

DAVID T. MARSHALL, M.D., M.S.

Department of Radiation Oncology
Medical University of South Carolina
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EDUCATION

- 1991 – 1995 University of Texas Southwestern Medical School, Dallas, Texas
Doctor of Medicine
Class Vice-President, 1991 – 1995
Distinguished Service Award – founder of SCOPE – Southwestern Community Outreach Program – a program placing medical student volunteers into community-based indigent care clinics in Dallas county
- 1989 – 1991 University of Florida, Gainesville, Florida
Master of Science, Nuclear Engineering Sciences – Health Physics
■ United States Department of Energy Operational Health Physics Fellow
- 1985 – 1989 Texas A&M University, College Station, Texas
Bachelor of Science, Nuclear Engineering, cum laude
Texas A&M University Academic Achievement Award, College of Engineering
Distinguished Student Award, Mendon B. Krischer Memorial Scholarship,
Isham & Jack Beasley Scholarship, Tau Beta Pi

PROFESSIONAL EXPERIENCE

- Dec. 2004 – present **Medical University of South Carolina**, Department of Radiation Oncology, Charleston, South Carolina
Associate Professor Jul. 2009 - present
Assistant Professor Dec. 2004 - Jun. 2009
Residency Training Program Director Dec. 2004 - present
Primary clinical interests – Genitourinary and gastrointestinal cancers, prostate brachytherapy, pediatric tumors, melanoma and aggressive skin cancers, sarcomas, image-guided and stereotactic radiotherapy /radiosurgery for CNS and extracranial targets, including development of image-guided and tomotherapy approaches for GU and GI cancers.
Worked successfully with industry leaders to achieve the first clinical application of QuickLink™ device to construct custom built linked seeds in the operating room for prostate brachytherapy.
Train physicians from other institutions on the use of custom built linked seeds with real-time dosimetry for prostate brachytherapy.
Delivered first SIR-Spheres™ Y-90 treatment for liver metastases in the state of South Carolina.

Delivered first Therapsheres™ Y-90 treatment for hepatocellular carcinoma in the state of South Carolina.

MUSC Graduate Medical Education Committee – member

Charleston VA Medical Center Cancer Committee – member

MUSC Cancer Program Committee – member

MUSC Institutional Review Board – member

Research Interests

Vitamin D and its influence on prostate cancer.

Detection and implications of circulating tumor cells in prostate cancer.

Significance of single nucleotide polymorphisms in radiation sensitivity and toxicity.

Clinical research protocol development regarding the treatment of GU tumors, GI tumors, and pediatric malignancies.

Integration of new technologies into patient treatment strategies including stereotactic body radiosurgery.

Development of image-guided radiotherapy and intensity-modulated radiation therapy (IMRT) regimens including tomotherapy for the treatment of prostate cancer, cholangio-pancreatic tumors, and other malignancies of the genitourinary and gastrointestinal systems.

Integration of small molecule therapeutic and nutritional agents with radiotherapy and chemoradiotherapy.

Ongoing research in DNA-radiation chemistry and molecular effects of hypoxia and other variables of the tumor microenvironment on radiotherapy. Involves detailed Monte Carlo computer simulations of radiation physics and chemistry of clinical photon beams used in radiotherapy.

08/03 – 12/04 **Mount Sinai School of Medicine**, Department of Radiation Oncology, New York, New York

Assistant Professor

Head and Neck Cancer Strategic Planning Task Force - member

Clinical research protocol development regarding the treatment of head and neck cancer, CNS tumors, GI tumors, lymphomas, and sarcomas.

Development of stereotactic radiotherapy and intensity-modulated radiation therapy (IMRT) protocols for the treatment of head and neck cancer, CNS tumors, and other intra- and extra-cranial lesions.

Research in DNA-radiation chemistry and molecular effects of hypoxia and other variables of the tumor microenvironment on radiotherapy.

07/00 – 07/03 **University of Medicine and Dentistry of New Jersey – Robert Wood Johnson Medical School**, Department of Radiation Oncology, New Brunswick, New Jersey

Acting Chairman (2003)

Assistant Professor

Member – The Cancer Institute of New Jersey

Member – Scientific Review Board

Member – MD/NP Collaborative Forum Committee
Executive Committee – Neuro-Oncology Tumor Study Group
Member – Breast Tumor Study Group
Member – Gastrointestinal Tumor Study Group

RTOG Principle Investigator for RWJMS

Conducted computational DNA-radiation chemistry and molecular effects of hypoxia and other variables of the tumor microenvironment on radiotherapy.

