

Program Director/Principal Investigator : Rosen, Jennifer

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.

NAME Jennifer E. Rosen, M.D., F.A.C.S.		POSITION TITLE Assistant Professor	
eRA COMMONS USER NAME Jennifer.Rosen@bmc.org			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Pennsylvania, Philadelphia PA	B.A.	1987-1991	Biological Basis of Behavior
Columbia University, New York, NY	Postbac	1992	
Hahnemann University Philadelphia, PA	Postbac	1992-1993	
Jefferson Medical College, Philadelphia, PA	M.D.	1993-1997	Medicine

A. Positions and Honors.

Positions and Employment

- 1997-1998 Internship, Beth Israel Medical Center (New York, NY)
1998-2002 Surgical Residency, Beth Israel Medical Center (New York, NY)
2002-2005 Clinical Associate, Surgery Branch, NCI, NIH (Bethesda, MD)
2005-present Assistant Professor of Surgery, Boston University Medical Center (Boston, MA)
2009-present Assistant Professor, Division of Graduate Medical Sciences and Molecular Medicine, Boston University Medical Center (Boston, MA)

Honors

- 1987 National Merit Scholar
1993 Valedictorian of the Class of 1993, Hahnemann Medical College Medical Science Track program
1993 Hahnemann Medical College Outstanding Speaker's Award
1994 Hobart Amory Hare Honor Society member, Jefferson Medical College
2001 Beth Israel Senior Surgical Resident Clinical Achievement Award
2005 The Laszlo N. Tauber Assistant Professor of Surgery
2007 AMA-National Advocacy Conference; Massachusetts Medical Society Young Physician Representative

B. Selected publications, abstracts and presentations (in chronological order).

- Hollander E, Cohen L, Simeon D, **Rosen J**, DeCaria C, Stein DJ. Fluvoxamine treatment of body dysmorphic disorder. *J Clin Psychopharmacol.* 1994 Feb;14(1):75-7.
- Northrup BE, Vaccaro AR, **Rosen JE**, Balderston RA, Cotler JM. Occurrence of infection in anteriorcervical fusion for spinal cord injury after tracheostomy. *Spine* 1995 Nov 15;20(22):2449-53.
- Northrup BE, Vaccaro AR, **Rosen JE**, Balderston RA, Cotler JM. Occurrence of infection in anterior cervical fusion for spinal cord injury after tracheostomy. Proceedings of the 63rd Annual Meeting of the American Association of Neurological Surgeons, Orlando, Florida: April 1995.
- Rosen JE**, Costouros NG, Lorang D, Burns AL, Alexander HR, Skarulis MC, Cochran C, Pingpank JF, Marx SJ, Spiegel AM, Libutti SK. Gland Size is Associated with Changes in Gene Expression Profiles in Sporadic Parathyroid Adenomas. *Annals of Surgical Oncology* 1995 12(5) 1-6.
- Rosen JE**, He M, Umbricht C, Alexander HA, Dackiw APB, Zeiger MA, Libutti SK. A six-gene model for differentiating benign from malignant thyroid tumors based on gene expression. *Surgery* 2005 Dec;138(6):1050-6.

