## THE ROLE OF BIOMECHANICS AND NEUROMECHANICS IN DYNAMIC PERFORMANCE: A PRACTICAL INTEGRATION FOR MUSICIANS

Robert Friberg, Leigh Anne Hunsaker
Hardin Simmons University, United States of America
rfriberg@hsutx.edu
hunsaker@hsutx.edu

## **ABSTRACT**

An interactive two-part session in which posture and effective motor control will be explained and demonstrated in an accessible, hands-on manner for performers and teachers. Recent and ongoing research on the relevant components of dynamic posture will be reviewed. Limitations of traditional approaches to teaching posture in the music studio will be examined, with recommendations for identifying, examining, and planning an intervention to improve dynamic posture. Musicians are invited to bring their modern or period instruments to participate in the sessions. Participants and observers in this two-part session will 1. Observe the interaction between the biomechanical and neuromechanical components of dynamic performance; 2. Recognize components of an efficient static posture; 3. Utilize principles of applied physiology, biomechanics, and motor control to modify posture; 4. Apply a rubric for identifying biomechanical and neuromechanical dysfunctions of posture and designing an individual program for performers. 5. Receive an individualized plan to improve dynamic posture in their performance medium.