

## **CURRICULUM VITAE**

June 11, 2007

Name Danny Y. Song, M.D.

### Current Appointments

University: Assistant Professor, Radiation Oncology and Molecular Radiation Sciences  
The Johns Hopkins University School of Medicine

Joint Appointment, Department of Urology  
The Johns Hopkins University School of Medicine

Joint Appointment, Department of Oncology  
The Johns Hopkins University School of Medicine

### Addresses

Office: Sidney Kimmel Comprehensive Cancer Center  
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Suite 1440  
Baltimore, Maryland 21231-1000

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### Education and Training

1992 B.A., Southern Adventist University, Chattanooga, TN

1996 M.D. Medical College of Georgia, Augusta, GA

1996-97 Internship, Sinai Hospital of Baltimore, Internal Medicine, Baltimore, Maryland

1997-01 Residency, Radiation Oncology, The Johns Hopkins Hospital, Baltimore, Maryland

2000-01 Chief Resident, Radiation Oncology, The Johns Hopkins Hospital, Baltimore, Maryland

### Professional Experience

2001-7/2004 Assistant Professor, Virginia Commonwealth University, Department of Radiation Oncology, Richmond, VA

- 10/2004-present      Joint Appointment, Department of Oncology, Johns Hopkins University School of Medicine, Baltimore, MD
- 10/2004-present      Joint Appointment, Department of Urology, Johns Hopkins University School of Medicine, Baltimore, MD
- 7/2004-present        Assistant Professor of Radiation Oncology and Molecular Radiation Sciences, The Johns Hopkins University School of Medicine, Baltimore, MD

### **Educational Activities**

#### **Editorial Activities**

- Reviewer (ad hoc), *Urology*, Elsevier Publishers.
- Reviewer (ad hoc), *American Journal of Clinical Oncology*, Lippincott Williams & Wilkins Publishers.
- Reviewer (ad hoc), *The Prostate*, Wiley-Liss Publishers.
- Reviewer (ad hoc), *International Journal of Radiation Oncology, Biology, and Physics*, Elsevier Publishers.

#### **Clinical Activities**

##### Certification

- 2001-2011      Board certification in Radiation Oncology, American Board of Radiology
- 2005          Virginia Board of Medicine
- 2005          Maryland Board of Physicians
- present      Maryland Dept of Health and Mental Hygiene, Division of Drug Control
- present      Drug Enforcement Administration license

##### Service Responsibilities

- Genitourinary radiation oncology
- Thoracic radiation oncology
- Prostate brachytherapy

#### **Organizational Activities**

##### Departmental Administrative Appointments

- 2005-2007      Member, SKCCC Clinical Research Review Committee
- 2005-2007      Member, SKCCC MD Logix development oversight committee
- 2005-present    Member, Johns Hopkins Hospital Clinical Quality Improvement committee

2005-present Institutional principal investigator, Radiation Therapy Oncology Group

### Professional Societies

1995-present Alpha Omega Alpha Medical Honor Society  
1997-present American Society for Therapeutic Radiology and Oncology  
2002-present American College of Surgeons Oncology Group  
2004-present American Brachytherapy Society

### Recognition

#### Awards, Honors

2002 Richmond magazine, "Best Pediatric Doctors in Richmond," March 2002 issue  
2002 Faculty Teaching Award, VCU Department of Radiation Oncology  
2002 Teacher of the Year Award, Association of Residents in Radiation Oncology  
2006 NIH 2nd Biennial Career Development Workshop to Increase Diversity in Research Funding Workshop

#### Invited Lectures

2002 "Extracranial stereotactic radioablation: future directions." Niagara Falls, Ontario, Canada.  
2003 Refresher Course: "Extracranial Stereotactic Radiosurgery", American Association of Physics in Medicine 45<sup>th</sup> annual meeting, San Diego CA.  
2003 "Extracranial stereotactic radiotherapy: methods, outcomes, and future directions", New England chapter of AAPM, Boston MA.  
2003 "Stereotactic radiosurgery: improving patient survival while decreasing toxicity". 4<sup>th</sup> Biennial Cancer Rehab Conference, Richmond VA.  
2004 "Stereotactic radiosurgery: indications and outcomes". Virginia Heart Institute visiting lecturer series, Richmond VA.  
2004 "Current status of cranial and extracranial stereotactic radiosurgery". Anthem BCBS Visiting Lecturer Series.  
2004 "Extracranial Stereotactic Radiation Therapy of Lung Metastases – Method and Results". 3<sup>rd</sup> Annual conference on stereotactic body radiation therapy, Indianapolis IN.  
2004 Refresher Course: "Stereotactic Body Radiotherapy Part II: clinical results and rationale". American Association of Physics in Medicine 46<sup>th</sup> annual meeting, Pittsburgh PA.  
2005 "The Role of Radiotherapy in Locally Advanced Prostate Cancer". Oncology World Congress, New York NY.

