molitoris JK, Masucci L, Roberge D, Shi D, Shih HA, Olson A, Kirkpatrick JP, Braunstein S, Sneed P, Mehta MP. Estimating Survival for Renal Cell Carcinoma Patients with Brain Metastases: An Update of the Renal Graded Prognostic Assessment (Renal-GPA). *Neuro-Oncology*, 2018 Nov 12;20(12):1652-1660. doi: 10.1093/neuonc/noy099. PMID: 30418657.
- 220. Alexander MS, Wilkes JG, Schroeder SR, Buettner GR, Wagner BA, Du J, Gibson-Corely K, O'Leary BR, Spitz DR, Buatti JM, Berg D, Bodeker KL, Vollstedt S, Brown HA, Allen BG, Cullen JJ. Pharmacological Ascorbate Reduces Radiation-Induced Normal Tissue Toxicity And Enhances Tumor Radiosensitization In Pancreatic Cancer. *Cancer Research*. 2018 Dec 15;78(24):6838-6851. doi: 10.1158/0008-5472.CAN-18-1680. Epub 2018 Sep 25. PMID: 30254147
- 221. Guram K, Smith MC, Ginader T, Bodeker K, Pelland D, Pennington E, Buatti JM. Using Smaller than Standard Radiation Treatment Margins Does Not Change Survival Outcomes in High-grade Gliomas. *Practical Radiation Oncology*. 2019 Jan;9(1):16-23. doi: 10.1016/j.prro.2018.06.001. Epub 2018 Jun 5. PMID: 30195927
- 222. Seyedin SN, Mitchell D, Mott S, Russo J, Watkins JM, Bell SL, Jakyru, Tracy CR, Snow AN, Parkhurst JR, Smith MC, Buatti JM. Is More Always Better? An Assessment Of The Impact Of Lymph Node Yield On Outcome For Clinically Localized Prostate Cancer With Low/Intermediate Risk Pathology (Pt2-3a/Pn0) Managed With Prostatectomy Alone. *Pathol Oncol Res*, 2019 Jan;25(1):209-215. doi: 10.1007/s12253-017-0349-5. Epub 2017 Oct 27. doi: 10.1007/s12253-017-0349-5. PMID: 29079967
- 223. Zhong Z, Kim Y, Plichta K, Allen BG, Zhou L, Buatti JM, Wu X. Simultaneous Co-segmentation of Tumors in PET-CT Images Using Deep Fully Convolutional Networks, *Medical Physics*.2019 Feb;46(2):619-633. doi: 10.1002/mp.13331. Epub 2019 Jan 4. PMID: 30537103
- 224. Ulrich EJ, Menda Y, Boles Ponto LL, Anderson CM, Smith BJ, Sunderland JJ, Graham MM, Buatti JM, Beichel RR. FLT PET Radiomics for Response Prediction to Chemoradiation Therapy in Head and Neck Squamous Cell Cancer. *Tomography*. 2019 Mar;5(1):161-169. doi: 10.18383/j.tom.2018.00038. PMID: 30854454 [PubMed].
- 225. Beichel RR, Ulrich EJ, Smith BJ, Bauer C, Brown B, Casavant T, Sunderland JJ, Graham MM, Buatti JM. FDG PET based prediction of response in head and neck cancer treatment: Assessment of new quantitative imaging features. *PLoS One.* 2019 Apr 19;14(4):e0215465. doi: 10.1371/journal.pone.0215465. eCollection 2019. PMID: 31002689 [PubMed in process] Free Article
- 226. Rendleman MC, **Buatti JM**, Braun TA, Smith BJ, Nwakama C, Beichel RR, Brown B, Casavant TL. Machine Learning With The TCGA-HNSC Dataset: Improving Performance By Addressing Inconsistency, Sparsity, and High-Dimensionality. *BMC Bioinformatics* 2019 20:339. doi.org/10.1186/s12859-019-2929-8. June 17, 2019. PMID: 31208324
- 227. Sperduto PW, Fang P, Li J, Breen W, Brown P, Cagney D, Aizer A, Yu J, Chaing V, Jain S, Gaspar L, Myrehaug S, Sahgal A, Braunstein S, Sneed P, Cameron B, Attia A, Molitrois J, Wu CC, Wang T, Lockney N, Beal K, Parkhurst J, **Buatti JM**, Shanley R, Lou E, Tandberg D, Kirkpatrick J, Shi D, Shih H, Chuong M, Hirotake S, Aoyama H, Masucci L, Roberge D, Mehta MP. Survival and Prognostic Factors in Patients with Gastrointestinal Cancers and Brain Metastases: Have We Made Progress? *Translational Research*. 2019 Jun;208:63-72. doi: 10.1016/j.trsl.2019.02.011. Epub 2019 Feb 27. [Epub ahead of print] PMID: 30885538.
- 228. Sperduto PW, Fang P, Li J, Shi D, Chiang V, Molitoris J, Mehta M, Saito H, Fang P, Beal K, Tandberg D, Shih H, Wang T, Breen W, Attia A, Aizer A, Yu J, Shanley R, Aoyama H, Jain S, Wu CC, Kirkpatrick J, Sahgal A, Sneed P, Cameron B, Braunstein S, Myrehaug S, Cagney D, Parkhurst J, Gaspar L, Chuong M, Roberge D, Masucci L, Lou E, Brown P, **Buatti JM**, Lockey N. Estimating Survival in Patients with Gastrointestinal Cancers and Brain Metastases: An Update of the Graded Prognostic Assessment for

Gastrointestinal Cancers (GI-GPA). *Clinical and Translational Radiation Oncology*. 2019 Jun 27;18:39-45. doi: 10.1016/j.ctro.2019.06.007. eCollection 2019 Sep. PMID: 31341974

- 229. Graham MM, Buatti JM. Training Requirements for Theranostics a Unique Opportunity for Collaboration. J Nucl Med. 2019 Sep;60(9):1205-1206. doi: 10.2967/jnumed.119.228940. Epub 2019 Apr 6. PMID: 30954946
- 230. Allen BG, Bodeker KL, Smith MC, Monga V, Sandhu S, Hohl RJ, Carlisle TL, Brown HA, Hollenbeck NJ, Vollstedt S, Greenlee JD, Howard MA, Seyedin SN, Caster JM, Jones KA, Cullen JJ, Berg DJ, Wagner BA, Buettner GR, TenNapel MJ, Smith BJ, Spitz DR, Buatti JM. First-In-Human Phase 1 Clinical Trial Of Pharmacological Ascorbate Combined With Radiation And Temozolomide For Newly Diagnosed Glioblastoma. *Clin Cancer Res.* 2019 Nov 15;25(22):6590-6597. doi: 10.1158/1078-0432.CCR-19-0594. Epub 2019 Aug 19. PMID: 31427282
- 231. Burmeister J, Buatti JM, Jimenez R, Marcrom S, Olivier K, Price M, Wallner P. Exam Preparation and Performance Reporting Changes for the American Board of Radiology Radiation Oncology Physics Examination: Results from the ASTRO Workgroup. *Int J Radiat Oncol Biol Phys.* 1 January 2020; 106(9)43-44. doi: 10.1016/j.ijrobp.2019.05.041. [Epub ahead of print] PMID: 31648870
- 232. Baek S, He Y, Allen BG, Buatti JM, Smith BJ, Tong L, Sun Z, Li R, Deihn M, Loo BW, Plichta KA, Seyedin SN, Gannon M, Cabel KR, Kim Y, Wu X. Deep Segementation Networks Predcit Survival of Non-Small Cell Lung Cancer. *Sci Rep.* 2019 Nov 21;9(1):17286. doi: 10.1038/s41598-019-53461-2. PMID: 31754135 232.
- 233. Anderson CM, Lee CM, Saunders D, Curtis A, Dunlap N, Nangia C, Lee AS, Gordon S, Kovoor P, Arevalo-Araujo R, Bar-Ad V, Pedadda A, Colvett K, Miler D, Jain A, Wheeler J, Blakaj D, Bonomi M, Venigalla M, Agarwala S, Garg M, Worden F, Holmlund J, Brill JM, Downs M, Sonis ST, Katz S, Buatti JM. Phase IIb, Randomized, Double-Blind Trial Of GC4419 Vs Placebo To Reduce Severe Oral Mucositis In Head And Neck Cancer Patients Receiving Concurrent Radiotherapy And Cisplatin. *J Clin Oncol.* 2019 Dec 1;37(34):3256-3265. doi: 10.1200/JCO.19.01507. Epub 2019 Oct 16.PMID: 31618127
- 234. Sperduto PW, Mesko S, Li J, Cagney D, Aizer A, Lin NU, Nesbit E, Kruser TJ, Chan J, Braunstein S, Lee J, Kirkpartick JP, Breen W, Brown PD, Shi D, Shih HA, Soliman H, Sahgal A, Shanley R, Sperduto W, Lou E, Everett A, Boggs DH, Masucci L, Roberge D, Remick J, Plictha K, Buatti JM, Jain S, Gaspar LE, Wi CC. Wang TJC, Bryant J, Chuong M, Yu J, Chiang V, Nakoano T, Aoyama H, Mehta MP. Estrogen, Progesterone and HER2 Receptor Discordance Between Primary Tumor and Brain Metastases in Breast Cancer and Its Effect on Subsequent Treatment and Survival. *Neuro Oncol.* 2020 September 1: 22 (9)1359-1367. doi: 10.1093/neuonc/noaa025. Online ahead of print. PMID: 32034917
- 235. Andresen NS, Snow AN, Mott SL, Pagedar NA, Bayon R, Anderson CM, Buatti JM, Watkins JM. Impact of Treatment Time on Outcome for Resected Head and Neck Squamous Cell Carcinoma by HPV Status. *Clin Oncol Res* 2020;3(2):ISSN 2613-4942 (published online 29 Feb 2020). Doi 10.31487/j.COR.2020.02.09
- 236. Xiong X, Linhardt TJ, Liu W, Smith BJ, Sun W, Bauer C, Sunderland JJ, Graham MM, Buatti JM, Beichel RR. A 3D Deep Convolutional Neural Network Approach for the Automated Measurement of Cerebellum Tracer Uptake in FDG PET-CT Scans. *Med Phys.* 2020 March;47(3):1058–1066. doi:10.1002/mp.13970 PMID: 31855287
- 237. Hamed HH, Tewfik FA, Viner T, Capper D, **Buatti JM**. Differentiated Thyroid Cancer: Management and Treatment in a Community Hospital and Guidelines to Lower Morbidity. *Archives of Otorhinolaryngology-Head & Neck Surgery*. 2020;4(1):5 DOI: 10.24983/scitemed.aohns.2020.00126
- 238. Fedorov A, Beichel RR, Kalpathy-Cramer J, Clunie D, Onken M, Reismeier J, Herz C, Bauer C, Beers A, Fillion-Robin JC, Lasso A, Pinter C, Pieper S, Nolden M, Maier-Hein K, Herrmann MD, Saltz J, Prior F, Fennessy FM, **Buatti JM**, Kikinis R. Quantitative Imaging Informatics for Cancer Research (QIICR)

JCO Clinical Cancer Informatics. 2020 May;4:444-453. doi: 10.1200/CCI.19.00165. Epub May 11, 2020. PMID: 32392097

- 239. Sperduto PW, Mesko S, Li J, Cagney D, Aizer A, Lin NU, Nesbit E, Kruser TJ, Chan J, Braunstein S, Lee J, Kirkpartrick JP, Breen W, Brown PD, Shi D, Shih HA, Soliman H, Sahgal A, Shanley R, Sperduto W, Lou E, Everett A, Boggs DH, Masucci L, Roberge D, Remick J, Plichta K, Buatti JM, Jain S, Gaspar LE, Wu CC, Wang TJC, Bryant J, Chuong M, Yu J, Chang V, Nakano T, Aoyama H, Mehta MP. Beyond an Updated Graded Prognostic Assessment (Breast GPA): A Prognostic Index and Trends in Treatment and Survival in Breast Cancer Brain Metastases from 1985 to Today. *Int J Radiat Oncol Biol Phys.* 2020 Jun 1;107(2):334-343. doi:10.1016/j.ijrobp.2020.01.051. Epub 2020 Feb 19. PMID: 32084525
- 240. Jones EF, **Buatti JM**, Shu HK, Wahl RL, Kurland BF, Linden HM, Mankoff DA, Rubin DL, Tata D, Nordstrom RJ, Hadjiyski L, Holdhoff M, Schwartz LH. Clinical Trial Design and Development Work Group Within the Quantitative Imaging Network. *Tomography*. 2020 Jun;6(2):60-64. doi: 10.18383/j.tom.2019.00022. PMID: 32548281
- 241. Smith BJ, Buatti JM, Bauer C, Ulrich EJ, Ahmadvand P, Budzevich MM, Gillies RJ, Goldgof D, Grkovski M, Hamarneh G, Kinahan PE, Muzi JP, Muzi M, Laymon CM, Mountz JM, Nehmeh S, Oborski MJ, Zhao B, Sunderland JJ, Beichel RR. Multisite Technical and Clinical Performance Evaluation of Quantitative Imaging Biomarkers from 3D FDG PET Segmentations of Head and Neck Cancer Images. *Tomography*. 2020 Jun;6(2):65-76. doi: 10.18383/j.tom.2020.00004. PMID: 32548282
- 242. Watkins JM, Russo JK, Andresen NS, Rountree CR, Zahra A, Mott SL, Herr DJ, O'Keefe J, Allen BG, Sharma AK, Buatti JM. Long-Term Outcome Comparison for Standard Fractionation (>59 Gy) Versus Hyperfractionated (>45 Gy) radiotherapy plus concurrent chemotherapy for limited-stage small-cell lung cancer. *Rep Pract Oncol Radiother*, 2020 Jul-Aug;25(4):489-493. doi: 10.1016/j.rpor.2020.03.017. Epub 2020 Apr 27. PMID: 32477014
- 243. Callaghan CM, Seyedin SN, Mohiuddin I, Hawkes KL, Petronek MS, Anderson CM, Buatti JM, Milhem MM, Monga V, Allen BG. The Effect of Concurrent Stereotactic Body Radiation and anti-PD-1 therapy for Recurrent Metastatic Sarcoma. *Radiation Research*. 2020 Aug 1;194(2):124-132. doi: 10.1667/RADE-20-00017. PMID: 32845986 244.
- 244. Ali MdY, Oliva CR, Noman ASM, Allen BG, Goswami PC, Zakharia Y, Monga V, Spitz DR, **Buatti** JM, Griguer CE. Radioresistance in Glioblastoma and the Development of Radiosensitizers. *Cancers* 3 September 2020, 12(9), 2511. doi:10.3390/cancers12092511
- 245. Buatti JS, **Buatti JM**, Yaddanapudi S, Pennington EC, Wang D, Gross B, St-Aubin JJ, Hyer DE, Smith MC, Flynn RT. Stereotactic Radiotherapy of Appropriately Selected Meningiomas and Metastatic Brain Tumor Beds with Gamma Knife Icon versus Volumetric Modulated Arc Therapy. *Journal of Applied Clinical Medical Physics*. 2020 Nov 18. doi: 10.1002/acm2.13100. Online ahead of print. PMID: 33207030 http://dx.doi.org/10.1002/acm2.13100
- 246. Sperduto PW, Mesko S, Li J, Cagney D, Aizer A, Lin NU, Nesbit E, Kruser TJ, Chan J, Braunstein S, Lee J, Kirkpartrick JP, Breen W, Brown PD, Shi D, Shih HA, Soliman H, Sahgal A, Shanley R, Sperduto WA, Lou E, Everett A, Boggs DH Masucci L, Roberge D, Remick J, Plichta K, Buatti JM, Jain S, Gaspar LE, Wu CC, Want TJC, Bryant J, Chuong M, An Y, Chiang V, Nakano T, Aoyama H, Mehta MP. Survival in Patients with Brain Metastases: Summary Report on the Updated Diagnosis-Specific Graded Prognostic Assessment and Definition of the Eligibility Quotient. November 10, 2020; 38(32)3773-3784. DOI: 10.1002/acm2.13100. ISSN: 1527-7755
- 247. **Buatti JM**, Pryma DA, Kiess AP, Mailman J, Ennis RD, Menda Y, White GA, Pandit-Taskar N. A Framework for Patient-Centered Pathways of Care for Radiopharmaceutical Therapy (RPT): An ASTRO Consensus Document. *Int J Radiat Oncol Biol Phys.* 2020 Nov 26:S0360-3016(20)34570-3. doi: 10.1016/j.ijrobp.2020.11.048. Online ahead of print. PMID: 33249143
- 248. Petronek MS, Steinbach EJ, Kalen AL, Builta ZJ, Callaghan CM, Hyer DE, Spitz DR, Flynn RT, **Buatti JM**, Magnotta VA, Zepeda-Orozco D, St Aubin JJ, Allen BG. Assessment of Gadobutrol

Safety in Combination with Ionizing Radiation Using a Pre-Clinical MRI-Guided Radiotherapy Model. *Radiat Res.* 2020 Dec 21. doi: 10.1667/RADE-20-00199.1. Online ahead of print. PMID: 33347596

- 249. Cushing CM, Petronek MS, Bodeker KL, Vollstedt S, Brown HA, Opat E, Hollenbeck NJ, Shanks T, Berg DJ, Smith BJ, Smith MC, Monga V, Furqan M, Howard MA, Greenlee JD, Mapuskar KA, St-Aubin J, Flynn RT, Cullen JJ, Buettner GR, Spitz DR, Buatti JM, Allen BG, Magnotta VA. Magnetic resonance imaging (MRI) of Pharmacological Ascorbate-Induced Iron Redox State as a Biomarker in Subjects Undergoing Radio-Chemotherapy. *Redox Biol.* 2021 January;38:101804. doi: 10.1016/j.redox.2020.101804. Online ahead of print. PMID: 33260088
- 250. **Buatti JM**, Kiess AP. The Rapid Evolution of Theranostics in Radiation Oncology. *Semin Radiat Oncol.* 2021 Jan;31(1):1-2. doi: 10.1016/j.semradonc.2020.07.001. PMID: 33246630 No abstract.
- 251. Zhou L, Zhong Z, Shah A, Qiu B, **Buatti JM**, Wu X. Deep Neural Networks for Surface Segmentation Meet Conditional Random Fields. *IEEE TMI*. Submitted. September 06, 2019.
- 252. Seyedin SN, Watkins JM, Mayo Z, Snow AN, Laszewski MJ, Russo JK, Mott SL Tracy CR, **Buatti JM**, Caster JM. A Recursive Partitioning Analysis Demonstrating Risk Subsets for 8-year Biochemical Relapse Following Margin-Positive Radical Prostatectomy Without Adjuvant Hormone or Radiation Therapy. Submitted. *Advances in Radiation Oncology*.
- 253. Blitzer GC, Parekh AD, Chen S, Taparra K, Kahn JM, Fields EC, Stahl JM, Rosenberg SA, Buatti JM, Laucis AM, Wang Y, Mayhem DL, McDonald AM, Harari PM, Brower JV. Why Increasing Numbers of Unmatched Residency Positions in Radiation Oncology? A Survey of Fourth Year Medical Students. Int J Radiat Oncol Biol Phys. Submitted September 29, 2020.
- 254. Wu X, Zhou L, Zhong Z, Shah A, Qiu B, **Buatti JM**. Integrating Conditional Random Field into Deep Neural Networks for Surface Segmentation in 3-D Medical Images. *Computerized Medical Imaging and Graphics*. Submitted October 13, 2020.
- 255. Xiong X, Smith BJ, Graves SA, Sunderland J, Graham M, Gross B, **Buatti JM**, Beichel RR. Automated Measurement of Uptake in Pelvis FLT PET-CT Scans Utilizing a Combined Localization and Segmentation Approach Based on a 3D Deep Convolutional Neural Network. *Medical Physics*. Submitted March 15, 2021.

#### Book Chapters

- 1. **Buatti JM**, Cress AE, Stea B, Gerner EW. Polyamine-Dependent Radiation Recovery Processes In Rodent And Human Cells. *Radiation Research: A Twentieth-century Perspective*. Academic Press. pp. 447. December 1990
- 2. Harari PM, Pickart MA, **Buatti JM**, Gerner EW. Polyamine Modulation of Response to Radiation and Hyperthermia. *In* Nishioka K (ed): *Critical Roles of Polyamines in Cancer: Basic Mechanisms of Clinical Approaches*. Austin, TX: RG Landes Co., pp. 191-217, 1996.
- 3. Friedman WA, Bova F, **Buatti JM**. Stereotactic Radiosurgery: Clinical Experience at the University of Florida. In Gildenberg PL, Tasker RR. (eds): Textbook of Stereotactic and Functional Neurosurgery, New York: McGraw-Hill; pp. 733-744, 1997.
- 4. Bova JF, Meeks SL, Friedman WA, **Buatti JM**. Imaging in Stereotactic Treatment Planning. In Hazle JD, and Boyer A (eds): Imaging in Radiation Therapy, Madison, WI: Medical Physics Publishing; 445-458, 1998.
- 5. Mendenhall WM; Parsons JT; Friedman WA; **Buatti JM**. Radiation Therapy for Temporal Bone Chemodectomas and Acoustic Schwannomas. In Thawley SE; Panje WR (eds): Comprehensive Management of Head and Neck Tumors, 2nd ed, Philadelphia: W B Saunders Company; pp. 466-477, 1999.

- 6. Foote KD, Friedman WA, Meeks SL, Wagner TH, **Buatti JM**, Bova FJ. Fundamentals of Stereotactic Radiosurgery: Software and Dose Planning. Linac and Gamma Knife Radiosurgery (AANS Topics Book): In Germano IM (ed). pp: 31-55, 2000.
- 7. Foote KD, Friedman WA, **Buatti JM**, Bova FJ. Linac Radiosurgery for Vascular Malformations. In Germano IM (ed): Linac and Gamma Knife Radiosurgery (AANS Topics Book). 2000.
- 8. Barker JL, Mayr NA, Young DC, Meeks SL, **Buatti JM**: The role of radiation therapy in the treatment of breast cancer. In: Breast Cancer. Problems in General Surgery. Scott-Conner CEH, Jochimsen PJ, eds., Lippincott Williams and Wilkins, Philadelphia, PA, 17(4):67-78,2000.
- 9. **Buatti JM**, Friedman WA, Meeks SL, Bova FJ, Foote KD. Radiation therapy and radiosurgery for brain tumors. In Kaye AH and Laws ER Jr (eds). Brain Tumors (2nd Ed). WB Saunders, London, England, 357-374, 2001.
- 10. Meeks SL, **Buatti JM**, Bova FJ, Friedman WA, Pennington EC, Wagner TH. Stereotactic radiosurgery with the Linac Scalpel. In Handbook of Stereotactic Neurosurgery. Schulder M (ed), Mercel Dekker, Inc., New York, 191-215, 2002.
- 11. Foote KD, Friedman WA, **Buatti JM**, Bova FJ. Radiosurgical Procedures for Arteriovenous Malformations. In Batjer HH and Loftus C (eds): Textbook of Neurological Surgery. Lippincott Williams and Wilkins; pp. 2002.
- 12. Meeks SL, Tome WA, Bouchet LG, Hass AC, **Buatti JM**, Bova FJ Patient Positioning Using Optical and Ultrasound Techniques. In Intensity Modulated Radiation Therapy: The State of the Art. Palta JR and Mackie TR (eds), pp 727-748, 2003.
- 13. **Buatti JM**, Meeks SL, Howes TL. Stereotactic Body Radiation Therapy for Retroperitoneal and Pelvic Tumors. In Extracranial Radiosurgery. Brian Kavanagh and Robert Timmerman (eds.) Lippincott, Williams and Wilkins, Philadelphia, PA. In press 2004.
- Buatti JM, Meeks SL, Radiotherapy for Benign Skull Base Tumors. In Youman's Neurological Surgery: 5th Edition, Philadelphia: W B Saunders Company; Part II, Chap 265, pp 4027-4031, 2004.
- 15. Bova FJ, Meeks SL, Wagner TH, Friedman WA, Buatti JM. Fractionated and stereotactic radiation, extracranial stereotactic radiation, intensity modulation and multileaf collimation. In Youman's Neurological Surgery, 5th Edition, Philadelphia: W B Saunders Company; Part II, Chap 275, pp 4131-4144, 2004.
- Buatti JM, Meeks SL, Mayr NA, Robbins MEC, Friedman WA, Bova FJ. Radiobiology. In Youman's Neurological Surgery, 5th Ed, Philadelphia: W B Saunders Company; Part II, Chap 262, pp 3999-4003, 2004.
- Buatti JM, Meeks SL, Ryken TC. The Role of Fractionated Conformal Radiotherapy in the Treatment of Pituitary Tumors. In Cancer of the Central Nervous System, 2nd Edition. Peter McL. Black and Jay S. Loeffler (eds.) Lippincott Williams and Wilkins, Philadelphia, PA, pp 439-444, 2005.
- Ryken TC, Buatti JM, Carlisle T, Central Nervous System Colon Cancer Metastases. In Principles of NeuroOncology. Michael Berger and Michael Prados (eds) Lippincott, Williams and Wilkins, Philadelphia, PA. Chapter 58 pp 443-450, 2005.
- 19. Dornfeld K, **Buatti JM**. Intensity Modulated Radiotherapy Combined with Radiation Sensitizers and Protectors. In Intensity Modulated Radiation Therapy: A Clinical Perspective. Arno Mundt and John Roeske (eds.) BC Decker Inc, Hamilton, Ontario, Canada. pp. 622-627, 2005.
- 20. Hoffman HT, McCulloch TM, **Buatti JM**, Karnell L. Management of early glottic carcinoma. In Cummings, Haughey, Thomas, Harker, Robbins, Schuller, Flint, Richardson, (eds):

Otolaryngology - Head and Neck Surgery, 4th Edition. Elsevier/Mosby, Philadelphia, PA. pp. 2284-2325, 2005.

