ROBERT U. HARTZLER, M.D., M.S.

PERSONAL INFORMATION

Date of Birth: 01/28/81 Birthplace: Austin, Texas

Address: 150 E. Sonterra Blvd Suite 300, San Antonio, TX 78258

Business Phone: (210) 804-5630

E-mail contact: dramirez@tsaog.com (clinical coordinator)

PRESENT ACADEMIC RANK AND POSITION

Clinical Assistant Professor, Baylor College of Medicine Sports Medicine Fellowship Program

Assistant Clinical Professor, University of the Incarnate Word School of Osteopathic Medicine

Orthopaedic Surgeon, Shoulder and Elbow Specialist, TSAOG Orthopaedics

MEDICAL TRAINING

Fellowship, The San Antonio Orthopaedic Group

150 E. Sonterra Blvd. Ste 300 San Antonio, TX 78258

- Department Head: Dr. Stephen S. Burkhart
- Contact Telephone: 210-489-7222
- **02/10/14 08/29/14**

Fellowship, Florida Orthopaedic Institute

13020 Telecom Parkway N Temple Terrace, FL 33637-0925

- Department Head: Dr. Mark FrankleContact Telephone: 813-978-9700
- 08/01/13 01/31/14

Internship and Residency, Mayo Clinic

200 1st Street SW Rochester, MN 55905

- Department of Orthopedic Surgery
- Department Chair: Dr. Daniel Berry
- Renee Cocker, Program Coordinator
- Contact Telephone: 507-284-3316
- 06/28/2008 06/28/13

EDUCATION

Master of Science in Biomedical Sciences Mayo Graduate School

200 1st Street SW Rochester, MN 55905

- Graduate Program Director: Dr. N.S. Turner
- Maribeth Trevis, Program Coordinator
- Contact Telephone: 507-284-4076
- 07/06/09 05/18/13

Doctor of Medicine

The University of Texas Southwestern Medical School

- Dean, UTSW Medical School: Dr. J. Gregory Fitz
- Office of Medical Education: 214-648-9590
- 08/16/04 05/30/08
- Member of Alpha Omega Alpha (AOA)
- GPA: 4.0 / 4.0

5323 Harry Hines Boulevard Dallas, TX 75390

Bachelor of Science in Chemical Engineering The University of Texas at Austin

200 E. Dean Keeton St. Stop C0400 Austin, TX 78712-1589

- Department Chair: Dr. Roger T. Bonnecaze
- Kelly McQueary, Undergraduate Coordinator
- Contact Telephone: 512-471-6443
- 08/26/98 12/22/01
- Biomedical Engineering track
- Magna Cum Laude; GPA: 3.96/ 4.0

BOARD CERTIFICATION

American Board of Orthopaedic Surgery

- Board Certified 7/28/2016 12/31/2026
- 400 Silver Cedar Court, Chapel Hill, North Carolina 27514
- Telephone: (919) 929-7103

USMLE Step 3

- Score: 253
- **04/15/09**

USMLE Step 2 CK

- Score: 260
- **02/19/08**

USMLE Step 2 CS

- Pass
- **11/27/07**

USMLE Step 1

- Score: 254
- **06/22/06**

MEDICAL LICENSURE

Texas Medical License

- # P7925, Active
- Issued 09/16/2013

Minnesota Medical License

- # 51930, Inactive
- Issued 07/11/09

Florida Medical License

- # ME115054, Inactive
- Issued 01/31/12

WORK EXPERIENCE

MCAT Instructor Kaplan, Inc.

2270 Guadalupe St Austin, TX 78705

- Taught preparatory classes in reading and writing skills, biology, physics, general chemistry, and organic chemistry
- Contact Person: Kaplan, Inc. Corporate Office
- **212-492-5800**
- 06/04/01 05/24/02

Mathematics and Science Teacher City School

1702 Woodland Avenue Austin, TX 78741

- Mathematics and science educator at the 5-8th grade levels
- Contact Person: Michelle Allen or Seela Misra
- **512-416-7744**
- 10/07/02 05/28/04

The San Antonio Orthopaedic Group

 2016 Runner-up for Arthroscopy Journal Basic Science Research Award in Best Basic Science category for "Remplissage of an Off-track Hill-Sachs Lesion Is Necessary to Restore Biomechanical Glenohumeral Joint Stability in a Bipolar Bone Loss Model"

Residency

- HA Peterson Award for Scholarly Writing, 2013
- Best Paper at the American Society for Surgery of the Hand Annual Meeting, 2010
- PJ Kelly Basic Science Research Award Finalist (Mayo Orthopedic Surgery), 2010

Medical School

- Elected to Alpha Omega Alpha, 2007
- Highest Ranking Graduate, Class of 2008
- Class officer, Wilson Surgical Society, 2005-2007
- President, Wilson Surgical Society, 2007-2008

Undergraduate

- Elected to Omega Chi Epsilon, Chemical Engineering Honors Society, 2001
- Eastman Chemical Engineering Scholar, 2000
- W.B. Franklin Endowed Presidential Scholarship in Chemical Engineering, 1999

