CURRICULUM VITAE

Robert John Kowalski, Jr

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Clearwater, FL 33765

Office (727)797-7463
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EMPLOYMENT

Neurosurgeon 09/09 - Present
Florida Spine Institute
Clearwater, Florida

Neurosurgeon 08/05 – 08/09
Lieutenant Colonel, United States Air Force, Medical Corps
Wilford Hall Medical Center
San Antonio, Texas

Task Force Neurosurgeon 05/08 – 09/08
Craig Joint Theater Hospital
Bagram Air Field, Afghanistan

Engineer 06/89 – 05/94
Lieutenant, United States Navy, Civil Engineer Corps
Naval Air Station Key West
Key West, Florida

EDUCATION:

Post Graduate

Board Certification – Neurological Surgery - 28093 11/08 – 12/18
American Board of Neurological Surgery

Clinical Fellow – Complex Spinal Surgery 07/04 – 07/05
Cleveland Clinic Spine Institute
Cleveland, OH

Research Fellow 07/03 – 06/05
Neurosurgery Research and Education Foundation
American Association of Neurological Surgeons

Neurosurgery Resident 07/98 – 06/04
Cleveland Clinic Foundation
Cleveland, OH

Research Fellow 07/02 – 06/03
Spinal Research Laboratory
Cleveland Clinic Foundation
Cleveland, OH

Medical

M.D.
University of South Florida College of Medicine 09/94 – 05/98
Tampa, FL

Graduate

M.S. Mechanical Engineering 06/89 – 05/90
The Catholic University of America
Washington, DC

Undergraduate

B.S. Mechanical Engineering with Distinction 07/85 – 05/89
United States Naval Academy, Annapolis, MD

MILITARY SERVICE:

Air Force Officer

Lieutenant Colonel, Medical Corps	1998 - Present
2nd Lieutenant, Medical Service Corps	1994 - 1998

Naval Officer

Lieutenant, Civil Engineer Corps	1989 - 1994
Midshipman, U.S. Naval Academy	1985 - 1989

PUBLIC SERVICE:

Auxiliary Police Officer

Patrolman	1992 - 1994
Key West Police Department	
Key West, FL	

Medical Student Volunteer

Public Sector Medicine Program	1995 - 1998
Judeo-Christian Free Clinic	
Tampa, FL	

HONORS/AWARDS:

Post Graduate

Research Fellowship	2003 – 2005
Neurosurgery Research and Education Foundation	
American Association of Neurological Surgeons	
Department of Neurosurgery Humanitarian Award	2002
Cleveland Clinic Foundation	

Graduate

Alpha Omega Alpha	1997
Ambrose Pare Award	1998
Florida Chapter of the American College of Surgeons	
C.O.M. Student Council Vice-President	1995 - 1996
C.O.M. Senior Honors Surgery Program	1997

Undergraduate

1 of 10 Navy-wide recipients of full graduate scholarship	1989
Tau Beta Pi, engineering honor society	1988
Pi Tau Sigma, mechanical engineering honor society	1988
Brigade of Midshipman 1st Lieutenant	1988

Military

Air Force Meritorious Service Medal	2009
Army Commendation Medal	2008
Global War on Terrorism Expeditionary Medal	2008
Afghanistan Campaign Medal	2008
NATO Medal	2008
Global War on Terrorism Service Medal	2005
Armed Forces Service Medal	2005
Humanitarian Service Medal	2005
Air Force Small Arms Expert Marksmanship Ribbon	2005
Navy Commendation Medal	1994
National Defense Service Medal	1993
Navy Expert Pistol Shot Medal	1989
Navy Expert Rifleman Medal	1989

Other

Eagle Scout	1983
National Merit Scholar	1985

High School District Scholar-Athlete 1985

LICENSURE:

Medicine

Doctor of Medicine
- Ohio # 35-07-7398-K 1999 - Present
- Mississippi # 19025 2005 - Present
- Florida # ME 95396 2006 - Present
- Texas # M4253 2006 - Present

