

## Evalina L. Burger, MD

#### **Professor and Chair**

Department of Orthopedics
University of Colorado
School of Medicine

#### **Education**

#### Undergraduate

B. Med. Sc (UOVS) 1980 (UVOS) 1984 (MD equivalent) (Honors in Pediatrics, Surgery and Psychiatry)
 University of the Orange Free State
 P.O. Box 2319 Bloemfontein 0001 Republic of South Africa

### **Post Graduate**

M. Med (Ortho) 1993 University of Pretoria P.O. Box 667 Pretoria 0001, Republic of South Africa

#### Internship

Vereeniging (Kopanong Hospital) and Sebokeng Hospitals Private Bag X 1026 Thaba Tshwane, 1043, Republic of South Africa - 15 December 1984-21 May 1985

#### Military Hospital Pretoria

Private Bag X169 Pretoria, 0001, Republic of South Africa - 1 June 1985-15 December 1985

#### **Medical Officer**

S A Defense Force, Medical Core, Department of Orthopaedics, 1 Military Hospital, Voortrekkerhoogte Private Bag X 169, Pretoria, 0001, Republic of South Africa - 1 January 1986-14 January 1987 Rank: Captain (Medical Officer Spine Unit - 16 January 1987-30 June 1987

#### Residency

Orthopaedic Training
Kalafong Hospital Pretoria (University of Pretoria)
P.O. Box 667, Pretoria, 0001, Republic of South Africa

Pretoria Academic Hospital (University of Pretoria) (Now Steve Biko Hospital) Private Bag X 169 Pretoria, 0001, Republic of South Africa

Residency: 1 July 1987-30 June 1993 (including general surgery/ trauma surgery and spine surgery for 24 months)



#### Certifications

Fellow of the American Board of Orthopedic Surgery, July, 2016 South African Orthopaedic Association, 1993-present

#### Licensures

The Health Professionals Council of South Africa (Medical & Dental Council)

Issued Date: 30 November 1985 Registration Number: MP28454

General Medical Council - United Kingdom

o Issued Date: 14 August 2007-Present

o Reference Number: 4660767

Louisiana State Board of Medical Examiners

o Issued Date: 21 July 2001-7/21/2006

Louisiana Department of Health & Hospitals

o Issue Date: 1 November 2001-21 July 2006

State of Colorado Department of Regulatory Agencies Division of Registrations

o Issue Date: 5 January 2006

Federal DEA License

o Issue Date: 16 November 2001

ATLS Certification

Issue Date: 9 December 2001

> BLS Certification:

Valid until: 20 November 2019

### **Academic Appointments**

- Professor and Chair, University of Colorado School of Medicine, Robert D'Ambrosia Endowed Chair of Orthopedics, 1 November 2018-Present
- Professor, Adult Spine Unit, University of Colorado SOM, Dept. of Orthopedics, 1 July 2012-Present
- Vice Chair, Clinical Affairs, University of Colorado, 2011-2018
- Vice Chair, Department of Orthopedics, University of Colorado School of Medicine, January 2008-October 2018
- Director Orthopedic Outpatients University of Colorado Hospital, 1 July 2008-1 July 2013
- Associate Professor, Adult Spine Unit, University of Colorado SOM, Dept. of Orthopaedics, 1 July 2006-30 June 2012
- Associate Professor, LSUHSC Orthopaedic Spine Unit, New Orleans, LA, 1 November 2001-31 June 2006
- Full-time Senior Orthopaedic Consultant, and Head of the Spinal Unit, Pretoria Academic Hospital, University of Pretoria, with special interest in Pediatric Orthopaedic Unit, 2 July 1995-31 May 1999
- Full-time Junior Orthopaedic Consultant, and Head of the Spinal Unit, Pretoria Academic Hospital, University of Pretoria, with special interest in the Pediatric Orthopaedic Unit, 1 July 1993-30 June 1995

## **Professional Memberships**

- Medical Association of South Africa 1985-2001, The South African Pediatric Orthopaedic Society, (Committee Member- 1994-1995)
- The South African Spinal Cord Association, (Secretary 1996-1998)
- > AO Alumni Member from 1996
- AO Alumni, South African-Chapter, (Vice-President 2001-2002)
- Soroptomist International Tshwana Club 1996-2001
- Scoliosis Research Society, Active Member 1998- Present
- American Medical Association Member 83606860015 2001- Present
- Musculoskeletal Transplant Foundation Trustee Member, 2002-2006
- > AO Spine North America Faculty Member, June 2001- Present
- North American Spine Society Member, 8 July 2003-Present
- American Medical Foundation Member, 23 September 2003-2012
- International College of Surgeons, Fellow, 17 March 2004-November 2013, Inducted 6 May 2010
- Robert Gladden Orthopedic Society Member, 7 July 2004-Present
- SICOT North America Member, Feb, 2004-Present
- ≥ 20<sup>TH</sup> Century Orthopedic Association Member 1<sup>st</sup> Female Member since 1947; 2003-Present
- > American Association of Orthopaedic Surgeons Member, 1 October 2007-Present
- Society of Lateral Access Surgery, May 2009-2012
- Orthopedic Research Society Member, May 2015-Present
- ➤ Ruth Jackson Society Member, 2007-Present
- Eurospine, The Spine Society of Europe, January 2017-Present
- American Orthopaedic Association Member June 2018-Present
- ➤ The Royal Society of Medicine April 202International Orthopaedic Diversity Alliance Member September 2021

