



Julie Muccini, MS, OTR/L

Research Engineer, Rad/Musculoskeletal Imaging

Bio

BIO

Julie Muccini is an occupational therapist who has spent most of her clinical career working with individuals with neurological diagnoses. She is registered and licensed in California and is a member of the American Occupational Therapy Association (AOTA) and the Occupational Therapy Association of California (OTAC). She is actively involved in research working with individuals post-stroke, neuromuscular diseases, and osteoarthritis; additional work includes assessing shoulder movements, sprinting, and balancing tasks; she works in the Human Performance Lab with an interdisciplinary team integrating biomechanics, biomedical engineering, physiology, psychology, and rehabilitation. Ms. Muccini received her bachelor of science in industrial engineering and operations research from the University of Massachusetts at Amherst and her master of science in occupational therapy from Boston University. She started working at the hospital at Stanford in 1997 and transitioned to the Outpatient Neuro Rehab Clinic at the Stanford Neurosciences Health Center in 2014. In March 2021, Julie moved to the Stanford University School of Medicine to work in the Human Performance Lab at the Arrillaga Center for Sports and Recreation, ACSR, as a Wu Tsai Human Performance Alliance member.

INSTITUTE AFFILIATIONS

- Member, Wu Tsai Human Performance Alliance

EDUCATION AND CERTIFICATIONS

- MSc, Boston University, Sargent College , Occupational Therapy (1996)
- BSc, University of Massachusetts, Amherst , Industrial Engineering and Operations Research (1990)

PERSONAL INTERESTS

While an undergraduate, Julie competed in Division I Track and Field in the 400-meter hurdles and triple jump; after graduate school, she became a competitive cyclist on the track and road and won two Masters National Championships on the Velodrome for the Points Race. In addition, she enjoys Muay Thai Fighting, Brazilian Jiu-jitsu, hiking, road cycling, and mountain biking.

LINKS

- Human Performance Lab: <https://ortho.stanford.edu/humanperformance.html>
- Engage Health: <https://engagehealth.stanford.edu/our-team>
- Linked In: <https://www.linkedin.com/in/julie-muccini-63991b6>

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Member, Occupational Therapy Association of California (1997 - present)

- Member, American Occupational Therapy Association (1997 - present)

Publications

PUBLICATIONS

- **Personalizing the shoulder rhythm in a computational upper body model improves kinematic tracking in high range-of-motion arm movements.** *Journal of biomechanics*
Maier, J. N., Bianco, N. A., Ong, C. F., Muccini, J., Kuhl, E., Delp, S. L.
2024; 176: 112365
- **Towards Video-Based Movement Biomarkers for Neuromuscular Diseases**
Uhlrich, S. D., Ruth, P. S., de Monts, C., Falisse, A., Muccini, J., Ataide, P., Day, J., Duong, T., Delp, S. L., Pons, J. L., Tornero, J., Akay, M.
SPRINGER INTERNATIONAL PUBLISHING AG.2024: 501-504
- **OpenCap: Human movement dynamics from smartphone videos.** *PLoS computational biology*
Uhlrich, S. D., Falisse, A., Kidziński, Ł., Muccini, J., Ko, M., Chaudhari, A. S., Hicks, J. L., Delp, S. L.
2023; 19 (10): e1011462
- **Home-based Virtual Reality Therapy for Hand Recovery After Stroke.** *PM & R : the journal of injury, function, and rehabilitation*
Lansberg, M. G., Legault, C. n., MacLellan, A. n., Parikh, A. n., Muccini, J. n., Mlynash, M. n., Kemp, S. n., Buckwalter, M. S., Flavin, K. n.
2021
- **Embodied Virtual Reality Mirror Visual Feedback for an Adult with Cerebral Palsy** *American Journal of Psychiatry and Neuroscience*
Bullock, K. D., Stevenson Won, A., Bailenson, J., Muccin, J., Paul, M., Bronte-Stewart, H.
2021; 9 (2): 59-67
- **How to Design Woke Stroke Tech: The STORIES Project**
Eakin, M., Gian, A., Kim, F., Muccini, J., Lansberg, M., Flavin, K.
LIPPINCOTT WILLIAMS & WILKINS.2020