# MICHAEL A. BOIN, MD

### MEDICAL PRACTICE

2024-present	Orthopedic Surgeon, Shoulder and Elbow Specialist:
2024-present	Orthopedic Health of Kansas City,
	Kansas City, MO
2021-present	Assistant Professor of Orthopedic Surgery: Kansas City University
2021-2023	Orthopedic Surgeon, Shoulder and Elbow Specialist:
2021 2025	Orthopedic Surgeons, Inc
	Kansas City, MO
EDUCATION	N
Fellowship	
	New York University: Shoulder and Elbow Surgery. New York, New York. August 2020 – July 2021
Residency	g
v	Wright State University: Orthopaedic Surgery. Dayton, Ohio.
	July 2014 – June 2020
<b>Medical Schoo</b>	
	University of Missouri-Kansas City combined 6-year BA/MD program. Kansas City,
	Missouri.
	Doctor of Medicine: May 2014
Undergraduat	
	University of Missouri-Kansas City combined 6-year BA/MD program. Kansas City, Missouri.
	Bachelor of Liberal Arts: May 2013
	Magna Cum Laude Honors
High School	
	Osceola High School. Osceola, Missouri.
	Valedictorian: May 2008

# HONORS AND AWARDS

2023	Best of the Northland: Voted one of the 3 best orthopaedic surgeons in the North Kansas City Metro area by the Courier-Tribune.
2023	Kansas City University/HCA Midwest Health Orthopaedic Surgery Residency Program: Faculty of the Year
2023	Named Top 5 Surgeons in Kansas City by Kev's Best
2022	American Academy of Orthopaedic Surgeons, Orthopaedic Video Theater: Sports Medicine Award Winner. Open Repair of a Deltoid Tendon Rupture
2022	Doximity Top 10% Most Cited Clinician
2021	Frankle-Mighell Award Winner, American Shoulder and Elbow Surgeons Fellows Symposium. Reverse Shoulder Arthroplasty for Massive Irreparable Rotator Cuff Tears: A Reliable Treatment Method
2017	1 <sup>st</sup> place: Ohio Orthopaedic Society Resident Research Contest: Suture-Only Repair Versus Suture Anchor–Augmented Repair for Achilles Tendon Ruptures with a Short Distal Stump
2017	Finalist: Ohio Orthopaedic Society Resident Research Paper Contest. The Role of Far Cortical Endosteal Fixation for the Treatment of Medial Malleolus Fractures: A Biomechanical Study

- 2016 Wright State University Research Grant Recipient
- 2015 Arthrex Research Grant Recipient
- 2013 Flarsheim Research Scholarship Recipient: Awarded by the University of Missouri-Kansas City School of Medicine to one student annually
- 2011 Order of Omega Greek Honor Society: Recognizing fraternity men and women who have attained a high standard of leadership

#### PUBLICATIONS

Gabriel S, **Boin MA**. Cryptococcus Neoformans Periprosthetic Joint Infection of Revision Shoulder Arthroplasty: A Case Report. *Cureus*. October 2024.

Scigliano Ni, Puga T, Scicliano No, Williams Y, **Boin MA**. The Effect of COVID-19 Infection on Clinical Outcomes in Patients Undergoing Surgical Repair of Humerus Fractures. *Cureus*. March 2024.

Kanakamedala A, Shankar D, Gambhir N, Boylan M, **Boin MA**, Alben M, Virk MS, Kwon YW. Concomitant open distal clavicle excision is associated with greater improvement in range of motion without increased risk of acromial stress fracture after reverse total shoulder arthroplasty: a retrospective cohort study. *Clinics in Shoulder and Elbow Surgery*. November 2023.

Zhong J, **Boin MA**, Zuckerman JD. Advanced Technology in Shoulder Arthroplasty. *Shoulder and Elbow*. July 2023.

Gabriel S, Tucker T, **Boin MA**. A Narrative Review of Non-infected Painful Total Shoulder Arthroplasty: Evaluation and Treatment. *Annals of Joint*. April 2023.

