

Michael Warren Cluck, MD, PhD

Board Certified Orthopaedic Surgeon
Fellowship Trained Spine Surgeon

CURRICULUM VITAE

Silicon Valley Spine Institute
221 East Hacienda Ave., Ste A
Campbell, CA 95008
Phone (408) 376-3300 ♦ Fax (408) 374-830
www.svspine.com

I. PROFESSIONAL EXPERIENCE

4/2009-Present Silicon Valley Spine Institute
Surgical and Non-Surgical Care of Spinal Disorders

8/2006-4/2009 Spine Institute of Arizona
Surgical and Non-Surgical Care of Spinal Disorders

II. EDUCATION

Fellowship Spine Surgery, Director-Henry Bohlman
Case Western Reserve University, OH, 2005-2006

Residency LAC+USC Medical Center
Orthopaedic Surgery, Los Angeles, CA, 2001-2005

Internship LAC+USC Medical Center
General Surgery, Los Angeles, CA, 2000-2001

Medical School Creighton University School of Medicine
Omaha, Nebraska, 1994-2000

Graduate School Creighton University School of Medicine
Omaha, Nebraska, 1996-2000
Doctor of Philosophy-Molecular Biology

College University of California
Santa Barbara, California, 1987-1992
Bachelor of Arts-Physiology and Cell Biology

High School Hollister High School
Hollister, California, 1983-1987

III. HONORS AND AWARDS

“Top Doctor” Orthopaedic Spine Surgery, Phoenix Magazine, 2009
Excellence in Teaching Award, Physicians’ Assistant Program, LAC+USC, 2005
Outstanding Junior Paper Award, LAC+USC, 2004
AAOS Clinical Scientist Development Program, LAC+USC, 2003
AOA Leadership Forum, LAC+USC, 2003

Dr. Perer Award for Excellence in Biochemistry, Creighton University, 2000
Midwest Student Research Award, Creighton University, 1998
Jesuit Honor Society Nominee, Creighton University, 1997
Alpha Omega Alpha, Creighton University, 1996
Order of Omega Academic Excellence, University of California, 1990
Dean's Academic Honors, University of California, 1989

IV. LICENSURE

California Medical Board, License A76201 valid until 4/29/11
Arizona Medical Board, License 35401 valid until 4/29/09

V. PROFESSIONAL BACKGROUND

Teaching Experience

University of Arizona College of Medicine
Medical Student Education

Banner Good Samaritan Orthopaedic Residency
Basic Science Core Curriculum
Spine Surgery Faculty

Case Western Reserve University
Resident and Medical Student Education

LAC+USC Medical Center
Resident and Medical Student Education
Physicians' Assistant Education

Creighton University
Molecular Biology Laboratory Teaching Assistant
Gross Anatomy Teaching Assistant
Grade School Science Tutor
Grade School Epilepsy Educator

Administrative Responsibilities

Silicon Valley Spine Institute
Co-Director, Spine Surgery Fellowship

Spine Institute of Arizona
Director, Medical Student Education
Director, Orthopaedic Resident Education
Co-Director, Spine Surgery Fellowship

Banner Good Samaritan Orthopaedic Residency
Director, Basic Science Core Curriculum

Case Western Reserve University
Chief, Spine Service, VA Medical Center

LAC+USC Medical Center
Chief Resident Trauma Service
Chief Resident Sports Service
Chief Resident Hand Service

Resident Core Curriculum

Creighton University

Committee on Scientific Investigation and Funding
Medical School Admissions Committee
Creighton Campaign 2000 Alumni Fund Volunteer
Community Service Committee
M-1 Class Officer Fund-raising Chairman

Society Memberships

Lumbar Spine Surgery Society (member)
North American Spine Society (member)
American Academy of Orthopaedic Surgeons (Fellow)
California Medical Association (past)
Endocrine Society (past)
American Society for Biochemistry and Molecular
Biology (past)

Hospital Affiliations

El Camino Hospital, Mountain View, CA
El Camino Hospital, Los Gatos, CA
Good Samaritan Hospital, Los Gatos, CA
O'Connor Hospital, San Jose, CA
Bay Area Surgical Group, Santa Clara, CA

Past Hospital Affiliations

Scottsdale Shea Hospital, Scottsdale, AZ
Scottsdale Thompson Peak Hospital, Scottsdale, AZ
Scottsdale Osborn Hospital, Scottsdale, AZ
Surgical Specialty Hospital, Phoenix, AZ
Arrowhead Hospital, Glendale, AZ

VI. ACADEMIC APPOINTMENTS

Clinical Assistant Professor, Department of Orthopaedic Surgery, University of Arizona College of Medicine, Phoenix, AZ, 9/2008-present

Co-Director, Spine Surgery Fellowship, Silicon Valley Spine Institute, Campbell, California, 4/2009-present.

