### THOMAS J. NOONAN

## **CURRENT POSITION:**

UC Health Steadman Hawkins Clinic Denver 8200 East Belleview Avenue, Suite 615 Greenwood Village, CO 80111 Thomas.noonan@ucdenver.edu

Fax: 303-694-9666

## EDUCATION:

Princeton University, BSE, Civil Engineering and Operations Research, June 1988

Duke University School of Medicine, Doctor of Medicine, May 1992

## INTERNSHIP:

General Surgery - Duke University Medical Center, Durham, NC 1992-94

#### RESIDENCY:

Orthopedic Surgery - Duke University Medical Center, Durham, NC, 1994-98

## FELLOWSHIP:

Sports Medicine - Steadman Hawkins Clinic, Vail, CO, 1998-99

## ACADEMIC APPOINTMENTS:

Assistant Professor, Department of Orthopedic Surgery, University of Colorado School of Medicine, 2016-present

Adjunct Associate Professor of Bioengineering in the Department of Mechanical and Materials Engineering, University of Denver, 2011-present

Assistant Clinical Professor, Department of Family Medicine, University of Colorado Denver School of Medicine, 2012-present

## BOARD CERTIFICATION:

# American Board of Orthopedic Surgery Certificate of Added Qualification in Sports Medicine

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## HONORS/AWARDS:

## **Duke University Orthopedic Surgery Residency Program:**

J. Leonard Goldner Award for Outstanding Research

## **Duke University School of Medicine:**

The Dean's Recognition Award for Academic Achievement, 1992 Alpha Omega Alpha, 1990 Mary W. and Foster G. McGaw Merit Scholarship, 1988-92 McGraw-Hill Achievement Award for Top Academic Standing in First Year Class, 1989

## **Princeton University:**

Summa Cum Laude, 1988
Phi Beta Kappa, 1988
National Merit Scholarship, 1984-88
Tau Beta Pi, National Engineering Honor Society - vice-president, 1987-88
Sigma Xi, Scientific Research Society, 1988

Joseph Clifton Elgin Prize - to that person who has done the most to advance the interests of the School of Engineering and Applied Science in the community at large, 1988

W. Mack Angus Prize - to the outstanding student in the Department of Civil Engineering and Operations Research Charles W. Caldwell Scholarship for Advanced Education - given to a senior athlete J. Rich Steers Award, 1987.

#### **ACTIVITIES:**

#### **Current:**

Medical Director – Colorado Rockies Major League Baseball Club Team Physician – Valor Christian High School Assistant Editor- *Journal of Shoulder and Elbow Surgery*, 2008- Present Reviewer- *Physical Therapy in Sport*, 2014-present Reviewer- *Physician and Sports Medicine*, 2015-present Reviewer- *Scientific Reports*, 2020-present UCL Study Group, founding member Orthopedic Research and Education Foundation (OREF) research grant reviewer, 2016-present

Committee member, Finance Committee, University of Colorado Department of Orthopedic Surgery, 2019

Committee Member. Sports Medicine Governance Committee, University of Colorado, 2017-present

Medical Executive Committee, UC Health Inverness Orthopedics and Spine Surgery Center

Quality Assurance Committee, UC Health Inverness Orthopedics and Spine Surgery Center

Program Evaluation Committee, UC Health Steadman Hawkins Clinic Denver Sports Medicine Fellowship Program

Board of Directors, Hawkins Society

#### Past:

President, Executive Committee – Major League Baseball Team Physicians Association

Medical Director, UC Health Steadman Hawkins Clinic Denver, 2016-17 Member - MLB Injury Surveillance System (ISS) Committee, 2010-16

Moderator/organizer: Major League Baseball Team Physicians

Association National Meeting, Nashville, TN, 2007.

