# MICHAEL B ELLMAN, MD

## **CURRICULUM VITAE**

Michael B. Ellman, MD

Director, Panorama Orthopedics Hip Preservation Center

Panorama Orthopedics & Spine Center

660 Golden Ridge Road, Suite 250

Golden, CO 80401

Office Phone: (303) 233-1223

Email: mellman@panoramaortho.com

## **EMPLOYMENT / TRAINING**

## Panorama Orthopedics & Spine Center

2014 - Present

- Director, Hip Preservation, Panorama Orthopedics & Spine Center
- Complex Hip Arthroscopy, Knee Ligament Reconstruction & Arthroscopy, Shoulder Arthroscopy, Sports Medicine
- Golden, Colorado

## The Steadman Clinic - Steadman-Philippon Research Institute

2013 - 2014

- Vail, Colorado
- Fellow Physician, Orthopedic Sports Medicine

## Rush University Medical Center, Department of Orthopedic Surgery

2008 - 2013

- Chicago, IL
- Resident Physician

## University of Michigan Medical School

2003-2008

- Ann Arbor, MI
- Doctor of Medicine
- La Universidad de Guadalajara, Guadalajara, MX; Medical Spanish, Summer 2004
- Rush University Medical Center, Department of Biochemistry, Research Fellow, 2007-2008

### University of Michigan - Undergraduate Studies

1998-2002

- Ann Arbor, Michigan
- B.S., Biopsychology; Graduated with Honors (3.95 GPA)
- Study Abroad Program via UW-Platteville in Seville, Spain, Spring 2001

# MEMBERSHIPS/LICENSURES

American Board of Orthopedic Surgery – Board Certified	2016-present
American Orthopedic Society for Sports Medicine, Active Fellow	2013-present
American Academy of Orthopedic Surgeons, Active Fellow	2009-present
Arthroscopy Association of North America	2017-present
Division of Workers Compensation Task Force – Advisory Panel	2015-2016
American Journal of Orthopedics - Advisory Board Member	2013-2014
USMLE – Steps 1, 2, & 3	2006-2009
Golden Key National Honor Society	1998-2002

# TEAM COVERAGE

Colorado Christian University – Head Team Physician	2017-Present
<ul> <li>Denver, Colorado</li> </ul>	
Men's Varsity Football – Green Mountain High School – Head Team Physician	2015-Present
<ul> <li>Denver, Colorado</li> </ul>	
Men's Varsity Football – Golden High School Team Physician	2014-15
Golden, Colorado	
United States Olympic Ski Team – Consultant	2013-Present
<ul> <li>La Parva, Chile – Downhill Olympic Team Training</li> </ul>	
<ul> <li>Copper Mountain, CO – Alpine Olympic Team Training</li> </ul>	
FIS Alpine Ski World Cup Championship Tour	2013
Beaver Creek, CO	
United States Olympic Snowboard Team – 2014 Winter Olympics Boarder X Training	2013
Solden, Austria	
• Vail, CO	
NCAA Division I Women's Hockey Tournament	2013
• Vail, CO	
United States Pro Cycling Challenge	2013
• Vail, Colorado	
Men's Varsity Football – Eagle Valley High School	2013
Vail, Colorado	
Chicago Steel Men's Hockey Team, United States Hockey League	2010-2012
Bensenville, IL	
Chicago Bulls, National Basketball Association	2010-2012
Resident Physician	
• Chicago, IL	
Chicago White Sox, Major League Baseball	2010-2012
Resident Physician	
• Chicago, IL	
Men's Varsity Football – Morton High School, Hope Academy High School	2009-2012
• Chicago, IL	
NCAA Varsity Women's Soccer - DePaul University	2010
• Chicago, IL	

# HONORS / AWARDS / LEADERSHIP

5280 Magazine – "Top Doctors in Orthopedic Surgery", Denver CO American Academy of Orthopedic Surgery Baxter Healthcare Scholarship	2016 2012
Hip Preservation in the Adolescent and Young Adult; Rosemont IL	
<ul> <li>Awarded for excellence in research in the of field hip preservation surgery</li> </ul>	
Dean's Commendation for Excellence in Clinical Skills and the Art of Medicine	2009
University of Michigan Medical School Intramural Sports Chairman, Captain	2005-2007
• Flag football, 3-on-3 basketball, 5-on-5 basketball, softball, broomball	
Award for Clinical Excellence in Medical Spanish, Guadalajara, Mexico	2004
Demigod of Dissection, University of Michigan Medical School	2003
<ul> <li>Awarded to Top Anatomy Student in Medical School Class</li> </ul>	

Class Honors, University Honors; University of Michigan	1999-2002
James B. Angell Scholar, University of Michigan	2002
Phi Beta Kappa Honor Society; University of Michigan	2002
Golden Key National Honor Society; University of Michigan	2001
Ken Fish Award; Andover High School, Bloomfield Hills, Michigan	1997

