



Research Centre:	National Institute for Cellular Biotechnology, School of Biotechnology
Post Title:	Postdoctoral Researcher - Bioinformatics/Computational Biology
Level on Framework:	Level 1
Post Duration:	Five Months

## **Overview:**

Dublin City University (www.dcu.ie) is a research intensive, globally engaged, dynamic institution which has developed its own research specialists, established internationally recognized centres of excellence that have substantive collaborative links with leading universities and industrial partners. DCU is distinguished both by the quality and impact of its graduates and by its focus on the translation of knowledge into societal and economic benefit. Through its mission to transform lives and societies through education, research and innovation DCU acts as an agent of social, cultural and economic progress. DCU is Ireland's fastest growing university and now hosts more than 17,000 students across its three academic campuses: DCU Glasnevin Campus, DCU St Patrick's Campus and CU All hallows campus. 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 and Role:**

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-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 CUT N'RUN) 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.

# **Research Career Framework:**

As part of this role the researcher will be required to participate in the DCU Research Career Framework (<u>http://dcu.ie/hr/ResearchersFramework/index.shtml</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.

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## **Principle Duties and Responsibilities:**

- Integrative analysis (processing and visualisation) of multi-omic data sets including whole exome and transcriptomics, CUT N'RUN and GWAS 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

## Minimum Criteria:

The successful candidate must hold a PhD in Bioinformatics/Computational Biology. In addition, it is desirable that the candidate has a subset of the following skills / experience:

- Experience with processing, analysis and visualisation of DNA/RNA sequencing data.
- Ability to work individually and as part of a multidisciplinary team.
- Proven communication, organisational, and problem solving skills.
- Experience working on research projects; working closely with laboratory scientists and clinicians.

## Mandatory Training:

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.

## 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 communicate 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