Co-Director, Spine Surgery Fellowship, The Spine Institute of Arizona, Scottsdale, Arizona, 8/2006-4/2009.

Director, Basic Science Core Curriculum, Orthopaedic Surgery Residency Program, Banner Good Samaritan Medical Center, Phoenix, Arizona, 8/2006-4/2009.

Volunteer Faculty, Spine Surgery, Orthopaedic Surgery Residency Program, Banner Good Samaritan Medical Center, Phoenix, Arizona, 8/2006-4/2009.

Volunteer Faculty, Department of Basic Medical Sciences, University of Arizona College of Medicine, Phoenix, Arizona, 10/2007-4/2009.

VII. JOURNAL PUBLICATIONS

- (1) Menendez, L.R., Ahlmann, E.R., Savage, K., Cluck, M., Fedenko, A.N. Tumor Necrosis has no Prognostic Value in Neoadjuvant Chemotherapy for Soft Tissue Sarcoma. *Clin Orthop Relat Res.*, **455**: 219-224, 2007
- (2) Cluck, M.W., Skaggs, D.L. Cobalt Chromium Sublaminar Wires for Spinal Deformity Surgery. *Spine*, **31(19)**: 2209-12, 2006.
- (3) Cluck, M.W., Chan, C.Y., Adrian, T.E. The Regulation of Amylin and Insulin Gene Expression and Secretion. *Pancreas*, **30(1)**: 1-14, 2005.
- (4) Skaggs, D.L., Cluck, M.W., Mostofi, A., Flynn, J.M., Kay, R.M. Lateral Entry Pin Fixation in the Operative Management of Supracondylar Humerus Fractures in Children. *J Bone Joint Surg Am.*, **86A(4)**: 702-707, 2004.
- (5) Cluck, M.W., Murphy, L.O., Olsen, J., Knezetic, J.A., Adrian, T.E. Amylin Gene Expression Mediated by cAMP/PKA and Transcription Factors HNF-1 and NFY. *Mol Cell Endocrinol.*, **210(1-2)**: 63-75, 2003.
- (6) Murphy, L.O., Cluck, M.W., Knezetic, J.A., Adrian, T.E. Pancreatic Cancer Cells Require an EGF Receptor-Mediated Autocrine Pathway for Proliferation in Serum-Free Conditions. *British J.Cancer*, **84(7)**: 926-935, 2001.
- (7) Ding XZ, D., Iversen, P., Cluck, M.W., Knezetic, J.A., Adrian, T.E. Lipoxygenase Inhibitors Abolish Proliferation of Human Pancreatic Cancer Cells. *Biochemical and Biophysical Research Communications*, **26**: 218-223, 1999.
- (8) Allen, R.T., Cluck, M.W., Agrawal, D.K. Mechanisms Controlling Cellular Suicide: Role of BCL-2 and Caspases. *Cellular and Molecular Life Sciences*, **54(5)**: 427-445, 1998.

VIII. BOOK CHAPTERS

- (1) Cluck, M.W., Bohlman, H.H. Multilevel Cervical Spondylosis: Anterior Approach. Cervical Spine Surgery: Diagnosis and Management. Editors: T.J. Albert, J.Y. Lee, M.R. Lim. Chapter 4. Thieme Publishers, New York. 2008. In press.

IX. SCIENTIFIC PAPER PRESENTATIONS

- (1) Back Pain Improves Following Nerve Decompression Without Fusion. Lumbar Spine Research Society, 2nd Annual Meeting, Chicago, Illinois, April 2-3, 2009.
- (2) International Update on US DIAM IDE Trial. Medtronic Investigators Meeting, Nice, France, September 18-21, 2008.
- (3) Preliminary Results of IDE study using DIAM for Axial Back Pain. Medtronic Research Forum, Memphis TN, January 25, 2008.
- (4) Anterior Cervical Decompression and Fusion for Axial Neck Pain and Spinal Cord Compression. Inaugural Bohlman Spine Lecture Series, Case Western Reserve University,

Cleveland, OH, 2006

(5) Cobalt Chromium Sublaminar Wires for Spinal Deformity Surgery. Annual Senior Residents Research Forum, University of Southern California, Department of Orthopaedic Surgery, Los Angeles, CA, 2005.

(6) Lateral Entry Pin Fixation in the Operative Management of Supracondylar Humerus Fractures in Children. Annual Junior Residents Research Forum, University of Southern California, Department of Orthopaedic Surgery, Los Angeles, CA, 2004.

(7) Regulation of Amylin Gene Expression and Secretion in Pancreatic Beta Cells. Dissertation Seminar, Eppley Cancer Institute, University of Nebraska Medical Center, Omaha, NE, 1998.

