



Research Masters Opportunity (MSc)

“Development of protective food matrices for milk protein hydrolysates”

Background

Food for Health Ireland (FHI; www.fhi.ie) is a centre for functional food development funded by Enterprise Ireland and members of the Irish Food Industry. FHI at UCD consists of up to 30 individual scientists/postgraduate students working on the development of milk based functional foods targeting health areas, which include early infant development, metabolic syndrome, immunity/infection and satiety. FHI combines expertise from a number of national institutes including University College Cork, University College Dublin, Teagasc – Moorepark Food Research Centre and University of Limerick.

Milk protein hydrolysates are formed when proteins are broken down by enzymes in the gut or by fermentation or ripening during food processing. Some of these hydrolysates are ‘bioactive’ – they have an effect on systems in the body which may initiate a potential health benefit. An important consideration in the development of functional foods is protecting these bioactive ingredients in food environments as well as targeting their delivery within the body. The recruited MSc student will investigate food matrix formulation strategies to facilitate the successful incorporation of milk protein hydrolysates into suitable food systems. This work will involve determining the stability of these matrices in the gastrointestinal tract (GIT) in order to ensure the physiological efficacy of the bioactive is retained. Thus, the main aim of this project is to protect and target the delivery of milk protein hydrolysates through appropriate formulation / design of food matrices.

Qualifications

The ideal candidate will have an interest in dairy chemistry, functional foods and ingredient functionality. As part of their studies the student will spend a significant portion of their time conducting laboratory research and reading scientific papers. Candidates should be enthusiastic, self-motivated individuals, who interact well within a larger research team and can work on their own initiative.

The student will possess;

1. An honours degree in Food Science, Food Technology or a related discipline.
2. Commitment to research and excellent problem solving skills.
3. Excellent scientific, organisational and project management skills.
4. Ability to work independently and as part of a multi-disciplinary team focused on delivery of high-quality research.
5. Excellent interpersonal and communications skills.

Award

The successful candidate will conduct their research under the supervision of Professor Dolores O’Riordan and will be based in the UCD Institute of Food and Health. A student stipend of €22,000 per annum is available from which the student is required to pay fee’s. The masters is planned to start in September 2017 and funding is available for 1 year.

Application Procedure

Enquiries regarding the position are welcome and should be sent to Dr. Irene McIntyre irene.mcintyre@ucd.ie or to Dr. Emma Feeney emma.feeney@ucd.ie

Applicants should email a cover letter (1 page) and CV (2 pages) to Dr. Emma Feeney emma.feeney@ucd.ie

Closing Date

Applicants are asked to submit their application no later than **August 9th** 2017.