#### **Honors and Awards**

- Upjohn Prestige Award for the "Best Report" on General Practice, 1982
- Research Award for the Best Medical Student Research Paper: "Argyope as Psychiatric Laboratory Animal Model", 1983
- "Best paper" on ICI National Research Day at Johannesburg, April 1984
- The Cornelius Wessels Medallion for the most Outstanding Final Year Student in General Surgery, (University of the Orange Free State, R.S.A), 1984
- Registrar's prize for the Best Scientific Paper, Scientific Day, Faculty of Medicine, University of Pretoria, 1992. Best Junior Researcher for 1992
- ➤ The GF Dommisse prize for Outstanding Academic Achievement and Research, University of Pretoria, 1993. "Best Orthopaedic Resident"
- > Invitation from the DGOT First Traveling Fellow to Germany and Austria 1994 First time award
- Smith & Nephew, Spine Traveling Scholarship, 1996-1997
- Special Achiever Award Soroptimist International (Professional & Business Women's Service Organization), Pretoria Tshwana Club - 1997
- ABC Traveling Fellow (American-British-Canadian), 2000



- Partners in Care Award, University of Colorado Hospital, January, 2009
- Cambridge 2010 Edition of Who's Who Executives and Professionals, February 2010
- Thomas Whitecloud\_Award for the Best Basic Science Paper presented at the (IMAST) International Meeting on Advanced Spine Techniques, "Facet joint biomechanics at the treated and adjacent levels after total disc replacement.", Toronto - July 2010
- Best Poster Award, NASS, "Correlation of Vertebral Strength Topography with Three-Dimensional Computed tomography Structure", Andriy Noshchenco, PhD., Vikas Patel, M.D., Evalina Burger, M.D., September 2010
- Executive Leadership in Academic Medicine (ELAM) Fellow 2011
- "Top 10 Best Papers" at 33rd Annual Meeting of the International Society of Orthopaedic Surgery and Traumatology (SICOT) and the 17th Annual Meeting of the Pan Arab Orthopaedic Association (PAOA) Orthopaedic World Conference, Dubai, United Arab Emirates, Nov 28-30, 2012. Retrograde Ejaculation following Anterior Lumbar Spine Surgery.
- "Top 30 Women in Spine and Neurosurgery to Know in 2013", Beckers Healthcare Annual Spine Review,
- 20 November 2013
- "Best Doctors 2013", Denver Business Journal, 21 February 2014
- "26 Spine Surgeon Leaders at Academic Medical Centers", Becker's Spine Review, 20 December 2013
- MORE Award (Media Orthopaedic Reporting Excellence Award) received for accurate reporting on patient surgical outcomes (Flak Jacket)
- Featured in "Spine Review" Journal, 2011, 2012, 2013, 2016
- > Becker's list of Spine Surgeons to Know, September 2014
- "Best Doctors in America 2015-2016", Denver Business Journal, 7 August 2015
- Featured in "Custom Rods Take Guesswork Out of Spine Surgery" UC Health news article, 16 December 2015
- ➤ "Best Doctors in America 2016-2017", Denver Business Journal, 7 July 2017
- "2018 Marquis Who's Who in the World", The Marquis Who's Who Publications Board, 1 November 2017
- "Best Doctors in America 2017-2018", Denver Business Journal, 11 November 2017
- "Best Clinical Paper Award", Annual Meeting of the International Society of Orthopaedic Surgery and Traumatology (SICOT), "Pelvic Incidence and Its Relationship to Total Hip Dislocation in Patients with Previous Lumbar Spine Fusion", Cape Town, South Africa, 30 November-2 December 2017, Kleck CJ, York P, Dayton M, Hogan C, Burger EL.
- "Hull Deformity award", Annual Meeting of the International Society of Orthopaedic Surgery and Traumatology (SICOT), "Patient Specific Spine Rods (PSSR) Decrease Rate of Mechanical Complications (MC) after Correction of Adult Spine Deformity (ASD)", Montreal, Canada, 10-13 October 2018, Kleck CJ, Patel VV, Cain CMJ, Calabrese D, Reeves B, Noshchenko A, Burger EL.
- "10 Spine Surgeon Leaders to Know", Becker's Spine Review, 30 January 2019

