

# CURRICULUM VITAE

## Wayne K. Cheng, M.D.

Bones & Spine Surgery  
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Loma Linda, California 92354  
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PHONE (909) 906-1116  
FAX (909) 906-1118

### EDUCATION

- Fellowship  
Combined Orthopaedic and Neurosurgical Program in Adult Spine Surgery  
Duke University Medical Center  
Durham, North Carolina  
August 1, 2001 – July 31, 2002
- Residency  
Orthopaedic Surgery  
Martin Luther King, Jr./Drew Medical Center  
Los Angeles, California  
July 1, 1996 – June 30, 2001
- Internship  
General Surgery  
University of Southern California Medical Center  
Los Angeles, California  
June 24, 1995 – June 24, 1996
- Post Graduate  
Medical Doctor  
Loma Linda University School of Medicine  
Loma Linda, California  
July 1991 – June 1995
- College  
Bachelor of Science  
Loma Linda University  
Loma Linda, California  
September 1986 – June 1988
- Pacific Union College  
Angwin, California  
September 1984 – June 1986

**FACULTY APPOINTMENTS:**

***Clinical Professor***

Department of Basic Science  
Loma Lina University, School of Medicine  
Loma Linda, California  
July 1, 2015 -

***Professor***

Department of Orthopaedic Surgery  
Loma Linda University, School of Medicine  
Loma Linda, California  
July 1, 2013 – June 30, 2018

***Adjunct Associate Professor***

Department of Basic Sciences  
September 1, 2012 – June 30, 2015

***Faculty of Graduate Studies***

October 5, 2010 – June 30, 2015

***Associate Professor***

Department of Orthopaedic Surgery  
Loma Linda University, School of Medicine  
Loma Linda, California  
March 31, 2009 – June 30, 2013

***Head of Spine Service***

Department of Orthopaedic Surgery  
Loma Linda University, School of Medicine  
Loma Linda, California  
July 1, 2007 – June 30, 2013

***Volunteer Consultant, Medical Staff***

Orthopaedic Surgery Section  
VA Loma Linda Healthcare System  
Loma Linda, California  
October 11, 2006 –

***Assistant Professor***

Department of Orthopaedic Surgery  
Loma Linda University, School of Medicine  
Loma Linda, California  
August 1, 2004 – March 30, 2009

***Instructor***

Department of Orthopaedic Surgery  
Loma Linda University, School of Medicine  
Loma Linda, California  
September 1, 2002 – July 31, 2004

***Orthopaedic Spine Surgeon***

Department of Orthopaedic Surgery  
Loma Linda University Medical Center  
Loma Linda, California  
September 1, 2002 – June 30, 2015

***Volunteer Faculty***

Martin Luther King, Jr./Drew Medical Center  
Department of Orthopaedic Surgery  
Los Angeles, California  
September 1, 2002 – August 1, 2007

**PROFESSIONAL EXPERIENCE**

Course Faculty  
Globus Medical, Inc.  
Planning and Achieving Spinal Balance Cadaveric Training  
course  
Advanced Lateral Techniques for Creating Lumbar Lordosis  
Newport Beach, California. June 13, 2015

Course Faculty  
Globus Medical, Inc.  
Spinal Deformity and Sagittal Imbalance Cadaveric  
Training Course  
MIS Lateral Corpectomy, Osteotomy, and Sacro-Pelvic  
Fixation Techniques  
Newport Beach, California. June 21, 2014

Chairman  
Southern California Resident Spine Symposium  
Newport Beach, California. September 18-19, 2010

Course Faculty  
DePuy Spine  
Concepts in Lateral Approach Surgery  
Las Vegas, Nevada. August 28, 2010

Instructor  
Stryker Spine ALIF Cadaver Lab  
Las Vegas, Nevada. November 7, 2008

Chairman  
Medtronic Cervical Arthroplasty CORE Education Course  
Prestige Cervical Disc. January 30, 2008

Faculty  
Medtronic Cervical Arthroplasty CORE Education Course  
San Diego, California. August 3-4, 2007

Teaching Faculty  
Medtronic Cervical Arthroplasty: CORE Education.  
March, 2007 –

Chairman  
Residents' Trauma Forum  
Huntington Beach, California. September 16-17, 2006

Chairman  
2<sup>nd</sup> Annual Spine Symposium  
8<sup>th</sup> Annual Mammoth Lakes Symposium  
Mammoth Lakes, California. September 8, 2006

Director, Spine Grand Rounds & Journal Club  
Loma Linda University School of Medicine  
Department of Orthopaedic Surgery. 2005 – 2010

Founder, Spine & Orthopaedic Trauma  
Research Fund  
Loma Linda University School of Medicine  
Alumni Association. 2005 –

Co-Chairman, 1<sup>st</sup> Annual Spine Symposium Current Concepts  
in Hip, Knee & Spine  
7<sup>th</sup> Annual Mammoth Lakes Symposium  
Loma Linda University  
Mammoth Lakes, California. September 9-10, 2005

Vice President  
De Beau Development and Investment, Inc.  
Alhambra, California. 1989 – 1991

CEO  
Sports Avenue, Inc.  
Alhambra, California. 1989 – 1991

Founder/President  
Sugar Baby Diner, Inc.  
Alhambra, California. 1987 – 1989

## **ORGANIZED MEDICINE PARTICIPATION**

Review Editor/Peer Review Board  
Journal clinical & Experimental Orthopaedics  
Sep 2015-

Review Editor/Peer Review Board  
The Open Orthopaedic Journal  
March 2014 –

Review Editor/Peer Review Board Journal of Back and Musculoskeletal Rehabilitation	March, 2014 –
Review Editor/Peer Review Board International Journal of Spine Surgery	September, 2012 –
Medical Board of Trustees (MBOT) Education Committee Musculoskeletal Transplant Foundation	January, 2012 – June 30, 2015
Medical Board of Trustees Musculoskeletal Transplant Foundation	September, 2009 – June 30, 2015
Orthopaedic Research Committee	2009 – 2012
Clinical Science Faculty Advisory Council (CSFAC)	2002 – 2007
Department of Orthopaedics, Resident Selection Committee	2002, 2014