**Boin MA**, Knutson K, Morales J. Reverse Shoulder Arthroplasty with Humeral Head Autograft Glenoid Reconstruction Utilizing a Three-Dimensional Scapular Model and Patient-Specific Guide. *AAOS Orthopaedic Video Theater*. March 2023.

Doran M, **Boin MA**, Anil U, Bustamante S, Kwon YW, Zuckerman JD, Virk MS. Polyethylene Liner Dissociation From Humeral Tray (PDH): Impediment to Closed Reduction of Dislocated Reverse Total Shoulder Replacement. *JSES International*. November 2022.

Colasanti C, **Boin MA**, Hacquebord J, Virk M. Anterior Interosseous Nerve Palsy in the Early Postoperative Period after Open Capsular Release for Elbow Stiffness. *Clinics in Shoulder and Elbow*. November 2022.

**Boin MA.** Inlay Humeral Stem Technique for Reverse Total Shoulder Arthroplasty. *Vumedi. June* 2022.

Lin C, Karlin E, **Boin MA**, Dankert J, Larose G, Zuckerman JD, Virk MS. Operative Treatment of Proximal Humeral Fractures with Reverse Total Shoulder Arthroplasty in Patients  $\geq$ 65 Years Old: A Critical Analysis Review. *JBJS Reviews*. May 2022.

Alben M, Gambhir N, **Boin MA**, Campbell K, Virk MS. Wound Complication and Neuropraxia of the Posterior Cutaneous Nerve of the Arm After Primary Repair of a Latissimus Dorsi and Teres Major Tear. *Case Reports in Orthopedics*. May 2022.

Alben M, Gambhir N, **Boin MA**, Virk MS, Kwon YW. Atraumatic Deltoid Rupture with a Chronic Massive Rotator Cuff Tear: A Case Report and Surgical Technique. *Case Reports in Orthopedics*. April 2022.

Bustamante S, **Boin MA**, Dankert J, Adekanye D, Virk MS. The Utility of Routine Cultures, Cell Count, and Crystal Evaluation of Aspirate from Aseptic Olecranon Bursitis. *JSES International*. March 2022.

Chen J, **Boin MA**, Bustamante S, Lowe D, Kwon Y. Open Repair of a Deltoid Tendon Rupture. *AAOS Orthopaedic Video Theater*. March 2022.

Jia N, **Boin MA**, Lowe D, Stein D, Virk M. Coracoclavicular Ligament Reconstruction: Combined Suture and Allograft Reconstruction. *AAOS Orthopaedic Video Theater*. March 2022.

Magone K, Ben-Ari E, Gordon D, Pines Y, **Boin MA**, Kwon Y, Zuckerman J, Virk M. Analysis of Patient's Willingness and Concerns for Discharge Following Total Shoulder Arthroplasty. *JSES: International*. February 2021.

**Boin MA**, Virk MS. Lateral Ulnar Collateral Ligament Injury and Posterolateral Rotatory Instability of the Elbow: Evaluation, Physical Exam, and Imaging. Surgical Insights: Sports Medicine Shoulder and Elbow [online course]. Rosemont, IL, American Academy of Orthopaedic Surgeons, December 2021.

**Boin MA**, Virk MS. Lateral Ulnar Collateral Ligament Injury and Posterolateral Rotatory Instability of the Elbow: Surgical Treatment Techniques. Surgical Insights: Sports Medicine Shoulder and Elbow [online course]. Rosemont, IL, American Academy of Orthopaedic Surgeons, December 2021.

**Boin MA**, Virk MS. What is the Role of Reverse Shoulder Arthroplasty for the Treatment of Proximal Humerus Fractures in Patients Over the Age of 65? *CORR*. 479(11):2421-2429. November 2021

**Boin MA,** Mehta D, Dankert J, Umeh UO, Zuckerman JD, Virk MS. Anesthesia in Total Shoulder Arthroplasty: Systematic Review and Meta-Analysis. *JBJS Reviews*. Volume 9 - Issue 11. November 2021.