Awarded to top-ranked all-academic varsity football player

## PEER-REVIEWED PUBLICATIONS

- 1. Muddasani P, Norman JC, **Ellman M**, van Wijnen AJ, Im HJ. Basic fibroblast growth factor activates the MAPK and NFkappaB pathways that converge on Elk-1 to control production of matrix metalloproteinase-13 by human adult articular chondrocytes. Journal of Biological Chemistry 2007;282(43):31409-21. PMID: 17724016.
- Im HJ, Li X, Muddasani P, Kim GH, Rangan J, Forcyte C, Ellman M, Thonar E. Basic fibroblast growth factor accelerates matrix degradation via a neuro-endocrine pathway in human adult articular chondrocytes. Journal of Cellular Physiology 2008;215(2):452-63. PMID: 2893571.
- 3. **Ellman MB**, An HS, Muddassani P, Im HJ. Biological impact of the fibroblast growth factor family on articular cartilage and intervertebral disc homeostasis. Gene 2008; 420(1):82-9. PMID: 2525607.
- 4. Li X, An HS, **Ellman M**, Phillips FM, Thonar E, Park D, Udayakumar RK, Im HJ. The action of FGF-2 on the intervertebral disc. Arthritis Research & Therapy 2008;10:R48. PMID: 2453768.
- 5. Li X, Phillips FM, An HS, **Ellman M**, Thonar E, Wu W, Park D, Im HJ. The action of resveratrol, a phytoestrogen found in grapes, on the intervertebral disc. Spine 2008; 33(24):2586-95. PMID: 19011540.
- 6. Li X, Ellman M, Muddasani P, Davis F, Wang JHC, van Wijnen AJ, and Im HJ. PGE2 and its cognate EP2 receptors control human adult articular cartilage homeostasis and are linked to the pathophysiology of osteoarthritis. Arth & Rheum 2009;60(2):513-23. PMID: 2659545.
- 7. Kim J, **Ellman MB**, An HS, Im HJ. Insulin-like growth factor-1 synergizes with bone morphogenetic protein 7-mediated anabolism in bovine intervertebral disc cells. Arth & Rheum 2010; 62(12): 3706. PMID: 2995823.
- 8. **Ellman MB**, Gregory JM, Bhatia S, Hsu A, Ghodadra N, Provencher MT, Romeo AA. An Evidence-Based Review of the Etiology, Classification, Diagnosis, and Treatment of Rotator Cuff Tears. Minerva Ortopedica e Traumatologica 2011;62:89-108.
- 9. **Ellman MB**, Levine B. Fracture of the modular femoral neck component in total hip arthroplasty. J Arthroplasty. July 2011. PMID 21798696. *Epub ahead of print*.
- 10. **Ellman MB**, Levine B. Letter to the Editor In Reply, Re: Fracture of the modular femoral neck in total hip arthroplasty. Journal of Arthroplasty. September 2011. PMID 22197288. *Epub ahead of print*.
- 11. **Ellman MB**, Kim J, An HS, Kroin J, Li X, Chen D, Yan D, Buechter DD, Nakayama K, Liu B, Morganand S, Im HJ. The pathophysiological role of the PKCδ pathway in the intervertebral discs of rabbits and mice: in vitro, ex vivo, and in vivo studies. Arth & Rheum 2011; 64(6):1950-9. PMID 22161873.
- 12. **Ellman MB**, Mather C, Sherman SL, Bach Jr, BR. Advances in anterior cruciate ligament reconstruction: a quarter century of innovation at RUSH. Rush Orthopaedic Journal 2011: 20-26.
- 13. Kim J, Ellman MB, An HS, Yan D, van Wijnen AJ, Murphy G, Hoskin DW, Im HJ. Lactoferricin mediates anabolic and anti-catabolic effects in the intervertebral disc. J Cell Phys 2012; 227(4): 1512-20. PMID: 21678402.
- 14. **Ellman MB**, Kim JS, An J, Chen D, Ranjan KC, An J, Dittakavi T, van Wijnen A, Cs-Szabo G, Li X, Xiao G, An S, Kim S-G, Im H-J. Toll-like receptor adaptor signaling molecule MyD88 on intervertebral disc homeostasis: *in vitro, ex vivo* studies. Gene 2012; 505(2):283-90. PMID: 22692007.
- 15. Im HJ, Li X, Chen D, Yan D, Kim J, **Ellman MB**, Stein GS, Cole BJ, Ranjan KC, Cs-Szabo G, van Wijnen AJ. Biological effects of the plant-derived polyphenol resveratrol in human articular cartilage and chondrosarcoma cells. J Cell Phys 2012; 227(10):3488-91. PMID: 22252971.
- 16. Li X, Ellman MB, Kroin JS, Chen D, Yan D, Mikecz K, Ranjan KC, Xiao G, Kim SG, Cole BJ, Im H-J. Species-specific biological effects of FGF-2 in articular cartilage: Implication for distinct roles within the FGF receptor family. J Cell Biochem 2012; 113(7):2532-42. PMID: 22415882.