- 21. Foote KD, Friedman WA, Bova FJ, **Buatti JM**. Stereotactic Radiosurgery: LINAC. In Atlas of Neurosurgical Techniques. Laligam Sekhar, MD and Richard Fessler, MD. Thieme Medical Publishers, New York, NY. pp.981-996, 2006
- 22. Anderson C, Bayouth JE, **Buatti JM**. Principles of Radiation Therapy. Youmans Neurological Surgery, 6th Edition. Winn H.R., Editor-in-Chief. Chapter 251 pp 251-1-251-7 Elsevier, Inc: May 2010
- 23. Hyer DE, Bova FJ, **Buatti JM.** Radiosurgical Devices. Intracranial Stereotactic Radiosurgery, 2<sup>nd</sup> Edition. L. Dade Lunsford and Jason P. Sheehan. Thieme Medical Publishers, New York, NY. Chapter 6 pp. 2-24, May 2014.
- 24. Plichta KA, Sun W, **Buatti JM**. Toxicities of Radiation Treatment for Breast Cancer Risks and Management Strategies. Springer Publishing, New York, NY. Chapter 9 Tissue Fibrosis after Radiation Treatment for Breast Cancer. April 2019.
- 25. Sato M, Greenlee JD, **Buatti, JM**. Diffusion Weighted MR Imaging of the Brain, Head and Neck, and Spine. Springer International Publishing AG. Part II, Chapter 18. Management of Pediatric Brain Tumors. 2019.
- Buatti JM, Beichel R. Quantitative Imaging: from Basics to Applications. AIP Publishing. Book
  Section 3: Imaging Modes and Quantitative Imaging, Chapter 5 Quantitative Imaging in Radiation Treatment Planning. 2020

#### Books

Friedman WA, **Buatti JM**, Bova JF, Mendenhall WM. *Linac Radiosurgery: A Practical Guide*. New York: Springer-Verlag, pp. 1-171, 1997.

## Electronic Publications

- 1. **Buatti JM**, Meeks SL. RTOG 90-05: An Important Faux Pas. Select Review in Neuro-Oncology. Website Neurosurgery: //ON-CALL for congress of neurosurgeons and American Association of Neurological Surgeons.
- 2. **Buatti JM**, Meeks SL. Stereotactic radiosurgery for brain lesions. http://www.uihealthcare.com/news/currents/vol1issue3/stereotacticradiosurgery.html.
- 3. Meeks SL, **Buatti JM**. University of Iowa Radiosurgery website http://www.uihealthcare.com/depts/med/radiationoncology/facilandequip/radiosurgery/.
- 4. Meeks SL, **Buatti JM**. Ultrasound guidance for extracranial stereotactic radiosurgery. http://www.uihealthcare.com/news/currents/vol2issue4/7ultrasoundsrs.html
- Ryken T, Buatti JM, Foens C. AANS Neurosurgeon Point-Counterpoint: The Role of Stereotactic Radiosurgery Versus Whole Brain Radiotherapy in the Treatment of Central Nervous System Metastatic Disease. http://www.aansneurosurgeon.org/features/point-counterpoint-the-role-ofstereotactic-radiosurgery-versus-whole-brain-radiotherapy-in-the-treatment-of-central-nervoussystem-metastatic-disease/#.T0e839FWtZ4.email
- Patel SC, Bhatia S, VanTol M, Beichel R, Buatti JM. The Relevance of PET-CT in Cancer Response Evaluation. Invited Author. *Asian Hospital & Healthcare Management*. www.asianhhm.com. 2014 (29) pp. 10-15.
- Sperduto PW, Mesko S, Li J, Cagney D, Aizer A, Lin NU, Nesbit E, Kruser TJ, Chan J, Braunstein S, Lee J, Kirkpatrick JP, Breen W, Brown PD, Shi D, Lou E, Everett A, Boggs DH, Masucci L, Roberge D, Remick J, Plichta K, Buatti JM, Jain S, Gaspar LE, Wu CC, Wang TJC, Bryant J, Chuong M, An

Y, Chiang V, Nakano T, Aoyama H, Mehta MP. Survival in Patients with Brain Metastases: Summary Report on the Updated Diagnosis-Specific Graded Prognostic Assessment (GPA) and Definition of the Eligibility Quotient. September 15, 2020. Journal of Clinical Oncology. https://ascopubs.org/journal/jco. DOI <u>https://doi.org/10.1200/JCO.20.01255</u> PMID: 32931399

#### Published Abstracts

- Buatti JM, Rivero LR, Jorgensen TJ. Radiation-induced DNA Damage and Repair in Human Leukocytes. Presented at the Brookhaven National Laboratory Symposium on DNA Damage and Repair in Human Tissues, Oct. 1989; UCLA Conference on DNA Damage and Repair, Jan. 1990; Proceedings Radiation Research Meeting. Abs. EM-10. p. 173. Presented New Orleans, LA. April 1990.
- Buatti JM, Cassady JR, Cetas TC, Hynynen K, Kittelson JM, Stea B. Hyperthermia and Radiation for Advanced or Recurrent Sarcomas. Radiation Research Meeting, Apr. 1990. Proceedings Radiation Research Meeting. Abs. CT-3. p. 92. Presented New Orleans, LA. April 1990.
- Buatti JM, Stea B, Stringer DE, Gerner EW. Polyamines and modulation of c-myc expression and its effects on radioresponses of human glioblastoma cells. American Society for Therapeutic Radiology and Oncology. <u>Int J Radiat Oncol Biol Phys</u> 21(Suppl.1):126, 1991. Presented Washington D.C. October 1991.
- Buatti JM, Cress AE, Stea B, Gerner EW. Polyamine Dependent Recovery Processes in Rodent and Human Cells. International Congress of Radiation Research, Proceedings: <u>Radiation Research:</u> <u>A Twentieth Century Perspective, Vol I.</u> Abs P-37-17, p. 447. Presented Toronto, Canada. July 1991.
- 5. **Buatti JM**, Montes HZ, Hamilton A, Copeland JG, Cassady JR. Central Nervous System Involvement of Malignant Neoplasms in Cardiac Transplant Patients. Arizona Neurologic Society Meeting, Tucson, AZ. October 1992.
- Hamilton AJ, Buatti JM, Montes HZ, Cassady JR, Copeland JG. Central Nervous System Involvement of Malignant Neoplasms in Cardiac Transplant Patients. American Association for Neurological Surgeons. Proceedings: p. 502. Presented in Boston, MA. April 1993.
- 7. Yanes GD, Janjan N, **Buatti JM**. The Role of Radiation in Cancer Pain and Symptom Management. Refresher Course for the American Pain Society Meeting. Proceedings p. A-4. Presented in Orlando, FL. November 1993.
- 8. Anderson JM, Shimm DS, **Buatti JM**, Coulthard SW, Cassady JR. Cutaneous Angiosarcoma: Primary and Recurrent Treatment. American Radium Society Meeting, April 1994.
- 9. Sarkaria NJ, Mehta MP, Loeffler JS, Buatti JM, Chappell RJ, Levin AB, Alexander III E, Friedman WA, Kinsella TJ. Radiosurgery in the Initial Management of Malignant Gliomas: Survival Comparison with the RTOG Recursive Partitioning Analysis. American Society for Therapeutic Radiology and Oncology. <u>Int J Radiat Oncol Biol Phys</u> 30(Suppl1):164, 1994. Presented in San Francisco, CA. October 1994.
- 10. Janjan N, Yanes G, **Buatti JM**. Attitudes Expressed in a Professional Development Course on Radiotherapy. American Association for Cancer Education. Louisville, KY. November 1994.
- 11. Bova JF, Friedman WA, Yang J, **Buatti JM**, Liu C. A System for Precision Fractionated Radiation Therapy. American Association of Physicists in Medicine. <u>Med Phys</u> 22(6):966, 1995. Presented in Boston, MA. July 1995.
- 12. Bova FJ, Friedman WA, **Buatti JM**, Mendenhall WM, Yang C-C, Liu C. System for Frameless High-Precision Stereotactic Radiotherapy. American Society for Therapeutic Radiology and

Oncology. Int J Radiat Oncol Biol Phys 32(Suppl1):168, 1995. Presented in Miami, FL. October 1995.

- 13. Condra KS, **Buatti JM**, Friedman WA, Mendenhall WM, Marcus Jr RB, McCarty PJ. Treatment of Benign Intracranial Meningioma: The Role of Radiotherapy. American Society for Therapeutic Radiology and Oncology. Int J Radiat Oncol Biol Phys 32(Suppl1):276, 1995.
- 14. Auchter RM; Lamond JP; Alexander E; Buatti JM; Chappell RJ; Friedman W; Kinsella TJ; Levin AB; Noyes WR; Schultz C; Loeffler JS; Mehta MP. A Multi-Institutional Outcome and Prognostic Factor Analysis of Radiosurgery (RS) for Resectable Single Brain Metastasis. Recipient of the Resident Essay Award. American Society for Therapeutic Radiology and Oncology. Int J Radiat Oncol Biol Phys 32(Suppl1):145, 1995. Presented in Miami, FL. October 1995.
- 15. **Buatti JM**, Mendenhall WM, Friedman WA, Marcus Jr RB, Bova FJ. Accelerated hyperfractionated Radiotherapy for Malignant Gliomas. Florida American Cancer Society. Orlando, FL. March 1995.
- 16. Buatti JM, Theele DP, Friedman WA, Bova JF, Mendenhall WM. The Lazaroid U74389G Protects Normal Cat Brain From Stereotactically Delivered Radiation. Florida American Cancer Society, Orlando, FL. March 1995. Radiation Research Society 43rd Annual Meeting, North American Hyperthermia Group 15th Annual Meeting, Proceedings p. 128. Presented in San Antonio, TX. April 1995.
- 17. **Buatti JM**, Friedman WA, Bova JF, Theele DP, Mickle JP, Mendenhall WM. Development and Use of an Animal Model of Stereotactic Radiosurgery. 2nd Congress of the International Stereotactic Radiosurgery Society. Proceedings p. 103. Boston, MA. June 1995.
- Bova JF, Friedman WA, Buatti JM, Mendenhall WM. System for Fractionated Stereotactic Radiation Therapy. 2nd Congress of the International Stereotactic Radiosurgery Society. Proceedings p. 119. Boston, MA. June 1995.
- Shafron DH, Friedman WA, Buatti JM, Condra KS, Bova FJ. Linear Accelerator Radiosurgery for Meningiomas. Congress of Neurological Surgery. Proceedings p. 366. San Francisco, CA. October 1995.
- Wichman B, Bova JF, Buatti JM, Liu C, Friedman W. "Frameless Stereotactic Repeat Fixation System". 38th Annual Meeting of the American Association of Physics in Medicine. <u>Med Phys</u> 23(6):1167. Presented in Philadelphia, PA. July 1996.
- McCord MW, Buatti JM, Fennell EM, Mendenhall WM, Marcus RB, Rhoton AL, Friedman WA. "Radiotherapy for Pituitary Adenoma: Long-Term Outcome and Sequelae". American Society of Therapeutic Radiology and Oncology Meeting. <u>Int J Radiat Oncol Biol Phys</u> 36(Suppl1): 293. Presented in Los Angeles, CA. October 1996.
- 22. Meeks SL, **Buatti JM**, Bova JF, Friedman WA. "Convolving Setup Uncertainties with Dose Distributions for High Precision Fractionated Intracranial Radiotherapy". 38th Annual Meeting of the American Association of Physicists in Medicine. <u>Med Phys</u> 23(6): 1168. Presented in Philadelphia, PA. July 1996.
- Meeks SL, Bova JF, Friedman WA, Buatti JM, Wichman B. "Software Compensation of Linac Isocentric Inaccuracies". 38th Annual Meeting of the American Association of Physicists in Medicine. <u>Med Phys</u> 23(6):1038. Presented in Philadelphia, PA. July 1996.
- Ellis TL, Bova F, Friedman WA, Buatti JM, Meeks S, Moore R. "Patterns of Treatment Failure in Patients Undergoing Stereotactic Radiosurgery for Arteriovenous Malformations". American Association of Neurological Surgeons. <u>J Neurosurg</u> 86(2):364A, 1997. Presented in Denver, CO. April 1997.

- 25. Bova JF, Meeks SL, Friedman WA, **Buatti JM**, Mendenhall WM. "Image Guided Radiation Therapy". 39th Annual Meeting of the American Association of Physicists in Medicine. <u>Med Phys</u> 24(6):1028, 1997. Presented in Milwaukee, WI. July 1997.
- Rojiani AM, Salzman K, Buatti JM, Quisling RG. "Primary Intracranial Germ Cell Tumors: Neuroimaging, Clinical, and Histopathologic Review of 32 Tumors". <u>J Neuroimaging</u> 7(1):67-68, 1997.
- Buatti JM, Bova JF, Friedman WA, Meeks SL, Ellis TL, Marcus Jr RB, Li Z, Mendenhall WM. "Preliminary Experience with Frameless Stereotactic Radiotherapy". American Society for Therapeutic Radiology and Oncology. <u>Int J Radiat Oncol Biol Phys</u> 39(25):201. Presented in Orlando, FL. October 1997.
- 28. Bova F, Friedman W, **Buatti JM**, Meeks S, Mendenhall W. "The University of Florida Frameless Repeat Fixation System". Third Congress International Stereotactic Radiosurgery Society. Proceedings p. 91, 1997. Presented in Madrid, Spain. June 1997.
- 29. Meeks S, Bova F, Friedman W, **Buatti JM**, Mendenhall W. "Characterizing Dose Distributions as Analytic Functions for Fast Dose Optimization". Third Congress International Stereotactic Radiosurgery Society. Proceedings p. 89, 1997. Presented in Madrid, Spain. June 1997.
- Buatti JM, Friedman WA, Ellis TL, Bova JF, Meeks SL, Mendenhall WM. "Stereotactic Radiosurgery for Malignant Gliomas". Third Congress International Stereotactic Radiosurgery Society. Proceedings p. 103, 1997. Presented in Madrid, Spain. June 1997.
- Ellis TL, Buatti JM, Friedman WA. "An Outcome Database for Patients Treated with Radiosurgery". Third Congress International Stereotactic Radiosurgery Society. Proceedings p. 92, 1997. Presented in Madrid, Spain. June 1997.
- Marshall DT, Bolch WE, Tome WA, Buatti JM. "Redefining Dose: A Monte Carlo-Based Microdosimetry System to Quantify the Radiobiological Impact of Variations in the Tumor Microenvironment". Accepted for ASTRO 1998. Int J Radiat Oncol Biol Phys 42:S1 p. 242, 1998.
- Mabanta SR, Buatti JM, Friedman WA, Mendenhall WM, Meeks SL, Bova FJ. "Linear Accelerator Radiosurgery for Non-Acoustic Schwannomas". Presented ASTRO 1998, Phoenix, AZ. Int J Radiat Oncol Biol Phys 42:S1 p. 210, 1998.
- 34. Foote KD, **Buatti JM**, Friedman WA, Bova FJ, Meeks SL. Brainstem dose predicts the risk of cranial neuropathy after radiosurgery for vestibular schwannoma. Proceedings Linac Radiosurgery p. 40 1998.
- 35. Mabanta SR, **Buatti JM**, Friedman WA, Bova FJ, Meeks SL. The impact of dose and tumor volume in the local control of brain metastases with stereotactic radiosurgery. Proceedings Linac Radiosurgery, p. 53, 1998.
- Meeks SL, Bova JF, Maryanski M, Kendrick LA, Ranade MK, Buatti JM, Friedman WA. "Quantitative Dosimetry Evaluation Using BANG Gel and Image Correlation". American Association of Physicists in Medicine. <u>Med Phys</u> 25(7):A199, 1998.
- Buatti JM, Meeks SL, Friedman WA, Bova JF, Mandell LB, Mendenhall WM. "The Evolution of Linac Radiosurgery Treatment for Acoustic Schwannomas". Congress of Neurological Surgeons, Proceedings 48<sup>th</sup> Annual Meeting, p. 211, 1998.
- Foote KD, Friedman WA, Bova JF, Ellis TL, Buatti JM. "An Analysis of Salvage Retreatment for Failed AVM Radiosurgery" International Stereotactic Radiosurgical Society. Sydney, Australia. February 1999 Proceedings p. 59.
- 39. **Buatti JM**, Friedman WA, Bova JF, Meeks SL, Marcus RB. "Atypical and Malignant Meningiomas Treated with Combination Stereotactic Radiosurgery and Radiotherapy."

International Stereotactic Radiosurgical Society. Sydney, Australia. February 1999 Proceedings p. 60.

- Meeks SL, Bova JF, Maryanski MJ, Kendrick LA, Ranade MK, Buatti JM, Friedman WA. "Quantitive Verification of Dose Distribution for Linac Radiosurgery and Fractionated Stereotactic Radiotherapy" International Stereotactic Radiosurgical Society. Sydney, Australia. February 1999 Proceedings p. 62.
- 41. Meeks SL, Bova JF, Kim S, **Buatti JM**, Friedman WA. "Clinical Dosimetry Considerations for a Double Focused Miniature Multileaf Collimator" International Stereotactic Radiosurgical Society. Sydney, Australia. February 1999 Proceedings p. 93.
- 42. Mabanta SR, **Buatti JM**, Meeks SL, Friedman WA, Marcus RB, Mickle JP, Bova JF Fennel, E. "Stereotactic Radiotherapy Integrated with Conventional Radiotherapy for Normal Tissue Sparing in Intracranial Germinomas". "International Stereotactic Radiosurgical Society. Sydney, Australia. February 1999 Proceedings p.62.
- 43. Sanghavi SN, Miranpouri SS, Chapell R, Mabanta SR, Suh JH, Regine WF, Weltmen E, Sneed PK, Goetsch SJ, Breneman JC, Sperduto PW, Buatti JM, and Mehta MP. "Multi-Institutional Analysis of Survival Outcome for Radiosurgery Treated Brain Metastases, Stratified by RTOG RPA Classification. Int Radiat Oncol Biol Phys 45(3,supple):171, 1999. Scientific presentation at ASTRO (San Antonio, TX), 1999.
- 44. Bova FJ, Friedman WA, **Buatti JM** Meeks SL. Stereotactic plan evaluation tool: the UF index. <u>Int</u> <u>Radiat Oncol Biol Phys</u> 45(3,supple):188, 1999
- 45. Bova JF, Meeks SL, Friedman WA, **Buatti JM**. High Precision Patient Tracking of Intracranial and Head and Neck targets. <u>Medical Physics</u> 26(6):1112. 1999
- 46. Wagner TH, Yi T, Bova FJ, Meeks SL, Brechner B, Chen Y, Foote KD, Bouchet LG, Friedman WA, **Buatti JM**. Spere-packing as a starting point for optimization of linear accelerator based radiosurgery. <u>Med Phys</u>. 26(6):1752,1999.
- 47. Buatti JM, Friedman WA, Meeks SL, Mabanta SR, Bova FJ. A Preliminary Experience with Accelerated Hyperfractionated Radiotherapy and Radiosurgery for Atypical and Malignant Meningiomas. <u>Int Radiat Oncol Biol Phys</u> 45(3,supple):325, 1999. Scientific exhibit at ASTRO (San Antonio, TX), 1999.
- Meeks SL, Bova JF, Wagner TH, Buatti JM, Friedman WA, Foote KD, Wichman B. Image localization for frameless stereotactic radiotherapy. <u>Int Radiat Oncol Biol Phys</u> 45(3,supple):207, 1999. Scientific presentation at ASTRO (San Antonio, TX), 1999.
- 49. Sanghavi SN, Miranpuri S, Chappell R, Mabana SR, Regine WF, Weltman E, Sneed PK, Goetsch SJ, Breneman JC, Sperduto PW, Scott C, Buatti JM, Mehta MP. Multi-institutional analysis of prognostic factors and survival outcome for radiosurgery treated patients with brain metastases, stratified by RTOG RPA classification. <u>Linac Radiosurgery-1999 Scientific Program</u>, p. 37, 1999.
- Wagner TH, Yi T, Meeks SL, Bova FJ, Brechner BL, Chen YM, Buatti JM, Freidman WA, Foote KD, Bouchet LG. Geometrically based automated radiosurgery planning. <u>Linac Radiosurgery-</u> <u>1999 Scientific Program Proceedings</u>, p. 39, 1999.
- 51. Bouchet L, Meeks SL, Bova FJ, Goodchild G, **Buatti JM**, Friedman WA, Wagner TH. 3-D ultrasound optic guidance for high precision radiation therapy. <u>Linac Radiosurgery-1999 Scientific</u> <u>Program Proceedings</u>, p. 65, 1999.
- 52. Foote KD, **Buatti JM**, Friedman WA, Meeks SL, Bova FJ. An analysis of risk factors in radiosurgery for vestibular schwannomas. <u>Neurosurgery</u> 45(3):724,1999.
- 53. Bouchet LG, Meeks SL, Bova FJ, **Buatti JM**, Friedman WA. 3D-ultrasound optic guidance for high precision radiation therapy. Scientific presentation at the 2000 meeting of the AAPM.

- 54. Bouchet LG, Meeks SL, Goodchild G, Bova FJ, **Buatti JM**, Friedman WA. Calibration of threedimensional ultrasound images for image-guided radiation therapy. Scientific presentation at the 2000 meeting of the AAPM. <u>Phys Med Biol</u>. 2001 Feb;46(2):559-77.
- 55. Wagner TH, Bova FJ, Meeks SL, Friedman WA, **Buatti JM**. (abstract) Beam's-eye-view geometric optimization for stereotactic radiosurgery planning. Accepted to AAPM, 2000.
- 56. Buatti JM, Friedman WA, Bova FJ, Mandell LB, Paulino AC, Mayr NA, Meeks SL. Pediatric radiosurgery: Therapy needing evaluation. Scientific Exhibit at the 42<sup>nd</sup> Annual Meeting of the American Society for Therapeutic Radiology and Oncology. October 22-26, 2000, Boston, MA. Int J Radiat Oncol Biol Phys 48:3(Suppl. 1):304, 2000.
- 57. Bouchet LG, Meeks SL, Goodchild G, Bova FJ, Buatti JM, Friedman WA. Calibration of threedimensional ultrasound images for image-guided radiation therapy. Scientific presentation at the 42<sup>nd</sup> Annual Meeting of the American Society for Therapeutic Radiology and Oncology. October 22-26, 2000, Boston, MA. <u>Int J Radiat Oncol Biol Phys</u> 48:3(Suppl. 1):195, 2000.
- 58. Mayr NA, Taoka T, Yuh WT, Ehrhardt JC, Magnotta VA, Denning LM, Zhen WK, Paulino AC, Sorosky JI, Wen BC, Meeks SL, Buatti JM. Comparison of local control and survival predication with quantitative 3-D tumor volumetry vs simple diameter measurement by magnetic resonance imaging in cervical cancer. Scientific presentation at the 42<sup>nd</sup> Annual Meeting of the American Society for Therapeutic Radiology and Oncology. October 22-26, 2000, Boston, MA. Int J Radiat Oncol Biol Phys 48:3(Suppl. 1):210,2000.
- 59. Barker JL, Zhen WK, Hoffman HT, McCulloch TM, Buatti JM. Squamous cell carcinoma metastatic to cervical lymph nodes from unknown primary: a changing disease. Scientific exhibit at the 42<sup>nd</sup> Annual Meeting of the American Society for Therapeutic Radiology and Oncology. October 22-26, 2000, Boston, MA. Int J Radiat Oncol Biol Phys 48:3 (Suppl.) p.320-321, 2000
- 60. Paulino AC, Buatti JM, Wen BC, Tannous RA, Mayr NA, Zhen W, O'Dorisio MS, Loew TL, Goldman, FD, Ryken TC, Weidner GJ: Protracted radiotherapy treatment duration is detrimental in medulloblastoma. Scientific presentation at the 86<sup>th</sup> Scientific Assembly of the Radiological Society of North America, Chicago, IL, November 2000. <u>Radiology</u> 217(5): 2000
- 61. Simon JH, Paulino AC, Zhen WK, Wen BC, Mayr NA, Buatti JM: The importance of age in head and neck rhabdomyosarcoma: An institutional experience. Scientific exhibit at the 86<sup>th</sup> Scientific Assembly of the Radiological Society of North America, Chicago, IL, November 2000. <u>Radiology</u> 217(5): 2000.
- 62. Wilkinson CM, Paulino AC, Anderson KM; **Buatti JM**, Meeks SL: The use of 3D beam arrangements for the treatment of pancreatobiliary disease. Scientific exhibit at the 86<sup>th</sup> Scientific Assembly of the Radiological Society of North America, Chicago, IL, November 2000. <u>Radiology</u> 217(S):146-147,2000.
- 63. Tome WA, Mehta MP, Meeks SL, **Buatti JM**, Bova FJ, Friedman WA. Image guided fractionated stereotactic radiotherapy. The European Society for Therapeutic Radiology and Oncology, 2000.
- 64. Bouchet LG, Meeks SL, Bova FJ, Goodchild G, **Buatti JM**, Friedman WA. High precision Extracranial Radiation Therapy Using 3D-Ultrasound Optic Guidance. Linac Radiosurgery 2000 p.51.
- 65. Wagner TH, Bova FJ, Meeks SL, Friedman WA, **Buatti JM**, Bouchet LG. Circular Collimators with Multiple Isocenters are Potentially Superior to Current MLC-based IMRT and Conformal Beam SRS Treatment Planning. Linac Radiosurgery 2000 p. 54.
- 66. Ryken TC, Meeks SL, Hitchon P, Traynelis V, Bova F, Friedman W, **Buatti JM**. Frameless Stereotactic Radiosurgery: Initial Experience. Linac Radiosurgery 2000 p.63.

