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ACADEMIC APPOINTMENTS

2010-2012 Instructor, Department of Radiation & Cellular Oncology
The University of Chicago, Chicago, IL
2010- Lecturer, Department of Radiation Oncology, The University of Illinois
Hospitals and Clinics, Chicago, IL 2001-2002
2012- Assistant Professor, Department of Radiation & Cellular Oncology
The University of Chicago, Chicago, IL

Ph.D.-Granting Committee, Program, Institute, and Center Appointments

2010- Committee on Cancer Biology
2010- University of Chicago Comprehensive Cancer Center,
2010- Cancer Center Member, University of Illinois at Chicago

ACADEMIC TRAINING

1994-1998 B.S., Biological Chemistry, The University of Chicago, Chicago, IL
1998-2005 M.D. The University of Chicago, Chicago, IL
2000-2003 Ph.D., Pathology, The University of Chicago, Chicago, IL
2000-2005 Growth and Development Training Program, The University of Chicago,
Chicago, IL
2005-2006 Transitional Internship, Memorial Sloan Kettering Cancer Center, NY, NY
2006-2010 Residency, Radiation Oncology, Stanford University, Stanford, CA
2007-2010 Holman Research Pathway Selection

BOARD CERTIFICATION

2011- Diplomat, The American Board of Radiology

SCHOLARSHIP

(a) Peer-reviewed publications in the primary literature, exclusive of abstracts:

1. Chung TD, Yu JJ, **Spiotto MT**, Bartkowski M, Simons JW. "Characterization of the role of IL-6 in the progression of prostate cancer." *Prostate*. 1999 Feb 15; 38(3): 199-207.
2. Chung TD, Yu JJ, Kong TA, **Spiotto MT**, Lin JM. "Interleukin-6 activates phosphatidylinositol-3 kinase, which inhibits apoptosis in human prostate cancer cell lines." *Prostate*. 2000. Jan; 42 (1): 1-17.
3. **Spiotto MT**, Chung TD. "Stat3 mediates IL-6-induced growth inhibition in the human prostate cancer cell line LNCAP." *Prostate*. 2000. Feb 1; 42(2) 88-98.

4. **Spiotto MT**, Chung TD. "Stat3 mediates IL-6-induced neuroendocrine differentiation in prostate cancer cells." *Prostate*. 2000 Feb 15; 42(3) 186-95.
5. **Spiotto MT**, Yu P, Rowley DA, Nishimura MI, Meredith SM, Gajewski TF, Fu YX and Schreiber H. "Increasing tumor antigen expression overcomes ignorance to solid tumors via cross presentation by bone-marrow derived stromal cells." *Immunity*. 2002, Dec; 17(12) 737-47.
6. Yu P, **Spiotto MT**, Lee Y, Schreiber H, Fu YX. Complementary role of CD4+ T cells and secondary lymphoid tissues for cross-presentation of tumor antigen to CD8+ T cells. *J Exp Med*. 2003 Apr 21;197(8):985-95.
7. **Spiotto MT**, Reth M and Schreiber H. "Genetic changes occurring in established tumors rapidly stimulate new antibody responses." *Proc Natl Acad Sci U S A*. 2003 Apr 29; 100(9):5425-30.
8. **Spiotto MT**, Fu YX and Schreiber H. "Tumor immunity meets autoimmunity: antigen levels and dendritic cell maturation." *Curr Opin Immunol*. 2003 Dec; 15(6): 725-30.
9. Blank C, Brown I, Peterson AC, **Spiotto M**, Iwai Y, Honjo T, Gajewski TF. "PD-L1/B7H-1 inhibits the effector phase of tumor rejection by T cell receptor (TCR) transgenic CD8+ T cells." *Cancer Res*. 2004 Feb 1; 64(3):1140-5.
10. **Spiotto MT**, Rowley DA, Schreiber H. "Bystander elimination of antigen loss variants in established tumors." *Nat Med*. 2004 Mar; 10(3):294-8.
11. **Spiotto MT** and Schreiber H. "Rapid destruction of the tumor microenvironment by CTLs recognizing cancer-specific antigens cross-presented by stromal cells." *Cancer Immun*. 2005 Jun 6;5:8.
12. **Spiotto MT** and Schreiber H. "Floxed reporter genes: Flow-cytometric selection of clonable cells expressing high levels of a target gene after tamoxifen-regulated Cre-loxP recombination." *J Immunol Methods*. 2006 May 30;312(1-2):201-8.
13. Zhang B, Bowerman NA, Salama J, Schmidt H, **Spiotto MT**, Schietinger A, Yu P, Fu YX, Weichselbaum RR, Rowley DA, Kranz DM and Schreiber H. Induced Sensitization of Tumor Stroma Leads to Eradication of Established Cancer by T cells. *J Exp Med*. 2007 Jan 22;204(1):49-55.
14. **Spiotto MT**, Hancock SL, King CR. Radiotherapy After Prostatectomy: Improved Biochemical Relapse-Free Survival with Whole Pelvic Compared with Prostate Bed Only for High-Risk Patients. *Int J Radiat Oncol Biol Phys*. 2007 Sep 1;69(1):54-61.
15. King CR, Presti JC, Brooks JD, Gill H, **Spiotto MT**. Postoperative Prostate-Specific Antigen Velocity Independently Predicts for Failure of Salvage Radiotherapy after Prostatectomy. *Int J Radiat Oncol Biol Phys*. 2007 Oct 10;
16. King CR, **Spiotto MT**. Improved outcomes with higher doses for salvage radiotherapy after prostatectomy. *Int J Radiat Oncol Biol Phys*. 2008 May 1;71(1):23-7.
17. King CR, **Spiotto MT**, Kapp DS. Obesity and Risk of Biochemical Failure for Patients Receiving Salvage Radiotherapy after Prostatectomy. *Int J Radiat Oncol Biol Phys*. 2008 Aug 14.
18. Fels DR, Ye J, Segan AT, Kridel SJ, **Spiotto M**, Olson M, Koong AC, Koumenis C. Preferential cytotoxicity of bortezomib toward hypoxic tumor cells via overactivation of endoplasmic reticulum stress pathways. *Cancer Res*. 2008 Nov 15;68(22):9323-30.