Development of stereotactic radiotherapy protocols for the treatment of head and neck cancer, CNS tumors, and other intra- and extra-cranial lesions.

07/96 – 06/00 University of Florida College of Medicine, Department of Radiation Oncology, Gainesville, Florida

Resident Physician in Radiation Oncology

Chief Resident 1998 – 2000

2000 Radiological Society of North America Roentgen Resident/Fellow Research Award

1999 University of Florida Medical Alumni Association Outstanding Resident Award

1999 Courtesy appointment - Assistant Research Scientist in the Department of Nuclear and Radiological Engineering

1998 University of Florida Department of Radiation Oncology Talken Award

07/95 – 06/96 Methodist Hospitals of Dallas, Dallas, Texas

Intern in General Surgery

08/91 – 06/95 University of Texas Southwestern Medical Center, Dallas, Texas

Assistant Radiation Safety Officer

Provided health physics support to Radiation Safety Officer, performed radiation dosimetry and risk estimates for diagnostic radiology and experimental radiological procedures, evaluated applications for use of radiation on human subjects for institutional review board, revised institutional radiation safety handbook.

08/89 – 05/91 United States Department of Energy, Gainesville, Florida and Oak Ridge, Tennessee

Operational Health Physics Fellow

Performed research in radiation dosimetry including the development of anthropomorphic phantoms and specific absorbed fractions to be used in internal dosimetry for pregnant women at Oak Ridge Associated Universities, Oak Ridge, Tennessee.

LICENSURES

Medical licenses: Florida, South Carolina, New York (inactive), Georgia (expired), New Jersey (expired)

BOARD CERTIFICATIONS

American Board of Radiology, Radiation Oncology, May 16, 2000

PROFESSIONAL MEMBERSHIPS

Association for Directors of Radiation Oncology Programs – 2005 to present
2009 Vice-President
2010 President
American Society for Therapeutic Radiology and Oncology – 1997 to present
European Society for Therapeutic Radiology and Oncology – 2000 to present
Radiation Research Society – 2002 to present
American Brachytherapy Society – 2003 to present
American Society for Clinical Oncology – 2001 to present
Children’s Oncology Group (COG) – 2002 to present
RT Coordinator for AALL0331 (Standard-risk Pre-B ALL Study)
Southwest Oncology Group (SWOG) – 2006 – present
GI Committee member
Radiotherapy Committee member
South Carolina Medical Association – 2005 to present
Radiological Society of New Jersey – 2001 to 2004
Executive Committee, 2001 to 2003
Radiation Oncology Committee, Co-Chair, 2001- 2003

PUBLIC SERVICE

American Cancer Society’s Charleston Hope Lodge Advisory Work Group, 2005 – present.
Ace Breast Cancer Tennis Tournament, Mount Pleasant, SC, benefiting Hollings Cancer Center – committee member, 2007.
Institutional Review Board (IRB) member, Medical University of South Carolina, 2006 – present.
New Jersey Carrier Advisory Committee – Radiation Oncology Alternate Representative, 2000 – 2004

GRANTS

Vitamin D in Prostate Cancer, VA Achievement Award **Co-Investigator**, October 2009 – October 2012.
Vitamin D in Prostate Cancer, The Cancer Treatment Research Foundation Clinical Investigation Grant, \$420,000, **Co-Investigator (20%)**, October 2007 – October 2009.
Monte Carlo Simulations of Radiation Damage to DNA: Impact of Variations in the Molecular Microenvironment, The Whitaker Foundation Biomedical Engineering Research Grant, \$133,545, **Principal Investigator**, July 2001 - June 2003.
Molecular Effects of Hypoxia in Radiotherapy, University of Florida Opportunity Award, \$83,500, **Co-Principal Investigator**, July 1999 – June 2000.

Quantifying Molecular Effects of Hypoxia in Radiotherapy, American Cancer Society – Florida Division, Pilot Study Grant, \$13,500
Co-Investigator, February 1999 – January 2000.

CLINICAL RESEARCH PROTOCOLS

MUSC HRN-17773: SNP profile of radiosensitivity-relevant genes and adverse radiotherapy reactions in prostate cancer patients. Co-Investigator.

