## Performance enhanced by bridging the gap between theory and practice

Sports Coaches are educated to think critically about all aspects of performance and how they interact and influence each other. Ultimately, coaching is about problem solving within several unique ecological environments. In contrast, sports scientists are educated in a non-holistic perspective and therefore, athletes and teams are most often studied according to more restricted points of view. For example, a sports physiologist will mostly try to understand performance supported in blood and muscles dynamics, using variables like heart rate or lactate. A sports biomechanist will address the same problem mostly using angles, speed and accelerations; a sports psychologist could use motivation, self-confidence or arousal. These different ways of understanding sports performance may be in the origin of a gap between science and sport. In fact, different philosophical approaches to solve the same problems will turn into different research paradigms and communication systems that, ultimately, may not contribute so effectively towards understanding of sports performance. A more integrated effort is required from all, in a way to assume an holistic perspective when designing coach and academic education models.

The organization of sports performance conferences gathering participants from all fields of research and training may be a step to this needed overall integration or at least may be narrowing this gap. The Sports Performance group from the Research Center of Sport Sciences, Health and Human Development (CIDESD) is organizing this 1<sup>st</sup> symposium with these precise goals.

The program gathers keynote conferences from worldwide known scientists, addressing the main research topics from the group: genetic, physiological and biomechanical determinants of sports performance; performance analysis; and strength and conditioning. The participants will be also involved in roundtables with coaches and athletic directors to address together the training and evaluation of elite performances and possible synergies between Sports Federations, Olympic Comities and Universities. Additionally, several poster presentations will occur within these research and coaching topics that we are publishing here in this special issue of the journal **Motricidade**.