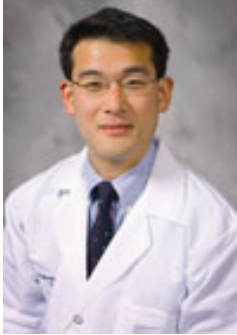


**Nicholas U. Ahn, M.D.**

Department of Orthopaedic Surgery  
Case Western Reserve University School of Medicine  
University Hospitals Case Medical Center  
11100 Euclid Avenue  
Cleveland, Ohio 44106-5043  
Phone: (216) 844-8301

**CURRENT POSITIONS:**

- 3/2005 – present      Associate Professor of Orthopaedic Surgery  
Case Western Reserve University School of Medicine  
Cleveland, Ohio
- 3/2005 – present      Attending Orthopaedic Surgeon  
University Hospitals of Cleveland  
Cleveland, Ohio
- 3/2005 – present      Louis Stokes Veterans Administration Medical Center  
Director, Spine Surgery Service  
Cleveland, Ohio

**PREVIOUS POSITIONS:**

- 9/2002 – 2/2005      University of Missouri – Kansas City School of Medicine  
Assistant Professor of Orthopaedic Surgery  
Truman Medical Center  
Director, Orthopaedic Spine Surgery service  
Kansas City, Missouri

**EDUCATION/CERTIFICATION:**

- 7/2004      Board Certified in Orthopaedic Surgery
- 8/2001 – 8/2002      Rush University Medical Center  
Fellowship in Spine Surgery
- 7/1996 – 6/2001      Johns Hopkins Hospital  
Johns Hopkins University School of Medicine  
Residency in Orthopaedic Surgery

7/1996 – 6/1997                    Johns Hopkins Hospital  
   Johns Hopkins University School of Medicine  
   General Surgery Internship

9/1992 – 6/1996                    Harvard Medical School  
   M.D. Degree

9/1989 – 6/1992                    Yale University  
   Bachelor of Science degree  
   Major: Molecular Biophysics and Biochemistry

#### **PUBLICATIONS IN PEER-REVIEWED JOURNALS:**

- 2008                    Wera GD, Dean CL, Ahn UM, Marcus RE, Cassinelli EH, Bohlman HH, **Ahn NU**. Re-herniation and failure after lumbar diskectomy: a comparison of fragment excision alone versus subtotal diskectomy. J SPINAL DISORD TECH 21:316-9, 2008.
- 2007                    Eubanks JD, Lee MJ, Cassinelli E, **Ahn NU**. Does lumbar facet arthrosis precede disc degeneration? A postmortem study. CLIN ORTHOP RELAT RES 464:184-9, 2007
- Eubanks JD, Lee MJ, Cassinelli E, **Ahn NU**. Prevalence of lumbar facet arthrosis and its relationship to age, sex, and race: an anatomic study of cadaveric specimens. SPINE 32(19):2058-62, 2007.
- Ahn NU**, Ahn UM, Ipsen B, An HS. Mechanical neck pain and cervicogenic headache. NEUROSURGERY 60(1 Supp 1 1):S21-7, 2007.
- 2006                    Cassinelli EH, Lee M, Skalak A, **Ahn NU**, Wright NM. Anatomic considerations for the placement of C2 laminar screws. SPINE 31(24):2767-71, 2006.
- Wera G, Dean C, Nho S, Hergan D, Cassinelli E, Andersson GM, **Ahn NU**. Cauda equina syndrome resulting from treatment of dural ectasia with fibrin glue injection. J SPINAL DISORD TECH 19(2): 148-50, 2006.
- Sponseller PD, Jones KB, **Ahn NU**, Erkula G, Foran JR, Dietz HC III. Protrusio acetabuli in Marfan syndrome: age-related prevalence and associated hip function. J BONE JOINT SURG AM 88(3):486-95, 2006.
- Cassinelli EH, Lee M, Skalak A, **Ahn NU**, Wright NM. Anatomic considerations for the placement of C2 laminar screws. SPINE 31(24):2767-71, 2006.

- 2003 **Ahn NU**, Ahn UM, Andersson GB, An HS. Operative treatment of the patient with neck pain. *PHYS MED REHABIL CLIN N AM* 14:675-92, 2003.
- Ahn NU**, Ahn UM, Harlan C, Reed WO, Amundson GM. Lumbar herniated nucleus pulposus. *ORTHOP NURS* 22(3):230-1, 2003.
- An HS, **Ahn NU**. Posterior decompressive procedures for the cervical spine. *INSTR COURSE LECT* 52:471-7, 2003.
- Buchowski JM, Kebaish KM, **Ahn NU**, Suk KS, Kostuik JP. Odontoid fracture in a 50-year-old patient presenting 40 years after cervical spine trauma. *ORTHOPEDICS* 26:1061-3, 2003.
- Riew KD, McCulloch JA, Delamarter RB, An HS, **Ahn NU**. Microsurgery for degenerative conditions of the cervical spine. *INSTR COURSE LECT* 52:497-508, 2003.
- Nallamshetty L, Buchowski JM, Nazarian LA, Narula S, Musto M, **Ahn NU**, Frassica FJ. Septic arthritis of the hip following cortisone injection. Case report and review of the literature. *CLIN IMAGING* 27(4):225-8, 2003.
- Buchowski JM, Helm PA, Huckell CB, Riley LH 3rd, Cohen DB, **Ahn NU**, Ahn UM, Okubadejo GO, Zinreich SJ, Kostuik JP. Evaluation of registration methods used in frameless stereotactic surgery for the lumbar and cervical regions of the spine. *AM J ORTHOP* 32(2):90-7, 2003.
- 2002 Nallamshetty L, **Ahn NU**, Ahn UM, Buchowski JM, An HS, Rose PS, Garrett ES, Erkula G, Kebaish KM, Sponseller PD. Plain radiography of the lumbosacral spine in Marfan syndrome. *THE SPINE JOURNAL* 2:327-333, 2002.
- Ahn UM, **Ahn NU**, Buchowski JM, Kebaish KM, Lee JH, Song ES, Lemma MA, Sieber AN, Kostuik JP. Functional outcome and radiographic correction after spinal osteotomy. *SPINE* 27:1303-11, 2002.
- Ahn UM, **Ahn NU**, Nallamshetty L, Buchowski JM, Rose PS, Miller NH, Kostuik JP, Sponseller PD. The etiology of adolescent idiopathic scoliosis. *AM J ORTHOP* 31:387-95, 2002.
- Nallamshetty L, **Ahn NU**, Ahn UM, Nallamshetty HS, Rose PS, Buchowski JM, Sponseller PD. Dural ectasia and back pain: review of the literature and case report. *J SPINAL DISORD TECH* 15:326-9, 2002.
- 2001 **Ahn NU**, Ahn UM, Nallamshetty L, Springer BD, Buchowski JM, Funches L, Garrett ES, Kostuik JP, Kebaish KM, Sponseller PD. Cauda equina syndrome in ankylosing spondylitis (the ces-as syndrome): meta-

