Stanford

Melissa Boswell

Postdoctoral Scholar, Bioengineering

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BIO

I am a postdoctoral scholar at Stanford University in the Neuromuscular Biomechanics Laboratory, where I also received my PhD in Bioengineering. I'm passionate about monitoring, improving, and motivating movement and increasing access to health care with digital technology. My research bridges the fields of biomechanics, psychology, and computer science to understand not just how we move, but how we think about movement and our motivation for being physically active. I value human-centered design and a holistic, lifestyle-focused approach to engineering and medicine. I enjoy cultivating creativity and humor in work and life, sharing ideas, and communicating science, particularly on my podcast, Biomechanics On Our Minds (my mom says it's her favorite biomechanics podcast).

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , BIOE-PHD (2022)
- Master of Science, Stanford University , BIOE-MS (2018)

STANFORD ADVISORS

- Scott Delp, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Mindset is associated with future physical activity and management strategies in individuals with knee osteoarthritis.** *Annals of physical and rehabilitation medicine*
  Boswell, M. A., Evans, K. M., Zion, S. R., Boles, D. Z., Hicks, J. L., Delp, S. L., Crum, A. J.
  2022; 65 (6): 101634

- **Biceps femoris long head sarcomere and fascicle length adaptations after three weeks of eccentric exercise training.** *Journal of sport and health science*
  Pincheira, P. A., Boswell, M. A., Franchi, M. V., Delp, S. L., Lichtwark, G. A.
  2021

- **A neural network to predict the knee adduction moment in patients with osteoarthritis using anatomical landmarks obtainable from 2D video analysis.** *Osteoarthritis and cartilage*
  Boswell, M. A., Uhlrich, S. D., Kidzinski, L., Thomas, K., Kolesar, J. A., Gold, G. E., Beaupre, G. S., Delp, S. L.
  2021