Surgeon Advisor, iBalance Medical 2004-2010

Assistant team physician - Denver Broncos

Assistant team physician - United States Ski Team

Assistant team physician - Duke University 1994-1998

Assistant team physician- North Carolina Central University, 1994-96

Reunion Chairman - Duke University School of Medicine Class of 1992 5<sup>th</sup>

Year Reunion

Medical Alumni Association, Student Representative, 1990-92

Princeton University Varsity Football, 1984-87

#### MEDICAL ASSOCIATIONS:

American Academy of Orthopedic Surgeons
American Orthopedic Society of Sports Medicine
American Shoulder and Elbow Surgeons
Arthroscopy Association of North America
Major League Baseball Team Physicians Association
Rocky Mountain Shoulder and Elbow Society
Hawkins Society
Colorado Medical Society

### **INVITED LECTURES:**

- **1. Noonan TJ**: The Diagnosis and Treatment of Sports Injuries. Columbia Medical Society, Columbia, SC, November, 2001.
- **2. Noonan TJ:** Elbow Injuries in the Throwing Athlete, EBI Sports Medicine Seminar, Colorado Springs, CO, July, 2002.
- **3. Noonan TJ**: Degenerative Biceps Lesions in Throwing Athletes. Major League Baseball Team Physicians Association Annual Meeting, New Orleans, LA, December, 2003.
- **4. Noonan TJ:** The Diagnosis and Management of Ulnar Collateral Ligament of the Elbow, Injury Prevention and Treatment Techniques Baseball Medicine Conference, Baltimore, MD, January, 2004.
- **5. Noonan TJ:** Shoulder Injuries in the Overhead Athlete, Steadman Hawkins Clinic Denver Symposium on Injuries of the Shoulder and Elbow in the Throwing Athlete, Denver, CO, February, 2004.
- **6. Noonan TJ:** Degenerative Biceps Lesions in Throwing Athletes. Professional Baseball Athletic Trainers Society Spring Meeting, Tucson, AZ, March, 2004.
- **7. Noonan TJ:** The Diagnosis and Treatment of Ulnar Collateral Ligament Injuries of the Elbow, Combined Meeting of the Rocky Mountain and Western Slope Chapters of the Western Orthopedic Association, Annual Summer Meeting, Avon, CO, August 6-7, 2004.
- **8. Noonan TJ:** The Biomechanics of Throwing, Injury Prevention and Treatment Techniques, Baseball Medicine Conference, Denver, CO, January, 2005.
- **9. Noonan TJ:** Degenerative Biceps Lesions in Throwing Athletes, Injury Prevention and Treatment Techniques, Baseball Medicine Conference, Denver, CO, January, 2005.
- **10. Noonan TJ:** Elbow Arthroscopy Pearls, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Vail, CO, June 2006.
- **11. Noonan TJ:** Controversies in the Overhead Throwing Athlete, Steadman Hawkins Annual Fellows Meeting, Vail, CO, December, 2006.
- **12. Noonan TJ:** Elbow Problems in the Throwing Athlete, Rocky Mountain Athletic Trainers Association Annual Meeting, Denver, CO, May 2007.
- **13. Noonan TJ:** Pediatric ACL Injuries, Rocky Mountain Athletic Trainers Association Annual Meeting, Denver, CO, May 2007.

- **14. Noonan TJ:** Internal Impingement in the Throwing Athlete, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Boulder, CO, July, 2007.
- **15. Noonan TJ:** Internal Impingement in the Throwing Athlete, University of Colorado Sports Medicine Symposium, Boulder, CO, September, 2007.
- **16. Noonan TJ:** The Biomechanics of Hitting, AOSSM/MLB Combined Meeting on Baseball Medicine, Los Angeles, CA, October, 2007.
- **17. Noonan TJ:** Knee Collateral Ligament Injuries in Baseball, AOSSM/MLB Combined Meeting on Baseball Medicine, Los Angeles, CA, October, 2007.
- **18. Noonan TJ:** Moderator, Shoulder Injuries in MLB Professional Pitchers, Major League Baseball Team Physicians Association Annual Meeting, Nashville, TN, December 2007.
- **19. Noonan TJ:** Elbow Injuries in the Overhead Throwing Athlete, Baseball Medicine Conference, St. Louis, MO, January 2008.
- **20. Noonan TJ**: UCL Injuries in the Throwing Athlete, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Aspen, CO, August 2008.
- **21. Noonan TJ:** Surgical Treatment of the Shoulder in the Elite Throwing Athlete, Hawkins Society Annual Meeting, Hilton Head, SC, May 2009.
- **22. Noonan TJ:** Patellofemoral Instability, Steadman Hawkins of the Carolinas 6<sup>th</sup> Annual Sports Medicine Symposium, Spartanburg, SC, June 2009.
- **23. Noonan TJ:** Diagnosis and Treatment of UCL Injuries of the Elbow, Steadman Hawkins of the Carolinas 6<sup>th</sup> Annual Sports Medicine Symposium, Spartanburg, SC, June 2009.
- **24. Noonan TJ:** Diagnosis and Treatment of Injuries of the Throwing Shoulder, Steadman Hawkins of the Carolinas 6<sup>th</sup> Annual Sports Medicine Symposium, Spartanburg, SC, June 2009.
- **25. Noonan TJ**: Update on UCL Injuries in the Elite Throwing Athlete, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Beaver Creek, CO, August 2009.
- **26.** Noonan TJ: Outcomes of Shoulder Surgery in the Elite Throwing Athlete, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Beaver Creek, CO, August 2009.
- **27. Noonan TJ**: Elbow Injuries in the Throwing Athlete, Rocky Mountain Athletic Trainers Association Annual Meeting, Denver, CO, April 2010.

