



Want to work in Ireland for 3 years with a Global recognised University and one of Ireland leading innovation companies, then this opportunity may be for you!

ANTIDOTE- Antimicrobial Coating designed to tackle the emergent crisis of microbes and viruses

Candidate

We are looking for a talented post-doctoral scientist to jointly apply to the Enterprise Ireland CAREER Fit-plus program <https://www.horizon2020.ie/career-fit-plus/>. The successful post-doctoral scientist will work jointly with Kastus Ltd (<https://kastus.com/>) where they will be involved in the design and assessment of the antimicrobial coatings and Trinity College Dublin at the Tallaght University Hospital site to perform in vitro and live testing of these coatings.

The applicant should have the following qualifications;

- A PhD in a clinical microbiology field
- Must not have working in Ireland for more than 12 months of the previous 3 years

The applicant should have the following experience/ knowledge;

- Worked in a clinical setting previously
- Environmental monitoring of microorganisms
- Antimicrobial technology
- Culture and identify clinically relevant microorganisms
- Molecular identification and quantification of microorganisms
- Data analysis using SPSS, GraphPad or similar

If you are interested and have any further queries please contact Dr Julie Renwick, Assistant Professor, Dept of Clinical Microbiology (Email: renwickj@tcd.ie, Ph: 01-896 3791/ 4551) and/ or Dr James Kennedy email james.kennedy@kastus.com

Background

Outbreaks of several antimicrobial resistant (AMR) microorganisms in recent years and in particular the current severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) global pandemic infecting >16.5 million people worldwide, have brought into sharp focus the importance of infection prevention and control measures. SARS-CoV-2 has already caused the death of >650,000 people globally and it is estimated that AMR infections will cause >10 billion deaths worldwide by 2050.

Contaminated surfaces are significant contributors to transmission of hospital pathogens and one way of addressing this concern is the utilisation of smart coatings that prevent growth and persistence of microorganisms on hospital surfaces. The premise of this work will investigate smart multifunctional visible light activated coatings, which have proven anti-

microbial activity. The work will focus on the application of these coatings to live clinical settings and monitoring the microbial bioburden and corresponding levels of healthcare associated infections.