

### **Department of Orthopaedic and Plastic Surgery**

### **Annual Report:**

July 1, 2019 – June 30, 2020

R. Michael Johnson, MD, MPH, FACS Professor and Chair Program Director, Plastic Surgery Residency Program Statement from the Chair/Associate Dean

The Department of Orthopaedic and Plastic Surgery essentially functions as two separate units: Orthopaedic Surgery functions autonomously under the direction of Anil Krishnamurthy, who is primarily based at the VA Medical Center and Plastic Surgery under my direction, primarily based at Miami Valley Hospital. While our individual sections have separate budgets and support mechanisms, we have a significant amount of overlap and interaction from a clinical and teaching standpoint. The residents in both programs rotate with the other and both programs have both plastic surgery and orthopaedic surgery faculty on the hand service. For example, the primary teaching faculty on the hand service consists of 3 plastic surgeons, 3 orthopaedic surgeons and 1 general surgeon. This team approach to the upper extremity leads to excellent relationships between the two units.

When I was initially tasked with the position of Chair, it was made clear by the previous Dean that this independently functioning process was mandate going forward. Therefore, my role has been primarily to only support Dr. Krishnamurthy as needed. The Orthopaedic program is functioning extremely well during this time of crisis and has continued to be academically productive with the help of Andy Froehle and the orthopaedic research program. The residents continue to score at the highest level on the annual orthopaedic in-training exams and the culture and morale of the program have improved dramatically under Dr. Krishnamurthy's direction.

From the plastic surgery standpoint, we are doing something that not many programs are able to do in the time of crisis; we are increasing our resident complement. We have done this by providing a value proposition to both Dayton Children's Medical Center and Kettering Health Network. We have approval from the ACGME for expansion of the program from an educational standpoint and have already secured funding from Dayton Children's for .5 FTE per year. We are optimistic we will secure funding for the remainder and will increase our complement eventually to 12 plastic surgery residents. This will allow a plastic surgery service that supports the entire Dayton Community. We are continuing to work with Premier Health Partners administration and basic scientists at Wright State University's main campus to maintain a high level of academic productivity. While significant challenges remain, support for research and scholarly activity is in place. To this point, we have been unable to secure funding for reestablishment of our biomechanics laboratory. Technical support for advanced engineering at the Miami Valley Hospital campus may not be possible due to funding issues, although this remains to be seen. We do have some support for Dr. Froehle for orthopaedic research and from the plastic surgery aspect, we have improved our scholarly output from our clinical faculty, primarily by the outstanding contributions of Dr. Sameep Kadakia and Dr. Sunishka Wimalawansa. We are continuing to collaborate with other academic departments at Wright State University, such as Pharmacology and Dermatology. However, our primary contact at the College of Science and Mathematics, Dr. Kate Excoffon, has left the university.

Plastic Surgery continues to have a high level of clinical teaching and involvement by not only full time faculty, but also the institutional and voluntary faculty. New services are being provided to patients in the Miami Valley region that were not previously available. In particular, Hand and Upper extremity replantation and peripheral nerve reconstruction is commonplace at Miami Valley Hospital.

Dayton Children's Hospital will be housing the clinical operations of the Cincinnati Shriners Burns Institute, estimated to begin in February of 2021. Remodeling of the inpatient unit is currently underway. The two pediatric plastic surgeons, Dr. Salim Mancho and Dr. Chris Gordon, bring extensive clinical experience to the area, performing major congenital craniofacial reconstructions in Dayton. Patients and their families had to previously travel to other cities to have this type of surgery.

Our faculty continues to reach beyond the Miami Valley to participate in the mission of global health. Dr. Steve Schmidt and the Legacy of Healing continue their annual mission work. They care for hundreds of plastic, hand and general surgery patients each year in underserved areas of Latin America. In addition, Dr. Chris Gordon and Dr. Salim Mancho perform cleft surgeries in Cuba and Ghana respectively.

Our response to the Covid crisis has been well documented elsewhere. We will continue to monitor the health and safety of our residents, faculty and staff in accordance with Federal, State, University and Hospital guidelines. But primarily, we will use our personal responsibility and good judgement to get through this pandemic.

To summarize, the last 18 months have presented many challenges and changes. The resiliency of the faculty and residents has been tremendous; their outstanding dedication to continuing improvement of patient care in the greater Miami Valley area is second to none. The future remains bright due to the dedication of the physicians and staff in the Department of Orthopaedic and Plastic Surgery.

