

CURRICULUM VITAE

MESFIN A. LEMMA, MD

DEMOGRAPHIC AND PERSONAL INFORMATION

CURRENT APPOINTMENTS

Director, Minimally Invasive Spine Surgery
Medstar Union Memorial Hospital
2016 – Present

PERSONAL DATA

Address: Office - Medstar Good Samaritan Hospital
5601 Loch Raven Blvd., Suite G-1
Baltimore, MD 21239
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Home - 3 Brookstone Court
Lutherville, MD 21093
Tel: (410) 823 – 0253
Cell: (443) 610-7620

Citizenship: United States

EDUCATION AND TRAINING

UNDERGRADUATE: B.Sc., Mechanical Engineering
Magna cum laude
Case Western Reserve University (CWRU)
Cleveland, Ohio
August, 1986 – January, 1991

MEDICAL SCHOOL: MD, CWRU School of Medicine
AOA, Medical Honor Society
Cleveland, Ohio
August, 1993 – May, 1997

INTERNSHIP: Johns Hopkins Hospital
Department of Surgery

July, 1997 – July, 1998

RESIDENCY: Johns Hopkins Hospital
Department of Orthopaedic Surgery
Baltimore, Maryland
July, 1998 – July, 2002

FELLOWSHIP: Johns Hopkins Hospital
Department of Orthopaedic Surgery
Division of Spine Surgery
July, 2002 – July, 2003

PROFESSIONAL EXPERIENCE

2016 – Present Director, Minimally Invasive Spine Surgery
Medstar Union Memorial Hospital

2011 - Present Medstar Good Samaritan Hospital
Director, Spine Surgery

2003 - 2016 Johns Hopkins University
Assistant Professor
Department of Orthopaedic Surgery

2003 – 2014 Division Chief
Johns Hopkins Orthopaedic Surgery at Good Samaritan Hospital

2003-2011 Good Samaritan Hospital
Co-Director, Spine Center
Johns Hopkins Orthopaedic Surgery at Good Samaritan Hospital

RESEARCH ACTIVITIES

Peer-reviewed scientific articles

1. Ahn UM, **Lemma MA**, Ahn NU, Buchowski J, Kostuik JP. Occipitocervical Fusion: A Review of Indications, Techniques of Internal Fixation, and Results. *Neurosurgery Quarterly* 11(2):77-85, 2001.
2. Ahn UM, Ahn NU, Buchowski JM, Kebaish KM, **Lemma MA**, Sieber AN, Kostuik JP. Functional Outcome and Radiographic Correction After Spinal Osteotomy. *Spine*. 2002 Jan 15;27(12):1303-11.
3. Tortolani PJ, **Lemma MA**, Riley LH III. Managing Lumbar Spinal Stenosis. *J Musculoskelet. Med.* 21(1):10-12,14-16,19-20, 2004.
4. **Lemma MA**, Cohen DB, Kebaish KM, Faust MD, Kostuik JP. Fusions to the Sacrum: Review of the Literature and Results of a Trans-ileal Fixation. *Spine Journal*.
5. Mesfin A, **Lemma MA**. Bilateral Pars Fractures Complicating Long Fusion to L5 in a Patient with Rheumatoid Arthritis. *Spine (Philadelphia Pa 1976)*. 2011;36(13):E882-E885.
6. Mesfin A, Gjolaj J, **Lemma MA**. A Method for Intraoperative Repositioning of the Cervical Spine During Posterior Cervical Surgery. Accepted for publication, *Orthopedics*. 2011; in press.
7. Mesfin A, Farjoodi P, Tuakli-Wosornu YA, Yan AY, **Lemma MA**, LaPorte DM. An analysis of the Othopaedic In-Training Examination rehabilitation section. *J Surg Educ*. 2012;69(3):286-291.
8. Tan EW, Jain A, Hassanzadeh H, Bernard JA, **Lemma MA**. The role of hematologic laboratory studies in postoperative management of patients undergoing anterior cervical discectomy and fusion. *Orthopedics*. 2012;35(6):e917-921.
9. Hassanzadeh H, Jain A, Tan EW, Stein BE, Van Hoy ML, Stewart NN, **Lemma MA**. Incentive spirometry use in postoperative orthopedic patients. *Orthopedics*. 2012;35(6):e927-931.
10. Mesfin A, Jain A, El Dafrawy MH, Hassanzadeh H, Kostuik JP, Lemma MA, Kebaish KM. Surgical outcomes of long spinal fusions for scoliosis in adult patients with rheumatoid arthritis. *J Neurosurg Spine*. 2014, in press.