- **28. Noonan TJ:** Internal Impingement in the Throwing Athlete, University of Colorado Sports Medicine Symposium, Boulder, CO, September, 2010.
- **29. Noonan TJ:** The Diagnosis and Treatment of Ulnar Collateral Ligament Injuries, University of Colorado Sports Medicine Symposium, Boulder, CO, September, 2010.
- **30. Noonan TJ:** Internal Impingement in the Throwing Athlete, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Beaver Creek, CO, August, 2011.
- **31. Noonan TJ:** Bicep Tenotomy versus Tenodesis, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Beaver Creek, CO, August, 2011.
- **32. Noonan TJ:** Technique: UCL Reconstruction of the Elbow, Rocky Mountain Shoulder and Elbow Society Annual Meeting, Beaver Creek, CO, August, 2011.
- **33. Noonan TJ:** Controversies in the Throwing Athlete, Current Topics in Sports Medicine, CACTIS Foundation, Scottsdale, AZ, March 17, 2012.
- **34. Noonan TJ:** Internal Impingement of the Shoulder and Proximal Bicep Tendon Injuries, Topics in Sports Medicine 2012, University of Denver, May 7, 2012, Denver, CO.
- **35. Noonan TJ:** Evaluation of the Shoulder in the Throwing Athlete, San Diego Shoulder Institute Annual Meeting, San Diego, CA, June 2013.
- **36. Noonan TJ:** UCL Injuries and Internal Impingement of the Shoulder: an MLB Perspective, Clinical Orthopedic Society, Colorado Springs, CO, September 2014.
- **37. Noonan TJ**: Lessons Learned in Major League Baseball, Hawkins Society, Hilton Head, SC, May 2015.
- **38. Noonan TJ:** Predicting Injury Risk in Professional baseball Players, Hawkins Society, Hilton Head, SC, May 2016.
- **39. Noonan TJ:** Lessons learned in 15 years as an MLB team physician, CU Sports Medicine Symposium, Boulder, CO, October 2016.
- **40. Noonan TJ:** Predicting injury in the throwing athlete, CU Sports Medicine Symposium, Boulder, CO, October 2016.

- **41. Noonan TJ:** Nonsurgical treatment of UCL Injuries, Lewis Yocum Memorial Lecture, Major League Baseball Team Physicians Association Annual Meeting, Orlando, FL, December 2017.
- **42. Noonan TJ:** Rotator Cuff Injuries in Throwers, 3<sup>rd</sup> Annual Baseball Sports Medicine Game Changing Concepts, New York, NY, November 2018.
- **43. Noonan TJ:** Partial Tears and Non-operative Treatment of UCL Tears, 3<sup>rd</sup> Annual Baseball Sports Medicine Game Changing Concepts, New York, NY, November 2018.
- **44. Noonan TJ:** UCL Injury Update: Revision UCL Reconstruction and UCL Repair, Hawkins Society Annual Meeting, Hilton Head Island, SC, May 2019.
- **45. Noonan TJ:** Rotator Cuff Injuries in Throwers, 4th Annual Baseball Sports Medicine Game Changing Concepts, New York, NY, November 2019.
- **46. Noonan TJ:** Non-operative Treatment of UCL Tears, 4<sup>th</sup> Annual Baseball Sports Medicine Game Changing Concepts, New York, NY, November 2019.
- **47. Noonan TJ:** Treatment of Biceps Problems in Throwers, 4<sup>th</sup> Annual Baseball Sports Medicine Game Changing Concepts, New York, NY, November 2019.
- **48. Noonan TJ:** Treatment of Knee Cartilage Injuries, 4<sup>th</sup> Annual Baseball Sports Medicine Game Changing Concepts, New York, NY, November 2019.
- **49. Noonan TJ:** Treatment of UCL tears: Who needs surgery, CU Sports Medicine Symposium, Boulder, CO, 2020.
- **50. Noonan TJ:** Biceps treatment: Let it Fly!, CU Sports Medicine Symposium, Boulder, CO, 2020.

