

One Early Stage Researcher (ESR) position is available in the Marie Skłodowska-Curie Actions European Joint Doctoral Programme [YEASTDOC](#)

What is offered:

- A mentored PhD research project based at INRA Montpellier, France and the University of Leicester, UK
- Secondment to the industrial sector (Lallemand)
- A comprehensive training programme
- A 36 month contract on EU Marie Curie rates (€37,320k/pa + mobility allowance)

What is required:

- **Availability for immediate start is essential**
- An MSc degree in microbiology, biochemistry, biotechnology or similar discipline
- Demonstrated track record of motivation and high academic achievement
- Ability to work independently and in a team environment
- Willingness to undertake secondments and training with different partners
- Excellent English language skills

EU Marie Curie ITN eligibility requirements

Applicants can have no more than 4 years research experience at the time of recruitment. This is measured from the date when they obtained the degree that would formally entitle them to embark on a doctorate. Applicants must not have resided in France for more than 12 months in the 3 years prior to recruitment.

Project Description: *Metabolic network and genetic basis of aroma production in Saccharomyces hybrids*

Academic partners: INRA, Montpellier, France; University of Leicester, UK.

Industry Partner: Lallemand, France

Incorporating phenotypic traits of their two originated species, yeast hybrids exhibit a unique combination of properties and specific arrays of fermentation products. For example, wine yeast hybrids can combine the low temperature tolerance of one parent with the profile of volatile molecules (aromas) produced by the other. This project will first aim to generate new *Saccharomyces* interspecies hybrids with metabolic phenotypes of interest for wine industry. The second key point will be the identification the metabolic network and genetic loci responsible for fermentative characters and formation of aroma and flavour by these strains. This project will rely on the high-throughput aroma profiling and ¹³C-metabolic fluxes analysis of various *Saccharomyces sensu stricto* strains and hybrids during wine fermentation. Hybrids and diploid hybrid F1 progeny will be generated via tetraploid intermediates. QTL analysis will be then used to identify and validate the role of allelic variants on fermentative and metabolic characters. The suitability for commercialisation of new hybrids will be assessed by the industry partner.

1. **Applicants should check that they meet the eligibility requirements of an EU Marie Curie ITN (<https://yeastdoc.eu/position-available/>)**
2. **Send a Curriculum Vita (in Europass format) and a short (half page) personal statement to yeastresearch@ucc.ie, by 6th June 2019 mentioning 'ESR position' in the subject line.**
3. **A Skype interview will be conducted in mid-June.**
4. **It is intended that the person selected would start as soon as possible i.e. July 2019**