SEMINAR SERIES

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UPDATES ON OUR RESEARCH IN MOVEMENT VARIABILITY

Featuring Dr. Nick Stergiou

Director of UNO's Department of Biomechanics

Friday, Aug. 27, 2021 | 12:00 - 1:15 pm | BRB 167 Parking Available in Lot T

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PRESENTATION ABSTRACT

An optimal level of variability enables us to interact adaptively and safely to a continuously changing environment, where often our movements must be adjusted in a matter of milliseconds. A large body of research exists that demonstrates natural variability in healthy movement such as gait and posture (along with variability in other, healthy biological signals e.g. heart rate), and a loss of this variability in sports injury, as well as in a variety of neurodegenerative and physiological disorders. In this seminar I present updates in this field of research regarding the innovative "next step" that goes beyond the many descriptive studies that characterize levels of variability in various populations. This research aims to eventually devise novel interventions and technologies that will harness the existing knowledge on biological variability and create new possibilities for those in need to improve performance and/or restore their decreased physical abilities.

ABOUT DR. STERGIOU

Dr. Nikolaos (Nick) Stergiou is the Distinguished Community Research Chair and Professor in Biomechanics as well as the Director of the Center for Research in Human Movement Variability at the University of Nebraska at Omaha (UNO) where his primary appointment is. Recently he was also appointed as the Assistant Dean and Director of the Division of Biomechanics and Research Development. He is the Founding Chair of the first ever academic Department of Biomechanics that graduates students with a BS, MS, and PhD in Biomechanics. His secondary appointment is as a Professor of the Department of Environmental, Agricultural, and Occupational Health of the College of Public Health at the University of Nebraska Medical Center. An international authority in the study of Nonlinear Dynamics, Dr. Stergiou's research focuses on understanding variability inherent in human movement and spans from infant development to older adult fallers.

