Ph.D. Position in Injury Biomechanics

The Trinity Centre for Bioengineering is seeking applicants for a Ph.D. position funded by the Irish Road Safety Authority on the topic of cycling collisions in Ireland. The project title is “Minor, severe and fatal cycling collisions in Ireland: an engineering assessment to prioritise injury/fatality prevention strategies”. This is a four year structured Ph.D. position at Trinity College Dublin, under the supervision of Professor Ciaran Simms, who leads the injury biomechanics research group at Trinity College Dublin (https://www.tcd.ie/mecheng/staff/csimms/). This PhD position will commence in September 2017, and funding is available for students eligible for European Union Ph.D. fees.

This Ph.D. project addresses the engineering risk factors associated with minor, serious and fatal cycling collisions in Ireland, with an explicit emphasis on prevention/reduction of minor injuries as well as serious and fatal collision cases to reduce overall societal harm. This addresses the recent call from the European Traffic Safety Council to target serious road injuries and will facilitate the safe delivery of the Irish government strategy of increasing the modal share of cycling in commuting. The project will involve a combination of analysis of national collision database information, detailed forensic collision reports and novel methods of collecting data relating to minor cycling collisions not currently captured in national databases as well as parametric analyses using computational multibody models of cyclist collisions with vehicles and roadside objects. The project endpoint will be a detailed understanding of the engineering circumstances of serious and fatal cycling injuries in Ireland, followed by a set of strategic priorities presented to the RSA for improving cycling safety in Ireland.

The Candidate should have attained a high level Honours Bachelors or Masters degree in Mechanical or Biomedical engineering (or cognate discipline) as well as having a demonstrable knowledge of mechanics and an interest in crash safety and injury biomechanics and strong interpersonal skills to assist with interviewing injured cyclists.

Interested parties should email a CV & cover letter to Ciaran Simms at csimms@tcd.ie by July 7th 2017.