# Mark A Frankle, MD

Education	Orthopaedic Internship and Residency University of South Florida, Tampa, FL	1985-1990
	<b>Doctorate of Medicine</b> Rush Medical College, Chicago, IL	1981-1985
	Bachelor of Arts Grinnell University College, Grinnell, IA	1977-1981
Fellowship Training	<ul> <li>Mayo Clinic</li> <li>Rochester, MN</li> <li>Shoulder &amp; Adult Reconstruction under the direction of Robert H. Cofield, MD</li> <li>Elbow &amp; Adult Reconstruction under the direction of Bernie Morrey, MD</li> </ul>	1991-1992
	<ul> <li>A/O-ASIF</li> <li>Davos, Switzerland         <ul> <li>Laboratory for Experimental Surgery Research</li> <li>under the direction of Stephen Perren, MD</li> </ul> </li> </ul>	<i>1990-1991</i> ch
	Rush Medical College Chicago, IL Orthopaedic Pathology and Research	1982-1983
Board Certification & Licensure	American Board of Orthopaedic Surgery Recertification Date Recertification Date Recertification Date  Examiner American Board Of Orthopaedic Surgery Examiner American Board of Orthopaedic Surgery	7/15/1994-12/3/2004 1/1/2005-12/31/2014 1/1/2015-12/31/2024 8/1/2022-12/31/2034 7/18/2011-7/21/2011 7/21/2014-7/24/2014
	ME0050333 Florida Original Issue Date: April 27, 1987	Expires: Jan 2026

Career History	<ul> <li>Florida Orthopaedic Institute, Tampa FL</li> <li>Chief of Shoulder and Elbow Surgery</li> <li>Specializing in Shoulder and Elbow Injuries</li> <li>Director of Shoulder and Elbow Fellowship Program</li> <li>Director of Shoulder and Elbow Biomechanical Laboratory</li> <li>Principal Investigator for the Foundation for Orthopaedic Research and Education (FORE)</li> </ul>	1992-Present
Hospital Privileges	Tampa General Hospital Tampa, FL Advent Health Hospital Carrollwood Tampa, FL Florida Orthopaedic Institute Surgery Center Tampa, FL	1992-Present 1992-Present 2002-Present
Staff Appointments	University of South Florida Tampa, FL Department of Orthopaedics Clinical Professor	2015-Present
	University of South Florida Tampa, FL Affiliate Assistant Professor	2012-2015
	University of South Florida Tampa, FL Chemical and Biomedical Engineering Department Courtesy Professor	2008-2009
	Florida Hospital Tampa, FL Chairman of Department of Orthopaedic Surgery	1998-2003
	Mayo School of Medicine Rochester, MN Department of Orthopaedic Surgery Instructor	1991-1992
Committee Appointments	President American Shoulder and Elbow Surgeons	2020-2021
	Vice President American Shoulder and Elbow Surgeons	2019-2020
	President Elect American Shoulder and Elbow Surgeons	2020-2021
	Cost Effectiveness Committee American Shoulder and Elbow Surgeons	2014-present

Executive Committee Member for the Florida Medical Association PAC	2010-present
Research Committee American Shoulder and Elbow Surgeons	2007-present
Shoulder and Elbow Program Committee American Academy of Orthopaedic Surgeons	2010-2014
Ad Hoc Committee (Task Force) on Value-Driven Shoulder Care American Shoulder and Elbow Surgeons	2013-2014
2014 Open Meeting Program Committee American Shoulder and Elbow Surgeons	2013
Appropriate Use Criteria Committee Writing Panel Member for Rotator Cuff Repairs American Academy of Orthopaedic Surgeons	2012-2013
Shoulder and Elbow Program Committee American Academy of Orthopaedic Surgeons	2002-2008
Sub-Committee Member for Upper Extremity Evaluation American Academy of Orthopaedic Surgeons	2007
Closed Meeting Committee American Shoulder and Elbow Surgeons	2007
Electronic Media Education Committee American Shoulder and Elbow Society	2001-2005
CPT Coding Committee American Shoulder and Elbow Society	2004
Publication Committee American Shoulder and Elbow Surgeons	2001-2003
Closed Meeting Committee American Shoulder and Elbow Society	2000-2001
Open Meeting Committee American Shoulder and Elbow Society	2000-2001

## Course Director

## **Current Solutions in Shoulder and Elbow Surgery** Tampa, FL

1994-Present

The purpose of this course is to provide orthopaedists with a comprehensive update on the surgical treatment of shoulder and elbow problems including arthroscopy, arthroplasty, and fracture management

#### **Annual Total Joint Replacement and Rehabilitation** Seminar

1995-2005

- Total Shoulder Arthroplasty Indications, Diagnosis, and Complex Problems Including Revision, Dislocations, Infections, and relation to Physical Therapy
- Total Elbow Arthroplasty Indications, Diagnosis, Surgical Approach and Procedure

## **Spectrum of Orthopaedics**

2001

Vail, CO

Co-Chairman of this course to discuss the surgical management of patients who have shoulder, knee or hip reconstruction or fracture repair in terms of surgical technique and device selection

# Course **Faculty**

#### **Nice Shoulder Course**

2006-Present

Nice, France

#### San Diego Shoulder Course

2002-Present

San Diego, CA

# Congress of the European Society for Surgery of

2000-present

the Shoulder & the Elbow

2001-present

# **International Congress of Shoulder and Elbow**

2012-present

Surgeons

### International Congress for Joint Reconstruction Annual **Shoulder Course**

Las Vegas, NV

State of the Art Shoulder Arthroplasty: Expanding Indications and Techniques Course NYU – New York, NY	2015
Paris International Shoulder Course Paris, France	2013
AAOS/ASES Shoulder Arthroplasty Course Rosemont, IL	2012
Ohio Shoulder & Elbow Society Course	2012
Orthopaedic Congress of North Germany Hamburg, Germany	2010
Orthopaedic Education Summit Park City, Utah	2008
37 <sup>th</sup> Annual Orthopaedic Trauma and Seminar Minneapolis, MN	2007
AAOS "Boomeritis: Musculoskeletal Care of the Mature Athlete" Hilton Head, SC	2007
Transforming Orthopaedics Vail, CO	2006
The Philadelphia Orthopaedic Society Philadelphia, PA	2001
AAOS Summer Institute San Diego, CA	2001
<b>Spectrum of Orthopaedics, Trauma, and Spine</b> Hilton Head, SC	2000
Shoulder Arthroplasty – Past and Future, Palais de Congrès Paris, France	2000
Mayo Clinic Orthopaedic Course on Advanced Surgical Skills of the Elbow for Trauma Related Injuries Rochester, MN	2000

## **AAOS Learning Course of Current Techniques in Open** and Arthroscopic Shoulder Surgery, #456/3226 Rosemont, IL

1998

Member Since

<b>Consulting</b>
Journal
Reviewer

**Clinical Orthopaedics and Related Research** 

Journal of Bone and Joint Surgery

Journal of Orthopaedic Research

Journal of Orthopaedic Trauma

**Journal of Shoulder and Elbow Surgery** 

<b>Professional</b>
<b>Memberships</b>

American Orthopedic Association	6/25/2005
Australia Society of Shoulder and Elbow Surgeons	9/15/2002
American Shoulder and Elbow Surgeons	11/4/1999
Fellow American College of Surgeons	10/29/1998
American Academy of Orthopaedic Surgeons	10/1/1997
American College of Surgeons	5/23/1997
American Medical Association	2/14/1994
Hillsborough County Medical Association	12/27/1993
Florida Orthopaedic Society	12/31/1992
Mayo Alumni Foundation	6/20/1992
Nominated for Charles S. Neer Award Stone G, Clark R, O'Brien K, Vaccaro L, Tannenbaum R, Cottrell B, Stephens B, Lorenzetti A, Frankle M. Periprosthetic shoulder infection: one-stage better than two-stage?	2016
Nominated for Charles S. Neer Award	2016

Updated: 7/12/2022

**Honors** Received Cabezas A, Simon P, Lorenzetti A, Krebes K, Santoni B, Stone G, Clark R, Frankle M. 2D/3D Image Registration To Determine Host Bone Coverage Of Glenoid Side Reverse Shoulder Implants.

#### Nominated for Charles S. Neer Award

2015

Hartzler R, Steen B, Hussey M, Cusick M, Cottrell B, Clark R, Frankle M. Reverse Shoulder Arthroplasty For Massive Rotator Cuff Tear: Risk Factors For Poor Functional Improvement.

### Nominated for Charles S. Neer Award

2014

Simon P, PhD, Gupta A, Pappou I, Hussey M, Santoni B, Inoue N, Frankle M. The Relationship Between the Subchondral Bone Density Distribution and Glenoid Depth: An In-Vivo Pilot Study of Male Total Shoulder Arthroplasty Subjects.

### **America's Top Orthopaedists**

2007,2008

Consumers Research Council

#### **Best Doctors in America**

Mark A. Frankle, elected by his peers for inclusion in Best Doctors in America®

2001-Present

## **Best Doctors** Tampa, FL Tampa Bay Metro

2002-Present

## America's Top Surgeons

2002-2005

Mark A. Frankle was selected as one of "America's Top Surgeons" in April of 2002. He is currently listed in the "Guide to America's Top Surgeons".

# Tampa Business Journal Tampa, FL

2004

Finalist for "Health Care Innovation and Research" Award

#### **Charles S. Neer Award Recipient**

2001

Frankle, M, Ondrovic, L, Markee, B, Harris, ML, Lee, WE. Tuberosity Reconstruction in Hemiarthroplasty for Four-part Proximal Humerus Fractures: A Biomechanical Study to Assess Interfragmentary Stability. Proceeding of American Shoulder and Elbow Society 17th Open Meeting, San Francisco, CA.

#### "Who's Who in the World"

June 2000

Mark A. Frankle was nominated by a colleague for inclusion in Marquis Who's Who in the World. Who's Who in the World is a comprehensive directory of the biographies of outstanding men and women in a wide range of professions and geographic locations. The book is a reference for educators, administrators, researchers and library patrons.

#### Nominated for Charles S. Neer Award

1999

**Frankle, M,** Sanders, R., DiPasquale, T. A Comparison of Open Reduction and Internal Fixation vs. Primary Total Elbow Arthroplasty for Distal Humerus Fractures in Females Greater Than Sixty-Five Years Old. Proceeding of American Shoulder and Elbow Society 15<sup>th</sup> Open Meeting, Anaheim, CA.

#### **Best Scientific Paper**

October

1998

**Frankle, M**, Markee, B, Greenwald, D. "The Biomechanical Effects of Malposition of Tuberosity Fragments on the Humerus Prosthetic Reconstruction for Four-Part Proximal Humerus Fractures." Proceeding of the Seventh International Conference on Surgery of the Shoulder.