COMMITTEE MEMBERSHIPS AND VOLUNTEER ACTIVITIES

TSAOG Orthopaedics Professional Standards Committee & Peer Review and Quality Assurance Committee 2018 - Present

Arthroscopy Journal Podcast Monthly Contributor from January 2019 - Present

Social Media Editor – Arthroscopy Association of North America Accepted Appointment 2020 – 2022

Technology Committee – American Shoulder and Elbow Surgeons 2018 - present

Learning Center Committee - Arthroscopy Association of North America 2019 - 2021

Research Committee Member – Arthroscopy Association of North America 2018 - 2020

Scientific Advisory Committee Member – Burkhart Research Institute for Orthopaedics 2017 - present

International Congress for Joint Reconstruction, Digital Media Committee 2017 - present

Arthroscopy Association of North America, Social Media Task Force 2016 - 2019

Clinical Reviewer for Arthroscopy: The Journal of Arthroscopic and Related Surgery 5/2014 - present

Clinical Reviewer for *The Journal of Shoulder and Elbow Surgery* 5/2014 - present

Mayo Clinic Surgery & Surgical Specialties Graduate Education Committee, Resident Member, 2011-2013

Mayo Clinic Department of Orthopedic Surgery Education Committee, Resident Member, 2011-2013

Question writer for Arthroscopy Association of North America (AANA) – American Shoulder and Elbow Surgeons (ASES) Self-Assessment Program: Subsection Elbow Trauma 2014-2015

Question writer for Arthroscopy Association of North America (AANA) – American Shoulder and Elbow Surgeons (ASES) Self-Assessment Program: Subsection Elbow Arthroscopy 2014-2015

PROFESSIONAL ORGANIZATIONS

American Shoulder and Elbow Surgeons (ASES)

- Candidate Member 6/18 6/19
- Associate Member 6/19 present

Arthroscopy Association of North America (AANA)

■ 12/15 - present

American Academy of Orthopedic Surgery (AAOS)

- Resident Member: 07/08 10/17
- Active Fellow: 10/17 present

American Medical Association

-09/04 - 7/14

CHAIRED MEETINGS

Arthrex Advanced Shoulder Arthroscopy: The Cowboy Way

■ San Antonio, TX; 10/10-11/2019

AANA Shoulder Solutions Course

- Orthopedic Learning Center
- Rosemont, IL; 10/4-6/2019

Arthrex Advanced Shoulder Arthroscopy: The Cowboy Way

Naples, FL; 4/4-5/2019

PROFESSIONAL COURSES & MEETINGS

Biomet Oxford Unicompartmental Knee Arthroplasty

■ Warsaw, Indiana; 4/17/09

DePuy Introduction to Hip & Knee Arthroplasty

■ Dallas, Texas; 10/08/09 – 10/10/09

Minnesota Medical Association Representative to the American Medical Association Interim Meeting

■ Houston, Texas; 11/06/09 – 11/08/09

Zimmer Resident Hip, Knee, and Shoulder Arthroplasty Course

Minneapolis, Minnesota; 12/04/09 – 12/05/09

AO Principles and Treatment of Spinal Disorders

■ Las Vegas, Nevada; 01/22/10 – 01/24/10

Synthes Spine Resident & Fellows Spine Forum

■ Minneapolis, Minnesota; 04/17/10 – 04/18/10

Zimmer Total Knee Arthroplasty Course

■ Minneapolis, Minnesota; 04/30/10

AO Basic Principles of Fracture Management

■ Marco Island, Florida; 06/12/10 – 06/17/10

DePuy Advanced Concepts for the Senior Resident

■ Chicago, Illinois; 10/14/11 – 10/16/11

Stryker Trauma Shoulder and Elbow Dissection Course

■ Tampa, Florida; 03/02/13

Mayo Clinic Advanced Elbow Surgical Skills Course

■ Rochester, Minnesota; 05/17/13-05/18-13

AIUM Hands-on Diagnostic and Interventional Musculoskeletal Ultrasound Course

■ Rochester, Minnesota; 06/27/13-06/29/13

DJO Masters Course in Shoulder Arthroplasty

■ Tampa, Florida; 08/02/2013-08/03/13

Current Concepts in Shoulder Arthroscopy

■ Tampa, Florida; 08/10/13

American Academy of Orthopaedic Surgeons Annual Meeting

■ New Orleans, Louisiana; 3/11/14 – 3/15/14

Arthrex Sports Medicine Fellowship Forum

■ Naples, Florida; 5/29/14 – 5/30/14

San Diego Shoulder Course

■ San Diego, California; 6/18/14 – 6/21/14

Mayo Clinic "Teach the Teachers" Advanced Elbow Surgical Skills Course

- Rochester, Minnesota; 5/14/15-5/16/15
- Lab Instructor

Orthopaedic Summit 2015: Evolving Techniques – Sports Medicine, Arthroscopy, and Arthroplasty

■ Las Vegas, Nevada; 12/4/15

AANA Mission Possible for Today's Shoulder Surgeon: A New Standard for a New Century

- Rosemont, Illinois; 2/19/16 2/21/16
- Associate Instructor

Berlin International Shoulder Course

- Berlin, Germany; 4/7/16 4/8/16
- Assistant for live surgery: Arthroscopic Superior Capsular Reconstruction