analysis of outcomes after medical and surgical treatments. J SPINAL DISORD 14:427-33, 2001.

**Ahn NU**, Nallamshetty L, Ahn UM, Buchowski JM, Rose PS, Lemma MA, Wenz JF. Early failure associated with the use of Hylamer-M spacers in three primary AMK total knee arthroplasties. J ARTHROPLASTY 16:136-9, 2001.

**Ahn NU**, Ahn UM, Nallamshetty L, Rose PS, Buchowski JM, Garrett ES, Kebaish KM, Sponseller PD. The lumbar interpediculate distance is widened in adults with the Marfan syndrome. ACTA ORTHOP SCAND 72:67-71, 2001.

Rose PS, **Ahn NU**, Levy HP, Ahn UM, Davis J, Lieberfarb RM, Nallamshetty L, Sponseller PD, Francomano CA. Thoracolumbar spinal abnormalities in the Stickler syndrome. SPINE 16:403-9, 2001.

**Ahn NU**, Nallamshetty L, Ahn UM, Buchowski JM, Rose PS, Garrett ES, Kebaish KM, Sponseller PD. Dural ectasia and conventional radiology in the Marfan lumbosacral spine. SKELETAL RADIOL 30:338-45, 2001.

Rose PS, **Ahn NU**, Levy HP, Magid D, Lieberfarb RM, Sponseller PD, Francomano CA. The hip in Stickler syndrome. J PEDIATR ORTHOP 21:657-63, 2001.

Buchowski JM, **Ahn NU**, Ahn UM, McCarthy EF, Mehta MB. Disproportionately severe calcinosis cutis in an 88-year old patient with CREST syndrome. SKELETAL RADIOL 30:478-81, 2001.

2000

**Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. SPINE 25:1562-8, 2000.

**Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Rose PS, Buchowski JM, Garrett ES, Kuszyk BS, Fishman EK, Zinreich SJ. Dural ectasia in the Marfan syndrome: MR and CT findings and criteria. GENET MED 2:173-9, 2000.

Ahn UM, **Ahn NU**, Buchowski JM, Garrett ES, Sieber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. SPINE 25:1515-22, 2000.

Rose P, Levy H, **Ahn N**, Sponseller P, Magyari T, Davis J, Francomano C. A comparison of the Berlin and Ghent nosologies in the diagnosis of Marfan syndrome: the NIH experience. GENET MED 2:86, 2000.

Sponseller PD, **Ahn NU**, Ahn UM, Nallamshetty L, Rose PS, Kuszyk BS, Fishman EK. Osseous anatomy of the lumbosacral spine in Marfan syndrome. SPINE 25:2797-802, 2000.

- 1999 Sponseller PD, **Ahn NU**, Choi J, Ahn UM. Orthopaedic problems in the Lesch-Nyhan syndrome. J PEDIATR ORTHOP 19:596-602, 1999.
- 1990 Giger ML, **Ahn N**, Doi K, MacMahon H, Metz CE. Computerized detection of pulmonary nodules in digital chest images: use of morphological filters in reducing false-positive detections. MED PHYSICS 17:861-865, 1990.

#### **PUBLICATIONS IN NON-REFERREED JOURNALS:**

- 2006 Wera GD, Dean CL, Cassinelli EH, Liu RW, **Ahn NU**. Cauda equina syndrome resulting from treatment of dural ectasia with fibrin glue injection. CASE ORTHOP JOURNAL 2(1):85-87, 2006.
- 2005 Wera GD, Dean CL, Cassinelli E, Liu R, **Ahn NU**. Cauda equina syndrome resulting from treatment of dural ectasia with fibrin glue injection. CASE ORTHOP JOURNAL 2(1):85-87, 2005.
- 2003 **Ahn NU**, Hammerberg KW, DeWald CJ, DeWald RL, Bergin CJ, An HS. Spondylolisthesis: Classification, Diagnosis, and Natural History. SEMIN SPIN SURG 15:112-124; 2003.
- 2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Rose PS, Lemma MI, Wenz JF. Intertrochanteric hip fracture in an elderly woman with negative plain films: a case report and review of the literature. EMERG RADIOL 8:149-151, 2001.
- Buchowski JM, **Ahn NU**, Ahn UM, Kebaish KM, Kostuik JP. Cauda equina syndrome in a 32-year-old woman following an L5-S1 central lumbar disc herniation. EMERG RADIOL 8:230-2, 2001.
- Ahn UM, Lemma MA, **Ahn NU**, Khanna AJ, Buchowski J, Kostuik JP. Occipitocervical Fusion: A Review of Indications, Techniques of Internal Fixation, and Results. NEUROSURGERY QUARTERLY 11:77-85, 2001.

