

Michael Warren Cluck, MD, PhD

Board Certified Orthopedic Surgeon
Fellowship Trained Spine Surgeon

BAY AREA SPINE CARE
2516 SAMARITAN DRIVE, STE B
SAN JOSE CA, 95124
PHONE 408-295-2200

CURRICULUM VITAE

I. PROFESSIONAL EXPERIENCE

| | |
|-----------------|---|
| 10/2018-Present | UCSF Department of Orthopaedic Surgery Associate Clinical Professor Attending Spine Surgeon |
| 10/2013-Present | Bay Area Spine Care (Owner/President) Surgical and Non-Surgical Care of Spinal Disorders |
| 4/2009-10/2013 | Silicon Valley Spine Institute (Employee) Surgical and Non-Surgical Care of Spinal Disorders |
| 8/2006-4/2009 | Spine Institute of Arizona (Employee) Surgical and Non-Surgical Care of Spinal Disorders |

II. EDUCATION

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|------------|---|
| Fellowship | Spine Surgery, Director-Henry Bohlman, MD Case Western Reserve University, OH, 2005-2006 |
| Residency | LAC+USC Medical Center Orthopedic Surgery, Los Angeles, CA, 2001-2005 |

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| 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” Orthopedic 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 4/30/21

V. PROFESSIONAL BACKGROUND

Teaching Experience:

UCSF Department of Orthopaedic Surgery
San Francisco, California (2018-Present)
 Resident Orthopaedic Surgeon Education
 Medical Student Education

O’Connor Hospital/Genesis Medicus Education Program
San Jose, California (Jan 2018-Present)
 International Medical Student Education

Bay Area Spine Care/Silicon Valley Spine Institute
San Jose, California (2009-13, SVSI; 2013-present BASC)

Medical Student Education
Physician Assistant Education
Spine Fellowship Education

University of Arizona College of Medicine
Phoenix, Arizona (2006-09)

Medical Student Education

Banner Good Samaritan Orthopedic Residency
Phoenix, Arizona (2006-09)

Basic Science Core Curriculum
Spine Surgery Faculty

Administrative Responsibilities:

O'Connor Hospital/Genesis Medicus Education Program
San Jose, California (Jan 2019-Present)

Director, Medical Student Surgery Clerkship

Bay Area Spine Care
San Jose, California (2013-present)

Owner/President

O'Connor Hospital
San Jose, California (10/2016-8/30/2018)

Medical Director, Spine Surgery Service Line
Chief, Division of Spine Surgery

California Orthopedic Association
Sacramento, CA (2014-2016)

Member, Nominating Committee
Chair, Health Care Delivery Committee

El Camino Hospital
Los Gatos, California (2012-2016)

Chairman, Division of Orthopedic Surgery
Vice-Chair, Division of Orthopedic Surgery

Silicon Valley Spine Institute
San Jose, CA (2010-2012)

Co-Director, Spine Surgery Fellowship

Spine Institute of Arizona
Scottsdale, Arizona (2007-2009)

Co-Director, Spine Surgery Fellowship

Director, Medical Student Rotation

Case Western Reserve University

Cleveland, Ohio (2005-2006)

Chief, Spine Service, VA Medical Center

LAC+USC Medical Center

Los Angeles, California (2000-2005)

Chief Resident Trauma Service

Chief Resident Sports Service

Chief Resident Hand Service

Creighton University

Omaha, Nebraska (1994-2000)

Committee on Scientific Investigation and Funding

Medical School Admissions Committee

Creighton Campaign 2000 Alumni Fund

Community Service Committee Chair

M-1 Class Officer Fund-raising Chair

Society Memberships:

(Past and Present)

Lumbar Spine Research Society

North American Spine Society

Society of Lateral Access Surgery

American Academy of Orthopedic Surgeons

California Orthopedic Association

Santa Clara County Medical Association

Hospital Affiliations:

UCSF Medical Center, San Francisco, CA

Zuckerberg San Francisco General Hospital, CA

Regional Medical Center, San Jose, CA

O'Connor Hospital, San Jose, CA

Good Samaritan Hospital, San Jose, CA

El Camino Hospital, Los Gatos, CA

El Camino Hospital, Mountain View, CA

Forrest Surgery Center, San Jose, 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/POSITIONS

Associate Clinical Professor, Department of Orthopaedic Surgery, UCSF School of Medicine, San Francisco, CA, 10/2018-present