Mayo Clinic "Teach the Teachers" Advanced Elbow Surgical Skills Course

- Rochester, Minnesota; 5/6/16-5/7/16
- Invited Lab Instructor

DJO Surgical - The Shoulder Summit

- Chicago, Illinois; 8/11/17-8/13/17
- Podium Presentation "Horrible Cases: The Worst of the Worst"

Stryker Current Concepts in Shoulder Arthroplasty

Mahwah, New Jersey; 7/22/17

Arthrex National Futures Forum

■ Naples, Florida; 8/4/17 – 8/4/17

Arthrex Sports Medicine Orthopedic Technology and Innovation Forum

■ Naples, Florida; 1/20/18

Arthrex Arthroplasty Orthopedic Technology and Innovation Forum

- Shoulder Arthroplasty Panel: Preoperative Planning with VIP System
- Naples, Florida; 4/20/18 4/21/18

Arthroscopy Association of North America (AANA) Annual Meeting

- Scientific Session Moderator: Shoulder Instability 2
- Chicago, Illinois; 4/27/18 4/28/18

Mayo Clinic "Teach the Teachers" Advanced Elbow Surgical Skills Course

- Rochester, Minnesota; 6/8/18-6/9/18
- Invited Lab Instructor

INTERNATIONAL PRESENTATIONS

Podium Presentation at International Congress of Shoulder and Elbow Surgeons

- Clinical Outcomes Comparing SCR versus Tendon Transfer
- Buenos Aires, Argentina; 9/20/2019 (scheduled)

Podium Presentation at ASES Annual Meeting

- Radiographic Parameters Associated with Excellent Versus Poor Range of Motion Outcomes Following Reverse Shoulder Arthroplasty
- New York, NY; 10/19/2019

Co-Chair and Presenter at Arthrex Advanced Shoulder Arthroscopy: The Cowboy Way

- Joint Preservation in Osteoarthritis: Alternatives to Joint Replacement
- SCR vs Tendon Transfer vs rTSA for Massive Cuff Tear: Indications
- Anatomic Total Shoulder Arthroplasty: Technique
- Anatomic TSA
- Congruent Arc Latarjet
- Live Surgery: Superior Capsular Reconstruction
- San Antonio, TX; 10/10-11/2019

Co-Chair and Presenter at AANA Shoulder Solutions Course

- Shoulder Arthroscopy Basics: Lateral
- Arthroscopic Double Row Rotator Cuff Repair: Cadaver Demonstration
- Subscapularis Tears: Tips and Tricks
- Superior Capsular Reconstruction
- Latarjet
- Rosemont, IL; 10/4-6/2019

Podium Presentation and Panel at San Diego Shoulder Course

- Very Active 50 or Under Patient with OA Arthroscopic Debridement and Biologic Glenoid Resurfacing is the Best Option
- Lab Instructor for Shoulder Arthroscopy Skills Practicum Session
- San Diego, CA; 6/19/2019

Podium Presentations at Arthrex Shoulder Arthroplasty Fellowship Forum

- Indications and Alternatives to TSA
- Managing Atypical Glenoid Deformity with TSA
- Naples, FL; 5/18/2019

Podium Presentations at Arthrex Sports Medicine Fellowship Forum

- When Soft Tissue Labral Repair is Not Enough
- PASTA Lesions: Fixation and Biologic Considerations
- Naples, FL; 5/16/2019

Podium Presentation and Lab Instructor: Mayo Clinic Shoulder Tendon Transfer and Complex Rotator Cuff Repair

- Why I Do Superior Capsular Reconstruction
- Relive Surgery: Superior Capsular Reconstruction
- Rochester, MN; 4/25/2019

Podium Presentation at Arthrex West Coast Sports Medicine OTIF

- My Approach for Dealing with the Massive or Irreparable Rotator Cuff Tear
- San Diego, CA; 4/12/2019

Co-Chair and Presenter - Arthrex Advanced Shoulder Arthroscopy: The Cowboy Way

- Anatomic and Reverse TSR
- SCR vs rTSR for Massive Cuff Tear: What are the Indications?
- Anatomic Total Shoulder Arthroplasty Live Demo
- Reverse Total Shoulder Arthroplasty Live Demo
- Naples, FL; 4/4-5/2019

Podium Presentation at Arthrex Orthopedic Technology and Innovation Forum

- Preoperative Planning Research and Patient Outcomes
- Naples, FL: 1/20/2019

Podium Presentations and Lab Instructor at Arthrex Shoulder Arthroplasty Course

- TSA Indications and Contraindications
- Alternatives to TSA
- Subscapularis Management and Postoperative Evaluation
- Naples, FL; 11/10/2018

Podium Presentations and Lab Instructor at Arthrex-ISO Colombia Meeting

- Joint Preservation: Alternatives to Joint Replacement
- SCR vs rTSR for Massive Cuff Tear: What are the Indications?
- Rotator Cuff Repair in Poor-Quality and Retracted Tissue
- Naples, FL; 11/8-9/2018

