

CURRICULUM VITAE

BIOGRAPHICAL

Name: Richard Marc Spiro, MD **Birth Date:** 5-13-71
Birth Place: Camden, NJ
Citizenship: United States
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EDUCATION AND TRAINING

UNDERGRADUATE:

1989–1991 The United States Coast Guard Academy Major: Marine Engineering
New London, Connecticut Naval Architecture
1992-1994 The Johns Hopkins University BS, Biomedical Engineering
BS, Material Science and
Engineering

GRADUATE:

1994-1998 University of South Alabama College of Medicine MD
Class Rank: 1/64

POST-GRADUATE:

1998-1999 University of Pittsburgh Surgical Internship
Pittsburgh, PA
1999-2004 University of Pittsburgh Neurosurgical Residency
Pittsburgh, PA

APPOINTMENTS AND POSITIONS

ACADEMIC APPOINTMENTS:

2004-2005 University of Pittsburgh Medical Center
Department of Neurological Surgery
Clinical Instructor

2005-2012 University of Pittsburgh Medical Center
Department of Neurological Surgery
Assistant Professor

2007-2012 University of Pittsburgh Medical Center
Department of Neurological Surgery
Chief, Spine Surgery

NON-ACADEMIC APPOINTMENTS:

2000-2004 Western Pennsylvania Emergency Physicians
Staff Physician

2000-2004 Ohio Valley Regional Medical Center
Staff Physician

2000-2002 Forbes Regional Medical Center
Staff Physician

2004-2012 University of Pittsburgh Medical Center – Presbyterian Hospital
Staff Neurosurgeon

2004-2012 University of Pittsburgh Medical Center – Shadyside Hospital
Staff Neurosurgeon

2004-2006 Oakland VA Medical Center
Staff Neurosurgeon

2007- 2012 Children’s Hospital of Pittsburgh
Staff Neurosurgeon

2008-2012 University of Pittsburgh Medical Center-Magee Women’s Hospital
Staff Neurosurgeon

University of South Alabama College of Medicine Tuition Scholarship	1995-1998
American Federation for Clinical Research Medical Student Award	1995
Robert Russell Memorial Scholarship for Oncology Research	1996-1997
National Pathology Honor Society	1997
Alpha Omega Alpha Honor Medical Society (Alabama Beta Chapter) Donald Memorial Scholarship Awarded for academic excellence, leadership & medical skills	1997 1997
American College of Surgeons Medical Student Research Award	1998
University of South Alabama College of Medicine Dean's Award	1998
University of South Alabama College of Medicine Award for Excellence in Pediatrics	1998
University of South Alabama College of Medicine Award for Excellence in General Surgery	1998
University of Pittsburgh Department of Neurological Surgery Resident Teaching Award	2004
Best Doctors	2012
Top 100 Spine Surgeons	2012

PUBLICATIONS

Peer Reviewed Articles:

Horowitz MB, **Spiro RM**, Purdy P, Jungreis C, Levy EI, Kassam AB. Meningioma Embolization. Contemporary Neurosurgery October 2001, 23(20):1-6.

Hasegawa T, Kondziolka D, **Spiro RM**, Flickinger JC, Lunsford LD. Repeat Radiosurgery for refractory trigeminal neuralgia. Neurosurgery March 2002 50(3):494-502.

Horowitz MB, Ramzipoor K, Nair A, Miller S, Rappard G, **Spiro RM**, Purdy P. Experimental Third Ventriculostomy Performed Using Endovascular Surgical Techniques and Their Adaptation to

Percutaneous Intradural Neuronavigation: Proof of Concept Cadaver Study. *Neurosurgery* August 2003 53(2):387-301.

Kassam, AB, Snyderman C, Gardner P, Carrau R, **Spiro RM**. The Expanded Endonasal Approach: A fully Endoscopic Transnasal Approach and Resection of the Odontoid Process: Technical Case Report. *Operative Neurosurgery* July 2005 (57)

Sherwood P, Crago E, **Spiro RM**, and Okonkwo DO (2007) Cervical spine injuries: preserving function, improving outcomes. *American Nurse Today* **2(9)**:26-29.

Pirris SM, Pollack IF, Snyderman CH, Carrau RL, **Spiro RM**, Tyler-Kabara E, Kassam AB. Corridor surgery: the current paradigm for skull base surgery. *Childs Nerv Syst* (2007) 23; 377-384

Tomczyk ND, Chew BG, Chang YF, Darby JM, Gunn SR, Nicholas DH, Ochoa JB, Peitzman AB, Schwartz E, Pape HC, **Spiro RM**, Okonkwo DO. MRI is unnecessary to clear the cervical spine in obtunded/comatose trauma patients: the four-year experience of a level trauma center. *J Trauma* 2008 May; 64(5): 1258-63.

Culley CM, Guttendorf S, Coldren M, Skledar SJ, Gross PR, **Spiro RM**, Triulzi DJ, Ragni MV. Coagulation factor VIIa (recombinant) in nonhemophilic patients requiring neurosurgery. *Am J Health Syst Pharm*. 2009 Sept 1;66 (17): 1554-9.

Maserati MB, Stephens B, Zohny Z, Lee JY, Kanter AS, **Spiro RM**, Okonkwo DO. Occipital condyle fractures: clinical decision rule and surgical management. *J Neurosurg Spine*. 2009 Oct; 11 (4):388-95.

