

# Curriculum Vitae

Aman Dhawan MD

## **Education/Post Graduate Education**

Doctor of Medicine, May 1999  
Albany Medical College,  
Albany, New York

Bachelor of Science, June 1996  
Biology/Sociology  
Union College, 7 yr Combined B.S./M.D. Program  
Schenectady, New York

General Surgery/Orthopaedics Internship, July 1999- June 2000  
Walter Reed Army Medical Center  
Washington DC

Orthopaedic Surgery Residency, July 2000- June 2005  
Walter Reed Army Medical Center/ NCC  
Washington DC

Orthopaedic Sports Medicine Fellowship, August 2010-July 2011  
Rush University Sports Medicine Fellowship Program  
Bernard R. Bach MD, Program Director  
Chicago, IL

## **ABOS Certifications**

American Board of Orthopaedic Surgery Certified/Recertified 2007/2015

ABOS Subspecialty Certificate in Orthopaedic Sports Medicine October 2014

## **Military Service**

Honorable Discharge from Active Duty U.S. Army June 30, 2010

### Duty Stations:

Walter Reed Army Medical Center, Washington DC 1999-2005  
Orthopaedic Surgery Internship and Residency

Carl R. Darnall Army Medical Center, Fort Hood, Texas 2005-2010  
Staff Orthopaedic Surgeon

### Wartime Service:

TF 21 Med, Camp Bucca, Iraq March-Oct 2006

## **Orthopaedic Surgery Fellowship**

Orthopaedic Sports Medicine Fellowship, August 2010-July 2011  
Rush University Sports Medicine Fellowship Program  
Bernard R. Bach MD, Program Director  
Chicago, IL

### **Faculty Involvement - National Course Faculty/Presentations**

**Course Director:** “Orthopaedic Essentials Course for The Primary Care Provider”. Hershey Lodge, Hershey, PA. July 19-20,2019.

Lectures: “Top Three Adult Shoulder Problems”

Breakout Sessions: “Anatomy of the Hip, Knee and Ankle”, “Anatomy of the Shoulder and Elbow”

**Course Director:** “Orthopaedic Essentials Course for The Primary Care Provider”, Sept 22,2017. University Conference Center, Hershey, PA. Sept 22,2017

Lectures: “Top Three Adult Knee Problems”

Breakout Sessions: “Anatomy of the Hip, Knee and Ankle”, “Anatomy of the Shoulder and Elbow”

“Revision Treatment Options for Recurrent Instability Following Failed Anterior Arthroscopic Stabilization”. Instructional Course Lecture. 2019 AOSSM Annual Meeting. July 11-14, 2019. Boston, MA”

“Revision Treatment Options for Recurrent Instability Following Failed Anterior Arthroscopic Stabilization”. Instructional Course Lecture. 2019 Arthroscopy Association of North America Annual Meeting. May 2-4, 2019. Orlando, FL

“Big Data: Big Progress or Big Headache”. 2019 Arthroscopy Journal Editor’s Meeting. April 30-May 1,2019. Orlando, FL.

Moderator, Grand Debate – The Massive Cuff Tear. 2019 Arthroscopy Association of North America Annual Meeting. May 2-4, 2019. Orlando, FL.

“Revision ACL Reconstruction”. 2019 AANA Annual OLC Fellows Course. June 7-9,2019. Rosemont, IL.

“Evaluation and Management of Superior Labrum Injuries of the Shoulder”. 2018 PAOS Annual Meeting. Nashville, TN. Sept 3-7,2018

“Management and Treatment of the Multi-Ligament Knee Injury”. 2018 PAOS Annual Meeting. Nashville, TN. Sept 3-7,2018.

“Revision ACL Reconstruction: Work-Up and Management”. AANA Sports Medicine and Arthroscopy Fellows Lab Course. OLC, Rosemont, IL. June 22-24,2018

“Revision Treatment Options for Recurrent Instability Following Failed Anterior Arthroscopic Stabilization”. Instructional Course Lecture. 2018 Arthroscopy Association of North America Annual Meeting. April 26-28,2018. Chicago, IL

“Standard and Accessory Portals, Diagnostic Shoulder Arthroscopy”. AAOS Fundamentals of Knee and Shoulder Arthroscopy for Orthopaedic Residents”. OLC, Rosemont, IL. Oct 27-29,2017

“Planning Factors for ACL Reconstruction,” 2017 Physician Assistant Orthopaedic Society Annual Meeting. Baltimore, Maryland. Aug 21-25,2017

“ACL Graft Preparation”, 2017 Physician Assistant Orthopaedic Society Annual Meeting. Baltimore, Maryland. Aug 21-25,2017

“Posterior Instability of the Glenohumeral Joint” The Wider Scope of Arthroscopy, S&N Fall Fellowship Meeting, Aug 27-29,2017. Andover, MA.

“Revision Treatment Options for Recurrent Instability Following Failed Anterior Arthroscopic Stabilization”. Instructional Course Lecture. 2017 AOSSM Annual Meeting. July 20-23, 2017. Toronto, Canada

“Avoiding Pitfalls in Arthroscopic Anterior Shoulder Stabilization”. Grand Rounds, Pinnacle Health. June 1, 2017.

Research Pearls: the Significance of Statistics, Perils of Pooling, Cost of Complications, and Underappreciation of Utility, Arthroscopy and Arthroscopy Techniques Editor’s Meeting. Denver, CO, May 16, 2017

"Evaluation and Treatment of Superior Labral (SLAP) Tears of the shoulder", CPRS, Dillsburg, PA, February 23, 2017

"Bioprinting of Zonally Stratified Articular Cartilage", Musculoskeletal Research Symposium, State College, PA, January 24, 2017

“AC/CC Ligament Reconstruction: What Really Works?” New Orleans International Shoulder Symposium, New Orleans, LA. October 20-21, 2016

“Surgical treatment of PCL & Posterolateral Corner Injuries”, The Wider Scope of Arthroscopy, S&N Fall Fellowship Meeting, Andover, MA. Sept 11, 2016

“Pearls and Pitfalls in the Evaluation and Management of Shoulder Instability”, PAOS in the West, Scottsdale, AZ, August 23, 2016

“Graft Preparation – Hands on time and discussion on the latest techniques for this valuable skill”, PAOS in the West, Scottsdale, AZ, August 22, 2016

“Management of Acute Type III AC Joint Separations: Is there a Role for Early Surgical Intervention?”. 4<sup>th</sup> Annual Central PA Sports Medicine Symposium, Hershey, PA. August 3, 2016.