# **Grants Received**

### Individual Research Project Grants Over \$2,000,000

2000-present

#### Orthopaedic Research & Educational Foundation

for prospective cohort study of shoulder function after reverse and anatomical total shoulder replacement.

**\$99,000** *2008-2010* 

#### Orthopaedic Research & Educational Foundation

for the Foundation for Orthopaedic Research & Education/Florida Orthopaedic Institute Shoulder & Elbow Fellowship Program

\$75,000/Tornier, Inc. 2009-2010

**\$25,000** 2010-2011

**\$27,500** *2011-2012* 

**\$25,000** 2012-2013

Updated: 7/12/2022

2013-2014

\$31,250

\$30,000

**OMeGA Medical Grants Association** 

for the Foundation for Orthopaedic Research & Education/Florida Orthopaedic Institute Shoulder & Elbow Fellowship Program

2009-2010 \$50,000 2011-2013 \$150,000 2014-2015

2015-2016 \$7,500

2017-2018 \$14,500

2020-2021 \$55,000

**DePuy Mitek Fellowship Grant** 

for the Foundation for Orthopaedic Research & Education/Florida Orthopaedic Institute Shoulder & Elbow Fellowship Program

2012-2013 \$25,000 2013-2014 \$21,500

**Cross Award Shoulder and Elbow Fellowship** 

for the Foundation for Orthopaedic Research & Education/Florida Orthopaedic Institute Shoulder & Elbow Fellowship Program

2012-2014 \$50,000 2014-2016 \$50,000

2016-2018 \$40,000

Arthrex, Inc. Fellowship grant

for the Foundation for Orthopaedic Research & Education/Florida Orthopaedic Institute Shoulder & Elbow Fellowship Program

> \$20,000 2015-2016

# **Product Development**

Encore Orthopaedics, Inc. (DJO Surgical) - Designer of Reverse Shoulder Prosthesis

Encore Orthopaedics, Inc. (DJO Surgical) - Co-designer of Total Shoulder Replacement

DePuy, Inc. - Co-designer Humeral Head Resection Guide

Wright Medical Technology, Inc. - Co-designer - Total Shoulder Replacement

#### **Patents**

Frankle, Mark. Shoulder arthroplasty systems and configurations for components thereof.

Patent 9,522,067. 2016.

Frankle, Mark and Gutierrez, Sergio. Method and system for the intramedullary fixation of a fractured bone.

Patent 8,425,513. 2013.

Frankle, Mark A. Suture management method and system.

Patent 6,860,887. 2005.

Frankle, Mark A. Reverse shoulder prosthesis system.

Patent 6,790,234. 2004.

Frankle, Mark A. Shoulder prosthesis system.

Patent 6,679,916. 2004.

# Video **Production**

Indications for Reverse Total Shoulder Arthroplasty. AAOS ICL 65, AAOS. Mark Frankle, Jonathan Streit, and Brent Stephens. 2015.

Reverse Shoulder Arthroplasty for Acute Proximal Humerus Fractures. Advanced Reconstruction 2, AAOS. Michael Hussey and Mark Frankle. 2015.

Locked Plating for Proximal Humerus Fractures. Mark Mighell, Derek Pupello, Brian Badman and Mark Frankle. 2007.

Reverse Shoulder Prosthesis Surgical Technique. Perf. Mark A. Frankle. 2006.

Updated: 7/12/2022

"The Reverse Shoulder Prosthesis for Glenohumeral Arthritis Associated with Sever Rotator Cuff Deficiency" Dir. Mark A. Frankle. The Video Journal of Orthopaedics. June 2005. <a href="http://www.vjo.com">http://www.vjo.com">http://www.vjo.com</a>>.

### **Books**

Frankle, Mark A, ed. Rotator Cuff Deficiency in the Shoulder. New York: Thieme Medical, 2008. p. 200. ISBN: 978-1588905062.

Frankle, Mark A, ed. Reverse Shoulder Arthroplasty: Biomechanics, Clinical Techniques, and Current Technologies. New York, NY: Springer, 2016. ISBN 978-3-319-20840-4.

# Book **Chapters**

Hussey MM, Steen BM, Frankle MA. Chapter 20: Reverse Shoulder Arthroplasty for Proximal Humerus Fractures. In: Wiesel SW, ed. Operative Techniques in Orthopaedic Surgery Volume 3. 2<sup>nd</sup> edition: Philadelphia: Lippincott Williams & Wilkins, c2015. ISBN: 1496314689.

Hussey MM, Steen BM, Frankle MA. Chapter 32: Reverse Shoulder Arthroplasty for Proximal Humerus Fractures. In: Williams GR, Ramsey ML, Wiesel BB, ed. Operative Techniques in Shoulder and Elbow Surgery. 2nd edition: Philadelphia: Lippincott Williams & Wilkins, c2015. ISBN: 9781496345219.

Puskas B, Harreld K, Sahajpal D, **Frankle M**. Chapter 40: Arthroplasty of the Shoulder Using the Reverse Shoulder Prosthesis. In: Craig E, ed. Master's Techniques in Orthopaedic Surgery: The Shoulder. 3<sup>rd</sup> edition: Philadelphia: Lippincott Williams & Wilkins, c2013. p. 621-660. ISBN: 978-0-7817-9748-1.

Otto R, Nigro P, Frankle M. Chapter 35: Reverse Shoulder Arthroplasty for Chronic Shoulder Pathology: Indications. Contraindications, and Outcomes, and Outcomes in 2012. In: Nicholson G, ed. Orthopaedic Knowledge Update: Shoulder and Elbow 4: Rosemont: Academy of Orthopedic Surgeons (AAOS), c2013. ISBN: 978-0-8920-3955-5.

Willis M, Walker M, **Frankle M**. Reverse Total Shoulder Arthroplasty. In: Sanchez-Sotolo J, editor. AAOS Monograph on Total Shoulder

- Arthroplasty. Rosemont: American Academy of Orthopedic Surgeons (AAOS); c2012. ISBN: 978-0-89203-412-3.
- Mulieri PJ, Frankle MA, Mighell MA. Chapter 22: Fractures of the Olecranon and Complex Fracture-Dislocations of the Proximal Ulna and Radial Head. In: Stanley D and Trail I, eds. Operative Elbow Surgery. Edinburgh: Elsevier Health Sciences, c2012. p. 621-660. ISBN: 978-0-7020-3099-4.
- **Frankle M.** Chapter 15: Revision of Reverse Shoulder Arthroplasty. In: Cofield RH and Sperling JW, eds. Revision and Complex Shoulder Arthroplasty. Philadelphia: Lippincott Williams & Wilkins, c2010. p. 138-156. ISBN: 078177747X.
- Frankle M, Chacon A, Cuff D. Reverse Prosthesis for Acute and Chronic Fractures. In: Dines D, Williams G, Laurencin C, editors. Arthritis & Arthroplasty: The Shoulder. Philadelphia: Elsevier, c2009. p. 218-234. ISBN: 978-1-4160-4975-3.
- Frankle, M. Chapter 32: Management of Flail Elbow. In: Yamaguchi K, O'Driscoll S, King G, McKee M, eds. Advanced Reconstruction Elbow. Rosemont: American Academy of Orthopedic Surgeons (AAOS), c2007. p. 427-434. ISBN: 978-0-89203-391-1.
- Frankle M, Fisher D, Mighell M. Chapter 26: Replacement Arthroplasty for Acute Fractures. In: Williams GR, Yamaguchi K, Ramsey ML, Galatz LM, editors. Shoulder and Elbow Arthroplasty. Philadelphia: Lippincott Williams and Wilkins, c2005. p. 393-404.
- **Frankle, Mark**. "Revision of Failed Reverse Type Implants." Revision and Complex Shoulder Arthroplasty. Philadelphia: Lippincott Williams and Wilkins, 2005.
- Devinney Scott, Mark Frankle, Mark Mighell, and David Fisher. "Surgery of Shoulder Arthritis." Arthritis and Allied Conditions. Philadelphia: Lippincott Williams & Williams, 2005.
- Floyd, III, W, Troum, S, Frankle, M. Infections-Acute and Chronic Sepsis, Surgery of the Hand and Upper Extremity, Edited by Clayton Peimer, Volume II, Chapter 77, pp 1731-1762.

## Research **Articles**

Melvani R, Diaz MA, Wilder L, Christmas KN, Simon P, Cronin KJ, Mighell MA, Frankle MA. Improved mechanical fixation of an

- all-polyethylene glenoid reduces postoperative radiolucent lines. J Shoulder Elbow Surg. 2022 Mar 23:S1058-2746(22)00301-9. doi: 10.1016/j.jse.2022.02.016. Epub ahead of print. PMID: 35339705.
- Haidamous G, Merimee S, Simon P, Denard PJ, Lädermann A, Mighell MA, Gorman RA 2nd, Frankle MA. Acromial fractures following reverse shoulder arthroplasty: the role of the acromial morphology and a comparison of clinical outcomes. J Shoulder Elbow Surg. 2022 Jun;31(6S):S34-S43. doi: 10.1016/j.jse.2022.01.132. Epub 2022 Feb 18. PMID: 35183742.
- Eyberg BA, Wilder LB, Simon P, Gutierrez S, Ayala G, Iannotti JP, Mighell MA, **Frankle MA**. Identifying areas of screw fixation in glenoids with severe bone loss in shoulder arthroplasty. J Shoulder Elbow Surg. 2022 Jun;31(6S):S136-S142. doi: 10.1016/j.jse.2022.01.131. Epub 2022 Feb 16. PMID: 35182767.
- Gauci MO, Diaz MA, Christmas KN, Simon P, Frankle MA. Do preoperative factors and implant design features influence humeral stem extraction efforts? J Shoulder Elbow Surg. 2022 Jul;31(7):1515-1523. doi: 10.1016/j.jse.2021.12.029. Epub 2022 Jan 25. PMID: 35085600.
- Neeley RA, Diaz MA, Gorman RA 2nd, Frankle MA, Mighell MA. A Weaving Rip-Stop Technique Leads to a Significantly Increased Load to Failure and Reduction in Suture-Tendon Cut-Through in a Biomechanical Model of Rotator Cuff Repair. Arthrosc Sports Med Rehabil. 2021;3(5):e1263-e1272. doi: 10.1016/j.asmr.2021.04.005.
- Ross JP, Lee A, Neeley R, Mighell MA, Frankle MA. The subscapularis-sparing windowed anterior technique for total shoulder arthroplasty. J Shoulder Elbow Surg. 2021;30(7S):S89-S99. doi: 10.1016/j.jse.2021.03.150.
- Southard EJ, Ode G, Simon P, Christmas KN, Pamic D, Collin P, Mighell MA, Frankle MA. Comparing patient-reported outcome measures and physical examination for internal rotation in patients undergoing reverse shoulder arthroplasty: does surgery alter patients' perception of function? J Shoulder Elbow Surg. 2021;30(7S):S100-S108. doi: 10.1016/j.jse.2021.01.020.
- Lee A, Christmas KN, Simon P, Bhatt FR, Lee WE 3rd, Mighell MA, Frankle MA. Influence of preoperative factors on timing for