Engineering

Professional Engineer
- Florida # PE-0048078 1994 - Present

CERTIFICATES:

Pediatric Basic Life Support	2000 - 2002
Basic Life Support	1996 - Present
Advanced Cardiac Life Support	1996 - Present
Advanced Trauma Life Support	1997 - 1999

ORGANIZATIONS:

Congress of Neurological Surgeons
American Association of Neurological Surgeons
North American Spine Society
American College of Surgeons
AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves
American Medical Association

RESEARCH/TEACHING:

Neurosurgery Research

Research Fellowship Grant ($70,000) 2003 – 2005
An *In Vitro* Biomechanical Assessment of Motion Preservation Strategies for the Lumbar Spine (Nuclear Replacement and Artificial Intervertebral Disc Technologies versus Gold Standard Discectomy and Arthrodesis Approaches)
- Neurosurgery Research and Education Foundation
- American Association of Neurological Surgeons

Biomechanical analysis of novel motion preservation strategies, in particular, artificial cervical intervertebral discs. 2002 - 2003
- Mentor: Edward Benzel, M.D.
- Cleveland Clinic Foundation, Cleveland, OH

Biomechanical analysis of three level placement of bilateral threaded interbody fusion cages (BAK) in the lumbar spine utilizing a bovine model. 2000
- Mentor: Edward Benzel, M.D.

Cleveland Clinic Foundation, Cleveland, OH

Research Assistant

Classified project studying silencing techniques for submarine hull design for the Naval Ship Research Center under a grant from the Office of Naval Research utilizing a sophisticated wind tunnel. 1989 - 1990

Mentors: Mario Casarella, Ph.D. and Theodore Farabee, Ph.D.
The Catholic University of America, Washington, DC

Teaching Assistant

Fluid mechanics laboratory for senior engineering students. 1989 - 1990

Mentor: Xu Ling, Ph.D.
The Catholic University of America, Washington, DC

PUBLICATIONS:

Book Chapters

Kowalski RJ, Benzel EC: Spine reconstruction for spine tumors - biomechanical considerations, in Dickman CA, Fehlings MG, Gokaslan ZL (eds): *Spinal Cord and Spinal Cord Tumors: Principles and Practice*. New York, Thieme, 2006.

Kowalski RJ, Ferrara LA, Benzel EC: Biomechanics of Mechanical Motion Preservation Strategies, in Benzel EC (ed): *Spine Surgery: Techniques, Complication Avoidance, and Management 2nd Edition*. Philadelphia, Elsevier Churchill Livingston, 2005, pp 1434-43.

Woodard EJ, **Kowalski RJ**, Benzel EC: Orthoses: Complication Prevention and Management, in Benzel EC (ed): *Spine Surgery: Techniques, Complication Avoidance, and Management 2nd Edition*. Philadelphia, Elsevier Churchill Livingston, 2005, pp 1915-34.

Kowalski RJ, Benzel EC: Management of posttraumatic syringomyelia, in Vaccaro AR (ed): *Fractures of the Cervical, Thoracic, and Lumbar Spine*. New York, Marcel Dekker, 2002, pp 687-95.

Kowalski RJ, Benzel EC: Management of posttraumatic deformity, in Vaccaro AR (ed): *Fractures of the Cervical, Thoracic, and Lumbar Spine*. New York, Marcel Dekker, 2002, pp 697-707.

Kowalski RJ, Benzel EC: Biomechanics of the spine, in Wilkins RH, Rengachary SS (eds): *Neurosurgery 3rd Edition*. New York, McGraw-Hill (in press).

Journal Articles

Kowalski RJ, Ferrara LA, Benzel EC: *Biomechanics of the Spine*. Neurosurg Q. 15(1), 2005 Mar.

Kowalski RJ, Prayson RA, Lee JH: Skull Base Neurocytoma: Case Report and Review of the Literature of Extraventricular Neurocytomas. *Skull Base: An Interdisciplinary Approach.* 12(2):59-65, 2002 May.