Ochalski PG, **Spiro RM**, Fabio A, Kassam AB, Okonkwo DO. Fractures of the Clivus: A Contemporary Series in the Computed Tomography Era. *Neurosurgery* 65: (6) 1063-1069 December 2009

Monaco EA, **Spiro RM**. Multiseptated post-traumatic cervicothoracic syrinx treated by two anatomically distant syringe-subarachnoid shunts. *J Neurol Neurosurg Psychiatry* 2009 80: 1043

Tormenti MJ, Kostov DB, Gardner PA, Kanter AS, **Spiro RM**, Okonkwo DO. Intraoperative computed tomography image-guided navigation for posterior thoracolumbar spinal instrumentation in spinal deformity surgery. *Neurosurg Focus* 28 (3):E11, 2010

Tormenti MJ, Maserati MB, Bonfield CM, Gerszten PC, Moossy JJ, Kanter AS, Spiro RM, Okonkwo DO. Perioperative surgical complications of transforaminal lumbar interbody fusion: a single-center experience. *J Neurosurg Spine* 2012 Jan;16(1):44-50.

Book Chapters:

Levy E, **Spiro R**, Horowitz M. Tumor Embolization. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S. Karger AG, Switzerland, 2005, 180-193.

Sherwood P, Crago E, Spiro RM, Okonkwo DO. Cervical spine injuries: preserving function, improving outcomes. American Nurse Today 2(9):26-29.

Gardner PA, Tormenti MJ, Kassam AB, Spiro RM, Prevedello DM, Carrau RL, Snyderman CH. Endoscopic endonasal approach to the odontoid and craniocervical junction. Pp. 152-67. In Kassam AB, Gardner PA (eds): Endoscopic Approaches to the Skull Base. Progress in Neurological Surgery, Volume 26. Karger, Basel, 2012.

Peer Reviewed Abstracts:

Spiro RM, Conrad ME, Umbreit JN, Moore EG. Tumor Necrosis Factor α and Nitric Oxide in the Regulation of Iron Absorption and Cellular Uptake. Blood 84, p. 451, 1994.

Spiro R, Patel AP, Horowitz MB, Kassam AB, Pless M, Jungries C. Complications Involving Embolization of the External Carotid Artery Prior to Meningioma Resection: A 10-Year Experience and Review of the Literature. Skull Base Surgery ISSN1531-5010. Vol. 11. Supplemental 1, (page 40), March 2001.

Culley CM, **Spiro R**, Ragni MV, Triulzi DJ, Gross PR, Guttendorf S, Skledar SJ. Off-label use of recombinant factor VIIa in non-hemophilic patients. Poster presented at American College of Clinical Pharmacy Annual Meeting, Dallas, TX; 2004, Oct 27. [107] Published: *Pharmacotherapy* 2004;24(10):1437. [Abstract]

Oral Presentations:

Spiro RM. Mechanisms of Corrosion in Biomedical Implants. Johns Hopkins University Department of Biomedical Engineering Senior Thesis Presentation, Baltimore, Maryland, 1994.

Spiro RM. Tumor Necrosis Factor α in the Regulation of Iron Uptake University of South Alabama College of Medicine Student Research Day, Mobile, Alabama, 1994.

Spiro RM. Tumor Necrosis Factor α and Nitric Oxide in the Regulation of Iron Uptake, Southern Section of the American Federation of Clinical Research, New Orleans, Louisiana, 1994.

Spiro RM Tumor Necrosis Factor α and Nitric Oxide in the Regulation of Iron Absorption and Cellular Uptake International Meeting of the American Society of Hematology, Nashville, Tennessee, 1994.

Spiro RM. Nitric Oxide in the Regulation of Iron Uptake. University of South Alabama College of medicine Student Research Day, Mobile, Alabama, 1995.

Spiro RM. Tumor Necrosis Factor α and Nitric Oxide in the Regulation of Iron Uptake. Southern Section of the American Federation of Clinical Research. New Orleans, Louisiana, 1995.

Spiro RM. The Role of Fixed, Dilated Pupils in Evaluation of the Severely Head Injured Patient. Accepted for oral presentation at the American College of Surgeons, Annual Meeting of the Pennsylvania State Committee on Trauma. Harrisburg, Pennsylvania, 1999.

Spiro R, Patel AP, Horowitz MB, Kassam AB, Pless M, Jungreis C. Complications Involving Embolization of the External Carotid Artery Prior to Meningioma Resection: A 10-Year Experience and Review of the Literature. North American Skull Base Society, Orlando, Florida, 2001.

PROFESSIONAL ACTIVITIES

TEACHING:

2003-Present	Zimmer Spine Center of Excellence Instructor
2004-Present	American Association of Neurological Surgeons Annual Meeting Vertebroplasty Course Faculty
2004-Present	American Association of Neurological Surgeons Annual Meeting Cervical Spine Stabilization Course Faculty
2005	Congress of Neurological Surgeons Vertebroplasty Course Instructor
2012	

RESEARCH INTERESTS:

Basic Science:

Hypothermia for spinal cord injury

Clinical:

Materials for spinal surgery

Minimally invasive spinal surgery

SERVICE

UNIVERSITY AND MEDICAL SCHOOL:

1993-1994 Honors and Ethics Representative, Alpha Delta Phi Fraternity
1996-1998 Neuroanatomy Tutor for first-year medical students