# Programs/Divisions

Name of Division or Program	Director	Dates
Sports Medicine Matthew W. Lawless, MD, L. Joseph Rubino, MD Michael A. Herbenick, MD	Matthew W. Lawless, MD	2006-Present
Orthopaedic Trauma Michael J. Prayson, MD, Indresh Venkatarayappa, MD Jennifer L. Jerele, MD, Brandon Horne, MD	Michael J. Prayson, MD	2004-Present
Shoulder & Elbow Surgery L. Joseph Rubino, MD, Michael A. Herbenick, MD Anthony J. Checroun, MD, Michael J. Griesser, MD	Michael A. Herbenick, MD	2012-Present
Foot & Ankle Surgery Paul G. Peters, MD	Paul G. Peters, MD	2018-Present
Joint Reconstruction & Replacement Anil Krishnamurthy, MD, Matthew W. Lawless, MD Indresh Venkatarayappa, MD; Dennis M. Brown, MD	Indresh Venkatarayappa, MD	2015-Present
Hand Surgery Beth Berrettoni, MD, Rannie Al-Samkari, MD Matthew Cavo, MD, Christopher Lyons, MD, Sunishka Wimalawansa, MD, Colin Rymer, MD	Peter Barre, MD	2015-Present
Plastic Surgery R. Michael Johnson, MD, Sunishka Wimalawansa, MD	R. Michael Johnson, MD	2009-Present
Pediatrics Orthopaedics Michael Albert, MD, Craig Shank, MD Jeffrey Mikutis, DO, Alvin Jones, MD Melissa Martinek, DO, Claire Beimesch, MD Sarah Steward, DO	Michael C. Albert, MD	2018-Present
C-STARS Program	Lt Col Brandon Horne, MD	2012-Present
Spine Surgery James Lehner, MD	James Lehner, MD	1993-Present

# Fully Affiliated Faculty (may be the same as #2 above for some depts) Clinical Interests Research Interest Deformity/Trail

Name and Academic Position	Clinical Interests	Research Interests
James C. Binski, MD Professor Emeritus	Trauma, Joint Reconstruction, Limb Lengthening	Limb Deformity/Trauma
Matthew Cavo, MD Assistant Professor	Hand Surgery	Hand Surgery
Kate Excoffon, PhD Associate Professor/Joint Appointment	Cell Biology	Cell Biology
Andrew Froehle, PhD Associate Professor/Joint Appointment	Motion Analysis, Musculoskeletal Research	Motion Analysis, Musculoskeletal Research
Christopher Gordon, MD Professor	Plastic Surgery and Reconstruction, Pediatric Craniofacial Surgery	Plastic Surgery and Reconstruction, Pediatric Craniofacial Surgery
Tarun Goswami, PhD Professor/Joint Appointment	Biomechanical Engineering	Biomechanical Engineering
Michael Herbenick, MD Associate Professor	Sports Medicine	Sports, Shoulder/Elbow
Lt Col Brandon Horne, MD Assistant Professor	Orthopaedic Trauma	Orthopaedic Trauma
Jennifer L. Jerele, MD Assistant Professor	Orthopaedic Trauma	Orthopaedic Trauma
R. Michael Johnson, MD, MPH, FACS Chair, Dept. of Orthopaedic and Plastic Surgery Professor	Plastic Surgery, Burn Treatment	Plastic Surgery, Wound Care, Tissue Engineering
Anil B. Krishnamurthy, MD Vice Chair, Dept. of Orthopaedic and Plastic Surgery Institutional Associate Professor	Adult Reconstruction	Adult Reconstruction
Matthew W. Lawless, MD Chief, Division of Sports Medicine Associate Professor	Sports Medicine, Joint Reconstruction	Knee Rehab/Sports
Christopher Lyons, MD Assistant Professor	Hand Surgery	Hand Surgery
Salim Mancho, DO Assistant Professor	Plastic Surgery and Reconstruction, Pediatric Craniofacial Surgery	Plastic Surgery and Reconstruction, Pediatric Craniofacial Surgery
Michael J. Prayson, MD Chief, Orthopaedic Trauma Professor Trauma Fellowship Director	Orthopaedic Trauma	Trauma/Fracture Fixation

Name and Academic Position	Clinical Interests	Research Interests
L. Joseph Rubino III, MD Assistant Professor	Sports Medicine	Sports, Shoulder/Elbow
Indresh Venkatarayappa, MD Assistant Professor	Orthopaedic Trauma Joint Reconstruction	Orthopaedic Trauma, Joint Reconstruction
Sunishka Wimalawansa, MD Assistant Professor	Hand Surgery, Plastic Surgery	Hand Surgery



#### **Baccalaureate** [any course for a bachelor's degree]

#### Froehle AW.

- KNH 2530
- Undergraduate research supervision

#### Johnson RM.

Preceptor for high school and college students interested in plastic surgery

### **Graduate students, including thesis supervision** [master's, doctor's post-doctoral] **Froehle AW.**

- KNH 7800
- Graduate research supervision

#### Undergraduate medical education [medical school]

#### Froehle AW.

• Graduate research supervision

#### Johnson RM.

- PLS 825/PLS 850 (Year 3-4), Wright State University BSOM
- Medical students pursuing Plastic surgery advising

#### Krishnamurthy AB.

- Medical Education Director
- Medical Student Advisor
- MS2, MS3, MS4 Clinical Rotations/Preceptor
- Medical Students Pursuing Orthopaedics/Advisor

#### Lawless MW.

- Medical student elective preceptors (Sports Medicine)
- Job shadow high school and college students
- Presentation to WSU MS III medical students