“Tunnel Placement in Anterior Cruciate Ligament Reconstruction”, JAAOS Plus Webinar, July 19, 2016

“ACL Reconstruction: Brace, What’s a Brace?” Pennsylvania Orthopaedic Society Spring Meeting 2016 Boca Raton, FL April 8-9, 2016

Faculty, 3rd Annual Central Pennsylvania Sports Medicine Symposium  
Hershey, PA August 4, 2015

Lectures/Panel Discussion: 1) “First Time Patellar Dislocation: Should We Manage with Surgery”  
2) “When Can My Athlete Return To Play”

Pennsylvania Orthopaedic Society Spring Meeting 2015  
Scottsdale, AZ April 9-11

Lectures: 1) “ACL Reconstruction: Brace, What’s a Brace?”  
2) “Meniscal Treatment in Athletes, To Fix or Not to Fix, That is the Question”  
3) “When can my kid return to sports, Patellofemoral Instability”

Moderator, American Orthopaedic Association Emerging Leaders Program Webinar, “Practice Management: Keys to Success Early in Practice”, August 4, 2015

Moderator, American Orthopaedic Association Emerging Leaders Program Webinar, “Time Management Skills for Your Professional and Personal Life”, February 11, 2015

Faculty, Smith and Nephew “Wider Scope of Arthroscopy” Meeting. Andover, MA Sept 13-15, 2015  
Lectures: 1) “Fundamentals of Rotator Cuff Repair”

Faculty, Smith and Nephew Masters Shoulder Course, Rockford, IL Oct 2-3, 2015 Lectures: 1) "Posterior Shoulder Instability"

Faculty, Smith and Nephew Fellows Advanced Shoulder Course, Austin, TX May 29-30, 2015  
Lectures: 1) "Tips and Pearls for Posterior and Multidirectional Instability"  
2) "The Biceps Tendon: When to kill, when to keep and when to Tenodesis"  
3) "Arthroscopic Rotator Cuff Repair: Technical Pearls for Anatomic Reconstruction"

Faculty, Smith and Nephew Charlotte Hip and Shoulder Arthroscopy Skills Lab  
Charlotte, NC Oct 24-25, 2014

Lectures: 1) "Patient selection for Hip Arthroscopy"  
2) "Current Solutions for Difficult Instability cases"  
3) "ARCR: Single Row vs Double Row vs TOE"

Faculty, Smith and Nephew "Wider Scope of Arthroscopy" Meeting, Andover, MA Sept 7-9, 2014  
Lectures: 1) "Simple Landmarks for Performing an Anatomic ACL Reconstruction"  
2) "Management of CAM Impingement"

Host, International Visiting Surgeons Program  
3 Surgeons visiting from South Korea, Nov 11-12 2014  
3 Surgeons visiting from German, April 14-15 2014

Instructor, AANA Fall Course, Knee Course  
AANA Fall Course Nov 7-9, 2014  
Palm Desert, CA

Faculty, 2nd Annual Central Pennsylvania Sports Medicine Symposium  
Hershey, PA July 29, 2014  
Lecture: 1) What is the Optimal Graft Choice for ACL Reconstruction in the Adolescent Athlete?

Faculty, Smith and Nephew Baylor University Hip and Shoulder Arthroscopy Skills Lab,  
Dallas, TX Aug 16-17, 2013  
Lectures: 1) "Complex Labral Repairs: How I Address: Advantages of all suture anchor"

Faculty, Smith and Nephew Hip and Shoulder Arthroscopy Skills Lab  
Phoenix, AZ Oct 18-19, 2013  
Lectures: 1) "Revision Cuff Repair: What to Consider"  
2) "Consideration of Hip Caspular management"  
3) "Hip Arthroscopy Postop Rehab: When to return to Activity"

Faculty, Smith and Nephew Laterjet Focus Demonstration, AANA Fall Course  
Las Vegas, NV Nov 7-9, 2013

Faculty, Smith and Nephew Multiligament Knee Focus Demonstration, AANA Fall Course  
Las Vegas, NV Nov 7-9, 2013

Faculty, Smith and Nephew Advanced Surgical Training  
New Brunswick, NJ. Nov 3, 2013.  
Lecture: "PCL and Posterolateral Corner Injuries of the knee"

Faculty, Smith and Nephew Baylor University Hip and Shoulder Arthroscopy Skills Lab  
Dallas, TX Aug 24-25, 2012  
Lectures: 1) "Hip arthroscopy: Instability, CAM and Pincer lesions"  
2) Arthroscopic Bicep tenodesis, Instability repair

Faculty, Smith and Nephew "Wider Scope of Arthroscopy" Meeting  
Andover, MA Sept 9-Sept 11, 2012

Lectures: 1) "Options for Treatment of Osteochondral Injuries"  
2) "When to Repair the Hip Capsule"

Faculty, Smith and Nephew Central Jersey Hip Arthroscopy Lab, Eatontown, NJ Oct 10, 2012  
Lectures: "Hip Arthroscopy: FAI and Labral Tears"

Faculty, Smith and Nephew Master Knee Course, Portland, Oregon Oct19-20, 2012  
Lectures: 1) "Current Solutions for Arthroscopic Rotator Cuff Repair"  
2) "Advances in Posterior Instability"  
3) "Anatomic SB ACL Reconstruction: Flexible Reamers. How I Do It"

Faculty, Arthrex 2012 Annual Fellowship Completion Forum, Naples, Florida. June 2012

Associate Master Instructor, AANA Shoulder Arthroscopy Course - # 202, January 25-27, 2013  
AANA/AAOS Orthopaedic Learning Center, Rosemont, IL

Associate Master Instructor, AANA Shoulder Arthroscopy Course - # 205, March 8-10, 2013  
AANA/AAOS Orthopaedic Learning Center, Rosemont, IL

Instructor, AANA Fall Course, Knee Course  
AANA Fall Course Nov 7-9, 2013, Las Vegas, NV

"Hip Injury and Arthroscopy: Current Innovations and Contemporary Practice", 2011 Jersey Shore Sports Medicine Symposium, Freehold, NJ. Oct 10,2011

"Injuries of the hip, Evaluation and Management", 2012 Jersey Shore Sports Medicine Symposium, Freehold, NJ. Sept 25,2012

Associate Master Instructor, AANA Shoulder Arthroscopy Course - # 107, April 27-29, 2012  
AANA/AAOS Orthopaedic Learning Center  
Rosemont, IL

"Evaluation and Management of Shoulder Injuries", Rider University/UOA Sports Medicine Lecture Series, Lawrenceville,NJ. Oct 17,2011

Military Medicine. Albany Medical College, Albany, New York. March 1-2, 2006.

Military Surgery and the Iraq Experience. Union College, Schenectady, New York. January 23, 2007.

Military Surgery and the Iraq Experience. State University of New York at Albany, Albany, New York. January 23, 2007.

Military Surgery and the Iraq Experience. Siena College, Loudonville, New York. January 24, 2007.

Military Surgery and the Iraq Experience. University of Cincinnati General Surgery Residency Program, Cincinnati, Ohio. March 5, 2007.

Military Surgery and the Iraq Experience. The Ohio State University College of Medicine, Columbus, Ohio. March 6, 2007.

Military Surgery and the Iraq Experience. Department of Surgery, Metrohealth Hospital System, Cleveland, Ohio. March 7, 2007.