- 17. Chalmers P, **Ellman MB,** Chahal J, Verma NN. Injection therapy in the management of musculoskeletal injuries of the knee. Oper Tech in Sports Med 2012; 20(2):172-184.
- 18. Bhatia S, Hsu, A, Lin E, Chalmers P, **Ellman MB**, Cole BJ, Verma N. Surgical treatment options for the young and active middle-aged patient with glenohumeral arthritis. Adv in Orthopaedics 2012; PMID: 22536515.
- 19. **Ellman MB**, Yan D, Ahmadinia K, Im H-J. Fibroblast growth factor control of cartilage homeostasis. J Cell Biochem 2013; 114:735-742. PMID 23060229.
- 20. Gross C, Chalmers P, Ellman MB, Fernandez J, Verma NN. Acute brachial plexopathy after clavicle open reduction internal fixation. JSES 2013; 22:6-9. PMID 23522601.
- 21. Kim JS, **Ellman MB**, Yan D, An HS, Li X, Chen D, Cs-Zabo G, Hoskin D, Buechter D, Van Wijnen A, Im H-J. Lactoferricin mediates anti-inflammatory and anti-catabolic effects in the intervertebral disc. J Cell Phys 2013; 227(4):1512-20. PMID 23460134.
- 22. Ellman MB, Kim J, An HS, Chen D, Ranjan KC, Li X, Xiao G, Yan D, Suh J, van Wijnen AJ, Wang JCH, Yan D, Kim S-G, Im H-J. Lactoferricin enhances BMP7-stimulated anabolic pathways in intervertebral disc cells. Gene 2013. PMID 2364413.
- 23. Ellman MB, Yanke A, Juhan T, Verma NN, Nicholson GP, Bush-Joseph C, Bach BR Jr., Romeo AA. Open repair of an acute latissimus rupture in a Major League Baseball pitcher. JSES 2013. 22(7):19-23. PMID 23706873.
- 24. Ellman MB, Yanke A, Juhan T, Verma NN, Nicholson GP, Bush-Joseph C, Romeo AA. Open repair of retracted latissimus dorsi tendon avulsion. Amer J Ortho 2013 42(6):280-285. PMID 23805423.
- 25. Lee A, **Ellman MB**, Yan D, Chen D, Kroin J, Cole BJ, van Wijnen AJ, Im H-J. A current review of molecular mechanisms regarding osteoarthritis and pain. Gene 2013. PMID 23830938.
- 26. Ahmadinia K, Yan D, **Ellman MB**, Im H-J. The anti-catabolic role of bovine lactoferricin in cartilage. Biomolecular Concepts 2013. 4(5):495-500. PMID 25436593.
- 27. Dhawan A, Mather III RC, Karas V, **Ellman MB**, Young BB, Bach BR Jr, Cole BJ. An epidemiological analysis of nonoperative treatment modalities in the management of osteoarthritis of the knee. J Arthroscopy 2014. 30(1):65-71. PMID: 24290788.
- 28. Bhatia S, LaPrade CM, **Ellman MB**, LaPrade RF. Current concepts: Meniscal root tears: significance, diagnosis, and treatment. AJSM 2014. PMID: 24623276.
- 29. **Ellman MB**, LaPrade CM, James E, LaPrade RF. Anterior meniscal root avulsion following intramedullary nail for a tibial shaft fracture. KSSTA 2014. PMID 24643359.
- 30. **Ellman MB**, LaPrade CM, Smith S, Rasmussen M, Engebretsen L, Wijdicks CA, LaPrade RF. Structural properties of the meniscal roots. AJSM 2014. PMID 24799425.
- 31. LaPrade CM, **Ellman MB**, Rusmussen M, James E, Wijdicks CA, Engebretsen L, LaPrade RF. Anatomy of the anterior attachments of the medial and lateral menisci: a qualitative analysis. AJSM 2014. PMID 25106782.
- 32. James EW, LaPrade CM, **Ellman MB**, Wijdicks CA, Engebretsen L, LaPrade RF. Radiographic identification of the anterior and posterior root attachments of the medial and lateral menisci. AJSM 2014. PMID 25143488.
- 33. Erickson BJ, Harris JD, Frank RM, Fillingham YA, **Ellman MB**, Bach Jr BR, Verma NN, Cole BJ. Performance and return-to-sport after ACL reconstruction in National Hockey League players. OJSM 2014.
- 34. Cerminara A, LaPrade CM, Smith S, **Ellman MB**, Wijdicks CA, LaPrade RF. Biomechanical evaluation of a transtibial pull-out meniscal root repair: challenging the bungee effect. AJSM 2014. PMID 25239930.
- 35. Ho CP, James EW, Surowiec RK, Gatlin CC, **Ellman MB**, Cram TR, Dornan GJ, LaPrade RF. Systematic technique dependent differences in CT versus MRI measurement of the tibial tubercle-trochlear groove (TTTG) distance. AJSM 2015. PMID 25575535.
- 36. LaPrade RF, LaPrade CM, Ellman MB, Turnbull T, Cerminara AJ, Wijdicks CA. Cyclic displacement after meniscal root repair fixation: a human biomechanical evaluation. AJSM 2015. PMID 25556220.
- 37. KC Ranjan, Voigt R, Li X, Forsyth CB, **Ellman MB**, Summa KC, Turek FW, Keshavarzian A, Kim JS, Im HJ. Induction of osteoarthritis-like pathologic changes by chronic alcohol consumption in an experimental mouse model. Arth Rheum 2015. PMID 25708245.
- 38. KC Ranjan, Li X, Voigt RM, **Ellman MB**, Summa KC, Vitaterna MH, Keshavarzian A, Turek FW, Meng QJ, Stein GS, van Wijnen AJ, Chen D, Forsythe CB, Im HJ. Environmental disruption of circadian rhythm predisposes mice to osteoarthritis-like changes in knee joint. J Cell Phys 2015. PMID 25655021.

- 39. Ellman MB, Sherman SL, Forsythe B, LaPrade RF, Cole BJ, Bach Jr BR. Return to play following anterior cruciate ligament reconstruction. JAAOS 2015. PMID 25911661.
- 40. LaPrade MD, LaPrade CM, Hamming M, **Ellman MB**, Turnbull T, Rasmussen M, Wijdicks CA, LaPrade RF. Intramedullary tibial nailing reduces the attachment area and ultimate load of the anterior medial meniscal root: A potential explanation for anterior knee pain in female patients and smaller patients. AJSM 2015. PMID 25911417.
- 41. Philippon MJ, Rasmussen MT, Turnbull TL, Tindade CAC, Hamming MG, **Ellman MB**, Harris M, LaPrade RF, Wijdicks CA. Structural properties of the native ligamentum teres. OJSM 2015. PMID 26535290.
- 42. Euler S, Horan MP, **Ellman MB**, Greenspoon JA, Millett PJ. Chronic rupture of the long head of the biceps tendon: comparison of 2-year results following primary versus revision open subpectoral biceps tendesis. AOTS 2015. PMID 26810192.
- 43. Bhatia S, Chahla J, Dean C, **Ellman MB.** Labral Reconstruction: A "kite technique" for improved efficiency and graft control." Arthroscopy 2015. PMID 27354954.
- 44. Bhatia S, **Ellman MB**, Nho S, Mather III RC, Bedi A, Aoki S, Larson CM, Kelly B, Griffin DR, O'Donnell J, Mei-Dan O. Letter to the Editor: Bilateral hip arthroscopy: direct comparison of primary acetabular labral repair and primary acetabular labral reconstruction. Arthroscopy 2018. PMID 29804596.
- 45. Mills E, **Ellman MB**, Foran JR. The risk of acute infection following intra-articular corticosteroid injection into a pre-existing total knee arthroplasty. J Arthroplasty 2017. *In press*.
- 46. Faucett SC, Nepple J, **Ellman MB**, et al. RCT: Arthroscopy vs PT for FAI: Underpowered and Inconclusive. Letter to the Editor. AJSM 2018. *In press*.
- 47. Sherman SL, **Ellman MB**, Gray A, LaPrade CM, LaPrade RF, Smith P. The team physician: preparation and emergency assessment of the downed athlete. JAAOS. *In process*.
- 48. Surowiec RK, **Ellman MB**, Ho CP, LaPrade RF, Philippon M. Arthroscopically identified femoral head stippling in patients undergoing hip arthroscopy: evaluation of conventional MRI and T2 mapping. AJSM 2017. *In process*.
- 49. **Ellman MB**, Foran JR. Rapidly progressive osteoarthritis in middle-aged patients: is there a relation with hip arthroscopy? AJO 2018. *In process*.
- 50. **Ellman MB**, Luther C, Civitarese D, Nho S, LaPrade RF, Philippon M, Bhatia S. The hip arthroscopy learning curve: has modern fellowship training improved early practice outcomes? Arthroscopy 2018. *In process*.
- 51. **Ellman MB**, Sonin A, Das V, Bhatia S. Asymptomatic physeal injury following hip arthroscopy with femoroplasty in a pediatric gymnast: A case report. JBJS Case Connector 2018. *In process*.
- 52. Palmer MP, Das V, Pykosz J, **Ellman MB**, Bhatia S. In office ultrasound-guided intra-articular hip injections vs hospital and operating room based fluoroscopic intra-articular injections: A cost minimization analysis. AJSM 2018. *In process*.
- 53. Das V, **Ellman MB**, Bhatia S. Iatrogenic rectus entrapment during capsular closure: A cause of recalcitrant anterior hip pain. AJO 2018. *In process*.
- 54. Das V, **Ellman MB**, Bhatia S. Severe myositis ossificans from rectus femoris avulsion in collegiate soccer player: case report. JBJS Case Connector 2018. *In process*.

