## Classic discoveries & hot topics in endurance research

Munich Endurance Symposium by the TUM Exercise Biology group

24st of November 2022, 4:00-6:10h p.m. Munich time (online on Zoom)

Registration: https://tum-conf.zoom.us/webinar/register/WN\_3BTcAwbISBmA-WKhVZcY1A

Introduction: Endurance sports such as the Tour de France, Ironman triathlon, City Marathons or Nordic skiing races are a central part of modern sports culture and many recreational endurance athletes train for health and performance. To update scientists, athletes and coaches on current endurance research, we have decided to organise the first Munich Endurance Symposium. Steven Seiler will start this symposium by discussing the physiology of intermittent endurance events such as Nordic skiing or road cycling, where high intensity periods alternate with lower intensity periods. After that, Veronique Billat will present research on the physiology of recreational Marathon runners. Henning Wackerhage will then highlight the contributions of Alois Mader, Hermann Heck and Wildor Hollmann to modern lactate testing and metabolic regulation. A direct insight of the Cologne sports medicine group is that the vLa.max, or maximal glycolytic rate, affects the lactate-exercise relationship. Sebastian Weber, will then end the symposium by introducing the vLa.max.

If you wish to join the Munich Endurance Symposium, please use the <u>registration link</u> and we will send you a Zoom link by e-mail. This symposium is suitable for sports and exercise scientists, athletes and coaches with an interest in sport and exercise science.

Time (Munich)	Speaker, title
16.00-16.05 h	Martin Schönfelder (moderator): Introduction
16.05-16.35 h	Stephen Seiler: Physiology of intermittent endurance events
16.35-17.05 h	Veronique Billat: Cardiorespiratory responses during the
	marathon in recreational marathoners and their training
17.05-17.35 h	Henning Wackerhage: Development of modern lactate testing
	by the Cologne sports medicine group in the 1970s and 1980s
17.35-18.05 h	Sebastian Weber: vLa.max: what it is, how it can be measured
	and open research questions
18.05-18.10 h	Martin Schönfelder: Closing words



**Prof. Dr. Stephen Seiler** is an American exercise scientist based at the University of Agder in Kristiansand, Norway. He is a leading endurance researcher who works on training, intensity distribution, stress and recovery.



**Prof. Dr. Veronique Billat** is a French exercise physiologist based at the Université d'Évry-Val-d'Essonne. She is known for her work with Marathon runners and researches questions in relation to endurance sports.



**Prof. Dr. Henning Wackerhage** is a molecular exercise physiologist and former triathlete who was taught by Alois Mader, Hermann Heck and Wildor Hollmann. One of his interests is to introduce non-German sports and exercise scientists to the work of the Cologne Sports Medicine group.



**Sebastian Weber** - together with Alois Mader - further developed the existing physiological models of muscular energy metabolism and successfully applies this knowledge to support some of the best endurance athletes across different sports.