- Clinical instruction to WSU MS III and MS IV medical students throughout the year
- Annual Musculoskeletal Lecture (Family Medicine)
- MS IV Orthopaedic Mentor
- Medical Student Advisor
- MS2 Musculoskeletal Integument, Wright State University BSOM
- · Clinical Instruction to athletic training students

#### Prayson MJ.

- Trauma preceptor for Air Force Orthopaedic PAs
- Plastic Surgery Resident Rotation/Preceptor
- MS-IV Home/Visiting Student Clinical Rotations in Orthopaedic Trauma/Supervisor
- MS-III Introduction to Clinical Medicine (Orthopaedic Section)/Faculty
- Orthopaedic Fellow and Resident Monthly Trauma Journal Club

#### Wimalawansa SM.

• BII Elective PLS 825/PLS 850 (Year 4), Wright State University BSOM

#### Graduate medical education [residents, fellows]

#### Froehle AW.

Research advising and supervision

#### Johnson RM.

- Program Director, Wright State University Plastic Surgery
- Chief, Section of Plastic and Reconstructive Surgery, Wright State University Department of Surgery
- Plastic Surgery Education Conference (Plastic Surgery Residency), Wright State University Boonshoft School of Medicine, Department of Orthopaedic Surgery, Department of Plastic Surgery
- Resident Supervisor (Plastic Surgery) Orthopaedic residents Wright State University Department of Orthopaedic and Plastic Surgery
- Resident Supervisor (Burn Service) Grandview Hospital Residents Rotating at Miami Valley Hospital, Wright State University Department of Surgery School of Medicine
- Resident Supervisor (Plastic Surgery), General Surgery Residents, Wright State University Department of Surgery
- Resident Supervisor (Dermatology) Dermatology Residents Wright State University Department of Dermatology

#### Prayson MJ.

- Trauma Fellowship Director: Jason Reid, MD (2015-2016), Amanda Wright, MD (2016-2017)
- Associate Residency Program Director
- Daily Orthopaedic Trauma Resident Conferences/Case Review (Trauma Curriculum)
- Orthopaedic Resident Faculty Mentor
- Orthopaedic Engineering/Faculty
- OTA Comprehensive Fracture Course for Residents (Faculty/Lab Director/Instructor)

#### Wimalawansa SM.

- Miami Valley Hospital: Emergency Trauma Hands On Cadaver Lab
- Miami Valley Hospital Burn Unit: Caring for Post-Op Microsurgical Patients Course

 Plastic Surgery Education Conference (Plastic Surgery Residency), Wright State University Boonshoft School of Medicine, Department of Orthopaedic Surgery, Department of Plastic Surgery

#### Continuing medical education [grand rounds, seminars]

#### Wimalawansa, SM.

- AxoGen "Masterminds of Nerve 2020"
   National invite-only nerve reconstruction seminar series.
- AxoGen National Education Program: Advances and Best Practices in Nerve Repair – Mixed and Motor Edition, Course Instructor and Lecturer; Training Course and Cadaver Lab, New Orleans, LA. 2020
- Targeted muscle reinnervation (TMR) cadaver lecture and lab.
   American Society of Plastic Surgeons Plastic Surgery The Meeting (2019)
   Course Instructor and Lecturer; Training Course and Cadaver Lab, San Diego, CA
- Microsurgery, replantation, and limb salvage. Wright State University, Department of General Surgery City-Wide Grand Rounds; January 22, 2020, Kettering, OH.
- Preserving the knee in the setting of high segmental tibial bone and massive soft tissue loss using
  vascularized distal tibial bone docking and a foot fillet flap: a case report. Ohio Valley Society of Plastic
  Surgeons; June 5, 2020, Live Streamed meeting.
- Adjunctive Wound VAC Use in Major Trauma, Limb Salvage, and Complex Wounds. KCI Wound V.A.C. regional meeting; July 17, 2019, Dayton, OH.

# Scholarly Activity

#### **Funded grants**

#### Froehle AW.

• Faculty Mentor: Boonshoft School of Medicine, Medical Student Research Grant. Student PI: Katie Fletcher. Liposomal bupivacaine vs. single shot adductor canal block for pain control in total knee arthroplasty: a randomized prospective study. Award: \$1,000.

**Publications** [List each publication only once; do not list manuscripts in press. List only publications from the year covered by this report.]