- 67. Mayr NA, Taoka T, Yuh WT, Meeks SL, Paulino AP, **Buatti JM**. Comparison of tumor size assessment using simple diameter measurement vs. 3-D tumor volumetry in cervical cancer before, during, and after radiation therapy (RT). RSNA 2000
- 68. Simon JH, Zhen WK, McCulloch TM, Hoffman, HT, Paulino AC, Mayr NM, Wen BC, **Buatti JM**. Esthesioneuroblastoma: The University of Iowa Experience 1978-1998.RSNA 2000.
- 69. Ryken TC, Meeks S, Hitchon P, Traynelis V, Bova F, Friedman W, **Buatti JM**. Frameless stereotactic radiosurgery: initial experience. Annual Meeting of the American Association of Neurological Surgeons, Toronto, Ontario, April 21-26, 2001.
- 70. Adli M, Mayr NA, Kaiser HK, Skwarchuk MW, Meeks SL, Paulino AC, Sorosky JI, Buatti JM. Dose prone position reduce bowel dose in pelvic radiation with intensity modulated radiation therapy (IMRT) for gynecologic cancer? <u>Int J Radiat Oncol Biol Phys</u> 51(3) (Suppl.) p334-335, 2001
- Kaiser HK, Mayr NA, Adli M, Skwarchuk MW, Paulino AC, Meeks SL, Pennington EC, Pelland D, Buatti JM. Usefulness of conformal radiation therapy with prone positioning in post-operative pelvic radiation for gynecologic malignancies. <u>Int J Radiat Oncol Biol Phys</u> 51(3) (Suppl.) p219-220, 2001.
- 72. Mayr NA, Taoka T, Yuh WTC, Meeks SL, Paulino AC, Adli M, Magnotta VA, Sorosky JI, Buatti JM. Irregular shrinkage of tumor volume in cervical cancer during radiation therapy and its impact on the assessment method of response using magnetic resonance imaging. <u>Int J Radiat Oncol Biol Phys</u> 51(3) (Suppl.) p333, 2001.
- 73. Simon JH, Paulino AC, Ritchie J, Mayr NA, **Buatti JM**. Presentation, prognostic factors and patterns of failure in adult rhabdomyosarcoma. Int J Radiat Oncol Biol Phys 51 (3) (Suppl.) p147, 2001.
- 74. Bouchet LG, Meeks SL, Bova FJ, **Buatti JM**, Friedman WA. A High Precision Positioning System for Conformal Extracranial Radiation Therapy. <u>Int J Radiat Oncol Biol Phys</u> 51(3) (Suppl.) p172, 2001.
- 75. Bhatia S, Paulino AC, Ritchie JM, **Buatti JM**, Mayr NA, Wen BC. Curative Radiation Therapy for Primary Orbital Lymphoma. Int J Radiat Oncol Biol Phys 51(3) (Suppl.) p360-361, 2001.
- 76. Mayr NA, Taoka T, Yuh WTC, Meeks SL, Paulino AC, Alli M, **Buatti JM**. Tumor Uniformity Change and Optimal Assessment of Tumor Volume Response During/After Radiation Therapy for Advanced Cervical Cancer Using MR Imaging. RSNA 2001, Chicago IL. <u>Radiology</u> 2001.
- 77. Bouchet LG, Meeks SL, Bova FJ, **Buatti JM**, Friedman WA. Three-dimensional ultrasound guided patient positioning based on 2D ultrasound imaging. <u>Med Phys</u>. 28(6):1219, 2001.
- 78. Wagner TH, Bova FJ, Meeks SL, Friedman WA, **Buatti JM**, Bouchet LG. Comparison of circular collimators with multiple isocenters with current mlc-based IMRT and conformal beams SRS treatment planning. <u>Med Phys</u>. 28(6): 1255,2001.
- 79. Paulino AC, Mayr NA, **Buatti JM**. Locoregional Control in Infants with Neuroblastoma: Role of Radiation Therapy and Late Toxicity. Accepted International Society of Pediatric Onc Meeting 2001.
- 80. Paulino AC, Mayr, NA, Buatti JM. Palliative Radiotherapy in Neuroblastoma. RSNA 2001
- 81. Haller JW, Ryken TC, **Buatti JM**, Meeks SL. Automatic Segmentation of Neuroanatomy for Treatment Planning. Int J Radiat Oncol Biol Phys 54(2) (Suppl.) p681-82, 2002
- 82. Lattanzi JP, Buatti JM, Meeks SL, Bova FJ, Coia LR. Preliminary Results of Phase III Randomized Trial Demonstrate Benefit of 3-D Ultrasound Image Guided Stereotactic Navigational System in Patients Receiving High Dose (78 Gy) External Beam Therapy for Prostate Cancer. Submitted to Biomedical Imaging Workshop, October, 2002

- 83. Ryken TC, Meeks SL, Haller JW, Bouchet L, **Buatti JM**. "Ultrasound Guidance for Spinal Radiosurgery" Poster presented at Computer Assisted Radiology & Surgery (CARS) 16<sup>th</sup> International Congress & Exhibition. Paris, France June 2002.
- 84. **Buatti JM**, Yao M, Dornfeld K, Skwarchuk M, Hoffman H, Funk G, Smith RB, Graham SM, Menda Y, Graham MM. Efficacy of IMRT in head and neck cancer as monitored by post-RT PET scans. Int J Radiat Oncol Biol Phys, 2003 Oct 1;57(2 Suppl):S305. ASTRO 2003.
- 85. Yao M, Buatti JM, Dornfeld K, Skwarchuk M, Menda Y, Graham M, Smith RB, Graham SM, Funk G, Hoffman H. Is Neck Dissection Necessary When Post-radiation PET is Negative After Radiation Treatment for Locally Advanced Head and Neck Cancer? Int J Radiat Oncol Biol Phys, 2003 Oct1;57 (2 Suppl):S244-245.
- 86. Mealer A, Ryken T, Buatti JM, Oberley L. A Retrospective Comparison of Clinical Outcome with Glioblastoma Superoxide Dismutase and Nitric Oxide Synthase Expression and Activity. Submitted 11<sup>th</sup> Annual Meeting of the Society for Free Radical Biology and Medicine, St. Thomas, Virgin Islands, November 2004.
- 87. Nathan TR, Dahle CE, Modrick JM, **Buatti JM**, Weiner GJ. Brachytherapy Combined with CpG ODN Enhances Development of a Tumor Antigen-Specific CD8 Response. American Society Hematology. Submitted 2004. International Society for Biological Therapy of Cancer. Presented November 2004.
- 88. Yao M. Nguyen T, Dornfeld K, Skwarchuk M, Wacha J, Meeks SL, **Buatti JM**. SIB-SEG IMRT for head and neck cancer: Preliminary results focusing on target volume definition and dose prescription. Radiologic Society of North America scientific assembly and annual meeting program. Oak Brook IL. P. 454, 2004.
- 89. Yao M, Nguyen T, Dornfeld KJ, Tan H, Wacha J, Bayouth JE, **Buatti JM**. Prognostic significance of FDG PET for head and neck cancer treated with IMRT. Int J Radiat Oncol Biol Phys, 2005;63:S149-S150.
- 90. Yao M, Hoffman HT, Smith RB, Funk GF, Chang K, Clamon GH, Dornfeld KJ, Buatti JM. Is Planned Neck Dissection Necessary for Head and Neck Cancer Treated with Intensity-Modulated Radiotherapy? Arch Otolaryngol Head Neck Surg; Vol, 132, Aug 2006. Presented AHNS 2006 Annual Meeting & Research Workshop on The Biology, Prevention and Treatment of Head and Neck Cancer August 17-20, 2006 Chicago.
- 91. Yao M, Bayouth JE, Tan H, Wacha J, Dornfeld KJ, **Buatti JM**. Intensity-modulated radiotherapy for oral cavity cancer. Int J Radiat Oncol Biol Phys 66(3):S431 2006. Presented ASTRO 2006.
- 92. Yao M, Graham MM, Smith RB, Hoffman HT, Tan H, **Buatti JM**. Correlation of pathology and post-radiation therapy FDG PET for residual cervical lymph node in head and neck cancer after radiation treatment. Oncology 2006;20 (supplement 3):8
- 93. Bayouth JE, Waldron TJ, Bhatia S, **Buatti JM**. Respiratory-gated extracranial radiosurgical target localization. Submitted to 25th Meeting of ESTRO: European Society for Therapeutic Radiology and Oncology.
- 94. Yao M, Chang K, Funk GF, Lu H, Tan H, Wacha J, Dornfeld KJ, **Buatti JM**. The Failure Patterns of Oral Cavity Squamous Cell Carcinoma after Intensity-Moduluated Radiotherapy The University of Iowa Experience. Presented at the Annual ASTRO Meeting Nov 5-9, 2006.
- 95. Wu X, Bayouth JE, Dou X, and **Buatti JM**. The Matrix Orthogonal Decomposition Problem in Intensity-Modulated Radiation Therapy. The Twelfth Annual International Computing and Combinatorics Conference, 2006.

- 95. Bayouth JE, Pennington EC, **Buatti JM**. WE-D-224C-02: High dose rate mode linear accelerator based stereotactic radiosurgery and image guided radiation therapy. Medical Physics 2006; 33:2249.
- 96. Bhatia S, Bayouth JE, Waldron T, **Buatti JM**. Cost Efficient Utilization of New Technology for Precise Tumor Targeting. Presented at American Radium Society Meeting in Amsterdam, May 2007.
- 97. Dou X, Wu X, Bayouth J, **Buatti JM.** Orthogonal Delivery to Improve IMRT Efficiency. Presented ASTRO 2007 Los Angeles, CA. IJROBP Vol 69 No 3 Oct 2007 pp S194.
- 98. Stockham A, Reddy CD, **Buatti JM**, Hitchon P, Ryken T, Smith MC. Patient Assessment of Outcome after LINAC Radiosurgery for Trigeminal Neuralgia. Presented ASTRO 2007.
- 99. Yao M, Smith RB, Hoffman HT, Funk GF, Lu M, Menda Y, Graham MM, Buatti JM. Clinical Significance of Post-Radiotherapy [<sup>18</sup>F] Fluorodeoxyglucose Positron Emission Tomography Imaging in Management of Head and Neck Cancer A Long-Term Outcome Report. Presented at the 49<sup>th</sup> Annual Meeting of ASTRO in Los Angeles, CA Oct 28 Nov 1, 2007.
- 100. Bylund KC, Bhatia SK, Smith MC, Buechler-Price JL, Buatti JM, Bayouth JE, Hass AC. Interobserver Variation in Megavoltage Cone Beam CT (MV CBCT) Based Corrections in Head and Neck Image Guided Radiotherapy. Accepted to the American Radium Society Annual Meeting, May 3-7 2008 in Laguna Niguel, CA.
- 101. Gupta AK, Cerniglia GJ., Ahmed MS., Maity A, Buatti JM. Radiosensitization in a panel of nonsmall cell lung cancer cell lines: A comparison of targeted therapy against EGFR vs. Akt. Submitted to AACR Annual Meeting 2008.
- 102. Gupta AK, Wilke WW, **Buatti JM**, Spitz DR. The HIV protease inhibitor nelfinavir is synergistic with energy restriction in SQ20b cells resulting in down-regulation of phosphorylated Akt and radiation sensitization. Submitted ASCO 2008.
- 103. Ryken T, Carlisle T, Buatti JM, Kirby P, Maley J, Hohl R, Smith B, Greenlee M, Frees M, Rogers M. Treatment of Adults with Newly Diagnosed Glioblastoma Multiforme or Anaplastic Astrocytoma with Surgery, Gliadel Wafers and Limited Field Radiation Plus Concomitant Temozolomide Followed by Adjuvant Temozolomide. Submitted ASCO 2008.
- 104. Dou X, Wu X, Kim Y, Bayouth J, **Buatti J**. SU-GG-T-100: Optimal field splitting in IMRT. *Med Phys* 2008;35:2749.
- 105. Muruganandham M, Bayouth J, Kearney W, Smith M, **Buatti J**. SU-GG-J-112: Integration and verification of 3T magnetic resonance spectroscopic imaging in radiation therapy treatment planning. *Med Phys* 2008;35:2704.
- 106. Iseli TA, Karnell LH, Preston TW, Graham SM, Gunk GF, Buatti JM, Gupta AK, Robinson RA, Hoffman HT. The role of Radiotherapy in Adenoid Cystic Carcinoma of the Head and Neck. Accepted for Presentation at the 7<sup>th</sup> International Conference on Head and Neck Cancer, San Francisco, July 19-23, 2008.
- Bylund KC, Bayouth JE, Smith MC, Buatti JM "Analysis of interfraction prostate motion using megavoltage conebeam CT" Poster Presentation, Abstract 4304. ESTRO 27, Goteborg, Sweden, Sept 14-18, 2008.
- Bylund KC, Bayouth JE, Smith MC, Siochi RA, Buatti JM. Geometric and Dosimetric Impact of Interfraction Prostate Motion Measured with Megavoltage Cone Beam CT. Presented at Annual ASTRO Meeting September 20-26, 2008.
- 109. Waldron TJ, Bayouth JE, Bhatia S, Buatti JM. Use of Music-based Breathing Training to Stabilize Breathing Motion in Respiration Correlated Imaging and Radiation Therapy. Presented at Annual ASTRO Meeting September 20-26, 2008.

- 110. Muruganandham M, Bayouth JE, Smith MC, **Buatti JM**. Impact of 3-Tesla MR Spectroscopic Imaging in the Delineation of High Grade Glioma Target Volume for Radiation Therapy Planning. Presented at Annual ASTRO Meeting September 20-26, 2008.
- 111. Gupta AK, Lee JH, Wilke WW, **Buatti JM**, Spitz DR. Comparison of Radiation Response in HPV Induced Squamous Cell Cancer. Presented at Annual ASTRO Meeting September 20-26, 2008.
- 112. Song Q, Yin Y, Chen M, Kim Y, Bayouth JE, Buatti JM, Siochi RA, Sonka M, Wu X. Simultaneous Segmentation of Bladder and Prostate Using Globally Optimal 3-D Graph Search Method. Presented at 50<sup>th</sup> Annual ASTRO Meeting September 20-26, 2008, Boston, MA. IJROBP (Supplement) Vol 72, p S148.
- 113. Olson AK, Smith MC, Ryke TC, Hitchon PW, Pennington EC, Smith BJ, Bayouth JE, Buatti JM. Frameless Stereotactic Radiosurgery for Treatment of Intracranial Metastases. Presented at Annual ASTRO Meeting September 20-26, 2008.
- 114. Ahmed R, Morris AM, Jacob A, Bruch L, **Buatti JM**, Hitchon PW. Management and Treatment Outcomes for Spinal Chordomas: A Case Series Review. Congress of Neurological Surgeons Annual Meeting, Orlando, FL, September 20-25, 2008.
- 115. Olson A, Ryken T, Smith M, Bayouth J, Pennington E, **Buatti JM**. Surgical Resection and Frameless Stereotactic Radiosurgery for Solitary Intracranial Metastatic Disease. Presented at Annual Society for Neuro-Oncology Meeting November 20-23, 2008.
- 116. Ding K, Reinhardt J, Bayouth J, **Buatti J**. SU-GG-BRC-07: 4DCT-based measurement of radiation induced changes in pulmonary function. *Med Phys* 2009;36:2683.
- 117. Wu, X, Sonka, M, **Buatti J**, Smith MC. Optimal Graph Search Segmentation Using Arc-weighted Graph for Simultaneous Surface Detection of Bladder and Prostate. Presenting at MICCAI, September 20-24, 2009, London, UK.
- Murphy CW, Buatti JM, Gupta AK. Head and Neck Cancer Patients with N3 Disease: Role of PET-CT and Overall Outcome. Presented at Annual ASTRO Meeting, Chicago, IL, November 1-5, 2009.
- 119. Morris A, Bayouth JE, **Buatti JM**. "Spinal Rotation and Non-Rigid Body Deformation in Head and Neck Cancer" Presented at Annual ASTRO Meeting, Chicago, IL, November 1-5, 2009.
- 120. Dou X, Wu X, Kim Y, Bayouth J, **Buatti JM**. MO-EE-A1-04: A comparison study of a new optimal field splitting algorithm in IMRT. *Med Phys* 2009;36:2701.
- 121. Muruganandham M, Bayouth J, Smith M, **Buatti JM**. MO-EE-A4-02: Metabolic changes in malignant brain tumors during mid-course radiation therapy: Initial findings of 3Tesla volumetric magnetic resonance spectroscopic imaging. *Med Phys* 2009;36:2705-2706.
- 122. Muruganandham M, Bayouth JE, Anderson CM, Smith MC, **Buatti JM**. 3D-MR Spectroscopic Imaging Assessment of Metabolic Status of Malignant Gliomas during External Beam Radiation Therapy Preliminary Results. *Int J Radiat Oncol Biol Phys* 2009;75:S228-S229.
- 123. Song Q, Wu X, **Buatti JM**, Smith M, Sonka M. TH-C-304A-04: Simultaneous delineation of bladder and prostate from 3D CT: An optimal graph-theoretic approach. *51<sup>st</sup> Annual Meeting of the American Association of Physicists in Medicine (AAPM) Anaheim, CA. Med Phys* 2009;36:2803.
- 124. Song Q, Wu X, Liu Y, Smith M, Buatti JM, Sonka M. Optimal Graph Search Segmentation using Arc-Weighted for Simultaneous Surface Detection of Bladder and Prostate. Lecture notes in Computer Science, Vol 5762, Springer Verlag Proc of the 12<sup>th</sup> International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) London, UK, September 20-24, 2009, pp. 827-835.

- 125. Sun W, Bayouth JE, **Buatti JM**, Maley JE, Anderson CM. Interobserver and intermodality variability in GTV delineation on simu7lation CT FDG-PET and MR images of head and neck cancer. Multidisciplinary Head and Neck Cancer Symposium. February 25-27, 2010.
- 126. Ponto LL, Menda Y, Watkins GL, Tewson T, Thede-Reynolds K, Graham M, **Buatti JM**. Do [18F]FLT Plasma Levels and Metabolism Change with Chemoradiation Therapy? Presented June 2010 at Annual Society of Nuclear Medicine Meeting, Salt Lake City, Utah.
- 127. Ponto LL, Menda Y, Sunderland J, Watkins L, **Buatti JM**, Gupta A. Technical Methods for the Image-based Evaluation of Pharmacologically-induced Changes in Tumor Blood Flow. Presented at Society of Nuclear Medicine Annual Meeting, June 5-9, 2010, Salt Lake City, Utah.
- 128. Dou X, Wu X, Bhatia S, Buatti JM. Tumor Segmentation in CT Images Using Globally Optimal Single Surface Detection. Oral Presentation during the 52nd Annual Meeting of the AAPM in Philadelphia, PA July 18 - 22, 2010. Medical Physics (Supplement) Vol 27 No. 6 June 2010, pp 3459. doi:10.1118/1.3469508
- 129. Andrews SD, Bhatia S, Anderson K, Murphy C, Reed A, Zimmerman M, Shiliang S, Karwal M, Bayouth J, Buatti JM. Highly Effective Treatment of Hepatocellular Carcinoma with Stereotactic Radiosurgery Combined with Chemo-embolization. Digital Poster Discussion session at the ASTRO annual meeting October 31 November 4, 2010, San Diego.
- 130. Yao M, Lu M, Savvides P, Rezaee R, Lavertu P, Buatti JM, Machtay M. Distant Metastasis in Head and Neck Cancer after Intensity-modulated Radiotherapy. Digital Poster Discussion session at ASTRO's 2010 Annual Meeting, October 31 – November 4, 2010, San Diego.
- 131. Allen BG, Fath MA, Simons AL, Bhatia SK, Buatti JM, Spitz DR. Enhancing Tumor Chemo-Radio-Sensitization Using Ketogenic Diets. Presented in an oral Scientific Session during the 2010 Annual Meeting, October 31 – November 4, 2010 in San Diego.
- 132. Han D, Bayouth J, Song Q, Taurani A, Sonka M, **Buatti JM**, Wu, X., Globally Optimal Tumor Segmentation in PET-CT Images: A Graph-Based Co-Segmentation Method. Accepted to the *22nd biennial International Conference on Information Processing in Medical Imaging* (IPMI), Monastery Irsee, Germany, July 3-8, 2011
- 133. Sheybani A, Ahmed R, Anderson KM, Pennington EC, Buatti JM. High Dose Photon Radiation Therapy: An Equivalent Treatment for Skull Based Chordomas Compared to Protons. ASTRO, 53<sup>rd</sup> Annual Meeting, October 1-6, 2011, Miami, FL.
- 134. Yao M, Lu M, Savvides P, Rezaee R, Zender C, Buatti JM, Machtay M, Lavertu P. The Value of Subsequent FDG-PET in Head and Neck Cancer Follow-up After a Negative Post-radiotherapy FDG-PET. ASTRO 53<sup>rd</sup> Annual Meeting, October 1-6, 2011, Miami, FL.
- 135. Yao M, Lu M, Savvides P, Rezaee R, Zender C, Lavertu P, **Buatti JM**, Machtay M. Distant Metastases in Head and Neck Squamous Cell Carcinoma Treated with Intensity-Modulated Radiotherapy. Multidisciplinary Head and Neck Cancer Symposium January 26-28, 2012. Arizona Biltmore, Phoenix.
- 136. Anderson CM, Steen S, Menda Y, Graham M, Buatti JM. Predictive Value of F-18 Fluorodeoxyglucose PET/CT 3 Months after Completion of Radiation Therapy for Head and Neck Squamous Cancer. Head and Neck Cancer Symposium - January 26-28, 2012. Arizona Biltmore, Phoenix.
- 137. Welsh JL, Bodeker K, Fallon E, Bhatia S, **Buatti JM**, Cullen JJ. Comparison of RECIST *vs.* Volumetric Measurements for Estimation of Tumor Burden in Pancreatic Adenocarcinoma and Hepatocellular Carcinoma. Association of VA Surgeons. April 1 – 3, 2012. Miami Beach, Florida.
- 138. **Buatti JM**, Menda Y, Ponto L, Anderson CM, Watkins LG, Sun W, Smith B, Funk G, Goswami P, Graham M. Early Evaluation of Response to Chemoradiation in Head and Neck Squamous Cell

Cancer (HNSSC) with F-18 Fluorothymidine Positron Emission Tomography (FLT PET). ASTRO 54<sup>th</sup> Annual Meeting, Boston, MA. October 28-31, 2012.