## HONORS AND AWARDS

Chen BY, Williams P, **Cheng WK**. “*Retrospective Analysis of Survivorship and Clinical Outcomes after Multi-level Anterior Lumbar Reconstruction: ALIF versus Hybrid Fusion*”.  
**Second place award**, Orthopaedic Research Seminar  
Loma Linda, California May 17, 2013

Justin Brier-Jones BS, Jared Kroger BS, Pierre Beaufond BS, Serkan Inceoglu PhD, Victoria Maskiewicz PhD, **Wayne K Cheng MD**. “*Setting Time Comparison of Four Antimicrobial Laden Calcium Sulfate Plasters*”.  
**First Place in Clinical - Basic Science Category**  
81<sup>st</sup> Annual Postgraduate Convention, Alumni Association  
School of Medicine of Loma Linda University. March 1-4, 2013

Becker’s Spine Review  
20 Spine and Neurosurgery Leaders at Large Academic Medical Centers, April 2012

Walter E. Macpherson Society  
In consideration of excellent investigation in medical science  
Outstanding Student Research Supervisor, 2012

A. Husain, D.K. Palmer, R.M. Mehrdady, K.R. Criswell, D. Rios, **W.K. Cheng**. “*Cervical Transfacet Fixation: Safety and Accuracy of Open versus Percutaneous Approaches*”  
**First place award**, Orthopaedic Research Seminar  
Loma Linda, California. May 20, 2011

Jonathan Allen, MD; Vikram Jadhav, MD, PhD; Farbod Asgarzadie, MD, Shyam Kishan, MD, Tim Peppers, MD, Paul Williams, MS, and **Wayne Cheng, MD.** *Comparison Between Gearshift And Drill Techniques For Pedicle Screw Placement By Resident Surgeons.*

**Second place award,** Orthopaedic Research Seminar  
Loma Linda, California. May 20, 2011

Daniel Kyle Palmer, BS, Jonathan L. Allen, MD, Paul A. Williams, MS, Ashley Elizabeth Voss, BS, Vikram Jadhav, MD, PhD, David S. Wu, and **Wayne K. Cheng, MD.** *Multilevel MRI Analysis of Multifidus-Longissimus Cleavage Planes in the Lumbar Spine and Potential Clinical Applications to Wiltse's Paraspinal Approach*

**Second place award,** poster presentation Loma Linda University,  
13<sup>th</sup> Annual Research Symposium  
Loma Linda, CA, September 9, 2010.

Junior Residents' Faculty Recognition Award, 2010  
California Physician of the Year  
National Republican Congressional Committee, 2006

National Leadership Award  
National Republican Congressional Committee  
Honorary Chairman  
Physicians' Advisory Board, 2006

Chief Resident  
Division of Orthopaedic Surgery  
Martin Luther King Medical Center, 2000 – 2001

Master's Course Resident Scholarship  
Arthroscopy Association of North America, 1998

Alpha Omega Alpha Honor Medical Society  
Epsilon Chapter of California. 1995

Dean's List of Distinguished Students  
Loma Linda University, 1986 – 1987

Scholarship Award of Academic Excellence  
Pacific Union College, 1984 – 1985

Valedictorian Award  
Orange Wood Academy, 1984

## LICENSURE

California Medical License  
# A062867, Exp. 03/31/2017

California DEA  
# BC5641306, Exp. 08/31/2018

Radiography and Fluoroscopy  
X-ray Supervisor and Operator Permit  
# RHD 143752, Exp. 09/30/2017

Board Certified, Orthopaedic Surgery, July 2004  
Re-certified 2014

Qualified Medical Examiner, 2004 –

## **U.S. PATENTS**

U.S. Provisional Patent Application No. 61/771,710  
*Minimally Invasive Method and Surgical Tools for  
Trans-PSOAS Approach*  
B18:02828.PRO

U.S. Provisional Patent Application No. 61/833,768  
*Expandable Vertebral Body Cage*  
B18:03027.PRO

## **PROFESSIONAL MEMBERSHIPS**

Cervical Spine Research Society  
2013

California Orthopaedic Association  
2012

Scoliosis Research Society  
March 2010

Neufeld Society  
December 2009

Society of Lateral Access Surgeons  
November 2007

North American Taiwanese Medical Association  
August 2007

Fellow  
American Academy of Orthopaedic Surgeons  
March 2006

Spine Arthroplasty Society  
International Society for the Advancement of Spine Surgery  
July 2005

North American Spine Society  
Associate Member  
September 2004

Diplomat  
American Board of Orthopaedic Surgery  
July 2004  
Piedmont Orthopedic Society  
Duke University Medical Center  
July 2001

Alpha Omega Alpha Honor Medical Society  
January 2000

Candidate Member  
American Academy of Orthopaedic Surgeons  
August 1995

## **GRANTS AND SPONSORED RESEARCH**

### **IDE STUDIES AND CLINICAL TRIALS**

- OrthoFix. Post Market Surveillance of Clinical and Functional Outcomes with Post-operative use of a Cervical Stimulator or Spinal Stimulator, 2008 – 2011  
\$26,593.75
- Multi-center, randomized, prospective study comparing DIAM versus conservative treatment, 2008 – present  
\$56,429.50
- TFAS (Total Facet Replacement System). Multi-center, randomized, prospective study comparing TFAS versus fusion, 2007-2009  
\$54,000.00
- The Centers for Arthroplasty Research and Education in Spine (C.A.R.E.S.). Registry for total disc arthroplasty, 2008-2009  
\$2,400.00
- Multi-center, randomized, prospective study comparing the Prestige LP2 Artificial Cervical Disc versus fusion, 2006 – present  
\$64,310.00
- Multi-center, randomized, prospective study comparing the Kineflex Artificial Lumbar Disc to the Charite` Artificial Lumbar Disc, 2006 – 2013  
\$19,226.26
- A post market surveillance validation to evaluate the effectiveness of the following product: Polaris Deformity Spinal System, 2010 – present



