PhD - Teagasc Walsh Scholarships  
(Microbiology/Biology/Biotechnology)  
Ref: 2019214 & 2019215

Background
Teagasc, in collaboration with University College Dublin and University College Cork, have 2 PhD positions in a project on the microbiology of fermented and smoked foods, funded by the Department of Agriculture, Food and the Marine (DAFM). Graduates will receive comprehensive training in culture based microbiology, fermentation science, molecular biology techniques and mathematical model development. These positions will be of interest to those considering a career in the food industry, the pharmaceutical sector, academia as well as national and international regulation.

The subject of this research is the microbiology, food safety and shelf-life of a range of fermented and smoked foods. The target bacteria are *Listeria monocytogenes*, Shiga toxin-producing *Escherichia coli*, *Clostridium botulinum*, *Staphylococcus aureus* and heat resistant coliforms and the target foods include sauerkraut, kefir, smoked salmon (PhD1), pepperoni and salami (PhD2). The research will include bacterial culture studies, predictive model development/validation and molecular biology (DNA sequencing, bioinformatics and virulence gene expression studies). Full laboratory training will be provided and the work will be undertaken in full consultation with relevant stakeholders.

Requirements
Applicants should have a good primary degree (first or second class (2.1) honours) or an MSc in an appropriate discipline (microbiology, molecular biology, biology or similar discipline). A full driving licence is also an advantage but is not essential.

Award
€24,000 per annum

Registration/Location:
PhD1 (ref. 2019214): University College Dublin and primarily based in Teagasc (Ashtown)
PhD2 (ref. 2019215): University College Cork and primarily based in Teagasc (Ashtown)

Further Information/Application
Submit an electronic copy of your Curriculum Vitae and a letter of interest to:
Dr. Declan Bolton, email: declan.bolton@teagasc.ie

Closing date
Friday 29th May 2020.