



**DEPARTMENT OF ORTHOPAEDIC SURGERY**  
 UCI SCHOOL OF MEDICINE  
 UCI MEDICAL CENTER, PAVILION III  
 101 THE CITY DRIVE SOUTH  
 ORANGE, CA 92868

## CURRICULUM VITAE

**Charles David Rosen, M.D.**  
**Clinical Professor of Orthopaedic Surgery**  
**Spine Surgery**

### EDUCATION

|  |            |                                   |           |
|--|------------|-----------------------------------|-----------|
| Regents Honors Graduate<br>Harrison, New York  |            |                                   | June 1972 |
| University of Pennsylvania,<br>Cum Laude, June 1977 Philadelphia, PA<br>EARLY ADMISSIONS PROGRAM from<br>Junior year at Harrison High School | B.A.       |                                   | 1972-1977 |
| University of California, San Diego<br>La Jolla, California<br>1983  | M.D.       |                                   | 1979-     |
| Santa Barbara Cottage Hospital,<br>Santa Barbara, California   | Internship | General Surgery                   | 1983-1984 |
| Hospital for Joint Diseases Orthopaedic Institute,<br>New York, New York   | Residency  | Orthopaedic<br>Surgery            | 1984-1988 |
| Rancho Los Amigos Medical Center,<br>Downey, California  | Fellowship | Spine Surgery &<br>Rehabilitation | 1988-1989 |

### LICENSES AND CERTIFICATIONS

|   |  |  |       |
|---|--|--|-------|
| Diplomat, American Board of Orthopaedic Surgeons<br>present |  |  | 1991- |
| California Medical License<br>1983-present                  |  |  |       |

PRINCIPAL POSITIONS HELD

|   |                     |
|---|---------------------|
| <u>Clinical Professor of Surgery</u><br>Department of Orthopaedic Surgery<br>University of California, Irvine, School of Medicine   | 2007-present        |
| <u>Staff Surgeon</u> – WOC – Without Compensation<br>VA Hospital Long Beach, California   | 2018- 2021          |
| President, Association for Medical Ethics   | 2015- present       |
| <u>Joint Editor-In-Chief: Journal of Hard Tissue.</u> Springer Verlag.  | 2012 – 2014         |
| <u>Associate Editor: Ethics in Biology, Engineering, and Medicine.</u><br>Begell House Pub.   | 2010-present        |
| Participant <u>U.S. SENATE: Roundtable on Physicians Payment Sunshine Act</u><br>Washington, DC with Senators Kohl, Grassley, and Blumenthal  | August 2012         |
| <u>President, Hard Tissue Society</u> – the International Society of Hard Tissue<br>Scientists. London, England. www.HardTissue.com   | 2012-2014           |
| Conference Advisory Board: <u>American Society of Mechanical Engineers</u>  | 2010-2012           |
| <u>NOMINEE FOR UNITED STATES SURGEON GENERAL</u><br>short list by Obama Administration  | December 2008       |
| <u>CONGRESSIONAL WITNESS</u> and advisor before<br><u>U.S. Senate Special Committee on Aging</u><br>Washington, DC. . CONGRESSIONAL TESTIMONY on behalf of :<br>Physicians’ Payment Sunshine Act sponsored by Sen. Grassley (R-IA)<br>and Sen. Kohl (D-W) | January 2008        |
| <u>Haitian Relief - Project Medishare</u> volunteer –Port Au Prince, Haiti  | 3/13 – 3/21/2010    |
| <u>California Medical Board Advisor</u> – reviewing spinal surgeries<br><br>present   | 2004-2009<br>2019 - |
| Medical Student Mentor and Contributor <u>American Medical Association</u><br><u>Journal of Ethics</u>  | 2009                |
| Member of national Blue Cross Blue Shield Expert Panel Roster for devising guidelines<br>for <u>Blue Distinction Centers for Spine Surgery</u> nationally   | 2009                |
| Member: <u>Conflict of Interest Committee, University of California, Irvine,</u>  |                     |