- bilateral shoulder arthroplasty. J Shoulder Elbow Surg. 2021;30(7S):S116-S122. doi: 10.1016/j.jse.2020.12.023.
- McLendon PB, Christmas KN, Simon P, Plummer OR, Hunt A, Ahmed AS, Mighell MA, Frankle MA. Machine Learning Can Predict Level of Improvement in Shoulder Arthroplasty. JBJS Open Access. 2021;6(1):e20.00128. doi: 10.2106/JBJS.OA.20.00128.
- Gorman RA 2nd, Christmas KN, Simon P, Mighell MA, Frankle MA. A cohort comparison of humeral implant designs in reverse shoulder arthroplasty: does implant design lead to lower rates of complications and revision? J Shoulder Elbow Surg. 2020:S1058-2746(20)30625-X. doi: 10.1016/j.jse.2020.07.031. [Online ahead of print]
- Franke KJ, Christmas KN, Simon P, Mighell MA, Frankle MA. The Effect of Glenoid Bone Loss and Rotator Cuff Status in Failed Anatomic Shoulder Arthroplasty after Revision to Reverse Shoulder Arthroplasty. J Shoulder Elbow Surg. 2020:S1058-2746(20)30615-7. doi: 10.1016/j.jse.2020.07.024. [Online ahead of print]
- Haidamous G, Ladermann A, Frankle MA, Gorman RA 2nd, Denard PJ. The risk of postoperative scapular spine fracture following reverse shoulder arthroplasty is increased with an onlay humeral stem. J Shoulder Elbow Surg. 2020:S1058-2746(20)30337-2. doi: 10.1016/j.jse.2020.03.036. [Online ahead of print]
- Gorman RA 2nd, Christmas KN, Simon P, Hess AV 2nd, Brewley EE Jr, Mighell MA, Frankle MA. Optimizing humeral stem fixation in revision reverse shoulder arthroplasty with the cement-withincement technique. J Shoulder Elbow Surg. 2020;29(7S):S9-S16. doi: 10.1016/j.jse.2020.01.094.
- Diaz MA, Hsu JE, Ricchetti ET, Garrigues GE, Gutierrez S, Frankle MA. Influence of reverse total shoulder arthroplasty baseplate design on torque and compression relationship. JSES Int. 2020;4(2):388-396. doi: 10.1016/j.jse.2019.10.012.
- Yahuaca BI, Simon P, Christmas KN, Patel S, Gorman RA 2nd, Mighell MA, Frankle MA. Acute surgical management of proximal humerus fractures: ORIF vs hemiarthroplasty vs. reverse shoulder arthroplasty. J Shoulder Elbow Surg. 2020;29(7S):S32-S40. doi: 10.1016/j.jse.2019.10.012.

- Brewley EE Jr, Christmas KN, Gorman RA 2nd, Downes KL, Mighell MA, Frankle MA. Defining the younger patient: age as a predictive factor for outcomes in shoulder arthroplasty. J Shoulder Elbow Surg. 2020;29(7S):S1-S8. doi: 10.1016/j.jse.2019.09.016.
- Diaz MA, Garrigues GE, Ricchetti ET, Gutierrez S, Frankle MA. Relationship Between Insertion Torque and Compression Strength in the Reverse Total Shoulder Arthroplasty Baseplate. J Orthop Res. 2020;38(4):871-879. doi: 10.1002/jor.24506.
- Franke KJ, Christmas KN, Downes KL, Mighell MA, Frankle MA. Does the etiology of a failed hemiarthroplasty affect outcomes when revised to a reverse shoulder arthroplasty? J Shoulder Elbow Surg. 2020;29(7S):S149-S156. doi: 10.1016/j.jse.2019.08.019.
- Easley J, Puttlitz C, Hackett E, Broomfield C, Nakamura L, Hawes M, Getz C, Frankle M, St Pierre P, Tashjian R, Cummings PD, Abboud J, Harper D, McGilvray K. A prospective study comparing tendon-to-bone interface healing using an interposition bioresorbable scaffold with a vented anchor for primary rotator cuff repair in sheep. J Shoulder Elbow Surg. 2020;29(1):157-166. doi: 10.1016/j.jse.2019.04.034.
- Garrigues GE, Zmistowski B, Cooper AM, Green A; ICM Shoulder **Group.** Proceedings from the 2018 International Consensus Meeting on Orthopedic Infections: the definition of periprosthetic shoulder infection. J Shoulder Elbow Surg. 2019;28(6S):S8-S12. doi: 10.1016/j.jse.2019.04.034.
- Garrigues GE, Zmistowski B, Cooper AM, Green A; ICM Shoulder **Group.** Proceedings from the 2018 International Consensus Meeting on Orthopedic Infections: management of periprosthetic shoulder infection. J Shoulder Elbow Surg. 2019;28(6S):S67-S99. doi: 10.1016/j.jse.2019.04.015.
- O'Briain DE, Simon P, Christmas KN, Diaz MA, Hess AV 2nd, Hernandez-Ortiz EG, Sellers T, McLendon PB, Mighell MA, Frankle MA. Do preoperative radiographs help predict intraoperative challenges in revision surgery after previous shoulder hemiarthroplasty? J Shoulder Elbow Surg. 2019;28(6S):S161-S167. doi: 10.1016/j.jse.2019.04.013.
- Garrigues GE, Zmistowski B, Cooper AM, Green A; ICM Shoulder **Group.** Proceedings from the 2018 International Consensus Meeting on Orthopedic Infections: prevention of periprosthetic

- shoulder infection. J Shoulder Elbow Surg. 2019;28(6S):S13-S31. doi: 10.1016/j.jse.2019.04.017.
- Lindbloom BJ, Christmas KN, Downes K, Simon P, McLendon PB, Hess AV 2nd, Mighell MA, Frankle MA. Is there a relationship between preoperative diagnosis and clinical outcomes in reverse shoulder arthroplasty? An experience in 699 shoulders. J Shoulder Elbow Surg. 2019;28(6S):S110-S117. doi: 10.1016/j.jse.2019.04.007.
- Hernandez-Ortiz EG, Christmas KN, Simon P, Diaz MA, Hess AV 2nd, O'Briain DE, McLendon PB, Mighell MA, Frankle MA. Improving preoperative planning of revision surgery after previous anatomic total shoulder arthroplasty. J Shoulder Elbow Surg. 2019;28(6S):S168-S174. doi: 10.1016/j.jse.2019.04.005.
- Cox JL, McLendon PB, Christmas KN, Simon P, Mighell MA, Frankle MA. Clinical outcomes following reverse shoulder arthroplastyallograft composite for revision of failed arthroplasty associated with proximal humeral bone deficiency: 2- to 15-year follow-up. J Shoulder Elbow Surg. 2019;28(5):900-907. doi: 10.1016/j.jse.2018.10.023.
- Allert JW, Sellers TR, Simon P, Christmas KN, Patel S, Frankle MA. Massive Rotator Cuff Tears in Patients Older Than Sixty-five: Indications for Cuff Repair versus Reverse Total Shoulder Arthroplasty. Am J Orthop (Belle Meade NJ). 2018 Dec;47(12). doi: 10.12788/ajo.2018.0109.
- Werthel JD, Schoch B, Frankle M, Cofield R, Elhassan BT. Shoulder Arthroplasty for Sequelae of Obstetrical Brachial Plexus Injury. J Hand Surg Am. 2018 Sep;43(9):871.e1-871.e7. doi: 10.1016/j.jhsa.2018.02.006.
- McLendon PB, Cox JL, **Frankle MA.** Humeral Bone Loss in Revision Shoulder Arthroplasty. Am J Orthop (Belle Mead NJ). 2018 Feb;47(2). doi: 10.12788/ajo.2018.0012.
- LaMartina J 2<sup>nd</sup>, Christmas KN, Simon P, Streit JJ, Allert JW, Clark J, Otto RJ, Abdelfattah A, Mighell MA, Frankle MA. Difficulty in decision making in the treatment of displaced proximal humerus fractures: the effect of uncertainty on surgical outcomes. J Shoulder Elbow Surg. 2018 Mar;27(3):470-477. doi: 10.1016/j.jse.2017.09.033.

- Sellers TR, Abdelfattah A, **Frankle MA.** Massive Rotator Cuff Tear: When to Consider Reverse Shoulder Arthroplasty. Curr Rev Musculoskelet Med. 2018 Mar;11(1):131-140. doi: 10.1007/s12178-018-9467-2. Review.
- Simon P, Streit JJ, Abboud JA, Mighell MA, Williams GR Jr, Frankle MA. Quantitative videographic analysis of intraoperative total shoulder arthroplasty is predictive of radiographic implant loosening. J Shoulder Elbow Surg Open Access. 2018 Mar. pii: 18-22. doi: 10.1016.j.jses.2017.11.001.
- Tanner G, Simon P, Sellers T, Christmas KN, Otto RJ, Cuff DJ, Abdelfattah A, Mighell MA, **Frankle MA**. Total shoulder arthroplasty with minimum 5-year follow-up: does the presence of subchondral cysts in the glenoid increase risk of failure? J Shoulder Elbow Surg. 2017 Dec 20. pii: S1058-2746(17)30695-X. doi: 10.1016/j.jse.2017.10.035. [Epub ahead of print]
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# Review and Invited Articles

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# Published Instructional Course Lectures

Groh GI, Kirsch JM, Williams GR Jr, Colley R, Levy JC, Serrano R, **Frankle MA.** The Basic Shoulder Arthroplasty: Simple Shoulder Replacement for the Generalist. *Instr Course Lect.* 2021;70:37-54.

Allert JW, Berglund D, Campbell J, Hernandez-Ortiz E, Lorenzetti AJ, Momaya AM, **Frankle MA**, Hawkins RJ, Levy JC, Mighell MA. Management of Three- and Four-Part Proximal Humerus Fractures. *Instr Course Lect.* 2019;68:99-116.

Lorenzetti AJ, Stone GP, Simon P, **Frankle MA**. Biomechanics of Reverse Shoulder Arthroplasty: Current Concepts. *Instr Course Lect.* 2016;65:127-43.

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# Research Presented at Meetings

Acromial Fractures Following Reverse Shoulder Arthroplasty: The Role of the Acromial Morphology and a Comparison of Clinical Outcomes Annual Meeting of the American Academy of

Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California

September 2021

Updated: 7/12/2022

Comparing patient-reported outcome measures and physical examination for internal rotation in patients undergoing reverse shoulder arthroplasty: does surgery alter patients' perception of function?

Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California

Machine Learning Can Predict Level of Improvement in Shoulder Arthroplasty

Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California

Optimizing humeral stem fixation in revision reverse shoulder arthroplasty with the cement-within-cement technique

Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, Florida [VIRTUAL]

Defining the younger patient: age as a predictive factor for outcomes in shoulder arthroplasty
Annual Meeting of the American Academy of

Orthopaedic Surgeons, Orlando, Florida [VIRTUAL]

Acute surgical management of proximal humerus fractures: ORIF vs. hemiarthroplasty vs. reverse shoulder arthroplasty

American Shoulder and Elbow Surgeons 2019 Annual Closed Meeting, New York, New York

Is there a relationship between preoperative diagnosis and clinical outcomes in reverse shoulder arthroplasty? An experience in 699 shoulders Annual Meeting of the American Academy of

Relationship Between Insertion Torque and Compression in a Monoblock RSA Design

Orthopaedic Surgeons, Las Vegas, Nevada

American Shoulder and Elbow Surgeons 2018 Annual Closed Meeting, Chicago, Illinois

Clinical outcomes following reverse shoulder arthroplasty-allograft composite for revision of failed arthroplasty associated with proximal humeral bone deficiency: 2- to 15-year follow-up. Annual Meeting of the American Academy of

Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana

September 2021

March 2020

September 2021

March 2020

October 2019

March 2019

October 2018

March 2018

Clinical outcomes following reverse shoulder arthroplasty-allograft composite for revision of failed arthroplasty associated with proximal humeral bone deficiency: 2- to 15-year follow-up. American Shoulder & Elbow Surgeons 2017 Annual Closed Meeting, New Orleans, Louisiana

October 2017

Difficulty in decision making in the treatment of displaced proximal humerus fractures: the effect of uncertainty on surgical outcomes.

American Shoulder & Elbow Surgeons 2017 Annual Closed Meeting, New Orleans, Louisiana

Classification of instability after reverse shoulder arthroplasty guides surgical management and outcomes.

American Shoulder & Elbow Surgeons 2017 Annual Closed Meeting, New Orleans, Louisiana

Bone Graft Augmentation for Severe Glenoid Bone Loss in Primary Reverse Total Shoulder Arthroplasty: Outcomes & Evaluation of Host Bone Contact by 2D/3D Image Registration Annual Meeting of the American Academy of

Orthopaedic Surgeons, San Diego, California

Bone Graft Augmentation for Severe Glenoid Bone Loss in Primary Reverse Total Shoulder Arthroplasty: Outcomes & Evaluation of Host Bone Contact by 2D/3D Image Registration

American Shoulder & Elbow Surgeons 2016 Annual Closed Meeting, Boston, Massachusetts

**Reoperation with Component Exchange After Failed Reverse Shoulder Arthroplasty** 

American Shoulder and Elbow Surgeons Closed Meeting Asheville, North Carolina

Reverse Shoulder Arthroplasty for Massive Rotator Cuff Tear: Risk Factors for Poor Functional Improvement

American Shoulder and Elbow Surgeons Open Meeting Las Vegas, Nevada Neer Award Nominee October 2017

October 2017

March 2017

October 2016

October 2015

March 2015

Outcome of reverse shoulder arthroplasty in patients with Parkinson's disease: A matched cohort study Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, Nevada

March 2015

**Outcomes And Value Of Reverse Shoulder Arthroplasty For The Treatment Of Glenohumeral** Osteoarthritis With An Intact Rotator Cuff: A **Matched Cohort Study** 

October 2014

American Shoulder and Elbow Surgeons Closed Meeting, Pinehurst, North Carolina

The Relationship Between The SBD Distribution And Glenoid Depth: An In-Vivo Pilot Study Of Male TSA Subjects

American Shoulder and Elbow Surgeons Open Meeting, New Orleans, Louisiana

March 2014

**Neer Award Nominee** 

**Results of Closed Management of Acute Dislocation** Following Reverse Shoulder Arthroplasty

Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana March 2014

Scapular Neck Length Measurement and Distribution in the Reverse Shoulder Arthroplasty (RSA) Patient Population

Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana March 2014

**Factors that Predict Postoperative Motion in Patients Treated with Reverse Shoulder Arthroplasty** 

Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana March 2014

**Effects of Morbid Obesity on RSA: A Case Control** Study on Outcomes, Complications, Disposition and Cost

Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana March 2014

Quantification of the Existing Glenohumeral Relationships in Patients Undergoing Reverse Shoulder Arthroplasty International Society for Technology in Arthroplasty Palm Beach, Florida	October 2013
What Is the Effect of Postoperative Scapula Fractures on Outcomes Following Reverse Shoulder Arthroplasty? International Society for Technology in Arthroplasty Palm Beach, Florida	October 2013
Effects of Morbid Obesity on RSA: a Case Control Study on Outcomes, Complications, Disposition and Cost International Society for Technology in Arthroplasty Palm Beach, Florida	October 2013
Factors That Predict Postoperative Motion in Patients Treated With Reverse Shoulder Arthroplasty International Society for Technology in Arthroplasty Palm Beach, Florida	October 2013
Scapular Neck Length Measurement and Distribution in the Reverse Shoulder Arthroplasty (RSA) Patient Population International Society for Technology in Arthroplasty Palm Beach, Florida	October 2013
Factors That Predict Postoperative Motion in Patients Treated with Reverse Shoulder Arthroplasty American Shoulder and Elbow Surgeons Closed Meeting, Pinehurst, North Carolina	October 2013
Acromial Fractures After Reverse Shoulder Arthroplasty: A Multicenter Evaluation Of Clinical And Radiographic Risk Factors International Congress of Shoulder and Elbow Surgeons, Nagoya, Japan	April 2013
The 4-Year Cost And Clinical Outcomes Of Reverse Shoulder Arthroplasty For The Surgical Treatment	March 2013

Of The Rotator Cuff Deficient Shoulder, Annual

Meeting of the American Academy of Orthopaedic Surgeons Specialty Day, Chicago

Acromial Fractures After Reverse Shoulder Arthroplasty: Multicenter Evaluation Of Risk March 2013

**Factors,** Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago

The 4-year Cost and Clinical Outcomes of Shoulder Arthroplasty, American Shoulder and Elbow Surgeons Closed Meeting, Sea Island

October 2012

Mid-term Results of Reverse Shoulder Arthroplasty at a Minimum of Five Years of Follow Up

Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco

February 2012

**Surgically Treated Humeral Shaft Fractures Following Shoulder Arthroplasty** 

23<sup>rd</sup> Congress of the European Society for Surgery of the Shoulder and the Elbow, Lyon

September 2011

Failed Total Shoulder Arthroplasty Treated with Reverse Shoulder Arthroplasty

Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego

February 2011

Proximal Humeral Bone Loss in Reverse Shoulder Arthroplasty

American Shoulder and Elbow Surgeons Closed Meeting, Scottsdale

October 2010

Effects of Tilt and glenosphere eccentricity in a reverse shoulder model

22<sup>nd</sup> Congress of the European Society for Surgery of the Shoulder and the Elbow, Edinsburg

September 2010

Factors Affecting Humeral Translation and Joint Volume in Reverse Shoulder Arthroplasty

 $22^{nd}$  Congress of the European Society for Surgery of the Shoulder and the Elbow, Edinsburg

September 2010

Stability of Reverse Shoulder Humeral Implants in a Proximal Humerus Bone Loss Model

22<sup>nd</sup> Congress of the European Society for Surgery of the Shoulder and the Elbow, Edinsburg

September 2010

Massive Cuff Tears Role of Reverse Prosthesis 22 <sup>nd</sup> Congress of the European Society for Surgery of	September 2010
Effects of Acquired Glenoid Bone Defects on Surgical Technique and Clinical Outcomes in Reverse Shoulder Arthroplasty Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans	March 2010
Effects of Tilt and glenosphere eccentricity in a reverse shoulder model American Shoulder and Elbow Society Closed Meeting, New York	October 2009
Effects of Glenoid Morphology on Surgical Technique and Clinical Outcomes in Reverse Shoulder Arthroplasty 21st Congress of the European Society for Surgery of the Shoulder and the Elbow, Madrid	September 2009
The Use of Reverse Shoulder Arthroplasty for Treatment of Failed Total Shoulder Arthroplasty 21st Congress of the European Society for Surgery of the Shoulder and the Elbow, Madrid	September 2009
Proximal Humerus Malunion in the Setting of Rotator Cuff Deficiency Treated with Reverse Shoulder Arthroplasty 21st Congress of the European Society for Surgery of the Shoulder and the Elbow, Madrid	September 2009
Pilot Study: Is a Formal Therapy Program Necessary after Total Shoulder Arthroplasty for Osteoarthritis Annual Meeting of the American Academy of Orthopaedic Surgery, Las Vegas	February 2009
Glenoid Morphology in Reverse Shoulder Arthroplasty – Classification and Surgical Implications American Shoulder and Elbow Society Closed Meeting, Santa Barbara	September 2008
Reverse Arthroplasty in Rheumatoid Patients	September 2008

20<sup>th</sup> Congress of the European Society for Surgery of the Shoulder and the Elbow, Belgium

Mobility versus Stability: The Relationship between the Abduction Range of Motion and Articular Constraint in Reverse Shoulder Arthroplasty

20<sup>th</sup> Congress of the European Society for Surgery of the Shoulder and the Elbow, Belgium

Classification of glenoid morphology in reverse shoulder arthroplasty and its surgical implications 20<sup>th</sup> Congress of the European Society for Surgery of

the Shoulder and the Elbow, Belgium

An Evaluation of Mechanical Failure of the Primary Glenoid Baseplate Treated with Revision Reverse Shoulder Arthroplasty

20<sup>th</sup> Congress of the European Society for Surgery of the Shoulder and the Elbow, Belgium

Outcomes of Reverse Shoulder Prostheses Using a Lateral Center of Rotation and Inferiorly Tilted Glenoid Component: A Minimum 2-Year Follow-up Study

American Shoulder and Elbow Society Closed Meeting, Chicago

Reverse Shoulder Prosthesis for Failed Hemiarthroplasty for Fracture

American Shoulder and Elbow Society Biennial, Orlando

RSP for the Treatment of Failed Arthroplasty
American Academy of Orthopaedic Surgeons Annual

Meeting, Chicago

Component Tilt and the Risk of Failure

American Academy of Orthopaedic Surgeons Annual Meeting, Chicago

A comparison of a reverse ball and socket prosthesis (RSP) as a salvage procedure for failed shoulder reconstruction to a primary reverse prosthesis for rotator cuff arthropathy or primary rotator cuff deficiency with idiopathic superior arch instability

September 2008

September 2008

September 2008

September 2007

April 2006

March 2006

March 2006

November 2002

Closed Meeting of the American Shoulder and Elbow Society, Pebble Beach, CA

## Osteoarthritis of the Shoulder Treated by Total Shoulder Arthroplasty: A Prospective Outcomes Study

Proceedings of the 69<sup>th</sup> American Academy of Orthopaedic Surgeons (AAOS), Dallas

