

Physiotherapy graduate pursues academic career

Ben Weeks has come the full circle from being one of the first intake of students into Griffith's double degree in physiotherapy and exercise science ten years ago to lecturing the latest batch of students.

He is also carving out a worthwhile research career – pursuing strategies to improve bone strength and ultimately reduce the risk of osteoporotic fractures in the community.

The ongoing research has already qualified him for his PhD which will be awarded at the Griffith graduations on Friday, December 19 at the Gold Coast Convention and Exhibition Centre.

Ben was a keen and competitive athlete in his school days and a representative at state and national titles. He was always interested in an active career in either sport or health.

He finished off his undergraduate studies at Griffith with an Honours project investigating ultrasound measures of bone strength in young men and women.

Despite a brief stint working as a physiotherapist at the Royal Brisbane and Womens' Hospital and in private practice, research had captured his imagination so he returned to Griffith to start his PhD.

"I still do a few hours of physiotherapy practice each week to maintain my clinical skills but I'm keen to do the research and develop the evidence that others can then apply in their practice," he said.

His PhD research focussed on developing a Bone-Specific Physical Activity Questionnaire (BPAQ) using a complex algorithm that ranks different activities according to their beneficial effect on bone.

Dynamic activities such as gymnastics rank highly because the high-force landings apply the necessary load to increase bone mass and strengthen bone architecture.

He has since designed a brief program of high-impact activities such as jumping and skipping that can easily be incorporated into school-based sports and physical education classes.

"To date, the 10-minute program provided twice a week for about eight months, has been shown to significantly improved bone and muscle strength in healthy teenagers," he said.

With 80 per cent of bone mass accrued in the first 20 years of life and especially around puberty, adolescence is a window of opportunity to maximise peak bone mass via high-intensity, weight-bearing activity.

He said further studies were required to determine whether the beneficial effects could persist into adulthood and reduce the risk of future bone fractures.
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