|   |                        |
|---|------------------------|
| <u>School of Medicine</u>   | 2008- 2010             |
| Co-Founder, Association for Medical Ethics.<br>present  | 2006-                  |
| President   | 2006-2009<br>2019-     |
| present   |                        |
| Website: EthicalDoctor.org  | 2008-present           |
| President and Founder, <u>Association for Ethics in Spine Surgery.</u>  | 2006                   |
| University of California, Irvine<br>UCI Spine Center Founding Director  | 2002-present           |
| University of California, Irvine<br>Department of Orthopaedic Surgery<br>Assistant Clinical Professor of Surgery              | 1995-1999<br>1999-2007 |
| Associate Clinical Professor of Surgery   |                        |
| Rancho Los Amigos Medical Center<br>Spinal Injury Service<br>Downey, California<br>Attending Physician, Consultant Specialist | 1989-1992              |
| University of Southern California School of Medicine<br>Los Angeles, California<br>Clinical Instructor of Orthopaedics        | 1989-1992              |
| Garden Grove Hospital<br>Garden Grove, California<br>Chief of Surgery   | 1998-2000              |

#### HOSPITAL AFFILIATIONS

University of California, Irvine Medical Center  
Orange, California  
Attending Physician, Active Class I

#### HONORS AND AWARDS

U.S. Surgeon General short list for nomination by Obama administration in December 2008

Albert M. Betcher Scholarship Award

Fellowship Study in Orthopaedic Surgery,  
Hospital for Joint Diseases Orthopaedic Institute  
New York, New York

Robert Hamburger Memorial Thesis Award

Runner-up for Senior Medical School Thesis, 130 papers submitted,  
“Education in Medical School”  
University of California, San Diego  
School of Medicine  
La Jolla, California

Gold Medal in Figure Skating (Ice Dancing)

Trained with the United States Olympic Team Coach (1972-1975),  
winning numerous medals in competition. Appeared twice on ABC’s Wide World of Sports.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

|   |               |
|---|---------------|
| Fellow, American College of Surgeons                                | 1993-present  |
| North American Spine Society  | 1988 - 2019   |
| Sports Medicine Committee, United States Figure Skating Association | 1990 - 1993   |
| Western Orthopaedic Association                                     | 1993 -present |
| California Orthopaedic Association                                  | 1993- present |
| Fellow, American Academy of Orthopaedic Surgeons                    | 1993 - 2013   |

PRESENTATIONS / SYMPOSIUMS

|  |              |
|--|--------------|
| CALIFORNIA STATE ASSEMBLY AND SENATE witness for passage of AB1278<br>for transparency in medicine.  | JULY 2021    |
| 9 <sup>TH</sup> Annual International Conference on Ethics in Biology, Engineering, & Medicine<br>SESSION CHAIR – Medical Practice and Ethics             | April 2018   |
| KEYNOTE SPEAKER – UCLA ANDERSON SCHOOL OF BUSINESS ANNUAL<br>HEALTH CARE FORUM   | October 2016 |
| American College of Occupational and Environmental Medicine Annual Meeting<br>Los Angeles, CA<br>KEYNOTE ADDRESS – WILLIAM T. PATTERSON MEMORIAL LECTURE | May 2012     |
| Congress of Neurological Surgeons Annual Meeting<br>Washington, DC<br>PRESENTATION – Ethics in Neurosurgical Practice                                    | October 2011 |

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|---|----------------|
| UCLA School of Engineering<br>Los Angeles, CA<br>PRESENTATION – Bioengineering and Ethics   | February 2011  |
| Blue Cross / Blue Shield National CMO Meeting<br>Chicago, IL<br>PRESENTATION – Bringing Care Back into Healthcare   | October 2009   |
| UC Regents: Symposium – Conflicts of Interest<br>Oakland, CA<br>PRESENTATION – Conflicts of Interest in Medicine.   | June 2008      |
| 4 <sup>TH</sup> Frontiers in Biomedical Devices Conference<br>Irvine, CA<br>Session Chair and Speaker: “Ethics in Orthopaedics”<br>PRESENTATION- Spine Arthroplasty and Ethics        | June 8-9, 2009 |
| American Society of Interventional Pain Physicians (ASIPP)<br>Washington, DC<br>KEYNOTE OPENING SPEAKER – The Evolution of Ethics and Disclosure                                      | February 2009  |
| Orthopaedic Research Society (ORS)<br>Las Vegas, Nevada<br>PRESENTATION - Poster: Lumbar Disc Replacement Failures: Review of 29 Patients:<br>Rationale for Revision.                 | February 2009  |
| Orthopaedic Research Society (ORS)<br>San Francisco, California<br>PRESENTATION – Poster: New Method for Determining the Axial Center of<br>Rotation in the Thoracic and Lumbar Spine | February 2008  |
| American Association of Neurological Surgeons<br>Washington, DC<br>PRESENTATION – The Failure of Lumbar Disc Replacements in the US,<br>A New Model of Lumbar Spine Motion            | April 2007     |
| American College of Surgeons Annual Meeting- 93 <sup>rd</sup> Clinical Congress<br>New Orleans, Louisiana<br>PRESENTATION: Industrial Ties: Ethical Relationships for Surgeons        | October 2007   |
| American Academy of Minimally Invasive Spine Surgery and Medicine<br>Shanghai, China<br>PRESENTATION: Artificial Lumbar Discs, the FDA, and a New Model of<br>Spine Motion            | March 2007     |