Book Chapters

1. **Lemma M.**, Herzka A., Tortolani J., Carbone JJ. Cauda Equina Syndrome Secondary to Lumbar Disc Prolapse. Principles and Practice of Spine Surgery. Vaccaro AR, Betz RR, Zeidman SM (eds): Philadelphia, WB Saunders Co, 2002.
2. **Lemma M**, Kostuik JP. Pathophysiology of Lumbar Degenerative Disc Disease. Scoliosis Research Society (SRS) Core Curriculum Textbook: DeWald R (ed), 2002.
3. **Lemma M**, Kostuik JP. Disseminated Intravascular Coagulation (DIC) in Spinal Surgery. Scoliosis Research Society (SRS) Core Curriculum Textbook: DeWald R (ed), 2002.
4. **Lemma M**, Kostuik JP. Deep Venous Thrombosis (DVT) in Spinal Surgery. Scoliosis Research Society (SRS) Core Curriculum Textbook: DeWald R (ed), 2002.
5. Khanna AJ, **Lemma M**, Wasserman BA, McLain RF. Imaging: Screening for Spinal Disease. In Cancer of the Spine, McLain RF, et al.. The Humana Press, Inc, Totowa, NJ, 2006, p67-72.

TEACHING

EDUCATIONAL PROGRAM BUILDING / LEADERSHIP

1. **Moderator**, Spine Section: Johns Hopkins Orthopaedic Surgery In-Training Examination Review Course. 2004-Present.
2. **Co-Director**, Motor Skills Lab, Spine Section. Alpha Lab, Johns Hopkins Bayview Medical Center, 2004- 2014.
3. **Co-Director**, ‘Hands-On Spine Review Course.’
Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2006.
4. **Co-Director** ‘Hands-On Spine Review Course.’
Johns Hopkins Medical Institutions; Baltimore, MD. March 31-April 1, 2007.

5. **Course Chairman**, ‘Advances in Minimally Invasion Spine Surgery.’
Ft. Lauderdale, FL. November 9-10, 2008.
6. **Supervisor**, Resident Education Curriculum. Medstar Good Samaritan Hospital,
Baltimore, MD. 2008 – Present.
7. **Course Moderator**, Deformity Roundtable. Lewisville, TX, January 20-21, 2012.
8. **Course Chairman**, ATLAS Deformity Summit. Dallas, TX. March 2-3, 2012.
9. **Course Chairman**, ATLAS Deformity Summit, Monterrey, Mexico, April 5-6, 2013.
10. **Co-Chairman**. Resident and Fellow’s Hands-On Spine Review Course.
Lewisville, TX 2010 – Present.

PRESENTATIONS AT LOCAL MEETINGS AND CONFERENCES

CME Course Instruction

1. **Lemma, MA.** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course.
Johns Hopkins University. Baltimore, MD, June 26-July 1, 2005.
2. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course.
Johns Hopkins University. Baltimore, MD, June 26-July 1, 2005.
3. **Lemma, MA.** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course.
Johns Hopkins University. Baltimore, MD, April 30 – May 5, 2006.
4. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course.
Johns Hopkins University. Baltimore, MD, April 30 – May 5, 2006.
5. **Lemma, MA.** *Cervical Spondylitic Myelopathy; What to Look for and How to Treat it.*
Grand Rounds. Medstar Good Samaritan Hospital. Baltimore, MD, October 10, 2012.