Steffensmeier A, Lamont S, Metoyer G, DiPaolo Z, **Froehle AW**. Relationship between age at adult height and knee mechanics during a drop-vertical jump in young adult males. *Orthop J Sports Med.* 2020;8(8):1-11. <a href="PMID">PMID</a> 32874998

**Froehle AW**, Wells GK, Pollom TR, Mabulla AZP, Lew-Levy S, Crittenden AN. Physical activity and time budgets of Hadza forager children: implications for self-provisioning and the ontogeny of the sexual division of labor. *Am J Hum Biol.* 2019;31(1):e23209. PMID 30576026

Martella A, Yue RA, **Boin MA**, **Rogozinski J**, **Flanigan T**, Purcell K, **Laughlin R**. Subtalar Nonunion Following Tibiotalocalcaneal Fusion Using an Intramedullary Nail: A Case Series of Errant Entry Points. *Foot and Ankle Orthopedics* 4(4), 2019 Oct 28, Doi: 10.1177/2473011419S00296

**Dorweiler M, Boin M, Froehle A, Lawless M,** May J. Improved Early Postoperative Range of Motion Following Total Knee Arthroplasty Using Tranexamic Acid: A Retrospective Analysis. *J Knee Surgery*. 2019 Feb;32(2):160-164. Doi: 10.155/s-0038-1636914 PMID: 29534269

Daily M, **Huff S**, White E, Liu J, Ebraheim N. Minimal Invasive Fixation Can Decrease Infection Rates in Diabetic and Obese Patients with Severe Ankle Fracture and Syndesmotic Injury. *Foot Ankle Spec.* 2019 Feb; 12(1):62-68. Doi: 10.1177/19386400187666627. PMID: 29580095

**Hijji FY, Schneider AD**, Pyper M, **Laughlin RT**. The Popularity of Outcome Measures Used in Foot and Ankle Literature. *Foot Ankle Spec.* 2020 Feb;13(1):58-68. Doi: 10.1177/1938640019826680. PMID: 30773056

**Schneider AD**, Srinivas M, **Hijji FY**, Jerkins D, **Wimalawansa SM**. Anatomic Considerations and Reconstruction of the Thumb Flexor Pulley System. *Tech Hand Up Extrem Surgery*. 2019 Dec;23(4):191-195. Doi: 10.1097/BTH000000000000253. PMID: 31188276

Sonn KA, Wallace SJ, Yuan FNF, **Schneider AD**, Hus EL, Harvey RM, Patwardhan AG, Callaci JJ. The Effect of Proton Pump Inhibitors on Bone Formation in a Rat Spinal Arthrodesis Model. *Spine (Phila Pa 1976)*. 2910 Jul 15;44(14):E815-E822. Doi: 1097/BRS.0000000000002987. PMID: 30664099

Acus KE, Indrakanti DL, Miller JL, **Parikh PP, Cheslik TG, McCarthy MC.** The Affordable Care Act: Long-Term Financial Impact on a Level 1 Trauma Center. *J Surg Res.* 2019 Nov;243:488-495. Doi: 10.1016/j.jss.2019.06.021 PMID: 31377488

Driscoll JA, Lubbe R, Jakus AE, Chang K, Haleem M, Yun C, Singh G, **Schneider AD**, Katchko KM, Soriano C, Newton M, Marez T, Li X, Baker K, Hsu WK, Shah RN, Stock SR, Hsu EL. 3D-Printed Ceramic-Demineralized Bone Matrix Hyperelastic Bone Composite Scaffolds for Spinal Fusion. *Tissue Eng Part A.* 2020 Feb;26(3-4):157-166. Doi: 10.1089/ten.TEA.2019.0166. PMID: 31469055

**Meeks BD, Kiskaddon EM, Boin M,** Willen B, Patel T, **Prayson MJ.** The Role of Far Cortical Endosteal Fixation for the Treatment of Medial Malleolus Fractures: A Biomechanical Study. *J Foot Ankle Surg.* Jan-Feb 2020;59(1):2-4. Doi: 10.1053.j.jfas.2018.12.042. PMID: 31668957

Metoyer G, **Huff S, Johnson RM.** Polymicrobial Infection with Kluyvera Species Secondary to Pressure Necrosis of the Hand, a Case Report. *J Surg Case Rep.* 2019 Nov 15;2019(11):rjz262. Doi: 10.1093/jscr/rjz262. PMID: 31749957

Wun K, Hashmi SZ, Maslak J, **Schneider AD**, Katchko KM, Singh G, Patel AA, Hus WK. The Variability of Lumbar Facet Joint Synovial Cyst Recurrence Requiring Revision Surgery After Decompression-Only and Decompression/Fusion. *Clin Spine Surg.* 2019 Dec;32(10):E457-E461. Doi: 10.1097/BSD.0000000000000870. PMID: 3145386

Aflatooni J, **Meeks BD, Froehle A**, Bonner KF. Biceps Tenotomy Versus Tenodesis: Patient Reported Outcomes and Satisfaction. *J Orthop Surg Res.* 2020 Feb 18;15(1):56. Doi: 10.1186/s13018-020-1581-3. PMID: 32070381

**Meeks BD, Kiskaddon EM, Boin M,** Willen B, Patel T, **Prayson MJ.** The Role of Far Cortical Endosteal Fixation for the Treatment of Medial Malleolus Fractures: A Biomechanical Study. *J Foot Ankle Surg.* Jan-Feb 2020;59(1):2-4. Doi: 10.1053/i.jfas.2018.12.042 PMID: 31668957