Western Orthopaedic Association Meeting  
Orange, California

PRESENTATION: Artificial Lumbar Discs, the FDA, and A New Model  
of Spine Motion

September 2006

UCI Department of Orthopaedic Surgery Graduate Research Forum  
Orange, California

PRESENTATION: Percutaneous pre-sacral approach and method for  
lumbo-sacral fusion

June 2006

North American Spine Society  
Monterey, California

Rosen, et al.

PRESENTATION: The Lumbar Facet Fracture as a Source of Pain after  
Lumbar Laminectomy.

August 1990

American Spinal Injury Association  
Orlando, Florida

Rosen, et al.

PRESENTATION: The Lumbar Facet Fracture as a Source of Pain after  
Lumbar Laminectomy.

May 1990

American Spinal Injury Association  
Las Vegas, Nevada  
Garland, Rosen, et al.

PRESENTATION: Bone Mineral Distribution Five Years or More After  
Spinal Cord Injury.

April 1989

American Academy of Orthopaedic Surgeons, Federation of Spine Associate Meeting  
San Francisco, California

Rosen, et al.

PRESENTATION: A Retrospective Analysis of the Efficacy of Epidural  
Steroid Injections.

### SYMPOSIUMS SPONSORED

Ethics: The Role of Industry and Academia – Univ. of CA, Irvine, School of Medicine  
Organized 1 day symposium of 12 speakers from Senate, DOJ, research, ethics, and industry.  
Created “Ethical Rules of Disclosure” under joint collaboration of speakers.

June 2009

## PUBLICATIONS

Andrew P Alvarez<sup>1</sup>, Amanda Anderson<sup>2</sup>, Saifal-Deen Farhan<sup>1</sup>, Young Lu<sup>1</sup>, Yu-Po Lee<sup>1</sup>, Michael Oh<sup>3</sup>, Charles Rosen<sup>1</sup>, Douglas Kiester<sup>1</sup>, Nitin Bhatia *The Utility of Flexion-Extension Radiographs in Degenerative Cervical Spondylolisthesis* Clin Spine Surg. 2022 Aug 1;35(7):319-322. doi: 10.1097/BSD.0000000000001307. Epub 2022 Mar 10. PMID: 35276718

Han Yu, Lara Wadi, Irene Say, Charles Rosen, MD et al.... *Magnetic Resonance Imaging in High School Football Players: Brain and Cervical Spine.* Neurotrauma Rep., March 15, 2022 pg 129-138 PMID 35403100

Jeffrey H. Choi, Huy Alex Duong, Sean Williams, Joshua Lee, Michael Oh, Charles Rosen, Yu-Po Lee, Nitin Bhatia. *The Efficacy of Bactrim in Reducing Gram-Negative Surgical Site, I- infections After Spine Surgery.* Clin Spine Surgery EMID:306ff9b9dc7b1e91 NASS The Spine Journal November 2021

Gattas, Sandra; Fote, Gianna; Brown, Nolan; Lien, Brian; Choi, Elliot; Chan, Alvin; Rosen, Charles; Oh, Michael. "Second Opinion in Spine Surgery: A Scoping Review." Surgical Neurology International, Aug 30, 2021. DOI: 10.25259/SNI\_399\_2021.

Chin, Yu-Po Lee MD, Saifal-Deen Farhan MD, Arif Pendi MS, BS, Torin J Cunningham MD, P. Douglas Kiester MD, Peter Hahn MD, Charles Rosen MD, Nitin N. Bhatia MD, *Does conflict of interest affect the reported fusion rates with bone graft extenders?* The Spine Journal Volume 20, Issue 9, Supplement, September 2020, Page S85

Lu Y, Lin CC, Doermann A, Patel N, Bhatia NN, Kiester PD, Rosen CD, Lee YP. *Impact of Sickle Cell Anemia on Inpatient Morbidity After Spinal Fusion.* Clin Spine Surg. 2019 Dec;32(10): 439-443

Young Lu MD, Charles C. Lin BSE, Hayk Stepanyan MD, Andrew Alvarez MD, Nitin N. Bhatia MD, P. Douglas Kiester MD, Charles D. Rosen MD, Yu-Po Lee MD, *Impact of Cirrhosis on Morbidity and Mortality After Spinal Fusion*, Global Spine Journal. Published October 10, 2019.

