



### **Dr. Steffen Willwacher's bio**

Steffen Willwacher (SW) finished his PhD at the [Institute of Biomechanics and Orthopaedics of the German Sport University in Cologne](#) in February 2014. His PhD work was in the field of running biomechanics with a particular focus on the effect of shoe design and running surface variations on running kinematics and kinetics. His work has been supervised by Prof. Gert-Peter Brüggemann. Another field of research over the last years has been the analysis of sprint start kinetics and reaction times in sprinters of all levels of performance. SW is further involved in biomechanical performance diagnostics of the German national sprint team. Other research interests include the interaction of athletes with different kinds of technology in the sporting environment (including shoes, apparel, start block instrumentation, etc.) and the impact of disabilities on sport performance. SW is currently working as research assistant in the Institute of Biomechanics and Orthopaedics at the German Sport University Cologne. Further, he is lecturing Sports Biomechanics at the Coaches Academy of the German Olympic Sports Confederation and is involved in the analysis of elite and recreational athletes in the Institute of Functional Diagnostics in Cologne.

SW has practiced track and field (Decathlon) until the age of 25 and has transformed since then to work as a coach. He is currently coaching regional level athletes in the track and field team of the German Sport University and is working as speed and strength and conditioning coach with the 2014 female German champion in field hockey (Rot Weiß Köln).

[Research Gate profile](#)