6. **Rosen JE**, Miller W, He M, O'Connor S, Alexander HR, Payvandi F, Stirling D, Schafer P, Libutti SK. A novel PDE4 inhibitory agent with endothelial cell specific activity. Proceedings of the 95th Annual Meeting of the American Association of Cancer Research, Orlando, FL: March 2004.
7. **Rosen JE**, Costouros NG, Lorang D, Burns AL, Alexander HR, Skarulis MC, Cochran C, Pingpank JF, Marx SJ, Spiegel AM, Libutti SK. Gland Size is Associated with Changes in Gene Expression Profiles in Sporadic Parathyroid Adenomas. Proceedings of the 57th Annual Meeting of Society of Surgical Oncology, New York, NY: March 2004.
8. Burness ML, Xu H, **Rosen JE**, Alexander HR. Identification of distinct gene expression profiles in peritoneal versus liver metastases in patients with advanced colorectal adenocarcinoma. Proceedings of the April 2005 Annual Meeting of the American Association for Cancer Research, Anaheim, California.
9. **Rosen JE**, Shen J, He M, Umbricht C, Dackiw APB, Zeiger MA, Libutti SK. Molecular diagnosis of thyroid tumors using fine needle aspiration biopsy specimens. Proceedings of April 2006 Annual Meeting of the American Association for Cancer Research, Washington DC.
10. Patel S, Wishnia SC, Noack C, Bhogal N, Klapperich C, **Rosen JE**. The effect of three-dimensional growth on epithelial-to-mesenchymal transition in human breast cancer cells. [Abstract] Annual Meeting of the Society of Surgical Oncology, March 2007, Washington, DC.
11. Wishnia SC, Patel S, Noack C, Bhogal N, Klapperich C, **Rosen JE**. Modeling malignant transformation of cancer cells: the importance of cadherins in a 3D cell culture model of the thyroid tumor microenvironment. [Abstract] Annual Meeting of the Society of Surgical Oncology, March 2007, Washington, DC.
12. Shen HCJ, **Rosen JE**, Yang L, Savage SA, Burns AL, Mateo CM, Agarwal SK, Chandrasekharappa SC, Spiegel AM, Collins FS, Marx SJ, Libutti SK. Parathyroid Tumor Development Involves Deregulation of HOX Genes. *Endocrine-Related Cancer* 2008; 15: 267-275.
13. Wishnia SC, Hamid MA, Haas S, Moreno-Ruiz N, **Rosen JE**. Management of a Presacral Teratoma in an Adult. *Journal of Clinical Oncology*, 2008 May 20; 26(15): 2586-2589.
14. **Rosen JE**, He M, Libutti SK. Microarray in Cancer Development and Progression. In: Mocellin S (Ed) *Microarray Technology and Cancer Gene Profiling*. Georgetown, Landes Biosciences, August 2006.
15. **Rosen JE**, Stone MD. Contemporary Diagnostic Approach to the Thyroid Nodule. In: Cady B (Ed) *Seminars in Surgical Oncology*. 2006;94:649-661.
16. He M, **Rosen J**, Mangiameli D, Libutti SK. Cancer development and progression. *Adv Exp Med Biol* 2007;593:117-33.
17. In H, Burgess J, McAneny D, Pearce E, **Rosen JE**. Treatment Options for Graves' Disease; A Cost-Effectiveness Analysis. Proceedings of the Annual Meeting of the American College of Surgeons October 2008, San Francisco, CA.
18. In H, Burgess J, McAneny D, Pearce E, **Rosen JE**. Treatment Options for Graves' Disease; A Cost-Effectiveness Analysis. *Journal of the American College of Surgeons* 2009; 209:170179.
19. Cassidy M, Becker J, **Rosen JE**. Postoperative leukocytosis and change in white blood cell count (WBC) does not predict postoperative complications after ileal pouch anal anastomosis (IPAA). Proceedings of the Annual Meeting of the American College of Surgeons, October 2008, SF, CA.
20. Wishnia S, Ladin K, Ansell J, Petros J, **Rosen JE**. Professionalism in consult practices. Proceedings of the Annual Meeting of the New England Surgical Society, September 2008, Boston, MA.
21. Suh H, Sur S, Orzell S, Wishnia S, Lee S, **Rosen JE**. microRNA Modulation of Gene Expression in Thyroid Cancer, Proceedings of the Annual Meeting of the American Thyroid Association, September 2009, Palm Beach, FLA.
22. Wishnia SC, Noack C, Klapperich CM, **Rosen JE**. Expression of Hypoxia-Inducible Factor 1 α and Carbonic Anhydrase IX In Human Thyroid Cancer: Is Chronic Hypoxia Protective? Proceedings of the 78th Annual Meeting of the American Thyroid Association, September 2007, NY, NY.
23. Suh H, Sur S, Orzell S, Wishnia S, Lee S, **Rosen JE**. microRNA 222 and Modulation of Gene Expression in Thyroid Cancer, Proceedings of the Annual Meeting of the New England Surgical Society, September 2009, Newport, RI.
24. **Rosen JE**. Special Issue on Thyroid Cancer: Molecular and Modern Advances. (Lead Guest Editor) *Journal of Oncology*. Publication in 2009.
25. Suh H, Sur S, Orzell S, **Rosen JE**. microRNA 222 modulates tamoxifen resistance in papillary thyroid cancer. Proceedings of the 5th Annual Academic Surgical Congress, February 5 2010, San Antonio, TX.

