Research Assistant (Biology / Biotechnology / Biomedical Engineering or related)

School: School of Mechanical andManufacturing Engineering
with Fraunhofer Project Center at Dublin City University (FPC@DCU)
Post title: Research Assistant
Post duration: Fixed Term Contract - 11 Months Full-time

Background
DCU has acquired funding for an exciting research project (MxNChip) to develop a proof-of-concept laboratory instrument. On successful completion of the project it is intended to secure follow-on funding with the eventual aim of establishing a university spin-out company. The project will therefore appeal to a researcher with a strong interest in commercial technology development.

The research assistant will join a team focussed on developing a novel PCR thermocycler and associate microfluidic chip which can greatly improve workflows in molecular biology laboratories.

The project will be based in a School of Mechanical Engineering and will be conducted in conjunction with the Fraunhofer Project Center @ Dublin City University (FPC@DCU). It is of 11 months’ duration.

This position involved multi-disciplinary work across biology / biomedical engineering and will therefore suit a biologist with a passion or interest in engineering or conversely an engineer with a strong interest in biology.

Principal Duties and Responsibilities

Reporting to the MxNChip Project PI the technical duties will include but will not be limited to:

- Conduct a specified programme of research within the MxNChip Enterprise Ireland Commercialisation Fund Project under the supervision and direction of the project PI
- Implementing common molecular biology methods, particularly PCR assays, to assist the development and testing of a novel PCR thermocycler
- Contributing to the optimization of the performance of the system including material bio-compatibility testing and PCR optimization
- Following training, fabrication of microfluidic cartridges
- Assist as required in activities relating to the mechanical design, system design, implementation and integration of during the development of a PCR thermocycler that can function both with microtitre plates and DCU’s patented MxNChip format.
- Testing the developed instrument prototype under various conditions and working in coordination to validate the performance of the system.
- Developing and maintaining relevant documentation and SOPs
- Promoting engagement with industry and other external parties in areas relevant to the project.
- Assist with the reporting of project out-comes to Enterprise Ireland
- Engage in appropriate training and professional development opportunities as recommended/required by Dublin City University
Criteria
Minimum criteria:
- An MSc or Bachelor’s Degree in Biology or Biotechnology or cognate discipline. A qualification in Mechanical / Biomedical / Mechatronic Engineering or related Engineer/ Science degree is also acceptable.
- Good communication and reporting skills.

Desirable criteria:
- Ideally 3+ years post-degree experience
- Experience in molecular biology protocols and particularly PCR
- A passion for on-the-job learning and a willingness to contribute to multi-disciplinary aspects of the project such as microfabrication of MxNChip cartridges and contributing to instrument assembly and testing.
- Proven aptitude for hands-on work and comfortable in the laboratory environment.

Salary: *€22,609 - €32,698
*Appointment will be commensurate with qualifications and experience will be made on the appropriate point of the salary scale, in line with current Government pay policy

Location: This position will be based in the laboratory facilities of School of Mechanical Engineering and/or FPC@DCU on the Dublin City University Glasnevin campus.

Closing date: 7th February 2020

Informal inquiries: david.kinahan@dcu.ie Tel: + 353 1 700 6592

Application Procedure:
Applications should be composed of a cv (max 3-pages) and cover letter.

Applications should be submitted by e-mail to hr.applications@dcu.ie or by Fax: +353 (0)1 700 5500 or by post to the Human Resources Department, Dublin City University, Dublin 9.

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1317 Research Assistant - MxNChip