Four Research Positions at University of Parma (IT).

Four postdoctoral positions are available at the TecMedLab www.tecmedlab.unipr.it at the Department of Medicine and Surgery at the University of Parma (Parma, IT). The TecMedLab research activity is dedicated to understanding the mechanisms underlying arrhythmias and to finding possible therapies using nanomaterials.

The present 3-year project aims to realize a platform for producing cardiac organoids-on-a-chip from differentiated human iPSC, for High Throughput Functional and Molecular screenings. The Project will take advantage of a collaboration with the Department of Engineering and Architecture and the Department of Chemical Science, Life Science and Environmental Sustainability.

We are now looking for four motivated postdocs with excellent interpersonal and team skills with the following characteristics:

PD 1. Engineer with <5 yrs from the Ph.D. VIVA date, with experience in sensors, IoT, electronics, programming and computer vision technologies. At least one paper as the first author in an internationally recognized peer-review journal. Knowledge of LabView/Matlab/Python software programming will be a plus.

PD 2. Bioinformatician with <5 yrs from the Ph.D. VIVA date. Candidates are required experience in NGS data analysis especially for transcriptomics, bash/Python/R programming and a strong background in molecular biology are also requisites. At least one paper as the first author in an internationally recognized peer-review journal.

PD 3. Cellular biologist or Bioengineer with <5 yrs from the Ph.D. VIVA date. At least one paper as the first author in an internationally recognized peer-review journal. Experience with hiPSC reprogramming and differentiation is mandatory. Knowledge of 3D bioprinting, organoid production and/or computer programming will be a plus.

PD 4. Cardiac Physiologist or Bioengineer with <5 yrs from the Ph.D. VIVA date, with experience in cardiac signals analysis and classification with artificial intelligence. At least one paper as the first author in an internationally recognized peer-review journal. In-vitro and in-vivo electrical and optical mapping experience will be highly appreciated.

English communication skills are mandatory for all 4 PD, and experience abroad is particularly valued. Positions are for 1 year, renewable for the other two years. Starting month: June 2022

Salaries will be based on experience (Assegno di Ricerca UNIPR Spin point 1-5, from 23.788 to 35.000 per annum). Please note that two out of four positions are dedicated to non-Italian citizens or Italian citizens that did not work in Italy for more than 12 months in the past three years. Please also note that all foreigners and Italian citizens that worked abroad for at least two years can benefit from tax exemption schemes. Candidates are advised to apply as early as possible as the selection and interview process will commence immediately and will end as soon as the right candidate has been found.

Interested candidates should send their CV's, a brief statement of research and career interest, and at least two names of references with contact information to:

Michele.miragoli@unipr.it

Barbara.montanini@unipr.it

Nicola.delmonte@unipr.it

References Papers:

Lagonegro, P., Rossi, S., Salvarani, N., Lo Muzio, FP, Rozzi G., Modica J, Bigi F., Quaretti M., Salviati G., Pinelli S., Alinovi R., Catalucci D., D'Autilia F., Gazza F., Condorelli G., Miragoli M. Synthetic recovery of impulse propagation in myocardial infarction via silicon carbide semiconductive nanowires. Nat Commun 13, 6 (2022). https://doi.org/10.1038/s41467-021-27637-2

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