



### **PhD Project: Manipulation of blood brain barrier permeability in the progression of TBI pathobiology and outcomes**

The Loane and Boto labs invite applications from prospective PhD students to work on a project tackling the blood brain barrier integrity after repetitive mild Traumatic Brain Injury (TBI), using both rodent and fruit fly models.

The selected candidate will be the recipient of a Trinity Research Doctorate Award (TRDA), a pioneering PhD Programme in Trinity College Dublin providing invaluable interdisciplinary training and experience, forming part of a wider team of clinician scientists, neuroscientists, legal experts, and policy makers aiming to identify novel markers for brain damage and understand the legal implications in sport-related concussions. The specific student within the Loane-Boto group will use a combination of molecular, flow cytometry, imaging and neurobehavioural approaches to study how the disruption of the blood brain barrier affects brain function, and how this structure can be manipulated for recovery.

The Loane and Boto labs are located in close proximity in Trinity College Dublin, Ireland's leading research intensive university. We are looking for an enthusiastic, creative and collaborative candidate with a degree in biological or brain sciences and previous experience in molecular biology, neurobiology, genetics, or neuroimmunology. A Masters degree in a related field will be desirable.

The PhD studentship is supported by a generous TRDA Award that covers academic fees and provides a PhD stipend of €25,000/annum. The interactions among principal investigators and research team members, as well as the interdisciplinary nature of the TRDA PhD Programme, will provide a unique training opportunity for PhD students on the important societal topic of sports-related concussion in the 21<sup>st</sup> Century and its medical and legal consequences.

Interested candidates should submit a motivation letter (1-page max), CV and contact information for two academic references to [loanedj@tcd.ie](mailto:loanedj@tcd.ie) and/or [botot@tcd.ie](mailto:botot@tcd.ie). Informal inquiries are welcomed.

Deadline for applications: 21<sup>st</sup> May 2024.



**Trinity College Dublin**  
Coláiste na Tríonóide, Baile Átha Cliath  
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