

Risk factors for developing new low back pain: A 3-year prospective cohort study of nurses [URBAN study]

Tagliaferri S¹, Belavy D¹, Bowe S¹, ²Connell D, Della Gatta P¹, Diwan A³, Ford J⁴, Hahne A⁴, Miller C¹, Owen P¹, Rantalainen T⁵, Ridgers N¹, Trudel G⁶, Hanel J¹, Douglas B¹, Brook L¹, Dirisan J¹, Hutchinson A⁷

¹Institute for Physical Activity and Nutrition, School of Exercise and Nutrition Sciences, Deakin University, Geelong, Australia. ²Imaging@Olympic Park, Melbourne, Australia. ³St George Private Hospital, NSW, Australia. ⁴La Trobe University, Bundoora, VIC, Australia. ⁵Gerontology Research Center, Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland. ⁶University of Ottawa, Bone and Joint Laboratory, Canada. ⁷Deakin Centre for Quality and Patient Safety Research-Epworth HealthCare Partnership

*scott.tagliaferri@deakin.edu.au

Background

In nurses, this risk of developing back pain has been shown to be 2-3 times greater than the general population. To date, several risk factors for back pain have been identified in the wider community, yet there has been less study of risk factors and prevention in nurses. Thus, there is an urgent need to identify these risk factors in this susceptible population group.

Aims

The primary aim of this 3-year prospective cohort study is to investigate a range of potential risk factors (biological, psychological and social) for new low back pain in nurses.

Design

This is a 3-year prospective cohort study in nurses (primary outcomes), with a nested 12-week, single blinded, prospective cohort sub-study (secondary outcomes). This study will recruit 200 nurses that are either a) transiting from their final year university studies into the workforce, b) graduate nurses or c) currently employed in the workforce. Risk factors will be assessed via magnetic resonance imaging, questionnaires, trunk strength and endurance, aerobic fitness, blood draws (genotyping and inflammatory markers), anthropometry, clinical examination and actigraphy.

NURSING RESEARCH

Why do so many of us get back pain?



Free MRI and fitness assessment

Participants will be assessed for risk factors of back pain at baseline.

Nurses that develop back pain will complete follow-up assessments.

Upon completion of the study, all participants will enter a draw for:

\$500

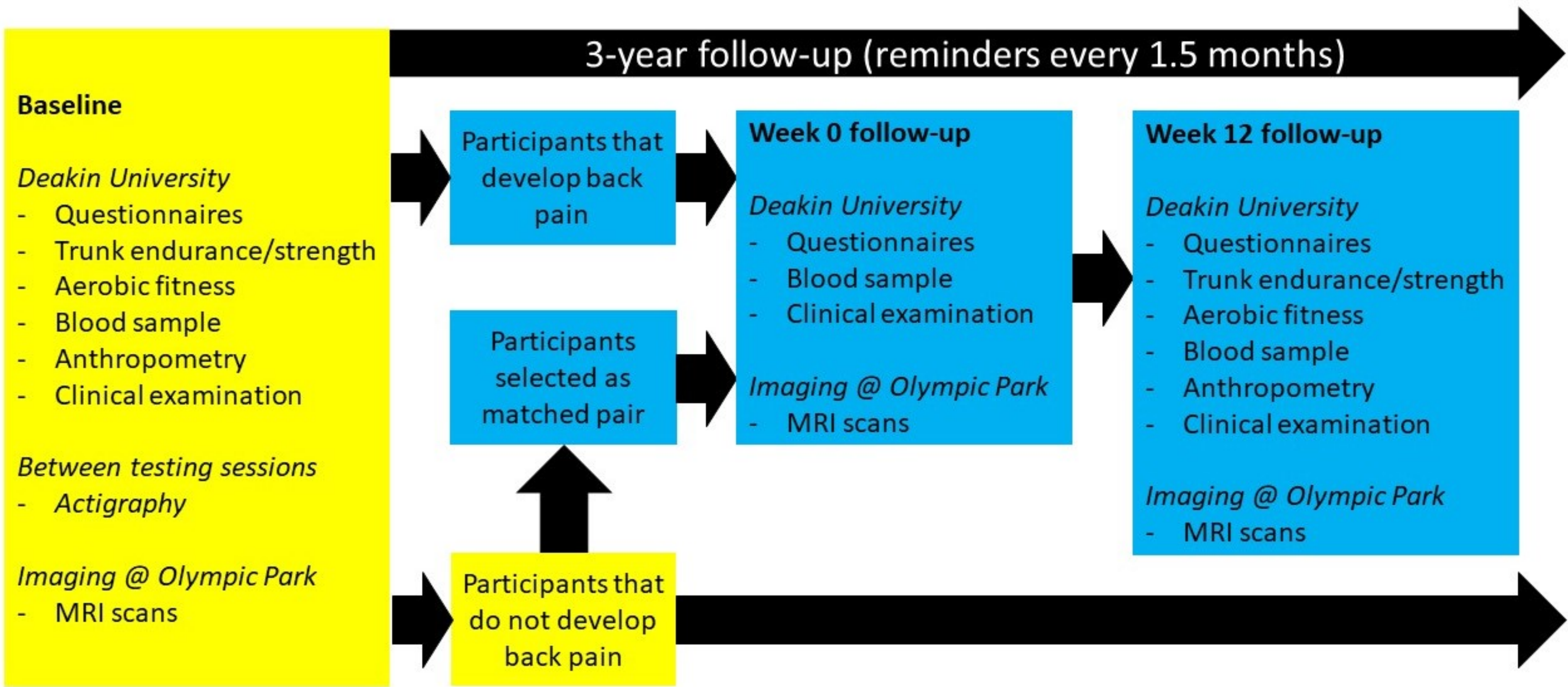
You may be eligible if you are:

- Employed as a nurse, recent nursing graduate or a final year nursing student in Melbourne

Contact Us
for further information:
spine@deakin.edu.au

DEAKIN UNIVERSITY

This study has received Deakin University ethics approval (reference number: 2018-221)



Significance

The study is important as it will identify risk factors of new low back pain in nurses and enable prophylaxis to reduce the incidence and subsequent costs to individuals and society. Ethics Approval Deakin University 2018_221

Study website: <http://www.deakin.edu.au/spine>