MUSC HRN-17398: Vitamin D and Prostate Cancer - Active Surveillance and Vitamin D for Low Risk Prostate Cancer. Co-Investigator.

MUSC HRN-16228: Detection of Circulating Tumor Cells in Patients with Advanced or Metastatic Hormone Refractory Prostate Cancer. Co-Investigator.

Children's Oncology Group AALL0331: Standard Risk B-precursor Acute Lymphoblastic Leukemia; a phase III national group-wide study. Radiotherapy coordinator – wrote the radiotherapy portion of this national protocol.

MUSC CTO-100783: Phase I Trial of Concurrent Taxotere with Radiation Therapy and Hormonal Therapy for Clinically Localized High Risk Prostate Cancer. Co-Investigator – wrote the radiotherapy portion of this in-house investigator initiated protocol.

MUSC CTO-100918: Phase II Study of Neoadjuvant Gemcitabine/Oxaliplatin and Cetuximab followed by Surgery or Concurrent External Beam Radiation with Capecitabine for Patients with Locally Advanced Unresectable Nonmetastatic Pancreatic Cancer. Co-Investigator – wrote the radiotherapy portion of this in-house investigator initiated protocol.

PUBLICATIONS

A.J. Zauls, H. Clarke, D.T. Marshall. Real-time dosimetry with intra-operatively built custom linked seeds for permanent prostate brachytherapy. *Int. J. Radiat. Biol. Oncol. Phys.* Accepted for publication June 2010.

N.N. Stone, D. T. Marshall J.J. Stone, J. Cesaretti, R.G. Stock. Does Neoadjuvant Hormonal Therapy Improve Urinary Function When Given to Men with Very Large Prostates Undergoing Prostate Brachytherapy? *J. Urology* February 2010; 183:634-640.

C.D. Fuller, J. Nijkamp, C.R.N. Rasch, L.A. Kachnic, P. Okunieff, S.J. Wang, D.T. Marshall, A.W. Katz, B.D. Smith, C.R. Thomas, on behalf of the Radiation Therapy Committee of the Southwest Oncology Group (SWOG); Impact of rectal cancer target volume consensus atlas implementation in the cooperative group setting: Preliminary results from a prospective randomized double-blind pilot study. Accepted for publication: *Int. J. Radiat. Biol. Oncol. Phys.* Nov. 2009.

J.C. Picard, A. Golshayan, D.T. Marshall, K.J. Opfermann, T.E. Keane. The Multi-disciplinary Management of High-risk Prostate Cancer. In press, August, 2009, *Urologic Oncology: Seminars and Original Investigations*.

- D.T. Marshall. Esophageal Cancer : Principles and Practice. Book review. *Int. J. Radiat. Oncol. Biol. Phys.* 2009, 75(4):1274.
- D.T. Marshall, C. Thomas. Anal Canal Carcinoma. *Oncol Reviews* 2009 Jan;3(1):27-40.
- J. M. Watkins, D.T. Marshall, S. Patel, P. Giglio, A.E. Herrin, E. Garrett-Mayer, J.M. Jenrette, III. High-Dose Radiotherapy to 78 Gy With or Without Temozolomide for High Grade Gliomas., *J. Neurooncol.* 14 January 2009.
- B. Aydogan, W.E. Bolch, S.G. Swarts, J.E. Turner, and D.T. Marshall. Site-specific water radical attack to the base moiety of DNA via Monte Carlo simulations. *Radiat Res.* 2008 Feb;169(2):223-31.
- M.C. Mitas, U.B. Chaudhary, D.T. Marshall, A.M. Graham, L.H. Ambrose, S. Gattoni-Celli. Detection of Circulating Tumor Cells in the Peripheral Blood of Patients with Androgen-Independent, Advanced or Metastatic Prostate Cancer. *Am J Hematol.* 2008 Jan;83(1):87.
- D.T. Marshall. Options and recent advances in permanent brachytherapy for prostate cancer. *Can. J. Urol.*; 2007 Dec; 14(supp. 1):28-31.
- J.H. Brashears, S. O, K. Morgan, A.J. Montero, Marshall D.T. Management of a large, exophytic rectal adenocarcinoma with concurrent chemoradiation, surgery, and adjuvant concurrent hyperfractionated chemoradiation. *Cancer Ther.*; 2007; 5:261-267.
- Gillespie M.B., Marshall D.T., Day T.A., Mitchell A.O., White D.R., Barredo J.C. Pediatric rhabdomyosarcoma of the head and neck. *Curr. Treat. Options Oncol.* 2006 Jan;7(1):13-22.
- D.T. Marshall, R.J. Amdur, M.T. Scarborough, N.P. Mendenhall, W.W. Virkus. Stage IE Primary non-Hodgkin's Lymphoma of Bone. *Clinical Orthopaedics and Related Research*; 2002; (405): 216-222.
- B. Aydogan, D.T. Marshall, S.G. Swarts, J.E. Turner, A.J. Boone, N.G. Richards, and W.E. Bolch. Site-specific OH attack to the sugar moiety of DNA: A comparison of experimental data and computational simulation. *Radiation Research*; 2002; (157): 38-44.
- W.W. Virkus, D.T. Marshall, W.F. Enneking, M.T. Scarborough. Tumor Biology: The Effect of Contaminated Surgical Margins Revisited. *Clinical Orthopaedics and Related Research*; 2002; (397): 89-94.
- M.G. Stabin, E. E. Watson, M. Cristy, J. C. Ryman, K. F. Eckerman, J. L. Davis, D.T. Marshall, M. K. Gehlen. Mathematical Models and Specific Absorbed Fractions of Photon Energy in the Nonpregnant Adult Female and at the End of Each Trimester of Pregnancy. Oak Ridge National Laboratory report ORNL/TM-12907, May 1995.
- W. E. Bolch, K. L. Peddicord, P. Nelson, D. Marshall, and D. Busche. A Radiological Assessment of Nuclear Power and Propulsion Operations Near