\$3,484.62

- The clinical and radiographic outcomes of anterior lumbar interbody fusion using a novel stand-alone interbody fusion device-(ROI-A) a prospective, non-randomized multi-center study
- A prospective, multi-center, randomized, controlled clinical trial evaluating the safety and effectiveness of NuBac™ disc arthroplasty, 2010 – 2013  
\$14,232.00
- A multi-center, prospective, randomized study to evaluate the efficacy of the Aspen™ spinous process system for use in anterior lumbar interbody fusion (ALIF), 2009  
\$3,780.00
- A comparison of clinical outcomes for fixed versus variable screw configuration for the Trinica® anterior lumbar plate, 2009 – 2010  
\$3,300.00
- A prospective, randomized clinical investigation of the FLEXUS™ interspinous spacer – A pivotal study, 2012  
\$3,170.00
- Osteocel® plus in anterior lumbar interbody fusion (ALIF): Evaluation of radiographic and patient outcomes, 2009 – 2011  
\$14,852.25
- PercuDyn (PDS) system clinical study
- Post-market surveillance of clinical and functional outcomes with post-operative adjunctive use of Cervical-Stim® or Spinal-Stim®
- Humanitarian Use Device: OP-1 putty
- Randomized, prospective study on transcutaneous electric nerve stimulation for patients with Spondylolisthesis, 2005
- Randomized, prospective study on transcutaneous electrical nerve stimulation for patients with cervical pain, 2005

## PUBLICATIONS

### PEER-REVIEWED JOURNALS

Shalin S. Patel MD, Wilson Aruni PhD, Serkan Inceoglu PhD, Gary D. Botimer MD, **Wayne K. Cheng MD**, Olumide A. Danisa MD. *A comparison of staphylococcus aureus biofilm formation on cobalt-chromium and titanium spinal implants.* Journal of Clinical Neuroscience 31, 219-223.

Adeel Husain MD, Yusuf T. Akpolat MD, Daniel K. Palmer BS, David Rios BS, Kevin R. Criswell MA, **Wayne K. Cheng MD**. *A comparison of open versus percutaneous cervical transfacet fixation.* Journal of Neurosurgery: Spine, 1-6

YT Akpolat, OA Danisa, **WK Cheng**. *Complication Associated With Pedicle Screw placement Using Cortical Bone Trajectory.* Clinical & Experimental Orthopaedics, 2015. 1, 1:2

Benjamin Chen MD, Yusuf T. Akpolat MD, Paul Williams MS, Darren Bergey MD, **Wayne K. Cheng MD**. *Retrospective analysis of survivorship and clinical outcomes after multi-level anterior lumbar reconstruction: Stand-alone ALIF versus hybrid.* J Clin Neurosci. 2016 Feb 17. pii: S0967-5868(15)00676-1. doi: 10.1016/j.jocn.2015.10.033. Epub ahead of print

**Cheng WK**, Akpolat YT, Patel S, Inceoglu S, Danisa OA. *Pars/Pedicle Fracture And Screw Loosening Associated With Cortical Bone Trajectory: A Case Series And Proposed Mechanism Through A Cadaveric Study.* 2015 Sep 24. pii: S1529-9430(15)01456-4. doi: 10.1016/j.spinee.2015.09.046. [Epub ahead of print]

Y. Akpolat<sup>1</sup>, S. Inceoglu<sup>2</sup>, N. Kinne<sup>1</sup>, D. Hunt<sup>1</sup>, **W. Cheng**<sup>1</sup>. *Fatigue Performance of Cortical Bone Trajectory Screw Compared to Standard Trajectory Pedicle Screw.* Spine (Phila Pa 1976). 2015 Oct 17. [Epub ahead of print]

Shalin S. Patel MD, **Wayne K. Cheng MD**, Olumide A. Danisa MD. *A Case Series Of Early Complications After Instrumentation Of The Lumbar Spine Using Cortical Bone Trajectory Technique.* J Clin Neurosci. 2015 Oct 16. pii: S0967-5868(15)00449-X. doi: 10.1016/j.jocn.2015.07.018. [Epub ahead of print]

**Wayne K. Cheng MD**, Serkan Inceoglu PhD. *Cortical and standard trajectory pedicle screw fixation techniques in stabilizing multi-segment lumbar spine with low grade spondylolisthesis.* Int J Spine Surg. 2015 Aug 31;9:46. doi: 10.14444/2046. eCollection 2015.

Serkan Inceoglu PhD, Justin Chen, Hayden Cale, Bjorn Harboldt, **Wayne K. Cheng MD**. *Unconstrained testing of spine with bi-axial universal testing machine.* Journal of the Mechanical Behavior of Biomedical Materials 50,223-227. 2015

Zachary S. Jager MD, Serkan Inceoglu PhD, Daniel Palmer BS, Yusuf T. Akpolat MD, **Wayne K. Cheng MD**. *Preventing Instrumentation Failure in 3-column spinal osteotomy: Biomechanical Analysis of Rod Configuration.* Spine Deformity 4 (1), 3-9

Peter Elsissy MD, Yusuf T. Akpolat MD, Alexander Chien MD, **Wayne K Cheng MD**. *MRI evaluation of the knee with non-ferromagnetic external fixators: Cadaveric knee model.* J Clin Neurosci. 2015 Aug;22(8):1239-43. doi: 10.1016/j.jocn.2015.03.004. Epub 2015 Apr 23. Review.

Mark Mikhael MD, Jaysson T. Brooks MD, Yusuf T. Akpolat MD, **Wayne K. Cheng MD**. *Rotation effect and anatomic landmark accuracy for midline placement of lumbar artificial disk under fluoroscopy*. Published online May 14, 2015, Eur Spine Journal, 1-5.

Jonathan Allen MD, Yusuf T. Akpolat MD, Shyam Kishan MD, Tim Peppers MD, Farbod Asgarzadie MD, **Wayne Cheng, MD**. *Comparison between gearshift and drill techniques for pedicle screw placement by resident surgeons*. Int J Spine Surg. 2015 Jun 11;9:23. doi: 10.14444/2023. eCollection 2015.

