

IBMC - Instituto de Biologia Molecular e Celular

Research fellowship (f/m)

Internal Code: Norte2020NEURO67

Project: NORTE-01-0145-FEDER-000008, Porto Neurosciences and Neurologic Disease Research at i3S

Title: Understanding pup mortality in laboratory mouse breeding

IBMC/i3S is opening **1 (one) Research Fellowship (Master)** to join its Research Program in Neurosciences.

Group and PI: Laboratory Animal Science, IBMC-i3S under the supervision of Dr Anna Olsson.

Candidate profile: Degree (BSc+MSc or integrated Master) in animal sciences, veterinary medicine, biology or related disciplines with an average mark* of 16 or higher. Research experience and motivation to develop a research career are required. Preference will be given to candidates with experience with laboratory animals and/or animal behaviour and welfare research, excellent spoken and written English and availability to do field work outside Portugal.

*according to the Portuguese classification system or equivalent international grades.

Selection: Candidates will be first ranked according to their CV and letter of motivation, using a scale ranging from 0 to 20. Candidates with a mark higher than 15 will be invited for an interview by the Selection Committee, evaluated using a scale ranging from 0 to 20. Final candidate ranking will include curricular evaluation (weight of 50%) and outcome of interview (weight of 50%).

Work Plan:

Perinatal mortality is a widespread problem in laboratory mouse breeding. The consequences of the problem go beyond animal health and welfare, since often the entire litter is lost, interfering with breeding logistics and requiring a greater number of breeding animals to ensure that enough animals are available for research. Mortality varies between animal facilities and mouse genotypes, with figures of 20-30% for the most common strains. Despite the importance of the problem, there has been little research into the phenomenon and its underlying factors. Experimental studies indicate a number of factors which affect pup survival, including maternal diet, infection, genotype, cage type, experience and maternal stress reaction. However, these have been identified in single studies using a wide variety of methods, with very little systematic research into perinatal mortality under normal conditions. In an ongoing research project, we are using a multidisciplinary approach combining ethology with epidemiology and studies of animal micro-environment, in order to identify potential risk factors for pup mortality.

The research fellow will collect and process animal behaviour data and animal environment data in animal facilities in Portugal and potentially in the United Kingdom.

The Research Fellowship will be for **12 months**, not renewable, and it is expected to start in **April 2018**.

The fellowship amount is 980 euros, paid by bank transfer, preferentially.
(<http://alfa.fct.mctes.pt/apoios/bolsas/valores>)

Fellowships are regulated by current laws relating to the Statute of Science Research Fellows, namely Law 40/2004 of August 18, amended and republished by Decree-Law No. 202/2012 of 27 August and the Regulation of Scientific Research Studentships of IBMC approved by Fundação para a Ciência e Tecnologia
(<http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf>)

Selection Committee:

Anna Olsson (PhD), Gabriela Munhoz Morello (PhD), Ana Catarina Vieira de Castro (PhD)

Applications are open from 1st March to 15 March 2018.

To apply for the Research Fellowship interested candidates must submit the following documents
a) Complete CV; b) Letter of Motivation indicating two persons who can give references and c) Master Certificate, *via* the online application system:

<http://www.ibmc.up.pt/gestao candidaturas/index.php?codigo=Norte2020NEURO67>

The ranking list of candidates will be published at IBMC website, and the selected candidate will be notified by email.