**Meeks BD, Kiskaddon EM, Burton MG Jr., Froehle AW, Crosby LA, Laughlin RT.** Update on Misrepresentation of Research Publications Among Orthopaedic Surgery Residency Applicants. *J Bone Joint Surg Am.* 2018 Sept 19;100(18):e121. Doi: 10.2106/JBJS.18.00283. PMID: 30234629

**Meeks BD, Kiskaddon EM,** Sirois Z, **Froehle A,** Shroyer J, **Laughlin RT**. Improvement and Retention of Arthroscopic Skills in Novice Subjects Using Fundamentals of Arthroscopic Surgery (FAST) Module. *J Am Acad Orthop Surg.* 2020 Jun 15;28(12):511-516. Doi: 10.5435/JAAOS-D-19-00336. PMID: 32073468

Venezia, M, **Battista C**, Steffensmeir A, Sirois Z, **Albert MC**. The Use of Sublaminar Bands in Treatment of Spinal Deformity; An Operative Technique. *Current Orthopaedic Practice*; Vol 30:4); July/August 2019.

Schmucker A, Chen R, Shobhan V, **Martinek M, Albert MC.** Radiation Exposure in the Treatment of Pediatric Supracondylar Humerus Fractures. *Arch Orthop Trauma Surg.* 2020 Apr;140(4):449-455. Doi: 10.1007/s00402-019-03251-2. PMID: 31392407

Welter JP, **Horne BR**. "Management of Orthopedic Blast Injuries" Operational and Medical Management of Explosive and Blast Incidents, Edited by David W. Callaway, et al. Springer, 2020, pp. 475-484.

**Metoyer GT, Anderson SR, Horne BR, Mancho SN, Wimalawansa SM:** Preserving the Knee in the Setting of High Segmental Tibial Bone and Massive Soft-Tissue Loss Using Vascularized Distal Tibial Bone Docking and a Foot Fillet Flap. JBJS Case Connect. 2020;10: e0496 <a href="http://dx.doi.org/10.2106/JBJS.CC.19.00496">http://dx.doi.org/10.2106/JBJS.CC.19.00496</a> PMID: 32649142

**Johnson RM.** A Brief Overview of Maxillary Reconstruction. Seminars in plastic surgery. May 1, 2020. PMID: 32390772

Scott B, **Harrison L, Kadakia S,** Ducic Y, **Johnson RM.** Prophylactic Use of the Pectoralis Major Flap to Prevent Anastomotic Leak in the Reconstruction of a Total Laryngopharyngoesophagectomy Defect Combined With Gastric Pull-Up After Chemoradiotherapy. Craniofac Surg. 2020 Sept. PMID: 32398618

Lee A, Colen D, **Fox JP**, Chang B, Lin I. Pediatric Hand and Upper Extremity Injuries Presenting to Emergency Departments in the United States: Epidemiology and Health Care-Associated Costs. Hand (NY). 2019 Aug 23; 1558944719866884. Doi: 10.1177/1558944719866884. PMID: 31441332

Lee A, Chang B, Yan C, **Fox JP**, Magee L, Scott M, Maguire M, Ross K, Rakow C, Drake F, McGinnis A, Watson A, Burlingame C, Kraemer F, Muhly W, Ruby J, Jackson O. The Reducing Opioid Use in Children with Clefts Protocol: A Multidisciplinary Quality Improvement Effort to Reduce Perioperative Opioid Use in Patients Undergoing Cleft Surgery. Plast Reconstr Surg. 2020 Feb;145(2):507-516. Doi: 10.1097/PRS.000000000006471. PMID: 31985649

Shokri T, Wang W, Cohn J, **Kadakia S**, Ducic Y. Premaxillary Deficiency: Techniques in Augmentation and Reconstruction. Semin Plast Surg. 2020 May;34(2):92-98. Doi: 10.1055/s-0400-1709175. Epub 2020 May 6. PMID: 32390776

Kadakia S. Special Topics in Palatal and Maxillary Reconstruction. Semin Plast Surg. 2020 May;34(2):67-68. Doi: 10.1055/s-0400-1709468. Epub 2020 May 6. PMID: 32390771

Hu S, Klimczak J, Garner W, Hart H, **Kadakia S**, Wood-Smith D, Abraham M. Open Versus Closing Wedge Osteotomy and Application to Mandibular Reconstruction. J Craniofac Surg. 2020 Jun;31(4):e380-e384. Doi: 10.1097/SCS.0000000000006344. PMID: 32282471

**Anderson SR, Wimalawansa SM,** Markov N, **Fox JP.** Cannabis Abuse or Dependence and Post-operative Outcomes After Appendectomy and Cholecystectomy. J Surg Res. 2020 Nov;255:233-239. Doi: 10.1016/j.jss.2020.05.009. Epub 2020 Jun 20. PMID: 32570125

Pool C, Shokri T, Vincent A, Wang W, **Kadakia S**, Ducic Y. Prosthetic Reconstruction of the Maxilla and Palate. Semin Plast Surg. 2020 May;34(2):114-119. doi: 10.1055/s-0400-1709143. PMID: 32390779