BOOK CHAPTERS

J.A. Fortney, A.J. Zauls, D.T. Marshall. Brachytherapy for prostate cancer. In: Glenn's Urologic Surgery, 7th edition, 2009. Wolters Kluwer.

ABSTRACTS

John A Fortney MD, Jessica Hannah, Andrew D Hardie MD, David T Marshall MD. Comparison of Intrafractional Prostate Motion with and without Endorectal Balloon Using Cine-MRI. Abstract, accepted to the 92nd Annual Meeting of the American Radium Society, Cancun, Mexico. May, 2010.

C.D. Fuller, J. Nijkamp, C.R.N. Rasch, L.A. Kachnic, P. Okunieff, S.J. Wang, D.T. Marshall, A.W. Katz, B.D. Smith, C.R. Thomas, on behalf of the Radiation Therapy Committee of the Southwest Oncology Group (SWOG); Impact of rectal cancer target volume consensus atlas implementation in the cooperative group setting: Preliminary results from a prospective randomized double-blind pilot study. ASCO/ASTRO 2010 Gastrointestinal Cancers Symposium, Orlando, Florida, January 22-24 2010.

D.T. Marshall, P. O'Brien, B. Hoffman, E. Garrett-Mayer, U. Chaudhary, A. Brisendine, B.D. Jones, L.E. Terwilliger, K. Cranford, N. Esnaola. IMRT to Reduce Toxicity in Chemoradiation for Locally Advanced Pancreatic Cancer - Preliminary Results of a Phase II Trial. International Journal of Radiation Oncology * Biology * Physics 1 November 2009 (Vol. 75, Issue 3, Supplement, Pages S267-S268)

L. Cannick, D.T. Marshall, S.J. Savage, L.H. Ambrose, S. Gattioni-Celli Daily Vitamin D Supplementation in the Active Surveillance of Low-risk Prostate Cancer. International Journal of Radiation Oncology * Biology * Physics 1 November 2009 (Vol. 75, Issue 3, Supplement, Page S346)

J.A. Fortney, A.S. Kraft, A. Golshayan, D.T. Marshall, Phase I Trial of Androgen Deprivation, Weekly Docetaxel and Concurrent Intensity Modulated Radiation Therapy (IMRT) in the Treatment of High-risk Prostate Adenocarcinoma. International Journal of Radiation Oncology * Biology * Physics 1 November 2009 (Vol. 75, Issue 3, Supplement, Page S329)

Zhu, Marshall, Jenrette, et al. Association between rectal toxicity induced by radiotherapy and SNPs of radiosensitivity-relevant genes in prostate cancer patients. July 2009 AACR/CSCC Annual Meeting.

