

Madi Davies

BSc. (Hons.)



Research specialisation: Sports Epidemiology; Long-term health in elite sports

Experience: I have a background in Sport and Exercise Science, particularly physical activity in populations with long-term health conditions, notably neurological disorders. My more recent research experience includes clinical trials within vaccinology and paediatrics, and Anthropometry within an international infant growth study. For my doctoral research program within musculoskeletal science, I have focused on the development of osteoarthritis amongst rugby players, designing a questionnaire to assess symptomatic osteoarthritis of the lower limb and shoulder, which has been adopted within several other sporting populations internationally. My doctoral research study also explores long-term health, morbidity and health-related quality of life amongst former elite and international rugby union participants. I have recently undertaken analyses exploring morbidity in these sports participants in comparison with representative population-based health survey participants, and modelled the development of Osteoarthritic outcomes within elite rugby union at the knee, hip and shoulder. My most recent project includes the development of a predictive model of hip replacement amongst former elite rugby players.

I have been an active participant in College and University life throughout my doctorate, as President of Lady Margaret Hall's graduate community, Captain of the Oxford Women's Panthers rugby team and with Committee memberships at Departmental, Collegiate and Sporting club levels.

Research overview: My research interests include establishing health and morbidity within specific populations, with a view to encouraging safe physical activity and sports participation for all members of recreational, professional and elite organisations. A key aim of my research agenda is to quantify and model poor outcomes, with a view to the prevention of these and the translation of research into policy and ultimately health protection and preservation. Public involvement and engagement has been key to my doctoral research, with all of my projects to date being founded on a player-driven research agenda, and with players as active collaborators and consultants in projects.

Supervision: I have supervised clinical undergraduate students, two for longer-term research placements, in addition to shorter-term clinical research projects within my College and Department. I tutor with the Stanford Overseas program at Oxford, in addition to mentoring internship students from Arthritis Research UK Centre for Sport, Exercise and Osteoarthritis.

Research publications:

Davies, M., Judge, A., Stokes, K., Delmestri, A., Kemp, S., Arden, N.K., Newton, J.L. Is rugby playing load predictive of lower limb osteoarthritis in former international rugby players? *Oarsi* 24, S533–S534 (2016).

Jones, M., Davies, M., Leyland, K., Delmestri, A., Porter, A., Ratcliffe, J., Pierce, N., Newton, J.L., Arden, N.K. Prevalence of and Risk for Osteoarthritis and Other Long-Term Health Outcomes in Former Elite Cricketers (under review).

Davies, M., Judge, A., Delmestri, A., Kemp, S., Stokes, K.A., Arden, N.K., Newton, J.L. Health amongst former rugby union players: A cross-sectional study of morbidity and health-related quality of life (under review).

Davies, M., Balai, E., Adams, J., Carter, J.C., Judge, A., Newton, J.L. and Arden, N.K. The consultation of rugby players in co-developing a player health study: feasibility and consequences of sports participation as research partners (under review).



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