

GLMS 17 January 2024, 15.00-16.00, Boeringzaal

Presenter: **Dr. Juliana Exel Santana**, University of Vienna, Centre for Sport Science and University Sports, Department of Sport and Human Movement Science

Unlocking the betas of performance in climbing with human movement sciences

Climbing is an ancient activity, has recently evolved into an organized sport, with an even more recent history as a subject of research. In the contemporary landscape, climbing has gained popularity as both an outdoor and indoor activity, with enthusiasm and participation steadily increasing over the last few decades. The increased interest in competitive climbing has led to its inclusion as an Olympic discipline in Tokyo 2020 and a permanent fixture in the Olympics from the next edition in Paris 2024.

Dr. Exel will dive into the role of biomechanics in supporting the assessment, diagnostics, and prescription of one of the most important predictor of climbing ability: finger flexors strength and endurance.

she will explore these aspects with a focus on the key scientific evidence across various climbing disciplines, genders, and ability levels. Dr. Exel will also share insights from her ongoing research in the field and present to the audience the primary challenges in enhancing the efficacy of biomechanics in uncovering climbing performance.