#### **LIST OF PUBLISHED ABSTRACTS:**

*Abstracts Published in Transactions of the American Academy of Orthopaedic Surgeons (AAOS):*

- 2004 **Ahn NU**, Ahn UM, Harlan C, Basran H, Hopkins W. Pain and functional outcomes after intradiscal electrothermal therapy: a retrospective review with cost-effectiveness analysis. TRANS AAOS, 71:77, 2004.

- 2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Rose PS, Sponseller PD. Lumbar spine pathology and atherosclerotic risk factors: a 53-year prospective study of 1337 patients. TRANS AAOS, 68:155, 2001.
- 1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. TRANS AAOS, 66:222, 1999.

*Other Published Abstracts:*

- 2005 **Ahn N**, Ahn U, De Roode C, Kline S, Hopkins W, Amundson G. Rate of total disability after lumbar discogenic fusion in the Workmen's Compensation population. THE SPINE JOURNAL 5:52-53S, 2005.
- 2004 **Ahn N**, Ahn U, Post Z, Salsbury T, Basran H, Datta J, Harlan C, Ipsen B, Hopkins W, Andersson G, An H. Smoking, diabetes and excessive preoperative epidural steroid administration are risk factors for intraoperative dural tears. THE SPINE JOURNAL 4:22S, 2004.
- Ahn N**, Ahn U, Basran H, Harlan C, Salsbury T, Niemann J, Post Z, Hopkins W, Hamilton JJ. Survival is significantly decreased in patients with lumbar stenosis that sustain hip fractures. THE SPINE JOURNAL 4:34S, 2004.
- Ahn N**, Ahn U, Basran H, Ipsen B, Datta J, Post Z, Salsbury T, Hopkins W. Is cervical discography predictive of surgical outcomes in patients with mechanical neck pain? A meta-analysis of 538 patients. THE SPINE JOURNAL 4:56-57S, 2004.
- Ahn N**, Ahn U, Datta J, Ipsen B, Basran H, Post Z, Salsbury T, Hamilton JJ. Painful postoperative neuritis is common after lumbar decompression in patients with hepatitis B and C. THE SPINE JOURNAL 4:69-70S, 2004.
- 2003 **Ahn N**, Ahn U, Harlan C, Basran H, Reed W, Hopkins W, Amundson G. Pain and functional outcomes after intradiscal electrothermal therapy: a retrospective review with cost-effectiveness analysis. THE SPINE JOURNAL 3:87S, 2003.
- Reed W, **Ahn N**, Harlan C, Basran H, Amundson G. Arthroscopic microdiscectomy: risk factors for painful postoperative radiculitis. THE SPINE JOURNAL 3:171S, 2003.
- 2002 **Ahn NU**, Klug R, Hergan D, Ahn UM, Andersson G, An HS. Residual lower extremity pain after decompression and posterolateral fusion for lumbar spondylolisthesis is often related to bone graft harvest. THE SPINE JOURNAL 2:58S, 2002.
- Ahn NU**, Imai Y, An H, Yamada M, Masuda K. Effect of nutrient concentration and osteogenic protein-1 on the metabolism of

intervertebral disc: in vitro organ culture study. THE SPINE JOURNAL 2:87-88S, 2002.

**Ahn NU**, Klug R, Nho S, Ahn UM, Hiranyashiti N, Crane B, Buchowski J, Andersson G, An H. Smoking, smoking cessation, and wound complications after lumbar spine surgery. THE SPINE JOURNAL 2:113-114S, 2002.

1989 Yoshimura H, Giger ML, Doi K, **Ahn N**, MacMahon H. Use of morphological filters in the computerized detection of lung nodules in digital chest images. RADIOLOGY, 173:347, 1989.

#### TEXTBOOK CHAPTERS:

2003 **Ahn NU**, Ahn UM, Amundson GM, An HS. Axial neck pain and cervical degenerative disk disease. In: Frymoyer (ed), THE ADULT SPINE, Principles and Practice, Lippincott Williams and Wilkins, Philadelphia, 2003.

Ahn UM, Kebaish K, **Ahn NU**, Kostuik JP. Spinal inflammatory arthritides. In: DeWald RL (ed), SPINAL DEFORMITIES: THE COMPREHENSIVE TEXT. Thieme Medical Publishers, New York, NY, 2003.

Ahn UM, Kebaish K, **Ahn NU**, Kostuik JP. Coagulation disorders in spine surgery. In: DeWald RL (ed), SPINAL DEFORMITIES: THE COMPREHENSIVE TEXT. Thieme Medical Publishers, New York, NY, 2003.

An HS, **Ahn NU**. Posterior decompressive procedures for the cervical spine. In: An HS (ed), INSTRUCTIONAL COURSE LECTURES SPINE, pp 39-46. American Academy of Orthopaedic Surgeons, Rosemont IL, 2003.

Riew KD, McCulloch JA, Delamarter RB, An HS, **Ahn NU**. Microsurgery for degenerative conditions of the cervical spine. In: An HS (ed), INSTRUCTIONAL COURSE LECTURES SPINE, pp 47-62. American Academy of Orthopaedic Surgeons, Rosemont IL, 2003.

2001 **Ahn NU**. Fibula Fracture. In: Sponseller PD (ed), THE 5 MINUTE ORTHOPAEDIC CONSULT, pp 111-112. Williams and Wilkins, Baltimore, 2001.

**Ahn NU**. Clubfoot. In: Sponseller PD (ed), THE 5 MINUTE ORTHOPAEDIC CONSULT, pp 75-76. Williams and Wilkins, Baltimore, 2001.

**Ahn NU**. Flatfoot. In: Sponseller PD (ed), THE 5 MINUTE ORTHOPAEDIC CONSULT, pp 113-115. Williams and Wilkins, Baltimore, 2001.

## SCIENTIFIC PRESENTATIONS AT NATIONAL OR INTERNATIONAL MEETINGS:

### *Orthopaedic Research Society (ORS) Meeting Presentations*

3/2009 Kummari S, Davis A, Vega L, **Ahn NU**, Cassinelli E, Hernandez C. Trabecular microfracture precedes cortical bone failure during cyclic loading of rat vertebrae. ORS, Las Vegas, NV.

