

Clinical Research

※ Winter 2023



NEWSLETTER

UPCOMING DEADLINES

Orthopaedic Research Society (ORS) Annual Meeting
February 2- February 6, 2024
Long Beach, California
Click this link for details.

American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting

February 12-February 16, 2024 San Francisco, CA <u>Click this link for details</u>. *Last day for early registration 01/12/24



RESIDENT RESEARCH PROJECT WINS MULTIPLE HONORS

Dustin Morgan, MD, a PGY-5 chief resident in the orthopaedics residency program, won first place in the resident poster competition at the 2023 annual meeting of the NYS Society of Orthopaedic Surgeons (NYSSOS) Sept. 9 in Rochester. His poster, was titled "Multidisciplinary Standardized Protocol Decreases Time to Antibiotics for Open Fractures: A Resident-Driven Quality Improvement Initiative." Morgan says open fractures pose a problem for orthopaedic surgeons due to their high rate of infection compared to other injuries and that receiving antibiotics in a timely manner is of utmost importance in these injuries (Hoffman, 2023). To read the full article, click here.

1. Hoffman, D. (2023, September 20). Resident's Research Project Wins Multiple Honors. Medicine.buffalo.edu. https://medicine.buffalo.edu/news_and_events/news/2023/09/orthopaedics-resident-research-18169.html

ANNOUNCEMENTS

COMING SOON: Clinical Research Staff Webpage!

The clinical research center will have their own website! Stay tuned in the new year to meet our team!

Medical Student Publishing Discounts and Waivers

Click this link for details.

HIGHLIGHTS

Featured Grant

Dr. Leslie Bisson and the Sports Medicine research team were awarded \$300,000 by the Mother Cabrini Health Foundation to support school-based CPR education. Dr.Bisson was inspired to submit the proposal after responding to Damar Hamlin's cardiac arrest in January 2023. The grant, "Leveraging Sports, Community, and Healthcare Partnerships to Increase Bystander CPR/AED Training in Underserved Communities and Increase Diversity in the Next Generation of Healthcare Professionals," will support the training of 60 new CPR instructors and 8,000 high school students and family members. The grant focuses on school-based programming in Western New York's historically underserved communities. Support is provided from October 2023 to September 2024.

Featured Staff

Tiffany is a 2020 MS in Medical Physiology graduate of Case Western Reserve University. Prior to her master's program, she received a bachelor's at the University at Buffalo in psychology and pre-medical studies. Tiffany is joining us from her previous role as a surgical neurophysiologist in Albany through Nuvasive Clinical Services. In that role, Tiffany monitored intraoperative patient neurostatus, specializing in trauma and complex spine surgery. Tiffany will primarily work with the sports medicine research team in her new role as research assistant.



Tiffany Thavisin, Research Assistant

FUNDED STUDY UPDATES

Knee Arthroplasty Activity Trial (KArAT)

- Aim(s): Compare standard of care, FitBit alone, and FitBit with health coaching and monetary incentives to address attitudes, beliefs and physical activity directly after TKR.
- Funded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS); Subaward with Brigham and Women's Hospital.
- 63 baseline visits completed.
- 38 subjects have been randomized.

<u>Building the Research Infrastructure to Diversify</u> <u>Degenerative Knee Studies (ECMC)</u>

- Aim(s): Identify barriers to enrolling subjects in degenerative knee trials among a diverse population at ECMC, assess subjects' willingness to participate in degenerative knee trials that include non-operative treatment and yearlong follow-up assessment, Pilot a non-operative comparative effectiveness trial.
- Funded by Reserarch for Health in Erie County, Inc.
- 20 patient preference interviews completed.
- 1 patient enrolled; active enrollment in clinical trial in progress.

Exercise Reset for Concussion- Modifying the Buffalo Concussion Protocol for Application in a Military Environment

- Aim(s): Determine whether early aerobic exercise added to current military concussion protocol speeds return to duty, improves clinical recovery, and protects against the risk of persisting symptoms.
- Funded by the Department of Defense in collaboration with the Geneva Research Foundation, University of North Carolina Chapel Hill, and the University of Michigan.
- Data to be collected from Fort Liberty and Camp Lejeune in North Carolina in 2024.

Zimmer Biomet Shoulder Arthroplasty Long-term Post Market Clinical Follow-up Study

- Aim(s): 10-year post-market study that gathers data on survival of the Zimmer Biomet implant as well as subject satisfaction and clinical benefits. This study tracks the ability to perform activities, pain levels, and range of motion exercises to evaluate improvement and longevity of the implant.
- Funded by Zimmer Biomet.
- 62 of 73 target enrollment.

<u>Stryker Orthopaedics Triathlon All-Polyethylene Tiba</u> <u>Outcomes Study</u>

- Aim(s): Retrospective, 10-year follow-up on subjects who received an all-polyethylene tibial implant. The study is collecting subject reported outcomes and reviewing x-rays.
- Funded by Stryker Orthopaedics.
- 19 subjects enrolled; active enrollment in progress.

MESSAGE FROM THE CRC ASSOCIATE DIRECTOR: A LETTER OF GRATITUDE

During the holiday season at the end of the year it is important to reflect on the past year and look forward to the new year. This has been a year of growth and productivity for our research team with many accomplishments. We are excited to have four new members on our team: Andrea Carland and Tiffany Thavisin are new research assistants, Jacob Geiger is our inaugural research intern, and Haley Chizuk is a new research coordinator on our concussion team. Our clinical research team is now 12 members strong, and we are grateful for the dedication and commitment of all our staff.

This year we embraced our new mission as leaders in rigorous and innovative scientific studies that advance musculoskeletal and sports medicine knowledge and improve care. Our team members produced 30 publications and made 28 presentations at regional, national and international meetings this year. We are currently working on nearly 100 research projects with funding from 10 grants and several industry sponsored clinical trials. We continue to educate the next generation of researchers through our medical student summer research program which enrolled a record 52 students this year.

We established the Clinical UBMD Orthopaedics & Sports Medicine Research Center (CRC) and moved into our new state-of-the-art space in the 716 Health Complex. The transition from OBERD to Patient IQ for our patient-reported outcomes data management is complete. Thank you to our data team and especially to Sam Miller for his leadership during the transition. We are excited for the opportunities that these new resources will bring to our research team in the new year and beyond.

I would like to extend my sincere gratitude to all of our faculty, residents, students and staff who have contributed to our research program this year, and a special thank you to our patients enrolled in clinical trials. Without their dedication we would not be able to fulfill our mission to advance knowledge and improve musculoskeletal care for our patients. I hope everyone has a safe and festive holiday season and a Happy New Year.

-Thomas Duquin, MD, Associate Director of the CRC