Robert S. Quigley MD, Yusuf T. Akpolat MD, Capt. Brent D. Forrest MD, Montri D. Wongworawat MD, **Wayne K. Cheng MD**. *Reason for lawsuit in spinal cord injury affects final outcome*. Spine 40 (11), 851-855

Yusuf K. Akpolat MD, Ben Fegale BS, **Wayne K. Cheng MD**. *Treatment of Os odontoideum in patient with spastic quadriplegic cerebral palsy: A case report and review of literature*. J Clin Neurosci. 2015 Aug;22(8):1239-43. doi: 10.1016/j.jocn.2015.03.004. Epub 2015 Apr 23. Review.

**Wayne K. Cheng MD**, Phillip A. Ta BS, Ahmed M. Abou-Zamzam, Jr. MD, Yusuf T. Akpolat MD, Phillip T. Guillen MD. *Novel posterior technique to temporize life-threatening hemorrhage after great vessel laceration during posterior osteotomy*. Eur Spine J. 2015 Apr 11. [Epub ahead of print]

Ray A. Grijalva MD, Frank PK Hsu MD, PhD, Nathaniel D. Wycliffe MD; Bryan E. Tsao MD; Paul Williams MS; Yusuf T. Akpolat MD; **Wayne K. Cheng MD**. *Hoffmann's Sign: Clinical correlation of neurological imaging findings in the cervical spine and brain*. Spine Apr 1;40(7):475-9, 2015.

Guillen PT MD, Knopper, RG BS, Kroger J BS, Wycliffe ND MD, Danisa OA MD, **Cheng WK MD**. *Independent Assessment of a New Pedicle Drilling Probe and Its Ability to Detect Pedicle Breach: A Cadaveric Study*. Journal of Neurosurgery: Spine 21:821-825, 2014.

Jared Kroger BS, Pierre Beaufond BS, Serkan Inceoglu, PhD, Victoria Maskiewicz PhD, **Wayne Cheng, MD**, Justin Eugene Brier-Jones BS. *Setting Time Comparison of Four Antimicrobial Laden Calcium Sulfate Plasters*. Duke Orthopaedic Journal June-July 2013; Vol 3, Issue 1: 36-40

A Yang, W Dajnowicz, S Inceoglu, **W Cheng MD**. *Pullout strength comparison in central and juxta-endplate anterior lumbar interbody fusion plate placement*. Journal of Investigative Medicine Vol 61, Issue 1, January 2013

David Rios, BS, Wyzsxc Merfil Patacxil, MS, Daniel Kyle Palmer, BS, Paul A. Williams, MS, **Wayne K. Cheng, MD**, Serkan Inceoglu, PhD. *Pullout Analysis of a Lumbar Plate with Varying Screw Orientations: Experimental and Computational Analyses*. Spine 2012; Vol 37, No 16:1-7

Daniel Kyle Palmer, BS, David Rios, BS, Wyzsxc Merfil Patacxil, MS, Paul A. Williams, MS, **Wayne K. Cheng, MD**, Serkan Inceoglu, PhD. *Pullout of a lumbar plate with varying screw lengths*. International Journal of Spine Surgery 6 (2012) 8-12

Zachary Scott Hadley, MD, Daniel Kyle Palmer, BS, Paul Allen Williams, MS, **Wayne K. Cheng, MD**. *Pullout Strength of Anterior Lumbar Interbody Fusion Plates: Fixed Versus Variable Angle Screw Designs*. Journal of Spine 2012. Vol 1, Issue 4

**Wayne K. Cheng, MD** and Daniel K. Palmer, BS. *Rebuttal to letter to the editor: a novel surgical treatment option in which posterior dynamic stabilization (PDS) is utilized to correct coronal plane tilt of a lumbar total disc replacement (TDR)*. Spine Arthroplasty Society Journal. December 2011, Vol 5, No. 4:131

Kodigudla, Manoj<sup>1</sup>; Palepu, Vivek<sup>1</sup>; Goel, Vijay<sup>1</sup>; Serhan, Hassan<sup>2</sup>; Mhatre, Devdatt<sup>2</sup>; **Cheng, Wayne<sup>3</sup>**; Allen, Todd<sup>4</sup>; Garfin, Steve<sup>4</sup>; Chen, Jack<sup>5</sup>. [Would bi-cortical screws plating system improve the stability of lateral lumbar interbody cage: GP57](#). Spine: Affiliated Society Meeting Abstracts: [October 2011](#)

Daniel Kyle Palmer, BS, Jonathan L. Allen, MD, Paul A. Williams, MS, Ashley Elizabeth Voss, BS, Vikram Jadhav, MD, PhD, David S. Wu, and **Wayne K. Cheng, MD**. *Multilevel MRI Analysis of Multifidus-Longissimus Cleavage Planes in the Lumbar Spine and Potential Clinical Applications to Wiltse's Paraspinal Approach*. Spine. August 2011, Vol 36, No. 16: 1263-67

Daniel K. Palmer, BS, Serkan Inceoglu, PhD, and **Wayne K. Cheng, MD**. *Stem Fracture after Total Facet Replacement in the Lumbar Spine: A Report of Two Cases and Review of the Literature*. The Spine Journal. July 2011, Vol 11, No. 7: E15-E19

Justin Eugene Brier-Jones, BS, Daniel Kyle Palmer, BS, Serkan Inceoglu, PhD, **Wayne K. Cheng, MD**. *Vertebral body fractures after transposas interbody fusion procedures*. The Spine Journal, November 2011, (11):1068-72

Wyzsax Merfil Patacxil, MS, Daniel Kyle Palmer, BS, David Rios, BS, Paul Allen Williams, MS, **Wayne K. Cheng, MD**, Serkan Inceoglu, PhD. *Screw orientation and foam density interaction in pullout of anterior lumbar interbody fusion (ALIF) plates*. The Duke Orthopaedic Journal July 2011-June 2012;2(1):35-39

**Wayne K. Cheng, MD**, Daniel Kyle Palmer, BS, Vikram Jadhav, MD, PhD  
*Novel indication for posterior dynamic stabilization: Correction of disc tilt after lumbar total disc replacement*. SAS Journal. June 2011, Vol 5, Issue 2: 44-47