### *American Academy of Orthopaedic Surgeons (AAOS) Meeting Presentations*

2/2007 Oldenburg FP, Dean C, Ahn UM, Cassinelli C, Hart D, **Ahn NU**. Predictive factors for improvement after lumbar epidural steroid injections: survival and cost-effectiveness analysis. AAOS, San Diego, CA.

2/2007 Wera G, Dean C, Cassinelli E, Ahn U, Bohlman HH, Marcus RE, **Ahn N**. Reherniation and Failure Following Lumbar Discectomy: A Comparison of Fragment Excision Alone Versus Subtotal Discectomy. AAOS, San Diego, CA.

3/2004 **Ahn NU**, Ahn UM, Harlan C, Basran H, Hopkins W. Pain and functional outcomes after intradiscal electrothermal therapy: a retrospective review with cost-effectiveness analysis. AAOS, San Francisco CA.

3/2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Rose PS, Sponseller PD. Lumbar spine pathology and atherosclerotic risk factors: a 53-year prospective study of 1337 patients. AAOS, San Francisco CA.

3/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. AAOS, Anaheim CA.

### *North American Spine Society (NASS) Presentations*

9/2007 P Messerschmitt, R Garcia, **N Ahn**. Does narcotic use prior to lumbar decompression surgery predict functional outcomes or duration of postoperative narcotic use? NASS, Austin, TX.

9/2006 J Eubanks, M Lee, **N Ahn**. The natural history of lumbar disc degeneration and facet arthrosis: A postmortem specimen study. NASS, Seattle, WA.

- 9/2006 C Dean, G Wera, E Cassinelli, U Ahn, H Bohlman, **N Ahn**. Smoking increases blood loss and transfusion requirements following lumbar spine surgery. NASS, Seattle, WA.
- 9/2006 F Oldenburg, C Dean, U Ahn, E Cassinelli, H Bohlman, **N Ahn**. Predictive factors for improvement after lumbar epidural steroid injections: survival and cost effectiveness analysis. NASS, Seattle, WA.
- 9/2006 J Eubanks, M Lee, **N Ahn**. Prevalence of lumbar facet arthrosis and its relationship to Age, sex, and race: An anatomic study of 647 cadaveric specimens. NASS, Seattle, WA.
- 10/2005 **Ahn NU**, Ahn UM, DeRoode C, Kline S, Hopkins W, Reed WO, Bailey AS, Amundson GM. Rate of total disability after lumbar discogenic fusion in the Workmen's Compensation population. NASS, Philadelphia PA.
- 10/2004 **Ahn NU**, Ahn UM, Post Z, Salsbury T, Basran H, Datta J, Harlan C, Ipsen B, Andersson G, An H. Smoking, diabetes, and excessive preoperative epidural steroid administration are risk factors for intraoperative dural tears. NASS, Chicago IL.
- 10/2004 **Ahn NU**, Ahn UM, Basran H, Harlan C, Salsbury T, Niemann J, Post Z, Hopkins W, Hamilton JJ. Survival is significantly decreased in patients with lumbar stenosis that sustain hip fractures. NASS, Chicago IL.
- 10/2004 **Ahn NU**, Ahn UM, Basran H, Ipsen B, Datta J, Post Z, Salsbury T, Hopkins W. Is cervical discography predictive of surgical outcomes in patients with mechanical neck pain? A meta-analysis of 538 patients. NASS, Chicago IL.
- 10/2004 **Ahn NU**, Ahn UM, Datta J, Ipsen B, Basran H, Post Z, Salsbury T, Hopkins W, Hamilton JJ. Painful postoperative neuritis is common after lumbar decompression in patients with Hepatitis B and C. NASS, Chicago IL.
- 10/2003 **Ahn NU**, Ahn UM, Harlan C, Basran H, Hopkins W, Amundson GM. Pain and functional outcomes after intradiscal electrothermal therapy: a retrospective review with cost-effectiveness analysis. NASS, San Diego CA.
- 10/2003 Reed WO, **Ahn NU**, Harlan C, Basran H, Amundson GM. Arthroscopic microdiscectomy: risk factors for painful postoperative radiculitis. NASS, San Diego CA.
- 10/2002 **Ahn NU**, Imai Y, An HS, Yamada M, Masuda K. Effect of nutrient concentration and OP-1 on the metabolism of intervertebral disc: in vitro organ culture study. NASS, Montreal, Canada.

- 10/2002 **Ahn NU**, Klug RS, Noh S, Ahn UM, Hergan D, Buchowski JM, Singh K, Andersson GB, An HS. Smoking, smoking cessation, and wound complications after lumbar spine surgery. NASS, Montreal, Canada.
- 10/2002 **Ahn NU**, Klug RS, Hergan D, Ahn UM, Noh S, Singh K, Andersson GB, An HS. Residual lower extremity pain after decompression and posterolateral fusion for lumbar spondylolisthesis is often related to bone graft harvest. NASS, Montreal, Canada.
- 10/2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Sponseller PD. Lumbar spine pathology, depression, and psychiatric illness: a 53-year prospective study of 1337 patients. NASS, Seattle WA.
- 10/2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Rose PS, Sponseller PD. Lumbar spine pathology and multiple atherosclerotic risk factors: a 53-year prospective study of 1337 patients. NASS, Seattle WA.
- 10/2000 Ahn UM, **Ahn NU**, Buchowski JM, Kebaish KM, Song ES, Lemma MA, Sieber A, Kostuik JP. Radiographic correction and postoperative outcomes after lumbar spinal osteotomy. NASS, New Orleans LA.
- 10/2000 Rose PS, **Ahn NU**, Levy HP, Ahn UM, Davis J, Lieberfarb RM, Nallamshetty L, Sponseller PD, Francomano CA. Thoracolumbar spinal abnormalities in the Stickler syndrome. NASS, New Orleans LA.
- 10/2000 **Ahn NU**, Nallamshetty L, Ahn UM, Rose PS, Buchowski JM, Garrett ES, Kebaish KM, Sponseller PD. Dural ectasia in the Marfan spine: signs, symptoms, and treatment. NASS, New Orleans LA.
- 10/2000 **Ahn NU**, Ahn UM, Sponseller PD, Nallamshetty L, Buchowski JM, Rose PS, Kostuik JP. Lumbar spine pathology and atherosclerotic risk factors: a 53-year prospective study of 1337 patients. NASS, New Orleans LA.
- 10/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. NASS, Chicago IL.