## NON PEER-REVIEWED PUBLICATIONS

- 1. Park DK, Khurana N, **Ellman MB**, Singh K. Perioperative complications in lumbar spine surgery. Contemporary Spine Surgery 2009;10(3): 1-6.
- 2. Yanke AB, **Ellman MB**, Sherman SL, Bach BR Jr. Graft-Tunnel Mismatch in Bone-Tendon-Bone ACL Reconstruction. Techniques in Orthopaedics 2012:27(2):153-7.

# WEB-BASED PRESENTATIONS / JOURNAL ARTICLES

1. Bhatia S, **Ellman MB**, Ghodadra N, Provencher MT, Romeo AA. Osteoarthritis, Aging and Inflammation. Orthopaedics Hyperguide. Feb 2011.

- 2. **Ellman MB,** Frank R, Bhatia S, Bach Jr BR. Chapter 14: Outpatient ACL Surgery: Is it safe? In Sanchis-Alfonso V, Monllau J.C. (Ed.), *Ebook*: The ACL-Deficient Knee: An Approach Based on Problems Resolution, Springer London 2013. 159-167.
- 3. **Ellman MB.** Director, AAOS Live Webinar: Becoming an Advanced Arthroscopist in Sports Medicine: Pearls and Pitfalls. Oct 2017.

## VIDEO PRESENTATIONS

- 1. Euler S, **Ellman MB**, Warth R, Millett PJ. Arthroscopic treatment of calcific tendinitis. AAOS Video Presentation, 2015.
- 2. Euler S, **Ellman MB**, Warth R, Millett PJ. Biceps Tenodesis for treatment of chronic proximal long head of biceps tendon ruptures. AAOS Video Presentation, 2015.
- 3. Warth R, Ellman MB, Millett PJ. Rotator Cuff Tear Patterns: Recognition and Treatment. AAOS Video Presentation, 2015.

## **BOOKS AND BOOK CHAPTERS**

- 1. Park DK, **Ellman M**, An HS. Chapter 101: Biological Therapy for Disc Degeneration. The Cervical Spine 5<sup>th</sup> edition. Lippincott Williams & Wilkins 2009.
- 2. **Ellman MB,** Rosenthal M, Van Thiel G, Sherman S, Provencher M. Chapter 3: Rehabilitation of Revision ACL Reconstruction. In Manske RC (ed.), Current Concepts in Evaluation, Examination and Rehabilitation of the Knee. http://www.spts.org/home-study-courses/course-list/the-knee-2011.
- 3. **Ellman MB**, Yan D, Im H-J. Biochemical mediators involved in cartilage degradation and the induction of pain in osteoarthritis. In Rothschild, B. (Ed.), Principles of Osteoarthritis. In Tech, 2012.
- Park DK, Ellman MB, Singh K, An HS. The Future: Disc Regeneration and Other Technologies. In Bridwell K, Kuklo T (Ed.), Textbook of Operative Spinal Surgery, 3rd edition. Lippincott Williams & Wilkins, May 2011. In press.
- 5. Gregory JM, **Ellman MB**, Chalmers P, Ghodadra N, Romeo AA. Anterior Shoulder Instability Arthroscopic Repairs. In Iannotti J, Miniaci A, Williams G, Zuckerman J (Ed.), Disorders of the Shoulder: Diagnosis and Management, 3<sup>rd</sup> Ed. Philadelphia, PA: Lippincott Williams & Wilkins, 2011. *In Press*.
- 6. **Ellman MB**, Nho S. Acromioclavicular Joint Injuries. In Levine, B. (Ed.), Acing the Boards. Slack Inc, 2011. Submitted.
- 7. Ellman MB, Nho S. SLAP Injuries. In Levine, B. (Ed.), Acing the Boards. Slack Inc, 2011. Submitted.
- 8. **Ellman MB**, Nho S. Internal Impingement in the overhead throwing athlete. In Levine, B. (Ed.), Acing the Boards. Slack Inc, 2011. Submitted.
- 9. **Ellman MB**, Lee S. Fifth Metatarsal Fractures. In Levine, B. (Ed.), Acing the Boards. Slack Inc, 2011. Submitted.
- 10. Ellman MB, Lee S. Achilles tendon injuries. In Levine, B. (Ed.), Acing the Boards. Slack Inc, 2011. Submitted.
- 11. Ellman MB, Lee S. Talus Fractures. In Levine, B. (Ed.), Acing the Boards. Slack Inc, 2011. Submitted.
- 12. **Ellman MB**, LaPrade R. Current concepts in the treatment of PCL injuries. In: Sports Injuries. Springer Inc, 2013.
- 13. **Ellman MB**, Bush-Joseph C. Patient evaluation: history and physical examination. In: Cole BJ, Harris J (Ed.), Biologic Knee Reconstruction: A surgeon's guide. Slack Inc, 2014.
- 14. **Ellman MB**, Chahla J, McNair PJ, LaPrade R. Endoscopic Double Bundle PCL Reconstruction. In: Ligamentous Injuries of the Knee. Nova Publishing, 2016.
- 15. Ellman MB, Chahla J. Meniscus: Biomechanics and Biology. In: Yanke AB (Ed.), Cartilage. 2017. In press.
- 16. Bhatia S, Chahla J, Cinque ME, **Ellman MB**. Recovery of hip muscle strength after ACL injury and reconstruction: Implications for reducing the risk of re-injury. In: Noyes F (Ed.), ACL Injury and Reconstruction. 2017. *In press*.
- 17. Das V, **Ellman MB**, Bhatia S. Emerging concepts in hip preservation surgery: Cartilage, Labrum, and Capsule. In: CRC Press, UK (Ed.), Hip Preservation Techniques. 2018. *In press*.

