PhD position

Visualizing and Understanding Mechanical Stimuli During Development and Disease in Zebrafish

We are happy to announce that we are seeking an outstanding PhD candidate to join the Pantazis lab at the Department of Bioengineering at Imperial College London. Our Laboratory of Advanced Optical Precision Imaging (https://www.pantazis-lab.org/) uses an interdisciplinary and quantitative approach to capture the chemical and mechanical dynamics of development and disease by using cutting-edge approaches to live imaging.

Our team addresses the growing imaging needs of the biological community by developing assays (Nat Cell Biol 2011), imaging technologies (Nat Prot 2016, Nat Methods 2015), reagents (Angew Chem Int Ed 2017, Nat Methods 2017, PNAS 2010), and algorithms (eLIFE 2019) for carrying out imaging with

i) high spatiotemporal resolution down to the single-cell level and
ii) sensitivities down to individual proteins (reviewed in Nat Rev Mol Cell Biol 2014).

We will be excited to expand our lab team with a passionate and highly motivated PhD student. The successful candidate will use our recently developed genetically-encoded reporter for mechanical stimuli (GenEPI) to investigate the spatiotemporal dynamics of mechanical processes and their relation to molecular and cellular processes during development, disease and regeneration in zebrafish. In addition, the candidate will be able to work in a collaborative manner with a highly interdisciplinary group spanning physics, chemistry, engineering and developmental biology, which allowed previous PhD students to successfully author both publications and patents.

Experience in molecular and quantitative biology as well as in zebrafish development will be considered positively. Applicants should email a CV (including contact information for two references) and a description of research interests to Dr Periklis Pantazis (p.pantazis@imperial.ac.uk). Applications submitted by April 30th, 2019 will receive priority consideration, but the position will remain open until filled. Start date is as soon as possible.

The Department of Bioengineering at Imperial College London is rated as the top UK department of bioengineering. Research in the Department of Bioengineering is highly interdisciplinary, performing research at the interface of engineering and life sciences in fields ranging from synthetic biology and biomimetics to tissue engineering and regenerative medicine, which will provide a powerful basis for the candidate to perform research in advanced precision imaging in systems biology with a strong outlook in medical systems biology and translational research.