# A Custom Reverse Ball and Socket Prosthesis As A Salvage Procedure in the Rotator Cuff Deficient Shoulder: A Prospective Outcome Study

Proceedings of the 69<sup>th</sup> American Academy of Orthopaedic Surgeons (AAOS), Dallas

## Tuberosity Reconstruction in Hemiarthroplasty for Four-Part Proximal Humerus Fractures: A Biomechanical Study to Assess Interfragmentary Stability

Proceeding of the 8<sup>th</sup> International Congress on Surgery of the Shoulder (ICSS), Cape Town, South Africa

# Outcomes of Hemiarthroplasty for Fractures of the Proximal Humerus

Proceeding of the 8<sup>th</sup> International Congress on Surgery of the Shoulder (ICSS), Cape Town, South Africa

## Tuberosity Reconstruction in Hemiarthroplasty for Four-Part Proximal Humerus Fractures: A Biomechanical Study to Assess Interfragmentary Stability

Proceeding of the 17<sup>th</sup> Annual American Shoulder & Elbow Surgeons Open Meeting (ASES), San Francisco **Neer Award Recipient in the Basic Science Category** 

# Outcomes of Hemiarthroplasty for Fractures of the Proximal Humerus

Proceeding of the 68<sup>th</sup> Annual American Academy of Orthopaedic Surgeons (AAOS), San Francisco

# Driving for Patients After Total Shoulder Surgery

Proceeding of the 14<sup>th</sup> European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon, Portugal

# Outcomes of Hemiarthroplasty for Fractures of the Proximal Humerus

September 2000

September 2000

February 2002

March 2002

March 2002

March 2001

Feb-Mar 2001

April 2001

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Proceeding of the 14th European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon, Portugal

**Tuberosity Reconstruction in Hemiarthroplasty for** Four-Part Proximal Humerus Fractures: A **Biomechanical Study to Assess Interfragmentary Stability** 

Proceeding of the 14th European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon, Portugal

September 2000

## **Invited Presentations**

Dislocation after RSA

ICJR 2021

October 2021

**Current Concepts in RSA** 

Polish Shoulder & Elbow Society Meeting

September 2021

**Innovative Take on Grammont's Ideals:** Lateralization & Decreased Humeral-Neck Angle in

**RSA** 

SECEC (Poland)

September 2021

Clinical Challenges in TSA in the US

SECEC (Poland)

September 2021

Subscapularis Failure

AAOS Annual Meeting 2021

September 2021

**Revision Shoulder Arthroplasty** 

AAOS Annual Meeting 2021

September 2021

**Ask the Expert Case Presentations** 

AAOS Annual Meeting 2021

September 2021

**Shoulder Replacement Concepts for PCP** 

Primary Care Physicians Course

July 2021

July 2021

Glenoid, Humeral Bone Loss, and Soft Tissue Loss in Revision Surgery Paris Shoulder Course	June 2021
Turis shoulder Course	June 2021
The Future of RSA ASES/BESS Joint Meeting	June 2021
History of ASES & Why We Join Groups ASES/BESS Joint Meeting	June 2021
Instability & RSA AAOS Webinar Series	June 2021
How the Reverse Works – Instability San Diego Shoulder Institute	April 2021
My Most Difficult Case & What I've Learned San Diego Shoulder Institute	April 2021
Strategies for Managing Complex Revision Cases UPMC Hand Fellows Course	April 2021
<b>55-Year-Old with MCT: Do a Reverse</b> Florida Orthopedic Society	
	April 2021
5 Things I've Learned: Reverse Shoulder Arthroplasty Tampa Shoulder Course	February 2021
Why We Join Groups Tampa Shoulder Course	January 2021
<b>Trials &amp; Tribulations of RSA Evolution</b> Brazilian Shoulder & Elbow Society Webinar	October 2020
Natural History of Osteoarthritis USF Grand Rounds	October 2020
RSA in the Young Patient SCCOT	October 2020

**Indications for Revision Shoulder Arthroplasty** 

October 2020 **SCCOT** 

October 2020 **Proximal Humerus Fractures** 

**SCCOT** 

September 2020

**Infection after Shoulder Arthroplasty** 

**SCCOT** June 2020

**AVN** 

**SCCOT** June 2020

Trials & Tribulations of RSA to the US

**USF** Grand Rounds

June 2020 RSA for Cuff Tear Arthropathy Re-Live Surgery

Nice Shoulder

**Evolution of RSA** May 2020 Nice Shoulder

February 2020

Reverse in the Setting of Humeral Bone Loss - APC

Nice Shoulder

February 2020

**Lateralization Re-Live Surgery** 

CCSA 2020

**Strategies for Managing Complex Revision Cases** 

Campbell Clinic Grand Rounds January 2020

Trials and Tribulations of Bringing the RSA to the

January 2020 **USA** 

Campbell Clinic Grand Rounds

Why I Prefer Glenoid Lateralization

January 2020 **ASAP 2020** 

The Evolution of RSA Design – Trials & Tribulations ASAP 2020	January 2020
ASAF 2020	January 2020
What to Do with an Infected Arthroplasty ASAP 2020	November 2019
How to Define Glenoid Erosion ASAP 2020	October 2019
Alternative Centerline – These are My Outcomes ASAP 2020	October 2019
<b>55-Year-Old with Massive Cuff Tear – Do a Reverse</b> ICJR 2019	May 2019
Trials & Tribulations of Bringing the RSA to the United States ASES Annual Meeting	May 2019
ASES Allitual Meeting	May 2019
Strategies for Managing Complex Revisions SCOOT Colombia	
Revision Indications ICSES Argentina	May 2019
Evolution of RSA in the US ICSES Argentina	March 2019
Strategies for Managing Complex Revision Cases	March 2019
USC Grand Rounds	February 2019
Evolution of RSA in the US USC Grand Rounds	February 2019
The Basic Shoulder Arthroplasty for the Generalist AAOS 2019	February 2019
The Evolution of RSA in the United States AAOS 2019	January 2019
RSA for Parkinson's Patients	January 2019

Paris Shoulder

January 2019 **Glenosphere Lateralization Mini-Battle** 

Paris Shoulder

January 2019 **Cement-Within-Cement Technique** 

Paris Shoulder

January 2019 **ASES Society Updates** 

Holy Cross Symposium

November 2018 **RSA Complications** 

Holy Cross Symposium

November 2018 Infection

**ASAP Meeting** 

November 2018 **B2** – Reverse All

**ASAP Meeting** 

November 2018 Alternative Centerline - When and How

**ASAP Meeting** 

October 2018 Most Challenging Case of My Career

ICJR 2018

October 2018

**Top 10 Arthroplasty Pitfalls** ICJR 2018

October 2018

How I Do a Revision Total Shoulder Arthroplasty

ICJR 2018

October 2018

**Glenosphere Lateralization** 

ICJR 2018

September 2018

**How the Reverse Works – Instability** 

Penn Ortho Society Annual Meeting

September 2018

Anatomic TSA – Reverse All!

Penn Ortho Society Annual Meeting

September 2018

**RSA** for the Young Patient

ASES Open Symposium

September 2018

**Reverse Shoulder Arthroplasty for Osteoarthritis** 

**ASES Open Symposium Meeting** 

March 2018

July 2018 What I've Learned from My Revisions VuMedi June 2018 Lateralization in RSA **MASES** Glenoid Revision in Shoulder Arthroplasty **MASES** June 2018 **Evolution of RSA in the United States MASES** June 2018 **Activities After Shoulder Replacement** Orthopaedics for the Primary Care Practitioner & Rehabilitation Therapist June 2018 Reverse Shoulder Arthroplasty: Technical **Considerations & Outcomes** British Shoulder & Elbow Society 2018 Annual June 2018 Scientific Meeting **Lateralized Design Rationale** British Shoulder & Elbow Society 2018 Annual June 2018 Scientific Meeting **RSA for MCT Without Arthritis AAOS** Webinar May 2018 **Reverse Shoulder Arthroplasty in Patients Under** Age 55 Nice Shoulder Course 2018: Current Concepts – Arthroscopy, Arthroplasty, & Fractures May 2018 **Lateralized Design Rationale** Nice Shoulder Course 2018: Current Concepts – Arthroscopy, Arthroplasty, & Fractures March 2018 **Treatment of Proximal Humeral Bone Loss with Allograft Prosthetic Composites** Nice Shoulder Course 2018: Current Concepts – March 2018 Arthroscopy, Arthroplasty, & Fractures RSA: The Soft Tissues are Important! How and Why I Balance Them

AAOS Webinar

Difficulty in Decision-Making in the Treatment of Displaced Proximal Humerus Fractures: The Effect of Uncertainty on Surgical Outcomes JBJS Webinar	March 2018
Improving Anatomic TSA: Learning from Our Failures 2018 Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans	January 2018
Know When to Fold 'Em: Arthroplasty for Fracture 2018 Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans	October 2017
Lateralized Design Rationale 2018 Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans	October 2017
The Failed RSA: Step-by-Step Approach to Revision  – How the Experts Think  2018 Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans	October 2017
RSA Complications 2018 Holy Cross Hospital-Mass General Hospital Orthopaedic Symposium	September 2017
<b>Lateralization in Reverse Shoulder Arthroplasty</b> 44 <sup>th</sup> Annual Meeting of the Japan Shoulder Society/1 <sup>st</sup> Annual Asia-Pacific Shoulder & Elbow Symposium	June 2017
<b>Treating the Unstable Reverse</b> 44 <sup>th</sup> Annual Meeting of the Japan Shoulder Society/1 <sup>st</sup> Annual Asia-Pacific Shoulder & Elbow Symposium	June 2017
Reverse Shoulder Arthroplasty: Biomechanics, Clinical Techniques, and Current Technologies 44 <sup>th</sup> Annual Meeting of the Japan Shoulder Society/1 <sup>st</sup> Annual Asia-Pacific Shoulder & Elbow Symposium	June 2017
Why I Do a Lateralized Center of Rotation Reverse	June 2017
Shoulder Arthroplasty AAOS/ASES Management of Massive Rotator Cuff Tears: Repair to Replacement	June 2017