K. J. Opfermann, L. Terwilliger, B. Jones, J. H. Brashears, III, D.T. Marshall. Dosimetric Comparison of IMRT vs. Helical Tomotherapy for Pancreatic Cancer. Poster presentation at the 91st Annual Meeting of the American Radium Society, Vancouver, British Columbia, April 2009.

J. A. Fortney, S.L. Cooper, D.T. Marshall. Intrafractional Pancreatic Head Motion during Neoadjuvant Pancreatic Radiotherapy. Poster presentation at the 91st Annual Meeting of the American Radium Society, Vancouver, British

Columbia, April 2009.

- U. B. Chaudhary, V. Gudena, S. Cole, P. O'Brien, A. J. Montero, D. T. Marshall, W. Amy, B. Hoffman, E. Garret-Mayer, N. Esnaola. Preliminary results of a phase II neoadjuvant trial with gemcitabine/oxaliplatin and cetuximab followed by surgery or concurrent intensity modulated radiotherapy (IMRT) with capecitabine for patients with borderline resectable and unresectable nonmetastatic pancreatic cancer. Poster presentation at the ASCO/ASTRO 2009 Gastrointestinal Cancers Symposium, San Francisco, California, January 2009.
- J.A. Fortney, J.M. Watkins, D.T. Marshall. Intrafractional prostatic fossa motion in biochemical relapsed prostate cancer using a rectal balloon. Poster presentation at the 51st annual meeting of the American Society for Therapeutic Radiology and Oncology, Boston, Massachusetts, September 2008.
- A.J. Zauls, H. Clarke, M.S. Ashenafi, J.M. Watkins, D.T. Marshall. Permanent prostate brachytherapy using real-time dosimetry combined with intraoperatively built custom links (IBCL) of seeds provides equivalent dosimetric results as traditional gun applicators. Poster presentation at ABS/GEC-ESTRO World Congress of Brachytherapy, Boston, Massachusetts, May, 2008.
- U. B. Chaudhary, V. Gudena, D. L. Milling, P. O'Brien, A. J. Montero, J. Brashears, D. Marshall, B. Hoffman, E. Garrett-Mayer, N. Esnaola. Preliminary results of a phase II neoadjuvant trial with gemcitabine/oxaliplatin and cetuximab followed by surgery or concurrent intensity modulated radiation therapy (IMRT) with capecitabine for patients with borderline resectable and unresectable nonmetastatic pancreatic cancer. 2008 ASCO Annual Meeting. *J Clin Oncol* 26: 2008 (May 20 suppl; abstr 15506).
- U.B. Chaudhary, V. Gudena, D.L. Milling, P. O'Brien, A.J. Montero, J. Brashears, D. Marshall, B. Hoffman, E. Garrett-Mayer, N. Esnaola. Preliminary results of a phase II neoadjuvant trial with gemcitabine/oxaliplatin and cetuximab followed by surgery or concurrent intensity modulated radiation therapy (IMRT) with capecitabine for patients with borderline resectable and unresectable nonmetastatic pancreatic cancer. 2008 ASCO/ASTRO Gastrointestinal Cancer Symposium, Orlando, Florida, January 25-27, 2008.
- J. Brashears, D.T. Marshall, U. Chaudhary. Preliminary Results of a Phase II Study of Induction Gemcitabine/Oxaliplatin (GEMOX) and Cetuximab Followed by Surgery or Concurrent Intensity Modulated Radiation Therapy (IMRT) and Capecitabine for Locally Advanced Pancreatic Cancer. Oral presentation at RSNA 93rd Scientific Assembly and Annual Meeting, Chicago, Illinois, November 25 - 30, 2007.
- D.T. Marshall, M.C. Mitas, S. Gattoni-Celli. Detection of Circulating Tumor Cells in the Peripheral Blood of Patients with Androgen-Independent, Advanced or Metastatic Prostate Cancer. *Int J Rad Oncol Biol Phys*. November 1, 2007, Vol. 69, Issue 3 (Supplement), S618-S619.
- B. Aydogan, W.E. Bolch, S.G. Swarts, J.E. Turner, and D. T. Marshall. Monte

Carlo simulations of site-specific radical attack to DNA bases. 13th International Congress of Radiation Research, San Francisco, California, July 8-12, 2007.

M. Munley, D. Marshall, C. Hampton. Simultaneous Use of an Implanted Fiducial System and an Endorectal Balloon for the Treatment of Prostate Cancer. American Association of Physicists in Medicine annual meeting, Minneapolis, Minnesota, July 22, 2007.

