

TEAGASC PHD WALSH SCHOLARSHIP OPPORTUNITY

CELL BIOLOGY

"SO-PLANTS"

Walsh Scholarship Ref Number **2023277**

Project Title: SO-PLANTS-In vitro digestion, bioavailability & muscle bioactivity of protein beverages from oat, quinoa, pea and favabean

Background:

We invite applications for a fully-funded 4-year PhD project (EU candidates). This cell biology PhD is part of a large project, funded by Irish Dept of Agriculture, Food & the Marine, entitled 'Sarcopenia in the Older post-menopausal woman-sustainable plant protein solutions (SO-PLANTS)'. The SO-PLANTS team will produce protein based beverages from oat, quinoa, pea and fava bean. The cell biology research component will track these beverages during protein digestion in the *in vitro* gut and assess their health benefits to gut and muscle cells. The PhD will go beyond 'state of the art' by developing laboratory models to mimic older adult digestion, to mimic an aged gut barrier and to mimic atrophic muscle.

Requirements:

EU Applicants should have a First or Second Class Honours B.Sc. degree (>65% final mark in a 4 year degree) in an appropriate discipline (such as Biochemistry, Cell Biology, Biomedical Science, Neuroscience, Genetics, Microbiology). In addition a relevant Masters degree (with a research component), is highly desirable.

The successful candidate should be self-motivated with enthusiasm to develop wet-lab technical skills across a range of disciplines. They should have an interest in and an aptitude for laboratory-based research.

For applicants whose first language is not English, the English language requirements accepted by MTU for entry into postgraduate studies are available at (for example: non-native speakers of English require a minimum IELTS score of at least 6.5 with no section below 6.0).

<https://www.mtu.ie/international/eu-applicants/>

Please read carefully 'Applicants to Courses at MTU Cork campus- Level 1'.

Award:

This PhD starts no later than **1 Jan 2025**. The student will be based primarily at Teagasc Food Research Centre, Moorepark, Fermoy, Ireland. The student will be registered at MTU, working under the supervision of Dr. Linda Giblin (Teagasc) in association with Dr. Michael Callanan (MTU) and Dr. Andre Brodkorb (Teagasc).

The scholarship funding is tax free at €31,000 per annum. This includes payment of University EU fees of up to a maximum of €6,000 per annum and a student stipend at a flat rate of €25,000 per annum which is tenable for 4 years.

Academic supervisors:

Dr. Linda Giblin (Teagasc), Dr. Michael Callanan (MTU) and Dr. Andre Brodkorb (Teagasc).

Application Procedure:

Send your CV (please include English test scores, University exam marks and technical experience) to Dr. Linda Giblin linda.giblin@teagasc.ie with 'SO-PLANTS' in the subject heading.

Closing date: 18 Oct 2024