### **Faculty Involvement - International Course Faculty/Presentations**

“Extra-articular tenodesis for failed ACLR”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Management of failed ACL Reconstructions”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Role of non-operative management in ACL injuries”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Panel Discussion- Case Discussion on failed ACLRs”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Meniscal Root repair- Yes I can fix them, but does it make difference?”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“ACL with Posterolateral Corner Reconstruction”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Meniscus body and posterior horn tears”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Management of chronic AC joint injury”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Panel Discussion - Traumatic Shoulder instability”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Principles of Latarjet Surgery”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Fluid management in shoulder arthroscopy”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“LIVE SURGERY : Bankart Repair”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Mini-Open biceps tenodesis”. 5th International Meeting of Arthroscopy Academy, Mumbai, India. July 27-29, 2018.

“Hamstring Autograft Size Can Be Predicted and is a Potential Risk Factor for Anterior Cruciate Ligament Reconstruction Failure”. Hong Kong, April 6,2017

“3D Bioprinting of Zonally Stratified Articular Cartilage”. Taipai, Taiwan. April 12,2017

“3D Bioprinting of Zonally Stratified Articular Cartilage”. Shanghai, China. April 17,2017

“The Effect of Patellar Tunnel Placement on Fracture Risk after MPFL Reconstruction”. Shanghai, China. April 17,2017.

“ Biomechanical Evaluation of First and Second Generation All Soft Suture Glenoid Anchors”. Kobe, Japan. April 20,2017.

“Evaluation of Rotator Cuff Anchor Biomechanics in the Humeral Greater Tuberosity w/wo Decortication”. Hiroshima, Japan. April 24,2017.

“Evaluation of Rotator Cuff Anchor Biomechanics in the Humeral Greater Tuberosity w/wo Decortication”. 2017 APKASS Annual Meeting, Seoul, Korea. April 28,2017.

“The Throwing shoulder, SLAP Tears and Repair” 11<sup>th</sup> Annual HSS/Ranawat Orthopaedic Conference. Benglaru, India. Jan 17-19 2013.

“Shoulder Instability and Bone Loss, is it Relevant” 11<sup>th</sup> Annual HSS/Ranawat Orthopaedic Conference. Benglaru, India. Jan 17-19 2013.

“Management of Chondral Injuries, What is the Future” 11<sup>th</sup> Annual HSS/Ranawat Orthopaedic Conference. Benglaru, India. Jan 17-19 2013.

“Arthroscopic Rotator Cuff Repair, What is the Best Technique” 11<sup>th</sup> Annual HSS/Ranawat Orthopaedic Conference. Benglaru, India. Jan 17-19 2013.

Moderator – Shoulder Session, 11<sup>th</sup> Annual HSS/Ranawat Orthopaedic Conference. Benglaru, India. Jan 17-19 2013.

**Professional Employment/Teaching Affiliations:**

**Associate Professor** July 2016 - Present  
*Department of Orthopaedics and Rehabilitation*  
*Penn State College of Medicine*  
*Hershey, PA*

**Assistant Professor,** September 2014-Jul 2016  
*Department of Orthopaedics and Rehabilitation*  
*Penn State College of Medicine*  
*Hershey, PA*

**Assistant Professor,** August 2011-August 2014  
*Department of Orthopaedic Surgery*  
*UMDNJ-Robert Wood Johnson Medical School*  
*New Brunswick, NJ*

**Director, Arthroscopic Skills Lab** July 2012-2015  
**UMDNJ-RWJ Orthopaedic Surgery Residency**  
**10 Skills labs per Academic Year**  
*Department of Orthopaedic Surgery*  
*UMDNJ-Robert Wood Johnson Medical School*  
*New Brunswick, NJ*

**UMDNJ-RWJ Orthopaedic Surgery Residency Education Committee** July 2012-Aug 2014  
*Department of Orthopaedic Surgery*  
*UMDNJ-Robert Wood Johnson Medical School*  
*New Brunswick, NJ*

**Assistant Professor of Surgery** 2005 - 2010  
*Department of Surgery*  
*F.Edward Hebert School of Medicine*  
*Uniformed Services University of the Health Sciences*  
*Bethesda, MD*

**Director of Graduate Medical Education** 2006 - 2010  
*Department of Orthopaedics and Rehabilitation*  
*Carl R. Darnall Army Medical Center*

Fort Hood, TX

**Peer Reviewed Publications**

**Dhawan A**, Hospodar PP. Suture Fixation as a Treatment for Acute Traumatic Osteochondral Lesions. *Arthroscopy* 1999; 15: 307-311.

Klemme WR, Owens BD, **Dhawan A**, Zeidman S, Polly DW Jr. Lumbar Sagittal Contour After Posterior Interbody Fusion. *Spine* 2001;26(5):534-537

Belmont PJ Jr., Klemme WR, **Dhawan A**, Polly DW Jr. Accuracy of Transpedicular Thoracic Screw Placement *In Vivo*. *Spine* 2001; 26(21):2340-2346

**Dhawan A**, Hospodar PP. Isolated Posttraumatic Posterior Dislocation of the Radial Head in an adult: a Case Report and Review of the Literature. *Am J Orthop* 2002; 2:83-86

**Dhawan A**, Doukas WC, Papazis JA, Scoville CR. Use of Postoperative Drain in Arthroscopically Assisted Bone-Patellar Tendon-Bone ACL Reconstruction. *American Journal of Sports Medicine* 2003; 31(3): 419-424

**Dhawan A**, Doukas WC. Acute Compartment Syndrome of the Foot Following an Ankle Sprain with Disruption of the Anterior Tibial Artery, A Case Report. *JBJS* 2003; 85(3): 528-531

**Dhawan A**, Polly DW Jr., Kuklo TR, Bronfman E. Analysis of Iliac Crest Bone graft Process Measures. *Am J Orthop*. 2006 Jul; 35:322-326

Kuhn MA, Olexa T, **Dhawan A**. Pace Yourself. *Arthroscopy* 2008;24(11):1299-300.

**Dhawan A**, Kirk K, Dowd T, Doukas W. Isolated Avulsion Fracture of the Lesser Tuberosity of the Humerus in an Adult: A Case Report and Review of the Literature. *Am J Orthop* 2008;37 (12): 627-30

**Dhawan A**, Klemme WR, Polly DW Jr.: Thoracic Pedicle Screws: Comparison of Start Points and Trajectories. *Spine* 2008; 33(24):2675-81

Farr J, Cole BJ, **Dhawan A**, Kercher J, Sherman S. Clinical Cartilage Restoration: Evolution and Overview. *Clin Orthop Relat Res* (2011) 469:2696–2705

Sherman SL, Lenart B, Strauss E, **Dhawan A**, Gouchener E, Nicholson GP. Reduced Scapular Notching Following Reverse Total Shoulder Arthroplasty. *Clinical Results of a New Implant Design*. *Rush Orthopaedic Journal* 2010-2011.