Yu-Po Lee MD, Saifal-Deen Farhan MD, Arif Pendi MS, Torin J Cunningham MD, P Douglas Kiester MD, Peter Hahn MD, Charles D Rosen MD, Nitin Bhatia MD, *Does Addition of Tobramycin Powder Reduce Infection Rates After Spine Surgery*, Global Spine Journal. Published December 2018.

Charles C. Lin, BSE; Young Lu, MD; Nilay A. Patel, MD; P. Douglas Kiester, MD; Charles D. Rosen, MD; Nitin N. Bhatia, MD; Yu-Po Lee, MD; *Outcomes and Complications After Spinal Fusion in Patients with Obstructive Sleep Apnea.* Global Spine Journal. Published August 13, 2018.

Rosen, Charles MD; Kiester, Douglas MD; Lee, Thay PhD: *Pseudo-Pedicle Heterotopic Ossification From Use of Recombinant Human Bone Morphogenetic Protein 2 (rhBMP-2) in Transforaminal Lumbar Interbody Fusion Cage,* American Journal of Orthopedics in press January 29, 2018.

Yu-Po Lee, MD; Saifal-Deen Farhan, MD; Douglas Kiester, MD; Charles Rosen, MD; Arif Pendi, MS; Nitin Bhatia, MD *Variables Affecting Return to Work After Spine Surgery in a Non-Workers' Compensation Population: A Retrospective Cohort Study.* Journal of the American Academy of Orthopaedic Surgeons, December 2017, 25(12):e282-e288.

S. Samuel Bederman MD, PhD, FRCSC, Charles D. Rosen MD, Nitin N. Bhatia MD, FACS, P. Douglas Kiester MD, Ranjan Gupta MD *Drivers of Surgery for the Degenerative Hip, Knee, and Spine: A Systematic Review,* Clin Orthop Relat Res (2012) 470:1090–1105

**Guest Editor** of Vol 2, #3, 2011 edition of the Journal of Ethics in Biology, Engineering and Medicine-Conflicts of Interest

Rosen, Charles D., *It's Not About the Money*, The Spine Journal (11) 2011 pg 700-702

Perret, D and Rosen, C., *A Physician-Driven Solution—The Association for Medical Ethics, The Physician Payment Sunshine Act, and Ethical Challenges in Pain Medicine:* Pain Medicine 2011; 12; 1361-1375

Rosen, C., *Wall Street Medicine: Prescription for Profit:* J. of Ethics in Biology, Engineering and Medicine Vol 2, #3, 2011

Sanjum P. Samagh, MS; Charles D. Rosen, MD; Karimdad Otarodifard, MD; Matthew Kornswiet, MS; Gabe Palmer, BS; Thay Q. Lee, PhD\* *New method for determining apparent axial center of rotation of lumbar and thoracic spine segments.* Journal of Research, Rehabilitation and Development Vol 48, #5, 2011

Rosen, Charles, MD “ *The Association for Medical Ethics and the Physician Payment Sunshine Act*” Ethics in Biology, Engineering, and Medicine – An International Journal 2010; Vol 1, Issue 3

Rosen C. “*New Devices and Truly Informed Consent*”. Virtual Mentor – AMA J. of Ethics 2010; 12:73-76. <http://virtualmentor.ama-assn.org/2010/02/ccas1-1002.html> Accessed February 1, 2010.

Charles Rosen, Douglas Kiester, Thay Q. Lee: “*The Potential Biomechanical Etiology for Lumbar Disc Replacement Failures: Review of 29 Patients and the Rationale for Revision*”. ORTHOPAEDICS October 2009

C. Rosen & D. Kiester : “*Lumbar Disc Replacements, the FDA , and A New Model of Lumbar Spine Motion*” . The Internet Journal of Minimally Invasive Spinal Technology. 2007 Volume 1 Number 1



2. Tehranzadeh, J., Ton, JD, Rosen, C., “*Advances in Spinal Fusion.*” Seminars in Ultrasound CT and MRI, Vol. 26, No. 2, April 2005, pp103-113.

