Balancing between daily service requirements and a long-term research and innovation plan when working as an applied sport scientist in elite sport can be challenging. The concept of “Thinking, Fast and Slow” as described in the book by Daniel Kahneman, has been recently paralleled as a conceptual model for practitioners and researchers in high-performance sport (Coutts, 2016). An example of this concept can be shown within the context of the commonly assessed physical quality of change of direction (COD) ability and agility (when in combination with perceptual-cognitive ability). The advancements in assessment (Sheppard, Young, Doyle, Sheppard, & Newton, 2006), analysis methods (Nimphius, Geib, Spiteri, & Carlisle, 2013) and monitoring that were originally implemented in a high performance environment (thinking fast) have lead to deliberate evaluation (Sayers, 2015; Spiteri, Hart, & Nimphius, 2014) of potentially new methods (thinking slow) to assess COD and agility.

During the series of presentations in this session, the areas of (1) testing and evaluation, (2) individualisation of athlete assessment and (3) load monitoring will be discussed. As a part of the comprehensive discussion, current practice of COD and agility assessment will be described and critically evaluated in conjunction with current innovations and advances occurring through systematic research that may ultimately improve and change our current understanding and assessment of COD and agility. Further, insight drawn from analysis of individual athlete data will be presented for practitioners to understand the implications of a chosen COD or agility assessment on identification of a athlete's training need or current capacity. Finally, new evidence will be presented to demonstrate the differences in external mechanical load when assessing COD and agility as drawn from research in load monitoring of other sports (Lundgren et al., 2015) to highlight the difference that may exist between current practice and future best practice. Collectively, the evidence provided in this presentation hopes to ignite a combination of alternative “fast thinking” practice and “slow thinking” research.

References