(8) Amylin and Insulin Gene Expression is Regulated by cAMP and May Involve the Transcription Factors HNF-1 and NFY. Midwest Student Biomedical Research Forum, Creighton University, Omaha, NE, 1998.

(9) Development of a Multiplex RT-PCR Technique to Measure Amylin and Insulin mRNA in Rat Beta Cells. Midwest Student Biomedical Research Forum, Creighton University, Omaha, NE, 1997.

(10) Amylin and Insulin gene expression in pancreatic beta cells. Creighton University, Biomedical Sciences Seminar Series, Omaha, NE, 1996.

(11) Paclitaxel Modulates Beta Tubulins in Breast Cancer Cells Selected with the Multidrug Resistance (MDR) Modulator PSC 833. Midwest Student Biomedical Research Forum, Creighton University, Omaha, NE, 1996.

X. PODIUM PRESENTATIONS AND LECTURES

(1) Conditions Of The Spine That Cause Pain.....What Are My Treatment Options? Scottsdale Thompson Peak Hospital, Community Education Seminar, Scottsdale, Arizona, February 3, 2009

(2) Prestige Cervical Disc Replacement: Background, Indications, Surgical Technique. Medtronic Faculty, Prestige Core Curriculum, Oklahoma City, Oklahoma, Dec 15, 2008.

(3) Posterior Cervical Spine Decompression and Fusion. Sacral Fixation Techniques. Fundamentals of Spine Surgery. Medtronic Faculty, San Diego, California, August 8-9, 2008.

(4) Prestige Cervical Disc Replacement: Surgical Technique. Medtronic Faculty, Prestige Core Curriculum, Seattle, Washington, July 26, 2008.

(5) Molecular and Cellular Biology in Orthopaedic Surgery. Banner Good Samaritan Orthopaedic Residency Program, Resident Research Symposium, Phoenix, Arizona, June 20, 2008.

(6) Cervical Conditions. Making Sense of Spine Surgery, Medtronic Faculty, Las Vegas, Nevada, May 30-31, 2008..

- (7) Anterior Cervical Discectomy and Fusion: Literature Review and History of Prestige Cervical Disc Replacement. Medtronic Faculty, Prestige Core Curriculum, AAOS, San Francisco, CA, March 4, 2008.
- (8) History of Prestige Cervical Disc Replacement. Medtronic Faculty, Prestige Core Curriculum, Denver, CO, February 9, 2008.
- (9) History of Prestige Cervical Disc Replacement. Medtronic Faculty, Prestige Core Curriculum, Memphis, TN, January 26, 2008.
- (10) Surgical Management of Degenerative Disc Disease of the Spine. Arrowhead Hospital, Community Outreach Program, Glendale, AZ, January 17, 2008.
- (11) Prestige Cervical Disc Arthroplasty. Association of Nurse Case Managers, Marriott Buttes Hotel, Phoenix, AZ, January 3, 2008. (CNU event)
- (12) Prestige Cervical Disc Arthroplasty. Arizona Self Insured, Tempe, Arizona, December 19, 2007.
- (13) Degenerative Disc Disease: Operative and Nonoperative Management. Grand Rounds, Scottsdale Osborn Hospital, Scottsdale, AZ, November 6, 2007. (CME event)
- (14) Articular Cartilage and Osteoarthritis. Banner Good Samaritan Orthopaedic Residency Program, Basic Science Core Curriculum, Phoenix, AZ, November, 2007
- (15) Cervical Conditions. Making Sense of Spine Surgery, Medtronic Faculty, Orlando, Florida, October 12-13, 2007.
- (16) Bone Formation and Function. Banner Good Samaritan Orthopaedic Residency Program, Basic Science Core Curriculum, Phoenix, AZ, October, 2007.
- (17) Key Concepts in Spine Surgery. Making Sense of Spine Surgery, Medtronic Faculty, Las Vegas, Nevada, May 4-5, 2007
- (18) Spine Surgery for the Masses: Diagnosis and Management. Arrowhead Hospital, Nurse and Allied Health Professionals Conference, Glendale, AZ, March 23, 2007.
- (19) Surgical Treatment of Cervical Spine Disease, Scottsdale Shea Hospital, Grand Rounds, Scottsdale, AZ, January 26, 2006.
- (20) Cervical Stenosis: Diagnosis and Management. MetroHealth Department of Orthopaedic Surgery, Grand Rounds, Case Western Reserve University, Cleveland, OH, 2006. (CME event)
- (21) Upper Cervical Spine Trauma. MetroHealth Multidisciplinary Spine Seminar, Case Western Reserve University, Cleveland, OH, 2006. (CME event).
- (22) Thoracolumbar Fractures: Diagnosis and Management. Orthopaedic Trauma Seminar, University of Southern California, Los Angeles, CA, 2005.
- (23) Subtrochanteric Femur Fractures: Diagnosis and Management. Orthopaedic Trauma

Seminar, University of Southern California, Los Angeles, CA, 2004.