Podium Presentations at Arthrex Advanced Shoulder Arthroscopy: The Cowboy Way

- Joint Preservation: Alternatives to Joint Replacement
- Congruent-Arc Latarjet
- SCR vs rTSR for Massive Cuff Tear: What are the Indications?
- San Antonio, TX; 10/25-26/2018

Podium Presentations and Lab Instructor at AANA Shoulder Skills Course

- Latarjet: Why and How?
- My SCR Technique
- OLC, Chicago, IL; 8/3-4/2018

Podium Presentation and Panel at AOSSM Annual Meeting

- Pseudoparalysis: We Can Reverse It
- Massive Rotator Cuff Repair Panel Discussion
- San Diego, CA; 7/5/2018

Podium Presentation at Arthrex West Coast Sports Medicine OTIF

- Superior Capsular Reconstruction: Technique Evolution
- San Diego, CA; 4/13/2018

Podium Presentation at Arthrex Advanced Shoulder Arthroscopy: The Cowboy Way

- Joint Preservation: Biologic Glenoid Resurfacing with Dermal Allograft
- Naples, FL; 4/6/2018

Podium Presentation at ASES Specialty Day

- Superior Capsular Reconstruction "How To" Technique Video
- New Orleans, LA; 3/10/2018

Podium Presentation at Arthrex Sports Medicine OTIF

- Non-Arthroplasty Treatment Options of Glenohumeral Arthritis
- Naples, FL; 1/20/2018

Podium Presentation at Arthrex National Futures Forum

- When Labral Repair Isn't Enough: Remplissage
- Innovations in Shoulder Arthroplasty
- Naples, FL; 8/4/2017

Podium Presentation at American Shoulder and Elbow Surgeons Specialty Day, AAOS Annual Meeting

- Remplissage of an Off-Track Hill-Sachs Lesion is Necessary to Restore Biomechanical Glenohumeral Joint Stability in a Bipolar Bone Loss Model
- Orlando, Florida; 3/5/2016

Podium Presentation at Orthopaedic Summit 2015: Evolving Techniques

- Evolving Technique Update: Arthroscopic Glenoidplasty and Interpositional Dermagrafts for OA: Successful Outcomes? The Truth!
- Las Vegas, Nevada; 12/4/15

Podium Presentation at Advanced Shoulder Arthroscopy The Cowboy Way

- Joint Preservation: Biologic Glenoid Resurfacing with Dermal Allograft
- San Antonio, Texas; 10/15/2015

Podium Presentation Mayo Orthopedic Research Alumni Association International Symposium

- Remplissage of an Off-Track Hill-Sachs Lesion is Necessary to Restore Biomechanical Glenohumeral Joint Stability in a Bipolar Bone Loss Model
- Rochester, Minnesota; 8/8/2015.

Podium Presentation at Advanced Shoulder Arthroscopy The Cowboy Way

- DJD: Glenoid Resurfacing with Dermal Allograft
- Naples, Florida; 5/9/2015

Podium Presentation at Arthrex Arthroplasty Faculty Forum

- Glenoid Resurfacing with ArthroFlex
- Naples, Florida; 5/2/2015

Podium Presentation at American Shoulder and Elbow Surgeons Specialty Day, AAOS Annual Meeting

- Reverse Shoulder Arthroplasty for Massive Rotator Cuff Tear: Risk Factors For Poor Functional Improvement
- Las Vegas, Nevada; 3/28/2015

Podium Presentation at Advanced Shoulder Arthroscopy: The Cowboy Way

- Joint Preservation: Biologic Glenoid Resurfacing with Dermal Allograft
- San Antonio, Texas; 10/16/14

Podium Presentation at the Mid-America Orthopaedic Association Annual Meeting

- Clinical and Radiographic Factors Influencing the Results of Revision Rotator Cuff Repair
- Bonita Springs, Florida; 04/20/12

Poster presentation at the Orthopaedic Research Society Annual Meeting

- Limited capsular release reduces flexion contracture in a rabbit model of arthrofibrosis
- Long Beach, California; 01/13/11-01/16/11

Poster presentation at the Orthopaedic Research Society Annual Meeting

- Adjuvant rosiglitazone does not increase the effectiveness of surgical release in a model of arthrofibrosis
- Long Beach, California; 01/13/11-01/16/11

Podium Presentation at the American Society for Surgery of the Hand Residents and Fellows Conference

- Biomechanical Effectiveness of Different Types of Tendon Transfers to the Shoulder for External Rotation
- Boston, Massachusetts; 10/06/10

Moment Arms of Axiohumeral Shoulder Muscles and Tendon Transfers

- Master in Biomedical Sciences Thesis Defense
- Mayo Clinic; 03/18/13

Options for Failed Lateral Ankle Instability Surgery

- Foot and Ankle Division Conference
- Mayo Clinic; 03/12/13

Rib Fracture Surgery

- Trauma Division Conference
- Mayo Clinic; 09/07/12

Ulnar Styloid Fractures: To Fix or Not to Fix?