Virk MS, Gambhir N, **Boin MA**, Alben M, Lowe D, Jia N. Distal Triceps Repair: Footprint Restoration with Cruciate Bone Tunnels. *Vumedi*. November 2021.

**Boin MA**, Ben-Ari E, Roche C, Zuckerman J. Reverse Shoulder Arthroplasty for Massive Irreparable Rotator Cuff Tears: A Reliable Treatment Method. *Seminars in Arthroplasty: JSES*. June 2021.

**Boin MA**, Pham V, Virk M, Yian E. Current Controversies in Periprosthetic Joint Infection: Clarifying Key Concepts for Patient Care. Slack Incorporated. Chapter: Chronic Antibiotic Suppression Therapy in Shoulder and Elbow Arthroplasty. Accepted for Publication. 2021.

**Boin MA**, Virk M. Shoulder Arthroplasty: Principles and Practice. Wolters Kluwer. Chapter 25, Addressing Glenoid Deformity in Reverse Total Shoulder Arthroplasty. 2021.

Meeks B, Kiskaddon E, **Boin MA**, Willen B, Patel T, Prayson M. The Role of Far Cortical Endosteal Fixation for the Treatment of Medial Malleolus Fractures: A Biomechanical Study. *The Journal of Foot and Ankle Surgery*. October 2019.

Martella A, Yue RA, **Boin MA**, Rogozinski J, Flanigan T, Purcell K, Martella A, Laughlin R. Subtalar Subtalar Nonunion Following Tibiotalocalcaneal Fusion Using an Intramedullary Nail: A Case Series of Errant Entry Points. *Foot and Ankle Orthopaedics*. 4(4). 2019. Dorweiler M, **Boin MA**, Froehle A, Lawless M, May J. Improved Early Postoperative Range of Motion in Total Knee Arthroplasty Using Tranexamic Acid: A Retrospective Analysis. *The Journal of Knee Surgery*. 2018.

Ina J, Vallentyne M, Hamandi F, Sugart K, **Boin MA**, Laughlin R, Goswami T. Failure Analysis of PHILOS Plate Construct Used for Pantalar Arthrodesis Paper I—Analysis of the Plate. *Metals*. March 2018.

Dorweiler M, Van Dyke R, Siska R, **Boin MA**, Dipaola M. A Comparative Biomechanical Analysis of Two Double-Row, Distal Triceps Tendon Repairs. *Orthopaedic Journal of Sports Medicine*. 5(5). 2017.

**Boin MA**, Narayanan S, Duren D, Dorweiler MA, Lee J, Froehle A, Laughlin RT. Factors Predicting Admission to Extended Care Facility following Distal Femur Fractures. *Current Orthopaedic Practice*. 28(4):388-392. 2017.

**Boin MA**, Dorweiler MA, McMellen C, Gould G, Laughlin RT. Suture-Only Repair Versus Suture Anchor–Augmented Repair for Achilles Tendon Ruptures with a Short Distal Stump. *Orthopaedic Journal of Sports Medicine*. 5(1). 2017.

Wimalawansa S, Lopez R, de Lucas F, De Smet L, **Boin MA**, Dorweiler MA, Degreef I. Salvage of Failed Achilles Tendon Interposition Arthroplasty for DRUJ Instability After Ulnar Head Resection with Aptis Prosthesis. *Hand*. October 2016.

Shatkin-Margolis A, Kow N, Patonai N, **Boin MA**, Muffly TM. The Effect of an Air Knot on Surgical Knot Integrity. *Female Pelvic Medicine & Reconstructive Surgery*. 21(3), 160-163. 2015.

Price NJ, **Boin MA**. Simulators in Medicine/Surgery: Simulation in Orthopaedics. *Missouri Medicine*. 110.2: 150-151. 2013.

