13 PhD Fellowship positions available in the Marie Skłodowska-Curie Actions Innovative Training Network "PATHSENSE" (H2020-MSCA-ETN-721456)
Ref. No. NUIG 072-17

Training Network to Understand and Exploit Mechanisms of Sensory Perception in Bacteria

Located in Ireland, Germany, Netherlands, Spain, Sweden, Switzerland and UK.

Project background and goal: The PATHSENSE (Pathogen Sensing) ETN investigates the molecular mechanisms of sensory perception in bacterial pathogens. Rapid and sensitive systems to sense and respond to environmental changes are a cornerstone of a bacterium’s survival apparatus, and understanding these sensory systems is central to predicting their behaviour. The success of bacterial pathogens is underpinned by their ability to sense their environment in order to protect themselves and then to deploy their virulence mechanisms at the appropriate time. A deep knowledge of how their first line of defence (sensory perception) functions is a vital step in developing strategies to subvert their survival apparatus, and ultimately to preventing human, animal and plant infections.

The overall objective of this project is to focus on understanding a highly sophisticated but poorly understood sensory organelle called the “stressosome”. The relationship between molecular structures and biological function is central to understanding any living system; however the research methodologies required to unravel these relationships are often complex and fast-changing. The team participating in the PATHSENSE Network will recruit and train 13 early stage researchers (ESRs) in state-of-the-art methodologies, including structural biology, proteomics & protein biochemistry, molecular biology, bacterial genetics, food microbiology, mathematical modelling, cell biology, microscopy and comparative genomics. This inter-sectoral Network comprises 8 leading Universities, 1 public research institution, 4 companies (from spin-off to large multi-national) and 1 governmental agency. A major objective of this Network will be to exploit the fundamental research to develop novel antimicrobial treatments that have applications in the food and public health sectors.

To apply and for further details on these opportunities see:

http://www.nuigalway.ie/about-us/jobs/researchjobs/

Closing date for receipt of applications is 5pm (GMT) on Friday 12th May 2017.

All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment.

National University of Ireland, Galway is an equal opportunities employer.