

# Ewell Lee Nelson, M.D.

## Education and Training

University of Texas at Austin, Bachelor of Science, 1989-1994, Electrical and Computer Engineering

Baylor College of Medicine, Doctor of Medicine, 1994-1998, Medicine

## Positions and Employment

1998-1999 General Surgery, Intern, Baylor College of Medicine

1999-2003 Neurological Surgery, Resident, Baylor College of Medicine

2003-2004 Neurological Surgery, Chief Resident, Baylor College of Medicine

2004- Neurological Surgery, Staff Neurosurgeon, Boulder Neurosurgical Associates

2008- Director of Neurosurgical Service, Exempla good Samaritan Medical Center, Lafayette, Colorado.

## Other Experience and Professional Memberships

American Board of Neurological Surgery - Board Certified

Medtronic Cranial Advisory Board, 10/06 - current

American Association of Neurological Surgeons

Congress of Neurological Surgeons

North American Spine Society

Colorado Medical Society

Boulder County Medical Society

## Honors

1994 Bachelor of Science in Electrical Engineering with Highest Honors, University of Texas at Austin

1994 Outstanding Scholar Leader of the Class, University of Texas at Austin

1994 Recipient of an Endowed Presidential Scholarship, Fluor Daniel Scholarship, 3M Scholarship, Alcoa Scholarship

1998 Doctor of Medicine with Honors, Baylor College of Medicine

1998 Alpha Omega Alpha, Baylor College of Medicine (Medical School)

2003 Kinjiro Iwata Award for Exceptional Contributions to the Department of Neurosurgery, Baylor College of Medicine

## Selected Peer Reviewed Publications

Grundmeyer RW, Garber JE, **Nelson EL**, Baskin, DS. Spinal spondylosis and disc disease. In: Evans RW, Baskin DS, Yatsu FM, eds. Prognosis of neurological disorders. 2nd edition. Oxford University Press, 2000.

Villavicencio AT, Burneikiene S, **Nelson EL**, Bulsara KR, Favors M, Thramann JJ. Safety and Efficacy of Transforaminal Lumbar Interbody Fusion using Intervertebral rhBMP-2. J Neurosurg, 2005 Dec;3(6):436-43.

Burneikiene S, Roeca CM, **Nelson EL**, Villavicencio AT. Minimally Invasive versus Open Transforaminal Lumbar Interbody Fusion (Submitted - Computer Aided Surgery).

Villavicencio AT, Burneikiene S, Romanelli P, McNeely L, Lipani JD, Fariselli L, McIntyre M, Chang SD, **Nelson EL**, Broggi G, Adler JR, Thramann JJ. Survival Following Stereotactic Radiosurgery for Newly Diagnosed and Recurrent Glioblastoma Multiforme: A Multicenter Experience (Submitted to Neurosurgical Review).

## Presentations

**Nelson EL**. The Aging Spine: Pathophysiology and New Surgical Solutions. Current Techniques in the Treatment of Cranial and Spinal Disorders, Broomfield, Colorado, November 15, 2008.

**Nelson EL**, Villavicencio AT, Burneikiene S, Roeca C. Correction of Degenerative Adult Scoliosis in Patients Undergoing Selective Transforaminal Lumbar Interbody Fusion. NASS 23<sup>rd</sup> Annual Meeting, October 14 – 18, Toronto, Canada.

**Nelson EL**, Burneikiene S, Villavicencio AT. Clinical Use of Osteogenic Protein (OP-1) for Instrumented Posterolateral Fusion. 2008 CNS Annual Meeting, Orlando, Florida, September 20 – 25, 2008.

**Nelson EL**, Villavicencio AT, Burneikiene S. Preliminary Clinical Experience with the O-arm for Complex Spinal Instrumentation and Kyphoplasty Cases. 2008 CNS Annual Meeting, Orlando, Florida, September 20 – 25, 2008.

Villavicencio AT, **Nelson EL**, Burneikiene S. Pelvic Sagittal Alignment in Patients Undergoing Selective Transforaminal Lumbar Interbody Fusion for Spinal Stenosis and Scoliosis Correction. 2008 CNS Annual Meeting, Orlando, Florida, September 20 – 25, 2008.

Villavicencio AT, Burneikiene S, **Nelson EL**. The Incidence of Discogenic Cervical Pain in Multisport Athletes. Spineweek 2008, May 26 -31, 2008, Geneva, Switzerland.

Burneikiene S, Villavicencio AT, Roeca CM, **Nelson EL**. Selective Transforaminal Lumbar Interbody Fusion for Degenerative Adult Scoliosis. SpineWeek 2008, May 26 -31, 2008, Geneva, Switzerland.