<b>Patient Selection and Preoperative Planning</b> 34 <sup>th</sup> Annual San Diego Shoulder Course, San Diego	March 2017
Tips for Reverse Shoulder Arthroplasty: Stiffness & Patient Satisfaction	Water 2017
34 <sup>th</sup> Annual San Diego Shoulder Course, San Diego	February 2017
My Approach Overall and Specific to this Case of Failed Reverse Prosthesis 34th Annual San Diego Shoulder Course, San Diego	February 2017
How Do I Minimize Notching and Optimize Stability?  34 <sup>th</sup> Annual San Diego Shoulder Course, San Diego	November 2016
One-Stage Revision for Infection 34th Annual San Diego Shoulder Course, San Diego	November 2016
Know When to Fold 'Em: Arthroplasty for Fracture 2017 Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego	November 2016
RSA for Fracture 2017 Holy Cross Shoulder Symposium, Fort Lauderdale	October 2016 October 2016
Glenoid-Sided Lateralization 2017 Holy Cross Shoulder Symposium, Fort Lauderdale	October 2016
Top 10 Surgical Tips for Total Shoulder Arthroplasty 5th Annual ICJR Shoulder Course, Las Vegas	July 2016
Surgical Treatment of Periprosthetic Joint Infection: Emerging Evidence 5th Annual ICJR Shoulder Course, Las Vegas	June 2016
<b>Determining the Correct Baseplate Orientation</b> 5 <sup>th</sup> Annual ICJR Shoulder Course, Las Vegas	June 2016
Instability & RSA Paris Convention on Instability and Arthroplasty, France	June 2016
France	June 2016

**Humeral & Glenoid Loosening** 

Paris Convention on Instability and Arthroplasty, France	June 2016
Hardware/Component Failures Paris Convention on Instability and Arthroplasty, France	June 2016
<b>Total Shoulder Arthroplasty: Current Concepts</b> Orthopaedics for the Primary Care Practitioner & Rehabilitation Therapist, Clearwater	May 2016
Massive Rotator Cuff Repairs: Reverse Total Shoulder Arthroplasty	April 2016
33 <sup>rd</sup> Annual San Diego Shoulder Course, San Diego	April 2016
I Lateralize without Bone Graft	
33 <sup>rd</sup> Annual San Diego Shoulder Course, San Diego	April 2016
My Approach to this Kind of Fracture is Reverse	
Prosthesis	
33 <sup>rd</sup> Annual San Diego Shoulder Course, San Diego	April 2016
Reverse Shoulder Prosthesis (RSP)	
33 <sup>rd</sup> Annual San Diego Shoulder Course, San Diego	
<b>Managing Complications of Reverse Prosthesis</b>	March 2016
33 <sup>rd</sup> Annual San Diego Shoulder Course, San Diego	
How I Place a Baseplate to Avoid Notching	
33 <sup>rd</sup> Annual San Diego Shoulder Course, San Diego	March 2016
	Waren 2010
Revision of a Failed Lateralized Reverse Arthroplasty: What Did I Learn?	
Nice Shoulder Course 2016, France	
Defugue Describe Charalder Andrews leader	Marrie 2016
Painful Reverse Shoulder Arthroplasty Melbourne Shoulder Symposium, Australia	March 2016
What Makes a Reverse Work? St. George Shoulder Conference, Australia	
Strategies for Successfully Converting Anatomical to Reverse Total Shoulder Arthroplasty St. George Shoulder Conference, Australia	March 2016

Strategies to Prevent & Manage Joint Replacement Infections St. George Shoulder Conference, Australia	February 2016
Painful Reverse Shoulder Arthroplasty Symposium Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando	January 2016
Treatment of Proximal Humerus Fractures: Reverse Total Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando	January 2016 October 2015
Surgical Treatment of Periprosthetic Joint Infection: Emerging Evidence Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando	September 2015
Shoulder 2 Ask the Expert Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando	June 2015
<b>B2</b> Glenoid: Implant Design Implications Current Solutions in Shoulder & Elbow Surgery Tampa	June 2015 June 2015
Revision of a Failed Lateralized Reverse Arthroplasty (RSA): What Did I Learn? Mayo Clinic Comprehensive Shoulder Course: Current	June 2015
Concepts & Controversies, Scottsdale	April 2015
<b>B2</b> Glenoid: Reverse is the Best Way to Go Mayo Clinic Comprehensive Shoulder Course: Current Concepts & Controversies, Scottsdale	April 2015
Reoperation with Component Exchange After Failed Reverse Shoulder Arthroplasty	
American Shoulder & Elbow Surgeons 2016 Annual Closed Meeting, Asheville	April 2015

## Lateralization with the Sphere on the Glenoid Side: **Metallic Lateralization**

SECEC Meeting, Milan

March 2015

#### Revision Reverse Arthroplasty (RSA): A 12 Year **Review of a Lateralized Implant**

32<sup>nd</sup> Annual San Diego Shoulder Course, San Diego

#### **Does Adding Bone Graft Influence Revision RSA Outcomes?**

32<sup>nd</sup> Annual San Diego Shoulder Course, San Diego

#### Biomechanics of the RSA: Influence of Prosthetic Design

32<sup>nd</sup> Annual San Diego Shoulder Course, San Diego

#### 10 Year Outcomes of the Reverse Shoulder **Prosthesis**

32<sup>nd</sup> Annual San Diego Shoulder Course, San Diego

## **Surgical Treatment of Periprosthetic Joint Infection**

22<sup>nd</sup> Annual Spring Congress of the Korean Shoulder & Elbow Society, Korea

## Massive Cuff Tears Without Arthritis: The Role of **Reverse Prosthesis: A Re-Evaluation of Indications**

22<sup>nd</sup> Annual Spring Congress of the Korean Shoulder & Elbow Society, Korea

#### The Biomechanical Principles of RSA in the **Development of Improved Technology**

22<sup>nd</sup> Annual Spring Congress of the Korean Shoulder & Elbow Society, Korea

#### Shoulder 2

Ask the Expert Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas

#### **Infected Shoulder Arthroplasty: Diagnostic Dilemmas, Treatment Challenges and Current Controversies**

**Instructional Course Lecture** Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas

March 2015

June 2014

	Curriculum Vitae
RSA in the USA: The First 10 Years; Where We Started, Where We Are, and Where We Are Going Symposium Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas	March 2015
How to Avoid Complications Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas	March 2015
Long Stems, Cemented Stems Hold Up Well with Reverse Shoulder Arthroplasty (SIZE MATTERS When you like it Stiff (with cement)) American Shoulder and Elbow Surgeons Closed Meeting, Pinehurst, North Carolina	October 2014
Inferior Tilt Is Important to Create Compressive Forces and Ensure Glenoid Base Plate Ingrowth American Shoulder and Elbow Surgeons Closed Meeting, Pinehurst, North Carolina	October 2014
Patient-Specific Instrumentation Simulation is all you need - Don't need special instruments VuMedi	September 2014
RSA for Failed TSA AAOS Webinar	September 2014
Creating Value In Shoulder Surgery ICJR - Current State of the Art and Science Shoulder Reconstruction 2013, Las Vegas	September 2014
Medial vs. Lateral COR in Reverse TSA ICJR - Current State of the Art and Science Shoulder Reconstruction 2013, Las Vegas	September 2014
Total Shoulder Arthroplasty: Top 10 Surgical Technique Tips ICJR - Current State of the Art and Science Shoulder	September 2014

Reconstruction 2014, Las Vegas

Nice Shoulder Course, Nice

MIO-RSA: Complications and Revisions

Results of Closed Management of Acute Dislocation Following Reverse Shoulder Arthroplasty Nice Shoulder Course, Nice	June 2014
Periscapular Fractures after Reverse Shoulder Arthroplasty Nice Shoulder Course, Nice	June 2014
Subchondral Bone density distribution in degenerative shoulder disease; implications for clinical practice and etiology Grand Rounds, MGH Boston, Massachusetts	May 2014
Defining Value in Shoulder Arthroplasty MGH Sports Medicine Conference Boston, Massachusetts	May 2014
Subchondral Bone density distribution in degenerative shoulder disease; implications for clinical practice and etiology RH Cofield Visiting Professor Mayo Clinic, Rochester Minnesota	May 2014
<b>Defining Value in Shoulder Arthroplasty</b> RH Cofield Visiting Professor Mayo Clinic, Rochester Minnesota	May 2014
The 4-year Cost and Clinical Outcomes of Shoulder Arthroplasty Current Solutions in Shoulder and Elbow Surgery, Tampa, FL	January 2014
<b>Size Matters</b> Current Solutions in Shoulder and Elbow Surgery, Tampa, FL	January 2014
An Update on RSA for the Treatment of Massive Cuff Tears Without Arthritis Salzburger Schulterforum, Saltzburg	December 2013
Poor Glenoid Bone Stock and Reverse Shoulder Arthroplasty Salzburger Schulterforum, Saltzburg	December 2013
<b>New Options For Clavicle Fractures</b>	November 2013

ICJR - Current State of the Art and Science Shoulder Reconstruction 2013, Las Vegas

## Medial vs. Lateral COR in Reverse TSA

November 2013

ICJR - Current State of the Art and Science Shoulder Reconstruction 2013, Las Vegas

#### Choosing Medial vs. Lateral Offset in Reverse TSA

November 2013

ICJR - Current State of the Art and Science Shoulder Reconstruction 2013, Las Vegas

# Biomechanics of the RSA: Influence of Prosthetic

October 2013

International Society for Technology in Arthroplasty, Palm Beach, Florida

#### Biomechanics Of The RSA: Influence Of Prosthetic **Design**

June 2013

Instructional Course Lecture. International Congress of Shoulder and Elbow Surgeons, Nagoya, Japan

#### **Component Loosening In Anatomic And Reverse** Arthroplasty, Can It Be Avoided?

April 2013

Symposium: Eight Common Pitfalls In Shoulder Arthroplasty Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago

#### Reverse Shoulder Arthroplasty: Beyond The Basics,

March 2013

**Instructional Course Lecture** Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago

## What are the Limits of Reverse Shoulder

March 2013

**Arthroplasty?**, Paris International Shoulder Course,

Paris

#### **RSA** for the Treatment of Massive Cuff Tears Without Arthritis, Paris International Shoulder Course, Paris

March 2013

**Size Matters,** Current Solutions in Shoulder & Elbow Surgery, Tampa

February 2013

Updated: 7/12/2022

The 4-year Cost and Clinical Outcomes of Shoulder Arthroplasty, Current Solutions in Shoulder & Elbow Surgery, Tampa	February 2013
Reverse Shoulder Arthroplasty for Cuff Tear Arthropathy: Technical Considerations and Outcomes, AAOS/ASES Shoulder Arthroplasty Course, Rosemont	January 2013
New Options For Clavicle Fractures, International Congress for Joint Reconstruction Conference, Las Vegas	November 2012
Choosing Medial vs. Lateral Offset in Reverse Shoulder Arthroplasty, International Congress for Joint Reconstruction Conference, Las Vegas	October 2012
Resurfacing vs. Reverse Shoulder Arthroplasty: Is there really a question? International Congress for Joint Reconstruction Conference, Las Vegas	September 2012
Point / Counterpoint: Lateralization in RSA: Humeral or Glenoid Lateralization? Nice Shoulder Course, Nice	September 2012
Our Patients: Who Does and Who Does Not Do Well With a Reverse San Diego Shoulder Course, San Diego	September 2012
Baseplate Complications and Reverse Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco	June 2012
RSA for the Treatment of Massive Cuff Tears Without Arthritis Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco	February 2012
Current Controversies in Biomechanics of Reverse Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco	February 2012