## **Hospital Committees**

Rehabilitation Committee, 1993-1999, Pretoria Academic Hospital, Gauteng, South Africa



- LSUHSC Ambulatory Surgery Center Committee Member, 2003-2005
- MCLNO Trauma Committee Representative, LSUHSC Department of Orthopaedics, 2002-2004
- Kenner Regional Hospital Board, 2004-2006
- Implant Oversight Committee UCH, 2006-2012
- Supply Cost Reduction Team UCH, 2007-2012
- Spine Center Strategic Management Committee, 2009-2014
- Orthopedic Outpatient Clinic Director, 2008-2013
- Physician Accountabilities Group, 2011-2012
- South-Box Steering Committee Member, 2011-2012
- Search Committee Member for Vice President of Ambulatory Care, 2015
- OR Executive Committee UCH, 2014-Present
- Technology Assessment Committee UCH, 2015-2017
- > ERAS Spine Committee (Enhanced Recovery After Surgery), 2016-2018
- ➤ UCH Medical Staff Board, 2016-Present
- Bylaws Committee of the UCH Medical Staff, 2017-2018
- CU Medicine Governance Committee, January 2022 December 2026

#### **Clinical Service**

- MCLNO/University Hospitals, New Orleans, LA, 2001-2006
- Kenner Regional Medical Center, Kenner, LA, 2001-2006
- Metropolitan Development Center, Belle Chasse, LA, 2001-2006
- Pelter Lawless Development Center, Thibodaux, LA, 2001-2006
- Consultant, Children's Hospital, New Orleans, LA, 2001-2006
- ➤ AOP Spine Center, Denver, CO, 2006-Present
- Denver Health Medical Center, Spine Trauma Consultant, Denver, CO, 2006-2015
- University of Colorado Hospital, Inpatient and Outpatient Services, Denver, CO, 2006-Present
- The Veterans Hospital at Denver, Orthopedic Spine Service, Denver, CO, 2006-Present

### **Leadership Advancement**

- > 2004, Academy for the Advancement of Educational Scholarship at LSU
- September 2010, "Human Resource Management How to Avoid Difficult Situations", Blair D. Gifford, PhD, Professor, UCD Business School
- > January 2011, "Income: Why It's Important," Richard W. Foster, PhD, Professor of Finance and Health Administration, UCD Business School
- March 2011, "Working in Teams!", Kenneth Bettenhausen, PhD, Associate Professor, UCD Business School
- > 2011-2012, ELAM Fellow
- October 2012, Patient Safety Leadership Congress, Colorado Hospital Association
- April 2013, Physician Leadership Boot Camp, Poudre Valley Fort Collins, CO



- ➤ January 2014, "Being Seen and Being Heard", ELUM, San Antonio, Texas
- October 2015, Physicians Professional Leadership Seminar, "Training Physicians to Lead Clinical Integration", Phoenix, AZ
- ➤ January 2017, Next Level Leadership, "Building Personal and Organizational Capacity", ELUM, Denver, CO
- ➤ January 2018, "Communication Skill Development" and "Systems Engineering/Thinking in Healthcare 2.0", ELUM, Denver, CO
- > April 2019, "ELAM Women in Leadership Power Breakfast", Denver, Colorado

# Summary

## **Book Chapters**

- > Burger EL." Complications in Spine Surgery", Spine Trauma Surgical Techniques. 2010.
- ▶ Patel VV, Botolin S, Burger EL ."Anterior Lumbar Interbody Fusion", in Sacral and Pelvic Procedures, edited by Drs. Daniel Kim, Alexander Vaccaro, Peter Whang, See Hoon Kim, and Sang Don Kim, Quality Medical Publishing, 2011.
- **Burger EL.** "Neuro-monitoring for Thoracic Spine Surgery", in Monitoring the Nervous System for Anesthesiologists and Other Health Care Professionals. Springer Publishing, 2011.
- Patel VV, Henry S, **Burger EL**. "<u>Diagnosis and Treatment of Iatrogenic Durotomy</u>", in Surgical Anatomy & Techniques to the Spine (2<sup>nd</sup> Edition Elsevier), 2012.
- ➤ Patel VV, Lafleur M, **Burger EL**, Cain A. "<u>Trans-1 Lumbar Fusion</u>", in Surgica lAnatomy & Techniques to the Spine (2<sup>nd</sup> Edition Elsevier),2012.
- ➤ Kleck C, Ayers R, **Burger EL**, Patel VV. "<u>Metallurgy of Spinal Instrumentation</u>", Springer Publishing, 2014.
- **Burger EL,** Patel VV. "Spine Injuries in Mass Casualties", in Orthopedics in Disasters: Orthopedic Injuries in Natural Disasters and Mass Casualty Events. Springer Publishing, 2016.
- Sloan TB, Burger EL, Kleck CJ, Olivia AM. "Neurophysiological Monitoring in Thoracic Spine Surgery", in Monitoring the Nervous System for Anesthesiologists and Other Health Care Professionals. Springer Publishing, 2017.
- Chapman M, James M, Burger EL. "Chapman's Comprehensive Orthopaedic Surgery", Copyright Jaypee Brothers Medical Publishing (P) Ltd, Daryagani, New Delhi 2019

