

# Department of Orthopaedics

## Publications

### Mary Bouxsein, PhD

[Small animal DXA instrument comparison and validation](#) Coulombe J, Maridas D, Chow J, **Bouxsein ML**. Bone, 2023, 116923, ISSN 8756-3282, doi.org/10.1016/j.bone.2023.116923.

[Validity of Evaluating Spinal Kinetics Without Participant-Specific Kinematics](#) Yan C, Lynch AC, Alemi MM, Banks JJ, **Bouxsein ML**, Anderson DE, Journal of Biomechanics, 2023, 111821, ISSN 0021-9290, doi.org/10.1016/j.jbiomech.2023.111821.

[Total Calcium Intake Is Associated With Trabecular Bone Density in Adolescent Girls With Type 1 Diabetes](#) Saunders RK, Kilroe KM, Joseph TV, Caksa S, **Bouxsein ML**, Misra M. and Mitchell DM (2023),. JBMR Plus e10813. <https://doi.org/10.1002/jbm4.10813>.

[Sex differences in muscle health in simulated micro-and partial-gravity environments in rats](#) Rosa-Caldwell M, Mortreux M, Wadhwa A, Kaiser UB, Sung DM, **Bouxsein ML**, Rutkove S. Sports Medicine and Health Science, 2023. doi.org/10.1016/j.smhs.2023.09.002.

[EMG Validation of a Subject-Specific Thoracolumbar Spine Musculoskeletal Model During Dynamic Activities in Older Adults](#). Alemi MM., Banks J, Lynch AC, Allaire BT, **Bouxsein ML**, Anderson, DE. Ann Biomed Eng 51, 2313–2322 (2023). doi.org/10.1007/s10439-023-03273-3

[Predicting ankle and knee sagittal kinematics and kinetics using an ankle-mounted inertial sensor](#) Long T, Outerleys J, Yeung T, Fernandez J, **Bouxsein ML**, Davis IS, Bredella MA, Besier TF. Computer Methods in Biomechanics and Biomedical Engineering, 30 Jul 2023. doi.org/10.1080/10255842.2023.2224912

### Ara Nazarian, PhD

[97. Gene expression changes with short-and long-term cannabinoid treatments in a spinal fusion model](#). Fogel H, Yeung C, Yeritsyan ., Momenzadeh K, Kheir N, Abbasian M. and **Nazarian A.**, 2023. The Spine Journal, 23(9), p.S50. doi.org/10.1016/j.spinee.2023.06.149.

[Monitoring Scapular Kinematics through Wearable Magneto-Inertial Measurement Units: State of the Art and New Frontiers](#). Antonacci C, Longo UG, **Nazarian A**, Schena E, Carnevale A. Sensors. 2023; 23(15):6940. [doi.org/10.3390/s23156940](https://doi.org/10.3390/s23156940)

[Propylene glycol and Kolliphor as solvents for systemic delivery of cannabinoids via intraperitoneal and subcutaneous routes in preclinical studies: a comparative technical note](#). Momenzadeh K., Yeritsya D, Kheir N, Nazarian R, **Nazarian A**. J Cannabis Res 5, 24 (2023). doi.org/10.1186/s42238-023-00194-9.

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## Publications

### Tamara Rozental, MD and Carl Harper, MD

[Trends in Orthopedic Management of Distal Radius Fractures Among Medicare Beneficiaries From 2019 to 2020: A Claims Analysis](#) He LD, Duggan JL, Lans J, **Harper CM, Rozental TD**. Journal of Hand Surgery Global Online. 2023 Jul 22. [doi.org/10.1016/j.jhsg.2023.06.002](https://doi.org/10.1016/j.jhsg.2023.06.002)

[Evaluating Male Patients' Understanding of Osteoporosis Evaluation and Treatment Following a Distal Radius Fracture](#). Russo M, Liu C, Liu Y, Mahar S, **Rozental TD, Harper CM**.. The Journal of Hand Surgery. 2023 Aug 7. [doi.org/10.1016/j.jhsa.2023.07.006](https://doi.org/10.1016/j.jhsa.2023.07.006)

[Do Surgeons Accurately Predict Level of Activity in Patients with Distal Radius Fractures?](#) **Harper CM, Model Z, Xiong G, Hegermiller K, Rozental TD**..The Journal of Hand Surgery. 2023 Aug 26. [doi.org/10.1016/j.jhsa.2023.07.007](https://doi.org/10.1016/j.jhsa.2023.07.007)

# Department of Orthopaedics

## Presentations

**Chris Miller, M.D.**, and **Fernando Raduan, M.D.**, recently attended the 6th International Congress of Foot & Ankle Minimally Invasive Surgery held in Rio de Janeiro, Brazil. Working with international leaders in minimally invasive surgery (MIS), the conference is designed to teach the most recent advances and techniques in MIS foot and ankle surgery and expand our understanding of what is possible with a minimal incision approach. Dr. Miller was part of the scientific organizing committee for the conference, moderated several of the sessions, and presented BIDMC research on complex midfoot and hind foot osteotomies for deformity correction as well as a novel minimally invasive technique for repairing Achilles tendon ruptures and for 1st MTP fusion.

Following the conference in Rio, they travelled to Sao Paulo, Brazil to meet with Dr. Raduan's former surgical partners at the University of Sao Paulo to build a partnership between them and the BIDMC Orthopaedic community. While there, Drs. Miller and Raduan demonstrated modern MIS techniques, which the Brazilian surgeons are not using frequently.

# Department of Orthopaedics

## Events

**2023-2024**  
**Wilson C. Hayes**  
**Distinguished Musculoskeletal Health**  
**Lecture Series**

Carl J. Shapiro Department of  
Orthopaedic Surgery

Beth Israel Lahey Health   
Beth Israel Deaconess  
Medical Center

 HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL



**Nadeen Chahine, PhD**  
Associate Professor of Biomechanics  
Columbia University  
November 1, 2023



**Brendan Harley, PhD**  
Robert W. Schafer Professor of Chemical &  
Biomolecular Engineering, University of  
Illinois Urbana-Champaign  
February 7, 2024



**Treena Arinzeh, PhD**  
Professor of Biomedical Engineering  
Columbia University  
April 3, 2024



**Kurt Hankenson, DVM, MS, PhD**  
Henry Ruppenthal Family Professor of  
Orthopaedic Surgery & Bioengineering,  
University of Michigan  
May 1, 2024

Lectures are at 8 am. Email Jessica Osorio [josorio@bidmc.harvard.edu](mailto:josorio@bidmc.harvard.edu)  
for the Zoom link.

Beth Israel Deaconess  
Medical Center



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