#### RESEARCH PRESENTATIONS:

- 1. **Noonan TJ**, Best TM, Reddy AS, Garrett WE Jr.: Identification of a threshold for skeletal muscle injury. American Orthopedic Society for Sports Medicine. San Diego, CA, 1992.
- 2. **Noonan TJ**, Best TM, Seaber AV, Garrett WE Jr.: Temperature effects on skeletal muscle mechanics. Orthopedic Research Society. Washington, DC, 1992.

- 3. **Noonan TJ**, Reddy AS, Best TM, Garrett WE Jr.: Identification of a threshold for injury to skeletal muscle during passive loading. Orthopedic Research Society, San Francisco, CA, 1993.
- 4. **Noonan TJ**, Garrett WE Jr.: The effect of direction change on gastrocnemius activation and its relation to muscle strain injury. American Orthopedic Association Residents' Conference, Pittsburgh, PA, 1995.
- 5. **Noonan TJ**, Garrett WE Jr.: The patellar tendon-tibial shaft angle and its relation to non-contact injury of the ACL. American Academy of Orthopedic Surgeons, Atlanta, GA, 1996.
- 6. **Noonan TJ**, Garrett WE Jr.: A biomechanical evaluation of a passive stretch preconditioning routine. American Orthopedic Association Residents' Conference, Baltimore, MD, 1996.
- 7. **Noonan TJ**, Garrett WE Jr.: The patellar tendon-tibial shaft angle and its relation to non-contact injury of the ACL. American Orthopedic Association Residents' Conference, New York, New York, 1997.
- 8. **Noonan TJ**, Garrett WE Jr.: The effect of bone bruising on ACL-reconstruction rehabilitation. American Academy of Orthopedic Surgeons, New Orleans, LA, 1998.
- 9. **Noonan TJ**, Garrett WE Jr.: The patellar tendon-tibial shaft angle and its relation to non-contact injury of the ACL. Steadman Hawkins Fellows Meeting, Vail, CO, 1998.
- 10. **Noonan TJ**, Garrett WE Jr.: The effect of bone bruising on ACL-reconstruction rehabilitation. Steadman Hawkins Fellows Meeting, Vail, CO, 1998.
- 11. **Noonan TJ**, Horan M, Hawkins RJ: Thermal Capsulorrhaphy in the Treatment of Shoulder Instability. Hawkins Society Annual Meeting, Hilton Head, SC, 1999.
- 12. **Noonan TJ**, Briggs K, Hawkins RJ: Laser Thermal Capsulorrhaphy in the Treatment of Shoulder Instability. Steadman Hawkins Fellows Meeting, Vail, CO, 1999.
- 13. **Noonan TJ**, Briggs K, Hawkins RJ: Outcomes of Shoulder Instability Treated with Laser Thermal Capsulorrhaphy. American Orthopedic Society for Sports Medicine Specialty Day, Orlando, FL, 2000.
- 14. **Noonan TJ**, Briggs K, Hawkins RJ: Outcomes of Shoulder Instability Treated with Laser Thermal Capsulorrhaphy. 2<sup>nd</sup> Biennial Shoulder and Elbow Meeting AAOS/ASES, Miami, FL, 2000.