#### PRESENTATIONS

Boin MA. ARVIS Surgical Demonstration. ASES Annual Meeting. San Antonio, TX. October 2024.

**Boin MA.** Bone Loss in Revision Shoulder Arthroplasty. UMKC/KCU Shoulder/Elbow Surgery Educational Event. Café Trio. Kansas City, MO. July 2024.

**Boin MA.** Social Media in Orthopedics. KCU Orthopedic Residency Education Symposium. Tiffany Green's Golf Club. Kansas City, MO. June 2023.

**Boin MA.** Using Social Media to Grow Your Practice. Wright State University Orthopedic Alumni Event. Dayton, OH. June 2023.

Boin MA. Rotator Cuff Repair Technique. Anika Fellows Shoulder Course. Tampa, FL. June 2023.

**Boin MA.** Incorporating Social Medial Into Your Practice. Anika Fellows Shoulder Course. Tampa, FL. June 2023.

**Boin MA.** Rotator Cuff Repair: Constructs and Considerations for Poor Bone Quality. Anika Texas Shoulder Course. San Antonio, TX. March 2023.

**Boin MA.** Complex Rotator Cuff Pathology: Case Presentation and Panel Moderator. Kansas City Shoulder and Elbow Society Meeting. Leawood, KS. February 2023.

**Boin MA.** DJO/Enovis Shoulder Portfolio Introduction with Lab Demonstration. Midwest Medical Lab. Overland Park, KS. February 2023.

**Boin MA.** Shoulder Arthroplasty Surgery and Rehabilitation. Kansas City Hand Rehab Special Interest Group. Kansas City, MO. January 2023.

**Boin MA**. Shoulder Arthritis: Nonoperative and Operative Treatment. Research Medical Center. Family Medicine Residency Grand Rounds. Kansas City, MO. December 2022.

**Boin MA**. Complex Shoulder Arthroplasty: Case Presentation and Panel Moderator. Kansas City Shoulder and Elbow Society Meeting. Kansas City, MO. November 2022.

Kanakamedala A, Boylan M, Gambhir N, **Boin MA**, Shankar D, Alben M, Virk MS, Kwon YW. Distal Clavicle Excision Is Not Associated with Adverse Outcomes After Reverse Total Shoulder Arthroplasty. Eastern Orthopaedic Association Annual Meeting. Atlantic City, NJ. October 2022.

**Boin MA.** Degenerative Shoulder Disease: Evaluation and Management. North Kansas City Hospital Operative Room Staff Inservice. North Kansas City Hospital. Kansas City, MO. July 2022.

**Boin MA.** Glenoid Deformity in Primary Reverse Total Shoulder Arthroplasty. KCU Orthopedic Residency Education Symposium. Tiffany Green's Golf Club. Kansas City, MO. June 2023.

**Boin MA**. The History of Reverse Total Shoulder Arthroplasty and Implant Design. Shoulder Arthroplasty Journal Club. Piropos Restaurant. Kansas City, MO. April 2022.

**Boin MA.** Preoperative Imaging and Planning for Shoulder Arthroplasty. KCU Radiology Conference. Kansas City, MO. April 2022.

**Boin MA**, Ben-Ari E, Roche C, Zuckerman J. Reverse Shoulder Arthroplasty for Massive Irreparable Rotator Cuff Tears: A Reliable Treatment Method. Podium Presentation. 28<sup>th</sup> Annual Tampa Shoulder Course. Tampa, FL. February 2022.

**Boin MA**, Ben-Ari E, Roche C, Zuckerman J. Reverse Shoulder Arthroplasty for Massive Irreparable Rotator Cuff Tears: A Reliable Treatment Method. Poster Presentation at the American Shoulder and Elbow Surgeons Fellows Symposium. Virtual Meeting. June 2021.