- Hand Division Conference
- Mayo Clinic; 07/08/11

Surgical Considerations in Juvenile Idiopathic Arthritis

- Pediatric Orthopedic Surgery Grand Rounds
- Nemours Children's Clinic; Jacksonville, FL; 06/15/11

Parathyroid Hormone and Fracture Healing

- Advanced Bone Physiology Course
- Mayo Clinic; 09/18/09

CURRENT RESEARCH PROJECTS

Functional Outcomes and Healing Rates Comparing Two Fixation methods of Double-Row Rotator Cuff Repair: A Randomized Control Trial

Arthroscopic Bankart versus Arthroscopic Bankart with Remplissage: a functional comparative study

Variability in total shoulder arthroplasty planning software compared to a control CT-derived 3D printed scapula

Factors Associated with Surgeon Acceptance of a Glenoid Component Version and Inclination in a Commercially Produced 3D Total Shoulder Arthroplasty Planning

Factors Associated with Version and Inclination Correction of the Glenoid Component in 3D Total Shoulder Arthroplasty Planning

Cost-Utility Analysis of Single versus Two-Incision Distal Biceps Repair

Analysis of Direct Hospital Costs for Reverse Total Shoulder Arthroplasty versus Superior Capsular Reconstruction for Massive Rotator Cuff Tears without Arthritis

GRANTS

Mayo Clinic Orthopedic Surgery Resident Research Grant (\$25,000 over 1 year)

PEER-REVIEWED PUBLICATIONS

- Hanus LH, **Hartzler RU**, Wagner NJ. Electrolyte-Induced Aggregation of Acrylic Latex I. Dilute Particle Concentrations. Langmuir, 2001.
- Rosenthal ME, Ritter EM, Goova MT, Castellvi AO, Tesfay ST, Pimentel EA, Hartzler R, Scott DJ. Proficiency-based Fundamentals of Laparoscopic Surgery skills training results in durable performance improvement and a uniform certification pass rate. Surg Endosc. 2010 Oct;24(10):2453-7.
- Kubista B, Hartzler RU, Wood CM, Osmon DR, Hanssen AD, Lewallen DG. Reinfection after two-stage revision for periprosthetic infection of total knee arthroplasty. Int Orthop. 2012 Jan;36(1):65-71.

- 4) Hartzler RU, Barlow JD, An KN, Elhassan BT. Biomechanical Effectiveness of Different Types of Tendon Transfers to the Shoulder for External Rotation. J Shoulder Elbow Surg. 2012 Oct;21(10):1370-6.
- 5) Elhassan BT, Bishop AT, **Hartzler RU**, Shin AY, Spinner RJ. Tendon Transfer Options About the Shoulder in Patients with Brachial Plexus Injury. J Bone Joint Surg Am. 2012 Aug 1;94(15):1391-8.
- Hartzler RU, Sperling JW, Schleck CD, Cofield, RH. Clinical and radiographic factors influencing the results of revision rotator cuff repair. Int J Shoulder Surg. 2013 Apr-Jun;7(2): 41-5.
- Barlow JD, Hartzler RU, Abdel MP, Morrey ME, An KN, Steinmann SP, Morrey BF, Sanchez-Sotelo J. Surgical capsular release reduces flexion contracture in a rabbit model of arthrofibrosis. J Orthop Res. Oct;31(10):1529-32, 2013
- Hartzler RU. Axial Rotation Moment Arms of Axiohumeral Shoulder Muscles and Tendon Transfers. Diss. College of Medicine-Mayo Clinic, 2013.
- 9) **Hartzler RU**, Llusa-Perez M, Steinmann SP, Morrey BF, Sanchez-Sotelo J. Transverse coronoid fracture: when does it have to be fixed? *CORR Jul*; 472(7):2068-74, 2014.
- Hartzler RU, Morrey BF, Steinmann SP, Llusa-Perez M, Sanchez-Sotelo J. Radial head reconstruction in elbow fracture-dislocation: monopolar or bipolar prosthesis? Clin Orthop Relat Res. Jul; 472(7):2144-50, 2014.
- 11) Cabezas AF, Gutiérrez S, Teusink MJ, Schwartz DG, **Hartzler RU**, Santoni BG, Frankle MA. Kinematic impact of size on the existing glenohumeral joint in patients undergoing reverse shoulder arthroplasty. Clin Biomech. Jun; 29(6):622-8, 2014.
- 12) Watts CD, Hartzler RU, Cross WW. Open reduction and percutaneous fixation of a rare hamstring avulsion fracture. BMJ Case Rep. Sep 25, 2014.
- 13) **Hartzler RU**, Burkhart SS. Technical Note: Medial Biceps Sling Takedown May be Necessary to Expose an Occult Subscapularis Tendon Tear. *Arthrosc Tech.* Dec 15;3(6):e719-22, 2014.
- 14) Brady PC, Narbona P, Adams CR, Huberty D, Parten P, Hartzler RU, Arrigoni P, Burkhart SS. Arthroscopic proximal biceps tenodesis at the articular margin: evaluation of outcomes, complications, and revision rate. *Arthroscopy*. Mar; 31(3):470-6, 2015.
- 15) Cusick MC, Hussey MM, Steen BM, **Hartzler RU**, Clark RE, Cuff DJ, Cabezas AF, Santoni BG, Frankle MA. Glenosphere dissociation after reverse shoulder arthroplasty. *JSES* Jul; 24(7):1061-8, 2015.
- 16) **Hartzler RU**, Steen BM, Hussey MM, Cusick MC, Cottrell BJ, Clark RE, Frankle MA. Reverse shoulder arthroplasty for massive rotator cuff tear: risk factors for poor functional improvement. *ISES*. Nov; 24(11):1698-706, 2015.
- 17) Barlow JD, Morrey ME, Hartzler RU, Arsoy D, Riester S, van Wijnen AJ, Morrey BF, Sanchez-Sotelo J, Abdel MP. effectiveness of rosiglitazone in reducing flexion contracture in a rabbit model of arthrofibrosis with surgical capsular release. *Bone and Joint Research*. 2016 Jan 1;5(1):11-7.
- 18) Adams CR, Denard PJ, Brady PC, **Hartzler RU**, Burkhart SS. The arthroscopic superior capsular reconstruction. *American Journal of Orthopedies*. 2016 Jul.
- 19) Sheean AJ, Hartzler RU, Denard PJ, Lädermann A, Hanypsiak BT, Burkhart SS. A 70 arthroscope significantly improves visualization of the bicipital groove in the lateral decubitus position. Arthroscopy: The Journal of Arthroscopic & Related Surgery. 2016 Sep 30;32(9):1745-9.
- 20) Hartzler RU, Bui CN, Jeong WK, Akeda M, Peterson A, McGarry M, Denard PJ, Burkhart SS, Lee TQ. Remplissage of an off-track Hill-Sachs lesion is necessary to restore biomechanical glenohumeral joint stability in a bipolar bone loss model. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2016 Dec 31;32(12):2466-76.
- 21) Burkhart SS, Denard PJ, Adams CR, Brady PC, **Hartzler RU**. Arthroscopic superior capsular reconstruction for massive irreparable rotator cuff repair. *Arthroscopy techniques*. 2016 Dec 31;5(6):e1407-18.
- 22) Hartzler RU, Melapi S, de Beer JF, Burkhart SS. Arthroscopic Joint Preservation in Severe Glenohumeral Arthritis Using Interpositional Human Dermal Allograft. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2017 Nov 1;33(11):1920-5.
- 23) Sheean AJ, **Hartzler RU**, Denard PJ, Lädermann A, Sanders TG, Zlatkin M, Burkhart SS. Preoperative radiographic risk factors for incomplete arthroscopic supraspinatus tendon repair in massive rotator cuff tears. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2017 Dec 19.