- 15. **Noonan TJ**, Horan M, Hawkins RJ: Outcome of subscapularis ruptures with and without prior surgical treatment. Steadman Hawkins Fellows Meeting, Vail, CO, 2000.
- 16. **Noonan TJ**, Horan M, Hawkins RJ: Outcome of subscapularis ruptures with and without prior surgical treatment. American Academy of Orthopedic Surgeons, San Francisco, CA, 2001.
- 17. Krishnan SG, Hawkins RJ, Karas SG, Horan MP, **Noonan TJ**: "Electrothermal Arthroscopic Shoulder Capsulorrhaphy: A Minimum 2-Year Follow-Up." American Academy of Orthopedic Surgeons, 70<sup>th</sup> Annual Meeting, AOSSM/COMSS Society, February 3 9, 2003, New Orleans, LA.
- 18. **Noonan TJ:** Rib Stress Fractures in a Professional Baseball Pitcher, Major League Baseball Team Physicians Association Annual Meeting, Anaheim, CA, December, 2004.
- 19. **Noonan TJ:** Toradol Use in Professional Athletes, Major League Baseball Team Physicians Association Annual Meeting, Dallas, TX, December, 2005.
- Noonan TJ: Pulmonary Embolism in a Professional Baseball Pitcher, Major League Baseball Team Physicians Association Annual Meeting, Dallas, TX, December, 2005.
- 21. **Noonan TJ**, Torry MR, Decker MJ, M Sabick, et al: Forces at the Shoulder During the Baseball Pitch in Youth and Professional Baseball Throwers, American College of Sports Medicine, Denver, CO, May, 2006.
- 22. Christoforetti JJ, Michener TA, Hardin JW, Noonan TJ, Philippon MJ, Singleton SB, and Hawkins RJ: The Thrower's Hip: Femoroacetabular Impingement Testing Results and Prevalence of Femoral Head Asphericity in Asymptomatic Professional Baseball Players, AOSSM Annual Meeting, Orlando, FL, July 2008. (Awarded Aircast Award for Clinical Science).
- 23. Byram IR, Bushnell BB, Dugger K, Charron K, Harrell FE, and **Noonan TJ**: Preseason Shoulder Strength Measurements in Professional Baseball Pitchers: Identifying Players at Risk for Injury Requiring Surgery, AOSSM Annual Meeting, Keystone, CO, July 2009.
- 24. Byram IR, Bushnell BB, Dugger K, Charron K, Harrell FE, and **Noonan TJ**: Preseason Shoulder Strength Measurements in Professional Baseball Pitchers: Identifying Players at Risk for Injury Requiring Surgery, Major League Baseball Team Physicians Association Annual Meeting, Indianapolis, IN, December 2009.

- 25. Byram IR, Bushnell BB, Dugger K, Charron K, Harrell FE, and **Noonan TJ**: Preseason Shoulder Strength Measurements Can Predict Injury in Professional Baseball Pitchers, AAOS Annual Meeting, New Orleans, LA, March 2010.
- 26. Noonan TJ, Bushnell BD, Anz AW, Torry MR, Hawkins RJ: Correlation of Torque and Velocity with Elbow Injury in Professional Baseball Pitchers, Biennial AAOS/ASES Shoulder and Elbow Meeting, Miami, FL, April 2010.
- 27. Sweitzer, BA, Wyland, DJ, Hawkins, RJ, Thigpen,C, Shanley, E, Stranges, G, **Noonan, T**: Professional Pitchers With A History of SLAP Repair Have Less Glenoid Retroversion. Southern Orthopedic Association. June 18, 2010, Fajardo, Puerto Rico.
- 28. Anz AW, Bushnell BD, **Noonan TJ,** Torry MR, Hawkins RJ: The Association of Maximum Pitch Velocity and Elbow Injury in Professional Baseball Pitchers, American Orthopedics Society for Sports Medicine, Providence, RI, July 2010.
- 29. Sweitzer BA, Thigpen CA, Shanley E, Stranges G, Weinke J, Storey T, **Noonan TJ**, Hawkins RJ, Wyland DJ: Professional Pitchers with a History of SLAP Repair have Less Glenoid Retroversion, American Orthopedics Society for Sports Medicine, Providence, RI, July 2010.
- 30. **Noonan TJ:** Prospective Evaluation of Shoulder and Elbow Range of Motion in Adolescent and Professional Pitchers, Major League Baseball Team Physicians Association Annual Meeting, Nashville, TN, December 2012.
- 31. **Noonan TJ**, Ford G, Genuario J, Kinkartz J, Githens T, Murayama S: Return to Play After Nonsurgical Treatment of Elbow UCL Injuries in Professional Baseball Players, American Shoulder and Elbow Surgeons Closed Meeting, Las Vegas, NV, October 2013.
- 32. **Noonan TJ**, Thigpen CT, Shanley E: The relationship between humeral torsion and arm injury in professional pitchers, Major League Baseball Team Physicians Association Annual Meeting, San Diego, CA, December 2014.
- 33. Mayer BK, Shanley E, Thigpen CT, **Noonan TJ**: Decreased lower extremity functional movement scores as a predictor for elbow injury in professional baseball pitchers, American Shoulder and Elbow Surgeons Specialty Day, Las Vegas, NV, March 2015.
- 34. Kissenberth MJ, Thigpen CA, Bailey LB, Wyland DJ, **Noonan TJ**, Shanley E: Differences in Pitchers' UCL Morphology and Elbow gapping following reconstruction. Southern Orthopedic Association, Annual Meeting, Asheville, NC, 2015.