Gross C, **Dhawan A**, Harwood D, Gochanour E, Romeo A. Glenohumeral Joint Injection: A Review. *Sports Health* March/April 2013;2:153-159

**Dhawan A**, Ghodadra N, Salata M, Cole BJ. Bioabsorbable Surgical Implants in the Shoulder. *Current Concepts Review*, *Am J Sports Med* June 2012 40 1424-1430

Lin EC, Mall NA, **Dhawan A**, Sherman SL, McGill KC, Provencher MT, Nicholson GP, Cole BJ, Solomon DJ, Verma NN, Romeo AA. Arthroscopic primary rotator cuff repairs in patients aged younger than 45 years. *Arthroscopy*. 2013 May;29(5):811-7.

**Dhawan A**, Mather RC, Karas V, Ellman M, Bach BR, Cole BJ. An Epidemiological Analysis of Non-Arthroplasty Treatment Modalities in the Management of Osteoarthritis of the Knee. *Arthroscopy*. 2014 Jan;30(1):65-71

Karas V, Wang V, **Dhawan A**, Cole BJ. Biomechanical Factors in Rotator Cuff Pathology. *Sports Med Arthrosc*. 2011 Sep;19(3):202-6.



Lavery KP, Rasmussen JF, **Dhawan A**. Arthroscopic transosseous-equivalent rotator cuff repair. *Arthroscopy Tech*. 2013 May 18;2(2):e183-5

Rasmussen JF, Lavery KP, **Dhawan A** Anatomic Anterior Cruciate Ligament Reconstruction With a Flexible Reamer System and 70° Arthroscope . *Arthrosc Tech*. 2013 Aug 30;2(4):e319-22.

Conte EJ, Hyatt AE, Gatt CJ Jr, **Dhawan A**. Hamstring autograft size can be predicted and is a potential risk factor for anterior cruciate ligament reconstruction failure. *Arthroscopy*. 2014 Jul;30(7):882-90.

Lenart BA, Freedman R, Van Thiel GS, **Dhawan A**, McGill KC, Basu S, Meyer JR, Provencher CM, Cole BJ, Romeo AA, Verma NN. Magnetic resonance imaging evaluation of normal glenoid length and width: an anatomic study. *Arthroscopy*. 2014 Aug;30(8):915-20.

Lavery KP, Rasmussen JF, **Dhawan A**. Five-Strand Hamstring Autograft for Anterior Cruciate Ligament Reconstruction. *Arthrosc Tech*. 2014 Jul 7;3(4):e423-6

Erickson J, Lavery K, Monica J, Gatt C, **Dhawan A**. Surgical Treatment of Symptomatic Superior Labrum Anterior-Posterior Tears in Patients Older Than 40 Years: A Systematic Review. *Am J Sports Med*. 2014 Jun 24.

Scott DJ, Sherman S, **Dhawan A**, Cole BJ , Bach BR Jr, and Mather RC. Quantifying the Economic Impact of Provider Volume Through Adverse Events: The Case of Sports Medicine. *Orthopaedic Journal of Sports Medicine*, March 2015; vol. 3( 3)

Hyatt A, Lavery KP, Mino C, **Dhawan A**. Suture Anchor Biomechanics After Rotator Cuff Footprint Decortication. *Arthroscopy*. 2016 Apr;32(4):544-50

Bonnazza N, Smuin D, Silvis M, Onks C, **Dhawan A**. Reliability, Validity and Injury Predictive Value of the Functional Movement Screen: a MetaAnalysis. *Am J Sports Med*. *Am J Sports Med*. 2017 Mar;45(3):725-732

**Dhawan A**, Gallo RA, Lynch SA. Anatomic Tunnel Placement in Anterior Cruciate Ligament Reconstruction. *J Am Acad Orthop Surg*. 2016 Jul;24(7):443-54

Bonazza NA, Smuin D, Onks CA, Silvis ML, **Dhawan A**. Reliability, Validity, and Injury Predictive Value of the Functional Movement Screen. *Am J Sports Med*. 2017 Mar;45(3):725-732

Harris JD, Brand JC, Cote MP, Faucett SC, **Dhawan A**. Research Pearls: The Significance of Statistics and Perils of Pooling.Part 1: Clinical Versus Statistical Significance. *Arthroscopy*. 2017 Jun;33(6):1102-1112.

**Dhawan A**. The Jury Remains Out on Hybrid Autograft-Plus-Allograft for Diminutive Hamstring Anterior Cruciate Ligament Autografts. *Arthroscopy*. 2016 Nov;32(11):2364-2365

Chiarappa F, Erickson J, Haskel J, Monica J, **Dhawan A**. Biomechanical Comparison of a First and Second Generation All Soft Suture Anchor. *Orthop J Sports Med*. 2017 Jul 20;5(7)

Bonazza N, Liu G, Leslie D, **Dhawan A**. Trends in Surgical Management of Shoulder Instability. *Orthop J Sports Med*. 2017 Jun 28;5(6)

Harris JD, Brand JC, Cote MP, Faucett SC, Dhawan A. Research Pearls: The Significance of Statistics and Perils of Pooling. Part 3: Pearls and Pitfalls of Meta-analyses and Systematic Reviews. *Arthroscopy*. 2017 Aug;33(8):1594-1602.

Smuin D, Swenson R, **Dhawan A**. Saucerization versus Complete Resection of Symptomatic Discoid Lateral Meniscus at Short and Long Term Follow up: A Systematic Review. *Arthroscopy*. 2017 Sep;33(9):1733-1742

Weinheimer K, Smuin D, **Dhawan A**. Patient Outcomes as a Function of Shoulder Surgeon Volume: A Systematic Review. *Arthroscopy*. 2017 Jul;33(7):1273-1281.

**Dhawan A**. Research Pearls: the Significance of Statistics, and Perils of Pooling. *Arthroscopy*. 2017 Jun;33(6):1099-1101

Vaughn N, Stepanayan H, Gallo R, **Dhawan A**. Genetic Factors in Tendon Injury: A Systematic Review. *Orthop J Sports Med*. 2017 Aug 23;5(8):2325967117724416.

Brown L, Rothermel S, **Dhawan A**. Recurrent Instability after Arthroscopic Bankart Reconstruction, a Systematic Review of Surgical Technical Factors. *Arthroscopy*. 2017 Nov;33(11):2081-2092.

Datta P, Ozbolat V, Ayan B, **Dhawan A**, Ozbolat. Bone Tissue Bioprinting for Craniofacial Reconstruction. *Biotechnol Bioeng*. 2017 Nov;114(11):2424-2431

Rothermel S, Smuin D, **Dhawan A**. Are Outcomes After Meniscal Repair Age Dependent? A Systematic Review. Submitted. *Arthroscopy*. 2018 Mar;34(3):979-987.

Datta P, **Dhawan A**, Yu Y, Hayes D, Ozbolat I. Bioprinting of osteochondral tissues: A perspective on current gaps and future trends. *International Journal of Bioprinting*, [S.l.], v. 3, n. 2, p. 109-120, July 2017

Leberfingher A, Ravnic D, **Dhawan A**, Ozbolat I. Bioprinting of Stem Cells for Transplantable Tissue Fabrication. *Stem Cells Transl Med*. 2017 Oct;6(10):1940-1948.