- 24) **Hartzler RU**, Burkhart SS. Management of Subscapularis Tendon Tears. *Operative Techniques in Sports Medicine*. 2017 Oct 7.
- Hartzler RU, Burkhart SS. Superior Capsular Reconstruction. Orthopedics. 2017 Oct 10;40(5):271-80.
- 26) Funakoshi T, **Hartzler RU**, Stewien ET, Burkhart SS. Remplissage using Interconnected Knotless Anchors: Superior Biomechanical Properties to a Knotted Technique? *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 34(11), pp.2954-2959.
- 27) Burkhart SS, Harzler RU. Superior Capsular Reconstruction Reverses Profound Pseudoparalysis in Patients with Irreparable Rotator Cuff Tears and Minimal or No Glenohumeral Arthritis. Arthroscopy: The Journal of Arthroscopic & Related Surgery. 2019 Jan 1;35(1):22-8.
- 28) Funakoshi T, **Hartzler RU**, Stewien E, Burkhart SS. Hill-Sachs Lesion Classification by the Glenoid Track Paradigm in Shoulder Instability: Poor Agreement Between 3-Dimensional Computed Tomographic and Arthroscopic Methods. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2019 Jun 1;35(6):1743-9.
- Hartzler RU, Denard PJ. The Glenoid Track and How It Can Guide Management. Operative Techniques in Sports Medicine. 2019 Jan 10.
- 30) Burkhart SS, **Hartzler RU**. Arthroscopic Rotator Cuff Repair: How to Avoid Retear. Arthroscopy: The Journal of Arthroscopic & Related Surgery. 2019 Jan 1;35(1):12-3.
- 31) Petis SM, Kubista B, **Hartzler RU**, Abdel MP, Berry DJ. Polyethylene liner and femoral head exchange in total hip arthroplasty: factors associated with long-term success and failure. *JBJS*. 2019 Mar 6;101(5):421-8.
- 32) **Hartzler RU**. Editorial Commentary: Safety in Anteromedial Elbow Portal Placement? Go North! *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2019; July; 35(7): 2173-4.
- 33) Navasartian D, **Hartzler RU**, DeBerardino T, Burkhart SS. Arthroscopic Repair of Humeral Avulsion of the Glenohumeral Ligaments Based on Location. Arthroscopy Techniques. 2019 Jul 17.
- 34) Hartzler RU, Softic D, Qin X, Dorfman A, Adams CR, Burkhart SS. The histology of a healed superior capsular reconstruction dermal allograft: A case report. *Arthroscopy: The Journal of Arthroscopic & Related Surgery.* 2019 Oct 1;35(10):2950-8.
- 35) Sheean AJ, Hartzler RU, Burkhart SS. Arthroscopic Rotator Cuff Repair in 2019: Linked, Double Row Repair for Achieving Higher Healing Rates and Optimal Clinical Outcomes. Arthroscopy: The Journal of Arthroscopic & Related Surgery. 2019 Sep 1;35(9):2749-55.
- 36) Hartzler RU, Sheean AJ, Burkhart SS. Are Anchor Removal and Staged Surgical Treatment Necessary in the Arthroscopic Treatment of Infected Rotator Cuff Repair? Submitted to ASMAR.
- 37) Burkhart SS, Pranckun JJ, **Hartzler RU**. Superior Capsular Reconstruction for the Operatively Irreparable Rotator Cuff Tear: Clinical Outcomes Are Maintained 2 Years After Surgery. Accepted in *Arthroscopy: The Journal of Arthroscopic & Related Surgery*