J. Brashears, D.T. Marshall. Preliminary clinical outcomes with concurrent intensity modulated radiation therapy (IMRT) and capecitabine for pancreatic and cholangiocarcinomas (Abstr.) Presented at the 89th Annual meeting of the American Radium Society, Amsterdam, May 5-9, 2007.

J. Brashears, D.T. Marshall. Tolerability of concurrent intensity modulated radiation therapy (IMRT) and capecitabine for pancreatic and cholangiocarcinomas (Abstr.) 2007 Gastrointestinal Cancer Symposium, Orlando, Florida, Jan. 19-21, 2007.

J.M. Watkins, D.T. Marshall, D. Sinha, J.M. Jenrette. Conformal High-Dose Radiotherapy (HD-CRT) to 78 Gy for High Grade Primary CNS Neoplasms: Toxicity, Outcomes, and Prognostic Factors. (Abstr.) Radiological Society of North America, 2006 Annual Meeting, Chicago, Illinois, Nov. 26 – Dec. 1, 2006.

D.T. Marshall. Minimal Acute Toxicity with Intensity Modulated Radiotherapy (IMRT) and Capecitabine in the Treatment of Pancreatic Cancer and Cholangiocarcinomas. Oral presentation at the 88th Annual meeting of the American Radium Society, Maui, Hawaii, May 7, 2006.

D. T. Marshall, N.N. Stone, J.J. Stone, J. Cesaretti, R.G. Stock. Hormonal therapy reduces the risk of post-implant urinary retention in symptomatic prostate cancer patients with glands larger than 50 cc. (Abstr.) Proceedings: 46th Annual Meeting of the American Society for Therapeutic Radiology and Oncology, Volume 60, Issue 1 (Supplement) (September 2004).

B. Aydogan, W.E. Bolch, S.G. Swarts, J.E. Turner, D.T. Marshall. Computational modeling of radiation interaction and chemistry with a 167-base pair segment of DNA and comparison with experimental results. (Abstr.) 46th annual meeting American Association of Physicists in Medicine, Pittsburgh, Pennsylvania, July 25-29, 2004.

B. Aydogan, W.E. Bolch, S.G. Swarts, J.E. Turner, D.T. Marshall. Site-specific water radical attack to the base moiety of DNA via Monte Carlo simulations. (Abstr.) Program & Abstracts: 51st Radiation Research Society Annual Meeting, St. Louis, Missouri, April 24-27, 2004.

B. Aydogan, W.E. Bolch, S.G. Swarts, J.E. Turner, D.T. Marshall. A method to improve efficiency in a computational method of near-approach DNA radiation chemistry simulations. (Abstr.) 12th International Congress of Radiation Research, Brisbane, Australia, August 17 – 22, 2003.

B. Aydogan, W.E. Bolch, S.G. Swarts, J.E. Turner, N.G. Richards, A.J. Boone,

D.T. Marshall. Computational Modeling of site-specific water radical attack to the base moiety of DNA. (Abstr.) Program & Abstracts: 49th Radiation Research Society & 20th North American Hyperthermia Society Annual Meeting, Reno, Nevada, April 20-24, 2002.

P. Kumar, R. Weiss, M. Todd, K. Cummings, D.T. Marshall, R. Knee, R. DiPaola. The Safety and Feasibility of Concurrent Docetaxel and 3-D Conformal Radiation Therapy (3-D CRT) in High Risk Localized Adenocarcinoma of the Prostate: Preliminary Results of a Phase I Trial. (Abstr. 1057) Proceedings: 44th Annual Meeting of the American Society for Therapeutic Radiology and Oncology, Volume 54, Issue 2 (Supplement) (October 2002).

B. Aydogan, D.T. Marshall, S. Swarts, J. Turner, B. Morabito, W. Bolch. Consideration of steric hindrance in Monte Carlo modeling of OH radical attack on DNA. (Abstr.) Program & Abstracts: 48th Radiation Research Society & 19th North American Hyperthermia Society Annual Meeting, San Juan, Puerto Rico, April 21-25, 2001.

D.T. Marshall, N.P.Mendenhall, R.B.Marcus. Brain Stem Gliomas: Long-Term Survival and Toxicity Outcome at the University of Florida. (Abstr.) *Int. J. Radiat. Oncol. Biol. Phys.* 1999; (45):3(Suppl.): 323.

