



Pre-Doctoral Fellowship in Molecular and Cellular Biology (Bordeaux, France)

Job Description:

A pre-doctoral fellowship is now available for three years at an INSERM (Institut National de la Santé et de la recherche Médicale) laboratory in Bordeaux, France. This Marie-Curie ITN (initial training network) project deals with endothelial cell biology and is part of the Tissue Transmigration Training Network: T3Net.

Signaling and cellular features regulated by TGFbeta in arterial endothelial cells

Theme: TGFbeta plays an essential role in vascular homeostasis and alterations in TGFbeta signalling events give rise to common (atherosclerosis) and rare (hereditary hemorrhagic telangiectasia) vascular diseases. We have discovered that TGFbeta causes formation of podosomes in endothelial cells. These are actin-based and integrin-enriched punctate adhesion microdomains localized at the plasma membrane. These structures recruit metalloproteases that are instrumental in the degradation of extracellular matrix. Our working hypothesis is that podosomes contribute to vessel repair.

Objectives: To find out under what conditions podosomes are formed in vascular segments (ex-vivo) and in intact animals (in vivo) and to study their role in vascular remodeling. These studies should provide important information about the role of TGFbeta in vascular physiology and pathology.

Profile: French scientists are not eligible for this fellowship. Applicants should have an M.Sc. degree in molecular and cellular biology, biochemistry or related sciences. We seek somebody with a strong motivation for research, and the ability to work in a research team and ready to move to different laboratories within Europe. A good command of the English language is mandatory.

Location: The laboratory is located at the European Institute of Chemistry and Biology near Bordeaux. This new institution provides an exceptional scientific environment, at the interface of different disciplines with first class scientific programs in physical-chemistry, chemistry and biology (<http://www.iecb.u-bordeaux.fr/>, <http://www.iecb.u-bordeaux.fr/rmst/>).

Deadline for application: Aug 15th 2009, Starting date between sept and dec 2009

Further enquiries and application

Contact: Dr Elisabeth GENOT

Please send : (1) a curriculum vitae; (2) name and contact details of two potential referees (3) a cover letter outlining your background experience & interest in this research

to: e.genot@iecb.u-bordeaux.fr

our website

<http://www.iecb.u-bordeaux.fr/fileadmin/IECB/HTML/POLE4/GENOT/index.htm>