

W. – PhD Biological Sciences, 2009

UCL Faculty:

■ Life Sciences

Current role:

■ Postdoctoral Research Fellow

Previous role:

■ Postdoctoral Researcher

Sector:

■ Higher Education

As a Postdoctoral Research Fellow W. works in the Surgical and Orthopaedic Research Lab at the University of New South Wales (UNSW) in Sydney, Australia. This involves using computational morphology in combination with computational biomechanics (finite element analysis) to study the biomechanical behaviour of bone. W. applies these techniques to a range of projects which includes research into the biomechanics of osteoporotic bone and the design of new endo-prostheses. In a previous role at UNSW, W. applied similar techniques to both extant and fossil marsupial and hominin specimens in order to determine taxonomy and infer ecological patterns of the specimens.

W. is driven to push back the limits of what we know. He is inspired by 'the desire to be constantly challenged,' and by searching for answers, as yet unknown, to the questions which concern him. He adds that his motivation 'to go to work every week and do something that has never been done before, to increase our understanding of how and why we evolved to be as we are, and to determine the biological laws that govern our bodies' has underpinned his career choices thus far.

W's PhD research examined evolutionary and functional anatomy of the hominoid astragalus, using laser scanning technologies, 3D analyses and computational morphology with respect to ankle morphology and function. His PhD expertise is essential for his role and W. believes that having a PhD is essential for his career progression. W. recognises that his PhD training helped to develop at least some of the transferable skills he now uses in his position, which include analysis of complex information, project management, collaborating, problem solving and meeting deadlines.

The methods W. has used to secure employment after graduating have included talking to personal contacts and taking part in formal networking events and recruitment fairs. However W. found it difficult to decide what career path to take, and he wanted to ensure he did not waste his 'very specific skill set.' He felt that if he could find 'the right job', his skill set could be 'an invaluable asset.' During his time at UCL W. took part in several Careers Service events and training, which he found very positive; some of which included one-to-one discussions with a careers adviser, careers adviser-led training, PhD-specific employers careers events and careers events open to all students. A highlight of W's work with UCL Careers was participating in the City week-long course towards the end of his PhD. This coincided with the beginning of the global financial crisis, and at the time W. was 'seriously considering' using his skills in computer programming and statistical analysis to go into investment banking. He found the course very interesting, and he adds that it was 'invaluable' in making him realise that working for institutions in the City 'would not have been the best path' for him. W. recalls that taking part in the UCL Graduate School's academic writing training activity had a beneficial impact. Due to his dyslexia, writing has been a concern of W's for some time, but he felt that this training 'certainly helped to set (him) on the right path' even if he anticipates a life-long challenge to improve.

When reflecting on the question of competing in the jobs market, W. outlines the necessities, as well as the highs and lows of his role. He loves his job but admits that it would not be for everyone. The flaws of 'job instability, visa annoyances and a certain isolation in your knowledge are outweighed by the positives' mentioned above. Among the requirements are self-motivation, independence and a confidence in your ability to succeed. So that you can find appropriate partners for collaboration and a viable lab to work in, W. points out that networking at conferences is 'highly advised. W. does not forget to add that 'you also need luck.' Reflecting on his career to date and the needs that come with successfully completing a PhD, W's advice for making the decision to do a PhD focuses on the level of interest and independence of the student. 'A PhD is an independent pursuit. You cannot rely on your supervisors for too much guidance as you have to be doing something original and new. So you need to be doing a PhD because YOU want to be doing it.'

Tags:

 Life Sciences, Higher Education, Researcher, Academic