Bonazza N, Lewis G, Lukosius E, Roush E, Black K, **Dhawan A**. Effect of Transosseous Tunnels on Patella Fracture Risk after Medial Patellofemoral Ligament Reconstruction: A Cadaveric Study. *Arthroscopy*. 2018 Feb;34(2):513-518.

**Dhawan A**, Brand JC, Rossi MJ, Lubowitz JH. Big Data: Progress or a Big Headache? *Arthroscopy*. 2018 Mar;34(3):649-651

Bonazza N, Liu G, Leslie D, **Dhawan A**. Surgical Trends in Arthroscopic Hip Surgery using a Large National Database. *Arthroscopy*. 2018 Jun;34(6):1825-1830

Arena C, **Dhawan A**. Mini-open Subpectoral Biceps Tenodesis Using a Suture Anchor. *Arthrosc Tech*. 2017 Sep 18;6(5):e1625-e1631.

**Dhawan A**. Arthroscopic Simulation Training Need Not Be Expensive to Be Effective. *Arthroscopy*. 2017 Nov;33(11):2024-2025

Norton R, Honstad C, Joshi R, Silvis M, Chinchilli V, **Dhawan A**. Risk Factors for Elbow and Shoulder Injuries in Adolescent Baseball Players: A Systematic Review. *Am J Sports Med*. 2018 Apr 1:363546518760573.

Black S, Black K, **Dhawan A**, Onks C, Seidenberg P, Silvis M. Pediatric Sports Specialization in Elite Ice Hockey Players. *Sports Health*. 2018 Oct 5:1941738118800446

**Dhawan A**. Will New Technology Improve Outcomes or Are All-Suture Rotator Cuff Surgery Anchors Like a New Set of Golf Clubs? Not a Question for the Biomechanics Lab. *Arthroscopy*. 2018 Oct;34(10):2782-2783

**Dhawan A**. Editorial Commentary: Revision Hip Arthroscopy Provides Clinically Meaningful Improvements. *Arthroscopy*. 2018 Jun;34(6):1869-1870.

Wu Y, Kennedy P, Bonazza N, Yu Y, **Dhawan A**, Ozbolat I. Three-Dimensional Bioprinting of Articular Cartilage: A Systematic Review. *Cartilage*. 2018 Oct 29:1947603518809410. doi: 10.1177/1947603518809410. [Epub ahead of print]

**Dhawan A**, Kennedy P, Rizk E, Ozbolat I. 3D Bioprinting for Bone and Cartilage Restoration in Orthopaedic Surgery. *J Am Acad Orthop Surg*. 2019 Mar 1;27(5):e215-e226.

Kennedy P, Joshi R, **Dhawan A**. The Effect of Psychosocial Factors on Outcomes in Patients with Rotator Cuff Tears: A Systematic Review. *Accepted, Arthroscopy*, March 2019.

Bonazza N, Sterling N, Ba Djibril, Liu Guodong, Leslie D, Hennrikus W, **Dhawan A**. Epidemiology of Surgical Treatment of Adolescent Sports Injuries in the United States: Analysis of the MarketScan Commercial Claims and Encounters Database. *Accepted, Arthroscopy Sports Medicine and Rehabilitation*, February 2019.

Bonazza N, Buechel B, Ba D, Liu G, Leslie D, Onks C, **Dhawan A**. Epidemiology of Adolescent Sports Injury Trends in the United States: Analysis of the MarketScan Commercial Claims and Encounters Database. *Submitted, The Physician and Sportsmedicine*, June 2019

Hacken B, Onks C, Flemming D, Mosher T, Stuck D, Silvis M, Black K, **Dhawan A**. Prevalence of MRI Shoulder Abnormalities in Asymptomatic Professional and Collegiate Ice Hockey Athletes. *Submitted, Orthopaedic Journal of Sports Medicine*, July 2019

### ***Invited Reviews/Non-Peer Reviewed***

Yoshiya S, **Dhawan A**. Cartilage repair techniques in the knee: stem cell therapies. *Curr Rev Musculoskelet Med*. 2015 Sep 15.

**Dhawan A**, Cole B. Restoration of Knee Volume Using Selected Arthroscopic Releases, a review, OrthoSupersite Perspective. *September 24, 2010*

**Dhawan A**, Cole BJ. AAOS Instructional Course Lectures Sports Medicine, Volume 2, 2011. Editorial Commentary, Section 8 Knee Injuries: Cartilage Injuries.

**Dhawan A**, Svoboda SJ, McHale KA. Tibial Malrotation after injury triggers changes in kinetic chain. *BioMechanics* July 2002; 9(7): 63-66.

**Dhawan A**. Trends in Youth and High School Sports. *Points Sports Health*, September 2011.

### ***Textbook Chapters***

**Dhawan A**, Karas V, Cole BJ. Articular Cartilage Injury. In: ACSM's Sports Medicine: A Comprehensive Review. O'Connor FG, Casa DJ, Davis, BA, St.Pierre P, Sallis RE, Wilder RP, Editors. Lipincott Williams & Wilkens,, Philadelphia, 2013.

**Dhawan A**, Bush-Joseph . Patellar Tendon Autograft for Anterior Cruciate Ligament Reconstruction. *Surgical Techniques of the Shoulder, Elbow, and Knee in Sports Medicine*, 2nd Edition. Sekiya JK, Cole BJ Editors. Elsevier-Saunders 2013

**Scientific Presentations/Abstracts and Proceedings:**

**Dhawan A**, Belmont PJ Jr., Kuklo TR, Polly DW Jr. Thoracic Myelopathy Due to Ossification of the Ligamentum Flavum: A Case Report. 43<sup>rd</sup> Annual Meeting, Society of Military Orthopaedic Surgeons, Vail, Colorado, Dec 2001.

**Dhawan A**, Polly DW Jr., Kuklo TR, Bronfman E. Analysis of Iliac Crest Bone graft Process Measures. 43<sup>rd</sup> Annual Meeting, Society of Military Orthopaedic Surgeons, Vail, Colorado, Dec 2001.

**Dhawan A**, Polly DW Jr., Kuklo TR, Bronfman E. Analysis of Iliac Crest Bone graft Process Measures. International Meeting for Advanced Surgical Techniques (IMAST), Montreaux, Switzerland, May 23-25, 2002.

**Dhawan A**, Polly DW Jr., Kuklo TR, Bronfman E. Analysis of Iliac Crest Bone graft Process Measures. Scoliosis Research Society 37<sup>th</sup> Annual Meeting, Seattle, WA, September 19-21, 2002.  
Belmont PJ Jr., Klemme WR, **Dhawan A**, Polly DW Jr: Accuracy of Transpedicular Thoracic Screw Placement In Vivo. 35<sup>th</sup> Annual Meeting, Scoliosis Research Society, Cairns, Australia, Oct.2000

Belmont PJ Jr., Klemme WR, **Dhawan A**, Polly DW Jr: Accuracy of Transpedicular Thoracic Screw Placement. 15<sup>th</sup> Annual Meeting, North American Spine Society, New Orleans,LA,Oct. 2000.