- 139. Allen BG, Sibenaller ZA, Cullen JJ, Wagner BA, Buettner GR, Van't Erve J, Welsh JL, Buatti JM, Carlisle TL, Smith MC, Walsh S, Bayouth JE, Spitz DR. Pharmacological Ascorbate Enhances Chemo-Radio-Sensitization in Brain and Lung Cancer. SFRBM 2012 19<sup>th</sup> Annual Meeting, San Diego, CA. November 14-18, 2012.
- 140. Dirksen B, Wang D, Hyer D, **Buatti JM**, Sheybani A, TenNapel M, Bayouth JE, Flynn R. Radiosurgery of Peripheral Brain Lesions by Spot Scanning Proton Therapy. Poster Presented at 55th Annual Meeting, August 4-8 2013, Indianapolis, IN.
- 141. Anderson CM, Marquardt M, Steen S, Hoover A, Button A, Karnell L, Wehbe A, Sun W, Funk G, Buatti JM. Analysis of Pathologic Factors From Surgical Resection Influences Accuracy of 3 Month Post-Radiation Therapy FDG PET/CT in Resected Oral Cavity Cancer Patients, *International Journal of Radiation Oncology Biology Physics*. 2013;87(25):S195.
- 142. Eckers J, Kalen A, Thompkins V, Sarsour E, Yusuf M, Buatti JM, Goswami P. Forkhead box M1 (FoxM1) Regulates Radioresistance of Quiescent Human Oral Squamous Cancer Cells. Poster Presented at 59<sup>th</sup> Annual Meeting Radiation Research Society, September 12, 2013. New Orleans, LA.
- 143. Hoover A, Anderson CM, Karnell L, Steen S, Buatti JM. Sensitivity of 3 Month Surveillance PET/CT Imaging Among Head and Neck Cancer Patients Decreases with Increasing Length of Clinical Follow Up. Poster Presentation at 59<sup>th</sup> Annual ASTRO September 22-24, 2014. Atlanta, GA.
- 144. Ponto L, McGuire S, Clermont D, Watkins G, McNeely P, **Buatti JM**, Menda Y. Monitoring Bone Marrow Proliferative Activity with FLT During Chemoradiation Therapy of Pelvic Cancers, The Journal of Nuclear Medicine. 2014;55(1):1439.
- 145. Wang D, Bhatia S, Dinges E, Gross B, **Buatti JM**, McGuire S. The Impact of Body Weight Change on the Dose Distribution of Intensity-modulated Proton Therapy for Cervical Cancer, *International Journal of Radiation Biology Physics*. 2014.
- Holland MT, Noller J, Buatti JM, He W, Hitchon PW. 167 The Cost Effectiveness of Surgery for Trigeminal Neuralgia in Surgically Naive Patients; A Retrospective Study. *Neurosurgery*. 2014 Aug; 61 Suppl 1:215. doi:10.1227/01.neu.0000452442.13530.b8.
- 147. McGuire S, Bhatia S, Sun W, Menda Y, Ponto L, Gross B, Buatti JM. A Novel IMRT Planning Technique to Spare Sacral Bone Marrow in Pelvic Cancer Patients, Medical Physics. 2015 June;42(6):3293. PMID: 26127518
- 148. Anderson CM, Allen B, Sun W, Agarwala S, Kunos C, Venigalla M, Greenberg L, Adkins D, Chen Y, Zhen W, Mould D, Holmlund J, Brill J, Sonis S, Buatti JM. Phase 1 trial of superoxide (SO) dismutase (SOD) mimetic GC4419 to reduce chemoradiotherapy (CRT)-induced mucositis (OM) in patients (pts) with mouth or oropharyngeal carcinoma (OCC)., MASCC/ISOO Annual Meeting on Supportive Care in Cancer. Oral Mucositis Workshop. June 25-27. 2015. Copenhagen, Denmark.
- 149. McGuire SM, Bhatia S, Sun W, Menda Y, Ponto L, Gross B, Buatti JM. A Novel IMRT Planning Technique to Spare Sacral Bone Marrow in Pelvic Cancer Patients, *Medical Physics*. 2015 June;42(6):3293. PMID:26127518. AAPM 2015 July 12-16, Anaheim, CA.
- 150 Mapuskar KA, Schoenfeld JD, Sibenaller ZA, Riley DP, Strack S, Goswami PC, Buatti JM, Spitz DR, Allen BG. Increased DNA Damage and Reactive Oxygen Species Mediate Age-Associated Differential Susceptibility of Normal Dermal Fibroblasts to Chemotherapy and Radiation. *Free Radical Biology Medicine*. 87(Supplement 1); October 2015:S130-S131. http://dx.doi.org/10.1016/j.freeradbiomed.2015.10.340

- 151. Mapuskar KA, Schoenfeld JD, Sibenaller ZA, Riley DP, Strack S, Goswami PC, Buatti JM, Spitz DR, Allen BG. Increased DNA Damage and Reactive Oxygen Species Mediate Age-Associated Differential Susceptibility of Normal Dermal Fibroblasts to Chemotherapy and Radiation. Submitted. SFRBM 2015 Nov 18-21. Boston, MA.
- 152. Schoenfeld JD, Sibenaller ZA, Doskey CM, Cramer-Morales L, Mapuskar KA, Wagner BA, Domann FE, Buatti JM, Cullen JJ, Buettner GR, Spitz DR, Allen BG. Intracellular Redox Active Metal Ions Mediate the Differential Susceptibility of Lung and Brain Cancer to Pharmacological Ascorbate. SFRBM 2015 Nov 18-21. Boston, MA.
- 153. Chang T, Bhatia S, Berg DT, Mott SL, **Buatti JM**, Watkins JM. Disease control and survival outcomes for rectal adenocarcinoma managed with neoadjuvant chemoradiotherapy: performance of serum CEA changes as a biomarker. January 21, 2016 ASCO/ASTRO Gastrointestinal Cancers Symposium, ASCO/ASTRO, San Francisco CA.
- 154. Anderson CM, Loth E, Opat E, Bodeker K, Ahmann L, Parkhurst J, Sun W, Furqan M, Laux D, Brown H, Vollstedt S, Follmer K, Ma D, Spitz D, Fath M, Buatti JM, Allen B. A Phase I Trial of Ketogenic Diet with Concurrent Chemoradiation (ChemoRT) in Head and Neck Squamous Cell Carcinoma (HNSCC), Multidisciplinary Head and Neck Cancer Symposium February 18-20, 2016. Phoenix, AZ.
- 155. Yuan T, Watkins J, Mott S, Marquardt M, Hoover A, Sun W, Buatti JM, Pagedar N, Anderson C. Does Routine Surveillance PET/CT at 3 Months Have Value After Laryngectomy (L) Followed by Radiotherapy (RT) for Locoregionally Advanced Laryngeal Cancer (LC)?, Multidisciplinary Head and Neck Cancer Symposium, February 18-20, 2016, Phoenix, AZ.
- 156. Anderson CM, Allen BG, Sun W, Lee CM, Agarwala S, Venigalla M, Greenberg L, Adkins D, Chen Y, Zhen W, Mould D, Holmlund J, Brill J, Sonis S, Buatti JM. Phase 1b/2a Trial of Superoxide (SO) Dismutase (SOD) Mimetic GC4419 to Reduce Chemoradiotherapy-induced Oral Mucositis (OM) in Patients (pts) with Oral Cavity or Oropharyngeal Carcinoma (OCC), Multidisciplinary Head and Neck Cancer Symposium February 18-20, 2016. Phoenix, AZ.
- 157 Anderson CM, Loth E, Opat E, Bodeker K, Ahmann L, Parkhurst J, Sun W, Furqan M, Laux D, Brown H, Vollstedt S, Follmer K, Ma D, Spitz D, Fath M, Buatti JM, Allen B. A Phase I Trial of Ketogenic Diet with Concurrent Chemoradiation (ChemoRT) in Head and Neck Squamous Cell Carcinoma (HNSCC). *Inj Journal of Rad Onc Biology Physics*. 2016 March 15. 94(4) pp 898.
- 158. Anderson CM, Allen BG, Sun W, Agarwala SS, Lee CM, Kunos C, Venigalla ML, Greenberg L, Adkins D, Chen Y, Zhen W, Mould DR, Holmlund J, Brill JM, Sonis ST, Buatti JM. Phase 1b trial of superoxide (SO) dismutase (SOD) mimetic GC4419 to reduce chemoradiotherapy (CRT)-induced oral mucositis (OM) in patients (pts) with oral cavity or oropharyngeal carcinoma (OCC), Submitted. ASCO Annual Meeting, June 3-7, 2016, Chicago, IL.
- 159. Plichta KA, Peters DR, Dlouhy BJ, Sato M, Russi AS, Menezes A, **Buatti JM**. New onset hydrocephalus during chemoradiation therapy for medulloblastoma in a boy with Glutaric Aciduria type 1. International Society of Pediatric Neuro-Oncology (ISPNO) 17th International Symposium on Pediatric Neuro-Oncology, June 12-15 2016. Liverpool.
- 160. Anderson CM, Allen BG, Sun W, Agarwala S, Lee C, Venigalla M, Greenberg L, Adkins D, Chen Y, Zhen W, Mould D, Holmlund J, Brill J, Sonis S, Buatti JM. Phase 1b Trial of Superoxide (SO) Dismutase (SOD) Mimetic GC4419 to Reduce Chemoradiotherapy (CRT)-induced Oral Mucositis (OM) in Patients (pts) with Oral Cavity or Oropharyngeal Carcinoma (OCC). Oral Presentation, Annual ASTRO Meeting, September 27, 2016, Boston, MA. International Journal of Radiation Oncology Biology Physics Supplement.
- 161. Parkhurst J, Mott S, Anderson CM, Pagedar N, Bayon R, Sun W, **Buatti JM**, Watkins J. Do Intermediate Risk Factors Alone Pose Sufficient Risk to Justify Adjuvant Radiotherapy (RT) in

Pathologic Node-Negative (pN0) Oral Cavity (OC) Squamous-Cell Carcinoma (SCC)? Poster Viewing Session, Annual ASTRO Meeting, September 27, 2016, Boston, MA.

- 162. Russo JK, Snow AN, Terrell A, Vishal SJ, Laszewski M, Fisher C, Liu B, Mott SL, Hellekson C, Kaelberer J, Furqan M, Anderson CA, Buatti JM, Watkins JM. Resected p16+ Oropharyngeal Cancer (OPC) with Nodal Extracapsular Extension (ECE): Is Adjuvant Chemoradiotherapy (CRT) Superior to Radiotherapy (RT) Alone? Poster. Annual ASTRO Meeting, September 25-29, 2016, Boston, MA
- 163. Mapuskar KA, Flippo KH, Schoenfeld JD, Riley DP, Strack S, AbuHejleh T, Furqan M, Doman FE, Buatti JM, Goswami PC, Spitz DR, Allen BG. Mitochondrial Superoxide Mediates Age-Associated Increases in Susceptibility of Dermal Fibroblasts to Radiation and Chemotherapy. Poster, Radiation Research Society, October 16-19, 2016. Waikoloa Village, HI.
- 164. Schoenfeld JD, Sibenaller ZA, Cramer-Morales KL, Mapuskar KA, Waldron TJ, Kim YJ, Riley DP, Parekh KR, Keech JC, Wagner BA, Richerson G, Domann FE, Buatti JM, Cullen JJ, Buettner GR, Spitz DR, Allen BG. O<sub>2</sub> and H<sub>2</sub>O<sub>2</sub> Mediated Disruptions in Iron Metabolism Medial the Selective Sensitization by Pharmacological Ascorbate to Chemotherapy and Radiation. Poster, Radiation Research Society, October 16-19, 2016. Waikoloa Village, HI.
- 165. Parkhurst JR, Mott SL, Anderson CM, Pagedar N, Bayon R, Sun W, Buatti JM, Watkins JM. Do Intermediate Risk Factors Alone Pose Sufficient Risk to Justify Adjuvant Radiation Therapy in Patholgic Node-Negative Oral Cavity Squamous Cell Carcinoma? Int Journal of Rad Onc Biology Physics. 2016 October 1. 96(2) Supplement pp. E375-E376.
- 166. Yuan T, Watkins JM, Mott SL, Marquardt M, Hoover A, Sun W, Buatti JM, Pagedar N, Anderson CM. Does Routine Surveillance PET/CT at 3 months Have Value After Laryngectomy (L) Followed by Radiation Therapy (RT) for Locoregionally Advanced Laryngeal Cancer? *Inj Journal of Rad Onc Biology Physics*. 2016 March 15. 94(4) pp 923-924.
- 167. Marquardt MD, Anderson CM, Mott SL, Furqan M, Clamon CH, Parekh KR, Allen BG, Buatti JM, Watkins JM. Cisplatin/5-fluorouracil versus carboplatin/paclitaxel chemoradiotherapy for locoregionally advanced esophageal cancer. Accepted for poster presentation at the 2017 ASCO/ASTRO Gastrointestinal Cancers Symposium, San Francisco, CA: 21 Jan 2017.
- 168. Zhong Z, Kim Y, Buatti JM, and Wu X, "3D Alpha Matting Based Co-segmentation of Tumors on PET-CT Images," Proc. of the 5th International Workshop on Computational Methods for Molecular Imaging, in conjunction with the 20th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Quebec City, QC, Canada, September 11-13, 2017.
- 169. Sperduto PW, Deegan B, Li J, Krishan J, Brown PD, Lockney N, Beal K, Rana NG, Attia A, Shanley R, Lou E, Zahra A, Buatti JM, Molitoris J, Yu JB, Chiang V, Masucci L, Roberge D, Olson A, Kirkpatrick JP, Braunstein S, Sneed P, Shi D, Shih HA, Mehta MP. Prognostic Factors in Patients with Renal Cell Carcinoma and Brain Metastases. CNS ePoster Discussion 1 Brain Metastases. Annual ASTRO Meeting, September 24-27, 2017, San Diego, CA.
- 170. Kim Y, Chesnut D, Wagner BS, Oldham AJ, Schmitt B, Sangster N, Jespersen JR, Burk N, Wardenburg M, Flynn RT, Sun W, Papworth D, From RP, Buatti JM. Ferromagnetic Metal Side-Rails on Air-Hover HDR Patient Transport Table Can Cause Severe Skin Burns to Patients During MR Simulation for Brachytherapy. Volume 99, Issue 2, Supplement, Pages A1-A36, S1-S272, e1-e759 (1 October 2017) Proceedings of the American Society for Radiation Oncology, ASTRO's 59th Annual Meeting San Diego Convention Center, San Diego California, 24–27 September 2017.
- 171. Mohiuddin IH. Flynn RT, **Buatti JM**, Xia J. Visualizing Radiation Dosimetry in an Interactive Augmented Reality Environment for Intuitive Plan Evaluation. Poster. Annual ASTRO Meeting, September 24-27, 2017, San Diego, CA.

- 172. Parkhurst JR, Mott SL, Marquardt MD, Andresen NS, Pagedar NA, Sun W, Anderson CM, Buatti JM, Watkins JM. Risk Factors For Locoregional Failure And Survival In Pathologic Node-Negative Oral Cavity Squamous-Cell Carcinoma Following Resection Alone. Accepted for poster presentation. 2018 Head/Neck Cancer Multidisciplinary Symposium, Scottsdale, AZ: 15 Feb 2018
- 173. Wu X, Zhong Z, Buatti JM, Bai J. Multi-Scale Segmentation Using Deep Graph Cuts: Robust Lung Tumor Delineation in MVCBCT. IEEE International Symposium on Biomedical Imaging (ISBI'18) Washington DC April 4-7, 2018. Accepted.
- 174. Zhong Z, Kim Y, Zhou L, Plichta K, Allen BG, **Buatti JM**, Wu X. Improving Tumor Co-Segmentation on PET-CT Images with 3D Co-Matting. IEEE International Symposium on Biomedical Imaging (ISBI'18) Washington DC April 4-7, 2018. Accepted.
- 175. Zhong Z, Kim Y, Zhou L, Plichta K, Allen BG, **Buatti JM**, Wu X. 3D Fully Convolutional Networks for Co-Segmentation of Tumors on PET-CT Images. IEEE International Symposium on Biomedical Imaging (ISBI'18) Washington DC April 4-7, 2018. Accepted.
- 176. Anderson CM, Lee CM, Saunders D, Curtis A, Dunla N, Nangia C, Lee AS, Holmlund J, Brill JM, Sonis ST, Buatti JM, Randomized, Placebo-Controlled, Double-Blind P2b Trial Of GC4419 To Reduce Severe Radiation-Related Oral Mucositis (SOM) In Oral Cavity/Oropharynx Patients. 2018 HCCC Scientific Research Retreat, Coralville, IA June 20, 2018.
- 177. Zhong Z, Kim Y, Plichta K, Allen B, Zhou L, Buatti JM, and Wu X. "FCN-CoCRF: Simultaneous Tumor Segmentation on PET-CT Images," submitted to the 21st International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Granada, Spain, September 16-20, 2018.
- 178. Anderson CM, Lee CM, Saunders D, Curtis A, Dunla N, Nangia C, Lee AS, Holmlund J, Brill JM, Sonis ST, Buatti JM. Randomized, Placebo-Controlled, Double-Blind P2b Trial Of GC4419 To Reduce Severe Radiation-Related Oral Mucositis (SOM) In Oral Cavity/Oropharynx Patients. Oral Scientific Session. ASTRO Annual Meeting October 21-24, 2018.
- 179. Sperduto PW, Fang P, Li J, Breen W, Brown PD, Cagney D, Aizer A, Yu J, Chiang V, Jain S, Gaspar LE, Myrehaug S, Sahgal A, Braunstein S, Sneed P, Cameron B, Attia A, Molitoris J, WU CC, Wang T, Lockney N, Beal K, Parkhurst J, **Buatti JM**, Shanley R, Lou E, Tandberg DD, Kirkpatrick JP, Shi D, Shih D, Chuong M, Saito H, Aoyama H, Masucci L, Roberge D, Mehta MP. Survival & Prognostic Factors in Patients with GI Cancers & Brain Metastases. ASTRO Annual Meeting October 21-24, 2018.
- 180. Zhong Z, Kim Y, Zhou L, Plichta K, Allen B, Buatti JM, Wu X. "3D fully convolutional networks for co-segmentation of tumors on PET-CT images," 2018 IEEE 15th International Symposium on Biomedical Imaging (ISBI 2018), Washington, DC, 2018, pp. 228-231. doi:10.1109/ISBI.2018.8363561 LIRL http://ieeexplore.ieee.org/stamp/stamp.isp?tp=&arnumber=8363561&isnumber=8363198

URL:http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8363561&isnumber=8363198

- 181. Zhong Z, Kim Y, Zhou L, Plichta K, Allen B, Buatti JM, Wu X. "Improving tumor co-segmentation on PET-CT images with 3D co-matting," 2018 IEEE 15th International Symposium on Biomedical Imaging (ISBI 2018), Washington, DC, 2018, pp. 224-227. doi: 10.1109/ISBI.2018.8363560 URL:http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8363560&isnumber=8363198
- 182. Sperduto PW, Meski S, Li J, Cagney D, Aizer A, Lin NU, Nesbit E, Kruser TJ, Chan J, Braunstein S, Lee J, Kirkpartrick JP, Breen W, Brown PD, Shi D, Shih HA, Soliman H, Sahgal A, Shanley R, Sperduto W, Lou E, Everett A, Boggs DH, Masucci L, Roberge D, Remick J, Plichta K, Buatti JM, Jain S, Gaspar LE, Wu CC, Wang TJC, Bryant J, Chuong M, Yu J, Chang V, Nakano T, Aoyama H, Mehta MP. Beyond an Updated Graded Prognostic Assessment (Breast GPA): A Prognostic Index and Trends in Treatment and Survival in Breast Cancer Brain Metastases from 1985 to Today. Poster. American Society of Clinical Oncology (ASCO) 2019 Annual Meeting, Chicago, IL, June 2, 2019.

- 183. Graves S, Tiwari A, Hyer D, Flynn R, Buatti JM, Sunderland J. Impact of Kernel Truncation On 177Lu-DOTATATE and 131I-MIBG Voxelwise Dosimetry. AAPM 2019 Annual Meeting. *Medical Physics*, 46 (6), June 2019.
- 184. Graves S, Hyer D, Pennington E, Buatti JM, Flynn R. Extracranial Dose Delivered From Frameless Stereotactic Radiosurgery with the Gamma Knife Icon. AAPM 2019 Annual Meeting. *Medical Physics*, 46 (6), June 2019
- 185. Buatti JS, Buatti JM Yaddanapudi S, Pennington E, Wang D, Gross B, St-Aubin J, Hyer D, Flynn R. Stereotactic Radiotherapy of Meningiomas and Tumor Beds with Gamma Knife Icon Vs Volumetric Modulated Arc Therapy. AAPM 2019 Annual Meeting. *Medical Physics*, 46 (6), June 2019
- 186. Callaghan CM, Seyedin SN, Mohiuddin I, Hawkes K, Anderson CM, Buatti JM, Milhem M, Monga V, Allen BG. The Role of Concurrent Stereotactic Body Radiation and Anti-PD-1 Therapy for Recurrent Metastatic Sarcoma. Accepted. ASTRO 2019, Chicago, IL.
- 187. Waldron T, Flynn R, St-Aubin J, Spitz D, Buatti JM. Proposal for a Dedicated Research FLASH Irradiation System. Poster. Radiation Research Society 2019 Annual Meeting. San Diego, CA November 3-6, 2019.
- 188. Petronek, M, Steinbach E, Kalen A, Callaghan C, Hyer D, Flynn R, Spitz D, Buatti JM, Magnotta V, Zepedo-Orozco D, St-Aubin J, Allen B. Development of a Pre-Clinical MR-Guided Radiotherapy Model to Assess Gadolinium-Induced Renal Toxicity. PO-GeP-T-288. General ePOSTER. AAPM Virtual Meeting July 12–16, 2020.
- 189. LiuW, Chen Z, Zhang H, Wang D, Plichta K, Smith MC, Sonka M, Buatti, JM. A Just Enough Interaction Segmentation Tool Improves Consistency and Efficiency for Radiotherapy Contouring of Meningiomas. ASTRO Annual Virtual Mtg 2020. Poster. Oct. 25th, 2020.

#### Non-peer reviewed publications

- 1. **Buatti JM**. Death with Dignity/Euthanasia Amendments: A viewpoint. <u>Scalpel Newsletter</u>, February 1992.
- 2. **Buatti JM**. Presidential Categorical Course in Central Nervous System Tumors: *Radiation Therapy. A Major Role in the Treatment of Meningiomas*. American Society of Therapeutic Radiation and Oncology Syllabus.
- 3. **Buatti JM**, Meeks, SL. Stereotactic Radiosurgery for Brain Lesions. <u>Currents</u> (UI publication) Summer 2000;Vol 1, #3.
- 4. No More Scalpel. <u>University of Iowa Pacemaker</u>. 27:4 July/Sept/October 2000. (a review of radiosurgery system at the University of Iowa)
- 5. **Buatti JM.** Radiation Oncology Update. <u>Radiology Update</u> 13(1):3,2000. (UI publication)
- 6. 3D Ultrasound radiation targeting systems. <u>Radiology Today</u> 2(18):23-25,2001 (national magazine for radiologic science professionals featuring UI systems)
- Meeks SL, Buatti JM. Ultrasound Guidance for Extracranial Stereotactic Radiosurgery. <u>Currents</u> (UI publication) 2(4); Fall 2001.
- 8. **Buatti JM**. Department of Radiation Oncology. University of Iowa Web Publication.
- Lunsford LD, Niranjan A, Kobayashi T, Linskey M, Witt T, Landolt A, Liscak R, Laws Jr, ER, Vance ML, Buatti JM, Knisely J, Sperduto P, Coy S, Emerick RL. Stereotactic Radiosurgery for Patients with Pituitary Adenomas. <u>Radiosurgery Practice Guideline Initiative</u>. International Radiosurgery Support Association. Practice Guideline Report #3-04:1-12; 2004.
- Franken EA, Foens C, Wen BC, Pennington E, Mayr N, Buatti JM. In Memoriam, David H. Hussey, M.D. Int J Radiat Oncol Biol Phys. 2013 Sep 1;87(1):16-7. PMID:23920386

- 11. Buatti JM, Franken EA. In Memoriam David H. Hussey, MD. Radiology. March 2014; 270(3)
- Hadley SW, Feng M, Pauer C, Buatti JM, Koontz B. Making Complex Data Transfer Safer / IHERO. <u>ASTRO News</u> Winter 2015; 18(4) 29-31

#### Other Publications -

 Hadley SW, Feng M, Pauer C, Buatti JM, Koontz B. Making Complex Data Transfer Safer / IHERO. <u>ASTRO News</u> Winter 2015; 18(4) 29-31.

#### Areas of Research Interest and Current Projects

#### Active Clinical Trials—Investigator Initiated

#### **Principal Investigator**

Unity MRI: Investigation of additional sequences and algorithms [IRB 201910759]

- A Retrospective Study of Pediatric patients Treated on the Unity MRI Linear Accelerator [IRB202009003]
- Umbrella Project: Retrospective Radiation Oncology Research Studies Evaluation of Diagnostic and Therapeutic Efficacy [IRB 201701826]
- Graded Prognostic Assessment (GPA) with Molecular Markers to Estimate Survival for Patient With Brain Metastases [IRB 201608850]
- Prospective Observational Study in Human Subjects Undergoing Radiation Oncology Evaluation or Treatment [IRB 201109821]
- The Utility of Imaging in Cancer: Staging, Assessment of Treatment Response, and Surveillance [IRB 200503706]

#### **Co-Principal Investigator**

NCT02344355: A Phase II Trial of High-Dose Ascorbate in Glioblastoma Multiforme [IRB 201504786, Allen co-PI

#### **Co-Investigator**

- The contribution of patient reported outcome measures to shared decision-making in radiation oncology at a Midwestern cancer center [IRB 201812730, Bodeker PI]
- An exploratory, pilot study evaluating T2\* imaging for adult sarcoma [IRB 201807711, Allen PI]
- Quantification of circulating tumor cells using nanotechnology to predict recurrence in selected solid tumors treated with pre-operative or definitive radiation therapy [IRB 201802719, Caster PI]
- Outcomes of Embolization following Radiotherapy for Management of Central Nervous System Vascular Malformations ]IRB 201711766, Zanaty PI]
- NCT02905578: A Phase II Trial of Pharmacological Ascorbate, Gemcitabine, and nab-Paclitaxel for Metastatic Pancreatic Cancer [IRB 201801759, Cullen, PI]
- Laser speckle flowgraphy as early indicator of microvasculopathy in radiation-induced vision loss [IRB20181713, Grumbach PI]
- NCT02344355: A phase II trial of pharmacological ascorbate with concurrent chemotherapy and radiation therapy [IRB 201712770, Allen PI]

- How patients verbally communicate to radiation oncology physicians while undergoing treatment for cancer [IRB 201710783, Bodeker PI]
- T2\* and QSM imaging evaluation [IRB 20178773, Allen PI]
- Modified Activity Program for Lung Cancer: A Patient-Centered Study [IRB 201401766, Lee PI]
- Respiratory motion tracking during radiation therapy: An observational assessment [IRB 201107788, Waldron PI]
- Inflammation *versus* Residual Tumor: Methods to Improve Accuracy of Post-Radiotherapy PET scans in Head and Neck Cancer Patients [IRB 201102860, Anderson PI]
- Effects of Transcutaneous Electrical Nerve Stimulation (TENS) on Mucositis Pain and Function [IRB 201009732, Lee PI]
- Ocular, Skin and Connective Tissue Proliferative Disorders Clinical Data and Tissue Sample Collection Project [IRB 200804792, Milhem PI]
- Head and Neck Oncology and Reconstructive Surgery Outcomes Analysis [IRB 199412746, Pagedar PI]

#### Active Clinical Trials—Industry Sponsored

#### Sub-Investigator, University of Iowa

- NCT04476797: A phase 1/2 Study of stereotactic radiation therapy (SBRT) with or without GC4711 for non-small cell lung cancer [IRB 202001599, Allen PI]
- NCT04225026: A Phase 2A Open-Label Trial of the Effects of Intravenous GC4419 on the Incidence and Severity of Esophagitis in Subjects Receiving Chemoradiotherapy for Lung Cancer [IRB 201911174, Allen PI]
- NCT03689712: ROMAN: Reduction in Oral Mucositis with Avasopasem Manganese (GC4419) Phase 3 Trial in Patients Receiving Chemoradiotherapy for Locally-Advanced, Non-Metastatic Head and Neck Cancer [IRB 201807507, Anderson PI]
- NCT02508389: A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Trial of the Effects of Intravenous GC4419 on the Incidence and Duration of Severe Oral Mucositis (OM) in Patients Receiving Post-Operative or Definitive Therapy with Single-Agent Cisplatin plus IMRT for Locally Advanced, Non-Metastatic Squamous Cell Carcinoma of the Oral Cavity or Oropharynx [IRB 201508736, Anderson PI]
- An Automated Patient Chart Error Detection System for Radiation Therapy [IRB 201907736, Yaddanapudi PI]
- Phase I Trial of Peptide Receptor Radiotherapy (PRRT) with 177Lu-DOTA-tyr3-Octreotate (177Lu-DOTATATE) in Children with Neuroendocrine tumor or Pheochromocytoma/Paraganglioma [IRB 201812772, O'Dorisio PI]
- Multi-center phase II randomized controlled trial of naive T cell depletion for prevention of chronic graft-versus-host disease in children and young adults. GVH1701 [IRB 201811714, Modi PI]
- NCT03237325: DOM-INNATE: Study of SGX942 for the Treatment of Oral Mucositis in Patients With Concomitant Chemoradiation Therapy for Head and Neck Cancer [IRB 201710201, Anderson PI]

