

Professor Patria Hume



**AUT BRAIN HEALTH
RESEARCH INSTITUTE**



Research focus

Patria is Professor of Human Performance and focuses her team's research on sports biomechanics, epidemiology and injury prevention, using biomechanical analysis to better understand injury mechanisms and enhance athletic performance. Patria directs the AUT J.E. Lindsay Carter Kinanthropometry Clinic and Archive and leads the Women's Health and Neuroscience Research Programme, reflecting her broader interest in athlete health. Her career includes extensive senior academic and research leadership roles, where she has contributed to shaping research strategy, postgraduate education, and interdisciplinary collaboration. Her work connects research with real-world application, supporting evidence-based approaches to improving athlete safety and performance. Patria gained Officer of New Zealand Order of Merit for her services to sports injury prevention.

Current projects

1. Determining optimal sampling times for concussion blood biomarkers for prediction of recovery in females.
2. Signals in the blood: Developing personalised reference ranges and validating UCH-L1 and GFAP for acute mTBI detection and recovery prediction.
3. Brain-WOF (Brain warrant of fitness) identifying the extent of early cognitive decline following exposure to repeated head impacts and the relative importance of head impact exposure compared to 14 other factors.

Examples of recent work

Gosbee, H., **Hume, P. A.**, & Theadom, A. (2025). Factors influencing equestrian helmet use, purchase and safety perceptions: A cross-sectional study. *Injury*, 112907.

Hume, P. A., H., Fulcher, C., Dunshea-Mooij, H., Thorpe, S. T., Sims, H. E., Wyatt, S., Robson, C. E., Badenhorst, A. E., Kilding, K., Black, N., Draper, K. L., Schofield and A. Gibbons (2025). Special interest – advancing women's health research in high performance sport: Initial scoping of New Zealand's strengths, gaps, and global opportunities. *New Zealand Journal of Sport Medicine*, 51(2): 57-60.

Positions

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