



Research Centre	DCU Exoskeleton Programme School of Health and Human Performance Faculty of Science
Post title	Research Assistant Robotic Neuro – Rehabilitation
Post duration	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.

School of Health and Human Performance

A dynamic and rapidly growing School within the Faculty of Science and Health, the School of Health and Human Performance at DCU is developing an international reputation in health, sport and exercise science and physical education. As such, the School of Health and Human Performance is committed to researching, understanding and disseminating knowledge about exercise and physical activity across the continuum from health to elite sport performance, and to the area of musculoskeletal medicine. The mission of the School is to foster optimum wellness in all phases of the human life cycle through the provision of academic programmes, research and the translation of research into public health or high performance strategies with practical implementation. It aims to achieve this through:

- Pioneering undergraduate and graduate level academic programmes;
- Undertaking research that transcends traditional boundaries leading to enhancement of health, physical performance and quality of life of the citizens of Ireland and beyond;
- Developing a wide range of community-based sport, health-related and injury research programmes;
- Building on our national reputation for excellence for sports performance, preventive medicine, health and physical literacy, and healthy ageing across the life course.

The School has already received significant support from the University through the appointment of a range of key academic and support staff and the development of extensive facilities for exercise and sport. As a member of this School you will become part of this multi-disciplinary team. Faculty and postgraduate research students in the School of Health and Human Performance investigate a wide range of topics concerning human movement and education, athletic performance, musculoskeletal medicine and health promotion.

The School runs a number of different programmes in a variety of disciplines, further information can be found [here](#).

The School attracts high calibre students who are offered undergraduate teaching, research opportunities and practical placements in industry, in education or in clinical settings according to programme. At the heart of development plans for the University, the School is in a unique position for significant growth with the planned development of a new, dedicated Health and Human Performance facility on campus at DCU.

Background & Role

The DCU Exoskeleton programme is physiotherapist led service allowing persons with reduced mobility due to paralysis access the Eksobionics exoskeleton, Ekso NR to allow them to complete sessions of supported walking facilitated by a trained handler. We have assembled a team of personnel with over 15 years' experience in the field of neuro-rehabilitation and robotics.

The role of the research assistant is to provide support to the service lead in developing a parallel programme of research while continuing to deliver this life changing therapy to people with paralysis.

Principal Duties and Responsibilities

- Deliver robotic exoskeleton walking sessions to service users to aid in improving their general health and well-being as well as improving the mobility of those service users
- Progress service user's walking programmes with support from the clinical lead
- Screen potential participants for suitability
- Teach service users family or carers as well as undergraduate interns in how to deliver the therapeutic robotic walking
- Provide advice and guidance on health, exercise and wellness for service users
- Administrative duties such as timetabling, record keeping, waiting list triage and communication with service users via telephone and email
- Keeping up to date with current exoskeleton research
- Data collection and management for clinical trials

Minimum Criteria

Applicants should have an undergraduate degree in science, sports science, Allied Health (e.g. Physiotherapy, Occupational Therapy etc), nursing or Athletic Therapy and Training. Similar undergraduate degrees will also be considered.

In addition, it is desirable the candidate has:

- Experience or training in Handling or using an exoskeleton
- Experience in the treatment or caring for people with people with neurological impairment i.e. spinal cord injury, stroke etc
- A good understanding of basic principles of gait and biomechanics of gait
- Excellent organisational and time management skills
- A good understanding of the basic principles of high quality research

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](#)