

Postdoctoral and PhD positions on Cell Cycle Control and the Maintenance of Genomic Integrity

Two Postdoctoral and two predoctoral research positions are available in the laboratory of Dr Zoi Lygerou, School of Medicine, University of Patras, Greece, to work on dynamic complexes maintaining genome integrity. We study the control mechanisms which safeguard genomic stability by ensuring once per cell cycle replication in eukaryotic cells and how defects in this control may lead to tumorigenesis. To this end, we combine: molecular-cell biology studies in human cells, genetic studies in fission yeast, analyses of tumour specimens, advanced live cell imaging and modelling of biological networks.

Selected recent publications:

- Roukos V, Kinkhabwala A, Colombelli J, Kotsantis P, Taraviras S, Nishitani H, Stelzer E, Bastiaens P, and Lygerou Z (2011). Dynamic Recruitment of the Licensing Factor Cdt1 to Sites of DNA Damage **J. Cell Science**, 124:422-432
- J. Lygeros, K. Koutroumpas, S. Dimopoulos, I. Legouras, P. Kouretas, C. Heichinger, P. Nurse, Z. Lygerou (2008) Stochastic hybrid modelling of DNA replication across a complete genome. **Proc Natl Acad Sci USA**, 105:12295-12300.
- G. Xouri, A. Squire, M. Dimaki, B. Geverts, P. J. Verveer, S. Taraviras, H. Nishitani, A. B. Houtsmuller, P.I. H. Bastiaens, Z. Lygerou.(2007) Dynamic chromatin association of Cdt1 throughout G1 leads to Geminin recruitment onto chromatin. **EMBO J**, 26:1303-1314.

Qualifications

For Postdoc: PhD in Molecular Biology or related fields

Prior experience with advanced live-cell imaging methods (for Position 1) or yeast genetics (Position 2) will be positively evaluated

For PhD: BSc/MSc in Biology or related fields (Position 1) and Computer Sciences or Computational Biology (Position 2)

Application

send letter of motivation, CV, description of previous research activity and names of 3 referees by email to lygerou@med.upatras.gr

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