19. **Spiotto MT**, Loo BL, Chang, DT. Stereotactic body radiosurgery for primary and oligometastatic lesions. *Community Oncology*. 2009 Oct; 6 (10): 456-62.
20. **Spiotto MT**, Banh A, Papandreou I, Cao H, Galvez M, Gurtner GC, Denko NC, Le QT, Koong AC. Visualization of the unfolded protein response in primary tumors reveals unique microenvironments that reflect metabolic variations and predict for tumor growth. *Cancer Research*. *Cancer Res*. 2010 Jan 1;70(1):78-88.
21. Schreiber K, Arina A, Engels B, **Spiotto MT**, Sidney J, Sette A, Karrison TG, Weichselbaum RR, Rowley DA, Schreiber H. Spleen cells from young but not old immunized mice eradicate large established cancers. *Clin Cancer Res*. 2012 May 1;18(9):2526-33.
22. **Spiotto MT**, Pytynia M, Liu G, Ranck M, Widau R Animal Models to Study the Mutational Landscape for Oral Cavity and Oropharyngeal Cancers. *J Oral Maxillofac Res* 2013 Apr 1;4(1):e1.
23. Rudra S, **Spiotto MT**, Witt ME, Blair EA, Stenson K, Haraf DJ. Lymph node density - Prognostic value in head and neck cancer. *Head Neck*. 2014 Feb;36(2):266-72.
24. Herman LC, Chen L, Garnett A, Feldman LE, Smith B, Weichselbaum RR, **Spiotto MT**. Comparison of Carboplatin-Paclitaxel to Docetaxel-Cisplatin-5-Fluorouracil induction chemotherapy followed by concurrent chemoradiation for locally advanced head and neck cancer *Oral Oncol*. 2014 Jan;50(1):52-8.
25. Liu GF, Ranck MC, Solanki AA, Cao H, Kolokythas A, Wenig BL, Chen L, Ard S, Weichselbaum RR, Halpern H and **Spiotto MT**. Racial parities in outcomes after radiotherapy for head and neck cancer. *Cancer*. 2014 Jan 15;120(2):244-52.
26. Ranck MC, Abundo R, Jefferson G, Kolokythas A, Wenig BL, Weichselbaum RR, **Spiotto MT**. Effect of postradiotherapy neck dissection on nonregional disease sites. *JAMA Otolaryngology-Head&Neck Surgery*. 2014 Jan;140(1):12-21.
27. Zakeri K, MacEwan I, Vazirnia A, Cohen E, **Spiotto MT**, Haraf DJ, Vokes E, Weichselbaum RR, Mell LK. Race and Competing Mortality in Advanced Head and Neck Cancer. *Oral Oncol*. 2014 Jan;50(1):40-4.
28. Zhong R, Pytynia M, Pelizzari C and **Spiotto MT**. Bioluminescent imaging of autochthonous Human Papillomavirus-positive oral tumor growth and response to image guided radiotherapy. *Cancer Res*. 2014 Apr 1;74(7):2073-81.
29. **Spiotto, MT** and Weichselbaum RR. Comparison of 3D Conformal Radiotherapy and Intensity Modulated Radiotherapy with or without Simultaneous Integrated Boost during Concurrent Chemoradiation for Locally Advanced Head and Neck Cancers. *PLoSone*. 2014 Apr 8;9(4):e94456.