B. Aydogan, W.E. Bolch, B.J. Morabito, D.T. Marshall, K.E. Wilson. Predicting Radiation Damage at the Molecular Level with Applications to Radiation Therapy. (Abstr.) *Health Phys.* 1999; (76):6(Suppl. 3): S192.

B.J. Morabito, W.E. Bolch, D.T. Marshall, B. Aydogan, K.E. Wilson. Radiation-Induced Breaks in Plasmid DNA. (Abstr.) *Health Phys.* 1999; (76):6(Suppl. 3): S114.

D.T. Marshall, N.P.Mendenhall, R.B.Marcus. Brain Stem Gliomas: Long-Term Survival and Toxicity Outcome at the University of Florida. (Abstr.) *Int. J. Radiat. Oncol. Biol. Phys.* 1999; (45):3(Suppl.): 323.

D.T. Marshall, W. E. Bolch, W. A. Tome, J. M. Buatti. Redefining Dose: A Monte Carlo-Based Microdosimetry System to Quantify the Radiobiological Impact of Variations in the Tumor Microenvironment. (Abstr.) *Int. J. Radiat. Oncol. Biol. Phys.* 1998; (42):1(Suppl. 1): 242.

E.E.Watson, M.G.Stabin, K.F. Eckerman, M. Cristy, J.C. Ryman, J.L. Davis, D. T. Marshall. Mathematical Phantoms and Specific Absorbed Fractions for the Adult Female at Three, Six, and Nine Months of Pregnancy (Abstr.) In: Proceedings of the Twenty Fourth Midyear Topical Meeting of the Health Physics Society, Raleigh, North Carolina, January 21-24, 1991, p. 216.

PRESENTATIONS

D.T. Marshall. "ADROP Update." Invited presentation at 2010 SCAROP meeting, Washington, D.C., March, 2010.

D.T. Marshall. "Management of High-risk Prostate Cancer." Visiting professorship, University of Florida, Shands Cancer Center, Department of

Radiation Oncology, and the University of Florida Proton Therapy Institute, March 9-10, 2009.

- D.T. Marshall. "High Risk Prostate Cancer – What is standard of care?" MUSC Urology Grands Rounds, October 14, 2008.
- D.T. Marshall. "Radiotherapy for Mycosis Fungoides." MUSC Dermatology Grands Rounds, October 10, 2008.
- D.T. Marshall and S. Gattoni-Celli. "Circulating Tumor Cells and Vitamin D in Prostate Cancer." MUSC Urology Grand Rounds, June 5, 2007.
- D.T. Marshall. "The role of radiotherapy in the treatment of GI malignancies." MUSC Gastroenterology Grand Rounds, October 10, 2006.
- D.T. Marshall, "Radiation Oncology for Prostate Cancer," Us Too! Prostate Cancer Support Group, Charleston, SC, multiple presentations, 2005-present.
- D.T. Marshall, "Radiation Oncology in the Management of Head and Neck Cancer," Mount Sinai Department of Otolaryngology Grand Rounds, July, 14, 2004
- D.T. Marshall, "Computational Modeling of DNA Damage in Radiotherapy," invited lecturer, NYU Department of Radiation Oncology, May 16, 2003.
- D.T. Marshall. "Radiotherapy in the Treatment of Breast Cancer." Raritan Bay Medical Center, Breast Tumor Conference, May 1, 2002.
- D.T. Marshall, B. Aydogan, J. Turner, S. Swarts, A. Boone, N. Richards, W. Bolch. "Computational modeling of $\cdot\text{OH}$ interactions with a 167-base pair segment of DNA and comparison with experimental results", 7th International Workshop on Radiation Damage to DNA, Orléans, Nouan le Fuzelier, France, September 2 - 7, 2001.
- B. Aydogan, D.T. Marshall, J. Turner, S. Swarts, A. Boone, N. Richards, W. Bolch. "Consideration of Steric Hindrance in Monte Carlo Modeling of OH Radical Attack on DNA", 7th International Workshop on Radiation Damage to DNA, Orléans, Nouan le Fuzelier, France, September 2 - 7, 2001
- D.T. Marshall, "Stage IE Primary Lymphoma of Bone: The University of Florida Experience", The 30th Annual University of Florida Radiation Oncology Clinical Research Seminar, Gainesville, Florida, March 2-4, 2000.
- D.T. Marshall, "Computational Modeling of DNA Damage in Radiotherapy", The 30th Annual University of Florida Radiation Oncology Clinical Research Seminar, Gainesville, Florida, March 2-4, 2000.
- D.T. Marshall, "Total Skin Electron Irradiation", The 11th Annual Radiation Oncology Therapists' Seminar, Gainesville, Florida, March 3-4, 2000.
- D.T. Marshall, "Quantifying the Molecular Effects of Hypoxia in Radiotherapy", Biomedical Engineering Seminar Series, University of Florida, Gainesville,

Florida, February 23, 1999.

