

**GLMS 14 September 2023, 15.00-16.00, Keuningzaal**

**Monitoring fatigue and overreaching in high-performance cycling.**

Presenter: Prof Robert P Lamberts

Monitoring training load and recovery is an essential aspect of optimising training strategies and achieving peak performance in high-level cycling. Traditionally, this was done through performing a peak power output and time trial once or twice per year, along with race results and subjective feedback from cyclists to their coaches. However, the landscape of monitoring cyclists has significantly evolved over the last few decades due to the development of accurate power meters, which have become affordable for many cyclists. With the development of power meters, the research interest in studying and monitoring professional cyclists, as well as using this to guide training prescriptions in cycling, has also grown substantially.

As part of the GLMS lecture, Professor Lamberts will provide an overview of the most commonly used methods for monitoring high-performance cyclists. This will include the use of standardised submaximal testing as well as the use of field data from power meters. In addition, he will discuss the effect of accumulating levels of fatigue on performance, as well as the different stages of overreaching and the importance of this from a monitoring perspective. Last but not least, markers of functional overreaching will be discussed, which can assist with the prevention of long-term negative training responses and overall well-being.

**Personal background**

Prof Rob Lamberts is based at the Division of Movement Science and Exercise Therapy (MSET) at Stellenbosch University in South Africa. He started his academic career at the Faculty of Human Movement Sciences of the University of Groningen, where he completed his MSc. Upon completion, he immigrated to South Africa to pursue a PhD at the University of Cape Town (UCT), which was awarded to him in 2009. In 2013, he moved in 2013 to Stellenbosch University (SUN), where he was promoted to full professor in 2017. During his career, Prof Lamberts has been able to publish over a hundred peer-reviewed papers and currently has an H-index of 25.

In addition to his work at SUN, he is an associate editor as the International Journal of Sports Physiology and Performance (IJSPP), a scientific board member a scientific board member at the European College of Sport Science (ECSS) and Science and Cycling and lectures on several courses of the Union Cyclist International (UCI). Practically, he has worked with various professional cycling teams, high-performance cyclists, triathletes, endurance runners and rowers. His main area of expertise lies in applied exercise physiology.

