IBMC
INSTITUTO DE BIOLOGIA MOLECULAR E CELULAR
INSTITUTE FOR MOLECULAR AND CELL BIOLOGY

# Post-Doctoral Grant (m/f)

**Project title**: Actin and myosin II in the contractile ring - mechanisms of constriction

**Reference:** FCOMP-01-0124-FEDER- 028255-PTDC/BEX-BCM/0654/2012 funded by national funds through FCT/MEC (PIDDAC) and co-funded by FEDER through COMPETE - Programa Operacional Factores de Competitividade (POFC)

**Internal Reference:** PR691501

**Scientific Area:** Cell Biology

**Candidate profile**:
The candidate must have a PhD in the area of Cell Biology or Biophysics and at least one first author publication in an international peer-reviewed journal. Experience with *C. elegans*, confocal microscopy or biophysics are advantageous. Fluent written and spoken English is a requirement.

**Background and work plan**:
Cytokinesis is the process that completes cell division, ensuring the generation of two physically separated daughter cells with one genomic complement each. Failure of cytokinesis gives rise to polyploid cells, which are postulated to be a critical intermediate in the development of cancer. In animal cells, cytokinesis is accomplished via constriction of a contractile ring. The molecular mechanisms that allow the contractile ring to constrict at the end of each cell cycle are largely unknown. We are particularly interested in understanding the contribution of the two major players in the contractile ring, actin and non-muscle myosin II to constriction using the *C. elegans* embryo as model system. The candidate will have the opportunity to learn high-resolution live microscopy, gene replacement technology based on CRISPR-Cas9 and MosSCI technologies, RNA interference, and genetics.

**Application procedure:**
Applications should include a letter of motivation, CV and 2 reference letters/contacts, and must be submitted on the IBMC webpage:
http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=PR691501
between 12 and 26 February 2015.
In case of questions please contact: anacarvalho@ibmc.up.pt

**Working Place:** Laboratory of Cytoskeletal Dynamics, IBMC. https://www.ibmc.up.pt/research/research-groups/cytoskeletal-dynamics

**Legislação e regulamentação aplicável**: Employment at the IBMC is regulated by current laws relating to the Statute of Science Research Fellows of Fundação para a Ciência e Tecnologia, I.P. - 2012, 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 the IBMC approved by Fundação para a Ciência e Tecnologia (www.ibmc.up.pt/fellowships.php)

COMPETE
QUADRO DE REFERÊNCIA ESTRATÉGICO NACIONAL
UNIÃO EUROPEIA
Fundo Europeu de Desenvolvimento Regional

**Evaluation of applications:**
Based on the written documentation (CV, motivation letter and references), the most qualified candidates will be selected for a personal interview. The total evaluation will be based on written documentation (50%) and interview (50%).

**Jury:** President - Ana Xavier de Carvalho (PhD); Ordinary members - Reto Gassmann (PhD) and Fung-Yi Chan (PhD)

**Results:** the final results are announced at the IBMC site**.**

**Grant conditions:**
The fellowship starting date is March 15 2015. It will be awarded for 3.5 months, eventually renewable. The monthly amount of the fellowship is € 1495 (http://alfa.fct.mctes.pt/apoios/bolsas/valores) paid by bank transfer, preferentially.