## PRESENTATIONS / ABSTRACTS

- 1. **Ellman MB**, Li X, Park D, Davis F, An HS, Hee-Jeong Im. PKCdelta pathway on intervertebral disc homeostasis. Orthopaedic Research Society (ORS), 54th Annual Meeting; March 2008, San Francisco, CA. Poster.
- 2. Li X, Muddasani P, Davis F, **Ellman MB**, Park D, Im HJ. Stimulation of matrix formation by natural antioxidant (resveratrol) on human adult articular cartilage. Orthopaedic Research Society (ORS), 54th Annual Meeting; March 2008, San Francisco, CA. Poster.
- 3. Muddasani P, **Ellman MB**, Park SY, Mondal S, Im HJ. Chondroprotective effect of resveratrol on human articular cartilage. Segal North American Osteoarthritis Workshop II. May 2-4, 2008. Rush University School of Medicine, Chicago, Illinois. Poster.
- 4. **Ellman MB**, An HS, Kim J, Udayakumar R, Muddasani P, Mondal S, Park SY, Im HJ. The role of the PKCdelta pathway on intervertebral disc homeostasis. Segal North American Osteoarthritis Workshop II. May 2-4, 2008. Rush University School of Medicine, Chicago, Illinois. Poster.
- 5. **Ellman MB**, Im HJ, Kim J, An HS. The pathophysiological role of the PKCdelta pathway in the intervertebral disc. The International Society for the Study of the Lumbar Spine. May 4-8, 2009. Miami, Florida. Presentation.
- 6. **Ellman MB**. Inhibitor of PKCdelta pathway alleviates spine disc degeneration process. Department of Orthopaedic Surgery, Rush University Medical Center; June 2008, Chicago, IL. Presentation.
- 7. **Ellman MB**, An HS, Muddasani P, Phillips F, Udayakumar R, Im HJ. The Pathophysiological Role of PKCdelta Pathway in the Intervertebral Disc. North American Spine Society (NASS), 23<sup>rd</sup> Annual Meeting; October 2008, Toronto, CA. Presentation.
- 8. Li X, **Ellman MB**, An HS, Phillips F, Udayakumar R, Im HJ. Basic FGF antagonizes the activity of BMP7 in the intervertebral disc. North American Spine Society (NASS), 23<sup>rd</sup> Annual Meeting, October 2008, Toronto, CA. Presentation.
- 9. **Ellman MB**, Levine B. Modular Neck Failure in Total Hip Arthroplasty. Orthopaedic Surgery Department Grand Rounds, Rush University Medical Center, March 2009, Chicago, IL. Presentation.
- 10. **Ellman MB**, Kogan M. 15-year old male with hip pain slipped capital femoral epiphysis. Thesis Day Presentation, Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 25, 2010.
- 11. **Ellman MB**, Phillips F. Post-traumatic junctional kyphosis. Orthopaedic Surgery Department Grand Rounds, Rush University Medical Center, Chicago, IL, November 2010.
- 12. Dhawan A, Mather III RC, Karas V, **Ellman MB**, Bach BR Jr., Cole B. An epidemiological analysis of nonoperative treatment modalities in the management of osteoarthritis of the knee. Rush Thesis Day, June 24, 2011.
- 13. Dhawan A, Mather III RC, Karas V, **Ellman MB**, Bach BR Jr., Cole B. An epidemiological analysis of nonoperative treatment modalities in the management of osteoarthritis of the knee. AOSSM Specialty Day, Feb 2012, San Francisco, CA. Poster
- 14. Lin EC, Ellman MB, Yanke A, Shewman E, Dhawan A, Garbis N, Bach BR Jr, Verma N. Biomechanical Evaluation of Different Bony Substrates for Soft Tissue Grafts in ACL Reconstruction: Comparison of Bovine, Porcine, Sawbone, and Human Models. AOSSM Specialty Day, Feb 2012, San Francisco, CA. Poster
- 15. **Ellman MB**, Kim J, Li X, Kroin JS, Zheng Q, An HS, Cs-Szabo G, Chen D, Ding M, Pratap J, van Wijnen AJ, Im HJ. Pathophysiological role of the PKCdelta- Runx2 axis in spondylosis: *in vitro* and *in vivo* studies. Orthopaedic Research Society (ORS), 58th Annual Meeting; March 2012, San Francisco, CA. Poster / Presentation.
- 16. Ellman MB, Nicholson G. Reverse total shoulder arthroplasty in the management of proximal humerus fractures. Orthopaedic Surgery Department Grand Rounds, Rush University Medical Center, Chicago, IL, October 2011.
- 17. **Ellman MB,** Li X, Kroin JS, Chen D, Yan D, Mikecz K, Ranjan KC, Xiao G, Kim SG, Cole BJ, Im H-J. Species-specific biological effects of FGF-2 in articular cartilage: Implication for distinct roles within the FGF receptor family. 24th Annual Thesis Day: Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 15, 2012. Abstract.
- 18. **Ellman MB**, Yanke A, Juhan T, Verma NN, Bush-Joseph C, Romeo AA. Open repair of retracted latissimus dorsi tendon avulsion: surgical technique. 24<sup>th</sup> Annual Thesis Day: Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 15, 2012. Abstract.