### Books

- ▶ Patel VV, Brown C, Burger EL. <u>"Spine Trauma Surgical Techniques"</u>, Springer-Verlag, Copyright Springer-Verlag Berlin Heidelberg, 2010.
- ➤ Patel VV, Patel A, Harrop J, **Burger EL**. <u>"Spine Surgery Basics"</u>, Springer-Verlag, Copyright Springer-Verlag Berlin Heidelberg, 2014.

## Single Authored papers (24) 1984-2014

## Multi Authored papers most recent (92) 2008 - present

- Ayers R.A., Patel V., Ou-Yang D., Wessell N., Cain C., **Burger E.**, Kleck C.J.<u>" Multiple Clinical Causes for Metallosis in Spine Instrumentation: A Single Center Study", Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, 2020.</u>
- Katherine Branche, Rawha Netsanet, Andriy Noshchenko, Evalina Burger, David Ou-Yang, Vikas



Patel, Nolan Wessell, and Christopher Kleck, "Radius of Curvature in Patient-Specific Short Rod Constructs Versus Standard Pre-Bent Rods" IMAST, 2020

- Kleck, Christopher, Ayers, Reed, Patel, Vikas, Ou-Yang, David, Cain, Christopher and Burger, Evalina, 'Laser Marking as the Origin of Spine Rod Fractures: A Single Center Study 'Podium, IMAST 2020 submitted IMAST 2019 submitted, SiCOT 2019 submitted, Eurospine 2020
- Akaysha, Joiner, Branche, Katherine, Karin, Payne and Burger, Evalina "Rat Spinal Fusion: Techniques to Achieve Surgical Reproducibility" ORS 2021

## Posters most recent (122) 1998 - 2020

- Ayers R.A., Patel V., Ou-Yang D., Wessell N., Cain C., Burger E., Kleck C.J., Multiple Clinical Causes for Metallosis in Spine Instrumentation: A Single Center Study, Spine Week, 2020 Ayers R.A., Patel V., Ou-Yang D., Wessell N., Cain C., Burger E., Kleck C.J., Multiple Clinical Causes for Metallosis in Spine Instrumentation: A Single Center Study, Eurospine, 2020
- ➤ Vikas Patel, Christopher Kleck, Christopher Cain, David Calabrese, Andriy Noshchenko, **Evalina L. Burger**, "Pelvic Incidence-Lumbar Lordosis Mismatch Less than 10 Degree (PI-LL<10) has Limited Applicability as a Criterion of Adult Sagittal Spinal Deformity (ASD) Correction", Eurospine, 2020
- ➤ Eren O. Kuris, MD; Bradley Reeves, BS; Nolan M. Wessell, MD; Christopher J. Kleck, MD; Vikas V. Patel, MD, Evalina Burger, MD., Clinical and Radiographic Outcomes after Lumber Decompression with Placement of Interlaminar Spacers versus Decompression Alone: A Retrospective Cohort Study, NASS, 2020
- ➤ Kleck, Christopher and Burger, Evalina, "The Use of Predictive Modelling in Spine Surgery" eposter, Safety Summit 2020

## Videos and Multimedia most recent (19)

- "Career Saving Surgery Keeps Local Hero in the Cockpit", KDVR-Den (Fox 31 News), 17 May 2018 http://kdvr.com/2018/05/17/career-saving-surgery-keeps-local-hero-in-the-cockpit/
- <u>"Patient Specific Implants: One Size Does Not Fit All", Symposium on Adult Deformity, IMAST-Scoliosis Research Society, Los Angeles, July, 2018</u>
- "Osteoporosis", Co-Author, IMAST Scoliosis Research Society, Los Angeles, July 2019
- "Best in the World: International cast of doctors helps councilman fight cancer", CU Anschutz Today, 29 August 29 2018
- Breakthrough Campaign: Video Story "Designing New Techniques to Treat Spinal Injuries, University of Colorado, <a href="https://thisisbreakthrough.com/dr-dvalina-burger-treating-spinal-injuries">https://thisisbreakthrough.com/dr-dvalina-burger-treating-spinal-injuries</a>, Denver, CO, February 2020

Evalina Burger, MD 1-18-2022