*International Society for Study of the Lumbar Spine (ISSLS) Presentations*

- 5/2009 E Schnaser, J Toy, S Qureshi, P Gause, J Tinley, J Eubanks, **N Ahn**. Disc degeneration is increased in subjects with spondylolysis at lumbar levels other than L5. ISSLS, Miami, FL, USA.
- 5/2009 J Tinley, J Toy, P Gause, S Qureshi, J Eubanks, **N Ahn**. Correlation of sacropelvic parameters with disc degeneration in spondylolytic cadaver specimens. ISSLS, Miami, FL, USA.

- 5/2009 K Ahamandia, **NU Ahn**. Blood loss, transfusion requirements and hospital stay are increased in anticoagulated patients undergoing lumbar decompression despite preoperative correction. ISSLS, Miami, FL, USA.
- 5/2008 R Garcia, P Messerschmitt, **N Ahn**. An evaluation of information on the internet of a new device: the lumbar artificial disk replacement. ISSLS, Geneva, Switzerland.
- 5/2008 P Gause, S Qureshi, J Toy, **N Ahn**. Disk degeneration and spondylolysis: effect of lumbar vertebral geometry. ISSLS, Geneva, Switzerland.
- 5/2008 S Qureshi, P Gause, J Toy, J Eubanks, **N Ahn**. An anatomic study correlating the position of the L5 vertebral body with L5/S1 disk degeneration: does a deep-seated L5 afford any protection? ISSLS, Geneva, Switzerland.
- 6/2007 R Garcia, P Messerschmitt, **N Ahn**. Is sexual function affected by lumbar decompression surgery? ISSLS, Hong Kong, China
- 6/2007 P Messerschmitt, R Garcia, **N Ahn**. Does narcotic use prior to lumbar decompression surgery predict functional outcomes or duration of postoperative narcotic use? ISSLS, Hong Kong, China.
- 6/2007 D Master, J Eubanks, M Lee, **N Ahn**. The relationship between cervical and lumbar disk degeneration. ISSLS, Hong Kong, China.
- 6/2007 J Eubanks, P Messerschmitt, M Lee, D Cooperman, **N Ahn**. Anatomic variance of interfacet distance and its relationship to facet arthrosis and degenerative disk disease in the lumbar spine: a cadaveric study of 446 specimens. ISSLS, Hong Kong, China.
- 6/2006 C Dean, G Wera, E Cassinelli, U Ahn, H Bohlman, **N Ahn**. Smoking increases blood loss and transfusion requirements following lumbar spine surgery. ISSLS, Bergen, Norway.
- 6/2006 J Eubanks, M Lee, **N Ahn**. The natural history of lumbar disc degeneration and facet arthrosis: A postmortem specimen study. ISSLS, Bergen, Norway.
- 6/2006 F Oldenburg, C Dean, U Ahn, E Cassinelli, H Bohlman, **N Ahn**. Predictive factors for improvement after lumbar epidural steroid injections: survival and cost effectiveness analysis. ISSLS, Bergen, Norway.
- 6/2006 M Gerling, J Eubanks, H Bohlman, **N Ahn**. Long-term survivorship analysis after osteoporotic compression fractures of the thoracolumbar spine in elderly patients: Percutaneous cement augmentation versus brace treatment. ISSLS, Bergen, Norway.

- 6/2006 J Eubanks, M Lee, **N Ahn**. Prevalence of lumbar facet arthrosis and its relationship to Age, sex, and race: An anatomic study of 647 cadaveric specimens. ISSLS, Bergen, Norway.
- 6/2006 G Wera, C Dean, E Cassinelli, U Ahn, H Bohlman, R Marcus, **N Ahn**. Reherniation and failure following lumbar discectomy: A comparison of fragment excision alone versus subtotal discectomy. ISSLS, Bergen, Norway.
- 6/2006 B Hardy, C Dean, U Ahn, **N Ahn**. Predictors of surgical outcome for patients undergoing decompression for lumbar stenosis without classic neurogenic signs and symptoms. ISSLS, Bergen, Norway.
- 6/2006 T Mazahery, B Smucker, U Ahn, H Bohlman, **N Ahn**. Does preoperative discography affect postoperative outcomes after lumbar interbody fusion for mechanical low back pain? A meta-analysis of the literature. ISSLS, Bergen, Norway.
- 5/2005 **Ahn NU**, Ahn UM, Post Z, Salsbury T, Basran H, Datta J, Harlan C, Ipsen B, Hopkins W, Andersson G, An H. Smoking, diabetes, and excessive preoperative epidural steroid administration are risk factors for intraoperative dural tears. ISSLS, New York NY.
- 5/2005 **Ahn NU**, Ahn UM, Basran H, Harlan C, Salsbury T, Niemann J, Post Z, Hopkins W, Hamilton JJ. Survival is significantly decreased in patients with lumbar stenosis that sustain hip fractures. ISSLS, New York NY.
- 5/2005 **Ahn NU**, Ahn UM, Datta J, Ipsen B, Basran H, Post Z, Salsbury T, Hopkins W, Hamilton JJ. Painful postoperative neuritis is common after lumbar decompression in patients with Hepatitis B and C. ISSLS, New York NY.
- 5/2003 **Ahn NU**, Imai Y, An HS, Yamada M, Masuda K. Effect of nutrient concentration and OP-1 on the metabolism of intervertebral disc: in vitro organ culture study. ISSLS, Vancouver BC.
- 5/2003 **Ahn NU**, Klug RS, Hergan D, Ahn UM, Noh S, Singh K, Andersson GB, An HS. Residual lower extremity pain after decompression and posterolateral fusion for lumbar spondylolisthesis is often related to bone graft harvest. ISSLS, Vancouver BC.
- 5/2002 **Ahn NU**, Klug RS, Noh S, Ahn UM, Hergan D, Crane B, Buchowski JM, Singh K, Andersson GB, An HS. Smoking, smoking cessation, and wound complications after lumbar spine surgery. ISSLS, Cleveland OH.
- 5/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. ISSLS, Kona HI.

