



Four-year Post-doctoral fellowship

Antimicrobial resistance (AMR) poses a major global risk to human health by causing death, disability, longer hospitalisations, and increased healthcare costs. Vaccines are ideally suited to tackle this problem, improving the lives of people worldwide. The All-island Vaccine Research and Training Alliance (AVACTA) is a hub of excellence aimed to develop effective vaccines against ESKAPE pathogens (*Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacter cloacae*), a group of bacteria that are resistant to practically all available antimicrobials, which are considered a major global threat.

AVACTA will provide a unique interdisciplinary research programme with cross-training in complementary areas of life-sciences, biotechnology, health psychology, public health, ethics, and communication to build capacity in vaccine design, development, and deployment on the island of Ireland. This post-doctoral fellowship project will focus on vaccines against three ESKAPE pathogens: *Klebsiella pneumoniae*, *Acinetobacter baumannii* and *Pseudomonas aeruginosa*. The UCD team have already identified panels of novel vaccine candidate antigens targeting three ESKAPE pathogens. This AVACTA project will focus on these existing panels of vaccine candidates with a view to developing a “Universal ESKAPE vaccine”. This is an exciting research focused role funded by the All-island Vaccine Research and Training Alliance (AVACTA), under the Higher Education Authority’s North-South Research Programme.

We are looking for a post-doc with a background in Immunology and/ or Biochemistry to join our vibrant team of researchers. In particular, we would like to hear from recent PhD graduates with experience in the characterisation of T-cell responses; flow cytometry; experience in cloning, protein expression and characterisation. The PDR will take a lead in the following aspects of this collaborative project:

- Investigating our existing panels of vaccine antigens for common motifs;
- Evaluating T-cell responses to vaccine antigens;
- Examining antigen stability and characterisation;
- In collaboration with other partners, formulating lead vaccine antigens in nanoparticles or exploring approaches to maximise protective mucosal responses.

Queries: Assoc Prof Siobhán McClean siobhan.mcclean@ucd.ie

Applications must be made via the UCD HR application process:

[Jobs - Work at UCD](https://www.ucd.ie/workatucd/jobs/) (<https://www.ucd.ie/workatucd/jobs/>) Job reference number: 014750

Starting Salary €39,522, with annual increments

Closing date - 20th July 2022



Riailtas na hÉireann
Government of Ireland



An Roinn Ibscoldeachais agus Ardoidreachais,
Taighde, Nuálachais agus Folaíochais
Department of Further and Higher Education,
Research, Innovation and Science



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