Robotics Enhanced Rehabilitation Therapist
Professional 6
Insight SFI Research Centre for Data Analytics
2 Year Fixed Term Contract

Dublin City University

Dublin City University (DCU) is a leading innovative European University. It is proud to be one of the world's leading Young Universities and is among the world's top 2% globally. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

Insight SFI Research Centre for Data Analytics

The Insight SFI Research Centre for Data Analytics (http://www.Insight-centre.org) is an SFI funded Research Centre which brings together researchers from University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions, Trinity College Dublin (TCD), University of Limerick (UL), Maynooth University (MU) and Tyndall National Institute. It creates a critical mass of more than 400 researchers from Ireland's leading ICT clusters to carry out research on a new generation of data analytics technologies in a number of key application domain areas, such as Health and Human Performance, Smart Communities, Internet of Things, Enterprise and Services and Sustainability and Operations.

The €150m Centre is funded by Science Foundation Ireland and a wide range of industry and European Union partners. Insight's research focus encompasses a broad range of data analytics technologies from machine learning, decision analytics and social network analysis to linked data, recommender systems and the sensor web. Together, with more than 220 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.

Overview of the Exoskeleton Programme

This post will report into the Head of the School of Health and Human Performance and clinical lead of the DCU Exoskeleton Programme. The programme of research is affiliated with the Insight centre for data analytics.

In 2019, DCU in partnership with the Mark Pollock Foundation, launched a Robotics-enhanced rehabilitation programme to help address a recognised community requirement for rehabilitation services for adults with chronic neurological injury or illness. The therapy is in addition to any HSE services provided to service users and focuses on rehabilitation and long-term health management of the neurologically impaired individual.

The programme has recently acquired funding to launch a world first paediatric programme to ensure this technology is available across the life span for children with paralysis of neurological origin.

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.

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 the following teaching programmes:

1. BSc in Sports Science and Health www.dcu.ie/courses/undergraduate/shhp/sport-science-andhealth

2. BSc in Athletic Therapy and Training www.dcu.ie/courses/undergraduate/shhp/athletic-therapyand-training
3. BSc in Physical Education with Biology
www.dcu.ie/courses/undergraduate/shhp/physicaleducation-biology
4. BSc in Physical Education with Mathematics
www.dcu.ie/courses/undergraduate/shhp/physicaleducation-mathematics
5. Professional Doctorate in Elite Performance (Sport)
https://www.dcu.ie/courses/postgraduate/school-health-and-human-performance/professionaldoctorate-elite-performance
6. MSc in Elite Sport Performance https://www.dcu.ie/scienceandhealth/msc-elite-sport-performance

The Role

Dublin City University wishes to appoint a Robotics-Enhanced Rehabilitation Therapist to the DCU Exoskeleton Programme. The successful candidate will report into the Head of the School of Health and Human Performance and clinical lead of the DCU Exoskeleton Programme. The successful candidate will be accountable for the delivery and on-going development of the paediatric robotic (Marsibionics Exoskeleton) centred therapy and rehabilitation service in Dublin City University.

This role demands knowledge, expertise and enthusiasm to develop and deliver client care as an autonomous practitioner. The caseload will entail management of clients with a variety of paediatric neurological conditions including cerebral palsy, spinal cord injury, muscular dystrophy and spinal muscular atrophy. The successful post-holder will be required to contribute to the development of the rehabilitation programme and the facilitation of a parallel programme of research/teaching with academic colleagues in the University. The candidate will have the opportunity to pursue their own programme of research as part of the role.

Principal Duties and Responsibilities

The duties and responsibilities of the position include, but are not restricted to, the following:

- The delivery and on-going development of the robotic (Marsibionics Exoskeleton) centred therapy and rehabilitation service in Dublin City University for children.
- The pre-screening and management of children with a variety of neurological conditions.
- Contribute to development of the overall rehabilitation programme and the facilitation of a parallel programme of research and integration with teaching with academic colleagues across the University.
- On-going liaison with Mark Pollock Foundation and philanthropic donors.
- Work closely with DCU Education Trust to identify other potential donors to enable an expansion of the programme.
- Grow the programme of research by assisting the principle investigators from the Insight Centre for data analytics and The School of Health and Human Performance.
- Design and implement own programme of research.
- Produce interim reporting and project outputs in line with the agreed project schedule.
- Attend project meetings and present interim and final results.

- Carry out all necessary administrative tasks required for the clinical and research arms of the programme.

Qualifications, Skills and Experience Required

Candidates must have a Primary Degree or equivalent (NFQ Level 7) in allied health medicine with an emphasis on musculoskeletal evaluation and gait analysis, such as Athletic Therapy and Training, Sports Science, Physiotherapy and Occupational therapy plus previous experience at a length and level required for equivalent academic level posts.

The successful candidate will have the following:

- At least 1 year of post-graduate clinical experience in a field related to the treatment and management of paediatric neurological conditions.
- Experience of working in a multidisciplinary clinical team environment.

The ideal candidate will also have:

- Membership of their relevant professional organisation.
- Completion of relevant post-graduate training and education, preferably in paediatric musculoskeletal medicine or paediatric neurology.

The successful candidate must display:

- Strong interpersonal skills.
- The clinical, managerial and administrative capacity to fulfil the functions of the role.
- Experience or demonstrated interest in clinical audit and research.
- Experience or demonstrated interest in supervision of junior staff or therapy assistants.
- Experience of education of care givers and family members in the treatment and management of persons with neurological condition.

Essential Training

The postholder will be required to undertake the following essential compliance training:

- Eksobionics exoskeleton Level 2 certification.
- Marsibionics paediatric exoskeleton training certification.
- Child protection training – Children First

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

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


Athena
SWAN
Bronze Award