Clinical Assistant Professor, Department of Education, Midwestern University, College of Osteopathic Medicine, Phoenix, AZ, 9/2009-present

Clinical Assistant Professor, Department of Orthopedic Surgery, University of Arizona College of Medicine, Phoenix, AZ, 9/2008-2009

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

Volunteer Faculty, Spine Surgery, Orthopedic 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) Cluck, M.W., Besh, B., Colyvas, N., Page, A., Sah, A. Action Plan for Bundled Payments: Evaluating and Successfully Managing the Risk, White Paper Publication, **California Orthopedic Association**. www.coa.com. 2016.
- (2) 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
- (3) Cluck, M.W., Skaggs, D.L. Cobalt Chromium Sublaminal Wires for Spinal Deformity Surgery. *Spine*, 31(19): 2209-12, 2006.
- (4) 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.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) 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.

- (9) 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.

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 Orthopedic 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 Orthopedic 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. **Biomedical Sciences Seminar Series**, Creighton University, 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) What's Up and Coming in Cervical Spine Surgery. **California Orthopedic Association**, Annual Meeting, San Francisco, California, June 2, 2018.
- (2) Posterior Cervical Spine Fusion. **Providence Educational Series**, Dusseldorf, Germany and Madrid, Spain. November 16-17, 2017
- (3) Anterior and Posterior Spinal Fusion. **American Cervical Excellence Society**, San Francisco, CA, October 7, 2017
- (4) Brief History of MIS Surgery and Clinical Implications. **Sea Spine Sales Meeting**, San Diego, California, May 10, 2017.
- (5) Anterior Lumbar Interbody Fusion Indications and Procedures. **Nuvasive Sales Meeting**, San Jose, California, June 12, 2017
- (6) Diagnosis and Treatment of Sacroiliac Joint Pain. **Work Comp Nurse Case Managers Educational Lecture Series**, February 24, 2015
- (7) Neck Pain Diagnosis and Treatment. **Community Lecture Series El Camino Hospital**, Los Gatos California, February 10, 2015.
- (8) New Technologies for the Treatment of Back Pain. **Community Lecture Series El Camino Hospital**, Saratoga, California, August 1, 2012
- (9) Minimally Invasive Spine Surgery. **Grand Rounds, El Camino Hospital**, Los Gatos, California, February 25, 2012.
- (10) Painful spine and Minimally Invasive Surgery. **Bay Area Surgical Group Physician Lecture Series**, San Jose, California, January 26, 2012
- (11) Management of the Painful Spine. **El Camino Hospital Men's Health Fair**, San Jose, California, December 1, 2011
- (12) Keeping Our Spines Healthy As We Age, **YMCA Focus on Health**, Mountain View, California, August 17, 2011
- (13) Treatment Options for the Painful Spine. **Valley Fair Health Lecture**, San Jose, California, March 2, 2010

- (14) Treatment Options for Low Back Pain. **Grand Rounds, Good Samaritan Hospital**, San Jose, California, January 27, 2010
- (15) Treatment Options for Low Back Pain. **Santa Clara County Orthopedic Association**, San Jose, California, January 19, 2010.
- (16) Conditions Of The Spine That Cause Pain.....What Are My Treatment Options? **Community Education Seminar Series Thompson Peak Hospital**, Scottsdale, Arizona, February 3, 2009.
- (17) Prestige Cervical Disc Replacement: Background, Indications, Surgical Technique. **Medtronic Faculty, Prestige Core Curriculum**, Oklahoma City, Oklahoma, Dec 15, 2008.
- (18) Posterior Cervical Spine Decompression and Fusion. **Medtronic Faculty, Sacral Fixation Techniques. Fundamentals of Spine Surgery**, San Diego, California, August 8-9, 2008.
- (19) Prestige Cervical Disc Replacement: Surgical Technique. **Medtronic Faculty, Prestige Core Curriculum**, Seattle, Washington, July 26, 2008.
- (20) Molecular and Cellular Biology in Orthopedic Surgery. **Banner Good Samaritan Orthopedic Residency Research Symposium**, Phoenix, Arizona, June 20, 2008.
- (21) Cervical Conditions. **Medtronic Faculty, Making Sense of Spine Surgery**, Las Vegas, Nevada, May 30-31, 2008.
- (22) 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.
- (23) History of Prestige Cervical Disc Replacement. **Medtronic Faculty, Prestige Core Curriculum**, Denver, CO, February 9, 2008.
- (24) History of Prestige Cervical Disc Replacement. **Medtronic Faculty, Prestige Core Curriculum**, Memphis, TN, January 26, 2008.
- (25) Surgical Management of Degenerative Disc Disease of the Spine. **Community Education Series Arrowhead Hospital**, Glendale, AZ, January 17, 2008.
- (26) Prestige Cervical Disc Arthroplasty. **Association of Nurse Case Managers**, Marriott Buttes Hotel, Phoenix, AZ, January 3, 2008. (CNU event)
- (27) Prestige Cervical Disc Arthroplasty. **Arizona Self Insured Work Comp Lecture Series**, Tempe, Arizona, December 19, 2007.
- (28) Degenerative Disc Disease: Operative and Nonoperative Management. **Grand Rounds, Scottsdale Osborn Hospital**, Scottsdale, AZ, November 6, 2007. (CME event)