Garland, Rosen, et al., “*Osteoporosis after Spinal Cord Injury.*” Journal of Orthopaedic Research, Vol. 10, No. 3, 1992, pp 371-378.

Rosen, et al., “*Lumbar Facet Fracture as a Possible Source of Pain after Lumbar Laminectomy,*” Spine, V. 16, No. 62, pp 234-238.

Stewart, Rosen, et al., “*Heterotopic Ossification Effect on Dual Photon Absorptiometry of the Hip.*” Clinical Nuclear Medicine, October 1990, Vol. 15, No. 10, pp 697-700.

Rosen, et al., “*A Retrospective Analysis of the Efficacy of Epidural Steroid Injections.*” Clinical Orthopaedics and Related Research, V. 228, March 1988, pp 70-.

Garland, Rosen, et al., “*Bone Mineral Distribution Five Years or More after Spinal Cord Injury.*” Journal of Nuclear Medicine. V. 30, No. 5, May 1989, p 857.

Sharnoff, Rosen, et al., “*Prevention of Fatal Pulmonary Thromboembolism by Small Dose Heparin Prophylaxis.*” The British Journal of Clinical Practice, V. 35, November 1981, pp 390-392.

#### SUBMITTED FOR PUBLICATION

JANUARY 2020 Perry, et al., *Is There a Difference in Fusion Rates Between TLIF and Posterolateral Fusion?*

*The Efficacy of Prepackaged Sterile Implants on Infection Rates After Instrumented Spinal Fusion Surgery: Preliminary Findings of a Retrospective*

#### CITATIONS

Orthopaedic Knowledge Update, Three, 1990: Cited and summarized under lumbar spine section, Rosen, et al., *A Retrospective Analysis of the Efficacy of Epidural Steroid Injections.*” Clinical Orthopaedics and Related Research, Vol. 228, March 1988, pp 270-273.

#### LAY PRESS AND TELEVISION

NETFLIX Original Series *The Bleeding Edge* May 2018 re FDA and medical device approvals.  
Consultant for content and direction.

NBC Nightly News with Brian Williams

[http://www.msnbc.msn.com/id/3032619/ns/nightly\\_news/#43596626](http://www.msnbc.msn.com/id/3032619/ns/nightly_news/#43596626)

The Atlantic – The Medical–Industrial Complex – 6/29/10

**PROFILE - “From Outcast to Surgeon General” Orange County Register , 1/09/09**

**PROFILE – Business Week 5/9/08 “Doctor vs. Device Makers”**

Good Housekeeping –“ Low Back Pain “ 1/1/09

Wall Street Journal, 6/7/05 “J & J’s New Device For Spine Surgery Raises Questions” R. Rundle

The Street.com, 5/5/05 “J & J Discs Face Backlash” M. Davis

The Chicago Sun Times, 11/8/05 “Will Surgery Stop Your Back Pain?” J. Ritter

The Orange County Register, 2/15/05 “Back Surgery Evolves” M. Saar

Newsday, 10/11/05 “Artificial Disc Brings Mixed Results for People Suffering with Back Pain” J. Talan

Health Point .com 5/27/05 “ An Interview with Dr. Charles Rosen on Artificial Disc Clinical Trials” J. McCormick, The Street.com, 12/22/05 “Hope Slips for Disc Implants” M. Davis

The Gray Sheet, 2/6/06 “FDA Questioned on Prodisc” Vol 32, no. 6

MD Magazine, Feb 2006, “The UCI Spine Center-Dr. Charles Rosen, Founding Director” Cover story by R. Stillman

The Orange County Register, 4/14/06, “OC Doctors ,Disagree over Implants” B. Bernhard.

The Street.com, 6/4/06 “Suits Target J & J Discs” M. Davis

Book Chapter – “Money Driven Medicine” by M. Mahar. Published by Collins 2006. Ch 8. “Device Makers, Drugmakers, and the FDA.”

USA Today, 7/25/06 “Artificial Spinal Disc generates controversy”

The Los Angeles Times, 8/1/06, “Artificial Disc Recipients Take Legal Steps”

The New York Times, 12/30/06, “Side Effects: The Spine as Profit Center”

The Orange County Register, 3/6/07, “Don’t blame age for your bad back”

The Monterey Herald.com, 3/17/07, “Lots of reasons for back pain”

Chicago Tribune, 3/27/07, "Sore back can be a world of real hurt"