

Curriculum Vitae**Sean M. Esmende, M.D.****PERSONAL INFORMATION**

Office: Orthopedic Associates of Hartford
85 Seymour St. Suite 607
Hartford, CT 06106

EDUCATION

8/2005- 6/2009 University of California, Los Angeles David Geffen School of Medicine
Los Angeles, California 90095
Degree: M.D.

8/1998-6/2002 Cornell University
Ithaca, New York 14850
Degree: Bachelor of Science in Human Biology
Graduated with honors

POSTDOCTORAL TRAINING

6/2009-6/2010 **General Surgery Internship**
Brown University Warren Alpert School of Medicine/Rhode Island Hospital
Department of General Surgery of Brown University
Providence, Rhode Island 02903
Chairman: William Cioffi, MD

6/2010-6/2014 **Orthopaedic Surgery Residency**
Brown University Warren Alpert School of Medicine/Rhode Island Hospital
Department of Orthopaedic Surgery
Providence, Rhode Island 02903
Chairman: Michael G Ehrlich, MD

6/2014-6/2015 **Orthopaedic Trauma Surgery Fellowship**
Brown University/Rhode Island Hospital
Clinical Instructor/Junior Attending Surgeon
Mentors: Dr. Christopher Born and Dr. Roman Hayda

6/2015-7/2016 **Orthopaedic Spine Surgery Fellowship**
University of Pittsburgh Medical Center
Mentors: Dr. William Donaldson, Dr. Joon Lee, Dr. Timothy Ward

PUBLICATIONS

1. Petrigliano FA, English CS, Barba D, **Esmende S**, Wu BM, McAllister DR. The effects of local bFGF release and uniaxial strain on cellular adaptation and gene expression in a 3D environment: implications for ligament tissue engineering. *Tissue Eng.* 2007 Nov;13(11):2721-31 PMID: 17727336
2. **Esmende SM**, Petrigliano FA, Barba D, Wu B, McAllister DA. Ligament Engineering: The response of bone marrow stromal cells to high-frequency stimulation and uniaxial stretch. *Journal of Investigative Medicine* January 2007. 55 (1)
3. Barba D, Sun V, **Esmende SM**, Petrigliano FA, Wu B, McAllister DA. Ligament Engineering: Characteristics of beta fibroblast growth factor from a bioengineered scaffold. *Journal of Investigative Medicine* January 2007. 55 (1)
4. Farnig E, Urdaneta AR, Barba D, **Esmende S**, McAllister DR. The effects of GDF-5 and uniaxial strain on mesenchymal stem cells in 3-D culture. *Clin Orthop Relat Res.* 2008 Aug;466(8):1930-7. Epub 2008 Jun 6; PMID: 18535869
5. Thakur N, Daniels A, Schiller J, Valdes M, Czerwein J, Schiller A, **Esmende S**, Terek R. Benign Tumors of the Spine. *Journal of the American Academy of Orthopedic Surgery.* Nov 2012, 20 (11) PMID: 23118137
6. Palumbo M, Bianco A, **Esmende S**, Daniels, A. Wrong Site Spine Surgery. *Journal of the American Academy of Orthopedic Surgery.* *Journal of the American Academy of Orthopedic Surgery.* May 2013, 21 (5) PMID: 23637150
7. **Esmende S**, Daniels AH, Palumbo MA. Spinal cord compression after percutaneous kyphoplasty. *The Spine Journal.* 2013 Jul;13(7):831-2 PMID 23523439
8. Daniels A, **Esmende S**, Vigneswaran H, Arthur M, Palumbo M. Rapid Increase in Incidence and Hospital Charges Associated with Treating Patients with Axis Fractures in the United States from 2000 to 2010. *Spine (Phila Pa 1976).* 2014 May 22 PMID: 24859578

9. **Esmende S**, Daniels AH, Palumbo MA. Cervical total disc replacement exhibits similar stiffness to intact cervical functional spinal units tested on a dynamic pendulum testing system. *The Spine Journal*. January (1); 2015 162-7. PMID 25194516
10. **Esmende SM**, Shah KN, Daniels AH. Spinopelvic Fixation. *Journal of the American Academy of Orthopaedic Surgeons*. *Accepted for publication 3/18/2016; Currently in revision*.
11. Lee L, **Esmende SM**, Born C. Knee disarticulation for a total knee arthroplasty periprosthetic fracture. *Orthopedics*. 2016 May 19: 1-4. PMID: 27203416
12. **Esmende SM**, Nwaiske N, Lee JY, Donaldson WF. Minimally invasive lateral interbody technique for the treatment of lumbar adjacent segment stenosis. *Pittsburgh Orthopedic Journal* 2016
13. **Esmende SM**, Nwaiske N, Lee JY, Donaldson WF. Management of lumbar adjacent segment stenosis. *Orthopedic Surgical techniques Techniques* 2017
14. **Esmende SM**, Nawasike C, Lee JY. Prospective risk stratification of fundaparinux for venous thromboembolism prophylaxis in major elective thoracolumbar spine surgery. *In progress*

