

Applications are invited from suitably qualified candidates for the following position:

Research Centre
Post title

Level on Framework Post duration

School of Chemical Sciences
Postdoctoral Researcher
Bioinorganic and Nucleic Acid Chemistry
Level 1
Fixed term contract up to 2 years

Dublin City University

Dublin City University (DCU) is a young, ambitious and vibrant university, with a mission 'to transform lives and societies through education, research, innovation and engagement'. Known as Ireland's 'University of Enterprise', DCU is a values-based institution, committed to the delivery of impact for the public good. DCU was named Sunday Times Irish University of the Year 2021.

DCU is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. More than 18,000 students are enrolled across five faculties – Science and Health, DCU Business School, Computing and Engineering, Humanities and Social Sciences and DCU Institute of Education.

DCU is committed to excellence across all its activities. This is demonstrated by its world-class research initiatives, its cutting-edge approach to teaching and learning, its focus on delivering a transformative student experience, and its positive social and economic impact. The university continues to develop innovative programmes in collaboration with industry, such as the DCU Futures suite of degrees, which are designed to equip graduates with the skills and knowledge required in a rapidly evolving economy.

DCU's pursuit of excellence has led to its current ranking among the top 2% of universities globally. It is also one of the world's Top Young Universities (QS Top 100 Under 50, Times Higher Top 150 Under 100). In the Times Higher Education University Impact Rankings 2021, DCU ranked 23rd in the world for its approach to widening participation in higher education and its ongoing commitment to eradicating poverty, while it ranks 38th globally for its work in reducing inequality and 89th globally for gender equality.

The university is ranked 23rd in the world and first in Ireland for its graduate employment rate, according to the 2020 QS Graduate Employability Rankings. Over the past decade, DCU has been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

As part of this role the researcher will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Background & Role

The School of Chemical Sciences is one of Ireland's most progressive and highest achieving Schools with outstanding facilities, housed within a modern and dynamic city campus. Our goal is to develop graduates with the ability to critically evaluate, and then to solve, chemical and pharmaceutical problems, preparing the highest quality graduates capable of meeting the challenges of modern industry and research. The School is highly successful at attracting large scale research funding, with our researchers having significant roles within nationally significant university/industry collaborative initiatives and European funded Integrated Training Networks. The School is one of the leading academic schools within DCU and is ranked in the top 300 chemistry schools/departments in the world (QS Rankings), a reflection of the School's ambitious research activities and its undergraduate/postgraduate degree programmes.

This is a postdoctoral fellowship available for a period of 2-years in the area of artificial gene editing. You will become part of a larger Irish Research Council (IRC) research project called *ENACT: Gene Editing with Nucleic Acid Click Chemistry* which seeks to develop a breakthrough class of artificial gene editing system for the treatment of human cancer. The technology is based on conjugating a therapeutic oligonucleotide (TherON) probe to a metal complex that can trigger targeted damage at the DNA interface. In this project you will target unique base-base sequences present in genetic elements of recalcitrant cancers including triple negative breast cancer (TNBC) and glioblastoma multiforme (GBM). Using 'click chemistry' technology, each TherON will carry a unique artificial metallonuclease (AMN) programmed to direct cutting a specific genetic locus that leads to targeted tumour destruction. The position is fully funded and you will work under the guidance of Associate Professor Andrew Kellett in the School of Chemical Sciences

Principle duties and responsibilities

Please refer to the job description for a list of duties and responsibilities associated with this role

Qualifications and Experience:

Essential

- Applicants should have a PhD in synthetic chemistry with experience in inorganic, nucleic acid, and click chemistry essential.
- The candidate should have expertise in isolating small molecules and inorganic compounds, NMR, IR, UV-vis, fluorescence, PCR, thermal melting, LC-MS, and in nucleic acid chemistry, isolation, and purification techniques.

Desirable:

• Experience in molecular / biophysical assays used to determine the stability and targeting properties of therapeutic oligonucleotides.

• Excellent communication and English writing skills are 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

Essential Training

The postholder will be required to undertake the following essential compliance training: Orientation, Health & Safety and Data Protection (GDPR). Other training may need to be undertaken when required.

Salary Scale:

IUA Postdoctoral Researcher Salary Scale - €40,023 - €46,109

Appointment will be commensurate with qualifications and experience and in line with current Government pay policy

Closing date: Thursday 13th October

For more information on DCU and benefits, please visit Why work at DCU?

Informal Enquiries in relation to this role should be directed to:

Title. Dr. Andrew Kellett, School of Chemical Sciences, Dublin City University.

Phone + 353 (0)1 7005461 Email: andrew.kellett@dcu.ie

Please do not send applications to this email address, instead apply as described below.

Application Procedure:

Application forms are available from the DCU Current Vacancies website at

https://www.dcu.ie/hr/vacancies-current-vacancies-external-applicants

Applications should be submitted by e-mail with your completed application form to hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: #RF1713 Postdoctoral Researcher Bioinorganic and Nucleic Acid Chemistry

Dublin City University is an equal opportunities employer. In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes. The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the DCU Policy Starter Packs