

## EPA funded PhD Studentship - Public health Impact of Exposure to antimicrobial Resistance in coastal waters (PIER), Discipline of Bacteriology, School of Medicine, NUI Galway

Closing Date for receipt of applications: 24<sup>th</sup> May 2019

Discipline: Bacteriology

School: School of Medicine

College: College of Medicine, Nursing and Health Sciences

Post duration: 4 years (Full-Time)

Stipend: €16,000 per annum plus fees

### Position Summary

Applications are invited from suitably qualified candidates for a full-time 4-year funded Ph.D. studentship for a Structured Ph.D. in Bacteriology. The successful candidate will join the project team working on the four-year EPA-funded PIER project - Public health Impact of Exposure to antimicrobial Resistance in coastal waters (<http://www.nuigalway.ie/medicine-nursing-and-health-sciences/medicine/disciplines/bacteriology/research/pier/>).

The successful candidate will gain extensive experience in microbiology, molecular biology, epidemiology, high throughput sequencing and translation of research findings to policy. The successful candidate will join the structured Ph.D. programme of the School of Medicine, NUI Galway and complete modules aimed at achieving a diverse range of transferable professional skills key to a future career as an independent researcher. The Ph.D. candidate will be based in the Discipline of Bacteriology, School of Medicine, NUI Galway under the supervision of Dr Dearbháile Morris (<http://www.nuigalway.ie/our-research/people/dearbhailemorris/>) and Dr Liam Burke (<http://www.nuigalway.ie/our-research/people/medicine/liamburke/>).

### Project Description:

Antimicrobial resistance (AMR) is recognised globally as a major public health problem. It is increasingly recognised that the environment plays an important role in the transmission and persistence of antimicrobial resistance. The PIER project will explore the human health and wellbeing impacts associated with AMR contamination of coastal waters. The PIER project will investigate if coastal water users are at a higher risk for colonisation with Antimicrobial Resistant Organisms (AROs).

### **Role of the PhD candidate:**

The successful candidate will:

- Work within a multidisciplinary team of researchers to engage and recruit water users and non-water users as study participants and collect and analyse qualitative and quantitative data.
- Examine faecal samples from study participants for the presence of AROs and characterise isolates collected
- Participate in public outreach to publicise the study and disseminate the results, including attendance at public events, publishing of web articles and social media posts.
- Contribute to the regular project progress reports for the EPA.
- Present the results of the research at national and international scientific conferences.
- Publish the findings in peer reviewed scientific journals.

### **Qualifications/Skills required:**

#### **Essential Requirements:**

- 1<sup>st</sup> class or upper 2<sup>nd</sup> class honours degree in microbiology or a related discipline (where results are pending, evidence for anticipated result based on previous years marks must be provided)
- Experience in conventional microbiology techniques such as culture, DNA extraction
- Excellent oral and written communication skills (minimum of IELTS 7 or Cambridge C1 in English)
- Ability to work independently and collaboratively
- Excellent interpersonal skills
- Highly motivated, with excellent organisational skills
- Full driving license for (or transferable to) Ireland

#### **Desirable Requirements:**

- Masters' degree or previous relevant research experience
- Demonstrated experience with whole genome sequencing and/or bioinformatics
- Demonstrated experience in systematic literature review
- Competence in both qualitative and quantitative data analysis
- Experience with research involving the public

**Scholarship Amount & Stipend:** The award will be €21,750 per annum. This amount includes €16,000 per annum stipend and €5750 fees (EU fees) to the host institution.

**Start date:** Position will start on 2nd September, 2019.

Further information on doing a PhD at NUI Galway is available at <http://www.nuigalway.ie/courses/research-postgraduate-programmes/>. For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie). Further information about the Discipline of Bacteriology is available at <http://www.nuigalway.ie/bac/>. Informal enquiries concerning the scholarship may be made to Dr. Dearbháile Morris ([dearbhaile.morris@nuigalway.ie](mailto:dearbhaile.morris@nuigalway.ie)) or Dr Liam Burke ([liam.burke@nuigalway.ie](mailto:liam.burke@nuigalway.ie)).  
**NB:** Garda vetting is a requirement for this post.

**To Apply:**

Applications must include a C.V. and a cover letter outlining how your experience fits the essential and desirable qualifications/skills requirements, your motivation for the role, and the contact details of two academic referees. Applications must be sent via e-mail (as a single PDF only) to **Ms Debbie Monroe**, e-mail: [debbie.monroe@nuigalway.ie](mailto:debbie.monroe@nuigalway.ie) **on or before 5pm Friday May 24<sup>th</sup> 2019**. Please reference **PIER PhD application** in the subject line of your e-mail application.

**Closing date for receipt of applications is 5.00 pm on 24<sup>th</sup> May, 2019**