Yue RA, **Boin MA**, Rogozinski J, Flanigan T, Purcell K, Martella A, Laughlin R. Subtalar Nonunion Following Tibiotalocalcaneal Arthrodesis with Improperly Placed Intramedullary Nails: A Case Series. Poster Presentation at the American Orthopaedic Foot and Ankle Society Annual Meeting. Chicago, IL. September 2019.

Meeks B, Kiskaddon E, **Boin MA**, Willen B, Patel T, Prayson M. The Role of Far Cortical Endosteal Fixation for the Treatment of Medial Malleolus Fractures: A Biomechanical Study. Poster Presentation at the American Orthopaedic Foot and Ankle Society Annual Meeting. Seattle, WA. July 2017.

**Boin MA**, Dorweiler MA, McMellen C, Gould G, Laughlin RT. Suture-Only Repair Versus Suture Anchor–Augmented Repair for Achilles Tendon Ruptures with a Short Distal Stump. Poster Presentation at the Ohio Orthopaedic Society Annual Meeting. Award Finalist. Columbus, OH. May 2017. Meeks B, Kiskaddon E, **Boin MA**, Willen B, Patel T, Prayson M. The Role of Far Cortical Endosteal Fixation for the Treatment of Medial Malleolus Fractures: A Biomechanical Study. Poster Presentation at the Ohio Orthopaedic Society Annual Meeting. Award finalist. Columbus, OH. May 2017.

Dorweiler M, **Boin MA**, Lawless M, May J. The Effect of Tranexamic Acid on Early Postoperative Range of Motion Following Total Knee Arthroplasty. Podium Presentation at the Mid-America Orthopaedic Association Annual Meeting. Amelia Island, FL. April 2017.

**Boin MA**, Narayanan S, Duren D, Dorweiler MA, Lee J, Froehle A, Laughlin RT. Factors Predicting Admission to Extended Care Facility following Distal Femur Fractures. Poster Presentation at the Virginia C. Wood Research Forum. Dayton, OH. April 2017.

**Boin MA**, Dorweiler MA, McMellen C, Gould G, Laughlin RT. Suture-Only Repair Versus Suture Anchor–Augmented Repair for Achilles Tendon Ruptures with a Short Distal Stump. Poster Presentation at the Mid-America Orthopaedic Association Annual Meeting. Amelia Island, FL. April 2017.

**Boin MA**, Narayanan S, Duren D, Dorweiler MA, Lee J, Froehle A, Laughlin RT. Factors Predicting Admission to Extended Care Facility following Distal Femur Fractures. Poster Presentation at the Mid-America Orthopaedic Association Annual Meeting. Amelia Island, FL. April 2017.

Ina J, **Boin MA**, Laughlin RT, Goswami T. Failure Analysis of PHILOS Plate used for Pantalar Arthrodesis. Podium presentation at the Ohio Orthopaedic Research and Innovation Symposium. Dayton, OH. April 2017.

Dorweiler M, Van Dyke R, Siska R, **Boin MA**, Dipaola M. A Comparative Biomechanical Analysis of Two Double-Row, Distal Triceps Tendon Repairs. Podium presentation at the Ohio Orthopaedic Research and Innovation Symposium. Dayton, OH. April 2016.

#### COURSE AND MEETING ATTENDANCE

2024	Faculty: ASES Annual Meeting. San Antonio, TX
2024	ASES Specialty Day. San Francisco, CA
2024	AAOS Annual Meeting. San Francisco, CA
2023	ASES Annual Meeting. Scottsdale, AZ
2023	Faculty: Anika Fellows Shoulder Course. Tampa, FL
2023	Faculty: Anika Texas Shoulder Course. San Antonio, TX.
2022	ASES Annual Meeting. Atlanta, GA.
2022	DJO Revision Shoulder Arthroplasty Course. Tampa, FL.
2022	The Cowboy Way: Advanced Shoulder Arthroscopy. Naples, FL.
2022	ASES Specialty Day. Chicago, IL.
2022	AAOS Annual Meeting. Chicago, IL.
2022	ASES Open Symposium and Fracture Day. Tampa, FL.
2022	Faculty: 28 <sup>th</sup> Annual Tampa Shoulder Course. Tampa, FL.
2021	ASES Fellows Symposium. Virtual.
2021	Arthrex Fellows Sports Medicine Course. Naples, FL.
2021	DJO Fellows Shoulder Arthroplasty Course. Tampa, FL.
2021	Exactech Equinoxe Masters Course. Virtual.
2021	DJO Fellows Elbow Arthroplasty Course. Chicago, IL.