- 19. **Ellman MB**, Kim J, An HS, Yan D, van Wijnen AJ, Murphy G, Hoskin DW, Im HJ. Lactoferricin mediates anabolic and anti-catabolic effects in the intervertebral disc. 24<sup>th</sup> Annual Thesis Day: Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 15, 2012. Abstract.
- 20. **Ellman MB**, Kim J, Yan D, An HS, Chen D, Ranjan KC, Li X, Xiao G, Buechter DD, Yan D, Kim S-G, Im H-J. Lactoferricin enhances BMP7-mediated anabolism in the intervertebral disc. 24th Annual Thesis Day: Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 15, 2012. Abstract.
- 21. **Ellman MB**, Kim JS, Yan D, An HS, Li X, Chen D, Cs-Zabo G, Hoskin D, Buechter D, Van Wijnen A, Im H-J. Lactoferricin mediates anti-inflammatory and anti-catabolic effects via inhibition of IL-1 and LPS activity in the intervertebral disc. 24th Annual Thesis Day: Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 15, 2012. Abstract.
- 22. Im HJ, Li X, Chen D, Yan D, Kim J, **Ellman MB**, Stein GS, Cole BJ, Ranjan KC, Cs-Szabo G, van Wijnen AJ. Biological effects of the plant-derived polyphenol resveratrol in human articular cartilage and chondrosarcoma cells. 24th Annual Thesis Day: Rush University Medical Center Department of Orthopaedic Surgery, Chicago, IL, June 15, 2012. Abstract.
- 23. Dhawan A, Mather III RC, Karas V, **Ellman MB**, Bach BR Jr., Cole B. An epidemiological analysis of non-arthroplasty treatment of knee osteoarthritis. American Orthopaedic Association, 125<sup>th</sup> Annual Meeting; June 27, 2012, Washington, D.C., Special Emphasis Poster Presentation.
- 24. Kim JS, **Ellman MB**, Yan D, Ranjan KC, Li X, Suh J, An HS, Chen D, Xiao G, Cs-Zabo G, Hoskin D, Buechter D, Van Wijnen A, Im H-J. Lactoferricin mediates anti-inflammatory and anti-catabolic effects via inhibition of IL-1 and LPS activity in the intervertebral disc. Orthopaedic Research Society (ORS), Annual Meeting; January 2013, San Antonio, TX.
- 25. **Ellman MB**, Nho S. Piriformis and Deep Gluteal Space Syndrome. Orthopaedic Surgery Department Grand Rounds, Rush University Medical Center, Chicago, IL, June 2012.
- 26. **Ellman MB**. Latissimus tears in throwing athletes. 2<sup>nd</sup> Annual OREF/Andersson Lectureship; Guest Lecturer: James Andrews MD; Rush University Medical Center, August 17, 2012.
- 27. **Ellman MB**. "How to become an Orthopaedic Surgeon." Lake Zurich High School, presentation for Anatomy and Biology students; September 6, 2012.
- 28. Bhatia S, Saigal A, Hsu AR, **Ellman MB**, Bach BR Jr, Cole BJ, Romeo AA, Verma NN. Glenoid Diameter is an Inaccurate Method for Glenoid Bone Loss Quantification. Orthopaedics Today Annual Meeting, Jan 13-16, 2013, Big Island, HI. Presentation.
- 29. Bhatia S, Saigal A, Hsu AR, **Ellman MB**, Bach BR Jr, Cole BJ, Romeo AA, Verma NN. Glenoid Diameter is an Inaccurate Method for Glenoid Bone Loss Quantification. AANA Annual Meeting, April 25-27, 2013, San Antonio, TX. Poster.
- 30. **Ellman MB**, Cole BJ. Focal chondral defect in a thirty-year old male: Diagnosis and Treatment options. Orthopaedic Surgery Department Grand Rounds, Rush University Medical Center, Chicago, IL, May 2013.
- 31. Ellman MB, Ranjan KC, Li X, Voigt R, Summa K, Keshavarzian A, Turek F, Forsyth B, Im H-J. Chronic alcohol consumption increases susceptibility to osteoarthritis in an experimental mouse model. OREF/ORS Midwest Resident Research Symposium, May 17, 2013, Rush University Medical Center, Chicago, IL. Presentation.
- 32. Ellman MB, Ranjan KC, Li X, Yan D, Kim JS, Cole BJ, Im H-J. Biological effects of the plant-derived polyphenol resveratrol in human articular cartilage. 25th Annual Thesis Day, June 21, 2013, Rush University Medical Center, Chicago, IL. Presentation.
- 33. Forsythe B, Trella K, Tenuto F, McCormick F, **Ellman MB**, Shewman E, Verma NN, Bach Jr BR. Biomechanical evaluation of PCL reconstruction with quadriceps vs Achilles tendon bone-block allograft. 60<sup>th</sup> Annual ORS Meeting, March 12-15, 2014, New Orleans, LA. Poster.
- 34. Ranjan Kc, **Ellman MB**, Voigt R, Li X, Summa KC, Keshavarzian A, Turek FW, Forsyth CB, Chen D, Sampen H-J. Disruption of circadian rhythm in mice increases susceptibility to osteoarthritis. 60th Annual ORS Meeting, March 15-18, 2014. *NIRA Finalist;* Presentation.
- 35. Erickson BJ, Harris JD, Frank RM, Fillingham YA, **Ellman MB**, Bach Jr BR, Verma NN, Cole BJ. Performance and return-to-sport after ACL reconstruction in National Hockey League players. AAOS Annual Meeting, March 11-15, 2014, New Orleans, LA. *Poster presentation*.
- 36. Surowiec RK, James E, **Ellman MB**, Gatlin C, LaPrade RF, Ho CP. CT versus MRI for measurement of the tibial tubercle-trochlear groove (TT-TG) distance. ESSKA. *Poster presentation*.

