

Daniel Harwell, MD

Address: **Oklahoma Spine and Brain Institute**
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Post Graduate Training

Fellowship Complex Spine Surgery, Department of Neurosurgery, University of Michigan, Ann Arbor, MI, 7/2016- 6/2017

Residency, Department of Neurosurgery, University of Cincinnati, Cincinnati, OH, 7/2010-6/2016

Professional Education

Medical Doctor, University of Oklahoma College of Medicine, Oklahoma City, OK, 8/2006-5/2010

Bachelor of Science, Zoology-Biomedical Science, University of Oklahoma, Norman, OK, 8/2003- 5/2006

Certification & Licensure

- Board Eligible- Neurosurgery
- Ohio State Medical Board
- Michigan State Medical Board

Appointments & Positions

- Spine Fellow, University of Michigan, Department of Neurosurgery 7/2016- 6/2017 (anticipated)
- Chief Resident, University of Cincinnati, Department of Neurosurgery 7/2015-6/2016
- Resident Physician, University of Cincinnati, Department of Neurosurgery. 7/2010-6/2015
- Clinical Instructor, University of Cincinnati College of Medicine

Honors

- Ellen and Stewart Dunsker, MD, Award for Clinical Research- 2015
- Alpha Omega Alpha Honors Medical Society- 2010
- Dr. R McKinley Williams Scholar Award- 2010
- Tulsa County Medical Society- Presidents Award- 2009
- University of Oklahoma Health Science Center Plummer Scholar- 2009
- American Gastroenterology Association Student Fellowship Award- 2007
- University of Oklahoma Health Science Center CTS Scholar- 2007

- University of Oklahoma Health Science Center Leadership Scholarship, 2007-2008
- L. Basty, M.D. Scholarship, University of Oklahoma College of Medicine- 2006, 2007
- University of Oklahoma Undergraduate Research Scholar -2006
- University of Oklahoma Summa Cum Laude Graduate- 2006
- University of Oklahoma College of Arts and Science 4.0 Medallion- 2006

Professional Memberships

- American Association of Neurological Surgeons
- AO Spine
- Alpha Omega Alpha

Professional Service

- Committee Work
- University of Cincinnati Graduate Medical Education Committee- Member, 2014-2015
- University of Cincinnati Resident Advisory Committee- Member, 2014-2015
- University of Oklahoma College of Medicine Admissions Committee- Member, 2009
- Examination Review Committee- Chairman, 2007-2008
- Crimson Club- University service and community outreach organization 2007-2010
- Health and Wellness Interest Group- President- 2007-2008
- Student Advisory Board- Outstanding Member- 2006-2010
- Public Service
- Bedlam Community Health Clinic- Volunteer- 2008-2010

Research Projects

- Evaluation of the role of the meninges in determining brain and spinal cord intraparenchymal pressure in response to hypotonic solution. Principle Investigator. Mentor: Charles Kuntz IV. Sponsor: Division of Spine and Peripheral Nerve Surgery, University of Cincinnati.
- Spreading Depressions as Secondary Insults after Traumatic Injury to the Human Brain. Co- Investigator. Principal Investigator: Norberto Andaluz. 2010-2016.
- CLEAR III: Clot Lysis: Evaluating Accelerated Resolution of Intraventricular Hemorrhage Phase III. Co- Investigator. Principle Investigator: Ope Adeoye. 2010- 2016.
- Randomized Clinical Trial of the Safety and Efficacy of a Treatment Protocol, Based on Brain Tissue Oxygen (pBtO₂) Monitoring in Patients with Severe Traumatic Brain Injury. Co- Investigator. Principle Investigator: Norberto Andaluz. Sponsor: National Institute of Neurological Disorders and Stroke/ National Institute of Health. 2012-2016.
- INSPECT: Invasive and Non-Invasive monitoring of Spreading Depolarization by Electroencephalography in Trauma and Stroke. Co- Investigator. Principle Investigator: Jed Hartings. 2013-2016.
- INTREPID: Investigating Treatments for the Prevention of secondary Injury and Disability following TBI. Co- Investigator. Principle Investigator: Norberto Andaluz. 2014- 2016.
- MISTIE III: A Phase III, Random, Open Label, 500 Subject Clinical Trial of Minimally Invasive Surgery Plus rt-PA in the Treatment of Intracerebral Hemorrhage. Co-

Investigator. Principle Investigator; Mario Zuccarello. Sponsor: National Institute of Health. 2014- Current