#### Active Clinical Trials— Cancer Cooperative Groups

#### **Co-Principal Investigator, The University of Iowa**

ACNS1833: A Phase 3 Randomized Non-Inferiority Study of Carboplatin and Vincristine *versus* Selumetinib (NSC# 748727, IND# 77782) in Newly Diagnosed or Previously Untreated Low-Grade Glioma (LGG) not associated with BRAFV600E Mutations or Systemic Neurofibromatosis Type 1 (NF1) [IRB 202001508, Sato PI]

- ACNS1831: A Phase 3 Randomized Study of Selumetinib (IND # 77782) versus Carboplatin/Vincristine in Newly Diagnosed or Previously Untreated Neurofibromatosis Type 1 (NF1) Associated Low-Grade Glioma (LGG) [IRB 201912235, Sato PI]
- ACNS1723: A Phase 2 Study of Dabrafenib (NSC# 763760) with Trametinib (NSC# 763093) after Local Irradiation in Newly-Diagnosed BRAFV600-Mutant High-Grade Glioma (HGG) (IND# 145355) [IRB201912100, Sato PI]
- AALL1732: A Phase 3 Randomized Trial of Inotuzumab Ozogamicin (IND#:133494, NSC#: 772518) for Newly Diagnosed High-Risk B-ALL; Risk-Adapted Post-Induction Therapy for High-Risk B-ALL, Mixed Phenotype Acute Leukemia, and Disseminated B-LLy [IRB201911516, Sato PI]
- AALL1731: A Phase 3 Trial Investigating Blinatumomab (IND# 117467, NSC# 765986) in Combination with Chemotherapy in Patients with Newly Diagnosed Standard Risk or Down syndrome B-Lymphoblastic Leukemia (B-ALL) and the Treatment of Patients with Localized B-Lymphoblastic Lymphoma (B-LLy)) [IRB 201910204, Sato PI]
- HEAD START 4 PROTOCOL: Newly Diagnosed Children (Less than 10 Years Old) With Medulloblastoma and Other Central Nervous System Embryonal Tumors. Clinical and Molecular Risk-Tailored Intensive and Compressed Induction Chemotherapy Followed by Consolidation with Randomization to either Single-Cycle or to Three Sequential Cycles of Marrow-Ablative Chemotherapy with Autologous Hematopoietic Progenitor Cell Rescue [IRB 201905205, Sato PI]
- ACNS1721: A Phase 2 Study of Veliparib (ABT-888, IND # 139199) and Local Irradiation, Followed by Maintenance Veliparib and Temozolomide, in Patients with Newly Diagnosed High-Grade Glioma (HGG) without H3 K27M or BRAFV600 Mutations [IRB 201812205, Sato PI]
- AHEP1531: Pediatric Hepatic Malignancy International Therapeutic Trial (PHITT) [IRB 201807204, Sato PI]
- ANBL1531: A Phase 3 Study of 131I-Metaiodobenzylguanidine (131I-MIBG) or Crizotinib Added to Intensive Therapy for Children with Newly Diagnosed High-Risk Neuroblastoma (NBL) (IND# 134379) [IRB 201806206, Sato PI]
- AALL1631 : International Phase 3 Trial in Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia Ph+ ALL Testing Imatinib in Combination with Two Different Cytotoxic Chemotherapy Backbones [IRB 201802201, Sato PI]
- APEC1621: NCI-COG Pediatric Match (Molecular Analysis for Therapy Choice) Master Version Control Protocol [IRB 201712212, Sato PI]
- ACNS1422: A Phase 2 Study of Reduced Therapy for Newly Diagnosed Average-Risk WNT-Driven Medulloblastoma Patients [IRB 201711205, Sato PI]
- ARST1431: A Randomized Phase 3 Study of Vincristine, Dactinomycin, Cyclophosphamide (VAC) Alternating with Vincristine and Irinotecan (VI) Versus VAC/VI Plus Temsirolimus (TORI, Torisel, NSC# 683864) in Patients with Intermediate Risk (IR) Rhabdomyosarcoma (RMS) [IRB 201701702, Sato PI]
- AHOD1331: A Randomized Phase III Study of Brentuximab Vedotin for Newly Diagnosed High-Risk Classical Hodgkin Lymphoma (cHL) in Children and Adolescents [IRB 201510829, Sato PI]
- AEWS1221: Randomized Phase II Trial Evaluating the Addition of the IGF-1R Monoclonal Antibody Ganitumab to Multi-agent Chemotherapy for Patients with Newly Diagnosed Metastatic Ewing Sarcoma [IRB 201503710, Sato PI]
- ARST1321: Pazopanib Neoadjuvant Trial in Non-Rhabdomyosarcoma Soft Tissue Sarcomas [IRB 201501817, Buatti PI]

- AALL1231: A Phase III Randomized Trial Investigating Bortezomib (NSC# 681239; IND# 58443) on a Modified Augmented BFM (ABFM) Backbone in Newly Diagnosed T- Lymphoblastic Leukemia (T-ALL) and T- Lymphoblastic Lymphoma (T-LLy) [IRB 201410784, Sato PI]
- ACNS0831: Phase III Trial of Post-Radiation Chemotherapy in Patients with Newly Diagnosed Ependymoma Ages 1 to 21 years [IRB 201211760, Sato PI]
- AEWS1031: A phase III Randomized Trial of Adding Vincristine-topotecan-cyclophosphamide to Standard Chemotherapy in Initial Treatment of Non-metastatic Ewing Sarcoma [IRB 201210720, Sato PI]
- AALL1131: A Phase III Randomized Trial for Newly Diagnosed High Risk B-precursor Acute Lymphoblastic Leukemia (ALL) Testing Clofarabine (IND# 73789, NSC# 606869) in the Very High Risk Stratum [IRB 201204762, Sato PI]
- AAML1031: A Phase III Randomized Trial for Patients with de novo AML using Bortezomib and Sorafenib (IND# 114480; NSC# 681239, NSC# 724772) for Patients with High Allelic Ratio FLT3/ITD [IRB 201202792, Sato PI]
- ACNS0332: Efficacy of Carboplatin Administered Concomitantly With Radiation and Isotretinoin as a Pro-Apoptotic Agent in Other Than Average Risk Medulloblastoma/PNET Patients [IRB 201011795, Sato PI]
- ARST0332 [IRB 200906744, Sato PI]
- ARET0321: A Trial of Intensive Multi-Modality Therapy for Extra-Ocular Retinoblastoma [IRB 200906705, Sato PI]
- ACNS0334: A Phase III Randomized Trial for the Treatment of Newly Diagnosed Supratentorial PNET and High Risk Medulloblastoma in Children < 36 months Old with Intensive Induction Chemotherapy with Methotrexate Followed by Consolidation with Stem Cell Rescue vs. the Same Therapy Without Methotrexate [IRB 200903733, Sato PI]
- ARST0531 Randomized Study of Vincristine, Dactinomycin, and Cyclophosphamide (VAC) verses VAC Alternating with Vincristine and Irinotecan (VI) for Patients with Intermediate-Risk Rhabdomyosarcoma [IRB 200810704, Sato PI]
- AREN0533: [IRB 200808763, Sato PI]
- ANBL0532: Phase III Randomized Trial of Single vs. Tandem Myeloablative as Consolidation Therapy for High-Risk Neuroblastoma [IRB 200712731, Sato PI]
- AALL05B1: A Children's Oncology Group Protocol for Collecting and Banking Relapsed Acute Lymphoblastic Leukemia Research Specimens [IRB 200703726, Sato PI]
- AEWS0331: European Ewing Tumor Working Initiative of National Groups, Ewing Tumor Studies 1999 (Euro-E.W.I.N.G. 99) [IRB 200606737, Sato PI]
- AREN03B2 [IRB200605769, Sato PI]
- ARST0331: Vincristine, Dactinomycin and Lower Doses of Cyclophosphamide with or without Radiation Therapy for Patients with Newly Diagnosed Low-Risk Embryonal/Botryoid Rhabdomyosarcoma [IRB 200601788, Sato PI]
- ACNS0331: A Study Evaluating Limited Target Volume Boost Irradiation and Reduced Dose Craniospinal Radiotherapy and Chemotherapy in Children with Newly Diagnosed Standard Risk Medulloblastoma - A Phase III, Double Randomized Trial [IRB 200410785, Sato PI]

#### Co-Investigator, The University of Iowa

- SWOG S1826: A Phase III, Randomized Study of Nivolumab (Opdivo) Plus Avd or Brentuximab Vedotin (Adcetris) Plus Avd In Patients (Age ≥ 12 Years) with Newly Diagnosed Advanced Stage Classical Hodgkin Lymphoma
- A071801: Phase III Trial of Post-Surgical Single Fraction Stereotactic Radiosurgery (SRS) Compared with Fractionated SRS (FSRS) For Resected Metastatic Brain Disease. [IRB 201911571, Smith PI]
- NRG HN001: Individualized Treatment in Treating Patients With Stage II-IVB Nasopharyngeal Cancer Based on EBV DNA [IRB 201709203, Anderson PI]
- NRG BN003: Phase III trial of observation versus irradiation for a gross totally resected grade II meningioma [IRB 201708201, Smith PI]
- ETCTN 9979: Phase 1 and Pharmacology Study of Oral 5-iodo-2-pyrimidinone-2-deoxyribose (IPdR) as a Prodrug for IUdR-Mediated Tumor Radiosensitization in Brain Metastases [IRB 201706206, Milhem PI]
- STABLEMATES: A Randomized Phase III Study of Sublobar Resection (SR) versus Stereotactic Ablative Radiotherapy (SAbR) in High Risk Patients with Stage I Non-Small Cell Lung Cancer (NSCLC) [IRB 201703841, Allen PI]
- NRG BR003: A Randomized Phase III Trial of Adjuvant Therapy Comparing Doxorubicin Plus Cyclophosphamide Followed by Weekly Paclitaxel with or without Carboplatin for Node-Positive or High-Risk Node-Negative Triple-Negative Invasive Breast Cancer [IRB 201703713, Karwal PI]
- NRG-GI002: A Phase II Clinical Trial Platform of Sensitization Utilizing Total Neoadjuvant Therapy (TNT) in Rectal Cancer [IRB 201701729, Sharif PI]
- Alliance A011202: A Randomized Phase III Trial Comparing Axillary Lymph Node Dissection to Axillary Radiation in Breast Cancer Patients (cT1-3 N1) Who Have Positive Sentinel Lymph Node Disease After Neoadjuvant Chemotherapy [IRB 201610798, Lizarraga]
- NRG BR001: A Phase 1 Study of Stereotactic Body Radiotherapy (SBRT) for the Treatment of Multiple Metastases [IRB 201604712, Smith PI]
- NRG GU001: Randomized Phase II Trial of Postoperative Adjuvant IMRT Following Cystectomy For pT3/pT4 Urothelial Bladder Cancer [IRB 201507766, Smith PI]
- ECOG-ACRIN E3311: Phase II Randomized Trial of Transoral Surgical Resection followed by Lowdose or Standard-dose IMRT in Resectable p16+ Locally Advanced Oropharynx Cancer [IRB 201410749, Vaena PI]
- RTOG 1115: Phase III trial of dose escalated radiation therapy and standard androgen deprivation therapy (ADT) with a GNRH agonist vs. dose escalated radiation therapy and enhanced ADT with a GNRH agonist and TAK-700 for men with high risk prostate cancer [IRB 201207733, Smith PI]
- RTOG 1010: A phase III trial evaluating the addition of trastuzumab to trimodality treatment of HER2overexpressing esophageal adenocarcinoma [IRB 201107755, Smith PI]
- RTOG 1008: A randomized phase II study of adjuvant concurrent radiation and chemotherapy versus radiation alone in resected high-risk malignant salivary gland tumors [IRB 201107746, Smith PI]
- RTOG 0920: A phase III study of postoperative radiation therapy (IMRT) ± cetuximab for locally advanced resected head and neck cancer [IRB 201006724, Smith PI]
- CALGB 10403/ECOG C10403: An Intergroup Phase II Clinical Trial For Adolescents and Young Adults With Untreated Acute Lymphoblastic Leukemia (ALL) [IRB 200805765, Carter PI]
- RTOG 0415: A phase III randomized study of hypofractionated 3D-CRT/IMRT versus conventionally fractionated 3D-CRT/IMRT in patients with favorable-risk prostate cancer [IRB 200707710, Smith PI]

#### Completed Clinical Trials—Investigator Initiated

#### **Principal Investigator**

- NCT01752491: A Phase I Trial of High-Dose Ascorbate in Glioblastoma Multiforme [IRB 201211713]
- NCT01717391: Improving Pelvic Cancer Patient Chemoradiotherapy Outcomes with FLT PET Imaging [IRB 201204712]
- Quantifying radiation induced changes in pulmonary function in irradiated and non-irradiated lung tissue [200905703]
- A phase II trial of the HIV protease inhibitor Nelfinavir in patients with recurrent symptomatic adenoid cystic cancers of the head and neck [IRB 200905704]
- Verification of MRI Imaging Technique and Output [IRB 200709709]
- Serial Blood and Salivary Sampling for Validation of Quantitative Amifostine Assays. [IRB 200406002]
- Accelerated Hyperfractionation and Radiosurgical Boost for Malignant Gliomas [University of Florida, 1994-1998].
- Test of a High Precision Radiation Therapy Positioning System [University of Florida, 1994-1999]
- Frameless High-Precision Stereotactic Radiotherapy for the Treatment of Acoustic Schwannoma; Meningioma; Low Grade Chondrosarcoma; Cordoma; Nasopharyngeal Carcinoma; Other Previously Irradiated Brain Tumors; Other Intracranial Tumors [University of Florida, 1994-1999]
- Frameless High-Precision Stereotactic Radiotherapy for Pediatric Central Nervous System Tumors [University of Florida, 1994-2000]
- A Phase I Study of Vaccination with Irradiated Autologous Cancer Cells Genetically Engineered to Express B7-2 T-Cell Co-Stimulatory Molecule and Granulocyte Macrophage Colony Stimulating Factor in Patients with Recurrent Glioblastoma and Refractory Malignant Melanoma [University of Florida, 1997-98; Lung-Ji Chang, Ph.D., co-investigator]
- A Randomized Trial of Carbogen Breathing During Accelerated Hyperfractionated Radiotherapy for Head and Neck Cancer [University of Florida, 1996-1999; D. Siemann and W. Mendenhall, coinvestigators; transferred to W. Mendenhall]
- Neuropsychologic Sequelae of Brain Tumor Therapy [University of Florida, 1998-2000]
- Stereotactic Radiosurgery Versus Medical Management Alone For Patients With Hemorrhagic Cerebral Cavernous Malformations: A Phase III Multi-Center, Prospective Randomized Trial [University of Florida, 1998-1999; D. Kondziolka, co-investigator]
- A Micro-Multileaf Collimator for Irradiation of Central Nervous System Tumors [University of Florida, 1998-2000; transferred to William Friedman]
- A Phase III Randomized Study of the Clinical Utility of Ultrasound Image Guided Stereotactic Navigation to Improve External Beam Radiation Therapy in the Treatment of Patients with High Risk Cancer of the Prostate [University of Iowa, 2000-2005; J. Lattanzi, co-investigator]

#### **Co-Principal Investigator**

- Evaluating T2\* MRI for impact on treatment & management of glioblastoma multiforme [IRB 201404727, Allen co-PI]
- NCT00721799: F-18 Fluorothymidine (FLT) PET Imaging for Early Evaluation of Response to Chemoradiation Therapy in Patients with Head and Neck Squamous Cell Carcinoma (HNSCC) [IRB 200801758, Menda co-PI]

- NCT01975766: A phase I trial of a ketogenic diet with concurrent chemoradiation for head and neck cancer. [IRB 201309759, Allen co-PI]
- NCT01419587: A phase I trial of a ketogenic diet with concurrent chemoradiation for non-small cell lung cancer [IRB 201102773, Allen co-PI]
- NCT01419483: A phase I trial of a ketogenic diet with concurrent chemoradiation for pancreatic cancer [IRB 201102772, Allen co-PI]
- Biodistribution and Radiation Dosimetry of F-18 Fluorothymidine (FLT) Imaged with Positron Emission Tomography (PET) In Patients with Head and Neck Cancer: A Radioactive Drug Research Committee (RDRC) Study [IRB 200502799; Menda co-PI]

#### **Co-Investigator**

- NCT01852890: Gemcitabine, Ascorbate, Radiation therapy for pancreatic cancer, phase I [IRB 201310772, Cullen PI]
- PACMAN II: Pharmacological Ascorbate for the Control of Metastatic and Node-Positive Pancreatic Cancer (PACMAN): A phase II trial [IRB 201204737, Cullen PI]
- EMBRACE: A European study on MRI-guided brachytherapy in locally advanced cervical cancer. [IRB 201209714, Kim PI]
- Evaluation of the UIOWA Real-time Applicator Position Monitoring System (RAPS) reliability and effectiveness. [IRB 201210832, Xia PI]
- AMH Changes during Chemotherapy in Women Receiving Leuprolide Acetate [IRB 200912754, Stegmann PI]
- Evaluation of an efficient detector for the megavoltage cone beam computed tomography (MVCBCT) patient positioning system [IRB 200904766, Flynn PI]
- A multimodality comparison of imaging for lumpectomy cavity localization [IRB 200901744, Jacobson PI]
- Phase II trial of Induction chemotherapy with Cisplatin- 5FU-Docetaxel followed by cetuximab+ radiation for locally advanced SCC of the head and neck [200903738, Wehbe PI]
- Evaluation of Modified Radiation Therapy Imaging Beam Line [IRB 200804758, Flynn PI]
- A Phase II Trial of the HIV Protease Inhibitor Nelfinavir and Concurrent Radiation and Chemotherapy in Patients with Stage III Non-Small Cell Lung Cancer [IRB 200802788, Gupta PI]
- An investigator-initiated, multicenter, randomized, double-blind, placebo-controlled design Study to assess the effectiveness of CeviMeline to Improve oral health in patients with xErostomia secondary to radiation therapy for treatment of head and neck squamous cell carcinoma. [IRB 200705730, Van Daele PI]
- Imaging Acquisition for K25CA123112-01 [IRB 200709725, Wu PI]
- A Randomized Clinical Trial of Unruptured Brain Arteriovenous Malformations [IRB 200612776, Adams PI]
- Pilot study to evaluate esomeprazole (Nexium) in treating gastro-esophageal reflux in patients with head and neck cancer with prior external beam radiation therapy: a randomized, prospective, placebocontrolled, double-blind study. [200308067, Trask PI]
- PET Imaging of Solitary Pulmonary Nodules [IRB 200308003, Graham PI]
- PET Imaging in the Management of Head and Neck Cancer [IRB 200304023, Smith PI]
- Development of Radiation Fibrosis in Patients Treated with Pentoxifylline and Vitamin E: A Prospective Randomized Study [IRB 200211003, Jacobson PI]
- Quality of Life Interventions During Cervical Cancer Treatment [IRB 200105058, Lutgendorf PI]

Comprehensive Pediatric Neuro-Oncology Tumor Database [IRB 200008066, O'Dorisio PI]

#### Completed Clinical Trials—Industry Sponsored

#### **Principal Investigator**

- NCT01921426: A Phase I, open-label, multi-center, dose escalation study of the safety, tolerability, pharmacodynamic and pharmacokinetic properties of intravenous GC4419 in combination with radiation and chemotherapy for squamous cell cancers of the head and neck. [IRB 201307805]
- NCT01075399: A Pilot, Phase II, Open Label, Nonrandomized, Multi- Center Study of [F-18]HX4 Positron Emission Tomography (PET) to Detect Hypoxia in Tumors
- RSA Image Fusion Software for Stereotactic Radiosurgery and Stereotactic Radiotherapy Treatment Planning [University of Florida, 1994-1996]
- Longitudinal Open-Label, Multi-Center Clinical Trial of Gliadel<sup>®</sup> for Patients with Malignant Glioma [University of Florida, 1996-1998]
- A Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial of Prolifeprosan 20 with Carmustine 3.85% Implant in Patients Undergoing Initial Surgery for Newly Diagnosed Malignant Glioma [University of Florida, 1998-2000]

#### **Sub-Investigator**

- NCT00075816: A Phase III Randomized, Multicenter Trial Comparing G-CSF Mobilized Peripheral Blood Stem Cell with Marrow Transplantation from HLA Compatible Unrelated Donors [IRB 200311006 deMagalhaes-Silverman PI]
- A Multicenter Phase II Study of TP-38 in Those Patients With Glioblastoma Multiforme Who Have Recurred or Progressed after Previous Resection and Radiation Therapy and Are Scheduled for Gross Total Resection [IRB 200409037, Ryken PI]
- Phase II Treatment of Adults With Newly Diagnosed Supratentorial Glioblastoma Multiforme Treated With Gliadel Wafers, Surgery And Limited Field Radiation Plus Concomitant Temozolomide Followed by Temozolomide [IRB 200408035, Ryken PI]
- A Phase III Multicenter Study of Intratumoral/Interstitial Therapy with TransMID Compared to Best Standard of Care in Patients with Progressive and/or Recurrent, Non-Resectable Glioblastoma Multiforme [IRB 200407038, Ryken PI]
- Phase V GliaSite Radiation Therapy System Registry Protocol for the Treatment of Resectable Malignant Brain Tumors [IRB 200404058, Ryken PI]

#### **External Data and Safety Monitoring Board**

A combined phase I-II study of GRNOPC1 in patients with neurologically complete, subacute, thoracic spinal cord injury: Clinical safety in dose escalation. Sponsor: Geron Corporation (Menlo Park, CA) PI: Edward D. Worth, III, MD, PhD

#### **Grants Received**

#### **Active Support**

2U01CA140206 Quantitative Imaging to Assess Response in Cancer Therapy Trials			
NCI, National Institutes	of Health	Direct Funds:	\$
Period of Support:	04/01/2010-08/31/2020	Principal Investigator:	F

## Mitigation of Radiation Induced Damage to the Cardiac Conduction System by Mitochondrial Superoxide (GG011896-21)

NIH - Pass thru Columbia University Period of Support: 07/01/16 - 07/31/20 Co-Investigator: Buatti (1%) Total: \$321,888 Principal Investigator: London

## IDR-OM-02 A Pivotal, Double-Blind, Randomized, Placebo-Controlled, Multinational Study of Sgx942 (Dusquetide) for the Treatment of Oral Mucositis in Patients Being Treated with Concomitant

Soligenix, Inc. Period of Support: 11/01/17 - 10/31/20 Co-Investigator: Buatti (1%) Total: \$195,750 Principal Investigator: Anderson

#### Pharmacological Ascorbate Combined with Radiation and Temozolomide in GBM

Gateway for Cancer Research G-17-1500Period of Support:01/01/18 - 12/31/20Co-Investigator:Buatti (5%)

Total: \$227,083 1st year direct Principal Investigators: Allen

#### U54 UL1TR002537. The University of Iowa Clinical and Translational Science Award

NIH - Competing Renewal Period of Support: 04/01/18 - 02/28/23 Co-Investigator: Buatti (15%) Total: \$3,000,000 1st year direct Principal Investigators: Winokur, Hansen

## P01 CA217797-01A1 Exploiting Redox Metabolism Using Pharmacological Ascorbate for Cancer Therapy

NIH/NCI Period of Support: 09/01/18 - 08/31/23 Co-PI Project 3: Buatti (15%) Core Director: Clinical Trials (5%)

Principal Investigator: Cullen

Total: \$1,499,989 1st year direct

#### R01-EB004640 Deep LOGISMOS

NIH/NIBIB Period of Support: 7/1/19-6/30/24 PI: Milan Sonka, PhD Role: Co-PI Buatti 5% Direct Costs: \$291,836

#### R42 CA195819-02 An Automated Patient Chart Error Detection System for Radiation Therapy

Infondrian, LLC pass through NIH Period of Support: 04/01/18 - 03/31/20 Co-Investigator: Buatti Total: \$162,388 1st year direct Principal Investigator: Flynn

Total Amount: \$999,770

Principal Investigator: Baek

## 2040532 Convergence Accelerator - Track D: ImagiQ: Asynchronous and Decentralized Federated Learning for Medical Imaging

Source: National Science Foundation (NSF) Period: 09/01/2020 - 05/31/2021 (Phase I) Role: Co-Investigator (% effort: 1.1%)

Pending

**2R42 CA195819-02A1 Yaddanapudi, Bai (MPI)**09/10/19 - 08/31/21NIH/NCI – Pass thru Infondrian, LLC\$76,848An Automated Patient Chart Error Detection System for Radiation Therapy (STTR phase 2)Role: Co-Investigator

NIH

1S10 OD028752-01 Buatti (PI)