### *World Spine Congress*

- 7/2007 J Eubanks, M Lee, **N Ahn**. Prevalence of lumbar facet arthrosis and its relationship to age, sex, and race: An anatomic study of 647 cadaveric specimens. Istanbul, Turkey.

### *Cervical Spine Research Society (CSRS) Presentations*

- 12/2008 Dickson D, Seal C, **Ahn NU**. Does cocaine use/abuse affect post-op recovery in cervical myelopathy? CSRS, Austin, TX.
- 12/2008 Garcia RM, Qureshi S, Biro C, **Ahn NU**, Furey CG, Bohlman HH. Detection of nerve root and spinal cord deficits using somatosensory-evoked potentials in a consecutive series of cervical laminoplasty procedures. CSRS, Austin, TX.
- 12/2005 Dean C, Cassinelli E, Wera G, Furey C, Bohlman HH, Moore T, **Ahn NU**. Anatomy of the C2 Vertebra and Odontoid Process with Relation to Odontoid Screw Placement: A Cadaveric Study of 3389 Adult Specimens. CSRS, San Diego CA.  
**Winner, 3<sup>rd</sup> Place, Resident Research Award (senior author).**
- 12/2005 Cassinelli EH, Lee M, Skalak A, Bohlman HH, **Ahn NU**. Anatomic Considerations for the Placement of C2 Intra-laminar Screws. CSRS, San Diego CA. **Winner, 1<sup>st</sup> Place, Fellow Research Award (senior author).**
- 12/2004 **Ahn NU**, Ahn UM, Basran H, Ipsen B, Datta J, Post Z, Salsbury T, Hopkins W. Is cervical discography predictive of surgical outcomes in patients with mechanical neck pain? A meta-analysis of 538 patients. CSRS, Boston MA.
- 12/2002 **Ahn NU**, Imai Y, An HS, Yamada M, Masuda K. Effect of nutrient concentration and OP-1 on the metabolism of intervertebral disc: in vitro organ culture study. CSRS, Miami FL.

### *Scoliosis Research Society (SRS) Presentations*

- 9/2003 **Ahn NU**, DeWald CJ, Hammerberg KW, Bergin CJ, Ahn UM, An HS, DeWald RL. What causes pain and disability in adults with severe Scheuermann's kyphosis? SRS, Quebec City, Canada.
- 9/2003 **Ahn NU**, Ahn UM, Reed WO, Basran H, Hopkins W, Hamilton JJ. Mortality rates after hip fractures in patients with symptomatic lumbar stenosis. SRS, Quebec City, Canada.
- 9/2003 **Ahn NU**, Ahn UM, Harlan C, Basran H, Reed WO, Hopkins W, Amundson GM. Pain and functional outcomes after intradiscal

electrothermal therapy: a retrospective review with cost-effectiveness analysis. SRS, Quebec City, Canada.

- 9/2002 **Ahn NU**, Klug RS, Noh S, Ahn UM, Hergan D, Crane B, Buchowski JM, Singh K, Andersson GB, An HS. Smoking, smoking cessation, and wound complications after lumbar spine surgery. SRS, Seattle WA.
- 9/2002 **Ahn NU**, Imai Y, An HS, Yamada M, Masuda K. Effect of nutrient concentration and OP-1 on the metabolism of intervertebral disc: in vitro organ culture study. SRS, Seattle WA.
- 9/2002 **Ahn NU**, Klug RS, Hergan D, Ahn UM, Noh S, Singh K, Andersson GB, An HS. Residual lower extremity pain after decompression and posterolateral fusion for lumbar spondylolisthesis is often related to bone graft harvest. SRS, Seattle WA.
- 10/2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Sponseller PD. Lumbar spine pathology, depression, and psychiatric illness: a 53-year prospective study of 1337 patients. **Nominated for the Russell A. Hibbs Award**. SRS, Cleveland OH.
- 10/2001 **Ahn NU**, Ahn UM, Nallamshetty L, Buchowski JM, Rose PS, Sponseller PD. Lumbar spine pathology and multiple atherosclerotic risk factors: a 53-year prospective study of 1337 patients. SRS, Cleveland OH
- 10/2001 **Ahn NU**, Nallamshetty L, Ahn UM, Rose PS, Buchowski JM, Garrett ES, Kebaish KM, Sponseller PD. Dural ectasia and plain radiography in the Marfan lumbosacral spine. SRS, Cleveland OH.
- 10/2000 **Ahn NU**, Ahn UM, Sponseller PD, Nallamshetty L, Buchowski JM, Rose PS, Kostuik JP. Lumbar spine pathology and atherosclerotic risk factors: a 53-year prospective study of 1337 patients. SRS, Cairns, Australia.
- 10/2000 **Ahn NU**, Nallamshetty L, Ahn UM, Rose PS, Buchowski JM, Garrett ES, Kebaish KM, Sponseller PD. Dural ectasia in the Marfan spine: signs, symptoms, and treatment. SRS, Cairns, Australia.
- 10/2000 Ahn UM, **Ahn NU**, Buchowski JM, Kebaish KM, Song ES, Lemma MA, Sieber A, Kostuik JP. Radiographic correction and postoperative outcomes after lumbar spinal osteotomy. SRS, Cairns, Australia
- 10/2000 Rose PS, **Ahn NU**, Levy HP, Ahn UM, Davis J, Lieberfarb RM, Nallamshetty L, Sponseller PD, Francomano CA. Thoracolumbar spinal abnormalities in the Stickler syndrome. SRS, Cairns, Australia.
- 9/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. SRS, San Diego CA.

