

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: vgarcia@tsaog.com (clinical coordinator)

PRESENT ACADEMIC RANK AND POSITION

Assistant Clinical Professor, University of the Incarnate Word School of Osteopathic Medicine
Orthopaedic Surgeon, Shoulder and Elbow Specialist, The San Antonio Orthopaedic Group

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 Frankle
- Contact 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

5323 Harry Hines Boulevard
Dallas, TX 75390

- 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

**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 Eligible, Part 1 Passed July 11, 2013
- 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

HONORS/AWARDS/LEADERSHIP

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

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

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

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

Arthroscopy Association of North America

- 12/15 - present

American Academy of Orthopedic Surgery (AAOS)

- 07/08 – present

American Medical Association

- 09/04 – 7/14

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 - 4/8/2016
- 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

REGIONAL/NATIONAL PRESENTATIONS

Podium Presentation at American Shoulder and Elbow Specialty Day, AAOS 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 Specialty Day, AAOS 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

MAYO CLINIC PRESENTATIONS***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

Preoperative Risk Factors for Operative Irreparability of Massive Rotator Cuff Tears

- 2014 – present
- Drs Andrew J Sheehan and Stephen S. Burkhart, The San Antonio Orthopaedic Group

GRANTS

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

PEER-REVIEWED PUBLICATIONS

- 1) Hanus LH, **Hartzler RU**, Wagner NJ. Electrolyte-Induced Aggregation of Acrylic Latex I. Dilute Particle Concentrations. *Langmuir*, 2001.
- 2) 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.
- 3) 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.
- 6) **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.
- 7) 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
- 8) Barlow JD, **Hartzler RU**, Sanchez-Sotelo J, Steinmann S, Morrey BF. Effectiveness of rosiglitazone in reducing flexion contracture in a novel rabbit model of arthrofibrosis. *Accepted Bone and Joint Research*
- 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.
- 10) **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) 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.
- 14) Cusick MC, Hussey MM, Steen BM, **Hartzler RU**, Clark RE, Cuff DJ, Cabezas AF, Santoni BG, Frankle MA. Glensphere dissociation after reverse shoulder arthroplasty. *JSES* Jul; 24(7):1061-8, 2015.
- 15) **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.
- 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. *JSES.* Nov; 24(11):1698-706, 2015.
- 17) Sheean AJ, **Hartzler RU**, Denard PJ, Hanypsiak BT, Burkhart SS. Diagnostic Shoulder Arthroscopy with a 70 Degree Arthroscope Improves Visualization of the Bicipital Groove in Cadaveric and Living Subjects. *Accepted in Arthroscopy*
- 18) Hartzler RU, Melapi S, de Beer JF, Burkhart SS. Arthroscopic Glenoid Resurfacing with Dermal Allograft: Does a Thicker Graft Improve Outcomes? *In Preparation*

TEXTBOOKS

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

BOOK CHAPTERS

- 2) **Hartzler RU**, Sperling JW, Cofield RH. Total Shoulder Arthroplasty. In: Lee D, Neviasser RJ, editors. *Operative Techniques: Shoulder and Elbow Surgery*. Philadelphia: Saunders; 2010. p. 147-64.
- 3) Mighell MA, **Hartzler RU**, and Kovack TJ. Elbow Arthrodesis. *Operative Techniques for Orthopaedic Surgery*, 2nd ed. Wolters Kluwer, 2015.
- 4) **Hartzler RU**, Angelo RL, Burkhart SS. Pathoanatomy of Rotator Cuff Tears. In: *Normal and Pathological Anatomy of the Shoulder*. Springer, 2015.
- 5) **Hartzler RU**, Marder RA, Burkhart SS. Rotator Cuff Disorders. In: *Chapman's Orthopaedic Surgery 4th Edition*. *In preparation*
- 6) **Hartzler RU**, Burkhart SS. Anterior Instability with Moderate Glenoid Bone Loss: The Latarjet Procedure. In: *AAOS Advanced Reconstruction: Shoulder 2*. *In preparation*
- 7) **Hartzler RU**, Morrey BF. Coronoid Fractures. In: *The Elbow and Its Disorders Section IV: Acute Trauma*. *In preparation*
- 8) Sheean AJ, **Hartzler RU**, Burkhart SS. Latarjet. In: *An Atlas of Advanced Shoulder Arthroscopy*. *In preparation*

POSTERS/ABSTRACTS/PRESENTATIONS

- 1) 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.