#### The University of Iowa Midwest FLASH Irradiation Device This high-end instrumentation grant proposes to be the first U.S.-located dedicated research unit designed specifically to explore ultrahigh dose rate irradiation that has been shown to have at least a two-fold diminishment in normal tissue effects while maintaining anti-tumor efficacy. RO-1 CA-12726213 Image Guided Interventional Clinical Trials A Phase II Study of Multiparametric MR-Guided High Dose Radiotherapy with Concurrent Temozolomide In Patients with Newly Diagnosed Glioblastoma PI: Michelle Kim Role: Co-PI Buatti 8% Dates: 7/1/20-6/30/23 Direct Costs: \$203,440/year Completed A Phase 1, Open-Label, Multi-Center, Dose Escalation Study of the Safety, Tolerability, Pharmacodynamic and Pharmacokinetic Properties of Intravenous GC4419 in Combination with Radiation and Chemotherapy. Galera Therapeutics, LLC Direct Funds: \$55,804 current year direct Period of Support: 09/23/13-12/31/17 Principal Investigator: Buatti (10%) Polyamine Modulation of Oncogene Expression in Human Glioblastoma Cell - 1991 Direct Funds: \$20,000 ASTRO Research Fellowship Period of Funding: 1 year Principal Investigator: Buatti **Innovations in Medical Education** The Vernon and Virginia Furrow Fund Direct Funds: \$1600 Period of Funding: 1 year Principal Investigator: Buatti (5%) **Clinical Oncology Fellowship** American Cancer Society Direct Funds: \$10,000 Period of Funding: 1 year Principal Investigator: Buatti Polyamine Analogs as Modifiers of Radiosensitivity **RSNA Scholars Award** Direct Funds: \$45,000 Period of Funding: 1 year Principal Investigator: Buatti (50%) New Faculty Support (University of Florida) Division of Sponsored Research Direct Funds: \$11,900 Period of Funding: 1 year Principal Investigator: Buatti (5%) **Cancer Center Planning Grant** University of Florida Direct Funds: \$64,000 Period of Funding: 1993–1995 Principal Investigator: Buatti (10%) American Cancer Society Career Development Award American Cancer Society Direct Funds: \$90,000 Period of Funding: 1994-1996 Principal Investigator: Buatti (50%) **RSNA Medical Student/Scholar Assistant Program** Radiological Society of North America Direct Funds: \$5,000 Period of Funding: 1994 Principal Investigator: Buatti (5%) Bryan W. Robinson Neurological Foundation Award Direct Funds: \$2500

Period of Funding: 1994 (1 yr) Role: Mentor (5%)

Principal Investigator: Jeff Hunter

02/01/21 - 01/31/22

\$1,903,460

Stereotactic Injection of Herpes Simplex Thymidine Kinase Veo and Intravenous Ganciclovir for the Treatment of Recurrent Ma Genetic Therapy Incorporated	
Period of Funding: 1995 PI: Maria Role: Co-Investigator (5%)	
Stereotactic Radiosurgery Radioprotection by the Lazaroid U74	
Upjohn Period of Funding: 1 year	Direct Funds: \$8000 Principal Investigator: Buatti (5%)
A Practical Guide to Stereotactic Radiosurgery	
Springer-Verlag Period of Funding: 1 year The grant was endowed for textbook art	Direct Funds: \$2500 Principal Investigator: Buatti (1%)
A Randomized Trial of Carbogen Breathing During Accelerated Head and Neck Cancer	d Hyperfractionated Radiotherapy for
University of Florida Medical Guild	Direct Funds: \$500
Period of Funding: 1 year	Principal Investigator: Buatti (< 5%)
<b>Radiation Induced Gene Therapy for Malignant Gliomas</b> Univ. of Florida College Incentive Fund/Research Development Awa Period of Funding: 1 year	ard Direct Funds: \$27,000 Principal Investigator: Buatti (10%)
Phase III Multicenter, Randomized Double Blind, Placebo-Cor Carmustine 3.85% Implant in Patients Undergoing Initial Surge Gliomas	ery for Newly Diagnosed Malignant
Rhone-Poulenc Rorer, Inc. Period of Funding: 1 year	Direct Funds: \$8000/patient contract Principal Investigator: Buatti (< 5%)
Extracranial stereotactic radiotherapy	
Medtronic/ZMed Direct Funds: \$227,807 Period of Funding: 10/2000–10/2001	Principal Investigator: Buatti (n/a)
<b>Neuro-Oncology in the New Millennium</b> UIHC New Clinical Initiative	Direct Eurode, \$211,750
Period of Funding: 6/2001–3/2002	Direct Funds: \$211,750 Principal Investigator: Buatti (n/a)
Improved Patient Localization for External Beam Radiotherapy	
Whitaker Foundation Period of Funding: 1999–2003 Role: Co-Investigator (5%)	Direct Funds: \$183,169 Principal Investigator: Meeks
Ultrasound guided optical stereotactic navigational system	Direct Evender \$604.279
NIH -NCI (Multi-Institutional R33) Period of Funding: 1/2001–1/2004 Role: Co-Investigator (5%)	Direct Funds: \$604,378 Principal Investigator: Lattanzi
<b>P20 – Molecular Imaging of Responses to Cancer Therapy</b>	Direct Frender \$1.424.624
NIH –NCI RFA CA-01-010 Period of Funding: 3/2001–3/2004 Role: Co-Investigator (2.5%)	Direct Funds: \$1,424,634 Principal Investigator: Graham
<b>Ultrasound Guided Optical Stereotactic Navigational System</b> Community Medical Center Foundation	
Derived of Examiner 06 (2001, 05 (2004)	Duin ain al Lavrasticato n Busti

Period of Funding: 06/2001-05/2004

Principal Investigator: Buatti

<b>Molecular Imaging of Responses to Cancer Therapy</b> NIH Period of Funding: 06/2001–05/2004 Role: Advisor	Principal Investigator: Graham
Development of High Dose Rate (HDR) Brachytherapy Treatm	nent.
UIHC New Clinical Initiative	Direct Funds: \$475,590
Period of Funding: 7/2001–6/2004	Principal Investigator: Meeks
Role: Co-Author	
F-18 Fluorothymidine (FLT) Positron Emission Tomography (I and Neck Cancer Patients Treated with Concurrent Chemother Holden Comprehensive Cancer Center Seed Grant Period of Funding: 01/2004–12/2004 Role: Co-Investigator	
0	
A Phase III Multicenter Study of Intratumoral/Interstitial There Standard of Care in Patients with Progressive and/or Recurrent Zenova, Biomedix, Ltd.	
Period of Funding: 09/2004-03/2006	Principal Investigator: Ryken
Role: Co-Principal Investigator	
<b>The Use of 2-Deoxy-d-glucose and Stereotactic Radiosurgery fo</b> Roy J. Carver Charitable Trust	or Intracranial Malignancies.
Period of Funding: 01/01/2004–12/31/2006	Principal Investigator Dornfeld
Role: Co-Principal Investigator	I. O.
nore of Thirdpa hitedagator	
Healing Touch, Immunity and Fatigue in Breast Cancer	
National Cancer InstituteDirect Funds: \$150,000	
Period of Funding: 7/03-7/06	Principal Investigator: Lutgendorf %
Role: Co-Investigator (1%)	
Phase V GliaSite® Radiation Therapy System Registry Protocol Malignant Brain Tumors Proxima Therapeutics Period of Funding: 05/2004–05/2006	for the Treatment of Resectable Principal Investigator: Ryken
Role: Co-Principal Investigator	Timeipai mvesugator. Ryken
Role. Co T intelpai investigator	
<b>Reflexology in Head and Neck Cancer Patients</b> Diana Benz Memorial Seed Grant, Holden Comprehensive Cancer C	enter Direct Funds: \$19,525
Period of Support:	Principal Investigator: Nisly
Role: Co-Investigator	
Period of Funding: May 1, 2005 - April 30, 2007	
F-18 Fluorothymidine (FLT) Positron Emission Tomography (PET) Imaging in Squamous Cell Head and Neck Cancer Patients Treated with Concurrent Chemotherapy and Radiotherapy	
Source: Roy J. Carver Charitable Trust Period of Funding: 04/2004-03/2007 Role: Co-Investigator	Principal Investigator: Dornfeld
Respiratory Gating for 4D-RT	
Siemens	Direct Funds: \$360,000

Siemens Period of Funding: 6/2005–6/2008 Role: Co-Investigator Direct Funds: \$360,000 Principal Investigator: Bayouth

<b>3P30CA086862 Iowa I</b> NCI, National Institutes	<b>maging Response Assessment Team (IRA</b> s of Health	<b>T)</b> Direct Funds: \$167,458	
Period of Funding: 11/2 Role: Co-Investigator	2005–10/2008	Principal Investigator: Weiner	
NIH 1R21CA13028101 NCI, National Institutes	: Imaging Thymidine Uptake During Trea	tment for Head and Neck Cancer	
Period of Support: Role:	08/01/2007–07/31/2010 Co-Principal Investigator (2%)	Principal Investigator: Buatti/Mend	a
Quantifying Radiation Tissue	n Induced Changes in Pulmonary Function	n in Irradiated and Non-Irradiated L	ung
	ust Pilot Grant, University of Iowa 02/01/2009–01/31/2011	Direct Funds:\$50,000Principal Investigator:Bayouth	
Role:	Co-Investigator (2%). Dr. Buatti serves as th	e physician for this clinical trial.	
	Cancer to Chemo-Radio-Therapy Using F	-	
Radiological Society of Period of Support: 07/0		Direct Funds: \$30, 000 Principal Investigator: Allen	
	vith Newly Diagnosed Glioblastoma Multi fers and Limited Field Radiation Plus Con ide.		
Guilford Pharmaceutica Period of Support:	lls 05/01/2005–04/07/2011	Direct Funds: \$180,000 Principal Investigator: Buatti (1%)	
A Pilot, Phase II, Open Label, Nonrandomized, Multi-Center Study Of [F-18]HX4 Positron Emission Tomography (PET) To Detect Hypoxia In Tumors Siemens Molecular Imaging, Inc Period of Support: 11/08/2010 – 11/08/2012 Principal Investigator: Buatti			
		Principal Investigator: Buatt	1
Holden Comprehensive	for Enhancing Chemo-Radiation Therapy cancer Center	Direct Funds: \$50,000.0	0
Period of Support: Co-PI: Buatti (1%)	08/01/2013 - 07/31/2015	Principal Investigator: Aller	1
Evaluation of Pharma Radio-Chemo-Therap	cologic Ascorbate Tolerability in the Trea	ment of Glioblastoma Multiforme w	rith
Holden Comprehensive Period of Support: 2013	Cancer Center	Direct Funds: \$50,000 Principal Investigator: Buatti	
Using Ketogenic Diet	s to Enhance Radio-Chemo-Therapy Resp	oonse: A Phase I Trial – R21	
NIH Period of Support: Co-PI: Buatti (10%)	09/15/2011 - 08/31/2014	Direct Funds: \$150,000 direct first Principal Investigator: Spit:	
activities including ca	r Center Support Grant. Funding used for ncer-related research, clinical care and edu	0 1 0	
NCI, National Institute Period of Support: 08/1 Tumor Imaging Program		Principal Investigator: Weine	ſ
A New Prostate Cancer Treatment to Improve Outcomes and Reduce Side Effects			
NIH STTR - pass thru p Periods of Support: 09		Total: \$ Principal Investigator: Flynn	
	natti (1%)		

# Developing a Treatment Planning System for Next Generation Rotating-Shield BrachytherapyNIH/NIBIB R01-EB020665Total: \$1,372,500Period of Support:09/10/2015 - 06/30/2019Principal Investigator: Wu

Co-PI: Buatti (5%)

A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Trial of the Effects of Intravenous GC4419 on the Incidence and Duration of Severe Oral Mucositis (OM) in Patients Receiving Post-Operative or Definitive Therapy with Single-Agent Cisplatin plus IMRT for Locally Advanced, Non-Metastatic Squamous Cell Carcinoma of the Oral Cavity or Oropharynx.

Galera Therapeutics, LLCPeriod of Support:11/23/15–11/30/18Co-investigator:Buatti (1%)

Direct Funds: \$942,050 current year Principal Investigator: Anderson

#### Developing Effective PET-CT Image Analysis Tools for Radiotherapy

NIH/NCI R21 CA209874 Period of Support: 09/06/16 - 07/31/18 Co-Investigator: Buatti (5%) Total: \$239,250 Principal Investigator: Wu

#### **Invited lectures**

- 1. University of Chicago, Department of Radiation Oncology, Chicago, IL. "Polyamine Modulation of c-myc Expression and its Effects on Radioresponses of Human Glioblastoma Cells." 1992.
- University of Michigan, Department of Radiation Oncology, Ann Arbor, MI. "Polyamine Modulation of c-myc Expression and its Effects on Radioresponses of Human Glioblastoma Cells." 1992
- 3. MD Anderson Hospital, Department of Radiation Oncology, Houston, TX. "Polyamine Modulation of c-myc Expression and its Effects on Radioresponses of Human Glioblastoma Cells." 1992
- University of Florida, Department of Radiation Oncology, Gainesville, FL. "Polyamine Modulation of c-myc Expression and its Effects on Radioresponses of Human Glioblastoma Cells." 1992
- Refresher Course entitled "The Role of Radiation in Cancer Pain and Symptom Management." American Pain Society Meeting, Orlando FL, November 1993. Co-presenters: Geri Doran Yanes MD, Nora Janjan MD. 1993.
- 6. 24th Annual Radiation Oncology Clinical Research Seminar. University of Florida, Gainesville, FL. "Stereotactic Radiosurgery for Malignant Intracranial Neoplasms". 1994
- 7. 5th Annual Shands Hospital Radiation Therapists Seminar. University of Florida. "Fractionation in Radiation Therapy Clinical and Radiobiological Emphasis". Gainesville, FL. February 1994.
- 8. Radiologic Technologists Meeting, University of Florida. "Cancer Prevention in 1994". Gainesville, FL. May 19, 1994.
- 9. University of Florida Tumor Registry Meeting. "Stereotactic Radiosurgery for the Treatment of Malignant Intracranial Neoplasms". Gainesville, FL. October 1994.
- 6<sup>th</sup> Annual Radiation Oncology Clinical Research Seminar, University of Florida. Accelerated Hyperfractionated Radiotherapy for Malignant Gliomas". Gainesville, FL. February 1995.
- 11. 6th Annual Shands Hospital Radiation Therapists Seminar, University of Florida. "Treatment of Brain Tumors with Stereotactic Radiosurgery". Gainesville, FL. February 1995.
- 12. Florida Radiological Society, "Stereotactic Radiosurgery for Intracranial Neoplasms". St. Petersburg, FL. May 20, 1995.

- 13. First Annual X-Knife Consortium Meeting. "New Functionality in Stereotactic Treatment Planning". Boston, MA. June 13, 1995.
- 14. First Annual X-Knife Consortium-Panel Discussion Session on: "Future Directions of Linac Radiosurgery". Boston, MA. June 13, 1995.
- 15. The University of Florida Shands Cancer Center Seminar. "Stereotactic Radiosurgery: An Introduction to Clinical and Basic Science Research Programs". Gainesville, FL. May 17, 1995.
- 16. Linac Radiosurgery 1995 Meeting. "Why Do Radiosurgery? The History of Radiosurgery and an Overview of Clinical Results". Orlando, FL. December 1995.
- 17. Linac Radiosurgery 1995 Meeting. "Experimental Radiosurgery". Orlando, FL. December 1995.
- 18. Linac Radiosurgery 1995 Meeting. "University of Florida Treatment Planning Algorithm." Orlando, FL. December 1995.
- 19. Linac Radiosurgery 1995 Meeting. "Practical Course on Stereotactic Radiosurgery Treatment Planning". Orlando, FL. December 1995.
- Linac Radiosurgery 1995 Meeting. Moderator of Open Scientific Session on Malignant Tumors. Orlando, FL. December 1995.
- 21. Linac Radiosurgery 1995 Meeting. Discussant Acoustic Schwannomas Case Presentations and Questions. Orlando, FL. December 1995.
- 22. X-Knife Consortium Annual Meeting 1995. "Optimization for Stereotactic Radiotherapy versus Stereotactic Radiosurgery". Orlando, FL. December 1995.
- 23. X-Knife Consortium Annual Meeting 1995. Moderator: "Case Discussion: Which Treatment is Optimal? Surgery, Conventional Radiotherapy, Radiosurgery, Stereotactic Radiotherapy, etc." Orlando, FL. December 1995.
- 24. 26th Annual Radiation Oncology Clinical Research Seminar. "Stereotactic Radiosurgery for Intracranial Metastases". University of Florida, Gainesville, FL. February 22-24, 1996.
- 25. 7th Annual Shands Hospital Radiation Therapists Seminar. "Achieving Improved CNS Tolerances with Radiation Therapy". University of Florida, Gainesville, FL. February 23-24, 1996.
- 26. Gilbert H. Fletcher Society Meeting. "Stereotactic Radiosurgery for Acoustic Schwannomas". Williamsburg, VA. April 1996.
- 27. Angels in the Sun Brain Tumor Support Group. "Experimental Approaches for the Treatment of Malignant Glioma". Sarasota, Florida. May 20, 1996.
- 28. Florida Radiological Society. "Stereotactic Radiosurgery for Intracranial Metastasis". Boca Raton, Florida. June 7, 1996.
- 29. Florida Radiological Society. "Primary Treatment of Benign Meningioma". Boca Raton, Florida. June 7, 1996.
- Pediatric Oncology Group. "Treatment Planning for Linac Radiosurgery." Chicago, IL. October 19, 1996.
- Conference: The Role of Radiotherapy in Hospice Care. "Management of Brain Metastases." Gainesville, FL. October 25, 1996.
- 32. Project Decide: Choices in Dying. Sponsored by Hospice of North Central Florida and AV Med Health System. "Palliative Care". Gainesville, FL. November 1996.
- Linac Radiosurgery 1996. "The University of Florida Treatment Planning Algorithm". Orlando, FL. December 1996.
- 34. Linac Radiosurgery 1996. "Gene Therapy for Malignant Gliomas". Orlando, FL. December 1996.

- 35. Linac Radiosurgery 1996. "The Future of Radiosurgery-New Frontiers", Orlando, FL. December 1996.
- 36. Pediatric Neuro-oncology Conference. "Introduction to Stereotactic Radiosurgery and Stereotactic Radiotherapy". Gainesville, FL. February 1997.
- 37. 27th Annual Radiation Oncology Clinical Seminar. University of Florida. "Stereotactic Radiosurgery for Malignant Gliomas". Orlando, FL. February 6-8, 1997.
- 38. 27th Annual Radiation Oncology Clinical Seminar. University of Florida. "Gene Therapy: New Clinical Opportunities for Radiation Oncologists". Orlando, FL. February 6-8, 1997.
- 39. Gene Therapy Workshop. University of Florida, "Radiation and Gene Therapy". Gainesville, FL. February 15, 1997.
- 40. Rhone-Poulenc Rorer Oncology Dinner Program. "Latest Treatment of Malignant Gliomas". Gainesville, FL. April 3, 1997.
- Pediatric Oncology Group. "Fractionated Stereotactic Radiotherapy for Pediatric Brain Tumors". St. Petersburg, FL. April 17-20, 1997.
- 42. Pediatric Oncology Group Meeting. Radiobiology Subcommittee. "Lymphocyte DNA damagerepair and Apoptotic Response to Irradiation as an Indicator of Second Malignancy Susceptibility in Childhood Tumors". St. Petersburg, FL. April 17-20, 1997.
- 43. Angels in the Sun Brain Tumor Support Group. "Radiotherapy and Brain Tumors: New Technologies and Challenges". Sarasota, FL. May 19, 1997.
- 44. Visiting Professor: "Stereotactic Radiosurgery Treatment Planning." Windsor Regional Cancer Centre, Windsor, Ontario. May 22, 1997.
- 45. Visiting Professor: "Why Do Radiosurgery?" Hotel-Dieu Grace Hospital, Windsor, Ontario. May 22, 1997.
- 46. Rhone-Poulenc Rorer Oncology Dinner Program. "Latest Treatment of Malignant Gliomas". Jacksonville, FL. June 11, 1997.
- 47. International Stereotactic Radiosurgery Society. "Linac Dose Planning Tools". Madrid, Spain. June 25-28, 1997.
- 48. International Stereotactic Radiosurgery Society. "Stereotactic Radiosurgery for Malignant Gliomas". Madrid, Spain. June 25-28, 1997.
- 49. International Stereotactic Radiosurgery Society. Practical Course. "Stereotactic Radiosurgery Surgical Navigation Technologies". Madrid, Spain. June 25-28, 1997.
- 50. International Stereotactic Radiosurgery Society. "How I do it-UF Dose Planning Demonstration". Co-Presenters: William A. Friedman and Francis Bova. Madrid, Spain. June 25-28, 1997.
- 51. International Stereotactic Radiosurgery Society. Moderator of the Open Scientific Session on Benign Tumors. Madrid, Spain. June 25-28, 1997.
- 52. American Society for Therapeutic Radiology and Oncology. "Preliminary Experience with Frameless Stereotactic Radiotherapy". Orlando, FL. October 22, 1997.
- 53. American Society for Therapeutic Radiology and Oncology. Moderator: Scientific Session T; "Stereotactic Radiotherapy". Orlando, FL. October 22, 1997.
- 54. Linac Radiosurgery 1997. "The University of Florida Dose Planning Algorithm". Orlando, FL. December 1997.
- 55. Linac Radiosurgery 1997. "Metastases: Surgery or Radiosurgery?" Orlando, FL. December 1997.
- 56. Linac Radiosurgery 1997. "The Radiobiology of Radiosurgery." Orlando, FL. December 1997.

- 57. Linac Radiosurgery Scientific Session: Technical Advances II, Moderator, Orlando, FL. December 1997.
- 58. Arteriovenous Malformations: Case Presentation, Discussant. Orlando, FL. December 1997.
- 59. Practical Course: Linac Radiosurgery. Surgical Navigation Technologies. Orlando, FL. December 1997.
- 60. 28th Annual Radiation Oncology Seminar. University of Florida. "Preliminary Experience with Frameless Stereotactic Radiotherapy." Gainesville, FL. January 1998.
- 61. 28th Annual Radiation Oncology Seminar. University of Florida. "Clinical Perspective: Therapeutic Ratio." Gainesville, FL. January 1998.
- 62. Visiting Professor: "Optimal Treatment Planning Techniques for Radiosurgery." and "Stereotactic Radiotherapy at the University of Florida. State University of New York at Stony Brook. Stony Brook, New York. May 6, 1998.
- 63. 3rd Asia-Pacific Minimally Invasive Neurosurgery Seminar. "Stereotactic Radiotherapy at the University of Florida". Singapore. May 1998
- 64. Congress of Neurosurgeons, Luncheon Seminar: "Metastases, Surgery or Radiosurgery." Seattle, WA. October 5, 1998.
- 65. Practical Course: Radiosurgery. Congress of Neurosurgeons. Seattle, WA. October 4, 1998. (Panel discussion and demonstration)
- 66. American Society for Therapeutic Radiology and Oncology. Presidential Categorical Course: "The Prominent Role of Radiation in the Treatment of Meningiomas." Phoenix, AZ. October 25, 1998.
- 67. Bethesda Memorial Hospital Medical Staff Meeting. "Stereotactic Radiosurgery: Advances and Indications". Boynton Beach, FL. October 29, 1998.
- 68. Linac Radiosurgery 1998: "Frameless Radiosurgery: What are the Specs" Orlando, FL. December 1998.
- 69. Linac Radiosurgery 1998: "The University of Florida Dose Planning Algorithm" Orlando, FL. December 1998.
- 70. Linac Radiosurgery 1998: Practical Course: Sofamor Danek. Orlando, FL. December 1998.
- 71. Linac Radiosurgery 1998: "The Role of Radiosurgery for Metastases: What are the Limits" Orlando, FL. December 1998.
- 72. Linac Radiosurgery 1998: Moderator: Malignant Tumors with Case Presentations and Discussion Panel" Orlando, FL. December 1998.
- 73. Linac Radiosurgery 1998: Moderator: Open Scientific Session-Malignant Tumors. Orlando FL. December 1998.
- 74. Linac Radiosurgery 1998: Moderator: Meningiomas-Case Presentations and Discussion. Orlando, FL. December 1998.
- 75. Review Course in Neurological Surgery (Sponsored by Rush-Presbyterian-St. Luke's Medical Center) "Stereotactic Radiosurgery" Chicago, IL. January 31, 1999.
- 76. International Stereotactic Radiosurgery Society Scientific Meeting. "Radiosurgery Research: Experimental Studies". Sydney, Australia. February 1999.
- 77. International Stereotactic Radiosurgery Society Scientific Meeting. "Moderator- Open Scientific Session-Benign Tumors". Sydney, Australia. February 1999.
- 78. International Stereotactic Radiosurgery Society Scientific Meeting. "Clinical Specifications for Fractionated Stereotactic Radiotherapy" Sydney. Australia. February 1999.