Belmont PJ Jr., Klemme WR, **Dhawan A**, Polly DW Jr: Accuracy of Transpedicular Thoracic Screw Placement 42<sup>nd</sup> Annual Meeting, Society of Military Orthopaedic Surgeons, San Antonio,TX, Dec.2000.

**Dhawan A**, Mourtzikos KA. The Increased Activity of an Identified Neuron, MGI, in *Acheta Domestica*, due to an increase in advancing object size, and to objects approaching at angles at or near 90 degrees. The National Conference for Undergraduate Research, Schenectady, NY, March 1995.

**Dhawan A**. Racial Health Disparities: A Modern Day Black Plague. The National Conference for Undergraduate Research, Schenectady, NY, March 1995.

Ross AE, Farber G, Rose SD, **Dhawan A**. Revision of Ulnar Nerve Transpositions; a retrospective review. SOMOS 44th Annual Meeting, San Diego, California, Dec. 2002.

**Dhawan A**, Klemme WR, Runyon BD, Polly DW Jr.: Thoracic Pedicle Screws: Comparison of Start Points and Trajectories. 44<sup>th</sup> Annual Meeting Society of Military Orthopaedic Surgeons. San Diego, California, Dec 2002.

**Dhawan A**, Doukas WC. Acute Compartment Syndrome of the Foot Following an Ankle Sprain with Disruption of the Anterior Tibial Artery, A Case Report. 44<sup>th</sup> Annual Meeting Society of Military Orthopaedic Surgeons. San Diego, California, Dec 2002.

**Dhawan A**, Klemme WR, Runyon BD, Polly DW. Thoracic pedicle screws: comparison of start points and trajectories. 10th annual International Meeting for Advanced Spine Techniques (IMAST), Rome, Italy, July 10-12, 2003.

**Dhawan A**, Klemme WR, Runyon B, Polly DW. Thoracic pedicle screws: Comparison of start points and trajectories. 2nd Interdisciplinary Congress on Spine Care, World Spine II, Chicago, IL August 10-13, 2003.

**Dhawan A**, Mather RC, Karas V, Ellman M, Bach BR, Cole BJ. An Epidemiological Analysis of Non-Arthroplasty Treatment Modalities in the Management of Osteoarthritis of the Knee. 23<sup>rd</sup> Annual Rush Thesis Day, June 2011

Tetteh ES, **Dhawan A**, Bajaj S, Karas V, Cole BJ, Romeo AA, Verma NN. A Prospective Randomized Trial of Acromioplasty in Patients Undergoing Arthroscopic Rotator Cuff Repair . 30<sup>th</sup> Annual Meeting of the Arthroscopy Association of North America. San Francisco, CA. August 14-16,2011.

**Dhawan A**, Tetteh ES, Bajaj S, Karas V, Cole BJ, Romeo AA, Verma NN. A Prospective Randomized Trial of Acromioplasty in Patients Undergoing Arthroscopic Rotator Cuff Repair. AOSSM 2011 Annual Meeting. San Diego, CA. July 7-10,2011.

Tetteh ES, **Dhawan A**, Bajaj S, Karas V, Cole BJ, Romeo AA, Verma NN. “*A Prospective Randomized Trial of Acromioplasty in Patients Undergoing Arthroscopic Rotator Cuff Repair: Preliminary Results.*” Poster presentation at the European Society for Surgery of the Shoulder and the Elbow (SECEC/ESSSE) Annual Meeting, Lyon, France. September 14-17, 2011

Lenart BA, Van Thiel GS, **Dhawan A**, Freedman R, McGill K, Provencher MT, Cole BJ, Romeo AA, Verma NN. “*MRI Evaluation of Normal Glenoid Height and Width: an Anatomic Study.*” Poster presentation at the European Society for Surgery of the Shoulder and the Elbow (SECEC/ESSSE) Annual Meeting, Lyon, France. September 14-17, 2011

Harwood DP, Lin EC, **Dhawan A**, Gochanour E, Nicholson GP, Cole BJ, Romeo AA, Verma NN. “*Clinical Outcomes of Total Shoulder Arthroplasty in Patients Under the Age of 50.*” Poster presentation at the European Society for Surgery of the Shoulder and the Elbow (SECEC/ESSSE) Annual Meeting, Lyon, France. September 14-17, 2011.

Lin E, **Dhawan A**, Sherman S, McGill K, Provencher M, Nicholson G, Cole B, Verma N, Romeo A. Outcomes of Arthroscopic Rotator Cuff Repairs in patients younger than 50 yrs of age. AAOS Annual Meeting February 2012 – San Francisco, CA

**Dhawan A**, Mather RC, Karas V, Ellman M, Bach BR, Cole BJ. An Epidemiological Analysis of Non-Arthroplasty Treatment Modalities in the Management of Osteoarthritis of the Knee 125th AOA Annual Meeting - Washington, DC June 27-30, 2012.

Conte E, Hyatt A, Gatt CJ, **Dhawan A**. Hamstring Autograft Size Can Be Predicted and is a Potential Risk Factor for ACL Reconstruction Failure: A Systematic Review and Analysis. New Jersey Orthopaedic Society, Bedminister, NJ, March 28, 2014.

Lavery KP, Rasmussen JF, **Dhawan A**. 5 Strand Hamstring Graft for ACL Reconstruction. Rutgers RWJ University Department of Orthopaedics Annual Research Day, June 2014

Conte E, Hyatt A, Gatt CJ, **Dhawan A**. Hamstring Autograft Size Can Be Predicted and is a Potential Risk Factor for ACL Reconstruction Failure: A Systematic Review and Analysis. Rutgers RWJ University Department of Orthopaedics Annual Research Day, June 2014

Lavery KP, Rasmussen JF, **Dhawan A**. 5 Strand Hamstring Graft for ACL Reconstruction. New Jersey Orthopaedic Society, Bedminister, NJ, March 28, 2014.

Hyatt A, Lavery KP, **Dhawan A**. Evaluation of Anchor Biomechanics in the Humeral Greater Tuberosity with and without decortication. . New Jersey Orthopaedic Society, Bedminister, NJ, March 28, 2014

Erickson JE, Lavery KP, Monica J, Gatt CJ, **Dhawan A**. Surgical Treatment of Symptomatic Superior Labrum Anterior to Posterior Tears in Patients 40 yrs or Older. New Jersey Orthopaedic Society, Bedminister, NJ, March 28, 2014.

Hyatt A, Lavery KP, **Dhawan A**. Evaluation of Anchor Biomechanics in the Humeral Greater Tuberosity with and without decortication. Eastern Orthopaedic Association Annual Meeting, Amelia Island, FL. October 22-25, 2014

Erickson JE, Lavery KP, Monica J, Gatt CJ, **Dhawan A**. Surgical Treatment of Symptomatic Superior Labrum Anterior to Posterior Tears in Patients 40 yrs or Older. Eastern Orthopaedic Association Annual Meeting, Amelia Island, FL. October 22-25, 2014

**Dhawan A**, Erickson J, Lavery K, Monica J, Gatt C. Surgical Treatment of Symptomatic Superior Labrum Anterior-Posterior Tears in Patients Older Than 40 Years: A Systematic Review. American Academy of Orthopaedic Surgeons Annual Meeting 2015, Las Vegas, Nevada. March 25-29,2015.