Shokri T, Wang W, Vincent A, Cohn J, **Kadakia S**, Ducic Y. Osteoradionecrosis of the Maxilla: Conservative Management and Reconstructive Considerations. Semin Plast Surg. 2020 May;34(2):106-113. Doi: 10.1055/s-0040-1709144. Epub 2020 May 6. PMID: 32390778

Anderson SR, Scott B, Harrison LM, Wimalawansa SM, Kadakia S. Common Carotid-to-Internal Jugular Arteriovenous Loop for Single-Stage Microsurgical Reconstruction in the Radiated Vessel-Depleted Neck: Description of Technique and Clinical Case Correlates. J Craniofac Surg. 2020 Aug 28. Doi: 10.1097/SCS.00000000000006953. PMID: 32868729

Kranker L, **Curry EE**, Perry T. Response to Tom et al., Comparison of Traditional and Skin-Sparing Approaches for Surgical Treatment of Necrotizing Soft-Tissue Infections (DOI: 10.1089/sur.2019.263). Surg Infect (Larchmt). 2020 Jun;21(5):474-475. Doi: 10.1089/sur.2020.037. Epub 2020 Mar 26. PMID: 32212995

#### Books, chapters, reviews

American Academy of Orthopaedic Surgeons, Diagnosis and Management of Acute Compartment Syndrome Appropriate Use Criteria http://www.aaos.org/acsauc Published September 2019.

Co-Editor: Emergency War Surgery 5<sup>th</sup> Ed. 2018. Borden Institute US Army Medical Department Center and School Health Readiness Center of Excellence

**Griesser MJ.** Message from the Editor. Journal of Medicine and Science in Tennis. 2019 March, Volume 24, Number 1, p.2.

**Griesser MJ.** Message from the Editor. Journal of Medicine and Science in Tennis. 2019 March, Volume 24, Number 2, p.2.

**Griesser MJ.** Message from the Editor. Journal of Medicine and Science in Tennis. 2019 December, Volume 24, Number 3, p.2.

**Griesser MJ.** Message from the Editor. Journal of Medicine and Science in Tennis. 2020 March, Volume 25, Number 1, p.2.

**Griesser MJ.** Message from the Editor. Journal of Medicine and Science in Tennis. 2020 July, Volume 25, Number 2, p.2.

Significant presentations [e.g., to academic societies, medical schools and national professional societies.]

Wilson MW, Battista C, Venezia M, Steffensmeier A, **Froehle AW**, Albert M. Comparative analysis of adolescent idiopathic scoliosis treated surgically with high implant density pedicle screws versus hybrid sublaminar band technique. Scoliosis Research Society IMAST, April 1-4, 2020; Athens, Greece.

Peterson M, **Froehle AW**. Accelerated childhood skeletal aging is protective of development of sarcopenia later in life. *Innov Aging*. 2019;3(S1):S608-S609.

**Flanigan TL, Rogozinski JA, Krishnamurthy A,** Fox JP. Risk Factors for Opioid Misuse or Abuse Requiring Hospital Based Acute Care Following Total Hip or Knee Arthroplasty. Podium Presentation At: Mid-America Orthopedic Association; 2019 Apr 10-14: Miramar Beach, FL.

Flanigan TL, Rogozinski JA, Polenakovich F, Froehne A, Laughlin RT. Improved Psychomotor Proficiency in Novice Subjects with Two, Four, or Six Weeks of Fundamentals of Arthroscopic Surgery Training (FAST). Podium Presentation at: Mid-America Orthopedic Association; 2019 Apr 10-14; Miramar Beach, FL.

Rogozinski JA, Slack Grant, Quellhorst ML, Froehle AW, Laughlin RT. Effects of Aging on Walking Ankle Kinematics in the Sagittal Plane in an Asymptomatic Population. Podium Presentation at: Mid-America Orthopedic Association; 2019 Apr 12; Miramar Beach, FL.

Rogozinski JA, Flanigan TL, Froehle AW. The Orthopaedic In-Training Examination: Current Concepts and Perspectives, a Meta-Analysis. Poster Presentation at: American Orthopedic Association Annual Meeting; 2019 Jun 25-29; San Diego, CA

**Flanigan TL, Rogozinski JA,** Barnes JT, **Laughlin RT.** Does Pending Research on Residency Applications Actually get Published? Poster Presentation at: American Orthopedic Association Annual Meeting; 2019 Jun 25-29; San Diego, CA

**Huff S, Henningsen J, Schneider MD, Hijji F,** Dominguez B, **Froehle AW, Jerele J, Prayson MJ.** Physician Perception of Fracture Location. Implications for Bone Stimulator Treatment. Virtual Poster Presentation at: The American Orthopaedic Association (AOA) Annual Meeting; 2020 Jun 9-13.

Rogozinski JA, Flanigan TL, Spitz HC, Kiskaddon EM, Froehle AW, Krishnamurthy A. The utility of the Charlson Comorbidity Index and Modified Frailty Index as Quality Indicators in Total Joint Arthroplasty. Poster Presentation at: Ohio Orthopedic Society Annual Meeting; 2019.