2021	ASES Specialty Day Meeting. Virtual.
2019	36 <sup>th</sup> Annual San Diego Shoulder Course. Virtual.
2018	AAOS Musculoskeletal Oncology Course. Virtual.
2017	Ohio Orthopaedic Society Annual Meeting. Columbus, OH.
2017	Virginia C. Wood Research Forum. Dayton, OH.
2016	Zimmer/Biomet Revision Hip and Knee Master Class. New York City, NY.
2016	Ohio Orthopaedic Research and Innovation Symposium. Dayton, OH.
2016	AAOS Annual Meeting. Orlando, FL.
2014	AO North America: Basic Principles of Fracture Management. Columbus, OH.

# **PROFESSIONAL EXPERIENCE**

2021-present	Reviewer: Seminars in Arthroplasty: JSES
2021-present	Reviewer: Journal of Medical Insight
2020-present	Reviewer: Techniques in Orthopaedics
2019-present	Reviewer: Journal of Shoulder and Elbow Surgery
2018	Provider: University of Dayton Student Athlete Pre-Participation Physicals
2016	Provider: Wright State University Student Athlete Pre-Participation Physicals
2015-2016	Team Physician: Wright State University Women's Soccer Team
2011-2014	Provider: Sojourner Free Health Clinic, providing outpatient care to Kansas City's homeless and underprivileged population

### **PROFESSIONAL AFFILIATIONS**

American Academy of Orthopaedic Surgeons: Candidate Member American Shoulder and Elbow Surgeons: Candidate Member Missouri State Medical Association Beta Theta Pi Fraternity

#### **LEADERSHIP POSITIONS**

2023-present	Shoulder Studio: Co-Founder and Design Surgeon
2022-present	Kansas City Shoulder and Elbow Society: Founder
2022-present	ASES Educational Committee: Member
2018-2020	Miami Valley Hospital Trauma Committee: Resident Member
2014-2020	Wright State University Orthopaedic Interest Group: Advisor
2015-2016	Wright State University Medical School: Orthopedic Research Advisor

#### **TEACHING EXPERIENCE**

2023-present	Consultant/Speaker: DJO/Enovis Shoulder Arthroplasty
2023-2024	Consultant/Speaker: Anika Sports Shoulder
2022	Shoulder Arthroplasty Journal Club: organized and presented
2022	KCU Radiology Conference: Preoperative Imaging and Planning for Shoulder Arthroplasty
2021-present	Associate Professor: Kansas City University
2020-2021	Clinical Instructor: Department of Orthopaedic Surgery at NYU Grossman School of
	Medicine
2020-2021	NYU Shoulder and Elbow Academic Conference: Organized, prepared, and presented monthly on various shoulder and elbow topics.

2018-2020	WSU Resident Small Group Leader: Head of resident small group curriculum during
	educational conference.
2014-2020	WSU Resident Conference: Prepared and presented 1-hour lectures on various orthopaedic
	topics. 17 presentations.
2014-2020	WSU Case Conference: Prepared and presented various clinical case series. 11 presentations.
2017-2018	WSU Trauma Conference: Prepared and presented weekly trauma cases. 12 presentations.
2011-2014	UMKC Clinical Skills Course: Senior Student Teacher

# HOBBIES AND INTERESTS

Family Athletics: basketball, football, golf Fitness: Strength training, CrossFit, Peloton, running Fishing Barbeque Kansas City Chiefs, Kansas City Royals, and Missouri Tigers athletics Traveling