(b) Peer-reviewed works in 'non-traditional' outlets:

N.A.

(c) Peer-reviewed works accepted or in press

N.A.

(d) Non-peer-reviewed original articles

N.A.

(e) Books:

N.A.

(e) Book chapters:

1. Bigelow KR, **Spiotto MT**, Stadler WM. "Antiangiogenic Agents and Strategies," in Renal Cell Carcinoma. Current Clinical Oncology: Renal Cell Carcinoma: Molecular Biology, Immunology and Clinical Management. Eds. Bukowski, RM and Novick AC. 2000. Humana Press Inc., Totowa, NJ.
2. **Spiotto, MT** and Hoppe, RT. "Lymphoma: An image guided radiotherapy overview." In Image-Guided Radiation Therapy (IGRT): A Clinical Perspective. Eds. Mundt, AJ and Roeske, JC. 2011. Pmph usa.
3. **Spiotto, MT**. "Radiotherapy for Cancers of the Lip." In Lip Cancer. Eds. A. Kolokythas. 2014. Springer Verlag. Berlin, Germany.

(f) Other works that are publically available (websites, interviews, publications in the popular press, testimony, computer programs, protocols, reagents, inventions, patents not listed above, etc.)

N.A.

(g) Clinical trials that are ongoing and unpublished

University of Illinois at Chicago, "Phase II Trial of Radiotherapy Volume Reduction after Induction Chemotherapy in Head and Neck Cancer Patients" IRB 2012-0169. Role: Principal Investigator. Status: Closed.

University of Illinois at Chicago, "Radiotherapy for Head and Neck Cancer: Dosimetric and Clinical Outcomes in the Conventional, Conformal, and IMRT eras," IRB 2011-1078. Role: Principal Investigator. Status: Ongoing.

(j) Works in review, in preparation, etc. not yet publically available [list ONLY if available for BSD review]

1. Zhong R, Riyue B, Lingen M and Spiotto M. Insertional mutagenesis identified Notch1 equilibrium as a regulator of HPV tumorigenesis. In preparation.
2. Spiotto MT, Cao H, Mell L and Toback GF. ACE inhibitors predict for acute kidney injury during chemoradiation for head and neck cancer. Submitted.
3. Spiotto MT and Koshy M. Unplanned hospitalizations greater than five days predict for worse outcomes after radiotherapy for head and neck cancer. Submitted

FUNDING(a) Past:

RSNA Resident Research Seed Grant (RR0712)

Title: The Role of Hypoxia during the induction of Immune Responses in vitro and in vivo

Role: Principal Investigator

Project period/budget period: 7/1/07 – 6/30/08

Direct costs: \$30,000

Annual salary recovery: None.

RSNA Resident Research Seed Grant (RR0812)

Title: Molecular Mechanisms for Hypoxia-Mediated Immune Suppression in Tumors

Direct costs: \$30,000

Role: Principal Investigator

Project period/budget period: 7/1/08 – 6/30/09

Annual salary recovery: None.

Cancer Research Foundation

Title: Small Molecule Screens to Identify Inhibitors of the Human Papilloma Virus Oncoprotein E6.

Purpose: To develop cell based high throughput screens to identify molecules capable of inhibiting the p53-E6 interaction.

Role: Principal Investigator

Project period/budget period: 1/1/11-12/31/11.

Direct costs: \$75,000

Annual salary recovery: None.

Riveriera Country Club

Title: Assessing efficacy and off-target effects of putative Human Papillomavirus inhibitors

Purpose: To assess toxicity of hits from a high throughput screen for p53-E6 inhibitors.

Role: Principal Investigator

Project period/budget period: 02/1/12-1/31/13

Direct costs: \$25,000

Annual salary recovery: None.

R25CA132822-01A2

Title: Cancer Nanotechnology in Imaging and Radiotherapy

Purpose: To develop in vivo applications for nanoparticles targeting Human Papilloma Virus.

PI: Gayle Woloschack, Ph.D.

Role: Fellow/Researcher

Project period/budget period: 5/1/11-5/1/13

Direct costs:

Annual salary recovery: None.

(b) Current:

Fanconi Anemia Research Foundation

Title: Non-Genotoxic Inhibitors for Human Papillomavirus-Induced Head and Neck Cancers in Fanconi Anemia.

Purpose: To validate inhibitors for the p53-E6 interaction.

