Kevin P. Granata Memorial Seminar



Dr. Jill McNitt-Gray Biological Sciences and Biomedical Engineering Univ Southern California

Going Full Circle

ABSTRACT

Insights gained from investigating the control and dynamics of tasks performed by accomplished athletes in the context of practice and competition have advanced our understanding of momentum regulation in human movement. In this talk, I will share what we have learned from pairing experimental investigations conducted in the field with model simulation results and how this integrative approach has allowed us to go full circle and translate science-based solutions into practice. I will also highlight how these same biomechanical approaches used in research have also proven to be useful tools to inform personalized interventions in clinical populations and to facilitate learning of sport specific tasks and activities of daily living.

SPEAKER BIO

Jill L. McNitt-Gray, Ph.D. is a Gabilan Distinguished Professor of Science and Engineering in the Departments of Biological Sciences and Biomedical Engineering at the University of Southern California. She directs the interdisciplinary research conducted in the USC Biomechanics Research Laboratory and is a Fellow of the American Society of Biomechanics, the International Society of Biomechanics, and the National Academy of Kinesiology. Dr. McNitt-Gray's interdisciplinary research focuses used experimentation and model simulation to advance understanding of neuromuscular control and musculoskeletal dynamics of human movements performed by individuals with various skill level.





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