

Phillip Bellinger *PhD BExSc (Hon.) FECSS*

Contact Details

+61 402506948 | p.bellinger@griffith.edu.au |  @Phil_Bellinger

Name: Phillip Bellinger

Position: PhD, Senior lecturer and researcher in Exercise and Sport

PhD conferred: November, 2016



Research publications: 48

H-index / citations (GoogleScholar): 22/1437

Number of PhD students supervised currently: 5

Number of PhD students conferred: 4

10 Recent publications relevant to the proposed symposium:

1. Wackwitz, T., Minahan, C., Lievens, E., Kennedy, B., Derave, W and **Bellinger, P.** Muscle Fibre Typology is Associated with Sprint Cycling Characteristics in World-Class and Elite Track Cyclists. *International Journal of Sports Physiology and Performance*. 20 (1), 142–148. 2024
2. Lievens E., Van de Castele F., De Block F., Van Vossel K., Vandebogaerde T., Sandford GN., **Bellinger P.**, Minahan C., Bourgeois J. G., Stellingwerff T., Mujika 7 I., Derave W. Estimating muscle fiber type composition in elite athletes: a survey on current practices and perceived merit. *International Journal of Sports Physiology and Performance*. 19 (11), 1197–1208. 2024
3. Hopwood, H, **Bellinger, P.**, Compton, H, Bourne, M, Lievens E, Derave, W and Minahan C. Match Running Performance in Australian Football Is Related to Muscle Fiber Typology. *International Journal of Sports Physiology and Performance*. 18 (12), 1442–1448. 2023
4. Hopwood, H, **Bellinger, P.**, Compton, H, Bourne, M and Minahan C. The relevance of muscle fiber type to physical characteristics and performance in team-sport athletes. *International Journal of Sports Physiology and Performance*. 18 (3), 223-230. 2023
5. **Bellinger, P.**, Lievens, E, Kennedy, B, Rice, H, Derave, W and Minahan, C. The muscle typology of elite and world class swimmers. *International Journal of Sports Physiology and Performance*. 17(8): 1179–1186. 2022
6. **Bellinger, P.**, Derave, W, Lievens, E, Kennedy, B, Arnold, B, Rice, H, Minahan, C. Determinants of performance in paced and maximal 800-m running time trials. *Medicine and Science in Sports and Exercise*. 1;53(12):2635-2644. 2021
7. **Bellinger, P.**, Bourne, M, Duhig, S, Lievens, E, Kennedy, B, Martin, A, Cooper, C, Tredrea, M, Rice, H, Derave, W, Minahan, C. Relationships between lower limb muscle characteristics and force-velocity profiles derived during sprinting and jumping. *Medicine and Science in Sports and Exercise*. 53(7):1400-1411. 2021
8. **Bellinger, P.** Lievens, E, Van Vossel, K, Vancompernelle, J, Bex, T, Minahan, C, Derave, W. Muscle typology of world-class cyclists of various disciplines and specialties. *Medicine and Science in Sports and Exercise*. 53(4), 816-824. 2021
9. **Bellinger, P.**, Desbrow, B, Derave, W, Lievens, E, Irwin, C, Sabapathy, S, Kennedy, B, Craven J, Pennell, E, Rice H, Minahan, C. Muscle fiber typology is associated with the incidence of overreaching in response to overload training. *Journal of Applied Physiology*. 129: 823 - 836. 2020
10. **Bellinger, P.**, Derave, W, Lievens, E, Kennedy, B, Arnold, B, Rice, H, Minahan, C. Determinants of last lap speed in paced and maximal 1500 m time trials. *European Journal of Applied Physiology*. 121: 525–537. 2021

ECSS presentations:

1. **Bellinger, P.** Skeletal muscle determinants of rowing performance. 29th *Annual ECSS congress*. July 2 – 5, Glasgow, Scotland. 2024. Oral presentation.
2. **Bellinger, P.** Muscle typology underpins key determinants of track sprint cycling in elite cyclists. 28th *Annual ECSS congress*. July 2 – 5, Paris, France. 2023. Oral presentation.
3. **Bellinger, P.** Identifying the determinants of performance during paced and maximal middle-distance running events. 27th *Annual ECSS congress*. August 30 – September 2, Sevilla, Spain. 2022. Oral presentation.
4. **Bellinger, P.** Renewed interest in the muscle fiber typology of elite athletes. *ECSS symposium webinar*. 2021. Invited presentation.
5. **Bellinger, P.** Functional overreaching attenuates training induced improvements in muscle oxidative capacity in trained runners. 24th *Annual ECSS congress*. July 3-6, Prague, Czech Republic. 2019. Oral presentation.
6. **Bellinger, P.** β -alanine supplementation provides added benefits to the effect of sprint-interval training on cycling performance. 21st *Annual ECSS congress*. July 6-9, Vienna, Austria. 2016. Oral presentation.
7. **Bellinger, P.** Metabolic consequences of β -alanine supplementation during exhaustive supramaximal cycling and 4000-m time trial performance. 20th *Annual ECSS congress*. June 24-27, Malmö, Sweden. 2015. Oral presentation.
8. **Bellinger, P.** Placebo effects of acute β -alanine-induced paresthesia in competitive cyclists. 19th *Annual ECSS congress*. July 2-5, Amsterdam, Netherlands. 2014. Oral presentation.

ECSS Fellow: Since 2022

I am a young researcher with a track record in enhancing sports performance through nutritional modulation and supplementation, and via manipulation of training. My research is highly applied and my application of performance enhancing interventions stems from undertaking fundamental research that examines the determinants of performance across a range of Olympic (Track and Field, Track Cycling, rowing and Swimming) and professional sports (Rugby League, Australian Rules Football and Football). My research track record directly aligns with the Applied Sport Sciences and Sports and Exercise, Medicine and Health discipline areas of the ECSS. Despite being based on the East Coast of Australia, I have travelled and presented to the ECSS Congress on 9 occasions (2014-2016, 2018-2019 and 2022-2025) and presented during the first ECSS online Webinar (early 2021) along with three other colleagues where we delivered the webinar titled “Renewed interest in the muscle fibre typology of elite athletes”. I became an ECSS fellow in 2022 and have regularly chaired sessions at recent congresses as well as being an inaugural mentor in the ECSS mentor program. I would love the opportunity to highlight some of my collaborative research at the 31st annual ECSS Congress in Lausanne, Switzerland 2026 by for an invited symposium with my colleagues Christos and Marga. This symposium will provide a contemporary view on the hot topic of muscle typology in sports performance, health, and disease states and would appeal to applied sport science and exercise physiology researchers.