**Wayne K. Cheng, MD**, Vikram Jadhav, MD, PhD, and Daniel K. Palmer, BS. *A novel modification for removal of polyethylene core in artificial disc retrieval using transposas minimally invasive technique*. Journal of Neurosurgery: Spine. April 2011, Vol 14, No 4:466-469

Richard D. Guyer, MD1 , Kenneth A. Pettine, MD2 , Reginald Q. Knight, MD3 , Thomas A. Dimmig, MD4 , Dom Coric, MD5 , Paul C. McAfee, MD6 , Charley Gordon, MD7 , Andrew Cappuccino, MD8 , Rudolph Buckley, MD9 , Pierce Nunley, MD10, Fred Geisler, PhD11, Timothy A. Peppers, MD12, James Rappaport, MD13, Gary Dix, MD14, **Wayne K. Cheng, MD15**, Serena Hu, MD16, Yu-Po Lee, MD17, Fabien D. Bitan, MD18, Ravinder Bains, MD19  
*Radiographic Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Controlled Multicenter FDA-Regulated Trial*  
The Spine Journal. 2011, 10 (9), S12-S13

N Mehta, P Elsisy, A Chien, I Kjellin, J Unis, U Oyoyo, B Holshouser, **W Cheng**  
*Evaluation of Image Quality of MR of the Knee With MR-safe Knee External Fixation Device at 3 Tesla*  
American Journal of Roentgenology. 2010, 194 (5)

Sam Chen, MD, Matt V. Anderson, BS, **Wayne K. Cheng, MD**, Montri D. Wongworawat, MD. *Diabetes Associated with Increased Surgical Site Infections in Spinal Arthrodesis*. Clinical Orthopaedics and Related Research. July 2009, 467:1670-1673

Jason Chiriano, DO, Ahmed M. Abou-Zamzam, MD, Olivier Urayeneza, BS, Wayne W. Zhang, MD, and **Wayne Cheng, MD**. *The role of the vascular surgeon in anterior retroperitoneal spine exposure: Preservation of open surgical training*. Journal of Vascular Surgery. July 2009, 50:232

Barton Sachs, MD, MBA, Scott Webb, DO, Courtney Brown, MD, David Wiles, MD, Antonio Castellvi, MD, Charles Wingo, MD, Michael Halperin, MD, John Hsiang, MD, PhD, Khalid Sethi, Paul Schwaegler, MD, John Demakas, MD, **Wayne Cheng, MD**, Bruce Frankel, MD, Jamal Taha, MD. *The Total Facet Arthroplasty System® (TFAS®) in the Treatment of Degenerative Lumbar Spinal Stenosis: Midterm Results of US IDE Trial with Longest Follow-Up of 24-Months*. The Spine Journal, Vol 8, Issue 5, Supplement, September–October 2008, 60S-61S

William T. Long, MD, **Wayne K. Cheng, MD**, and Earl W. Brien, MD. *Grading System for Gunshot Injuries to the Femoral Diaphysis in Civilians*. Clinical Orthopaedic and Related Research. March 2003, 408:92-100

Shalin S. Patel MD, Yusuf T. Akpolat MD, Serkan Inceoglu PhD, Olumide A. Danisa MD, **Wayne K. Cheng, MD**. *Early hardware failure after pedicle subtraction osteotomy: Risk factors and prevention*. Submitted, pending acceptance.

Yusuf T. Akpolat MD, **Wayne K. Cheng MD**, Serkan Inceoglu PhD. *Biomechanical comparison of lumbar pedicle screw trajectories: Traditional vs. Headless screw*. Pending Acceptance.

Shalin Patel M.D.<sup>a</sup>, Phillip Glivar M.D.<sup>a</sup>, David Juma MPH<sup>c</sup>, Farbod Asgarzadie M.D.<sup>b</sup>, **Wayne Cheng, M.D.<sup>a</sup>**, Olumide Danisa M.D.<sup>a</sup> *The relationship between cervical lordosis and Nurick scores in patients undergoing circumferential vs. posterior alone cervical decompression, instrumentation and fusion for treatment of cervical spondylotic myelopathy*. Pending acceptance.

Rafeek O. Woods, MD, Serkan Inceoglu, PhD, Yusuf T. Akpolat, MD, **Wayne Cheng, MD**, Qasim Zaidi, MD, Danisa Olumide, MD. *C1 Lateral Mass Displacement and Transverse Atlantal Ligament Failure in Jefferson's Fracture: A Biomechanical Rationale for the "Rule of Spence"* Pending Submission.

Grigor Grigoryan, Serkan Inceoglu, Yusuf T Akpolat, MD, Olumide A. Danisa, **Wayne K Cheng** *Sacral End-plate Penetrating Screw for Lumbosacral Fusion: A Cadaveric Biomechanical Study*. Accepted for Oral Presentation.

### BOOK CHAPTERS

Luis Marchi, Luiz Pimenta MD PhD, Leonardo Oliveira, Jonathan Allen MD and **Wayne Cheng MD**. *Extreme Lateral Interbody Fusion for Revision Lumbar Surgery*. In eXtreme Lateral Interbody Fusion (XLIF®), 2<sup>nd</sup> Ed. Eds. J. Allan Goodrich, Ildemaro J. Volcan. Pp 1-13.

William Richardson, MD, **Wayne K. Cheng, MD**, and Robert Lins, MD. *Cervical Spine Surgery*. In Rheumatoid Arthritis, 1<sup>st</sup> Ed. St. Clair, W, Pisetsky DS, Haynes BF, eds. Lippincott, Williams, and Wilkins; 2004. pp 475-482.

