



BME PARIS
BioMedical Engineering
MASTER'S PROGRAM

ROW TO PIANO

Open Your Mind Seminar

Friday, Dec 11 2020
1.30 pm – 3 pm

Online (Microsoft TEAMS)

Improving performance and minimizing injury: some examples in rowing, kayaking & piano

Since sports performance has been quantified, it has improved years after years. In elite sport, progress are made towards optimizing performance et minimizing injury when the relevant determinants are known. These determinants are generally identified from dynamic modelling of human movement (descriptive approach). These models are built with experimental data acquired either in laboratory or in the field. Furthermore, the simulation of a movement allows an answer to many research-related questions, such as the understanding of the mechanics of human movement, gesture technique optimisation and movement control. These studies demonstrate their relevance when they are complementary to experimental studies, as they explore a vast array of solutions. These two approaches will be illustrated in this presentation in rowing and kayaking. Also, the role of material, anthropometry, neuromuscular coordination will be discussed. Finally, measurement techniques and underlying modelling are transferred to the analyse the color of the sound produced by a pianist.

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