- 35. **Noonan TJ,** Thigpen CA, Bailey LB, Wyland DJ, Kissenberth MJ, Hawkins RJ, Shanley E: Humeral torsion as a prospective risk factor for shoulder and elbow injury in professional baseball pitchers. AOSSM Annual Meeting, Orlando, FL, July 2015.
- 36. Thigpen CA, Bailey LB, Kissenberth MJ, **Noonan TJ**, Hawkins RJ, Shanley E, Effectiveness of a Preseason Prevention Program on Arm Injury Risk Factors: A Randomized Control Trial in Adolescent Pitchers. AOSSM Specialty Day, Orlando, FL, March 2015.

## INSTRUCTIONAL COURSE LECTURES:

- 1. Freehill M, **Noonan TJ**, Ryu R, Provencher M, Holy Grail: Getting Overhead Athletes Back Successfully, Arthroscopy Association of North America, Denver, CO, May 2017.
- 2. Freehill M, **Noonan TJ**, Ryu R, Tokish J, Holy Grail: Getting Overhead Athletes Back Successfully, Arthroscopy Association of North America, Chicago, Illinois, May 2018.

#### VIDEOS:

**Noonan TJ**, Hawkins RJ: "Latissimus Dorsi Transfer for the Treatment of Massive Rotator Cuff Tears." The American Academy of Orthopedic Surgeons 67<sup>th</sup> Annual Meeting, March 15-19, 2000, Orlando, Florida.

#### POSTERS:

- Karas, SG, Noonan TJ, Horan, MP, Hawkins RJ: "Electrothermal Arthroscopic Shoulder Capsulorrhaphy: A Minimum Two-Year Follow-Up." American Academy of Orthopedic Surgeons, 68<sup>th</sup> Annual Meeting, Final Program, February 28 – March 4, 2001, San Francisco, CA.
- 2. **Noonan TJ**., Horan MP, Hawkins RJ: "Analysis of Subscapularis Ruptures with and Without Prior Surgical Treatment." American Academy of Orthopedic Surgeons, 68<sup>th</sup> Annual Meeting, Final Program, February 28 March 4, 2001, San Francisco, CA.
- 3. Miller BS, Joseph TA, **Noonan TJ**, Horan MP, Hawkins RJ: "Rupture of the Subscapularis Tendon After Shoulder Arthroplasty: Diagnosis, Treatment, and Outcome:" American Academy of Orthopedic Surgeons, 70<sup>th</sup> Annual Meeting, February 3-9<sup>th</sup>, 2003, New Orleans, LA.

- 4. Wyland DJ, Shanley E, Clark JC, Sweitzer BA, Hawkins RJ, **Noonan** TJ, Kissenberth MJ, Thigpen CA: "Bony adaption of the proximal humerus and glenoid correlate within the throwing shoulder of professional baseball pitchers." American Orthopedic Society for Sports Medicine, 2011 Annual Meeting, July 7-10, 2011, San Diego, California.
- 5. Thigpen CA, Shanley E, Clark JC, Hawkins RJ, Wyland DJ, Kissenberth MJ, **Noonan TJ**: Humeral Retrotorsion is associated with decreased shoulder internal and horizontal adduction range of motion in the professional pitchers but not elite quarterbacks. American Orthopedic Society for Sports Medicine, 2011 Annual Meeting, July 7-10, 2011, San Diego, California.
- 6. **Noonan TJ**, Shanley E, PT, Bailey LB, Wyland DJ, Kissenberth M, Hawkins RJ, Thigpen CA: Professional Pitchers with GIRD Display Greater Humeral Retrotorsion than those with Normal ROM, American Orthopedic Society for Sports Medicine, 2013 Annual Meeting, July 2013, Baltimore, MD.
- 7. Tyson JJ, Bjerke B, Genuario J, **Noonan TJ**: Thromboembolic Events after Arthroscopic Knee Surgery: Increased Risk at High Altitude. American Orthopedic Society for Sports Medicine, 2014 Annual Meeting, July 10-13, 2014, Seattle, Washington.
- 8. Shanley E, Bailey LB, Rauh MJ, Kissenberth MJ, **Noonan TJ**, Hawkins RJ, Thigpen CA: Influence of a Preventative Program on Arm Injury Risk: An RCT in Adolescent Pitchers. American Orthopedic Society for Sports Medicine, 2014 Annual Meeting, July 10-13, 2014, Seattle, Washington.
- Mayer BK, Shanley E, Bailey LB, Thigpen CA, Wyland DJ, Hawkins RJ, Kissenberth MJ, Noonan TJ, Predictive Risk of Ulnar Collateral Ligament Injury Based on Ligament Morphology and Dynamic Abnormalities in Professional Baseball Pitchers Using Stress Ultrasonography, American Orthopedic Society for Sports Medicine, 2015 Annual Meeting, July 9-12, 2015, Orlando, FL.