Non-CME Course Instruction

1. **Lemma, MA.** *Lumbar Degenerative Disease.* Johns Hopkins Orthopaedic
Surgery Grand Rounds, Baltimore, MD, 2002.
2. **Lemma, MA.** Khanna, AJ. ‘*Kyphoplasty Procedure in a Patient with Multiple
Myeloma*’. Live Web-cast. Baltimore, MD, September, 2005. www.OR-Live.com

3. **Lemma, MA.** *Anterior Fixation of Dens Fractures.* Hands-On Spine Review Course; Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2006.
4. **Lemma, MA.** *Anterior Lumbar Fusion.* Hands-On Spine Review Course; Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2006.
5. **Lemma, MA.** *C1-2 Arthrodesis.* Hands-On Spine Review Course; Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2006.
6. **Lemma, MA.** *Posterior Subaxial Arthrodesis.* Hands-On Spine Review Course; Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2006.
7. **Lemma, MA.** *Post-operative Complications in Spinal Surgery.* Orthopaedic Nursing In-Training Course. April 12, 2007 and August 22, 2006.
8. **Lemma, MA.** *Endoscopic Discectomy and Interbody Fusion.* Minimally Invasive Techniques in Spinal Surgery. Phoenix, Arizona, October, 2006.
9. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course. *Johns Hopkins University.* April 13 – 15, 2007; Baltimore, MD.
10. **Lemma, MA.** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course. *Johns Hopkins University.* April 13 – 15, 2007; Baltimore, MD.
11. **Lemma, MA.** *Posterior Cervical Instrumentation.* Hands-On Spine Review Course. Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2007.
12. **Lemma, MA.** *Odontoid Fixation.* Hands-On Spine Review Course. Johns Hopkins Medical Institutions; Baltimore, MD. May 6-7, 2007.
13. **Lemma MA.** *MRI Interpretation of the Lumbar Spine.* Grand Rounds Presentation. Department of Rheumatology, Good Samaritan Hospital. Baltimore, MD. August 10, 2007.
14. **Lemma, MA.** *Case Presentations in Minimally Invasive Spine Surgery.* Ft. Lauderdale, FL, November 9, 2007.
15. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course. *Johns Hopkins University.* July 7 – 11, 2008; Baltimore, MD.
16. **Lemma, MA.** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course. *Johns Hopkins University.* July 7 – 11, 2008; Baltimore, MD.
17. **Lemma, MA.** *Case Presentation: Minimally Invasive Decompression and Fusion in an Obese Patient.* Advances in Minimally Invasive Spine Surgery. Ft. Lauderdale, FL. November 9-10, 2008.

18. **Lemma, MA.** *Patient Selection and Technical Considerations Minimal Access Spine Surgery.* Vista Lab, Baltimore, MD, March 7, 2009.
19. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course. Johns Hopkins University. July 7 – 11, 2009; Baltimore, MD.
20. **Lemma, MA,** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course. Johns Hopkins University. July 7 – 11, 2009; Baltimore, MD.
21. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course. Johns Hopkins University. July 7 – 11, 2010; Baltimore, MD.
22. **Lemma, MA,** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course. Johns Hopkins University. July 7 – 11, 2010; Baltimore, MD.
23. **Lemma, MA.** *Spinal Fixation Techniques.* Deformity Roundtable, Lewisville, TX, September 10, 2010.
24. **Lemma, MA.** *Complications in Spinal Deformity Surgery.* Dallas, TX, November 12, 2010.
25. **Lemma, MA.** *Posterior Cervical Instrumentation.* Resident Motor Skills Lecture Series, Alpha Lab, Johns Hopkins Bayview Medical Center, February 3, 2011.
26. **Lemma, MA.** *C1-C 2 Arthrodesis.* Resident Motor Skills Lecture Series, Alpha Lab, Johns Hopkins Bayview Medical Center, February 3, 2011.
27. **Lemma, MA.** *Posterior Cervical Fixation.* Hands-On Spine Review Course. Lewisville, TX, March 4, 2011.
28. **Lemma, MA.** *C1-C2 Arthrodesis.* Hands-On Spine Review Course. Lewisville, TX, March 4, 2011.
29. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course. Johns Hopkins University. Baltimore, MD. October 6, 2011.
30. **Lemma, MA,** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course. Johns Hopkins University. Baltimore, MD. October 6, 2011.
31. **Lemma, MA.** *C1-C2 Arthrodesis.* Resident Motor Skills Lecture Series, Alpha Lab, Johns Hopkins Bayview Medical Center, January 4, 2012.
32. **Lemma, MA.** *Posterior Cervical Instrumentation.* Resident Motor Skills Lecture Series, Alpha Lab, Johns Hopkins Bayview Medical Center, February 3, 2012.