- 79. Endocrinology Teaching Conference-"Stereotactic Radiation and Implications for the Pituitary Region" Gainesville, FL. March 1, 1999.
- 29th Annual Radiation Oncology Seminar. University of Florida. "Atypical and Malignant Meningiomas Treated with Accelerated Hyperfractionated Radiotherapy." Gainesville, FL. March 11, 1999.
- 81. 29th Annual Radiation Oncology Seminar. University of Florida. "A Randomized Trial of Carbogen Breathing with Accelerated Hyperfractionated Radiotherapy for Head and Neck Cancer: Preliminary Report." Gainesville, FL. March 11, 1999.
- 82. Stereotactic Radiosurgery and Radiotherapy Seminar, "The UF Treatment Planning Algorithm" Gainesville, FL. April 8, 1999.
- 83. Stereotactic Radiosurgery and Radiotherapy Seminar, "Dose Selection for Radiosurgery" Gainesville, FL, April 8, 1999.
- 84. Stereotactic Radiosurgery and Radiotherapy Seminar "Stereotactic radiotherapy, What are the Specs?" Gainesville, FL. April 8, 1999.
- 85. Stereotactic Radiosurgery and Radiotherapy Seminar "Optimizing Radiosurgery: The Team Approach" Gainesville, FL. April 8, 1999.
- 86. University of Iowa, "Stereotactic Radiotherapy: Clinical Specifications" Iowa City, IA, April 15,1999.
- 87. Wake Forest University Medical Center, "Image Guided Radiation Therapy: Technique and Application" Winston-Salem, NC. April 22,1999
- 67<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons, "Primitive Neuroectodermal Tumors in Childhood: Current Management and Outcomes" Seminar Panelist. New Orleans, LA. April 26, 1999.
- 89. 67<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons, "Management of Fourth Ventricle Tumors" Seminar Panelist, New Orleans, LA. April 27, 1999.
- 90. Gulf Coast Cancer Treatment Center Hospital Tumor Board, "Stereotactic Approaches to Central Nervous System Tumors" Panama City, FL. May 26, 1999.
- 91. North Florida Regional Medical Center, "Brain Metastases Symptoms and Management" Gainesville, FL. June 17,1999
- 92. Stereotactic Radiosurgery and Radiotherapy Seminar, "The UF Treatment Planning Algorithm" Gainesville, FL. July 18, 1999.
- 93. Stereotactic Radiosurgery and Radiotherapy Seminar, "Dose Selection for Radiosurgery" Gainesville, FL. July 18, 1999.
- 94. Stereotactic Radiosurgery and Radiotherapy Seminar "Stereotactic radiotherapy, What are the Specs?" Gainesville, FL. July 18, 1999.
- 95. Stereotactic Radiosurgery and Radiotherapy Seminar, "The UF Treatment Planning Algorithm" Gainesville, FL. Aug. 22, 1999.
- 96. Stereotactic Radiosurgery and Radiotherapy Seminar, "Dose Selection for Radiosurgery" Gainesville, FL. Aug. 22, 1999.
- 97. Stereotactic Radiosurgery and Radiotherapy Seminar "Stereotactic radiotherapy, What are the Specs?" Gainesville, FL. Aug. 22, 1999.
- 98. Visiting Professor: Long Island Jewish Medical Center. "Stereotactic radiosurgery and radiotherapy: what are the indications?" Lake Success, NY. September 8, 1999.

- 99. American Society of Therapeutic Radiology and Oncology 41<sup>st</sup> Annual Meeting. Seminar Panelist "Clinical Application of Advanced Technology Radiotherapy for Pediatric Brain Tumors". San Antonio, TX, Nov. 3, 1999.
- 100. Linac Radiosurgery 1999: "Optimizing Radiosurgery: The Team Approach." Orlando, FL, December 1999.
- 101. Linac Radiosurgery 1999: "University of Florida Dose Planning Algorithm". Orlando, FL, December 1999.
- 102. Linac Radiosurgery 1999: "Dose Selection". Orlando, FL, December 1999.
- 103. Linac Radiosurgery 1999: "Extracranial Radiosurgery". Orlando, FL, December 1999.
- 104. Linac Radiosurgery 1999 "Stereotactic Radiotherapy for Chordomas & Chondrosarcomas". Orlando, FL, December 1999.
- 105. Linac Radiosurgery 1999: Session moderator; "Linac Radiosurgery A Practical Approach." Orlando, FL, December 1999.
- 106. Review Course in Neurological Surgery. "Radiosurgery". January 31, 2000. Chicago, IL. (Compass Medical Education Network).
- 107. Medtronic-Sofamor Danek Training Course. "Stereotactic Treatment Planning." Gainesville, FL, Brain Institute. March 26, 2000.
- 108. 68<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons, "Novel Treatments for Malignant Brain Tumors" Seminar Panelist. San Francisco, CA. April 10, 2000.
- 109. Practical Course in Stereotactic Radiosurgery. 68<sup>th</sup> Annual Meeting of the American Association of Neurological Surgeons. San Francisco, CA, April 2000.
- 110. Department of Neurosurgery Saturday Resident Conference. "Introduction to Radiation Therapy: Radiobiologic Considerations." April 29, 2000
- 111. University of Iowa Brain Tumor Support Group. "Radiation Therapy." May 2, 2000.
- 112. University of Iowa Cancer Center Forum. "Advanced Technology Radiation Therapy: New Opportunities." May 23, 2000.
- 113. Department of Neurosurgery Saturday Resident Conference. "Radiosurgery Treatment Planning and Dose Selection." June 10, 2000.
- 114. First Annual University of Iowa Radiation Oncology Symposium. "Stereotactic Radiotherapy for Pediatric Brain Tumors." June 17, 2000.
- 115. "Stereotactic Treatment Planning; Dose Solutions for Radiosurgery and Stereotactic Radiotherapy Clinical Applications." Medtronic Training Course. First Annual Japanese Non-invasive Stereotactic Radiation Meeting. Hiroshima University, Japan. June 19-21, 2000.
- 116. Cedar Rapids Oncology Tumor Board. "Advanced Technology Stereotactic Radiotherapy." Mercy Hospital, Cedar Rapids, Iowa. July 10, 2000.
- 117. Congress of Neurological Surgeons Annual Meeting. "Radiosurgery as a Multidisciplinary Procedure." San Antonio, TX. September 23, 2000.
- 118. "Stereotactic Radiosurgery Procedures." In-service to UI radiation therapists. October 11, 2000.
- 119. "Current Radiotherapy for Prostate Cancer." UI Prostate Cancer Research Group. November 3, 2000.
- 120. Radiological Society of North American: Refresher Course. "Stereotactic Radiosurgery for CNS Tumors." November 2000.
- 121. Linac Radiosurgery 2000: "Linac Radiosurgery Dose Planning Algorithmin." Orlando FL. December 7, 2000.

- 122. Linac Radiosurgery 2000: "Dose Selection." Orlando FL December 7, 2000.
- 123. Linac Radiosurgery 2000. Practical Course. Z-MED. Orlando FL December 7, 2000.
- 124. Linac Radiosurgery 2000. "What's New in Extracranial Radiosurgery." Orlando FL December 8, 2000.
- 125. Linac Radiosurgery 2000. "Case Discussion, Benign Tumors-Panel." Orlando FL December 8, 2000.
- 126. Linac Radiosurgery 2000. "Emerging Therapies for Low Grade Gliomas." Orlando FL December 9, 2000.
- Linac Radiosurgery 2000. "Panel-Case Discussion. Malignant Tumors." Orlando FL December 9, 2000.
- 128. Lung Cancer: The Evidence-Based Approach for 2001 and Beyond Seminar. "Lung Cancer Radiotherapy: Current and Future Techniques". Cedar Rapids, IA. January 20, 2001.
- 2<sup>nd</sup> Annual Upper Midwest Brain Tumor Symposium. "Radiation Therapy Update". Bloomington, MN. March 23, 2001.
- 130. 2001 Surgical Update for Nurses. "Stereotactic Surgery". University of Iowa, Iowa City, IA, March 27, 2001.
- 131. 2001 AANS Annual Meeting, "Malignant Brain Tumors: State-of-the-Art Treatment". Toronto, Ontario, Canada. April 23, 2001.
- 132. 2001 AANS Annual Meeting, "Low Grade Gliomas: State-of-the-Art Treatment. Toronto, Ontario, Canada. April 24, 2001.
- 133. 2001 AANS Annual Meeting, "Intraaterial Chemotherapy Followed by Radiation Therapy Prolongs Survival in High-Grade Astrocytoma." Toronto, Ontario, Canada, April 25, 2001.
- 134. 2001 AANS Annual Meeting, "Management of the Difficult Meningioma" Toronto, Ontario, Canada. April 25, 2001.
- 135. International Stereotactic Radiosurgery Society Meeting. Faculty of radiosurgery practical course. Las Vegas, NV. June 10, 2001.
- 136. International Stereotactic Radiosurgery Society Meeting. "Pituitary Adenomas Medical Therapy, Surgery, Radiation Therapy and Radiosurgery. Las Vegas, NV. June 11, 2001
- International Stereotactic Radiosurgery Society Meeting. "Experimental SRS". Las Vegas, NV. June 13, 2001.
- 138. International Stereotactic Radiosurgery Society Meeting. "Uncommon Lesions- What is the Data? Las Vegas, NV. June 13, 2001.
- 139. International Stereotactic Radiosurgery Society Meeting. Moderator of Extracranial Stereotaxis Section. Las Vegas, NV. June 13, 2001.
- 140. Thoracic Oncology Conference, Clinical Cancer Center University of Iowa Advanced Technology Radiation Therapy for Lung Cancers. Sept. 6, 2001.
- 141. Radiological Society of North American: Refresher Course. "Stereotactic Radiosurgery for CNS Tumors." Chicago, IL. November 2001.
- 2002 Scofield Advanced Oncology Nursing Conference. "Stereotactic Radiosurgery" Coralville, IA. April 2002.
- 143. 2002 JASTRO "Extracranial radiosurgery: Current techniques and clinical applications." Tokyo, Japan. November 2002.
- 144. University of Iowa Pediatric Tumor Board: Update on Radiation Oncology for Pediatric Tumors. 2002.

- 145. Iowa Basic Science Course in Otolaryngology Head and Neck Surgery. "Radiation Therapy of the Head and Neck/Complications of Head and Neck Radiotherapy". University of Iowa, Iowa City, IA.
- 146. University of Minnesota and University of Iowa Joint Meeting of Head and Neck Oncology. "Alternative Techniques for Enhancement of the Therapeutic Ratio in HNSCC." Minneapolis, MN. February 21, 2003.
- 147. University of Iowa Neurology Grand Rounds: Treatment of Trigeminal Neuralgia 2003.
- 148. International Stereotactic Radiosurgery Society Meeting. "Stereotactic hypothesis: Has it been proven?" Kyoto, Japan. June 23, 2003.
- 149. University of Iowa Head & Neck Cancer & Reconstructive Surgery, Laser & Sinus Courses. "Melanoma Cases". Iowa City, IA. June 11, 2003.
- 150. Department of Human Oncology and University of Wisconsin Comprehensive Cancer Center Imaging and Radiation Sciences Seminars. "Clinical Application of Extracranial Stereotactic Radiosurgery". Madison, WI. February 2003.
- 151. University of Iowa Brain Tumor Support Group: Update on Radiation Oncology. April 2004.
- 152. University of Iowa Head & Neck Cancer & Reconstructive Surgery, Laser & Sinus Courses. "Laryngeal Cancer Cases". Iowa City, IA. June 7, 2004.
- 153. University of Iowa Head & Neck Cancer & Reconstructive Surgery, Laser & Sinus Courses. "Salivary Gland Cases". Iowa City, IA. June 10, 2004.
- 154. LINAC Radiosurgery, Consultation Corner, Orlando, FL. December 2004
- 155. LINAC Radiosurgery, Panel Member, Acoustic Schwannomas, Orlando, FL. December 2004
- 156. LINAC Radiosurgery, Meningiomas: Case Presentations, Orlando, FL. December 2004.
- 157. LINAC Radiosurgery, Metastatic Tumors: Case Presentations, Orlando, FL. December 2004.
- 158. Visiting Professor Medical College of Virginia Lecture. "Current State of Stereotactic Radiation Therapy and Radiosurgery" February 2005.
- 159. Pediatric Radiation Therapy Update: Pediatric Hematology Oncology Conference University of Iowa February 2005.
- 160. Iowa Surgical Conference: University of Iowa New Applications of Radiation Therapy November 2004.
- 161. Siemen's User Group Meeting 2D and 3D Image Guidance for Hypofractionated Radiation Therapy, Denver CO. October 2005.
- 162. Visiting Professor Ohio State University "Stereotactic Image-guided Radiosurgery and Radiotherapy" and "Challenges in Extracranial Applications for Radiosurgery". March 2006.
- 163. Scofield Advanced Oncology Nursing Conference. Lecture: "Increasing Efficacy/Decreasing Toxicity: The New Focus of Ra
- 164. diation Oncology". April 2006.
- 165. Cancer Survivors' Day 2006: Cancer Family Reunion. Guest speaker. June 2006.
- 166. Internal Medicine Grand Round s University of Iowa. "Image Guided Radiation Therapy for the Internist". July 2006
- 167. Pediatric Hematology/Oncology Noon Conference Division Educational Conference University of Iowa. "New Stimulation Techniques in Pediatric Radiation Therapy". August 2006.
- 168. Visiting Professor Baylor College of Medicine "New Simulation Techniques for Radiation Therapy" and "Stereotactic Radiosurgery Update." October 9, 2006.
- 169. Siemen's Adaptive Radiation Therapy Forum. Philadelphia, PA. November 4, 2006.

- 170. Dermatology Grand Rounds University of Iowa. January 2007.
- 171. The IRAT Network, Second Annual Workshop, Tempe, AZ. "Improving interaction between oncologists and radiologists and strategies for integrating imaging into clinical trials" February 13, 2007
- 172. First International Symposium on Stereotactic Body Radiation Therapy and Stereotactic Radiosurgery Conference. Plenary session "Current and Future Trends in Radiosurgery", Orlando, FL February 24, 2007.
- 173. Rotary Club, Davenport, IA March 26, 2007
- 174. Pediatric Nursing 2007 "New Stimulation Techniques in Pediatric Radiation Therapy" Coralville, IA April 27, 2007
- 175. North American Skull Base Society 18<sup>th</sup> Annual Meeting Seminar "Management of Jugular Foramen Tumors". Chicago, IL May 27, 2007
- 176. Skinner, Sheraden, Schneider, & Myers Wealth Management Group at Smith Barney "Image Guided Radiation Therapy." Iowa City, IA June 21, 2007.
- 177. Image Guided Radiation Therapy for the Ophthalmologist (Part I & Part II) September 2007.
- 178. ISTRO Meeting "PET/CT in Oncology" Coralville, IA, September 24, 2007.
- 179. Siemens' Pre-Show Meeting "The Future of Radiation Oncology" ASTRO Meeting, Los Angeles, CA, October 26, 2007
- 180. Chula Medical Expo "Clinical Application of PET/CT in Oncology"; "Image Guided Radiation Therapy"; "Respiratory Gating in Therapy". Thailand, October 2007.
- 181. Siemens' Art Forum "Image Guidance in Clinical Practice, Protocols, Experience, Benefits." Los Angeles, CA October 27, 2007.
- 182. 2007 Update for Nurses "Image Guided Radiation Therapy", Holiday Inn, Coralville, IA November 1, 2007.
- 183. Visiting Professor University of Virginia January 8, 2008.
- 184. Iowa Neurological Association Annual Meeting. "Directed Radiation Therapy." Marriott Coralville Hotel & Conference Center, Coralville, IA February 23, 2008
- 185. Massachusetts Radiological Society, Inc. 2008 Annual Meeting. "Present and Future Role of Imaging in Radiation Oncology." Boston, MA. March 5, 2008.
- 186. 2008 ASTRO IGRT Image Guided Radiotherapy Symposium. Workshop "IGRT How to: CNS and Head & Neck" "Eyes on Screen Practicum". Newport Beach, CA March 28-30, 2008.
- Presentation to The Board of Regents, State of Iowa, Marriott Hotel, Coralville, IA September 17, 2008.
- 188. Siemens Workshop Heidelberg, Germany October 16-18, 2008
- 189. Cleveland Clinic SBRT/SRS Symposium. "Radiosurgery in the Future: New Techniques and Applications" Orlando, FL, February 20-22, 2009.
- 190. Iowa Cancer Registrars Association, Spring 2009 Educational Workshop. "Image Guided Radiation Therapy". University Capital Centre, Iowa City, IA, April 9, 2009.
- ASTRO IGRT and SBRT Conference. "IGRT for Head and Neck Cancer." Miami, FL, May 15-17, 2009
- 192. Annual ISTRO. "Image Guided radiation therapy in head and neck cancers" Mercy Hospital, Des Moines, IA, September 12, 2009.
- 193. Siemens' ART Forum. "Stereotactic Radiosurgery: Liver" Chicago, IL, Oct 31, 2009.

- 194. ASTRO 51<sup>st</sup> Annual Meeting. Scientific Panel (speaker) "Utilization of Quantitative Imaging (QI) for Tumor Response Assessment." Chicago, IL, Nov 1-5, 2009.
- 195. 2010 Current State of the Art Techniques for IMRT, IGRT and SBRT Symposium, May 14-16, Dallas, TX.
- 196. Advanced Technology Consortium Meeting. "Quantitative Imaging Network" Philadelphia, PA June 17, 2010.
- 197. RRS 56<sup>th</sup> Annual Meeting, Scholars-In-Training Workshop. "Radiotherapy in the clinic" Maui, Hawaii September 25, 2010
- 198. Moderator Scientific Session at ASTRO's 52nd Annual Meeting in San Diego, November 2010
- 199. Linac Radiosurgery 2010. Body and Respiratory Gated Planning Demostration with John Bayouth, PhD. Orlando, FL Dec 9-12, 2010
- 200. Linac Radiosurgery 2010. Non-Acoustic Schwannomas. Orlando, FL Dec 9-12, 2010
- 201. Linac Radiosurgery 2010. Moderator: Schwannomas and Meningiomas: Case Presentations. Orlando, FL Dec 9-12, 2010
- 202. Linac Radiosurgery 2010. Lung Radiosurgery: The Next Frontier. Orlando, FL Dec 9-12, 2010
- 203. Dermatology Grand Rounds University of Iowa. "Radiation Therapy for the Dermatologist". February 2011.
- 204. 3rd Annual UI Health Sciences & Engineering Women Faculty Development Conference. March 4, 2011 Coraville, IA Marriott Hotel & Conference Center. "Building Collaborations among Colleagues and across Disciplines, Departments, and Colleges" co-guest speaker.
- 205. AANS Annual Scientific Meeting. Practical Course of Cranial Radiosurgery Program. "Radiosurgery for Metastatic Tumors." Denver, CO April 10, 2011
- 206. Pediatric Hematology/Oncology Educational Conference University of Iowa. "Protons for Pediatric Cancers" May 9, 2011.
- 207. Palliative Care Conference University of Iowa. "Palliative Radiation". May 11, 2011
- 208. University of Iowa Head & Neck Symposium "Proton Therapy for Head and Neck Cancer" May 25, 2011
- 209. ISTRO Annual Meeting "Proton Beam Therapy in Iowa City" Coralville, IA, Marriott Conference Center September 17, 2011.
- 210. Siemens ART Forum "PET/CT and New PET Hypoxia Markers in RT Planning Current Concepts and Future Directions" Miami, FL October 1, 2011.
- 211. Congress of Neurological Surgeons 61<sup>st</sup> Annual Meeting. Consensus Session I: Treatment of Metastatic Brain Tumors: What is Standard of Care? – "Risks and Benefits of Whole Brain Radiation for Metastatic Brain Tumors." Washington DC, October 3, 2011.
- 212. Co-moderator in an oral scientific session at ASTRO's 53rd Annual Meeting. Session Name: Head and Neck II: Targeted Biologics, Particle Therapies and Approaches to Reduce Toxicities of Radiotherapy. Miami, FL October 4, 2011
- 213. Linac Radiosurgery 2011 Case Presentations/Discussion. Orlando, FL December 9-11, 2011.
- 214. Linac Radiosurgery 2011 Lung Radiosurgery. Orlando, FL, December 9-11, 2011
- 215. Clinical Perspectives U01-Quantitative Imaging-RTOG Workshop at NCI. December 2011
- 216. Scofield Advanced Oncology Nursing Conference "Why Protons? What's New in Radiation Oncology", Coraville, IA, April 3, 2012.
- 217. AANS Annual Scientific Meeting. Breakfast Seminar, Panelist of Cranial Radiosurgery, Miami, FL, April 17, 2012.

- 218. Mary Greeley Medical Cener Grand Rounds, "Stereotactic Lung Radiothearpy" Ames, IA, April 11, 2012.
- 219. Pioneer Hi-Bred Lunch-N-Learn, "Brain Tumors", Johnston, IA, April 12, 2012
- 220. AANS/ASTRO Stereotactic Radiosurgery Course for Neurosurgery & Radiation Oncology Residents, "Radiosurgery for Acoustic Neuromas", Evanston, IL August 4, 2012
- 221. AANS/ASTRO Stereotactic Radiosurgery Course for Neurosurgery & Radiation Oncology Residents, "Evidence Based Radiosurgery", Evanston, IL August 4, 2012
- 222. ISTRO Annual Meeting "Update on the Proton Therapy Program at Iowa" MERF/UIHC, Iowa City, IA, October 6, 2012. (With Ryan Flynn)
- 223. Moderator RT Imaging Expert Lounge: Siemens Oncology, October 27, 2012, Boston, MA.
- 224. AANS Annual Scientific Meeting Panelist of Cranial Radiosurgery Brain Metastases, New Orleans, LA, May 1, 2013.
- 225. Visiting Professor Medical University of South Carolina (MUSC), August 1-2, 2013 "Radiosurgery for Brain Metastases and More" and "Cancer Imaging and a Look into the Future"
- 226. 2014 Multidisciplinary Head and Neck Cancer Symposium. "Imaging Treatment Response" Scottsdale, AZ, February 20-22, 2014.
- 227. Pediatric Hematology/Oncology Noon Conference Division Educational Conference University of Iowa. "The Future of Cancer Imaging for Response Assessment and Tumor Targeting" February 10, 2014.
- 228. AANS Annual Scientific Meeting Panelist "CNS Radiosurgery Course", San Francisco, CA April 7, 2014.
- 229. NRG Oncology Semiannual Meeting NRG Functional Imaging Working Group "Past, present and future of Quantitative imaging network (QIN)". Chicago, IL. July 11, 2014.
- 230. Visiting Professor University of Michigan. "Quantitative Imaging for Head and Neck Cancer" July 27-28, 2015
- Quantitative Imaging Network Annual Meeting 2016 Challenges & Collaborative Projects (CCP) Session, "QIN CCP Purpose, Process, and Priortization". National Cancer Institute, Bethesda, MD April 11, 2016.
- 232. AACR 2016 Annual Meeting Session Title Informatics Technology for Cancer Research. "A Pipeline for Development and Sharing of Quantitative Image Analysis Tools" New Orleans, LA. April 19, 2016.
- 233. ASTRO 2016 Annual Meeting Panel 3 Advanced Quantitative Imaging for the Radiation Oncologist: Response Assessment and Targeting for Clinical Trials and Practice, A View from the NCI's Quantitative Imaging Network. "An introduction to the Quantitative Imaging Network." "Quantitative imaging-based tools for radiation therapy targeting and response assessment in head and neck cancer". Boston, MA. September, 25, 2016.
- 234. Visiting Professor Georgetown University "Future of Quantitative Imaging in Radiation Oncology" October 21, 2016. Washington DC
- 235. SNMMI 2017 Annual Meeting. "Standardization of Advanced PET/SPECT Data Acquisition and Analysis" Denver, CO. June 14, 2017
- 236. QIN-NCTN Meeting at Alliance Fall 2017 "Respiratory" Chicago, IL November 3, 2017
- 237. NRG Oncology Semi-Annual Meeting Plenary Scientific Session "Quantitative Imaging Network (QIN) presentation" July 13, 2018. Philladelphia, PA
- 238. AAPM Annual Meeting July 29 August 2, 2018 Session Organizer and Speaker for Therapy Scientific Track "Longitudinal Imaging" July 31, 2018. Nashville, TN

- ASTRO 2018 "Future of Quantitative Imaging in Radiation Oncology" San Antonio, TX Oct 22-24, 2018.
- 240. Neurology Grand Rounds "Quantitative Imaging in Cancer Care: New Opportunities" University of Iowa, March 5, 2019.
- 241. NCI Workshop on Artificial Intelligence in Radiation Oncology Morning Session Overview of AI in Medicine and Oncology Session Chair. April 4, 2019.
- 242. 1<sup>st</sup> Annual Radiology Research Retreat. "Lessons Learned from the Quantitative Cancer Imaging Study (NIH U01)". University of Iowa, April 30, 2019.
- 243. SNMMI Annual Meeting Joint SNMMI-ASTRO Session: Individualized Dosimetry for Theranostics. June 24, 2019. Anaheim, CA.
- 244. AAPM Annual Meeting Scientific Symposium Functional Treatment Planning "Functional Imaging Quantitation for Radiation Therapy Planning in H&N Cancer". July 17, 2019. San Antonio, TX.
- 245. Visiting Professor, Oregon Health & Science University. "Translation Research Trials in a Radiation Oncology Department Seminar" Portland, OR. February 25, 2020.
- 246. Roy J. & Lucille A. Carver College of Medicine, University of Iowa, White Coat Ceremony Keynote Speaker. Iowa City, IA August 14, 2020.
- 247. Guest Speaker (virtual), Mayo Clinic Florida Neuroscience-Neurosurgery Lecture Series, Jacksonville, FL. January 25, 2021.