- 2006 “Stereotactic Body Radiation For Early Stage Non-Small Cell Lung Cancer”. 14<sup>th</sup> International Conference on Screening for Lung Cancer, Silver Spring MD
- 2006 “The Radiation Oncologist’s approach to skeletal-related events, including palliation of pain”. Amgen 2006 Cancer-Induced Bone Disease: Oncology RML Regional Training Sessions, Baltimore, MD.
- 2006 “Salvage Radiation Therapy”. Panel discussion, 64<sup>th</sup> Annual Meeting, Mid-Atlantic Section of the American Urological Association, Washington DC.
- 2007 “Contouring of the prostate and implications for TomoTherapy”. TomoTherapy Contouring and Anatomy Seminar, Baltimore, MD.

## **Research Activities**

### Extramural Sponsorship

#### Active

Principal Investigator, Department of the Army Prostate Cancer Research Program PC050042. 9/30/05 – 9/30/08. Awarded \$271,032. “*Pilot study of image guided, dynamic dosimetry for permanent interstitial prostate brachytherapy*”.

Consultant, University of British Columbia 1R21CA120232-01. 6/1/06 – 5/31/07. Awarded \$36,000. “*Visualization and real-time dosimetry for prostate brachytherapy using ultrasound*”.

Co-Investigator, NIH 2R44CA099374-02A1. 5/01/06 – 5/01/09. Awarded \$606,912. “*Quantitative C-arm Fluoroscopy in Prostate Brachytherapy.*”

#### Pending

Co-Investigator, NIH R01 EB006435-01A1. 7/01/07-6/30/11. Awarded (~\$2,500,000). “*Steering Flexible Needles in Soft Tissue.*”

#### Completed

Co-Investigator, Prostate Cancer Foundation. 1/01/06 – 12/31/06. Awarded \$100,000. “*Robotic MRI-Guided Prostate Interventions.*”

CR Bard Foundation Grant. 9/01/04 – 8/30/06. Awarded \$40,000. “*Prostate Brachytherapy Research and Education Initiative.*”

## **Journal Publications**

1. Munn DH, Beall AC, **Song DY**, Wrenn RW, Throckmorton DC: Activation-induced apoptosis in human macrophages: developmental regulation of a novel cell death