- 37. Forsythe B, Trella K, Haro M, Shin J, Tenuto F, McCormick F, **Ellman MB**, Shewman E, Verma NN, Bach Jr BR. Biomechanical evaluation of PCL reconstruction with quadriceps vs Achilles tendon bone-block allograft. AOSSM 2014.
- 38. **Ellman MB**. Biologics: The role of growth factors in osteoarthritis. The Steadman Clinic Grand Rounds, Steadman Philippon Research Institute, Vail, CO, November 18, 2013.
- 39. **Ellman MB,** Euler S, Millett PM: Evaluation and Management of Calcific Tendinitis. AAOS Conference, Las Vegas, NV, March 2014.
- 40. **Ellman MB,** Euler S, Millett PM: Management of Complex Rotator Cuff Tears. AAOS Conference, Las Vegas, NV, March 2014.
- 41. LaPrade RF, James EW, Surowiec RK, Dornan GJ, **Ellman MB**, Gatlin C, Cram TR, Ho CP. CT versus MRI for measurement of the Tibial Tubercle Trochlear Groove (TTTG) distance. ESSKA 2014.
- 42. Bhatia S, LaPrade CM, **Ellman MB**, LaPrade RF. Meniscal root tears: significance, diagnosis, and treatment. AAOS Scientific Exhibit 2015.
- 43. Trindade CA, Philippon MJ, Rasmussen MT, Turnbull TL, Hamming MG, **Ellman MB**, Harris M, LaPrade RF, Wijdicks CA. Tensile properties of the ligamentum teres. ISHA Abstract 2014, AAOS Abstract 2015. *Accepted*.
- 44. Bhatia S, **Ellman MB**, LaPrade RF. Meniscal root tears: significance, diagnosis and treatment. AAOS Scientific Exhibit 2015.
- 45. LaPrade MD, LaPrade CM, Hamming M, **Ellman MB**, Turnbull T, Rasmussen M, LaPrade RF, Wijdicks CA. Effects of intramedullary tibial nailing on attachment area and failure strength of the anterior medial meniscal root: is the safe zone really safe? ORS Abstract 2015. *Poster Presentation*.
- 46. Philippon MJ, Rasmussen MT, Turnbull TL, Tindade CAC, Hamming MG, **Ellman MB**, Harris M, LaPrade RF, Wijdicks CA. Structural properties of the native ligamentum teres. ISAKOS Abstract 2015. *E-Poster*.
- 47. LaPrade MD, LaPrade CM, Hamming M, **Ellman MB**, Turnbull T, Rasmussen M, LaPrade RF, Wijdicks CA. Effects of intramedullary tibial nailing on attachment area and failure strength of the anterior medial meniscal root: is the safe zone really safe? ISAKOS Congress Abstract 2015. *E-Poster*.
- 48. LaPrade RF, LaPrade CM, **Ellman MB**, Turnbull T, Cerminara A, Wijdicks CA. Cyclic displacement of four meniscus-suture fixation technicuqes in allograft quality human tissue: A biomechanical evaluation. ISAKOS Congress Abstract 2015. *E-Poster*.
- 49. Euler S, **Ellman MB**, Millett PM: Chronic rupture of the long head of the biceps tendon: Two-year results following primary and revision subpectoral biceps tendesis. SECEC, Milano 2015: *Poster Presentation*.
- 50. **Ellman MB**. Structural properties of the meniscal roots. The Steadman Clinic Fellowship Presentation, Steadman Philippon Research Institute, Vail, CO, July 2014.
- 51. Ellman MB. Hip pain in the young athlete. Panorama Orthopedics Grand Rounds, Golden CO, August 2015.
- 52. **Ellman MB**. Femoroacetabular impingement: CAM and Pincer deformities in active patients. Panorama Orthopedics Grand Rounds, Golden CO, January 2016.
- 53. Ellman MB. Complex Shoulder AC Joint Separations. Faculty, Vail Shoulder Summit, June 2016.
- 54. Ellman MB. ACL Graft Choice: Location, Living, Radiated? Faculty, Chicago Sports Symposium, August 2016.
- 55. **Ellman MB**. Posterolateral corner injuries of the knee. Faculty, Chicago Sports Symposium, Chicago IL, August 2016.
- 56. **Ellman MB**. Complex meniscal repair: Root, Radial, and Revision. Faculty, Chicago Sports Symposium, Chicago IL, August 2016.
- 57. Ellman MB. Extra-articular hip impingement. Faculty, Chicago Sports Symposium, Chicago IL, August 2016.
- 58. **Ellman MB**. The role of the acetabular labrum: an anatomic and biomechanical perspective. Panorama Orthopedics Grand Rounds, Golden CO, Sept 2016.
- 59. Ellman MB. Multiligament knee injuries. Panorama Orthopedics Grand Rounds, Golden CO, Jan 2017.
- 60. Ellman MB. FCL/LCL Injuries of the knee. Faculty, Chicago Sports Symposium, Chicago IL. August 2017.
- 61. Ellman MB. Microfracture. Faculty, Chicago Sports Symposium, Chicago IL. August 2017.
- 62. Ellman MB. PCL Reconstruction: Technical Pearls. Faculty, Chicago Sports Symposium, Chicago IL. August 2017.
- 63. Ellman MB. Meniscal Root Repairs. Faculty, Chicago Sports Symposium, Chicago IL. August 2017.
- 64. **Ellman MB**, Luther C, Civitarese D, Nho S, LaPrade RF, Philippon M, Bhatia S. The hip arthroscopy learning curve: has modern fellowship training improved early practice outcomes? Poster Presentation, AANA 2018.
- 65. **Ellman MB**, Hugate R. 2018 Panorama Orthopedics Hip Preservation Symposium. FAI and Labral Tears in the Active Hip. Golden CO, January 2018.

