IBMC - Instituto de Biologia Molecular e Celular

Postdoctoral fellowship (f/m)

Internal Code: Norte2020NEURO39

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

Title: Identification of proteins that interact with the wild-type (non-expanded form) polyQ region in proteins causing human polyglutamine diseases

IBMC/i3S is opening **1 (one) Postdoctoral Fellowship** to join its Research Program in to join the Phenotypic Evolution group a at I3, a team working in molecular evolution aiming to understand the molecular basis of phenotypic variation, under the supervision of Cristina Vieira (Evolutionary Systems Biology group at IBMC).

We are looking for a Fellow holding a PhD in Molecular Biology, Genetics, Biology or related fields, with less than three years of post-doctoral experience, with full autonomy in bio-informatics tools for both evolutionary and protein analyses. Preference will be given to candidates with previous experience in database analyses, especially PPI. English language, both spoken and written, and good inter-personal relationships in the context of a multidisciplinary research team are essential attributes.

Work Plan:
The polyglutamine (polyQ) diseases are a group of neurodegenerative disorders triggered by expanded CAG repeats. Nine disorders are described in structurally unrelated proteins. Besides the association with disease, polyQ sequences are common in eukariot proteins. Their function is to stabilize protein–protein interactions (PPI) and/or spacer elements between individual folded domains in molecules that mediate PPI. PolyQ expansion results in abnormal interactions. PPI are available in public available databases. In this work, using an evolutionary approach, we will analyze these databases to identify proteins that putatively interact with polyQ and its surrounding regions. For these proteins we will perform the computational characterization to validate the putative interaction. For those proteins that in silico show an interaction, we will also perform functional studies.

The work will be developed at Instituto de Investigação e Inovação em Saúde - i3S, Porto, Portugal, at the Phenotypic Evolution group, under the supervision of Cristina Vieira (Evolutionary Systems Biology group at IBMC).

Selection of candidates:

Candidates will be selected according to their CVs (60%) and, for the best candidates, through an interview (40%).

The Postdoctoral Fellowship will be for 8 months, renewable, and it is expected to start in March 1st 2017.

The fellowship amount is 1495 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 INEB approved by Fundação para a Ciência e Tecnologia
(http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf)

Selection Committee:
Cristina Vieira, PhD
Jorge Vieira, PhD
Clara Pereira, PhD

Applications are open from February 3th to 15th, 2017.

To apply for the Postdoctoral Fellowship interested candidates must hold a PhD degree, with less than three years of post-doctoral experience, and submit the following documents a) Complete CV; b) Letter of Motivation; and c) Name and contact of a potential referee, *via* the online application system:
http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=Norte2020NEURO39

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