



Institut de Génomique Fonctionnelle

CNRS UMR5203 – INSERM U661 – Université Montpellier I – Université Montpellier II



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Matteo E. Mangoni, PhD
Chargé de Recherche au CNRS

Date 12/7/2006

Dear Colleagues,

Two positions are sponsored by the prestigious Marie Curie mobility action of the European Commission and include a two-years based postdoctoral and a three-years based PhD program fellowships in the Department of Physiology of the Institute of Functional Genomics (IGF) in Montpellier (France). Our Department is led by Prof. Joël Nargeot and is focused on voltage-gated Ca^{2+} channels. Positions are available to work with Dr. Matteo Mangoni on the role of ionic channels and Ca^{2+} signalling in the genesis and regulation of the heart automaticity. Work will be focused on pacemaker activity and its regulation by the autonomic nervous system in genetically-modified mouse lines lacking specific ionic channels.

Postdoctoral fellow will be in charge of the project on the functional coupling between LTCC and intracellular Ca^{2+} signalling pathways in the generation of automaticity. Work will consist in isolating pacemaker cells from normal and genetically modified mouse strain and studying Ca^{2+} signalling by imaging, confocal and fluorimetric techniques. Ca^{2+} measurements and signalling will be also coupled to patch clamp recordings. Candidates should be acquainted in the patch-clamp technique. Experience in Ca^{2+} imaging and basic molecular biology techniques would be desirable.

PhD program fellow will be in charge of an extensive project on the relevance of LTCC and HCN channels in the genesis of automaticity and its regulation by the autonomic nervous system. Experiments will include *in vivo* telemetric ECG recordings, patch-clamp



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recordings of automaticity in cells from the sinus and atrioventricular node as well as from the Purkinje fibers network. Some previous experience in electrophysiology molecular biology and/or tissue labelling would be an advantage.

Beside technical skills, high motivation and willingness to work in a new and growing team will be major criterions for selection of applicants.

All candidates interested in these positions should send a *Curriculum Vitae*, with a personal motivation letter and a reference recommendation letter by at least one colleague to Dr Matteo Mangoni (matteo.mangoni@igf.cnrs.fr) or Joël Nargeot (joel.nargeot@igf.cnrs.fr)

Our Institute is an equal opportunity employer and will ensure a high quality interdisciplinary environment for recipients.

Sincerely yours,

Dr. Matteo Mangoni

A handwritten signature in black ink, appearing to read 'Matteo Mangoni', is placed over a white rectangular background.