D.T. Marshall, "Brain Stem Gliomas – 33 Years of Experience at the University of Florida: Outcome and Long-term Sequelae", The 29th Annual University of Florida Radiation Oncology Clinical Research Seminar, Gainesville, Florida, March 11-13, 1999.

D.T. Marshall, "Microdosimetry in Radiotherapy: Is the Dose What You Think It Is?" The 28th Annual University of Florida Radiation Oncology Clinical Research Seminar, Gainesville, Florida, January 22-24, 1998.

D.T. Marshall, "Pediatric Soft Tissue Sarcoma (Nonrhabdomyosarcoma): Results of Combined Surgery and Radiotherapy at the University of Florida." The 27th Annual University of Florida Radiation Oncology Clinical Research Seminar, Orlando, Florida, February 6-8, 1997.

D.T. Marshall and M. G. Stabin. "Mathematical Phantom and Specific Absorbed Fractions for the Adult Female at Six Months of Pregnancy." 1991 Annual Meeting of the Health Physics Society, Washington, D.C., July 21-25, 1991.

TEACHING EXPERIENCE

Radiation Oncology Resident Training Program Director, Medical University of South Carolina. Manage and coordinate the residency program, including clinical and didactic resident instruction and training, Dec. 2004 – present.

Small Group Leader, Physical Diagnosis course for first-year medical students, Medical University of South Carolina, Spring 2007.

Small Group Leader, Introduction to Medical Ethics course for second-year medical students, Medical University of South Carolina, Fall 2005 – 2008.

Participation in the instruction of Medical Students at Medical University of South Carolina during elective/selective rotations in Radiation Oncology, Dec. 2004 – present.

Radiation Oncology Lecture Series for Hematology/Oncology Fellows at MUSC

- Radiotherapy for prostate cancer. March 2010.

Radiation Oncology resident instruction in clinical radiation oncology at the Department of Radiation Oncology of the Mount Sinai School of Medicine, 2003 – 2004.

Department of Otolaryngology Grand Rounds at Mount Sinai Medical Center

- Intensity-Modulated Radiotherapy (IMRT) for head and neck cancer, July 14, 2004

Lecture for Otolaryngology residents at Mount Sinai Medical Center

- Post-operative radiotherapy for head and neck cancer, July 21,

2004

Lecture for Ophthalmology residents at Mount Sinai Medical Center

- Radiation-induced complications of the optic apparatus, September 15, 2004.

Case-Based Learning Course for first-year medical students at UMDNJ-Robert Wood Johnson Medical School

- “Brain tumor” case presentation with patient, Jan. 30, 2002.
- “Seizure” case presentation with patient, March 12, 2003.

Participation in the instruction of Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School during their 4-week rotations in Radiation Oncology, July 2000 – July 2003.

Radiation Oncology Lecture Series for Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School

- “Post-mastectomy Radiotherapy” lecture to Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School, Oct. 18, 2001.
- “High Grade Gliomas” lecture to Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School, Sept. 20, 2001
- “Anaplastic Astrocytoma and Glioblastoma Multiforme” lecture to Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School, Oct. 10, 2000.
- “Breast Cancer and Radiotherapy” lecture to Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School, Sept. 15, 2000.
- “The Role of Radiotherapy in the Management of Non-Hodgkin’s Lymphomas” lecture to Hematology/Oncology Fellows at UMDNJ-Robert Wood Johnson Medical School, May 15, 2003.

Participation in the instruction of Medical Students at UMDNJ-Robert Wood Johnson Medical School during elective rotations in Radiation Oncology, July 2000 – July 2003.

GRADUATE SCHOOL MENTORING

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B.J. Morabito – Master’s committee, University of Florida
K.E. Wilson – Master’s committee, University of Florida

JOURNAL REVIEWER

International Journal of Radiation Oncology Biology Physics
Urologic Oncology
American Journal of Oncology
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