## BOOK REVIEWS

Journal of Neurosurgery, 2006

*Diagnosis and Treatment of Pain of Vertebral Origin, 2nd ed.*, Robert Maigne

Journal of Neurosurgery, 2005

*Physical Examination of the Spine*, Albert & Vaccaro

## ORAL AND POSTER PRESENTATIONS NATIONAL, INTERNATIONAL, REGIONAL

Grigor Grigoryan, Serkan Inceoglu, Yusuf T Akpolat, MD, Olumide A. Danisa, **Wayne K Cheng**  
*Sacral End-plate Penetrating Screw for Lumbosacral Fusion: A Cadaveric Biomechanical Study*. Podium  
Presentation at 9<sup>th</sup> Annual meeting of Lumbar Research Society Meeting, Chicago, Illinois. April 15, 2016

Y. Akpolat<sup>1</sup>, S. Inceoglu<sup>2</sup>, N. Kinne<sup>1</sup>, D. Hunt<sup>1</sup>, **W. Cheng**<sup>1</sup>. Fatigue Performance of Cortical Bone  
Trajectory Screw Compared to Standard Trajectory Pedicle Screw.  
Poster presentation at 16<sup>th</sup> Annual Meeting of The International Society for the Advancement of  
Spine Surgery, Las Vegas, Nevada. April 7, 2015.

Shalin Patel M.D.<sup>a</sup>, Phillip Glivar M.D.<sup>a</sup>, David Juma MPH<sup>c</sup>, Farbod Asgarzadie M.D.<sup>b</sup>, **Wayne Cheng,  
M.D.<sup>a</sup>**, Olumide Danisa M.D.<sup>a</sup> *The relationship between cervical lordosis and Nurick scores in patients  
undergoing circumferential vs. posterior alone cervical decompression, instrumentation and fusion for  
treatment of cervical spondylotic myelopathy*.  
Poster presentation at 16<sup>th</sup> Annual Meeting of The International Society for the Advancement of  
Spine Surgery, Las Vegas, Nevada. April 7, 2015.

Shalin S. Patel MD, Wilson Aruni PhD, Serkan Inceoglu PhD, Gary D. Botimer MD, **Wayne K. Cheng  
MD**, Olumide A. Danisa MD. *A comparison of staphylococcus aureus biofilm formation on cobalt-  
chromium and titanium spinal implants*.  
Podium presentation at the AO Spine: Global Spine Congress. Buenos Aires, Argentina. May 20-23, 2015.

**Wayne K. Cheng MD**, Yusuf T. Akpolat MD, Shalin S. Patel MD, Serkan Inceoglu PhD, Olumide A.  
Danisa MD. *Pars/pedicle fracture as a complication during pedicle screw placement using cortical bone  
trajectory: Case report and pilot cadaveric study*.  
Oral poster presentation at the 15<sup>th</sup> Annual Meeting of The International Society for the Advancement of  
Spine Surgery, San Diego, California. April 15, 2015.

Patel S, **Cheng W**, Danisa O. Early Complication After Instrumentation of the Lumbar Spine using Cortical  
bone Trajectory Technique. Poster Presentation at CNS/AANS Section on disorders of the Spine and  
Peripheral Nerves. Phoenix, AZ. March 4-7, 2015

P.T. Guillen, P.A. Ta, **W.K. Cheng**. *“Novel Approach to Control Iatrogenic Great Vessel Laceration  
During Pedicle Subtraction Osteotomy”*.  
Oral presentation at the ISASS13 Annual Meeting, Vancouver, BC, Canada. March 3-5, 2013.

Wojtek Dajnowicz<sup>1</sup>, Andrew Yang<sup>1</sup>, **Wayne Cheng MD**<sup>2</sup>, Serkan Inceoglu PhD<sup>2</sup>. “*Central and Juxta-Endplate Placement of an ALIF Plate: Comparison of Pullout Strength*”.

Poster presentation at the ISASS13 Annual meeting, Vancouver, BC, Canada. March 3-5, 2013

Chen BY, Williams P, **Cheng WK**. “*Retrospective Analysis of Survivorship and Clinical Outcomes after Multi-level Anterior Lumbar Reconstruction: ALIF versus Hybrid Fusion*”.

Poster presentation at the ISASS13 Annual meeting, Vancouver, BC, Canada. March 3-5, 2013

**Wayne K. Cheng MD**, Ryan G. Knopper BS, Jared Kroger BS, Phillip T. Guillen MD, Nathaniel D. Wycliffe MD, Olumide A. Danisa MD. “*Independent Assessment of a New Pedicle Drilling Probe And Its Ability to Detect Pedicle Breach: A Cadaver Study*”

Poster presentation at the 29<sup>th</sup> Annual meeting of the AANS/CNS Section of Disorders of the Spine and Peripheral Nerves, Phoenix Arizona. March 6-9, 2013

Justin Brier-Jones BS, Jared Kroger BS, Pierre Beaufond BS, Serkan Inceoglu PhD, Victoria Maskiewicz PhD, **Wayne K Cheng MD**. “*Setting Time Comparison of Four Antimicrobial Laden Calcium Sulfate Plasters*”.

**First Place in Clinical - Basic Science Category**

Poster presentation at the 81<sup>st</sup> Annual Postgraduate Convention, Alumni Association School of Medicine of Loma Linda University. March 1-4, 2013

A. Husain, D.K. Palmer, R.M. Mehrdady, K.R. Criswell, D. Rios, **W.K. Cheng**. “*Cervical Transfacet Fixation: Safety and Accuracy of Open versus Percutaneous Approaches*”

Podium presentation at ISASS12 Conference, Barcelona, Spain. March 20-23, 2012

M. Mikhael, **W. Cheng**. “*Do preoperative HbA1c levels correlate with postoperative wound infection rates in spine surgery?*”

Podium presentation at ISASS12 Conference, Barcelona, Spain. March 20-23, 2012

Z.S. Jager, **W.K. Cheng**, A.E. Voss, D.K. Palmer, S. Inceoglu. “*Preventing Hardware Failure in Pedicle Subtraction Osteotomy Constructs: Pilot Biomechanical Analyses of Rod Configurations*”

Podium presentation at ISASS12 Conference, Barcelona, Spain. March 20-23, 2012

Robert Quigley, MD, Daniel Kyle Palmer, BS, Brent Forrest, BS, **Wayne K. Cheng, MD**. “*Why do Doctors Get Sued for Spinal Cord Injury? A Review of the Past 10 Years*”

Poster presentation at the 80<sup>th</sup> Annual Post-Graduate Convention, Loma Linda University, Loma Linda, California. March 4, 2012