- pathway by macrophage colony-stimulating factor and interferon. *J Exp Med* 181(1):127-36, 1995.
2. **Song DY**, Williams JA: Fractionated stereotactic radiotherapy for treatment of acoustic neuromas. *Stereotact Funct Neurosurg* 73(1-4):45-9, 1999.
  3. DeWeese TL, **Song DY**: Current evidence for the role of combined androgen suppression and radiation in the treatment of adenocarcinoma of the prostate. *Urology* 55(2):169-74, 2000.
  4. **Song DY**, Lawrie WT, Abrams RA, Kafonek DR, Bayless TM, Welsh JS, DeWeese TL: Acute and late radiotherapy toxicity in patients with inflammatory bowel disease. *Int J Radiat Oncol Biol Phys* 51(2):455-459, 2001.
  5. **Song DY**, Travis TL, Ramakrishnan V, Harrison R, DeWeese TL: Salvage Radiotherapy for Rising or Persistent PSA Following Radical Prostatectomy. *Urology* 60(2):281-287, 2002.
  6. **Song DY**, Jones RJ, Welsh JS, Haulk TL, Korman LT, Noga S, Goodman S, Herman M, Mann R, Marcellus D, Vogelsang G, Ambinder RF, Abrams RA: Phase I Study of Escalating Doses of Low-dose Rate, Local Regional Irradiation Preceding Cy-TBI for Patients with Chemotherapy Resistant, Non-Hodgkin's or Hodgkin's Lymphoma. *Int J Radiat Oncol Biol Phys* 57(1):166-171, 2003.
  7. **Song DY**, Kavanagh BD, Benedict SH, Schefter TA: Stereotactic Body Radiation Therapy: rationale, techniques, application, and optimization. *Oncology* (Williston Park), 18:1419-30, 2004.
  8. **Song DY**, Benedict SH, Cardinale RM, Chung TD, Chang MG, Schmidt-Ullrich R: Stereotactic Body Radiation Therapy of Lung Tumors: preliminary experience using normal tissue complication probability-based dosing. *Am J Clin Oncol* 28:591-6, 2005.
  9. DeWeese TL, **Song DY**: Radiation dose escalation as treatment for clinically-localized prostate cancer: is more really better? *JAMA* 294:1274-5, 2005.
  10. **Song DY**, DeWeese TL: Can PSA nadir predict prostate cancer outcomes following radiotherapy? *Nat Clin Pract Urol*, 3:464-65, 2006.
  11. **Song DY**: The role of radiotherapy in the treatment of locally advanced prostate cancer. *Community Oncol* 3:759-64, 2006.
  12. Muntener M, Patriciu A, Petrisor D, Schar M, Mazilu D, Ursu D, **Song DY**, Stoianovici D: MRI Compatible Robotic System for Fully Automated MRI-guided Transperineal prostate interventions: system description and proof of principle. *Radiology* (in press)
  13. Yu HM, **Song DY**, Tsai Y, Thompson T, Song DY, DeWeese TL: Impact of perineural invasion on the biochemical outcome of prostate cancer after definitive external beam radiation therapy. *Urology* (in press)
  14. **Song DY**, DeWeese TL: Defining the appropriate measure of success for adjuvant radiation following prostatectomy: commentary on Thompson et al. *Nat Clin Pract Urol* (in press)
  15. Lin SH, Sugar E, Saleh H, Teslow T, McNutt T, **Song DY**: Comparison of daily couch shifts on tomotherapy and BAT ultrasound systems during prostate radiotherapy. *Radiother Oncol* (submitted)

### Abstracts and presentations

1. Song, DY, Williams, JA: Fractionated stereotactic radiotherapy for treatment of acoustic neuromas. (presented at AASFN 7/1999).
2. Song, DY, Williams, JA: Fractionated stereotactic radiotherapy for treatment of acoustic neuromas. *Int J Radiat Oncol Biol Phys* 45(3S):325-326, 1999 (presented at ASTRO 10/1999).
3. Lawrie, WT, Song, DY, Abrams, RA, Kafonek, DR, Boitnott, JK, DeWeese, TL: Acute and late radiotherapy toxicity in patients with inflammatory bowel disease. *Int J Radiat Oncol Biol Phys* 48(3S):226, 2000 (presented at ASTRO 10/2000).
4. Song, DY, Wharam, M, Cohen, K, Burger, P: Pediatric High Grade Gliomas: Analysis of potential prognostic factors. *Med Ped Oncol* 39(4):383, 2002 (presented at SIOP 9/2002).
5. Song, D: Stereotactic Body Radiation Therapy, Part II: clinical experience and rationale. *Med Physics* 30(6):1357, 2003 (presented at AAPM 8/2003).
6. Benedict S, Song D, Kavanagh B: Stereotactic Body Radiation Therapy, Part I: physics and technology. *Med Physics* 31(6):1766, 2004 (presented at AAPM 8/2004).
7. Song D, Benedict S, Kavanagh B: Stereotactic body radiation therapy, Part II: clinical experience and rationale. *Med Physics* 31(6):1766, 2004 (presented at AAPM 8/2004).
8. Kavanagh B, Benedict S, Song D: Stereotactic body radiation therapy, Part III: radiobiological considerations. *Med Physics* 31(6):1766, 2004 (presented at AAPM 8/2004).
9. Vikal S, Jain AK, Deguet A, Song DY, Fichtinger G: Seed segmentation in C-arm fluoroscopy for brachytherapy implant reconstruction. *Med Physics* 33(6):2229, 2006 (presented at AAPM 8/2006).
10. Vikal S, Jain AK, Deguet A, Song DY, Fichtinger G: Automated segmentation of radiographic fiducials for C-arm tracking. *Med Physics* 33(6):2208, 2006 (presented at AAPM 8/2006).
11. Kennedy C, Iordachita I, Burdette C, Kronreif G, Ptacek W, Kazanzides P, Song D, Fichtinger G: Robotically Assisted Needle Placement for Prostate Brachytherapy. *Med Physics* 33(6):2264, 2006 (presented at AAPM 8/2006).
12. Ford E, Song D, Tryggstad E, McNutt T, Wong J: Evolution of Tumor Volume and Motion in Non-Small Cell Lung Cancer during Radiotherapy. *Med Physics* 33(6):2034, 2006 (presented at AAPM 8/2006).
13. Hales R, Shokek O, Burger P, Paynter N, Cohen K, Carson B, Weingart J, Song D, Wharam M: Importance of Accurate Pathologic Diagnosis and Prognostic Factors in Pediatric High-Grade Glioma. *Med Pediatr Oncol* 2006 (presented at SIOP 9/2006).
14. Hales R, Shokek O, Burger P, Paynter N, Cohen K, Carson B, Weingart J, Song D, Wharam M: Importance of Accurate Pathologic Diagnosis and Prognostic Factors in Pediatric High-Grade Glioma. *Int J Radiat Oncol Biol Phys* (presented at ASTRO 11/2006).
15. Yu HM, Song DY, Tsai Y, Thompson T, Song DY, DeWeese TL: Impact of perineural invasion on the biochemical outcome of prostate cancer after definitive external beam radiation therapy. *Int J Radiat Oncol Biol Phys* (presented at ASTRO 11/2006).
16. Lin SH, Song D, Sugar E, Saleh H, Teslow T, McNutt T, DeWeese T, Wong J: Comparison of daily couch shifts on tomotherapy and BAT ultrasound systems during prostate radiotherapy. *Int J Radiat Oncol Biol Phys* (presented at ASTRO 11/2006).

