

## **PhD studentship - Irish Rugby Injury Surveillance - UPMC**

**Location:** University of Limerick, Ireland

**Deadline:** 17.00 Irish time (GMT+1) Monday 20<sup>th</sup> of November 2023

**Interview date:** December 2023

**Start date:** February 2024

**Duration:** Four years full-time (structured PhD)

### **Description:**

Applications are invited for a PhD studentship funded by UPMC and the University of Limerick to start in January 2024. The project will be based in the Department of Physical Education and Sport Sciences at the University of Limerick with a dedicated period of research time spent at UPMC in Pittsburgh, Pennsylvania, USA. The successful candidate will be supervised by Dr Tom Comyns, Prof Ian Kenny and Dr John Mulvihill from the University of Limerick, and Dr. Michael 'Micky' Collins, Clinical Director, and Dr. Anthony Kontos, Research Director, of UPMC's Sports Medicine Concussion Programme. The candidate will work within the Irish Rugby Injury Surveillance (IRIS) programme at UL which is supported by the Irish Rugby Football Union (IRFU).

The aims of the PhD will be:

- Examine the qualitative symptoms of a concussion among existing IRIS concussion cases as they arise, as well as the length of recovery time and the treatment advice given to these players.
- Examine the feasibility of integrating the ImPACT® baseline testing within the IRIS model of injury surveillance.
- Support the research programme team to maintain implementation of their injury surveillance system (IRISweb) which allows for the collection, tracking and trend analysis of injury patterns (incidence, nature and severity), in order to identify possible injury causal factors and prevention strategies.
- To enhance the health and welfare of Rugby Union players across the game in Ireland by providing information on injury patterns that can impact on IRFU policy regarding injury prevention measures.

The research will involve working with clubs, schools and medical teams to assess current practices and their relationship to the incidence, nature, severity and prevention of injury within all levels of the game, and conduct on-going surveillance of injury trends.

### **About UL**

With over 18,000 students and 2,000 members of staff, the University of Limerick (UL) is an energetic, research led and enterprising institution with a proud record in innovation and excellence in education, research and scholarship. The dynamic, entrepreneurial and pioneering values which drive UL's mission and strategy ensure that we capitalise on local, national and international engagement and connectivity. The reference to UL as 'Ireland's Sporting Campus' is very much as a consequence of the University's strategy to create a world class sporting infrastructure. The building infrastructure is complimented by leading research facilities and staff from all aspects of sport and exercise sciences, the Sport and Human Performance Research Centre (SHPRC), and clinicians from UL's Health Research Institute (HRI). Sport and Exercise Sciences within UL is ranked in the World's top 50 by academic discipline.

## **About UPMC**

UPMC is a global, academic medical centre wholly committed to innovation, research, and patient-centred care. UPMC offers an integrated healthcare system which, for patients, means that it offers a range of healthcare services including general medicine and surgery, a host of highly regarded specialists, and a variety of skilled professionals to help patients complete their healthcare journey within one healthcare system. In Ireland, UPMC's operations include UPMC Whitfield Hospital in Waterford, UPMC Aut Even Hospital in Kilkenny, UPMC Kildare Hospital in Clane, and UPMC Sports Surgery Clinic in Dublin. Outpatient care is available at the UPMC Carlow Outreach Centre, UPMC Hillman Cancer Centre radiotherapy locations in Waterford and Cork, UPMC Sports Medicine Clinics in Waterford, Tipperary and Limerick, UPMC Institute for Health in Mayo, and nationwide via the UPMC Concussion Network.

## **About UPMC Sports Medicine Concussion Programme**

The UPMC Sports Medicine Concussion Programme, directed by Dr. Collins, is the largest concussion clinic in the United States, with ~20,000 visits per year, involving ~8000 patients each year across the lifespan. The Programme is located in the UPMC Freddie Fu Sports Medicine Center, a part of the state-of-the-art UPMC Rooney Sports Complex, which includes a training and rehabilitation gym with a plyometric training floor, a therapeutic pool, and a specialised performance training centre to support concussion clinical care. The Concussion Programme comprises seven clinics total and is staffed by an multidisciplinary team including clinicians from neuropsychology, neuro-radiology, neuro-optometry, neurosurgery, physical therapy, and sport medicine. The programme provides trainees with didactic and experiential learning experiences including monthly Concussion Grand Rounds, Clinical Cases Conferences, Research Meetings, and Journal Club.