**Boin MA, Flanigan TL, Rogozinski JA,** Purcell KF, **Laughlin RT.** Subtalar Nonunion Following Tibiotalocalcaneal Arthrodesis Using a Straight Intramedullary Nail: A Case Series. Poster Presentation at: American Orthopedic Foot and Ankle Society Annual Meeting; 2019 Sep 12-15; Chicago, IL.

Whale C, Schneider AD, Hijji F, Flanigan TL, Horne B. Effect of Restrictive Opioid Prescribing Policies on Opioid Prescribing Following Total Hip or Total Knee Arthroplasty. Poster presentation at: The American Academy of Hip and Knee Surgeons; 2019 Nov 7-10; Dallas, TX.

**Kiskaddon EM, Soehnlen NT, Erb E, Froehle AW, Krishnamurthy A.** Preoperative Emergency Department Visits are Predictive of Postoperative Emergency Department Visits and Discharge Disposition in Total Knee Arthroplasty Patients. Poster Presentation at: American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting; 2019 Mar 14-16; Las Vegas, NV.

**Schneider AD, Whale C, Hijji FY, Flanigan T, Horne B.** Effectiveness of Restrictive Opioid Prescribing Policies on Postsurgical Prescribing and Refilling Behavior of Surgeons and Patients. Podium Presentation at: The American Academy of Orthopedic Surgeons; 2020 Mar 26.

**Schneider AD, Whale CS, Hijji FY, Flanigan, TL.** Effectiveness of Restrictive Opioid Prescribing Policies on Postsurgical Prescribing and Refilling Behavior of Surgeons and Patients. Podium Presentation at: The American Academy of Orthopedic Surgeons; 2020 Mar 26.

#### Consultantships

Orthopaedic Consultant to the US Air Force Surgeon General - Brandon Horne, MD

Other recognition [e.g. editorships, reviewer awards]

#### Froehle AW.

#### **Editorial Positions**

• 2020-Present Invited Reviewer, Am J Sports Medicine

• 2020-Present Editorial Board, J Aging Phys Act

• 2020-Present Editorial Board, Int J Kinesiol High Educ

#### **Journal Reviewer**

Am Anthropol J Archaeol Sci Med Sci Sports Exerc J Gerontol A Biol Sci Med Sci Orthop J Sports Med Am J Hum Biol Am J Phys Anthropol J Hum Evol PM & R PLoS ONE Ann Hum Biol J Nutr Appl Physiol Nutr Metab J Orthop Surg Res **Quaternary Res** J Plast Surg Hand Surg BMC Women's Health Res Sports Med Clin Orthop Relat Res J Sports Rehabil Surg Obes Relat Dis

Meas Phys Educ Exerc Sci

**Grant Reviewer** 

Curr Anthropol

2019-Present National Science Foundation
 2012-Present The Leakey Foundation

Journal of the American Academy of Orthopaedic Surgeons Reviewer - Brandon Horne, MD

Editor-in-Chief Journal of Medicine and Science in Tennis - Michael Griesser, MD

Volunteer Reviewer American Journal of Sports Medicine - Michael Griesser, MD

Volunteer Reviewer Arthroscopy - Michael Greisser, MD

Volunteer Reviewer Journal of Bone and Joint Surgery - Michael Greisser, MD

Volunteer Reviewer Journal of the American Academy of Orthopaedic Surgeons - Michael Greisser, MD

Volunteer Reviewer Journal of Shoulder and Elbow Surgery - Michael Greisser, MD

Volunteer Reviewer International Journal of Sports Medicine - Michael Greisser, MD

Volunteer Reviewer Clinical Journal of Sports Medicine - Michael Greisser, MD

Volunteer Reviewer Physician and Sports Medicine - Michael Greisser, MD

Manuscript Reviewer The Journal of Trauma: Injury, Infection and Critical Care - Michael Prayson, MD

Manuscript Reviewer ACTA Scandanavia Orthopaedica - Michael Prayson, MD

Manuscript Reviewer Journal of Orthopaedic Trauma - Michael Prayson, MD

#### **Patent**

**Albert MC**, et. A. 2020. Tensioning instrument and band clamp tensioning system. US Patent 10,595,904, filed August 22, 2017 and issued March 24, 2020



#### Student advising

#### Froehle AW.

- Curriculum Advisor, Sports Science Undergraduate Program
- Research Mentor, BSOM Scholarship in Medicine Program
- Thesis Committee Member, MS in Computer Science and Engineering
- Research Advisor, Sports Management MA Program
- Resident Research Director, Orthopaedic Surgery Residency Program
- Thesis Committee Chair, Anatomy MS Program

#### **National Service**

2015-2020 Secretary, Human Biology Association (elected)