## PUBLICATIONS:

1. Ennever FK, **TJ Noonan**, and HS Rosenkranz: The predictivity of animal bioassays and short-term genotoxicity tests for carcinogenicity and non-carcinogenicity to humans. *Mutagenesis* 2(2): 73-78, 1987.

- 2. **Noonan TJ** and Garrett WE Jr.: Injuries at the myotendinous junction, *Clinics in Sports Medicine*, 11(4): 783-806, 1992.
- 3. Reddy AS, Reedy MK, Best TM, **Noonan TJ**, Lukaveche C, and Garrett WE Jr.: A single fiber model to investigate the restriction of the injury response following controlled muscle strains, *Transactions for the 38th Annual Meeting of the Orthopedic Research Society*, 17: 258, 1992.
- 4. Reddy AS, **Noonan TJ**, and Reedy MK: Localization of the preferential site of muscle fiber rupture during a controlled strain injury, *Transactions for the 38th Annual Meeting of the Orthopedic Research Society*, 17: 517, 1992.
- 5. **Noonan TJ**, Best TM, Seaber AV and Garrett WE Jr.: Thermal effects on skeletal muscle tensile behavior, *American Journal of Sports Medicine*, 21(4): 517-22, 1993.
- 6. **Noonan TJ**, Best TM, Seaber AV and Garrett WE Jr.: Identification of a threshold for skeletal muscle injury, *American Journal of Sports Medicine*, 22(2): 257-61, 1994.
- 7. **Noonan TJ**, Garrett WE, Jr.: The effect of direction change on gastrocnemius activation and its relation to muscle strain injury, *Orthopedic Transactions*, 19(3): 727, 1995-96.
- 8. **Noonan TJ**, Garrett WE, Jr.: Muscle injury of the posterior leg, *Foot and Ankle Clinics*, 2(3): 457-473, 1997.
- 9. **Noonan TJ**, Garrett WE Jr.: Muscle Strain Injury: Diagnosis and Treatment, *J Am Acad Orthop Surg*, 7(4): 262-9, 1999.
- 10. **Noonan TJ**, Garrett WE, Jr.: The Patellar Tendon- Tibial Shaft Angle and Its Relation to Non-contact Injury of the ACL, *Orthopedic Transactions*.
- 11. Wright JM, Heavrin B, Hawkins RJ, **Noonan TJ**: Arthroscopic Visualization of the Subscapularis Tendon, *Arthroscopy*, 17(7):677-84, 2001.
- 12. Decker MJ, Torry MR, **Noonan TJ**, et al: Landing Adaptations after ACL Reconstruction, *Med Sci Sports Exercise*, 34(9): 1408-13, 2002.
- 13. **Noonan TJ**, Tokish JM, Briggs KK, and Hawkins RJ: Laser-Assisted Thermal Capsulorrhaphy, *Arthroscopy*, 19(8): 815-819, 2003.
- 14. Decker MJ, Torry MR, **Noonan TJ**, Sterett WI and Steadman JR: Gait Retraining after Anterior Cruciate Ligament Reconstruction, *Archives of Physical Medicine and Rehabilitation*, 85: 848-56, 2004.