9/1999 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. SRS, San Diego CA.

9/1999 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Fishman EK. Osseous anatomy of the lumbosacral spine in the Marfan syndrome. SRS, San Diego CA.

*Pediatric Orthopaedic Society of North America (POSNA) Presentations*

5/2001 Sponseller PD, **Ahn NU**, Erkula G. Protrusio acetabuli in the Marfan syndrome. POSNA, Cancun, Mexico.

5/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. POSNA, Vancouver BC.

*AOA Residents' Conference Presentations*

3/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Rose PS, Kuszyk BS, Fishman EK. Osseous anatomy of lumbosacral spine in Marfan syndrome. AOA Resident Conference, St. Louis MO.

3/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. AOA Resident Conference, St. Louis MO.

*American Orthopaedic Association (AOA) Meeting Presentations*

6/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. AOA, Sun Valley ID.

*Other National Presentations*

11/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. American Academy of Pediatrics, Boston MA.

12/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in Marfan syndrome. Society of Teachers of Family Medicine, Orlando FL.

10/2000 Ahn UM, **Ahn NU**, Nallamshetty L, Rose PS, Sponseller PD, Miller NH, Kostuik JP. The etiology of adolescent idiopathic scoliosis. National Institutes of Health/ National Health Service Corps Annual Meeting, Washington DC. **Winner of Best Poster (1<sup>st</sup> place).**

- 10/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. National Institutes of Health/ National Health Service Corps, Washington DC.
- 6/2000 Rose P, Levy H, **Ahn N**, Sponseller P, Magyari T, Davis J, Francomano C. A comparison of the Berlin and Ghent nosologies in the diagnosis of Marfan syndrome: the NIH experience. American Society of Human Genetics, San Diego CA.
- 9/1999 **Ahn NU**, Sponseller PD. Current concepts in the Marfan Spine. National Marfan Foundation Conference, Pittsburgh PA.
- 7/1989 **Ahn NU**, Giger ML, Carney RA, Doi K. Digital image processing and lung cancer detection. American Mathematics Society, Boulder CO.  
**Awarded Scholarship Prize for Best Paper.**

*Scientific Presentations at Regional and Local Meetings*

- 5/2007 R Garcia, P Messerschmitt, **N Ahn**. Is sexual function affected by lumbar decompression surgery? Cleveland Orthopaedic Association.
- 5/2007 J Eubanks, M Lee, **N Ahn**. Prevalence of lumbar facet arthrosis and its relationship to Age, sex, and race: An anatomic study of 647 cadaveric specimens. Cleveland Orthopaedic Association.
- 4/2007 R Garcia, P Messerschmitt, **N Ahn**. Is sexual function affected by lumbar decompression surgery? Bohlman Lecture Series, Cleveland, OH.
- 4/2007 P Messerschmitt, R Garcia, **N Ahn**. Does narcotic use prior to lumbar decompression surgery predict functional outcomes or duration of postoperative narcotic use? Bohlman Lecture Series, Cleveland, OH.
- 4/2007 J Eubanks, P Messerschmitt, M Lee, D Cooperman, **N Ahn**. Anatomic variance of interfacet distance and its relationship to facet arthrosis and degenerative disk disease in the lumbar spine: a cadaveric study of 446 specimens. Bohlman Lecture Series, Cleveland, OH.
- 4/2007 Dickson D, Dorcil J, **Ahn NU**. Is there a relationship between bony cervical and lumbar stenosis? An anatomic study from the Hamann-Todd osteological collection. Bohlman Lecture Series, Cleveland, OH.
- 4/2007 Dorcil J, Dickson D, **Ahn NU**. Is the Torg ratio an accurate representation of bony cervical stenosis? A study of 85 postmortem specimens. Bohlman Lecture Series, Cleveland, OH.
- 4/2007 Seal C, Garcia R, Dickson D, **Ahn NU**. Treatment of cervical myelopathy in patients treated in a private institution versus the VA

system: a comparison of private versus managed-care systems.  
Bohlman Lecture Series, Cleveland, OH.

- 4/2007 Garcia R, Messerschmitt P, **Ahn NU**. An evaluation of information on the internet of a new device: the lumbar intervertebral disk replacement. Bohlman Lecture Series, Cleveland, OH.
- 1/2006 J Eubanks, M Lee, **N Ahn**. The natural history of lumbar disc degeneration and facet arthrosis: A postmortem specimen study. Cleveland Orthopedic Association.
- 1/2006 Cassinelli E, Dean CL, **Ahn NU**, Furey C, Bohlman HH. Ketorolac Decreases Postoperative Pain and Morphine Requirements Following Decompressive Lumbar Laminectomy: Preliminary Results from a Prospective, Randomized, Double-Blind, Placebo-Controlled Trial. Cleveland Orthopaedic Association. **Winner, 2<sup>nd</sup> Place Paper.**
- 5/2001 Ahn UM, **Ahn NU**, Buchowski JM, Kebaish KM, Song ES, Lemma MA, Sieber A, Kostuik JP. Radiographic correction and postoperative outcomes after lumbar spinal osteotomy. Maryland Orthopaedic Association.
- 5/2001 Buchowski JM, Helm PA, Huckell CB, Riley LH, **Ahn NU**, Ahn UM, Okubadejo GO, Zinreich SJ, Kostuik JP. Evaluation of anatomical and surface registration methods for the lumbar and cervical spine using a frameless stereotactic system. Maryland Orthopaedic Association. **Winner, 4<sup>th</sup> Place Paper.**
- 5/2000 **Ahn NU**, Sponseller PD, Ahn UM, Nallamshetty L, Kuszyk BS, Zinreich SJ. Dural ectasia is associated with back pain in the Marfan syndrome. Maryland Orthopaedic Association.
- 9/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. Canadian Orthopaedic Association, St. John's, Newfoundland, Canada.
- 5/1999 Ahn UM, **Ahn NU**, Buchowski J, Seiber A, Kostuik JP. Cauda equina syndrome secondary to lumbar disk herniation: a meta-analysis of surgical outcomes. Maryland Orthopaedic Association, 1999. **Winner, 2<sup>nd</sup> Place Paper.**