Daniel K. Palmer, BS, **Wayne K. Cheng, MD**, David Rios, BS, Wyzsxc M. Patacxil, MS, Zachary S. Hadley, MD, Paul A. Williams, MS, Serkan Inceoglu, PhD. “*Maximizing Anterior Lumbar Interbody Fusion Plate Stability*”

Poster presentation at the 80<sup>th</sup> Annual Post-Graduate Convention, Loma Linda University, Loma Linda, California. March 4, 2012

**WK Cheng, MD**. “*Future Biologic Therapies*”

Presented at The UC Irvine Spine Symposium, Irvine, California. June 3, 2011

**Wayne K. Cheng, MD**, Daniel Kyle Palmer, BS, and Vikram Jadhav, MD, PhD. “*Novel Indication for Posterior Dynamic Stabilization: Correction of Disc Tilt after Lumbar Total Disc Replacement*”

Poster presentation at the SAS11 Conference, Las Vegas, Nevada. April 26-29, 2011

WW Wong, MD, **WK Cheng, MD**, E Clarke, P Williams, MS, W Patacxil, D Rios, DK Palmer. *“Clinical Outcomes from a Prospective Study on Archus Total Facet Arthroplasty System for Treatment of Lumbar Stenosis with Degenerative Spondylolisthesis”*

Presented at SAS11 Conference, Las Vegas, Nevada. April 26-29, 2011

M Mikhael, MD, **W Cheng, MD**. *“The Accuracy of Midline Placement of Total Disc Arthroplasty of the Lumbar Spine Using Different Anatomic Landmarks Under Fluoroscopy”*

Poster/oral presentation at SAS11 Conference, Las Vegas, Nevada. April 26-29, 2011

Patacxil W M, Williams P A, Rios D A, Chen J C, Palmer D K, Inceoglu S, and **Cheng WK, MD**. *“Influence of Polyurethane Foam Density on ALIF Plate Pullout Strength”*

Poster presentation at ORS Annual Meeting, Long Beach, California. January 13-16, 2011

Ray A. Grijalva, MD; **Wayne Cheng, MD**; Vikram Jadhav, MD. *“Clinical Correlation of Magnetic Resonance Imaging Findings in Brain and Cervical Spine and the Hoffmann’s Sign”*

Podium presentation at the Cervical Spine Research Society 38<sup>th</sup> Annual Meeting, Charlotte, North Carolina. December 2-4, 2010

Adeel Husain, MD; Daniel Palmer, MS; David Rios, BS; Rosemina Mehrdady, MD; **Wayne Cheng, MD**. *“A Comparison of Open versus Percutaneous Cervical Transfacet Fixation”*

Podium presentation at the Cervical Spine Research Society 38<sup>th</sup> Annual Meeting, Charlotte, North Carolina. December 2-4, 2010

Richard D. Guyer MD, Kenneth A. Pettine MD, Reginald Q. Knight MD, Thomas A. Dimmig MD, Dom Coric MD, Paul C. McAfee MD, Charley Gordon MD, Andrew Cappuccino MD, Rudolph Buckley MD, Pierce Nunley MD, Fred Geisler PhD, Timothy A. Peppers MD, James Rappaport MD, Gary Dix MD, **Wayne K. Cheng MD**, Serena Hu MD, Yu-Po Lee MD, Fabien D. Bitan MD, Ravinder Bains MD. *“Direct Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Multicenter FDA Regulated Trial”*

Podium presentation at the NASS 25<sup>th</sup> Annual Meeting, Chicago, Illinois. November 2-5, 2010

Richard D. Guyer MD, Kenneth A. Pettine MD, Reginald Q. Knight MD, Thomas A. Dimmig MD, Dom Coric MD, Paul C. McAfee MD, Charley Gordon MD, Andrew Cappuccino MD, Rudolph Buckley MD, Pierce Nunley MD, Fred Geisler PhD, Timothy A. Peppers MD, James Rappaport MD, Gary Dix MD, **Wayne K. Cheng MD**, Serena Hu MD, Yu-Po Lee MD, Fabien D. Bitan MD, Ravinder Bains MD. *“Radiographic Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Controlled Multicenter FDA-Regulated Trial”*

Podium presentation at the NASS 25<sup>th</sup> Annual Meeting, Chicago, Illinois. November 2-5, 2010

Jonathan Allen, MD; Vikram Jadhav, MD, PhD; Farbod Asgarzadie, MD, Shyam Kishan, MD, Tim Peppers, MD, Paul Williams, MS, and **Wayne Cheng, MD**. *“Comparison Between Gearshift And Drill Techniques For Pedicle Screw Placement By Resident Surgeons”*

Podium presentation at the 58<sup>th</sup> Annual Piedmont Orthopedic Society meeting, White Sulphur Springs, West Virginia. May 5-9, 2010



Ray A. Grijalva, MD; **Wayne Cheng, MD**; Vikram Jadhav, MD. “*Clinical Correlation of Magnetic Resonance Imaging Findings in Brain and Cervical Spine and the Hoffmann’s Sign*”  
Podium presentation at the 58<sup>th</sup> Annual Piedmont Orthopedic Society meeting, White Sulphur Springs, West Virginia. May 5-9, 2010

**Wayne K. Cheng, MD.** “*Surgical Treatment of Cervical Spine Fractures*”  
Presented at the 29<sup>th</sup> Annual Harold B. Boyd Lectures, Orthopaedic Trauma, in conjunction with the 2009, 77<sup>th</sup> Annual Post-Graduate Convention, Loma Linda University, Loma Linda, California. March 8, 2009

**Wayne K. Cheng, MD.** “*ALIF Applications*”  
Presented at Stryker Spine ALIF Lab, Las Vegas, Nevada. November 7, 2008

**Wayne K. Cheng, MD.** “*Cervical Spine and Low Back Injuries*”  
Presented at Critical Management of High Risk Disease: “Don’t Kill Your Patient”, San Diego, California. May 2, 2008

**Wayne K. Cheng, MD.** “*Cervical Spine and Low Back Injuries*”  
Critical Management of High Risk Disease: “Don’t Kill Your Patient”, Las Vegas, Nevada. October 19, 2007

**Wayne K. Cheng, MD.** “*Common Spinal Disorders: Diagnosis and Treatment*”  
Presented at the North American Taiwanese Medical Association. June 30, 2007