- 15. Miller BS, Joseph TA, **Noonan TJ** et al: Rupture of the Subscapularis Tendon after Shoulder Arthroplasty: Diagnosis, Treatment, and Outcome, *Journal of Shoulder and Elbow Surgery*, 14(5): 492-96, 2005.
- 16. Hackett TR, Torry MR, Decker MJ, Sabick M, **Noonan TJ**, et al: Differences in Kinematics between youth and professional baseball players, *American College Sports Medicine*, *Medicine & Science in Sport & Exercise*, 38(5) Supplement: S39-S40, Denver, May, 2006.
- 17. **Noonan TJ**, Torry MR, Decker MJ, M Sabick, et al: Forces at the Shoulder During the Baseball Pitch in Youth and Professional Baseball Throwers, *American College Sports Medicine, Medicine & Science in Sport & Exercise*, 38(5) Supplement:S67, Denver, May, 2006.
- 18. **Noonan TJ**, Sakryd G, Espinoza LM, Packer D: Posterior Rib Stress Fracture in Professional Baseball Pitchers, *Am J Sports Med*, 35(4): 654-8, 2007.
- 19. Hawkins RJ, Krishnan SG, Karas SG, **Noonan TJ**, Horan MP: Electrothermal arthroscopic shoulder capsulorrhaphy: A minimum 2-year follow-up, *Am J Sports Med*, 35(9): 1484-8, 2007.
- 20. Lintner D, **Noonan TJ**, Kibler WB, Injury Patterns and Biomechanics of the Athlete's Shoulder, *Clin Sports Med*, 27(4): 527-51, 2008.
- 21. Keirns, MA, Ellenbecker TS, Noonan TJ: Orthopaedic Issues and Treatment Strategies for the Pediatric Patient: Youth Throwing Injuries and Proper Conditioning Programs, Independent Study Course 19.3.6, American Physical Therapy Association, 2009.
- 22. Bushnell BD, Anz AW, Dugger K, Sakryd GA, **Noonan TJ**: Effort Thrombosis Presenting as Pulmonary Embolism in a Professional Baseball Pitcher, *Sports Health*, 1(6): 493-499, 2009.
- 23. Ramappa AJ, Chen PH, Hawkins RJ, **Noonan T**, Hackett T, Sabick MB et al. Anterior Shoulder Forces in Professional and Little League Pitchers, *Journal of Pediatric Orthopaedics*; 30(1):1-7, 2010.
- 24. Bushnell BD, Sakryd G, **Noonan TJ**: Hamstring donor-site block: evaluation of pain control after anterior cruciate ligament reconstruction, *Arthroscopy*. 2010 Jul;26(7):894-900. doi: 10.1016/j.arthro.2009.11.022. Epub 2010 May 13.
- 25. Bushnell BD, Anz AW, **Noonan TJ**, Torry MR, and Hawkins RJ: Association of Maximum Pitch Velocity and Elbow Injury in Professional

- Baseball Pitchers, *American Journal of Sports Medicine*, 38(4): 728-32, 2010.
- 26. Anz AW, Bushnell BD, Griffin LP, Noonan TJ, Torry MR, and Hawkins RJ: Correlation of Torque and Elbow Injury in Professional Baseball Pitchers, *American Journal of Sports Medicine*, 38(7): 1368-1374, 2010.
- 27. Byram IR, Bushnell BD, Dugger K, Charron K, Harrell, FE, and **Noonan TJ**: Preseason Shoulder Strength Measurements in Professional Baseball Pitchers: Identifying Players at Risk for Injury, *American Journal of Sports Medicine*, 38(7): 1375-1382, 2010.
- 28. Shanley S, Thigpen CA, Clark JC, Wyland DJ, Hawkins RJ, **Noonan TJ**, and Kissenberth MJ: Changes in passive range of motion and development of glenohumeral internal rotation deficit (GIRD) in the professional pitching shoulder between spring training in two consecutive years, *Journal of Shoulder and Elbow Surgery*. 2012 Nov;21(11):1605-12. doi:10.1016/j.jse.2011.11.035. Epub 2012 Jul 24.
- 29. Nagda SH, Cohen SB, **Noonan TJ**, Raasch WG, Ciccotti MG, Yocum LA. Management and outcomes of latissimus dorsi and teres major injuries in professional baseball pitchers. *Am J Sports Med*. 2011 Oct;39(10):2181-6. Epub 2011 Aug 31.
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CONTINUING MEDICAL EDUCATION: Available upon request

INTERESTS: fitness, tennis, water/snow skiing, hiking, scuba diving

REFERENCES: Available upon request.