## **About the Concussion Research Laboratory**

The Concussion Research Laboratory (CRL), direct by Dr. Kontos, is located close to the main clinic at Concussion Programme, and includes approximately 4,000 square feet of research, testing, and office space. Research equipment at the CRL includes a minus 80 freezer for biomarker storage, retinal scanner, optical imaging, and a driving simulator. Research staff includes a lab manager, research project coordinators, research assistants, a phlebotomist, a post-doctoral research fellow, as well as doctoral, resident, medical, and undergraduate student interns. An exciting aspect of the CRL is the ongoing access to multiple large, clinical research databases that provide data on thousands of patients for clinical research projects. These databases provide many opportunities to collaborate with researchers at the University of Pittsburgh from the MRI Research Center, as well as the Departments of Neurosurgery, Otolaryngology, Psychology, and Physical Therapy, and the Eye and Ear Institute. Our research is funded by the *Centers for Disease Control and Prevention (CDC)*, *National Institutes for Health (NIH)*, *Department of Defense (DoD)*, *the National Football League (NFL)*, *Chuck Noll Foundation for Brain Injury Research*, as well as foundations, corporate, and individual sponsors. Our faculty and trainees publish on average ~40 impactful and innovative research articles each year in high-impact journals including *JAMA Neurology*, *Pediatrics*, *Sports Medicine*, *American Journal of Sports Medicine*, and *Journal of Neurotrauma*.

## **Requirements:**

- Students will normally need to hold at least a 2:1 degree (or equivalent) in Biomedical Engineering, Sports Science, Physiotherapy or a related discipline. A relevant Master's degree will be an advantage, as will experience in completion of a major research project.
- Proven academic or research experience in the field of concussion and injury epidemiology is essential.

- Proven experience in data analysis with advanced statistics is essential.
- Proven research experience and involvement in the Rugby industry will be an advantage.
- The candidate must possess excellent written, verbal and presentation skills for both specialist and non-specialist audiences; excellent interpersonal skills; ability and experience in collaborating effectively in teams; an ability to work independently and with initiative at a high level of self-motivation; high level attentiveness to detail.
- The PhD candidate will be required to travel independently to Rugby clubs and schools both locally and country-wide.

For informal enquiries about the project, please contact Dr. Tom Comyns ([tom.comyns@ul.ie](mailto:tom.comyns@ul.ie)), Prof. Ian Kenny ([ian.kenny@ul.ie](mailto:ian.kenny@ul.ie)) or Dr. John Mulvihill ([john.mulvihill@ul.ie](mailto:john.mulvihill@ul.ie)).

### **Application:**

To apply, please send applications directly to the following e-mail address:  
[rugby-surveillance@ul.ie](mailto:rugby-surveillance@ul.ie)

The application must comprise two documents:

1. One-page cover letter briefly outlining applicant suitability and motivation for the PhD research topic, and education, employment and research experience.
2. Curriculum Vitae (CV) including names and contact details of at least two referees.

General information about the Department of Physical Education and Sports Sciences, the University of Limerick, IRIS, and UPMC Concussion Programme can be found at:

- <https://www.ul.ie/pess/research>
- <https://www.ul.ie/>
- <https://www.ul.ie/shprc/research-themes/rugby-science>
- <https://upmc.ie/about/upmc-ireland>
- <https://www.upmc.com/services/sports-medicine/services/concussion/about>

### **Package:**

Tax free stipend of euro €22,500 per annum plus tuition fees at the EU rate, plus research consumables and expenses. International (non-EU) students may apply but will need to self-finance the balance of the non-EU fees.