Role: Principal Investigator

Project period: 5/1/12-4/30/15

Total direct costs: \$200,000

Annual salary recovery: 5%

Burroughs Wellcome Fund

Title: Identification of chromosomal aberrations that cooperate with the human papillomavirus to cause cancer

Purpose: To identify cellular oncogenes that cooperate with viral oncogenes to cause cancer

Role: Principal Investigator

Project period: 9/1/12 – 8/31/17

Total direct costs: \$700,000

Annual salary recovery: 5%

Primal Life Sciences.

Title: The role of the CKD4 inhibitor P1446A on the growth of autochthonous HPV Head and Neck tumors Alone or in combination with radiotherapy.

Purpose: Preclinical testing of P1446A in an autochthonous mouse oral tumor model.

Project period: 9/1/13 – 8/31/14

Role: Principal Investigator.

Total direct costs: \$100,000

Annual salary recovery: 2%

(c) Pending:

NA

HONORS, PRIZES, AND AWARDS

- | | |
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| 1994-1998 | Dean's List, The University of Chicago |
| 1998 | Graduation with General Honors |
| 1998 | Graduation with Divisional Honors |
| 1999 | American Association for Cancer Research Young Investigator Travel Grant |
| 2003 | Keystone Symposia Travel Scholarship |
| 2003 | Robert Priest Award in Pathology, The University of Chicago |
| 2003 | Award for best dissertation in the Department of Pathology |
| 2004 | Alpha Omega Alpha, The University of Chicago |
| 2005 | John Van Prohaska Award for outstanding potential in teaching, research and clinical medicine, The University of Chicago |
| 2005 | Leon O. Jacobson Basic Science Prize, The University of Chicago |
| 2008 | Malcolm Bagshaw Award, Stanford University |
| 2009 | Roentgen Resident/Fellow Research Award, Stanford University |
| 2009 | Martin J. Brown Award for Radiation Oncology Research, Stanford University |
| 2013 | Best Abstract Award, American Society for Therapeutic Radiation Oncology Annual Meeting |

INVITED SPEAKING

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| July 27, 2011 | Invited speaker. "Radiation Therapy for Cutaneous Malignancies." University of Illinois-Chicago. Dermatology Clinical Conference: Seminar Series. |
| January 11, 2012 | Invited speaker. "Postoperative Head and Neck Radiation Therapy." University of Illinois-Chicago. Department of |

- June 21, 2012 Otolaryngology Grand Rounds.
Research seminar. Radiation Oncology Faculty Research Discussion Series.
- September 27, 2012 Invited speaker. "A High Throughput Cell-Based Screen Identifies Compounds That Inhibit the Human Papillomavirus Oncoprotein E6 Without Damaging DNA." Fanconi Anemia Research Fund Annual Meeting. Denver, CO
- October 31, 2012 Invited speaker. "A High Throughput Cell Based Screen Identifies Compounds that Inhibit the Viral Oncoprotein E6 in Human Papillomavirus-positive Cancers." American Society of Therapeutic Radiation Oncology Annual Meeting. Boston, MA
- November 2, 2012 Invited speaker. "A Novel Cell Based Assay for High Throughput Screening of Protein:Protein Interactions." Small Molecules Testing for Fanconi Anemia. Portland, OR
- March 8, 2013 Research seminar. University of Chicago Comprehensive Cancer Center Seminar.
- March 14, 2013 Invited speaker. Post-operative Radiotherapy for Head and Neck Cancers. The University of Chicago Department of Otolaryngology Grand Rounds.
- April 18, 2013 Invited speaker. Clinical and Preclinical Studies in HPV-associated Head and Neck Cancer. Chicago Radiological Society.

INVITED, ELECTED, OR APPOINTED EXTRAMURAL SERVICE

- 2012 – Chair, Data Safety Monitoring Board, University of Illinois at Chicago
- Various Invited reviewer for Translational Oncology, Cancer Medicine, PLOSone, Journal of Racial and Ethnic Health Disparities, Oral Oncology.

PROFESSIONAL SOCIETIES

American Society for Therapeutic Radiation Oncology
Radiological Society of North America
American College of Radiology

EDUCATION

Graduate medical education (residency and clinical fellowships):

- (a) Didactic
2011-2013 5 resident teaching seminars over 2 years
- (b) Clinical
2010- Work with 1 resident 1.5 days per week

Research trainees:

(a) High school students and teachers
NA

(b) Undergraduate (B.A., B.S.)
NA

(c) Medical (M.D.)

2012 Alex Garnett, Pritzker Summer Research Program 2012, Winner of
Science Overall Excellence Award

(d) Graduate (Ph.D.)

N.A.

(e) Postdoctoral

N.A.

CLINICAL

2010- Department of Radiation Oncology, University of Illinois at Chicago 1.5
days per week.

SERVICE

University of Chicago

Thesis Committee:

2010-2012 Ph.D. Thesis Committee, David Binder