- (29) Articular Cartilage and Osteoarthritis. **Banner Good Samaritan Orthopedic Residency Program**, Basic Science Core Curriculum, Phoenix, AZ, November, 2007
- (30) Cervical Conditions. **Medtronic Faculty, Making Sense of Spine Surgery**, Orlando, Florida, October 12-13, 2007.
- (31) Bone Formation and Function. **Banner Good Samaritan Orthopedic Residency Program**, Basic Science Core Curriculum, Phoenix, AZ, October, 2007.
- (32) Key Concepts in Spine Surgery. **Medtronic Faculty, Making Sense of Spine Surgery**, Las Vegas, Nevada, May 4-5, 2007
- (33) Spine Surgery for the Masses: Diagnosis and Management. **Nurse and Allied Health Professionals Conference Arrowhead Hospital**, Glendale, AZ, March 23, 2007.
- (34) Surgical Treatment of Cervical Spine Disease, **Grand Rounds, Scottsdale Shea Hospital**, Scottsdale, AZ, January 26, 2006.
- (35) Cervical Stenosis: Diagnosis and Management. **Grand Rounds, MetroHealth Department of Orthopedic Surgery**, Case Western Reserve University, Cleveland, OH, 2006. (CME event)
- (36) Upper Cervical Spine Trauma. **MetroHealth Multidisciplinary Spine Seminar**, Case Western Reserve University, Cleveland, OH, 2006. (CME event).
- (37) Thoracolumbar Fractures: Diagnosis and Management. **Orthopedic Trauma Seminar**, University of Southern California, Los Angeles, CA, 2005.
- (38) Subtrochanteric Femur Fractures: Diagnosis and Management. **Orthopedic Trauma Seminar**, University of Southern California, Los Angeles, CA, 2004.
- (39) Humerus Fractures: Diagnosis and Management. **Orthopedic 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 Orthopedic 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. CONTINUING MEDICAL EDUCATION

- (1) California Orthopedic Association Annual Meeting, San Francisco, California, May 31-June 3, 2018
- (2) California Orthopedic Association Annual Meeting, Laguna Niguel, California, May 20-22, 2016
- (3) AAOS/OTA Annual Orthopedic Trauma Update, La Jolla, California, March 31-April 2, 2016
- (4) California Orthopedic Association Annual Meeting, Indian Wells, California, April 23-26, 2015
- (5) California Orthopedic Association Annual Meeting, Monterey, California, May 29-June 1, 2014
- (6) American Academy of Orthopedic Surgeons Annual Meeting
Chicago, Illinois, March 20-23, 2013
- (7) Federation of Spine Associations
Chicago, Illinois, March 23, 2013
- (8) American Academy of Orthopedic Surgeons Annual Meeting

San Francisco, California, February 8-11, 2012

(9) American Academy of Orthopedic Surgeons Annual Meeting
San Diego, California, February 16-19, 2011

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

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

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

(13) Lumbar Spine Research Society, 1st Annual Meeting
Chicago, Illinois, March 12-13, 2008

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

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

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

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

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

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

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

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

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

(23) American Academy of Orthopedic 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) DIAM™ Investigational Device Exemption (FDA study) 2007-2009
Interspinous Process Spacer Versus Conservative Care for Axial Back Pain:
A Prospective, Randomized Study.
- (2) LDR Investigational Device Exemption (FDA study) 2007-2009
Cervical Disc Arthroplasty Versus Anterior Cervical Discectomy and Fusion for
Radiculopathy and Myelopathy: A Prospective, Randomized Study.

XIV. OTHER INTERESTS

Spending time with family, golf, tennis, running, swimming, cycling, scuba diving and skiing