



Universidade de Évora
ICAAM – Instituto de Ciências Agrárias e Ambientais Mediterrâneas

Research fellowship

08 de Dezembro de 2016

A call is currently open for a research fellowship under the project “**MedOOMics - Mediterranean Extra Virgin Olive Oil Omics: profiling and fingerprinting**”, FCT “ARIMNET2/0001/2015” fully financed by Portuguese government state funding via the Fundação para a Ciência e Tecnologia, under the following conditions:

Área Científica: Chemistry, analytical chemistry, food chemistry

Admission requisites:

Candidates should have a Masters degree in Chemistry, Food Science, Biochemistry or Agricultural Sciences and a first degree in Chemistry, Food Science, Biochemistry or Agricultural Science. His/Her academic background should include subjects/courses of relevance to the theme of this project.

Specific Entry Requirements: The candidate should have significant (documented) experience in operating medium field Nuclear Magnetic Resonance (NMR) spectrometers such as 400 MHz instruments. He/She should be trained in the use of such equipment having experience in running various types of experiments that would include basic one- (^1H and ^{13}C) and two-dimensional standard experiments (COSY, NOSEY, etc). He/She should have a good understanding of the general working features of the equipment, both software programs and hardware, and be able to trouble-shoot when problems arise. He/She should be proficient in spectral analysis. Ideally the candidate should have experience in chemical analysis of food products using NMR techniques. The candidate should be a highly motivated, organized individual, with the ability to be able to work autonomously in the laboratory, but at the same time being a good team-player and with a track-record in accomplishing deadlines. The candidate should have excellent English language skills (both speaking and writing).

Work Plan:

The aim of MedOOMics project is to develop cutting edge innovative methods for the characterization of olive oils from Portugal, France, Turkey and Tunisia, with the goal of identifying markers for determining varietal and geographical origin. This international project involves a multi-disciplinary team from the above countries. This student will develop NMR protocols for quantifying the triacylglycerol (TAG) fraction of the olive oils. Samples from the

different varieties under study will be analyzed using quantitative ^1H and ^{13}C NMR with DEPT (Distortionless Enhancement by Polarization Transfer) editing, in order, to construct a predictive model for discriminating between the various olive oils. It is expected that this analysis will show some important trends between the regional samples studied. To check the validity and predictive power of this model, samples from different cultivars from each of these regions will be analyzed to determine their correlation or not with the data previously provided, and to corroborate its applicability. The ^1H and ^{13}C NMR techniques will be compared. The student will work with a Bruker Avance III 400 MHz spectrometer, installed in 2014, it is equipped with an automatic sample changer. He/She will be expected to participate in the maintenance of the equipment, which will include liquid nitrogen (weekly) and helium refills (yearly). The student will be expected to actively participate in various meetings of the MedOOMics project team and present his/her results at these meetings.

Legislation: A fellowship contract will be made between the University of Évora and the research fellow, under the terms of the Research Scholarship Regulations of the University of Évora, (service order nº1/2011), the Statute of the Research Fellow (Law nº40/2004 de 18 de Agosto e Decreto-Lei nº 202/2012 de 27 de Agosto), and respecting all the legislation and regulations listed in the *Regulamento de Formação Avançada e Qualificação de Recursos Humanos da FCT*.

Place of work: The work will be carried out in the NMR laboratory (room 123) and in laboratory 029 at the School of Science and Technology located in Colégio Luis António Verney (CLAV) at the University of Évora under the supervision of Prof. Anthony Joseph Burke.

Fellowship duration: The fellowship will start in February 2017. The fellowship will be for 6 months with the possibility of renewal for another 6 months (12 months total).

Payment: The student will receive a monthly allowance of €980, in accordance with the established values stipulated by FCT, I.P. in Portugal (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>). Payment will be made by cheque or bank transfer.

Selection Procedure: The selection of the candidate will be made using the following criteria:

- a) Curriculum evaluation (maximum 50 points)
 - b) Previous experience and background according to the “admission requisites” (maximum 40 points).
 - c) Adequacy of the scientific area of expertise (maximum 10 points).
- shortlisted candidates - those with the highest classifications, and who are deemed to have the most suitable profiles that match the requirements for this position - may be called for interview.

Composição do Júri de Seleção:

Presidente: Prof.^a Doutora Maria João Pires de Bastos Cabrita

1º Vogal – Prof. Doutor Anthony Joseph Burke
2º Vogal – Doutora Raquel Marta Neves dos Santos Garcia
1º Suplente – Prof. Doutor Fernando Manuel de Campos Trindade Rei
2º Suplente – Prof. Doutor Augusto Vieira Peixe

Publicity and notification of results: The final result of the selection will be made public through a ranking list which will be exhibited in a visible public place in the Chemistry Department/CQE of the University of Évora, the candidates also will be notified by email.

Deadline and form of application: The call is open between 27 December and 9 January of 2017 and the results are expected to be published after 12 January.

The applications should be made by sending a letter of intent together with the following documents: document ID, curriculum vitae, academic certificates and any other document deemed relevant by the candidate, as well as two recent letters of recommendation to support the candidates application (if needed the jury should be permitted to contact the referees if required).

The applications should be sent to:

Prof. Doutora Maria Joao Cabrita
Departamento de Fitotecnia da Universidade de Évora
Apartado 94, 7002-554, Évora

e-mail: mjbc@uevora.pt