33. **Lemma, MA.** *Pelvic Fixation in Spinal Surgery.* ATLAS Deformity Course, Lewisville, TX, March 1-2, 2012.
34. **Lemma, MA.** *Posterior Cervical Instrumentation.* Hands-On Spine Review Course. Lewisville, TX, March 4, 2012.
35. **Lemma, MA.** *C1-C2 Arthrodesis.* Hands-On Spine Review Course. Lewisville, TX, April 22, 2012.
36. **Lemma, MA.** *Sagittal Balance in Deformity Surgery.* ATLAS Deformity Course, Lewisville, TX, April 21-22, 2012.
37. **Lemma, MA.** *Spinal Infections.* Resident Didactic Program. Medstar Good Samaritan Hospital, September 26, 2012.
38. **Lemma, MA.** *The First 24 hours.* Nurse Instructional Course. Medstar Good Samaritan Hospital, October 3, 2013.
39. **Lemma, MA.** *Thoracolumbar Degeneration.* Orthopaedic Surgery Review Course. Johns Hopkins University.; Baltimore, MD, October 4, 2012.
40. **Lemma, MA.** *Thoracolumbar Trauma.* Orthopaedic Surgery Review Course. Johns Hopkins University.; Baltimore, MD, October 4, 2012.
41. **Lemma, MA.** *Sagittal Alignment in Spinal Surgery.* Orthopaedic Surgery Review Course. Johns Hopkins University.; Baltimore, MD, October 4, 2012.
42. **Lemma, MA.** *Pelvic Fixation.* Orthopaedic Surgery Review Course. Johns Hopkins University.; Baltimore, MD, October 4, 2012.
43. **Lemma, MA.** *Spinal Infections.* Orthopaedic Surgery Review Course. Johns Hopkins University.; Baltimore, MD, October 4, 2012.
44. **Lemma, MA.** *Tips and Pearls in Adult Spinal Reconstructive Surgery.* Universidad De Monterrey, Monterrey, Mexico, April 5-6, 2013.
45. **Lemma, MA.** *Pelvic Fixation.* Resident and Fellow's Hands-On Spine Review Course. Lewisville, TX, April 19-20, 2013.
46. **Lemma, MA.** *Anterior Odontoid Fixation.* Resident and Fellow's Hands-On Spine Review Course. Lewisville, TX, April 19-20, 2013.

