



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

Post Doctoral Research Fellow Investigating Host-Microbiome Interactions

Position Description: Applications are invited for an ambitious postdoctoral research position in cellular immunology funded by the Wellcome Trust. The postdoctoral research fellow will lead an exciting project investigating how exposure to the respiratory tract microbiome influences the immune response to subsequent pathogenic infection.

The successful candidate will join the Host-Pathogen Interactions group led by Prof Rachel McLoughlin at the School of Biochemistry and Immunology at Trinity College Dublin <https://www.tcd.ie/Biochemistry/research/mcloughlin/>. The School of Biochemistry and Immunology provides a dynamic and stimulating environment and the candidate will have the opportunity to interact with world-class immunology researchers working in areas such as innate immunity, vaccine development and immunometabolism.

This program will investigate how colonisation with important members of the respiratory tract microbiome influence development of adaptive immune memory (expansion and activation of resident memory T cells) and also innate immune memory (modulation of monocyte/macrophage function and metabolic activity), and will determine if this induced memory dictates the response to subsequent pathogenic challenge. Commensal microbes are resident at barrier surfaces throughout the body and have the capacity to influence host development, metabolism and immunity but we are only beginning to understand the mechanisms by which members of the respiratory tract microbiome modulate immune cell development and the consequences of this on subsequent bacterial or viral assault within the lungs. Germ-free mice represent a valuable model system to study the interaction between the microbiota and host immunity and this project will develop novel models of bacterial colonisation in germ-free mice to address our research questions.

Requirements: A PhD in Immunology, microbiology or cell biology with proven publication record and excellent communication skills. We are looking for a highly motivated candidate with a strong background in immunology, ideally in the context of infection. Candidates should ideally have experience with *in vivo* models and flow cytometry. The postdoctoral research fellow will actively support PhD students and undergraduate students working in the lab, present at national and international meetings and publish in leading international journals.

Salary: Appointment will be made on the Irish Universities Association Researcher Salary Guidelines at PD1, Point 1; €38,632 per annum

Post Status: Fixed-term, Specific Purpose Contract – Full-time

Applications Deadline: April 30th 2021 or until a suitable candidate is identified.

Please submit a covering letter and CV (include the names and contact details of 2 referees) to: rachel.mcloughlin@tcd.ie

Trinity College Dublin is an equal opportunities employer.