Burneikiene S, **Nelson EL**, Roeca CM, Villavicencio AT. Minimally Invasive vs, Open Transforaminal Interbody Fusion. SpineWeek 2008, May 26 – 31, 2008, Geneva, Switzerland.

Villavicencio AT, Burneikiene S, Roeca CM, **Nelson EL**. Selective Transforaminal Lumbar Interbody Fusion for Degenerative Adult Scoliosis Correction. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Orlando, Florida, February 27 – March 1, 2008.

Villavicencio AT, **Nelson EL**, Pushchak EM, Burneikiene S. The Risk Assessment of Outpatient Anterior Cervical Discectomy and Fusion with Instrumentation. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Orlando, Florida, February 27 – March 1, 2008.

Villavicencio AT, Burneikiene S, Roeca CM, **Nelson EL**. Selective Transforaminal Lumbar Interbody Fusion for Degenerative Adult Scoliosis. 21th Annual Neurosurgery in the Rockies Meeting, Beaver Creek, CO, February 23-27, 2008.

**Nelson EL**. Management of Spontaneous Intracerebral Hemorrhages. Exempla Good Samaritan Medical Center CME Series. – Lafayette, Colorado. October 4, 2007.

**Nelson EL**. Non-operative Management of Traumatic Cerebral Hemorrhages. Exempla Good Samaritan Medical Center CME Series. – Lafayette, Colorado. April 12, 2007.

**Nelson EL**. Intraoperative Guidance: Past, Present, and Future. Current Techniques in the Management of Spinal Disorders Symposium – Westminster, Colorado. September 30, 2006.

Villavicencio AT, Burneikiene S, **Nelson EL**, Bulsara KR, Thramann JJ. Intervertebral RhBMP-2 for Transforaminal Lumbar Interbody Fusion. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves 22<sup>nd</sup> Annual Meeting, Orlando, Florida. March 15-18, 2006

**Nelson EL**. Head Trauma Update: Guidelines for Management. Boulder Community Hospital CME Series. – Boulder, Colorado. December 8, 2005.

**Nelson EL**. Minimally Invasive Endoscopic Transphenoidal Surgery for Pituitary Lesions. Current Techniques in the Management of Spinal Disorders Symposium – Broomfield, Colorado. October 8, 2005.

**Nelson EL**. Head Injuries in the Multisystem Trauma Patient. Longmont United Hospital CME Series. – Longmont, Colorado. September 30, 2005.

Villavicencio AT, Burneikiene S, **Nelson EL**, Favors M, Bulsara KR, Thramann J. Safety and Efficacy of Transforaminal Lumbar Interbody Fusion (TLIF) Using Intervertebral rhBMP-2. World Spine III – Rio de Janeiro, Brazil. July 31- August 3, 2005

**Nelson EL**. Operative and Non-operative Management of Patients with Spinal Trauma. Current Techniques in the Management of Spinal Disorders Symposium – Boulder, Colorado. May 22, 2004.

### **Ongoing Research**

Pivotal IDE Study of the Wallis Mechanical Normalization System. Sponsor – Spinal Concepts, Inc. J.J.Thramann – PI, 2005 -  
Role: Sub-Investigator

Normal Pressure Hydrocephalus (NPH) Registry. Managed by AANS, Sponsor - Neuro-Knowledge and Outcome, A.T. Villavicencio – PI, 2005 –  
Role: Sub-Investigator

Restoration of Segmental Lordosis and Clinical Outcome in Anterior Cervical Fusion Patients, A.T. Villavicencio – PI, 2004 –  
Role: Sub-Investigator

### **Completed Research**

Gel Assisted Photocoagulation, A. J. Welch – PI, 1993.

Role: Research Assistant

Kappa Opioid Treatment of Focal Cerebral Ischemia, D.S. Baskin – PI, 1993

Role: Research Assistant

Transcleral Cyclophotocoagulation for the treatment of Glaucoma, A. J. Welch, - PI, 1993

Role: Research Assistant

Body Surface Laplacian Mapping of Visual Evoked Potentials for the Early Diagnosis of Glaucoma, G.H. Rylander - PI, 1994

Role: Research Assistant

Apoptosis and transient focal cerebral ischemia, D.S. Baskin –PI, 1997

Role: Research Assistant

Clinical Outcome Correlation with Serum, CSF, Brain Extracellular Magnesium and other Biochemical Markers Concentrations Following Traumatic Brain Injury and Intracranial Hemorrhage. Colorado Traumatic Injury Foundation Grant. A.T.Villavicencio - PI, 2005 - 2007

Role: Sub-Investigator