



## **PhD position in Cartilage Tissue Engineering at Erasmus MC the Netherlands and University College Dublin Ireland**

**A PhD studentship for 4 years is offered for a Science Foundation Ireland (SFI) funded project entitled: "Unravelling the interzone: a biomimicry solution for difficulties in cartilage tissue engineering?"**

This project focuses on recapitulating the morphogenetic processes of embryonic joint formation and cartilage development, using the biomimicry route to provide answers and solutions crucial for cartilage tissue engineering. Specifically we are interested in the differences between interzone cells which give rise to articular chondrocytes, and adjacent epiphyseal chondrocytes which undergo hypertrophy and apoptosis in the growth plate and are eventually replaced by bone cells during endochondral ossification. The PhD student will analyse differences in gene expression and cartilage formation by the different cells isolated from mouse embryo's and use the knowledge to improve Tissue Engineering of cartilage by adult human stem cells.

This is a collaborative SFI funded project between Veterinary Clinical Studies, UCD School of Veterinary Medicine, Dublin, Ireland and the Connective Tissue Cells and Repair Group, Erasmus MC, University Medical Center Rotterdam, the Netherlands.

The project is designed to provide postgraduate training along a 2 stage structured PhD program within UCD but due to its collaborative nature and specific local expertise exposes the student to an exciting international experience and training with a significant length of placement in the Netherlands. Therefore the student should be willing to live and work in the Netherlands during the project.

The PhD student will receive an annual tax free stipend of 18000 Euro for maintenance and University fees up to 5500 Euro per year will be covered. Additionally some allowance will be made for travel costs and conference attendance.

### **Required:**

- A degree in a biological or medical/veterinary science or equivalent qualification
- An excellent communicator and team worker
- Good interpersonal skills
- Willingness to travel and work and live abroad

### **Desirable:**

- Experience with cell and tissue culture
- A basic understanding of tissue physiology and embryology
- Experience with laser dissection and microarrays
- Good writing skills

To apply or to obtain further information, please send (1) a CV, (2) a letter of motivation why you are applying for this specific position to Prof. Pieter Brama (UCD; [pieter.brama@ucd.ie](mailto:pieter.brama@ucd.ie)) and Prof. Gerjo van Osch (Erasmus MC; [g.vanosch@erasmusmc.nl](mailto:g.vanosch@erasmusmc.nl)). The position will remain open until filled by a suitably qualified candidate but a **starting date of the 1<sup>st</sup> of October 2011** is envisaged.

### **For further information:**

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[www.erasmusmc.nl/orthopaedie/research/labor/CTCRgroup](http://www.erasmusmc.nl/orthopaedie/research/labor/CTCRgroup)