**Dhawan A**, Rothermel S, Brown A. Recurrent instability after Arthroscopic Bankart Reconstruction: MetaAnalysis of Surgical Technical Factors. Accepted, 2016 AAOS Annual Meeting, March 1-5,2016, Orlando, Florida

Bonnazza N, Smuin D, Silvis M, Onks C, **Dhawan A**. Reliability, Validity and Injury Predictive Value of the Functional Movement Screen: a MetaAnalysis. 2016 AAOS Annual Meeting., March 1-5, Orlando,Florida

Bonazza N, Liu G, Leslie D, **Dhawan A**. Surgical Trends in Arthroscopic Hip Surgery using a Large National Database. 2017 AAOS Meeting, March 14-18, San Diego, CA

Bonazza N, Liu G, Leslie D, **Dhawan A**. Trends in Surgical Management of Shoulder Instability using a Large National Database. 2017 AANA Meeting, May 18-20, Denver, CO

Lukosius E, Bonazza E, Lewis G, Roush E, Black K, **Dhawan A**. Effect of Patellar Tunnel Placement on Fracture Risk After MPFL Reconstruction: A Cadaveric Study. 2017 AANA Annual meeting, May 18-20, Denver, CO

Lukosius E, Bonazza E, Lewis G, Roush E, Black K, **Dhawan A**. Effect of Patellar Tunnel Placement on Fracture Risk After MPFL Reconstruction: A Cadaveric Study. 2017 AOSSM Annual meeting, July 20-23, Toronto, Canada

Bonazza N, Liu G, Leslie D, Dhawan A. Surgical Trends in Arthroscopic Hip Surgery using a Large National Database. 2017 AOSSM Annual meeting, July 20-23, Toronto, Canada

Black S, Silvis M, Black K, **Dhawan A**. Early Pediatric Sports Specialization in Professional Ice Hockey Players. 2017 AMSSM Annual Meeting, May 8-13, San Diego, CA

Norton R, Honstad C, Joshi R, Silvis M, **Dhawan A**. Risk Factors for Shoulder and Elbow Injuries in Youth Baseball Pitchers. 2017 Buchanan Memorial Lecture Day, June 9, Hershey,PA

Chiarappa F, Erickson J, Haskel J, Monica J, **Dhawan A**. Biomechanical Comparison of a First and Second Generation All Soft Suture Anchor. 2017 AANA Annual meeting, May 18-20, Denver, CO

**Dhawan A**, Bonazza N, Homcha B, Liu G, Leslie D. Surgical Trends in Hip Arthroscopy using a Large National Database. 48<sup>th</sup> Annual Eastern Orthopaedic Association Annual Meeting. October 18-21, 2017. Miami Beach, FL.

Black S, **Dhawan A**, Seidenberg P, Onks C, Black K, Silvis M. Sports Specialization in Professional and Collegiate Hockey Players. 2018 AAOS Annual Meeting. March 6-10, 2018. New Orleans, LA.

Bonazza N, Sterling N, Liu G, Leslie D, **Dhawan A**. Epidemiology of Surgical Treatment of Adolescent Sports Injuries in the United States: Analysis of the MarketScan Commercial Claims and Encounters Database. 2018 AAOS Annual Meeting. March 6-10, 2018. New Orleans, LA

**Dhawan A**, Bonazza N, Sterling N, Liu G, Leslie D. Epidemiology of Adolescent Sports Injury Trends in the United States: Analysis of the MarketScan Commercial Claims and Encounters Database. Magellan Society Meeting, Auchterarder, Perthshire, Scotland. May 5-8, 2018

Ridenour R, Ba D, Liu G, Aynardi M, Garner M, Bible J, **Dhawan A**. Opioid use, Perioperative Risks, and Associated Postoperative Complications with Arthroscopic Knee Surgery. 2019 AAOS Annual Meeting. March 12-16, 2019. Las Vegas, NV.

Ridenour R, Ba D, Liu G, Aynardi M, Garner M, Bible J, **Dhawan A**. Opioid use, Perioperative Risks, and Associated Postoperative Complications with Arthroscopic Knee Surgery. 2019 AANA Annual Meeting. May 2-4, 2019. Orlando,FL

Ridenour R, Ba D, Liu G, Aynardi M, Garner M, Bible J, **Dhawan A**. Opioid use, Perioperative Risks, and Associated Postoperative Complications with Arthroscopic Hip Surgery. 2019 AANA Annual Meeting. May 2-4, 2019. Orlando, FL

**Peer Reviewed Research Grants:**

**Ongoing Research Support**

**Congressionally Directed Medical Research Programs (CDMRP) 7/1/2018-12/1/2019**

Title: Magnetically Actuated Therapy for Bone Regeneration

Role: Co-Investigator

Amount: \$312,808

**REVOTEK 04/15/2017-04/14/2018**

Title: Scaffold-free Bioprinting of Zonally-Stratified Articular Cartilage

Role: Co-Investigator

Amount: \$158,210

**Woodward Family Foundation in Biomedical Engineering July 2019**

Title: Mechanobiological Deficits in Allograft ACL Reconstructions

Role: Co-Principal Investigator

Amount: \$50,000

**Penn State University Orthopaedic Research Investigator Program Grant July 2018**

Title: Mechanobiological Deficits in Allograft ACL Reconstructions

Role: Co-Investigator

Amount: \$20,000

**Penn State University Orthopaedic Research Mini-Project Grant March 2018**

Title: Opioid Use, Perioperative Risks, and Associated Complications in Orthopaedic Surgery

Role: Principal Investigator

Amount: \$15,000

**Penn State University Orthopaedic Research Initiation Grant August 2017**

Title: Effect of Smoking vs Nicotine vs Control on tendon healing utilizing a rat model

Role: Principal Investigator

Amount: \$15,000

**Cervical Spine Research Society New Investigator Grant August 2018**

Title: The Effect of Cigarette Smoke vs Vaporized Nicotine on a Spine Fusion Model

Role: Co-Investigator

Amount: \$25,000

**Smith and Nephew Advanced Surgical Devices Research Grant Dhawan 08/01/13-07/31/14**

Evaluation of Anchor Biomechanics in the al Greater Tuberosity with and without decortication.

