

Student projects or science abroad experience opportunities available at University of Essex, UK

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Students who are interested in gait and biomechanics: We are conducting a longitudinal study on effects of ageing on gait biomechanics and daily functioning. A large database is available to choose a topic from, and there are possibilities to explore new routes to analyse gait and daily life functioning in different populations. Recent abstracts presented of this research are available via researchgate (Matthew Taylor). It is also possible to work on similar topics in wheelchair biomechanics.

Students who are interested in pacing and how exercisers regulate their exercise intensity: We are developing knowledge regarding the understanding of how exercisers regulate their exercise intensity. Topics could be: Racing against opponents, the importance of different resources of information in the environment, management of fatigue, pacing & psychology, pacing in daily life or rehabilitation settings, pacing in Paralympics, etc etc. Relevant references are given below, and recent work can be found on researchgate (Florentina Hettinga).

- B. Smits, G.J. Pepping, **F. J. Hettinga**. Pacing and decision-making in sport and exercise: On the roles of perception and action in the regulation of exercise intensity. *Sports Med.* 44(6) (2014) 763-75.
- M. Konings, O. Noorbergen. D. Parry, **F.J. Hettinga**. Pacing in a broader sense: Tactical positioning in 1500m short track speed skating. *International Journal of Sports Performance and Physiology* (in press). DOI:10.1123/ijsp.2015-0137.

Students who are interested in training mechanisms and talent identification: Exciting opportunities are available to explore underlying physiologic mechanisms of training and applications for high performance athletes in cyclic, endurance and intermittent sports. Amongst others the following equipment is available: Near Infra Red Spectroscopy, TMS, Biomechanics facilities, Standard Exercise Physiology Measurements, Psychological Assessments, etc. In collaboration with our Human Performance Unit (www.humanperformanceunit.co.uk), we support University athletes in particular in the focus sports volleyball, basketball and rugby, and are involved in developing their talent identification program and training and testing.

Students who are interested in physical activity and health: Within the UK, the University of Essex is famous for their Green Exercise Research Programme: Exercise in an outdoor environment appears to be even better than indoors. Why? And how can we use that in a health related context? How about physical activity in a disabled population as researched in collaboration with the University of Groningen (www.respect.nl)?. Recent work on green exercise can be found on researchgate (Valerie Gladwell, Jo Barton).

Students who would like to write a meta-analysis literature review related to one of the above topics: Feel free to get in touch: fjhett@essex.ac.uk