Effects of Bone Defects on Surgical Technique & Clinical Outcomes in Reverse Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco	February 2012
Does Lateral Center of Rotation Lead to Baseplate Failure? Ohio Shoulder & Elbow Society Course, Cleveland, OH	February 2012
Baseplate Complications and Reverse Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego	January 2012
RSA for the Treatment of Massive Cuff Tears Without Arthritis Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego	January 2012
Effects of Bone Defects on Surgical Technique & Clinical Outcomes in Reverse Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego	February 2011
Current Controversies in Biomechanics of Reverse Shoulder Arthroplasty Instructional Course Lecture Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego	February 2011
Technique for Tunnel Bridge Hybrid Transosseous Rotator Cuff Repair Current Solutions in Shoulder and Elbow Surgery, Tampa	February 2011
Effects of Glenoid Bone Defects on Surgical	February 2011

**Technique & Clinical Outcomes in Reverse** 

**Shoulder Arthroplasty** 

Current Solutions in Shoulder and Elbow Surgery, Tampa

**Current Controversies in Biomechanics of Reverse Shoulder Arthroplasty** 

Current Solutions in Shoulder and Elbow Surgery, Tampa

**Chondrolysis following Shoulder Arthroscopy** 

San Diego Shoulder, San Diego

**Baseplate Complications and The Reverse** March 2010

**Prosthesis Instructional Course Lecture** Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans

How Does the Reverse Total Shoulder Work? Current Solutions in Shoulder and Elbow Surgery,

Tampa Reverse Shoulder Arthroplasty: Understanding The

Vumedi Webinar

**Debate Over Center of Rotation** 

Reverse Shoulder Arthroplasty for 'Cuff Tear Arthropathy' Vumedi Webinar

How Does the Reverse Total Shoulder Work? San Diego Shoulder Course, San Diego

The Total Shoulder Revision Glenoid San Diego Shoulder Course, San Diego

Using Reverse Shoulder Arthroplasty for Difficult Problems San Diego Shoulder Course, San Diego

Proximal Humeral bone loss in revision of hemi to reverse prosthesis

Nice. France

Massive Cuff Tears - Role of Reverse Prosthesis

Annual Meeting of the American Academy of Orthopaedic Surgery, Las Vegas

September 2010

January 2011

March 2010

September 2009

September 2009

August 24, 2009

August 24, 2009

June 2009

June 2009

June 2009

Financial Conflicts of Interest in Patient Care & Clinical Research 9th USF Symposium on Bioethics, Tampa	February 2009
How Does the Reverse Total Shoulder Work? Current Solutions in Shoulder and Elbow Surgery, Tampa	February 2009
Clinical Outcomes of Reverse Shoulder Arthroplasty Current Solutions in Shoulder and Elbow Surgery, Tampa	March 26, 2009
How Does the Reverse Total Shoulder Work? Orthopaedic Education Summit, Salt Lake City	January 2009
How Does the Reverse Total Shoulder Work? San Diego Shoulder, San Diego	September 2008
Fracture Sequelae: Open Reduction Internal Fixation San Diego Shoulder, San Diego	September 2008
Proximal Humeral bone loss in revision of hemi to reverse prosthesis Nice Shoulder Course, France	June 2008
Proximal Humeral bone loss in revision of hemi to reverse prosthesis Nice Shoulder Course, France	June 2008
Reverse Shoulder Arthroplasty for Treatment of Acute and Chronic Fractures of the Shoulder Florida Orthopaedic Society, Key Largo	May 2008
Theory, Biomechanics and Design Rationale of Reverse Shoulder Arthroplasty Instructional Course Lecture American Academy of Orthopaedic Surgeons Annual Meeting Instructional Course Lecture, San Francisco	May 2008
Biomechanics of the Reverse Shoulder Prosthesis Orthopaedic Education Summit, Park City, Utah	May 2008
Reverse Shoulder Arthroplasty: The Case for a Lateral Offset and Clinical Results	March 2008

American Shoulder and Elbow Society 25<sup>th</sup> Anniversary Symposium on Total Shoulder and Elbow Arthroplasty, Dallas

#### **Biomechanics and Design Rationale of Reverse Shoulder Arthroplasty Instructional Course Lecture** American Academy of Orthopaedic Surgeons Annual

October 2007

Design Rationale and Clinical Outcomes for the **Reverse Shoulder Prosthesis** 

San Diego Shoulder Meeting, San Diego

September 2007

Complications and Revisions, My Experience with the

**Reverse Shoulder Prosthesis** 

Meeting, San Diego

Shoulder Arthropathy and Arthroplasty, France

March 2006

The Design Rational of the Reverse Shoulder

**Prosthesis** Orthopaedic Education Summit, Tampa

March 2006

Clinical Outcomes of the RSP

2006

2006

Orthopaedic Education Summit, Tampa

In Vivo Wear of Glenoid Components American Shoulder and Elbow Society Focused Meeting, Las Vegas

**Semi-constrained Total Elbow Arthroplasty** 

November 2003

Closed Meeting of the Shoulder and Elbow Society of Australia, Queensland, Australia

**Seven Steps to Glenoid Exposure** 

November 2002

Closed Meeting of the Shoulder and Elbow Society of Australia, Queensland, Australia

The Reverse Shoulder Arthroplasty: Evolution, Rationale, Technique and Outcomes

September 2002

Closed Meeting of the Shoulder and Elbow Society of Australia, Queensland, Australia

**Revision Shoulder Arthroplasty for Failed Glenoid Components** 

September 2002

Closed Meeting of the Shoulder and Elbow Society of Australia, Queensland, Australia

Outcomes of Arthroscopic Versus Open Repair in the Management of Rotator Cuff Tears Advances in Minimally Invasive Hand/Upper Extremity Surgery, Brussels, Belgium	April 2002
Semiconstrained Arthroplasty for Irreparable Rotator Cuff Tears State of the Art in Orthopaedics, Whistler, BC, Canada	March 2002
Triceps Splitting Approach for Total Elbow State of the Art in Orthopaedics, Whistler, BC, Canada	March 2002
Arthroplasty for Proximal Humerus Fractures The Philadelphia Orthopaedic Society, Philadelphia	March 2001
Glenoid Reconstruction in Revision Shoulder Surgery Part of the Bone and Joint Decade 2000-2010 Current Concepts in Shoulder Arthroplasty at the Schulthess Klinik, Zurich, Switzerland	August 2000
The Techniques and Results of Four-Part Fracture Fixation Spectrum of Orthopaedics, Trauma, and Spine, Hilton Head	April 2000
Acute Complex Proximal Humerus Fractures – A Round Table Discussion Shoulder Arthroplasty – Past and Future, Palais de Congrès, Paris, France	January 2000
Glenoid Component Failure Treated with a Bulk Allograft for Revision Total Shoulder Surgery Shoulder Arthroplasty – Past and Future, Palais de Congrès, Paris, France	January 2000

## Poster **Presentations**

Hussey M, Steen B, Cusick M, Cox J, Marberry S, Simon P, Cottrell B, Santoni B, Frankle M. "The Effect of Glenoid Wear Patterns on Patients with Osteoarthritis in Total Shoulder Arthroplasty: An Assessment of Outcomes and Value" American Shoulder and Elbow Surgeons Closed Meeting, Pinehurst, North Carolina

October 2014

Teusink M, Otto R, Cottrell B, <b>Frankle M</b> . "What is the Effect of Postoperative Scapula Fractures of Outcomes Following Reverse Shoulder Arthroplasty?" American Academy of Orthopaedic Surgeons Annual Meeting	March 2014
Cabezas A, Santoni B, Diaz M, Teusink M, Schwartz D, Gutierrez S, <b>Frankle M</b> . "Quantification Of The Existing Glenohumeral Relationships In Patients Undergoing Reverse Shoulder Arthroplasty" American Academy of Orthopaedic Surgeons Annual Meeting	March 2014
Gutierrez S, Harreld K, Nigro P, Santoni B, <b>Frankle</b> M. "The Effect of Glenosphere Edge Offset on Glenoid-Glenosphere Surface Contact Area" American Academy of Orthopaedic Surgeons Annual Meeting	February 2012
Harreld K, Clark R, Virani N, Downes K, <b>Frankle M</b> . "Correlation of Subjective and Objective Outcome Measures Before and After Shoulder Arthroplasty" American Academy of Orthopaedic Surgeons Annual Meeting	February 2012
Pupello D, Clark R, <b>Frankle M</b> . "Hospital Cost and Outcome Analysis of Shoulder Arthoplasty for Osteoarthritis with and without an Intact Rotator Cuff" American Orthopaedic Association	June 2011
Virani N, Pupello D, <b>Frankle M</b> . "Range Specific Strength After Total and Reverse Shoulder Arthroplasty" American Academy of Orthopaedic Surgeons Annual Meeting	February 2011
Willis, M, Min, W, Brooks, J, Mulieri, P, Walker, M, Pupello, D, <b>Frankle, M</b> . "Proximal humeral malunion treated with reverse shoulder Arthroplasty" International Congress on Surgery of the Shoulder (ICSS).	2010
Walker, M, Brooks, J, Willis, M, <b>Frankle, M</b> . "Failed Total Shoulder Arthroplasty Treated with Reverse Shoulder Arthroplasty" International Congress on Surgery of the Shoulder (ICSS).	2010

Pupello, D, Holcomb, J, Chacon, A, <b>Frankle, M</b> . "Mechanical Failure of the Primary Glenoid Baseplate Treated with Revision Reverse Shoulder Arthroplasty." British Elbow and Shoulder Society	2008
Pupello, D, Levy, J, Chacon, A, Virani, N, <b>Frankle, M</b> . "Prospective Evaluation of Reverse Shoulder Prosthesis- Allograft Composite for the Revision of Failed Arthroplasty Associated with Proximal Humeral Bone Deficiency" British Elbow and Shoulder Society	2008
<b>Frankle, M</b> , Pupello, D, Levy, J, Virani, N. "Revision of Failed Hemiarthroplasty for Proximal Humerus Fractures Treated with a Reverse Shoulder Prosthesis" International Congress on Surgery of the Shoulder (ICSS).	2007
Frankle, M, Pupello, D, Levy, J, Virani, N. "Use of the Reverse Shoulder Prothesis for the Treatment of Failed Hemiarthroplasty in Patients with Glenohumeral Arthritis and Rotator Cuff Deficienc", International Congress on Surgery of the Shoulder (ICSS).	2007
<b>Frankle, M</b> , Pupello, D, Levy, J, Gutierrez, S. "Component Positioning and Hardware Failure in the Reverse Shoulder Prosthesis" 73 <sup>rd</sup> Annual American Academy of Orthopaedic Surgeon (AAOS)	February 2006
<b>Frankle, M</b> , Mighell, M, Pupello, D. "Chondrolysis in the Shoulder: Clinical Course and Results of Treatment with Total Shoulder Arthroplasty" 19th European Society for Surgery of the Shoulder & the Elbow (ESSSE).	September 2005
<b>Frankle, M</b> , Mighell, M, Pupello, D. "Reverse Shoulder Prosthesis in the Treatment of Fixed Anterior Superior Humeral Escap", 19 <sup>th</sup> European Society for Surgery of the Shoulder & the Elbow (ESSSE).	September 2005
Frankle, M, Harman, M, Vasey, M, Lee III, W, Ondrovic, L, Ganey, T, Gutierrez, S. "A Comparison of Micromotion for Two Different Semi-Constrained Shoulder Replacements used in Rotator Cuff Deficient Patients." 2003 American Shoulder and Elbow Society	November 2003

(ASES) Focused Meeting, Las Vegas, NV.

