



Research Centre:	National Institute for Cellular Biotechnology
Post title:	Post-doctoral researcher bioinformatician / Computational biology
Level on Framework:	Level 1
Post duration:	Fixed Term Contract up to 9 Months

Research Career framework

As part of this role the researcher will be required to participate in the <u>DCU Research Career</u> <u>Framework</u>. This framework is designed to provide significant professional development opportunities to researchers and offer the best opportunities in terms of a wider career path. DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your academic career.

Background & Role Profile

An SFI funded post-doctoral position in bioinformatics/computational biology is available to join the team of Assistant Professor Naomi Walsh (<u>https://www.dcu.ie/nicb/people/naomi-</u> <u>walsh.shtml</u>). The successful candidate will join her team to identify genomic variants involved in cancer development, progression and drug resistance. Experience in analysing GWAS and next generation sequencing (whole exome, RNA-seq and ChIP-seq) is required as the candidate will perform bioinformatic research and statistical analysis from published sources, cell line models and organoids developed by the PI's research team.

Duties and Responsibilities:

Responsibilities for this post, include but are not limited to:

- Integrative analysis (processing and visualisation) of multi-omic data sets including whole exome/genome and transcriptomics, ChIP-Seq, CUT&RUN data
- Provide key statistical analysis support to PIs research group
- Identify novel targets and discoveries to aid in the detection and treatment of cancer
- Create graphical representations of data for publications and presentations
- Communicate research efforts, including compiling reports, participation in the generation of manuscripts and presenting findings at group meetings, national and international conferences
- Take part in supervision of undergraduate and postgraduate students as required
- Provide bioinformatics support/assistance for team members and ongoing projects of the research lab

Qualifications and Experience:

Minimum Criteria

The successful candidate must hold a PhD in bioinformatics/biostatistics/computer science with research in a relevant scientific / cancer area.

Desirable Criteria

In addition to this, candidates should ideally have experience in processing, analysis and visualisation of DNA/RNA sequencing data. Experience in pipeline development, particularly with CUT&RUN and clonal evolution and tumour heterogeneity assessments is also desirable. Candidates should be enthusiastic and willing to work on research projects as part of a multidisciplinary team working closely with laboratory scientists and clinicians.

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.

Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications.

Communicating Research – Demonstrates the ability to convey their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students. **Managing & Leadership skills** - Demonstrates the potential to manage a research project including the supervision of undergraduate students.

Mandatory Training

Post holders will be required to undertake the following mandatory training: Orientation, GDPR, and Compliance. Other training may need to be undertaken when required