26. **Rosen JE**, Suh H, Lee S, Aamar OM, Bigio IJ. Design, conduct and challenges of a clinical trial utilizing elastic light scattering spectroscopy in thyroid lesions. Proceedings of the BIOS SPIE Photonics West 2nd Scientific Meeting, San Francisco, CA: January 23, 2010.
27. **Rosen JE** Lawrence R. Cancer Trial Accrual Symposium April 29-30 2010 Bethesda, MD
28. Hyunsuk Suh MD, Samuel S. Kim BA, Susannah C. Orzell BS, Ousama A'amar PhD, Stephanie L. Lee MD, PhD, Irving J. Bigio PhD, Jennifer E. Rosen MD, FACS. Elastic Scattering Spectroscopy (ESS) for Discrimination of Benign from Malignant Disease in Thyroid Nodules. American College of Surgeons Scientific Meeting, Washington DC October 2010.

C. Research Support

Completed:

IRBX03325 June 1, 2004-July 1, 2005

Washington Hospital Center and the National Cancer Institute, Washington, DC.

Role: Principal Investigator

Direct Costs: \$7K

Colorectal Cancer Tissue and Demographic Data Procurement.

BCCA BC052166 July 1, 2006-July 1, 2007

Department of Defense Breast Cancer Concept Award

Office of the Congressionally Directed Medical Research Programs

Role: Co-Principal Investigator (Dr. Catherine Klapperich, Principal Investigator), 8% effort

Direct Costs: \$75K/Total Costs: \$121K

8% effort

“Barriers to therapy: a novel 3D model of tumor interstitial pressure in endocrine-resistant breast cancer”

The goal of this project was to develop a three dimensional model of tumor interstitial pressure.

Ongoing:

Massage Therapy Foundation March 1, 2009-February 28, 2010

Massage Therapy Foundation Award

Role: Principal Investigator

Total Costs: \$20K, 10% effort

“A pilot RCT of massage therapy for cancer patients undergoing implantable catheter insertion at Boston Medical Center.”

This study is to pilot a small feasibility RCT of massage therapy in reducing pain and anxiety in cancer patients undergoing implantable catheter insertion.

CIMIT Young Clinical Investigator Award October 1, 2009

Role: Principal Investigator

Total Costs: \$50K

“Development of a novel optical probe diagnostic in thyroid cancer.”

This funding was awarded as a one-time supplement and has been used for the ex vivo trial used for preliminary data in this application.

Genome Science Institute July 1, 2009-June 30, 2010

Role: Principal Investigator

Total costs: \$15K

“Development of a novel genomic diagnostic in thyroid cancer.”

The goal of this project was to perform microRNA arrays to use in the differential diagnosis of benign from malignant thyroid nodules using patient tissue.

BU-BRIDGE Award September 1, 2009-August 31, 2010

Role: Co-Principal investigator

Total costs: \$16K

“Development of a novel genomic diagnostic in thyroid cancer: supplemental salary grant”

The goal of this project was to support a research assistant's salary in completing the project outlined in the Genome Science Institute Project.