Determine the effect of greater tuberosity decortication on pullout biomechanics of rotator cuff suture anchors

Role: PI

Amount: \$16,000

**Penn State University Orthopaedic Research Initiation Grant December 2014 – December 2017**

Title: Surgical trends and current practice patterns in the United States: 1) Anterior Shoulder Stabilization, 2) Hip Arthroscopy, 3) Multiligament Knee Reconstruction: Analysis of data from the MarketScan Commercial Claims and Encounters Database. Role: Principal Investigator

Amount: \$12,387

**Penn State University Orthopaedic Research Initiation Grant 6/1/2016 – 7/31/2019**

Title: Epidemiology of youth sports injuries and surgical treatment trends in the United States: Analysis of the MarketScan Commercial Claims and Encounters Database  
Role: Principal Investigator  
Amount: \$5,364

**Penn State University Orthopaedic Research Initiation Grant August 2016**

Title: The Prevalence of Shoulder Abnormalities on MRI in Asymptomatic Professional and Collegiate Hockey Players  
Role: Principal Investigator  
Amount: \$15,000

**Penn State University Pathways to Partnership (P3) May 2015**

Project Title: Exploiting surface nanotopography to promote integration of synthetic grafts for soft tissue reconstruction  
Role: Principal Investigator  
Amount: \$5000

**Penn State University Orthopaedic Miniprogram Grant Jan 2019**

Title: The therapeutic and analgesic effects of THC and CBD, the major constituents of Cannabis, on tendon to tendon healing utilizing a Sprague Dawley rat achilles surgical repair model  
Role: Principal Investigator  
Amount: \$8000

**Pending Research Support:**

**NIH R21 Grant Program**

Title: Mechanobiological Deficits in Allograft ACL Reconstructions  
Role: Co-Investigator  
Amount: \$138,000

**NIH R21 Grant Program**

Title: 3-D Printed MiRNA Mimic Gradients for Directed Osteochondral Interface Formation  
Role: Co-Investigator  
Amount: \$434,002

**NIH R21 Grant Program**

Title: Improving Osteointegration in 3D Printed Degradable Metal Grafts  
Role: Co-Investigator  
Amount: \$632,213

**Orthopaedic Trauma Association Grant**

Title: The Effect of Cigarette Smoke vs. Vaporized Nicotine on Healing of a Rat Femur  
Role: Co-Primary Investigator  
Amount: \$25,000

**AOA Affiliations:**

**AOA Emerging Leaders Program**

**American Orthopaedic Association, 2015 Emerging Leaders Program Webinar Workgroup**  
Sept 2014-Jan 2016

**AOA Member**  
Inducted 2016



**CORD Affiliate Institution** - Penn State Hershey Medical Center/Penn State Health

**AOA Leadership Immersion Series** at the University of Chicago Booth School Sept 2015

**Membership/Leadership Positions:**

**Professional Society Memberships:**

American Academy of Orthopaedic Surgeons

Arthroscopy Association of North America

American Orthopaedic Society for Sports Medicine

American Orthopaedic Association

Eastern Orthopaedic Association

Orthopaedic Research Society

**Committee Appointments:**

**Penn State Center for Orthopaedic Translational Sciences (CORTS) Research Committee** 2018- Present

**EOA Program Committee** 2017

**AOSSM Self Assessment Committee** 2012-2016

**AOSSM Publications Committee** 2017-Present

**Arthroscopy Association of North America, Research Committee** April 2014-May 2019

**Arthroscopy Association of North America, Development Committee** May 2019 - Present

**Editorial Responsibilities**

**Associate Editor**

Jan 2015 - Present

*Arthroscopy: The Journal of Arthroscopic and Related Surgery*

**Editorial Board**

Copyright 2011

*AAOS Instructional Course Lectures Sports Medicine 2*

*Section 8: Knee Injuries*

**Section Editor: Cartilage Repair Techniques in the Knee (Dec 2015 Issue)** Dec 2015

*Current Reviews in Musculoskeletal Medicine*

**Editorial Board**

*Sports Medicine and Arthroscopy Review*

**Editorial Board**

*Current Reviews in Musculoskeletal Medicine*

**Editorial Board**

*Orthopaedic Journal of Sports Medicine*

**Principal Reviewer**

*American Journal of Sports Medicine*

***Honors and Awards:***

<b><i>2017 AOSSM-APKASS Travelling Fellowship</i></b>	April 2017
<b><i>Host – 2019 ESSKA-AOSSM Travelling Fellowship</i></b>	July 2019
<b><i>EOA/OREF Resident/Fellow Award</i></b> <i>EOA 45<sup>th</sup> Annual Meeting, Amelia Island, FL</i> <i>“Suture Anchor Behavior In The Setting Of</i> <i>Rotator Cuff Footprint Decortication”</i>	Oct 2014
<b><i>American Orthopaedic Association (AOA) Emerging Leader</i></b>	Oct 2009
<b><i>2008 Arthroscopy Association of North America</i></b> <b><i>Advanced Arthroscopy Travelling Fellowship</i></b>	April 2008
<b><i>Meritorious Service Medal</i></b> For exemplary performance of duty providing unparalleled patient care abilities, professionalism, and devotion to soldiers	June 2010
<b><i>Army Achievement Medal</i></b> Meritorious achievement while providing outstanding leadership, selfless service and exceptional performance above and beyond the call of duty in response to the 5 November 2009 tragedy at Ft.Hood	November 2009
<b><i>Meritorious Service Medal,</i></b> Graduation award for exceptional performance during Orthopaedic Surgery Residency, Walter Reed Army Medical Center Orthopaedic Surgery Residency Program	June 2005
<b><i>Army Achievement Medal,</i></b> Outstanding achievement in research as an Orthopaedic Surgery Resident	May 2004
<b><i>Army Commendation Medal,</i></b> Meritorious service as Chief of Orthopaedics, Operation Iraqi Freedom TF 21 Med Camp Bucca, Iraq	October 2006
<b><i>Medical School Graduation Honors,</i></b> Rank in the Top 1/3 of Class of 1999 Albany Medical College	May 1999
<b><i>F. Edward Hébert Health Professions Scholarship</i></b>	August 1995
<b><i>Iraq Campaign Medal</i></b>	October 2006
<b><i>Global War on Terrorism Ribbon</i></b>	October 2006
<b><i>National Defense Service Ribbon</i></b>	August 1996
<b><i>Army Service Ribbon</i></b>	August 1996

**Community Service/Team Coverage Experience**

AHL Hockey – Hershey Bears (Washington Capitals Affiliate)	August 2014-Present
Double A Minor League Baseball – Harrisburg Senators (Washington Nationals Affiliate)	August 2014-Present
Lebanon Valley College – Division III	August 2014- Present
Penn State Harrisburg – Division III	August 2014 - Present
United States (US) Rowing, Team Physician	June 2012-Jul 2014
Manalapan High School, Team Physician	July 2012-Jul 2014
Freehold High School, Team Physician	July 2012-Jul 2014
NBA Basketball – Chicago Bulls, Assistant Team Physician	Aug 2010 - Jul 2011
MLB Baseball – Chicago White Sox, Assistant Team Physician	Aug 2010 - Jul 2011
DePaul University Athletics, Assistant Team Physician	Aug 2010 - Jul 2011
USHL Ice Hockey - Chicago Steel, Assistant Team Physician	Aug 2010 - Jul 2011
Morton High School Football, Team Physician	Aug 2010 – Jul 2011
Illinois Gymnastics Institute Chicago Meet 2011, Team Physician	Feb 2011
Chicago Chaos Semiprofessional Football, Assistant Team Physician	July 2011