- 66. **Ellman MB**. Arthroscopic Labral Reconstruction of the Hip: Tips and Tricks. Stryker Masters Hip Arthroscopy Course, Las Vegas NV. March 2018.
- 67. Palmer MP, Das V, Pykosz J, **Ellman MB**, Bhatia S. In office ultrasound-guided intra-articular hip injections vs hospital and operating room based fluoroscopic intra-articular injections: A cost minimization analysis. AOSSM 2018. *Submitted*.
- 68. **Ellman MB**, Chahla J, Nho SJ, Bhatia S. AAOS Instructional Course Lecture: Kite Technique for Labral Reconstruction. AAOS 2019. *Submitted*.

Courses / Conferences		
Masters Hip Arthroscopy Course – Stryker Sports Medicine, Faculty	2018	
<ul> <li>Las Vegas, NV</li> </ul>		
Steadman-Philippon Masters Hip Arthroscopy Course, Faculty	2018	
• Vail, CO		
Stryker Fellows Hip Arthroscopy Course, Faculty	2017	
• Denver, CO		
AANA APEx Comprehensive Hip Arthroscopy, Faculty	2017	
• Chicago, IL		
AANA Annual Meeting	2017	
• Denver, CO		
Stryker Advanced Hip Arthroscopy Course, Faculty	2017	
Miami, FL		
AAOS Annual Meeting	2013 - Present	
<ul> <li>Chicago 2013, New Orleans 2014, Las Vegas 2015, San Diego 2017</li> </ul>		
Masters Hip Arthroscopy Course	2014 - 2017	
• Vail, CO		
Chicago Sports Symposium, Faculty	2016, 2017	
Chicago, IL		
AOSSM Annual Meeting	2016	
Colorado Springs, CO		
Vail International Complex Knee Symposium	2014, 2015	
• Vail, CO		
Visiting Surgeon Day for Hip Arthroscopy, Christopher Larson MD  • Edina, MN	2014	
AAOS Hip Preservation in the Adolescent and Young Adult	2012	
Rosemont, IL		
AAOS Knee Injuries in Athletes: Getting Patients Back in the Game	2012	
Rosemont, IL		
Masters Shoulder Course – Arthroscopy Association of North America	2012	
• Rosemont, IL		
Advanced Nailing & Percutaneous/MIPO Techniques	2012	
Fort Lauderdale, FL		
Resident Hip Arthroscopy Course	2011, 2012	
Rush University Medical Center, Chicago, IL	,	
Resident Knee Arthroscopy Course	2008-2012	
Rush University Medical Center, Chicago, IL	_	
Resident Shoulder Arthroscopy Course	2009-2012	
D. H. C. C. H.		

Rush University Medical Center, Chicago, IL

## **ADMINISTRATIVE SERVICE**

_		
	Director – Panorama Orthopedics Hip Preservation Center	2015-present
	Panorama Orthopedics & Spine Center, Denver CO	
	OrthoColorado Hospital - Board of Directors	2016-present
	Panorama Orthopedics & Spine Center, Denver CO	
	Co-Director – Research Advisory Committee	2017-present
	Panorama Orthopedics & Spine Center, Denver CO	
	Resident Selection Interview Committee, Chicago IL	2013
	Rush Department of Orthopedic Surgery – Chief Resident Class Representative	
	ACGME Resident Review Committee, Chicago IL	2011
	Rush Department of Orthopedic Surgery – Resident Class Representative	
	Orthopedic Surgery Interest Group, Chicago IL	2010
	• Member	
	MedBuddy Program, Ann Arbor MI	2006
	• Member	
	American Medical Student Association, Ann Arbor MI	2004
	• Member	
	March of Dimes Undergraduate Organization, Ann Arbor MI	1998-2002
	<ul> <li>President</li> </ul>	

# LOCAL AND NATIONAL VOLUNTEER SERVICE

Bumps & Bruises Clinic, Denver CO	2014-present
<ul> <li>Provide free health care to high school athletes throughout football season</li> </ul>	
Mullen High School, Denver CO	2015-present
Pre-participation sports physicals	
Vail Valley High School & Middle School, Vail CO	2013
<ul> <li>Pre-participation sports physicals</li> </ul>	
Rush Oak Park High School, Chicago IL	2009-2012
Pre-participation sports physicals	
Latin American Youth Center, Washington, D.C.	2009
Helped organize Christmas activities for underserved youth	
HOPE clinic, Ypsilanti MI	2006
Provided health care to underserved population	
Common Ground Relief Effort, New Orleans LA	2006
<ul> <li>Provided aid in cleanup effort following Hurricane Katrina</li> </ul>	
Project H Clinic, Detroit MI	2006
<ul> <li>Provided health care for homeless patients</li> </ul>	
La Clinica Central, Guadalajara MX	2004
<ul> <li>Provided health care for underserved patients</li> </ul>	
Fenway Park, The Souvenir Store, Boston MA	2003
• Employee	
New England Medical Center, General Surgery Department, Boston MA	2003
Patient transport to and from operating room	
Wheelchair Basketball Game, Dance Marathon Charity	2000
Chrisler Arena, University of Michigan, Ann Arbor MI	
Organizer, Volunteer and Participant	