TEXTBOOKS

1) Burkhart SS, Brady PC, Denard PJ, Adams CR, **Hartzler RU**. The Cowboy's Conundrum. Philadelphia: Lippincott, Williams and Wilkins; 2017.

BOOK CHAPTERS

- 1) **Hartzler RU**, Sperling JW, Cofield RH. Total Shoulder Arthroplasty. In: Lee D, Neviaser RJ, editors. Operative Techniques: Shoulder and Elbow Surgery. Philadelphia: Saunders; 2010. p. 147-64.
- Mighell MA, Hartzler RU, and Kovack TJ. Elbow Arthrodesis. Operative Techniques for Orthopaedic Surgery, 2nd ed. Wolters Kluwer, 2015.
- 3) **Hartzler RU**, Angelo RL, Burkhart SS. Pathoanatomy of Rotator Cuff Tears. In: Normal and Pathological Anatomy of the Shoulder. Springer, 2015.
- 4) **Hartzler RU**, Marder RA, Burkhart SS. Rotator Cuff Disorders. In: Chapman's Orthopaedic Surgery 4th Edition. *Submitted*.
- Hartzler RU, Burkhart SS. Anterior Instability with Moderate Glenoid Bone Loss: The Latarjet Procedure. In: AAOS Advanced Reconstruction: Shoulder 2. American Academy of Orthopaedic Surgeons, 2016.

- 6) Hartzler RU, Morrey BF. Coronoid Fractures. In: Morrey's The Elbow and Its Disorders, 5th Edition. Section IV: Acute Trauma. Elsevier; 2017.
- Sheean AJ, Hartzler RU, Burkhart SS. Latarjet. In: An Atlas of Advanced Shoulder Arthroscopy. CRC Press; 2018.
- 8) Sheean AJ, **Hartzler RU**, Burkhart SS. Massive Rotator Cuff Repair: Margin Convergence. In: Shoulder Surgery: Tricks of the Trade. *Submitted*.
- Hartzler RU, Burkhart SS. Arthroscopic Subscapularis Repair. In: Illustrated Tips and Tricks in Sports Medicine Surgery. Wolters-Kluwer; 2018.
- 10) Schoch BS, **Hartzler RU**, Sperling JW. Total Shoulder Arthroplasty. In: Operative Techniques: Shoulder and Elbow Surgery. Elsevier; 2018.
- Hartzler RU, Denard PJ. Subscapularis Tears Recognition and Techniques of Fixation. In: Premier Approaches to Arthroscopic Rotator Cuff Repair. Submitted.
- 12) Denard PJ, **Hartzler RU.** Tricks of the Trade for Poor Tissue and Bone. In: Premier Approaches to Arthroscopic Rotator Cuff Repair. *Submitted*.
- 13) **Hartzler RU**, Burkhart SS. Glenohumeral Osteoarthritis: Biological Interposition. In: Rotator Cuff Across the Lifespan: ISAKOS Consensus Book. *Submitted*
- 14) Sheean AJ, **Hartzler RU**, Burkhart SS. Double Row When is it truly indicated? In: Rotator Cuff Across the Lifespan: ISAKOS Consensus Book. *Submitted*
- 15) Duquin TR, Hohman, Jr. DW, Hartzler RU. Arthroscopic Rotator Cuff Repair. In: Atlas of Essential Orthopaedic Procedures, Ed 2. Wolters-Kluwer. Flatow E, Colvin AC. Atlas of Essential Orthopaedic Procedures. Lippincott Williams & Wilkins; 2019 Jul 11.
- 16) Burkhart SS, **Hartzler RU**. The Philosophy of Arthroscopic Rotator Cuff Repair. In Rotator Cuff Across the Life Span, 2019 (pp. 125-128). Springer, Berlin, Heidelberg.
- 17) **Hartzler RU**, Burkhart SS. Glenohumeral Osteoarthritis: Biological Interposition. In Rotator Cuff Across the Life Span 2019 (pp. 257-270). Springer, Berlin, Heidelberg.
- 18) **Hartzler RU**, Sheean AJ, Burkhart SS. 9 Massive Rotator Cuff Repair: Margin Convergence. Shoulder Surgery: Tricks of the Trade. 2019 Apr 4:8.
- Hartzler RU, Burkhart SS. Subscapularis Tears and Subcoracoid Impingement. Orthopaedic Knowledge Update: Shoulder and Elbow 5. Submitted
- 20) Lynch TB, Barlow JD, Hartzler RU. Distal Biceps Repair: Dual Incision. Elbow Surgery: Tricks of the Trade. In preparation
- 21) Denard PJ, **Hartzler RU**, Elhassan BT. Approach to the Irreparable Cuff Tear and Failed Cuff Repair. The Shoulder: 5th Edition. *In preparation*