(24) Humerus Fractures: Diagnosis and Management. Orthopaedic Trauma Seminar, University of Southern California, Los Angeles, CA, 2003.

XI. SCIENTIFIC POSTERS AND EXHIBITS

(1) Anterior Cervical Decompression and Fusion for Axial Neck Pain and Spinal Cord Compression. Cervical Spine Research Society, Palm Beach, FL, Nov. 30-Dec. 2, 2006.

(2) The Success of Lateral Pin Fixation in Supracondylar Humerus Fractures in Children. American Academy of Orthopaedic Surgeons, New Orleans, LA, 2003.

(3) Dissociation of Amylin and Insulin Secretion in β -cells is Mediated by Changes in Gene Expression. American Society for Biochemistry and Molecular Biology, Washington D.C., 1998.

(4) Endogenous Stimulation of the EGF Receptor Massively Increases c-fos and c-jun mRNA in Human Pancreatic Cancer Cells. American Society for Biochemistry and Molecular Biology Washington D.C., 1998.

(5) Amylin Gene Expression is Regulated by cAMP and Involves HNF-1 and NFY. American Pancreatic Association, Chicago, IL, 1998.

(6) Signal Transduction Following Autocrine Activation of EGF Receptors on Pancreatic Cancer Cells Employs the Extracellular-Regulated MAP Kinases 1 and 2. American Pancreatic Association, Chicago, IL, 1998.

(7) Pancreatic Cancer Cell Proliferation is Inhibited by Activation of Protein Kinase C. American Pancreatic Association, Chicago, IL, 1998.

(8) Non-parallel Secretion of Amylin and Insulin is Mirrored by Changes in mRNA Content in INS-1 cells. American Diabetes Association, Chicago, IL, 1997.

(9) The Spectrum of Resistance to Paclitaxel in Human Sarcoma and Breast Cancer Cells Selected with and without the Multidrug Resistance (MDR) Modulator PSC 833. American Association of Cancer Research, Boston, MA, 1996.

XII. CONFERENCES ATTENDED

(1) Lumbar Spine Research Society, 2nd Annual Meeting
Chicago, Illinois, April 3-4, 2009

(2) Federation of Spine Associations
Las Vegas, Nevada, February 28, 2009

(3) American Academy of Orthopaedic Surgeons, 76th Annual Meeting
Las Vegas, Nevada, February 25-28, 2009

(4) Lumbar Spine Research Society, 1st Annual Meeting

Chicago, Illinois, March 12-13, 2008

(5) Cervical Spine Research Society, 35th Annual Meeting
San Francisco, CA, November 28 – December 01, 2007.

(6) DuPuy Spine Fellowship Workshop: Bioskills Workshop
(Assistant Faculty)
St. Louis, MO, May 10-12, 2007.

(7) Medtronic Spinal and Biologics: Cervical Arthroplasty Update
Memphis, TN, March 29-31, 2007.

(8) Cervical Spine Research Society, 34th Annual Meeting
Palm Beach, FL, November 30 – December 03, 2006.

(9) North American Spine Society, 21st Annual Meeting,
Seattle, WA, September 26-30, 2006

(10) Federation of Spine Associations
Chicago, IL, March 25, 2006.

(11) American Academy of Orthopaedic Surgery, 73rd Annual Meeting
Chicago, IL, March 22-26, 2006.

(12) Federation of Spine Associations
Washington, DC, February 26, 2005.

(13) American Academy of Orthopaedic Surgery, 72nd Annual Meeting
Washington, DC, February 23-27, 2005.

(14) American Academy of Orthopaedic Surgery, 70th Annual Meeting
New Orleans, LA, February 5-9, 2003.

XIII. RESEARCH INTERESTS

Basic Science/Clinical

- (1) Intracellular signaling and gene expression
- (2) Growth factors, cell cycle regulation and apoptosis
- (3) Degenerative diseases of the spine
- (4) Spinal trauma and deformity
- (5) Metastatic disease of the spine

Clinical Trials

- (1) DIAMTM Investigational Device Exemption (FDA study) 2007-present
Interspinous Process Spacer Versus Conservative Care for Axial Back Pain:
A Prospective, Randomized Study.
- (2) LDR Investigational Device Exemption (FDA study) 2007
Cervical Disc Arthroplasty Versus Anterior Cervical Discectomy and Fusion for
Radiculopathy and Myelopathy: A Prospective, Randomized Study.

XIV. OTHER INTERESTS

Athletics including golf, running, swimming, cycling, and skiing