

# **Postgraduate Scholarship Information Sheet**

Scholarship Project Title	Molecular Strategies for Mosquito Monitoring and Surveillance
Advert Reference number	SETU_2024_238
Supervisor(s)	Dr Denise O'Meara, SETU, Waterford; Dr Thomas Curran, University of Innsbruck; Dr Annetta Zintl, University College Dublin; Dr Tomasz Kokurewicz, Wrocław University of Environmental and Life Sciences
Research Group	Molecular Ecology Research Group, Eco-Innovation Research Centre
Department /School/Faculty	Science
Duration	4 Years/48 Months
Status: Full-time / part-time	Full Time
Funding information	SETU 2024 Presidents Scholarship Programme
Value of the scholarship per year for four years	Stipend: €18,500 per annum Fees of €5,750 per annum Research costs- €2,000/€3,000 per annum
Closing date and time	August 14 <sup>th</sup> @4PM Irish Time
Interview date	To be confirmed
PhD commencement date	To be confirmed

**Project Key Words: (enter 3 to help advertise on online platforms)** *Mosquitoes; Molecular Ecology; Surveillance* 

### **Post summary**

Mosquitoes, vectors of numerous diseases, are migrating and establishing in new regions, including Ireland. Our study, in collaboration with the School of Veterinary Medicine at UCD and the Natural History Museum, aims to enhance knowledge of both resident and potentially invasive mosquito species in Ireland.

Employing a comprehensive surveillance approach, we will collect and analyse various biological samples using advanced DNA and real-time PCR techniques to identify mosquitoes. Additionally, we will expand blood meal analysis techniques to better understand vector-borne diseases and their transmission. This approach is expected to contribute significantly to molecular ecology, with applications in medical and veterinary entomology.

Field research will cover diverse environments across Ireland and extend internationally to Portugal through the Erasmus+ Blended Learning Programme. The focus will be on the diet of a protected bat species, in collaboration with the Institute of Environmental Biology at Wrocław University of Environmental and Life Sciences (Poland). The diet of bats will be genetically screened for mosquitoes and broader insect diversity.

Our research will advance our understanding of mosquito populations and their ecological impacts, fostering international collaborations and community engagement in biodiversity conservation efforts.

### Knowledge & Experience

### Essential

 BSc Hons in a biological discipline e.g. Biology, Molecular Biology, Zoology, Ecology, Agricultural Science

### Desirable

Experience in Entomology, Molecular Biology and Field work

# Skills & Competencies

#### Essential

- Applicants whose first language is not English must demonstrate on application that they
  meet <u>SETU's English language requirements</u> and provide all necessary documentation.
   See Page 7 of the Code of Practice
- In order to be **shortlisted for interview**, you must meet the SETU English speaking requirements so please provide evidence in your application.

#### Desirable

Good team player and communicator

#### **Further information**

For any informal queries, please contact <Dr Denise O'Meara> on email <denise.omeara@setu.ie > For queries relating to the application and admission process, please contact the Postgraduate Admissions Office <a href="mailto:researchadmissions@setu.ie">researchadmissions@setu.ie</a> or telephone +353 (0)51 302883.

For queries relating to the funding programme, please email <a href="mailto:scholarships2024@setu.ie">scholarships2024@setu.ie</a> University Website https://www.setu.ie/

## **Application procedure**

Download the Research PhD/MSc Application Form from the SETU website and return the completed application to researchadmissions@setu.ie quoting **SETU\_2024\_238** in the email subject line.

Please note that paper submissions will not be accepted.

The University may decide to interview only those applicants who appear from the information they provided, to be the most suitable in terms of experience, qualifications and other requirements of the post.

The University will short-list and interview those applicants who provide the most suitable information in terms of experience, qualifications and other requirements relevant to the scholarship.

SOUTH EAST TECHNOLOGICAL UNIVERSITY (SETU) IS AN EQUAL OPPORTUNITIES EMPLOYER

