

## Natalie Hardaker

BSc (Hons), PhD candidate at AUT



**Research specialisation:** Sex differences; the influence on injury risk, recovery and performance in sport.

**Experience:** Nat is originally from Yorkshire in the UK; prior to moving out to New Zealand Nat spent 5 years' working as research assistant to Professor James Selfe at the University of Central Lancashire. Nat led several research projects focusing on patellofemoral pain, cryotherapy and thermoregulation. Other relevant experience includes working in the University Sports Injury Clinic alongside other healthcare professionals.

On moving to New Zealand Nat secured a role in the research team at ACC and has since transitioned into ACC Injury Prevention focusing on work in the sports portfolio.

Nat currently leads multiple sports Injury prevention programmes for ACC including Netball, Football, Concussion and the overall SportSmart framework.

Nat is a current member of Sports Medicine New Zealand – Wellington Branch committee, and active member on two local sports club committees.

As an athlete Nat was a national level springboard diver and gymnast in the UK and has coached in the UK, Australia and New Zealand. Now a highly competitive age group triathlete (short course).

**Research overview:** Nat has always had an interest in 'special populations' (adolescents and females) in sport, and is increasingly driven to understand the impact of female physiology on injury risk, recovery and performance in sport.

**Research publications:** 23 peer reviewed publications and conference contributions, including;

01. Robinson H, Howell G, Hardaker N, Parmer R, Richards J, Hughes P, Selfe J (2010) Investigation of a method of Thermal Imaging with the potential to assist in the diagnosis of Carpal Tunnel Syndrome. *Thermology International*. 20(2) 53-59
02. Selfe J, Sutton C, Hardaker N, Greenhalgh S, Karki A, Dey P (2010) Cold Females a Distinct Group of Patellofemoral Pain Syndrome Patients? *Journal of Orthopaedic and Sports Physical Therapy* 40 (3) A42
03. Selfe J, Hardaker N, Whittaker J, Hayes C (2009) An investigation into the effect on skin surface temperature of three cryotherapy modalities. *Thermology International* 19 (4) 121-126
04. Kennet J, Hardaker J, Hobbs S, Selfe J (2007) Cooling efficiency of 4 common cryotherapeutic agents. *Journal of Athletic Training* 42 (3) 343-348
05. Hardaker N, Selfe J, Richards J, Sullivan I, Moss A, Jarvis S, (2007) The relationship between skin surface temperature measured via non-contact thermal imaging and intra-muscular temperature of the rectus femoris muscle. *Thermology International* 17 (1) 45-50
06. Hardaker N, Selfe J, Richards J, Moss A, McEwan I, Jarvis S, (2006) Relationship between intramuscular temperature and skin surface temperature as measured by thermal imaging camera. *Thermology International* 16 (3) 100

**Refereed conference contribution:**

07. Hardaker N, Selfe J, Richards J, Sullivan I, Moss A, Jarvis S, Relationship Between Intramuscular Temperature and Skin Surface Temperature as Measured by Thermal Imaging Camera. 10th European Congress of Thermology Zakapone Poland Sept 2006
08. Hardaker N, Karki A, Karppi P, Ekberg J, Selfe J A thermographic investigation of skin temperature changes in response to a thermal washout of the knee in healthy young adults. The BSR Annual Meeting and the BHRP Spring Meeting, a joint meeting with the German Society for Rheumatology Annual Meeting, Birmingham, April 2005; **first prize poster presentation**

**Natalie Hardaker**  
 PhD candidate AUT (2017-2020)  
 Sports Performance Research Institute,  
 New Zealand (SPRINZ)  
**M: + 64 (0) 21 518 302**  
**E: natalie.hardaker@aut.ac.nz**  
 SA 208, Level 2, AUT-Millennium Campus  
 17 Antares Place, Mairangi Bay, Auckland,  
 New Zealand

**ACC SportSmart**