- Retrospective Review of Head CT Imaging and Need for Follow up imaging following hemorrhage. Co-Investigator. Principle Investigator: Norberto Andaluz. 2013- Current
- Intracerebral Hemorrhage Removal: Safety and Efficacy of Minimally Invasive Surgery (MIS) Plus Recombinant Tissue Plasminogen Activator (Rt-Pa). Co- Investigator. Principal Investigator Mario Zuccarello. Sponsor: National Institute of Health. 2010- 2013.
- Quality of life, depression, and satisfaction after decompressive hemicraniectomy for malignant MCA territory infarction. Co- Investigator. Principle Investigator: Ralph Rhame. 2010-2011

Grants

- American Gastroenterology Association Student Fellowship 07/01/07-06/31/08
- University Oklahoma Summer CTS Scholar 06/01/07-08/01/07

Presentations

- Role of the Pia on Regulating Brain and Spinal Cord Intraparenchymal Pressure, Joint Section of Spine and Peripheral Nerve, March 2016.
- Role of the Pia on Regulating Brain and Spinal Cord Intraparenchymal Pressure, Mayfield Symposium, May 2015.
- Anterior Cervical Discectomy and Transforaminal Facetectomy with Fusion and Fixation for Reduction of Traumatic Cervical Facet Dislocation: A Cadaveric Study. Ohio State Neurosurgical Society. April 2015.
- History of Chiari Malformations, Winter Clinics, Snowmass Colorado, February 2015. Cervical Myelopathy, University of Cincinnati Department of Neurosurgery Grand Rounds. November 2014.
- Neurosurgery Specialty Seminar. University of Cincinnati College of Medicine. July 2014.
- The History and Management of Colloid Cysts. University of Cincinnati Department of Neurosurgery Grand rounds. June 2013.
- Pediatric Spinal Cord Injuries. An overview and proposed guidelines for implementation at CCHMC. Department of Pediatrics, Cincinnati Children's Hospital. October 2012
- Therapeutic effects of Phyllanthus species on pancreatic cancer cells. Clinical and Translational Research Symposium, University of Oklahoma Health Science. November 2007.
- Effect of Nicotine on Human Gingival Fibroblast in vitro. Undergraduate Research Day, University of Oklahoma. April 2006.

Publications

- Harwell DM, Gibson J, Fessler R, Holtz J, Pettigrew DB Charles Kuntz IV. Pia Mater Significantly Contributes to Spinal Cord Intraparenchymal Pressure in a Simulated Model of Edema. Spine (Phila Pa 1976). 2016 May;41(9)
- Gozal, YM Farley CW, Hanseman DJ, Harwell D, Magner M, Andaluz N, Shutter L. Ventriculostomy-Associated Infections: New Standardized Definition, Reporting Formal, and Institutional Experience. Neurocrit Care. 2014 Aug;21(1)

- Harwell DM, Do H, Andaluz N, Pettigrew D, Kuntz IV C,. Anterior Cervical Discectomy and Transforaminal Facetectomy with Fusion and Fixation for Reduction of Traumatic Cervical Facet Dislocation: A Cadaveric Study (Submitted)
- Tackla R, Harwell D, York J, Grewald S, Grande A, Ringer A. Nickel Allergy Resulting in Cerebral Vasculitis and Subsequent Stroke. (Submitted)

Book Chapters

- Complications of Brain Tumor Surgery, Youmans/Winn 7th ed.
- Pathophysiology of Thoracic Myelopathy: Biomechanics and Deformative Stress, Benzel/Kuntz 2nd ed.

Published Abstracts

- Farley C, Harwell D, Magner M, Andaluz N, Shutter L. Ventriculostomy-Associated Infections:
New Standardized Definition, Reporting Formal, and Institutional Experience.

National Courses Attended

- SNS Neurosurgery Bootcamp, Philadelphia, PA, September 2010.
- AO Spine Principles and Treatment of Spinal Disorders, Las Vegas NV, April 2012.
- Research Update in Neurosciences for Neurosurgeons, Woods Hole, MA. October 2012
- Ozark Neuroscience Education Clinic, Branson MO, July 2013.
- AANS Fundamentals in Spinal Surgery for Residents, Houston TX, Nov 2013.
- Chicago Board Review Course, Chicago IL, January 2014.
- Intensive Course in Cerebrovascular Surgery, Cincinnati OH, October 2014
- Alleghany General Hospital Microscopic and Endoscopic Skull Base Course, November 2014.
- Winter Clinics for Cranial and Spinal Surgery, Snowmass CO, February 2015.
- AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ, March 2015.
- CNS Annual Meeting, New Orleans LA, September 2015.
- AANS/CNS Joint Section on Disorders of Spine and Peripheral Nerves, Orlando FL, March 2016.