

# Research Associate/Post-doctoral position

Skeletal Biology Group  
Department of Veterinary Basic Sciences  
Royal Veterinary College

**Salary Range: up to £31,797 (plus London weighting)**

**Fixed Term appointment for 36 months.**

A full-time research position is available in the Skeletal Biology Group at the Royal Veterinary College, London. The BBSRC funded project will examine the effects of ageing and growth on the mechanoadaptation of bones. The project will use detailed evaluation of the spatial changes in bone architecture and mass, as well as cellular responses that are induced by applied bone loading in vivo. The project is part of ongoing collaboration with the Dept of Bioengineering at Imperial College London and integrates parallel evaluation of mechanics and modelling of skeletal responses to load during growth and aging. The project funds a post-doc at each institution working closely together. The post-doc at the RVC will focus on characterising the biological basis of these adaptive responses in murine bones.

Candidates should have a PhD in related fields and previous experience in mechanobiology and tissue based histomorphometric/immunochemical analyses of skeletal biology. A solid biological training is important. The candidate should have an academic record of scientific excellence, independent research, and a strong interest in an interdisciplinary approach to research.

Start date: February 1<sup>st</sup>, 2012.

Please direct informal approaches to: Professor Andrew Pitsillides, Department of Veterinary Basic Sciences, Royal Veterinary College, London, NW1 0TU, UK  
Email: [apitsill@rvc.ac.uk](mailto:apitsill@rvc.ac.uk). Tel: +44 (0)20 7468 5245).

**Closing date for applications: 9<sup>th</sup> January 2012**

Interviews are likely to take place in week of 16<sup>th</sup> January, 2012

**The RVC is committed to Equality of Opportunity and Diversity**

## **Imperial College London**

### **JOB DESCRIPTION**

#### **Department of Bioengineering**

<b>Job title:</b>	Research Associate
<b>Grade:</b>	Level B, Research and Education Job Family
<b>Reporting to:</b>	Dr. Sandra Shefelbine

The Dept of Bioengineering is seeking a highly motivated researcher to work as a research associate in bone biomechanics.

The project will focus on characterisation of bone mechanosensitivity with age using a murine loading model and will work in collaboration with researchers at the Royal Veterinary College.

#### **Key Responsibilities**

- To work in close co-operation with the principal investigator and collaborators on the project
- To develop novel techniques for characterising bone mechanics.
- To generate and display the results and interpret their implications.
- To maintain accurate and complete records of all findings.
- To write progress reports and publications for refereed journals.
- To work in an interdisciplinary environment in parallel with characterisation of the biological analysis.
- To take initiative in the planning of research.
- To attend relevant workshops and conferences.
- To help maintain the laboratory environment.

**Imperial College London**  
**Department of Bioengineering**

**PERSON SPECIFICATION**

**Research Associate**

**Bone Mechanics**

**Qualifications**

Essential

- A PhD in Bioengineering
- A background in bone biomechanics, with both musculoskeletal and biomaterials expertise.

**Experience**

Essential

- Demonstrable research track record in laboratory research in bone biomechanics.
- Experience in developing computational models of bone adaptation.
- Laboratory expertise in preparing and testing bone mechanics using novel methods, particularly in small animal models.
- Previous experience in interdisciplinary projects
- Experience in publishing in peer-reviewed journals

**Skills and Abilities**

- Ability to absorb a wide-range of interdisciplinary literature
- Creative approach to problem solving
- Excellent written communication skills and the ability to write clearly and succinctly for publication
- Ability to organise own work without extensive supervision.
- Ability to prioritise own work in response to deadlines
- Flexible and disciplined attitude towards work
- Meticulous approach and attention to detail
- Willingness to undertake necessary training
- Willingness to travel to present research and attend conferences
- Ability to interact successfully with others and to learn new skills
- Ability to supervise undergraduate projects if necessary