POSTERS/ABSTRACTS/PRESENTATIONS

- Sarkari M, Chen X, Hartzler RU, Young TJ, Rogers TL, Vaughn JM, Brown JN, Hu J, Williams III RO, Johnston KP. Evaporative Precipitation into Aqueous Solutions (EPAS) -A New Technology to Enhance Bioavailability for Poorly Water Soluble Drugs. Poster presented at the American Association of Pharmaceutical Scientists Meeting; Denver, Colorado, 2001.
- 2) Goova M, Ritter E, Tesfay S, Pimentel E, Hartzler RU, Scott D. Proficiency-Based FLS Skills Training Results In Durable Performance Improvement and Uniform Certification Pass Rate. Poster presented at the Scientific Session of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES); Philadelphia, Pennsylvania, 2008.
- 3) Hartzler RU, Llusa-Perez M, Steinmann SP, Morrey BF, Sanchez-Sotelo J. Coronoid Fracture Fixation and Radial Head Replacement Using a Monopolar or Bipolar Implant Improve Elbow Stability and Kinematics. Poster presented at the International Congress of Shoulder and Elbow Surgery; Edinburgh, Scotland, 2010.
- 4) Steinmann SP, Hartzler RU, MD, Llusa-Perez M, Morrey BF, An KN, Sanchez-Sotelo J. The Effect of Coronoid Fracture Fixation and Radial Head Replacement using a Monopolar or Bipolar Implant on Elbow Stability and Kinematics. Podium presentation at the American Shoulder and Elbow Surgeons Closed Meeting; Scottsdale, Arizona, 2010.
- 5) Elhassan BT, Bishop AT, Spinner RJ, Shin AY, **Hartzler RU**. Shoulder Reconstruction Options in Patients with Brachial Plexus Injury. Podium presentation at the Annual Meeting of the American Society for Surgery of the Hand; Boston, Massachusetts, 2010.
- 6) Elhassan BT, Hartzler RU. Biomechanical Effectiveness of Different Types of Tendon Transfers to the Shoulder for External Rotation. Podium presentation at the International Congress of Shoulder and Elbow Surgery; Edinburgh, Scotland, 2010.

- 7) Bui CNH, **Hartzler RU**, Jeong WK, Akeda M, Peterson A, McGarry M, Burkhart SS, Lee TQ. Biomechanical Stability of Glenohumeral Bipolar Bone Lesions After Soft Tissue Repair. Podium Presentation at Western Orthopaedics Association Annual Meeting, Coeur d'Alene, Idaho, 2015. Winner of Sanford and Darlene Anzel Award.
- 8) Sheean AJ, Hartzler RU, Burkhart SS. Diagnostic Shoulder Arthroscopy With A 70-Degree Arthroscope Improves Visualization Of The Bicipital Groove In Cadaveric And Living Subjects. Podium Presentation at The Society of Military Orthopaedic Surgeons Annual Meeting, St. Petersburg, Florida, 2015.
- 9) Hartzler RU, Burkhart SS. Arthroscopic glenoid resurfacing for Severe Glenohumeral Arthritis: Does a Thicker Graft Improve Results? ePoster Presentation at the AANA Annual Meeting; Boston, Massachusetts, 2016.
- 10) Hanson TM, Hartzler RU, Burkhart SS. Risk Factors for Failure of a Standardized Non-Operative Treatment Protocol for Idiopathic Shoulder Adhesive Capsulitis. ePoster Presentation at the AANA Annual Meeting; Boston, Massachusetts, 2016.
- 11) Sheean AJ, Hartzler RU, Denard PJ, Lädermann A, Sanders T, Zlatkin M, Burkhart SS. Preoperative Risk Factors for an Irreparable Supraspinatus Tendon in Arthroscopic Massive Rotator Cuff Surgery. ePoster presentation at AANA Annual Meeting: Denver, Colorado, 2017.
- 12) Funakoshi T, Hartzler RU, Stewien ET, Burkhart SS. Bipolar Bone Loss Measurements in Shoulder Instability: Poor Agreement Between 3D CT and Arthroscopic Values. AANA Annual Meeting: Chicago, Illinios, 2018.
- 13) Pranckun JJ, **Hartzler RU**, Burkhart SS. Arthroscopic Superior Capsular Reconstruction with Dermal Allograft: A Comparison of Outcomes During the "Learning Curve" and Afterward. ePoster presentation at AANA Annual Meeting: Orlando, Florida 2019.
- 14) Navasartian DJ, DeBerardino TM, Hartzler RU, Burkhart SS. "Outcomes of Arthroscopic HAGL Repair." Podium Presentation at George E. Omer Jr Research Symposium: San Antonio, Texas, 2019.