#### Patents

U.S. Patent 6,390,982: Ultrasonic guidance of target structures for therapeutic application Inventors: FJ Bova, SL Meeks, WA Friedman, JM Buatti May 21, 2002

Australian Patent 764,768: Ultrasonic guidance of target structures for medical procedures Inventors: FJ Bova, JM Buatti, WA Friedman, SL Meeks July 15, 2004

### IV. Service

#### Professional Memberships

0	1
1989-present	American Society for Therapeutic Radiation and Oncology
1989-present	Radiation Research Society
1992-1996	American College of Physicians
1992-present	American College of Radiology
1993-2000	American Association for the Advancement of Science
1993-1996	American Society of Clinical Oncology
2001-present	American Society of Clinical Oncology
1993-present	International Stereotactic Radiosurgery Society
1995-present	Pediatric Oncology Group / Children's Oncology Group
1999	Board Member - Stop Children's Cancer Inc., Gainesville, FL
1999-present	University of Iowa Holden Comprehensive Cancer Center
2000-present	Iowa Medical Society
2000-present	Johnson County Medical Society

2000-present	Iowa Chapter of the American College of Radiology, Iowa Society of Therapeutic Radiology and Oncology
2000-present	Society for Neuro-Oncology
2003-present	American Medical Association
2004-present	Radiation Therapy Oncology Group
2009-present	Radiological Society of North America
2007-present	SNM Advanced Molecular Imaging and Therapy

#### Clinical Service

1999–2005	Clinic Director, Department of Radiation Oncology
1999–2002	Lead participant, thoracic oncology service
1999–present	Specialty services in stereotactic radiosurgery and radiotherapy, central nervous system tumors, pediatric malignancy, and head and neck cancer. Began treating patients with extracranial radiosurgery in 2001.
2000–present	Co-Director, Neuro-Oncology Program, The Holden Comprehensive Cancer Center. Established Neuro-Oncology Clinic and Tumor Board in 2003.
2000-2003	Lymphoma service, including total body irradiation
2001-2003	Gynecologic oncology & breast service
2001-2003	Prostate oncology service, including implants

#### **Editorships**

1998–present	Editorial board member, Select Review in Neuro-Oncology
1999–2003	Editorial board member, Neuro-Oncology
2001–present	Editorial board member, Journal of Neuro-Oncology
2006–present	UpToDate® Peer Reviewer in Oncology
2008	Guest Editor, Imaging Decisions MRI [Volume 12, issue 1, 2008]
2009-2011	Editorial board member, International Journal of Radiation Oncology, Biology, Physics
2015-present	Anticancer Research Editorial Board
2021	Guest Editor, Seminars in Radiation Oncology [Volume 31, Number 1, January 2021]

#### Reviewer—Peer-reviewed journals

- 1) International Journal of Radiation Oncology, Biology, Physics
- 2) Practical Radiation Oncology
- 3) Neurosurgery
- 4) Journal of Clinical Oncology
- 5) Cancer Research
- 6) Radiation Research
- 7) Medical Physics
- 8) Journal of Skull Base Surgery
- 9) Archives of Otolaryngology
- 10) Cancer
- 11) Annals of Otolaryngology
- 12) Clinical Cancer Research
- 13) Translational Oncology
- 14) Journal of the American College of Radiology
- 15) CNS Oncology

- 16) Radiation Oncology Investigations
- 17) Gynecology and Obstetrics
- 18) Expert Review of Anticancer Therapy
- 19) Annals of Otology, Rhinology and Laryngology
- 20) Ad Hoc Reviewer, Technology in Cancer Research & Treatment Journal
- 21) Clinical Pharmacology and Therapeutics
- 22) Clinical Medicine & Research
- 23) Technology in Cancer Research and Treatment (Ad hoc reviewer 2006)
- 24) Academic Radiology
- 25) PLOS ONE
- 26) Cancer Letters
- 27) International Journal of Computer Assisted Radiology and Surgery
- 28) JAMA Oncology
- 29) The American Journal of Clinical Oncology
- 30) Journal of Radiosurgery and SBRT
- 31) Tomography
- 32) The Journal of Nuclear Medicine (JNM | JNMT)
- 33) Dovepress Cancer Management and Research
- 34) Clinical Neurology & Neurosurgery

#### Review Panels-NIH Study Section/Grant Reviews

1999	Pediatric Oncology Group of UOI Grant Proposal. Ad Hot Review Panel.
1999	National Institute of Health, NINDS, PO-1 Proposal Ad Hot Review Panel.
2001	Department of Defense—CDRMP Prostate Cancer Research Program. Panel Member on Therapeutic Intervention.
2002	Pediatric Oncology Group, Radiotherapy Section Review Panel, Jacksonville Florida
2003	National Cancer Institute. Advanced Technology QA Center for Radiation Oncology Review Panel
2004–2008	Angoff Meeting for CNS Tumors for ABR
2004-2017	National Institute of Health Loan Repayment Program Review Panel
2004	A Phase I Study of Stereotactic Radiosurgery for Recurrent Pediatric Brain Tumors. Pediatric Brain Tumor Consortium Trial.
2004–2008	Department of Defense - Chairman, Prostate Cancer Research Program Review Panel – Radiation Oncology.
2009	National Cancer Institute Subcommittee G Education Meeting.
2009	National Cancer Institute IRG Committee Ad Hot Reviewer
2009	P30 ARRA Competitive Revision Supplement Applications Review Panel
2005-2007	Department of Defense – Breast Cancer Concept Review Panel Member
2009	P30 CCSG Grant Ad Hot Reviewer-Duke University, Raleigh-Durham, North Carolina
2009-2011	Abstract reviewer ASTRO's Annual Meeting
2009-2011	P30 CCSG Grant Ad Hoc Reviewer (3 institutions)
2010	RC-4 ARRA Review
2010	NCI Site Visit Reviewer-Abramson Comprehensive Cancer Center, University of Pennsylvania, Philadelphia, PA.
2011	NIH / NCI - Ad Hoc Review ZRG1 OTC-C(02) Radiation Therapeutics Study Section

2011	Panel Review SBIR Contract Proposals for "Algorithms for Automated Quantitative Imaging of Tumor Microenvironment" and "Development of Innovative Algorithms/software for Processing and Analysis of in Vivo Images in Oncology".
2012	Focused Ultrasound Foundation Research Award Program
2012	NIH Meeting Panel - ZRG1 OTC-C (05) Radiation Therapeutic Member Conflict SEP
2012	NIH Review Panel – CCOP and MBCCOP
2012	Radiation Therapeutics SEP Study Section ZRG1 OTC (05)
2012	Chair - Panel Review SBIR Contract Proposals for "Algorithms for Automated Quantitative Imaging of Tumor Microenvironment" and "Development of Innovative Algorithms/software for Processing and Analysis of in Vivo Images in Oncology".
2012	NCI-Site Visit Reviewer (P30) – Kimmell Cancer Center at Thomas Jefferson University, Philadelphia, PA.
2013	PAR 11-150 QIN – Reviewer (2) Study Sections-Spring and Fall)
2013	Cancer Center Support Grant P30 Site Visit MD Anderson Houston
2013	Panel Review SBIR Contract Proposals for Topic 306 "Image Processing Algorithm and Software Development for Oncology".
2013	NCI - Site Visit Reviewer, St. Jude Children's Comprehensive Cancer Center, Memphis, TN
2013	Reviewer – NCI R21/R03 Applications, Cancer Therapy (Omnibus) Special Emphasis Pane
2013	NCI IRG Subcommittee A - Parent Committee Meeting (Reporting for the St Jude Children's Research Hospital) Participant
2013	NCI Special Emphasis Panel-Informatics Technology for Cancer Research – PAR 12-286- 289
2013	NCI Special Emphasis Panel Member - PAR-11-150 "Quantitative Imaging for Evaluation of Responses to Cancer Therapies"
2014	Special Emphasis Panel/Scientific Review Group 2014/05 ZCA1 SRLB-J (M1) S. Reviewer
2014	Chair - NCI Review Special Emphasis Panel "Development of Innovative Algorithms for Processing & Analysis of In Vivo Images".
2014	Reviewer – Grant Applications PAR 14-116 "Quantitative Imaging for Evaluation of Response to Cancer Therapies".
2015	Reviewer - Alvin J. Siteman Cancer Center (Washington University) Site Visit Review. St Louis, MO (Cancer Center Support Grant, P30)
2015	Reviewer - (NCI Omnibus R21) and PAR-14-007 "NCI Small Grants Program for Cancer Research (NCI Omnibus R03) Grant Review Study Section
2015	R01 Reviewer-NIH - Health Services Organization and Delivery (HSOD) 2016/01
2015	NCI Lasker Clinical Research Scholars Program
2016	NCI Site Visit Reviewer - Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University, Baltimore, MA
2016	Reviewer – Grant Applications PAR 14-116 "Quantitative Imaging for Evaluation of Response to Cancer Therapies".
2017	Reviewer – Carver Collaborative Pilot Grant (CPG)
2017	Reviewer – U01 Applications PAR-14-116, "Quantitative Imaging for Evaluation of Response to Cancer Therapies"
2017	Reviewer – U01 Applications PAR-16-111 "Cooperative Agreement to Develop Targeted Agents for Use with Systemic Agents Plus Radiotherapy"

2017	NCI Site Visit Reviewer - The Sidney Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA
2017	Clinical and Experimental Therapeutics (CET-3) Review panel for FY17 Breast Cancer Research Program (BCRP) for the development of Defense Congressionally Directed Medical Research Programs (CDMRP). Review Panel Member.
2018	NCI Special Emphasis Panel U24/UG3-UH3/U01 applications - PAR-16-385: Oncology Co-Clinical Imaging Research Resources to Encourage Consensus on Quantitative Imaging Methods and Precision Medicine (U24); PAR-17-128: Quantitative Imaging Tools and Methods for Cancer Therapy Response Assessment (UG3/UH3); PAR-17-129: Quantitative Imaging (QI) Tools and Methods for Cancer Response Assessment (U01)
2018	Reviewer - NIH/ NCI Development of Informatics Technologies for Cancer Research and Management applications (R21, U01, U24, UG3)
2018	Co-Chair Special Emphasis Panel – NCI Program Project Review (P01), Gaithersburg, MD
2018	Review Committee, Cancer Center Support Grant Application, 2 P30 CA015083-45, Mayo Clinic Comprehensive Cancer Center. Rochester, MN.
2019	Site Visit/Review Committee, University of Texas MD Anderson Cancer Center, Cancer Center Support Grant Application, 2 P30 CA016672-43. Review Panel Member.
2019	NCI Program Project Review Panel (P01), Gaithersburg, MD
2019	Site Visit/Review Committee, Dartmouth-Norris Cotton Cancer Center, 2 P30 CA023108- 41, Cancer Center Support Grant (CCSG). Review Panel Member. Lebanon, NH.
2020	NIH – Emerging Imaging Technologies and Applications (EITA) – February 2020
2020	NCI Special Emphasis Panel U24/UG3-UH3 application – March 2020
2020	Review Committee, Karmanos Cancer Center, Detroit, MI. Grant application 2 P30 CA022453-39 May 6 - 8, 2020 Virtual Site Visit.
2021	NIH - Special Emphasis Panel - Metastasis Research Network (RFA-CA-20-029). Feb 25-26, 2021 Virtual Review
2021	NIH - Peer-Review WebEx Meeting: "The Information Technology in Cancer Research" March 30-31, 2021.

#### International Review Panels -

1998	A Randomized Trial of Best Supportive Care with or without Palliative Radiotherapy in Poor Prognosis High Grade Glioma (BR09). Medical Research Council. London, England.
2014	Reviewer – P13-19 Technology Foundation STW Programme Proposal "Radiomics- Non- invasive Stratification of Tissue Heterogeneity for Personalized Medicine – Radiomics STRaTeGy". Netherlands
2015-present	Panel Reviewer – Italian Association for Cancer Research (AIRC)
2016	Reviewer - P13-19 Technology Foundation STW Programme Proposal "Visual technology integrating quantitative patient outcomes to support multidisciplinary clinical decision making". Netherlands

#### Departmental Committees

1992–1993	Quality Assurance Committee, Department of Radiation Oncology University of Arizona
1994	Search Committee—Radiation Biologist, Department of Radiation Oncology, University of Florida
1995	Search Committee—Radiation Physics Faculty, Department of Radiation Oncology, University of Florida

1997–1998	Continual Quality Improvement (CQI) Committee to review faculty research procedures, Department of Radiation Oncology, University of Florida
1997–1998	Search Committee—Physician Faculty, Department of Radiation Oncology, University of Florida
1998–1999	Supervisor Research Office, Department of Radiation Oncology, University of Florida
2000	Quality Assurance Committee, Department of Radiology, University of Iowa
2000	Search Committee—Physicians for UIHC and Clinton, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2000	Search Committee—Program Associate, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2000–2005	Planning Committee, Center of Excellence for Image Guided Radiation Therapy, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001–present	Executive Committee, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001–present	Faculty Search Committee, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001	Search Committee—Grants Administrator, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001	Search Committee—Image Analyst, Nurse Coordinator and Clerk for Neuro-oncology Clinical Initiative, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2003	Search Committee—APN Nursing Supervisor, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2003	Search Committee—Data Manager, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2004	Search Committee—Physics and Electrical Engineering Joint Recruitment, The University of Iowa, Iowa City, Iowa
2014	Linac Replacement Committee, Department of Radiation Oncology, University of Iowa Hospitals & Clinics, Iowa City, Iowa

#### Collegiate Committees

1995–1996	Research Protocol Committee, Shands Cancer Center, University of Florida
1996–1999	Institutional Review Board, University of Florida
1995–1999	Hospice of North Central Florida Liaison
1999–2003	Holden Comprehensive Cancer Center Marketing Advisory Group, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2000–2014	Holden Comprehensive Cancer Center Executive Committee, The University of Iowa Hospitals & Clinics, Iowa City, Iowa
2000–2001	Medical Radiation Protection Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2000	Hospital Radiation Safety Review Group, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001–2005	Clinical Outcomes and Resource Management Advisory Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001	Search Committee—Neurosurgery Chair, University of Iowa Hospitals & Clinics, Iowa City, Iowa

2001–2019	University Hospital Advisory Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001–2010	Senior Executive Leadership Council, University of Iowa, Iowa City, Iowa (Committee Ended)
2001–present	Medical Council, Carver College of Medicine, Iowa City, Iowa
2001–2007	Research Review Committee, Holden Comprehensive Cancer Center, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001–2009	Clinical Cancer Center Advisory Subcommittee (committee discontinued), University of Iowa Hospitals & Clinics, Iowa City, Iowa
2001–2002	UI Healthcare Task Force to Evaluate Length of Stay: DRG 116, Cardiac Catheterization, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2002–2009	Hospital Information Management Subcommittee of Hospital Advisory Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2002–2003	Performance Value and Service Management Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2002–2003	Emergency Medicine Residency Program Planning Group Committee (advisory after 2002), University of Iowa Hospitals & Clinics, Iowa City, Iowa
2003–2009	University of Iowa Health Care Joint Management Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa (Committee Discontinued)
2003–2005	Co-Chair Data Safety Monitoring Board, Holden Comprehensive Cancer Center, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2003	Chair, Search Committee for Associate Dean for Clinical Affairs and Associate Hospital Director/Chief of Medical Operations, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2003	Chair Compensation Plan Committee Carver College of Medicine, University of Iowa, Iowa City, Iowa
2003–2005	Vice-Chair of Management Committee Faculty Practice Plan (elected), University of Iowa, Iowa City, Iowa
2003–2005	Chair, Managed Care Contracting Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2004	Chair, Search Committee for Head of Pediatrics, University of Iowa Hospitals & Clinics, Iowa City, Iowa.
2004	<i>Ad Hoc</i> Committee of the Credentials Subcommittee – Medical Panel, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2004–present	Research Committee, Carver College of Medicine, University of Iowa, Iowa City, Iowa
2004–present	Medical Student Promotions Committee, Carver College of Medicine, University of Iowa, Iowa City, Iowa
2004–2005	Co-Chair, UIHC Strategic Plan Task Force, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2004–2005	Co-Chair Strategic Planning Committee University of Iowa Hospitals and Clinics – Exceptional Outcomes, Iowa City, Iowa
2005–2006	Search Committee Department of Dermatology Head Search, University of Iowa, Iowa City, Iowa
2005	Committee Member, Carver College of Medicine Strategic Planning Committee – Clinical Services, University of Iowa, Iowa City, Iowa

2005	Sharing Agreement Advisory Committee, Carver College of Medicine, University of Iowa, Iowa City, Iowa
2005	Chair, Ad Hoc Promotion Review Committee Emergency Medicine
2005–2006	Search Committee—Division Head, Hematology Oncology, Department of Internal Medicine, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006	Review Committee, Department of Radiology, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006	Ambulatory Care Consultant, Navigant Steering Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006–2008	Baldridge National Quality Award Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006	Search Committee—Chief of Payor Relations – University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006	Search Committee—Chief of Medical Operations, University of Iowa Physicians, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006–2007	Search Committee—Chief Financial Officer, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006–present	Board Member, Iowa Medical Malpractice Insurance Company
2006–2013	University of Iowa Physicians Executive Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2006 - 2008	Chair, University of Iowa Physicians Finance Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2007–2008	Capital Allocations Committee, University of Iowa Hospitals & Clinics and Carver College of Medicine, University of Iowa, Iowa City, Iowa UIHC & COM
2007	Clinical Strategies and Marketing Council, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2007-2013	Advisory Panel, Doris Duke Clinical Research Fellowship Program, Holden Comprehensive Cancer Center, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2007	Baldridge Committee—Subcommittee on HR, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2007	Search Committee—Administrator, Holden Comprehensive Cancer Center, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2007	Search Committee—Director Clinical-Translational Research – Holden Comprehensive Cancer Center, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2007–2010	Internal Advisory Committee, Institute for Clinical Translational Science, The University of Iowa, Iowa City, Iowa
2007-2009	Carver College of Medicine Executive Committee, University of Iowa, Iowa City, Iowa
2008–2012	Holden Comprehensive Cancer Center Associate Directors Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2008	Consultant Member of the Facilities Planning and Construction Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2008–2010	Secretary, Medical Council Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2008–2010	Secretary, UIP Executive Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2008–2012	UIP Finance Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa

2008-2009	Co- Chair, LCME Self Study Section on Institutional Setting
2009	Chair, UIP Bylaws Review Committee, University of Iowa Hospitals & Clinics, Iowa City,
2007	Iowa
2009–present	Capital Budget Guidance Team, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2009–2010	Co-Chair, Search Committee—Chief Quality Officer, University of Iowa Hospitals &
	Clinics, Iowa City, Iowa
2009–2012	Marketing Advisory Council, University of Iowa Hospitals & Clinics, Iowa City, Iowa (Meeting Discontinued)
2008–2013	Holden Comprehensive Cancer Center Advocacy Board, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2009-present	Committee Section on Purchasing and Operating Imaging Equipment and Infrastructure, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2009–2010	Search Committee—Assistant Vice President of Revenue Management., University of Iowa Hospitals & Clinics, Iowa City, Iowa
2010	Beacon Maintenance Oversight Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2010-2012	Vice Chair UIP, Faculty Practice Plan, University of Iowa, Iowa City, Iowa
2010	Chair, Institute for Clinical and Translational Science Internal Advisory Committee, University of Iowa, Iowa City, Iowa
2010-2013	Vice Chair, UIP Finance Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2010-2012	HCCC Biostatistics Core Advisory Committee, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2010-2015	Internal Advisory Committee – University of Iowa T-32 Surgical Training Grant
2011-2015	Clinical Strategies Advisory Group, University of Iowa Hospitals & Clinics, Iowa City, Iowa
2011	Co-Chair, Iowa River Landing Advisory Committee – University of Iowa, Iowa City, Iowa
2011-2012	University of Iowa Health Care Referring Physician Steering Council, Iowa City, Iowa
2011	Chair - 5 Year Review Committee of Department of Otolaryngology, University of Iowa, Iowa City, Iowa
2011-2012	UI Children's Hospital Outpatient Planning Committee, Iowa City, Iowa
2013-2015	UIP Clinical Affairs Subcommittee, University of Iowa, Iowa City, Iowa
2013-2015	University of Iowa Health Care, Physician Work Group (implementation of Epic Patient Access/Revenue Cycle), Iowa City, Iowa
2013-2016	Information Systems Prioritization Committee-Representative, Carver College of Medicine, Iowa City, Iowa
2013-2014	Co-Chair, Diagnostics and Molecular Therapeutics Working Group, Carver College of Medicine, Iowa City, Iowa
2014-2017	Hospital Information Systems Advisory Subcommittee, University of Iowa Hospitals & Clinics, Iowa City, Iowa. Member
2015-present	AYA Cancer Program Steering Committee, Member
2015-2016	Committee to Develop Space Assignment and Management System
2016-2017	LCME Subcommittee Chair – Standard 1-Mission, Planning, Organization and Integrity
2016	Strategic Planning for UI Health Care's Clinical and Education Mission – Subcommittee
2016	Strategic Planning Working Groups regarding Strong Partnerships and Diversified Financial Resources

2016-2017	Member - Search Committee for VPMA and Dean, University of Iowa Carver College of Medicine
2017-2018	UIP Practice Management Committee, Member. Carver College of Medicine, Iowa City, Iowa
2018-present	UI Health Care Enterprise Committee, Member
2018-2020	UIP Committee for Review/Revision of Organizational Agreement, Chair
2018-2020	UI Health Care Enterprise Subcommittee, Funds Flow Evaluation, Member
2018-2019	UI Health Care Enterprise Subcommittee, Clinical FTE Definition, Member
2018-2019	UI Health Care Revenue Cycle Enhancement Project, Member
2018-2019	UI Health Care Enterprise Subcommittee - Payer and Care Delivery Transformation Committee - Co-Chair
2019-present	Chair Clinical Operations Committee, Clinical Systems Committee
2019-2020	Search Committee – Chair & DEO Pediatrics, Stead Family Children's Hospital, University of Iowa Hospitals & Clinics, Iowa City, Iowa.
2019	Chair - Clinical trials - Investment and Improvement Sub-Committee
2019-2020	Member - Compliance Officer Search Committee, University of Iowa Hospitals & Clinics
2019	Member - Chief Growth Officer Search Committee, University of Iowa Hospitals & Clinics
2019-present	Clinical Systems Committee – University of Iowa Hospitals and Clinics – Member
2020	Accountable Care Organization (ACO) Work Group - Member, University of Iowa
2020	COVID Finance Task Force, University of Iowa Hospitals and Clinics – Member
2021	University of Iowa Hospitals & Clinics, Chief of Staff, Nominating Committee, Chair

#### University Committees

1995–1999	University Libraries Committee, University of Florida, Gainesville, Florida
2013-2016	University of Iowa Carver College of Medicine Faculty Senate - Member (elected)
2014 -2015	Office of the VP for Research and Economic Development (OVPRED) Search Committee for Assistant VP for Research: Regulatory Affairs
2016-2018	Member - HRPP Taskforce – Review Human Subjects Research Program, University of Iowa
2019-2020	HRPP Audit Review Taskforce

#### National and International Committees

1995	Chair, Annual Meeting, X-Knife Consortium
1995–1999	Radiation Oncology Subcommittee Cancer Biology, Pediatric Oncology Group
1996–1999	RT Study Coordinator, POG 9432: A Phase II Study of Pre-Irradiation Chemotherapy in Newly Diagnosed Children with Intracranial Ependymoma
1997	<i>Ad Hoc</i> Committee to Develop Criteria for Quality Assurance of 3D-Conformal Radiotherapy, Pediatric Oncology Group
1997–1999	Co-Chair, Stereotactic Radiosurgery Subcommittee, Pediatric Oncology Group Brain Tumor Group
1997–1999	Brain Tumor Core Committee, Pediatric Oncology Group
1998	Study Co-Chair, Eastern Cooperative Oncology Group Trial E6397: A Phase II Trial of Radiosurgery for 1 to 3 Newly Diagnosed Metastases from Renal Cell, Melanoma and Sarcoma.

1998–2000	ASTRO Education Committee
1999–2000	Ependymoma Subcommittee, Children's Oncology Group
1998–2001	American Board of Radiology-Recertification Board Examination Item Writer on Central Nervous System Tumors.
2000–2006	American Association of Neurosurgery Consensus Guidelines for Treatment of Malignant Gliomas
2000	International Society of Stereotactic Radiosurgery-Scientific Program Committee
2003–2006, 201	2 Item writer for ACR Certification Exam, American College of Radiology
2003	Selected to Board for International Society for Stereotactic Radiosurgery (2003-2005), Japan 2003.
2003-2005	Vice President ISTRO (Iowa Society of Therapeutic Radiation Oncology)
2003-2005	International Stereotactic Radiosurgery Society Education Committee.
2003-2005	International Stereotactic Radiosurgery Society Publications Committee.
2003-2005	International Stereotactic Radiosurgery Society Newsletter Committee.
2004-2009	Member, ASTRO Research Evaluation Committee
2004-2010	Member, ASTRO Education Committee
2005	ACR Guidelines for Performance of Stereotactic Radiosurgery
2005-2007	President, Iowa Society of Therapeutic Radiation and Oncology
2005	International RadioSurgery Association Guideline Initiative – Pituitary Adenomas
2010-2011	Chairman, QIN Steering Committee
2010-2012	Examiner, Oral Boards Radiation Oncology, Central Nervous System and Pediatrics
2010	5 Year Review Committee of James Larner MD, Professor and Chair of Radiation Oncology, University of Virginia.
2011-2012	Medical School Curriculum Re-Design Steering Committee
2012-2015	Member, Board of Directors, Commission on Accreditation of Medical Physics Educational Programs (CAMPEP)
2012-2015	Panel Member – ACR Appropriate Criteria® Expert Panel on Radiation Oncology-Brain Metastases, American College of Radiology
2012-2017	Co-Chair, ASTRO – IHERO Leadership Committee
2013-2017	ASTRO – Science Council Steering Committee
2013-2014	Committee Co-Chair, Clinical Trials Working Group, NCI Quantitative Imaging Network
2013-2015	QIN Coordinating Committee
2014-2015	Committee Chair, QIN Clinical Trials Design Development Working Group
2017-2019	SCAROP Executive Committee Member (elected)
2017-present	Member – External Advisory Committee – Moffitt Cancer Center
2018-present	Chair - ASTRO Theranostics Task Force
2018-2020	Member - ASTRO Nominating Committee
2019-2020	Member – NIH/NCI CTAC ad hoc Quantitative Imaging Network (QIN) Working Group
2019	Committee Chair, QIN Clinical Trials Design Development Working Group
2019	Member - SNMMI/ASTRO Education & Training Working Group
2019	Organizing Committee Member - NCI Workshop on Artificial Intelligence in Radiation Oncology. April 4-5, 2019. NCI Shady Grove Campus, Rockville, MD.