*National, Regional, Local Postgraduate Courses*

- 6/2006 Korean- American Spine Society  
Invited Faculty  
First Annual Conference, Boulder CO

- 6/2005 Maine Orthopaedic Review Course  
Faculty  
Waterville, ME
- .11/2005 *Orthopaedics in Primary Care* Course  
Course Chairman  
Cleveland, OH

**AWARDS:**

- 6/2009 Inducted into American Orthopaedic Association (AOA)
- 6/2006 Teacher of the Year Award, 2005-2006  
Case Western Reserve University School of Medicine  
Department of Orthopaedic Surgery
- 1/2006 Winner, 2<sup>nd</sup> Place, Best Resident Paper (co-author)  
Cleveland Orthopaedic Society, Cleveland, OH
- 12/2005 Winner, 3<sup>rd</sup> Place, Best Resident paper (senior author)  
Cervical Spine Research Society, San Diego, CA
- 12/2005 Winner, Best Fellow paper award (senior author)  
Cervical Spine Research Society, San Diego, CA
- 6/2002 Winner, Research Award in Orthopaedic Surgery  
Rush University Medical Center, Chicago, IL
- 1/2002 Prospective study on smoking and back pain named “**3<sup>rd</sup> Biggest Story of 2001**” by *Orthopaedics Today* (1<sup>st</sup> author)
- 10/2001 Nominated for Russell A. Hibbs Award for Clinical Research  
Scoliosis Research Society, Cleveland, OH
- 5/2001 Winner, 4<sup>th</sup> Place paper  
Maryland Orthopaedic Association, Baltimore, MD
- 3/2000 Winner, 1<sup>st</sup> Place poster  
2000 National Health Service Corps, Washington, DC
- 4/1999 Winner, 2<sup>nd</sup> Place paper  
Maryland Orthopaedic Association, Baltimore, MD
- 9/1992 Graduated Cum Laude with Honors in Molecular Biophysics and Biochemistry,  
Yale University
- 9/1989-91 Yale University Club of Chicago Scholarship(s)
- 9/1989-91 Cullman Scholarship(s), Yale University

- 9/1989            Robert C. Byrd Scholarship
- 8/1989            American Mathematics Society Scholarship Award (Best Paper)

**MEMBERSHIPS:**

1.     American Orthopaedic Association (AOA)
2.     American Academy of Orthopaedic Surgeons (AAOS)
3.     American Board of Orthopaedic Surgeons (ABOS)
4.     North American Spine Society (NASS)
5.     International Society for Study of Lumbar Spine (ISSLS)
6.     Scoliosis Research Society (SRS)
7.     Clinical Orthopaedic Society (COS)
8.     Ohio Orthopaedic Society
9.     Herndon Society for Orthopaedic Surgery
10.    Cleveland Orthopaedic Society
11.    Korean- American Spine Society (KASS)

**COMMITTEE/EDITORIAL BOARD APPOINTMENTS:**

- 2007 – present        Reviewer for *Online Orthopaedic Update*
- 2006 – present        Reviewer for *International Journal of Impotence Research*
- 11/2005 – present    American Board of Orthopaedic Surgery Task Force Committee  
(Spine)
- 1/2002 – present     Advisory Editorial Board for *Spine*  
(The international journal for study of the spine)
- 1/2002 – present     Advisory Editorial Board for *The Spine Journal*  
(The official journal of North American Spine Society [NASS])

**COMMITTEE APPOINTMENTS AT MEDICAL SCHOOLS/ HOSPITALS:**

- 2005-2006:    Orthopaedic Research Committee  
                  Case Western Reserve University School of Medicine, Department of  
                  Orthopaedic Surgery  
                  Cleveland, OH

- 2005-2006: **Chief, Spine Surgery Service**  
Louis Stokes Veteran's Administration Medical Center, Department of  
Orthopaedic Surgery  
Cleveland, OH
- 2005-2006 Orthopaedic Education Committee  
Louis Stokes Veteran's Administration Medical Center,  
Department of Orthopaedic Surgery  
Cleveland, OH
- 2005-2006: **Head and Course Director**  
Orthopaedics in Primary Care/ CME Committee  
University Hospitals of Cleveland  
Cleveland, OH
- 2005-2006: Minority preceptor, Case Western Reserve University School of  
Medicine, Cleveland OH
- 2002-2005: **Chief, Spine Surgery Service**  
University of Missouri- Kansas City  
Department of Orthopaedic Surgery  
Truman Medical Center  
Kansas City, MO
- 2004-2005: Orthopaedic Education Committee  
University of Missouri- Kansas City  
Truman Medical Center  
Kansas City, MO
- 2004- 2005: **Vice Chairman, Orthopaedic Surgery**  
Menorah Medical Center (an affiliate of UMKC)  
Overland Park, KS
- 2003-2005 Research/ IRB Committee  
Shawnee Mission Medical Center (an affiliate of KU Medical Center)  
Overland Park, KS

#### **RESEARCH GRANTS:**

- 6/1999 Grant from Johns Hopkins University GCRC and National Institutes of  
Health: \$5,000
- 6/1998 Grant from National Marfan Foundation: \$10,000
- 6/1997 Grant from Johns Hopkins University GCRC and National Institutes of  
Health: \$14,000

**AREAS OF EXPERTISE/INTEREST:**

Degenerative disorders of the cervical, thoracic, and lumbar spine; spinal tumors; spinal cord injury; spinal trauma; spinal deformity and instability; bone morphogenic proteins; pain management; and basic science of disk regeneration and cord injury