SCIENTIFIC PRESENTATIONS AT NATIONAL / INTERNATIONAL MEETINGS

1. **Lemma M**, Antezana D, Cohen D, Kostuik JP. The Surgical Management of Thoracolumbar Burst Fractures: A Meta-analysis of Anterior Versus Posterior Treatment. Congress of Neurosurgeons (CNS), San Antonio, TX, September, 2000.
2. **Lemma M**, Cohen DB, Kebaish KM, Faust MD, Kostuik JP. Fusions to the Sacrum: Results of a Trans-ileal Fixation. North American Spine Society (NASS) Annual Meeting, Seattle, WA, 2001.
3. Ahn UM, Ahn NU, Buchowski JM, Kebaish KM, **Lemma MA**, Sieber AN, Kostuik JP. Functional Outcome and Radiographic Correction After Spinal Osteotomy. NASS, Seattle, WA, 2001.
4. **Lemma M**, Cohen DB, Kebaish KM, Faust MD, Kostuik JP. Fusions to the Sacrum: Results of a Trans-ileal Fixation. Meeting of the Americas, New York, NY, April, 2002.
5. **Lemma M**, Cohen DB, Kebaish KM, Faust MD, Kostuik JP. Fusions to the Sacrum: Results of a Trans-ileal Fixation. American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting, New Orleans, February, 2003.
6. **Lemma, M**. 'Tuberculosis of the Spine.' US-Ethiopia Orthopaedic Symposium. Addis Abeba, Ethiopia. December, 2006.
7. Hassanzadeh H, Jain A, Stein B, Van Hoy M, Stewart N, **Lemma MA**. Compliance with Incentive Spirometry use in the Orthopaedic Ward. Southern Orthopaedic Association 2011 Annual Meeting, Podium presentation, Big Island of Hawaii, July 20-23, 2011.
8. Tan EW, Jain A, Hassanzadeh H, Bernard JA, **Lemma MA**. The Role of Hematologic Laboratory Studies in Post-operative Management of Patients Undergoing Anterior Cervical Discectomy and Fusion. Podium presentation, Maryland Orthopaedic Association 2011 Annual Meeting, May 7, 2011, Baltimore, MD.
9. Mesfin A, Farjoodi P, Tuakli-Wosornu YA, Yan A, **Lemma MA**, LaPorte DM. An Analysis of the Orthopaedic In-Training Examination Rehabilitation Section. Podium presentation, 2011 AAOS Annual Meeting, February 15-19, 2011, San Diego, CA.
10. Menga E, Mesfin A, **Lemma MA**. Smart Phone Applications for Spine Surgeons. Maryland Orthopaedic Association, Baltimore, MD. April 21, 2012.
11. Neubauer, P. **Lemma MA**. Cervical Spondylitic Myelopathy: What You Need to Know and How to Treat it. Maryland Orthopaedic Association, Baltimore, MD. April 21, 2012.
12. **Lemma MA**. Principals of Spinal Deformity Correction. SpineWeek, Amsterdam, The Netherlands. May 31, 2012.

13. Jain A, Menga E, Hassanzadeh H, **Lemma MA**, Mesfin A Thoracic Disc Disorders with Myelopathy; Analysis of 13,837 Patients. AAOS Annual Meeting 2013, Chicago, IL, March 23, 2013.

14. Lemma, MA. Tips and Pearls in Adult Spinal Reconstructive Surgery. Universidad De Monterrey, Monterrey, Mexico, April 5-6, 2013

CLINICAL ACTIVITIES

LICENSURE/CERTIFICATION

State Licenses: Maryland; 2002; #D0059030

Certifications: Certified by the American Board of Orthopaedic Surgery

PROFESSIONAL SOCIETIES

1. Alpha Omega Alpha (AOA) Medical Honor Society, 1996- present
2. American Academy of Orthopaedic Surgeons, 2000 to present
3. American Medical Association (AMA), 2000 to present
4. North American Spine Society (NASS), 2003 to present
5. The Johns Hopkins Medical and Surgical Association, 2003 to present
6. Maryland Orthopaedic Association, 2005 to present
7. MedChi: The Maryland State Medical Society, 2005 to present

RECOGNITION

Awards, Honors

1. Academic Honors: Magna Cum Laude
Case Western Reserve University, Cleveland, OH, 1991.
2. Alpha Omega Alpha Medical Honor Society
Case Western Reserve University, Cleveland, OH, 1997.
3. Top Doctors in the US
Castle Connely, 2010- Present.
4. Top 100 Spine Surgeons in the US
Becker's Healthcare, 2011.

5. US New and World Report
Top Doctors in the US, 2010 – present
6. Top 250 Spine Surgeons in the US
Becker's Healthcare, 2014.
7. *Teacher of the Year Award*
Johns Hopkins University
Department of Orthopaedic Surgery, 2014
8. *'Top Doc' Award*
Baltimore Magazine, 2015 - 2017
9. *'Best Doctors in the US' Award*
Best Doctors, 2015 - 2017.