17. Christodouleas JP, Song DY, DeWeese TL: Treating physician is the most important predictor of acute genitourinary toxicity in men with low and intermediate risk prostate cancer treated by IMRT. (presented at RSNA 11/2006).

### **Book Chapters**

1. Song DY, Blomgren H: "Body Stereotactic Radiotherapy for Lung Tumors" in *Body Stereotactic Radiotherapy*, Kavanagh and Timmerman, eds., Williams-Wilkins, 2004.
2. Benedict S, Song DY: "High Precision Radiotherapy" in *IMRT Handbook: Foundations & clinical applications*, Bortfeld, Schmidt-Ullrich, and de Neve, eds., Springer-Verlag, 2004.
3. Benedict S, Cardinale RM, and Song DY: "Application of IMRT to stereotactic radiosurgery", in *Intensity Modulated Radiotherapy: A Clinical Perspective*, Arno J. Mundt and John C. Roeske, eds., BC Decker Inc Publisher, Hamilton, Ontario, Canada, 2004.
4. Song DY, and DeWeese TL: "Radiotherapy for the treatment of locally advanced and metastatic prostate cancer", in *Prostate Cancer: Surgical Principles and Practice*, Kirby, Partin, Feneley, and Parsons eds., Taylor and Francis, London, 2005.
5. Song DY, Jabbour S, and DeWeese TL: "Emerging concepts in improving the therapeutic outcome of locally advanced prostate cancer using radiation therapy", in *Prostate Cancer: Biology, genetics, and the new therapeutics*, Chung, Isaacs, and Simon eds., Humana Press, NJ, 2006.
6. Song DY, DeWeese TL: "Radiation Therapy", in Dr. Patrick Walsh's Guide to Surviving Prostate Cancer, Janet Worthington and Patrick C. Walsh, Warner Books, NY. (in press)
7. Song DY. Stereotactic body radiation therapy: rationale and clinical experience. In: *UpToDate.com*, Rose BD (Ed), UpToDate, Wellesley, MA, 2007.
8. Christodouleas J, Fox J, Song DY, DeWeese TL: "Radiation Therapy for Prostate Cancer", in *Early Diagnosis of Cancer Series: Prostate Cancer*, Su LM (Ed), Elsevier, PA, (in press).

### **Advisory Committees, Review Groups**

Member, AAPM Stereotactic Body Radiotherapy Task Group 101