**Wayne K. Cheng, MD.** “*Hybrid & Spanning External Fixation*”  
Presented at the Residents’ Trauma Forum, Huntington Beach, California. September 17, 2006

**Wayne K. Cheng, MD.** “*Common Spinal Disorders*”  
Presented at Spine Grand Rounds & Journal Club, Rancho Cucamonga, California. September 13, 2006

**Wayne K. Cheng, MD.** “*Complications of Artificial Disc*”  
Presented at The 8<sup>th</sup> Annual Mammoth Lakes Symposium, Mammoth Lakes, California. September 9, 2006

**Wayne K. Cheng, MD.** “*Preliminary Results of Artificial Disc*”  
Presented at The 8<sup>th</sup> Annual Mammoth Lakes Symposium, Mammoth Lakes, California. September 9, 2006

**Wayne K. Cheng, MD.** “*Anterior Lumbar Interbody Fusion – Surgical Techniques of Interbody Fusion*”  
Presented at Neurosurgery Conference, Loma Linda University, Loma Linda, California. April 19, 2006

**Wayne K. Cheng, MD.** “*Surgical Aspects of Neck and Back Pain*”  
Presented at International Church of Christ, Arcadia, California. April 2, 2006

**Wayne K. Cheng, MD.** “*Surgical Management of the C-Spine in Patients with Rheumatoid Arthritis*”  
Presented at the 25<sup>th</sup> Annual Harold B. Boyd Lectures in conjunction with the 2005 Annual Post-Graduate Convention, Loma Linda University, Loma Linda, California. March 6, 2005

**Wayne K. Cheng, MD.** “*Common Spine Disorders*”  
Presented at Workman’s Compensation Forum, San Bernardino, California. January 2003

William T. Long, MD and **Wayne K. Cheng, MD**. “*Surgical Management of One Hundred and Forty Gunshot Injuries to the Femoral Diaphysis*”

Presented at Charles R. Drew University Resident’s Research Symposium, Martin Luther King Hospital, Division of Orthopaedic Surgery, 2001.

**Wayne K. Cheng, MD**. “*Management of Polytrauma Patients*”

Presented at DePuy/ACE Complex Trauma Conference, Colorado. February 2001

William T. Long, MD, Darryl Willoughby, MD, and **Wayne Cheng, MD**. “*Treatment of Pelvic Fractures in Multiple Trauma Patients*”

Presented at Drew Trauma Symposium hosted by the Gladden Society, Martin Luther King Hospital, Division of Orthopaedic Surgery, 1999

**Wayne K. Cheng, MS**, William F. Wagner, MD, and Subrata Saha, PhD. “*A Biomechanical Evaluation of Different Knotting Techniques and Suture Materials*”, Loma Linda University Medical Center, 1995

Presented/published at the 37<sup>th</sup> Annual Biomaterial Society Conference, Shreveport, Louisiana

## **CERTIFICATIONS/TRAINING**

Baxano

iO-Flex System Training

UCI Medical Center

Orange, California. September 22, 2010

LANX

2010 Bioskills Lab, Innovative Technology in Minimally Invasive Lumbar Fusion

Aspen Spinous Process Fixation System/Telluride MIS Spinal Fixation System

Las Vegas, Nevada. February 20, 2010

Experience the Breakthrough Power of “O”:

O-ARM® System with Navigation Technology Workshop

Las Vegas, Nevada. May 30-June 1, 2008

Advanced XLIF Training Course

NuVasive

San Diego, California. April, 2008

Oracle Spacer System - Director Lateral Approach

Synthes Spine

Henderson, Nevada. April, 2008

ProDisc-C Cervical Artificial Disc

Synthes Spine

Los Angeles, California. February, 2008

ProDisc Lumbar Artificial Disc

Synthes Spine

Los Angeles, California. June, 2007

Medtronic Faculty Training  
Prestige Cervical Disc System  
Memphis, Tennessee. March, 2007  
Operative Treatment of Acetabular Fractures  
AAOS 2007 Annual Meeting  
San Diego, California. February 2007

Triage Medical Percutaneous Lumbar  
Stabilization Procedure  
Hands-on Cadaver Training Course  
Irvine, California. December 2006

MESA Spinal System  
Deformity Study Group  
Baltimore, Maryland. June 2006

Trans-1 AxiaLIF Hands-on Cadaver Lab  
Stryker Orthopaedics  
Loma Linda, California. April 2006

X-STOP Training Course  
Dallas, Texas. January 2006

Dynesys Dynamic Stabilization Workshop  
St. John's Health Center  
Santa Monica, California. April 2005

Charite` Artificial Disc Training  
Cincinnati, Ohio. February 2005

Minimally Invasive Spine Techniques  
Barrow Neurological Institute  
Phoenix, Arizona. May 2003

Minimal Access System  
Northwestern University, Feinberg School of Medicine  
Chicago, Illinois. April 2003

Surgical Prospectives on Chronic Pain  
Westminster, Colorado. March 2003

Spine Education Summit  
Vail, Colorado. March 2003

Advanced Concepts in Anterior Scoliosis Treatment (Endoscopic and Open Treatment)  
Half Moon Bay, California. February 2003

Inflatable Bone Tamp Technology course

Stanford University School of Medicine  
Palo Alto, California. December 2002

Endoscopic/Atraumatic Spine Fusion System  
Kerlan and Jobe Sports Medicine Clinic  
Los Angeles, California. December 2002

Intradiscal Electro Thermal Therapy  
Practical Anatomy Workshop  
St. Louis, Missouri. October 2002

Microvascular course  
Loma Linda University School of Medicine  
Loma Linda, California. August 2002

Minimal Invasive Spine Surgery  
St. Louis University School of Medicine  
St. Louis, Missouri. April 2002

Advanced Techniques in Cervical Spine Decompression and Stabilization  
St. Louis University School of Medicine  
St. Louis, Missouri. January 2002

## **PRECEPTORSHIP**

Endius Endoscopic Spine Fusion System  
Sarasota, Florida, July 2003

X-Tube Assisted Spine Fusion System  
Los Angeles, California, June 2003