**Regional Service** 

2017-Present Reviewer, DAGMEC Group for Resident and Fellow Research Grants

#### Committee membership/officer

#### Froehle AW.

#### University Service and Committees (Wright State University unless otherwise noted)

- University Honors Committee
- College of Education and Human Services Promotion and Tenure Committee
- Department of Kinesiology and Health Promotion and Tenure Committee
- · Department of Kinesiology and Health Faculty Mentor
- BSOM Research Committee
- Department of Orthopaedic Surgery Residency Program Interview Committee/Residency Candidate Interviewer
- Department of Kinesiology and Health Curriculum Committee (Chair 2021-2022)
- Graduate School Regular Faculty
- Biomedical Sciences PhD Program Faculty

#### Johnson RM.

- Executive Committee, Wright State University BSOM
- Dayton Area Graduate Medical Education

#### Krishnamurthy AB.

- Promotions Committee
- Graduate Medical Education Committee

#### Prayson MJ.

- General Surgery Trauma Collaborative Conference Member
- Research Committee
- Resident Selection Committee
- Clinical Competency Committee (Chair)
- PhD in Engineering Program, Program Faculty

#### Hospital or affiliated institution

#### Johnson RM.

- Vice Chair, Department of Surgery at Miami Valley Hospital
- Chair, Department of Surgical Services Committee at Miami Valley Hospital
- Interdisciplinary Wound Management Team
- Fidelity Health Care Board Quality Committee

#### Krishnamurthy AB

- VA DOD Clinical Practice Workgroup VA Champion VA Central Office
- VA Electronic Health Record Management VA Central Office
- Dayton VA Peer Review Committee
- Specialty and Surgical Care Collaborative Faculty and Planning Committee VA Central Office
- Orthopedic Surgery Surgical Advisory Board, VA Central Office

#### Hospital or affiliated institution

#### Prayson MJ.

- Miami Valley Hospital Trauma Committee
- Miami Valley Hospital Trauma Joint Practice Committee
- Miami Valley Hospital Hip Fracture Advisory Board
- Miami Valley Hospital Hip Fracture Improvement Group
- Miami Valley Hospital IntraOp Design Team, Department of Surgical Services
- Miami Valley Hospital DOSS Performance Improvement Project
- Miami Valley Hospital Medical Directors Forum
- Miami Valley Hospital Orthopaedic Trauma Committee, Committee Organizer (Chair)
- Miami Valley Hospital Surgery Scheduling Team
- Miami Valley Hospital Clinical Quality Value Analysis (CQVAQ) Team for Orthopaedics and Spine Services
- Orthopaedic Trauma Fracture Review & Quality Improvement Committee (Chair)
- Premier Health Trauma Ortho Committee/Service Line
- Premier Health Fragility Fracture Care Path

#### State

#### Lehner J.

- Ohio Orthopaedic Society Executive Committee
- United Rehabilitating Servivices Board Member

#### **National**

#### Albert MC.

- Pediatric Orthopaedic Society of North America (POSNA) Industry Relations Committee and Public Education and Media Relations
- Scoliosis Research Society Patient Education Committee
- Scoliosis Research Society Governance Council

#### Bemeisch C.

- American Academy of Cerebral Palsy and Developmental Medicine (AACPDM) Education Committee Member
- Pediatric Orthopaedic Society of North America (POSNA) Micro Grant Task Force

#### Griesser M

• Society for Tennis Medicine and Science Board Member

#### Johnson RM.

- ASPS Healthcare Delivery Subcommittee
- ASPS Legislative Advocacy Committee

#### Krishnamurthy AB.

CMS Quality Council

#### **Patient Care Summary**

Nothing to report at this time.

## Honors and awards [Faculty or staff]

Bates NL. 2020 Gregory E. Maupin M.D. Chief's Award for Outstanding Contributions to Plastic Surgery Johnson RM. 2019 WSU Dermatology Department Teacher of the Year Award Checroun AJ. 2019 WSU Orthopaedic Surgery Residency Teaching Excellence Award Krishnamurthy, AN. 2019 and 2020 WSU Orthopaedic Surgery Residency Teaching Excellence Award Prayson, MJ. 2020 WSU Orthopaedic Surgery Residency Teaching Excellence Award Herbenick, MA. 2020 WSU Orthopaedic Surgery Residency Teaching Excellence Award Lawless, MW. 2020 WSU Orthopaedic Surgery Residency Teaching Excellence Award Venkatarayappa I. 2020 WSu Orthopaedic Surgery Resident Education Award

### Hosted events [CME, etc.]

Hosted events were placed on hold as of March 2020. Prior to this, Plastic Surgery hosted several DPSS events. Orthopaedic Surgery has a yearly visiting professor. We plan to reestablish visiting professors quarterly after the pandemic.

### Other information

Our department has proven to have a significant interest in scholarly activity. We have collaborated in studies with pharmacology toxicology and clinically with many specialties, particularly with Dermatology. Plastic surgery trains many medical students on 3<sup>rd</sup> and 4<sup>th</sup> year electives on suturing techniques, regardless of the specialty they are entering. We believe this adds to their overall confidence as physicians. We also attempt to increase diversity among our residents to reflect the goals and mission of the university. We also mentor many 1<sup>st</sup> and 2<sup>nd</sup> year residents.