Noga C, Prayson RA, **Kowalski RJ**, Sweeney PJ, Mayberg M: Metastatic Adenocarcinoma to a Pituitary Adenoma: A Case Report and Review of the Literature. *Annals of Diagnostic Pathology*. 5(6):354-60, 2001 Dec.

Kowalski RJ, Rasmussen P: Open direct embolization of a dural arterio-venous fistula: Technical case report. (manuscript in preparation).

Kowalski RJ, Prayson RA, Mayberg M: Pituicytoma: Case report and review of the literature. (manuscript in preparation).

On-line Publications

Schlenk R, **Kowalski RJ**, Benzel EC: Biomechanics of spinal deformity. *Neurosurgery Focus* 14 (1), 2003.

Kowalski RJ, Ferrara LA, Benzel EC: Biomechanics of bone fusion. *Neurosurgery Focus* 10 (4):Article 2, 2001.

Kowalski RJ, Rasmussen P: Intermittent left-sided paresthesias in a 61-year-old woman. *The Cleveland Clinic Foundation Neurosurgery Case Review Series* (On-line CME Course) on Healthstream.com. November, 2000.

Posters

McCafferty RR, Ragel BT, **Kowalski, RJ**. Neurosurgical caseload in Afghanistan during "Operation Enduring Freedom." Congress of Neurological Surgeons, Orlando, 2008.

Kowalski R, Kayanja MM, Jones GA, Borsellino S, Milks R, Benzel EC. Biomechanical properties of the Charité artificial disc. Congress of Neurological Surgeons, San Diego, 2007.

Milks R, Kayanja MM, Jones GA, Borsellino S, Benzel EC, **Kowalski R**. Biomechanical properties of the Prosthetic Disc Nucleus (PDN). Congress of Neurological Surgeons, San Diego, 2007.

Kowalski R, Jones GA, Kayanja MM, Borsellino S, Milks R, Benzel EC. Biomechanical comparison of ALIF fixation techniques. Congress of Neurological Surgeons, San Diego, 2007.

Ferrara LA, Paskiet JL, **Kowalski RJ**, Benzel EC, McLain RF: Biomechanical assessment of multilevel fixation using threaded interbody fusion cages. Congress of Neurological Surgeons 51st Annual Meeting, San Diego, CA, September 29-October 4, 2001.

Ferrara LA, Paskiet JL, **Kowalski RJ**, Benzel EC, McLain RF: Biomechanical assessment of multilevel fixation using threaded interbody fusion cages. International Meeting on Advanced Spine Techniques, Paradise Island, Bahamas, July 12-14, 2001.

PRESENTATIONS:

Kowalski RJ, Prayson RA, Mayberg M: Pituicytoma: Case report and review of the literature. Presented at the Ohio State Neurosurgical Society Annual Meeting, September 7, 2002.

Kowalski RJ, Prayson RA, Mayberg M: Pituicytoma: Case report and review of the literature. Presented at the Cleveland Clinic Foundation 27th Annual Neuroscience Residents' Day, May 10, 2002.

Ferrara LA, Paskiet JL, **Kowalski RJ**, Benzel EC, McLain RF: Biomechanical assessment of multilevel fixation using threaded interbody fusion cages. Presented at the World Federation of Neurological Societies 12th World Conference of Neurosurgeons, Sydney, Australia, September 16-22, 2001.

Kowalski RJ, Prayson RA, Lee JH: Skull Base Neurocytoma: Case Report and Review of the Literature of Extraventricular Neurocytomas. Presented at the Cleveland Clinic Foundation 26th Annual Neuroscience Residents' Day, May 29, 2001.

Noga C, Prayson RA, **Kowalski RJ**, Sweeney PJ, Mayberg M: Metastatic Adenocarcinoma to a Pituitary Adenoma: A Case Report and Review of the Literature. Presented at the Ohio State Neurosurgical Society Annual Meeting, September 9, 2000.