BOLSA DE INVESTIGACAO

Encontra-se aberto concurso, de 29 de julho a 9 de agosto de 2013, para apresentação de candidatura a uma Bolsa de Investigação no âmbito do projeto "PTDC/AGR-TEC/3107/2012 – Integral assessment of risk-based intervention strategies to improve the microbial safety of Portuguese traditional sausages (QTradiSaus)", financiado pela FCT e pelo FEDER através do programa COMPETE), a decorrer no Centro de Investigação de Montanha do Instituto Politécnico de Bragança.

Project background

The objective of the QTradiSaus two-year project is to assess control measures to reduce the levels of *Salmonella*, *Listeria monocytogenes* and *Staphylococcus aureus* in the production of Portuguese dry-fermented sausages. In the first place, this will be done by obtaining information on the current level of contamination in factories by means of microbiological, physicochemical and manufacture surveys. With these results, the overall association between microbial levels and physicochemical properties of the product will be understood. Furthermore, the performance of current microbiological criteria for ready-to-eat products will be assessed. On the second year, the survival of pathogens in the dry-fermented sausage along manufacture will be tracked by the conduction of fate or inoculation studies. This will enable the creation of a predictive microbiology model which will be later utilised for the construction of an exposure assessment model. Simulation will be conducted for what-if scenarios that allow the optimisation of the manufacture technology of the Portuguese dry-fermented sausages in terms of microbial safety.

Candidate profile

The researcher (BI) will aid in the development of statistical models assessing the associations between microbial levels and physicochemical properties of the sausages, as well as in the construction and testing of predictive microbiology models. He/she will give support in the assessment of the performance of EU microbiological criteria for the current levels of contamination of this Portuguese product. It is expected that on some occasions, the researcher will accompany the collection of sausage samples from factories.

Requirements

The candidates must have a Degree in Engineering (either Animal Science or Food), knowledge on meat quality and safety, and experience in data analysis (i.e., meta-analysis, robust regression).

It is also desirable that the candidate has a good command of written English, and some knowledge on predictive microbiology, food safety legislation and the use of the R software.

Documents to be presented are:

- a) Cover letter indicating motivation and professional objectives
- b) CV (maximum 3 pages including contact details of two referees)
- c) Copies of Degrees certificates

They should be submitted as one PDF file by e-mail to:

Dr. Ursula Gonzales-Barron E-mail: <u>ubarron@ipb.pt</u> Research Fellow CIMO Mountain Research Centre School of Agriculture (ESA)

Evaluation criteria

The evaluation criteria are the following:

- a) Qualifications and final marks, quality of CV and suitability for the tasks of the project (50%).
- b) Knowledge on meat quality/safety (30%)
- c) Data modelling using R (20%).

The best two candidates may be called for interview. In case of a foreign candidate, interview, even if virtual, is a must.

Applicable legislation

Lei Nº. 40/2004, de 18 de Agosto (Estatuto do Bolseiro de Investigação Científica); Regulamento de Bolsas do Instituto Politécnico de Bragança.

Duration

The researcher scholarship has duration of 12 months, renewable up to a maximum of 10 months, starting in October 2013. The research will be carried out in the installations of the School of Agriculture (ESA) of the Polytechnic Institute of Bragança (IPB).

Stipends

The stipend of €745 per month corresponds to the standard values of scholarships granted directly by FCT, I. P. for researchers (BI) (<u>http://alfa.fct.mctes.pt/apoios/bolsas/valores</u>). Payment is done by bank transfer.

Members of the assessment board

Dr. Ursula Gonzales-Barron (President) Prof. Dr. Vasco Cadavez Prof. Dr. Teresa Dias

Notification of results

The final results of the assessment will be divulgated to all candidates by e-mail annexing a table of punctuations. The approved candidate will be notified by an additional e-mail.