Frankle, M, Harman, M, Vasey, M, Lee III, W, Ondrovic, L, Ganey, T, Gutierrez, S. "Achieving Adequate Glenoid Fixation During Semi-Constrained Total Shoulder Arthroplasty Used in Rotator Cuff-Deficient Patients." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, Las Vegas, NV.

November 2003

November 2003

Frankle, M, Vasey, M, Shields, J, Moore, J. "The Effects of Ostepenia/Osteoporsis on Surgical Outcomes of Arthroscopic Rotator Cuff Repair." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, #15, Las Vegas, NV.

November 2003

Frankle, M, Kumar, A, Lee III, W, Ondrovic, L, Ganey, T, Gutierrez, S, Vasey, M. "The Effects of Proximal Prosthetic Humeral Geometry on the Stability of Tuberosity Reconstruction for Four-Part Proximal Humerus Fractures." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, #16, Las Vegas, NV.

November 2003

Frankle, M, Lee III, W, Ondrovic, L, Ganey, ., Gutierrez, S, Vasey, M. "Influence of Prosthesis Design on Moment Arms of the Deltoid in Rotator Cuff Deficient Shoulders." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, # 17, Las Vegas, NV.

November 2003

**Frankle, M,** Mighell, M, Devinney, S, Vasey, M, Pupello, D. "Revision of Failed Hemiarthroplasty for Proximal Humerus Fractures Treated With a Reverse Shoulder Prosthesis (RSP)." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, #18, Las Vegas, NV.

November 2003

**Frankle, M,** Mighell, M, Devinney, S, Vasey, M, Pupello, D. "Revision of Total Shoulder Arthroplasty with Recurrent Instability Treated with a Reverse Shoulder Prosthesis." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, # 19, Las Vegas, NV.

November 2003

Frankle, M, Mighell, M, Devinney, S, Vasey, M, Pupello, D. "Comparison of Hemiarthroplasty versus Reverse Shoulder Prosthesis Performed by One Surgeon For Rotator Cuff Arthropathy." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, # 20, Las Vegas, NV.

November 2003

**Frankle, M,** Mighell, M, Fisher, D, Vasey, M, Pupello, D. "Deep Infection Treated with Revision to Reverse

Shoulder Prosthesis." 2003 American Shoulder and Elbow Society (ASES) Focused Meeting, #21, Las Vegas, NV.

**Frankle, M.** "Outcomes for Revision of Failed Hemiarthroplasties with a Chronic Irreparable Rotator Cuff Treated with a Custom Reverse Ball and Socket Prosthetics." Proceeding of the 8<sup>th</sup> International Congress on Surgery of the Shoulder (ICSS), #246, Cape Town, South Africa.

April 2001

**Frankle, M**, Mighell, M, Bernasek, T, Sanders, R. "Outcomes Following Surgical Reconstructions for Periprosthetic Humerus Fractures." Proceeding of the 8<sup>th</sup> International Congress on Surgery of the Shoulder (ICSS), #244, Cape Town, South Africa.

April 2001

**Frankle, M.** "Outcomes for Revision of Failed Hemiarthroplasties with a Chronic Irreparable Rotator Cuff Treated with a Custom Reverse Ball and Socket Prosthetics." Proceeding of the 68<sup>th</sup> Annual American Academy of Orthopaedic Surgeon (AAOS), Poster #PE227, San Francisco, CA.

February - March 2001

**Frankle, M**, Mighell, M, Kioschos, JM. *A Review of Chronic Unreduced Elbow Dislocations Treated with Total Elbow Arthroplasty*. Proceeding of the 14<sup>th</sup> European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon, Portugal.

September 2000

Mighell, M, Hamelin, J, **Frankle, M**. Failed Impingement and Instability Surgeries in Patients with Primary Scapular Winging. Proceeding of the 14<sup>th</sup> European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon, Portugal.

September 2000

**Frankle, M,** Kioschos, JM, McClain, R. A Comparison of Primary Total Elbow Arthroplasty versus Total Elbow Arthroplasty for Failed Osteosynthesis in the Treatment of Complex Elbow Fractures in Elderly Patients. Proceeding of the 14<sup>th</sup> European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon Portugal.

September 2000

**Frankle, M**, Ondrovic, L, Markee, B, Lee, WE, Greenwald, D, Harris, ML. *A Biomechanical Evaluation of Varying Humeral Head Size in Total Shoulder Arthroplasty*. Proceeding of the 14<sup>th</sup> European Society for Surgery of the Shoulder & the Elbow (ESSSE), Lisbon Portugal.

September 2000

Mighell, M, Collinge, C, Frankle, M. Outcomes of	May 2000
Hemiarthroplasty for Fractures of the Proximal	
Humerus. Proceeding of the 2 <sup>nd</sup> Biennial Shoulder and	
Elbow Meeting, Miami, FL, Paper #15, p.119.	
Kioschos, JM, Frankle, M. Glenoid Component	May 2000
Failure Treated with a Bulk Allograft for Revision Total	
Shoulder Surgery. Proceeding of the 2 <sup>nd</sup> Biennial	
Shoulder and Elbow Meeting, Miami, FL, Paper #16,	
p.120.	
Mighell, M, Goodman, A, Hamelin, J, Frankle, M.	March 2000
Paralysis of the Trapezius: Etiology and Treatment	
Outcomes. Proceeding of the American Academy of	
Orthopaedic Surgeons 67th Annual Meeting, Orlando,	
FL, PE330, p.430.	
Mighell, M, Hamelin, J, Frankle, M. Failed	March 2000
Impingement and Instability Surgeries in Patients with	
Primary Scapular Winging. Proceeding of the	
American Academy of Orthopaedic Surgeons 67 <sup>th</sup>	
Annual Meeting, Orlando, FL, PE325, p.428.	
Freels, D, Bernasek, T, Gustke, K, Frankle, M.	March 2000
Ceramic Head Endoprosthetic Replacement for	
Avascular Necrosis of the Hip. Proceeding of the	
American Academy of Orthopaedic Surgeons 67 <sup>th</sup>	
Annual Meeting, Orlando, FL, PE029, p. 319.	

## Current Research **Activities**

#### Outcome of reverse shoulder arthroplasty in patients with Parkinson's disease: A matched cohort study

Purpose: Previous studies have shown that patient's with Parkinson's Disease tend to have limited functional outcomes with high complication rates when compared to non-Parkinson patients when treated with anatomical total shoulder arthroplasty. We are seeking to determine if RSA provides similar functional outcomes when compared to a matched cohort of non-Parkinson's patients.

#### Glenosphere Dissociation after Reverse Shoulder Arthroplasty

Purpose: Glenosphere dissociation is a rare but serious complication after reverse shoulder arthroplasty. We believe potential etiologies of these glenosphere dissociations may be trauma, technical error, or related to implant design. The purpose of this paper is to present our series and investigate additional etiologies.

#### Measurement of Hounsfield Units to Assess Supraspinatus Muscle **Quality in Arthritic Shoulders**

Purpose: To devise a reliable method to quantitatively evaluate rotator cuff volumetric muscle density using CT Hounsfield Units (HU).

#### A Novel Patient Derived Outcome Assessment to Estimate the Financial Impact of Shoulder Disease Prior to Surgery

Purpose: To develop a new questionnaire adapted specifically to shoulder related conditions, named the Economic Assessment Form (EAF) to quantify the financial burden of shoulder disease.

#### Comparison of the Existing Glenohumeral Relationships Between Patients from the United State and South Korea Undergoing **Reverse Shoulder Arthroplasty**

Purpose: To quantify and compare shoulder morphologies between patients undergoing RSA in the US and Korea

#### **Book Reviews**

Bernasek, T, Frankle, M. Complications in Total Hip Arthroplasty By Richard H. Rothman, M.D., Ph.D., Journal Of Orthopaedic Trauma. In

Frankle, M. The Musculoskeletal System Physiological Basis by James Gibson Gamble, M.D., Journal of Orthopaedic Trauma, Vol. 2, No. 3, Page 264, 1988.

### **Miscellaneous Publications**

American Academy of Orthopaedic Surgeons: Appropriate Use Criteria on Optimizing the Management of Full-Thickness Rotator Cuff Tears. Rosemont, IL, American Academy of Orthopaedic Surgeons, September 2013.

http://www.aaos.org/research/Appropriate\_Use/rotatorcuffaucfull.pdf

Pupello D, Frankle M. Regarding "Observations on retrieved humeral polyethylene components from reverse total shoulder arthroplasty". J Shoulder Elbow Surg. 2011 Dec;20(8):e22-3. doi: 10.1016/j.jse.2011.01.026. Epub 2011 Apr 9. PMID: 21482152 [PubMed - indexed for MEDLINE]

Holcomb JO, Frankle M. Counterpoint: should rotator cuff tears be repaired early? Orthopedics. 2010 Apr;33(4):230-1. doi: 10.3928/01477447-20100225-01. PMID: 20415346 [PubMed indexed for MEDLINE]

Holcomb J, Pupello D, Levy J, Cuff D, Frankle M. Challenging the conclusion, "Clinical outcome was essentially not affected by the notch". J Shoulder Elbow Surg. 2009 May-Jun;18(3):e51-2; author reply e52-3. doi: 10.1016/j.jse.2009.01.026. PMID: 19393922 [PubMed - indexed for MEDLINE]

- Frankle M, Mighell M. Re: Shoulder prostheses treating cuff tear arthropathy: a comparative biomechanical study. J Orthop Res. 2006 Jan;24(1):112; author reply 112-3. PMID: 16419976 [PubMed indexed for MEDLINE]
- Frankle M. Weight Lifting, Weight Training Injuries, Letter to Editor, Orthopaedics, Vol. 1, No. 1, January 1986.
- Frankle M. Leffers, D. Hooked On Hormones, Letter to the Editor, JAMA, Vol. 263:15, April 1990.

Frankle M, Maas, R. Does Anabolic Steroid Use Lead to Avascular Necrosis Letter to Editor, The American Journal of Sports Medicine. In Print.

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