BOOK CHAPTERS

1. **Esmende SM** and Lee, JY. Harms and Magerl Techniques. *Atlas of Orthopedic Techniques*. 3rd Edition, 2017. Editors: Vaccaro, A and Baron, E. *Accepted for publication*
2. **Esmende SM**, Cornett C, Kang J, Lee, JY. Surgical Management of Cervical Myelopathy. *Instructional Course Lectures*, Volume 66. American Academy of Orthopaedic Surgery. *Manuscript accepted for publication*

PRESENTATIONS

1. The Relationship Between Human NRAMP1 Promoter Polymorphisms and Serum Iron

- Indicators” **Esmende, S.** Cornell University Honor Thesis Presentation, Ithaca, New York, May 2002
2. Western Orthopaedic Association Petrigliano FA, English CS, Barba D, **Esmende S**, Wu BM, McAllister DR. “The Effects of Local BFGF Release and Uniaxial Strain on Bone Marrow Stromal Cells in a 3D Environment: Implications for Ligament Tissue Engineering” Resident Award Winner. July 21, 2007
 3. **Esmende S**, Petrigliano FA, English CS, Barba D, Wu BM, McAllister DR. The effects of local bFGF release and uniaxial strain on cellular adaptation and gene expression in a 3D environment: implications for ligament tissue engineering. June 2007 UCLA Research Day
 4. “Ligament Engineering: Response of Bone Marrow Stromal Cells to High Frequency Stimulation and Uniaxial Strain.” **Esmende S**, Petrigliano F, Barba D, Wu B, McAllister D. UCLA School of Medicine Scholarship Day, August 2007
 5. “Ligament Engineering: Characteristic of Beta Fibroblast Growth Factor Release from a Bioengineered Scaffold.” Barba D, Petrigliano F, **Esmende S**, Wu B, McAllister D. UCLA School of Medicine Scholarship Day, August 2007
 6. “Orthopaedic Analgesia ” Warren Alpert School of Medicine of Brown University/Rhode Island Hospital Department of Surgery Resident Teaching Conference, July 30, 2009
 7. “Does Trabecular Density Predict Load to Failure of Odontoid Screw Fixation” Brown University/Rhode Island Hospital Orthopaedic Surgery COBRE Research Meeting June 13, 2012
 8. **Esmende S.** Cervical Spine Trauma: Treatment of Odontoid Fractures. Grand Rounds, Brown University Orthopaedic Surgery December 5, 2012
 9. **Esmende S.** Evaluation of fibular malreduction with variable syndesmosis screw trajectory: A cadaver study. Brown University/Rhode Island Hospital Orthopaedic Surgery COBRE Research Meeting December 6, 2012
 10. **Esmende S**, Daniels A, Koruprolu S, Paller D, Palumbo M, Crisco J. Dynamic Biomechanical Examination of the Cervical Spine Using a Novel Pendulum System. International Society for the Advancement of Spine Surgery, Poster presentation April 3-5, 2013
 11. Daniels A, **Esmende SM**, Vigneswaran H, Arthur M, Palumbo M. Treatment of Odontoid Fractures in the United States from 2000 to 2010. Cervical Spine Research Society Annual meeting, Los Angeles, CA December 5-7, 2013
 12. **Esmende SM**, Daniels S, Koruprolu S, Paller D, Palumbo M, Crisco J. Analysis of Bone Mineral Density in Type II Odontoid Fractures. Orthopaedic Research Society Annual meeting, New Orleans March 2014

13. Daniels A, **Esmende SM**, Vigneswaran H, Arthur M, Palumbo M. Rapid Increase in Incidence and Hospital Charges Associated with Treating Patients with Axis Fractures in the United States from 2000 to 2010. American Academy of Orthopaedic Surgeons, New Orleans March 2014
14. **Esmende SM**, Daniels AH, Vigneswaran H, Arthur M, Palumbo M. Treatment of Odontoid Fractures in the United States from 2000 to 2010. North American Spine Society Annual meeting, San Francisco, CA November 2014
15. **Esmende SM**. Ankylosing Spondylitis. University of Pittsburgh Medical Center Residency

CURRENT RESEARCH

1. Cohen E, **Esmende S**, Vaughn J, Hayda R. Quantitative Computed Tomography Bone Densitometry Analysis of Acetabular Fractures in the Elderly. *In progress*
2. **Esmende S**, Pidgeon T, Hodax J, Dasilva M. Evaluation of trabecular distal radius bone mineral density using quantitative computed tomography. *In progress*
3. **Esmende SM**, Fourman M, Lee JY. Outcomes of bariatric surgery patients follow elective thoracolumbar spine surgery. *In progress*

JOURNAL MANUSCRIPT REVIEWER

2/2014- <i>Current</i>	PLOS-ONE (Public Library of Science)
	Orthopaedic Surgery Section
3/2015- <i>Current</i>	The Spine Journal
3/2015- <i>Current</i>	BMC Musculoskeletal Disorders

PROFESSIONAL SOCIETIES

North American Spine Society	May 2012-current
AO Spine Associate Member	July 2012-current
American Association of Orthopaedic Surgeons (AAOS)	2008-current
American Medical Association (AMA):	2004-current