

INVESTMENTS IN EDUCATION DEVELOPMENT

Postdoctoral research fellow position (tutor Michal Žurovec)

Project title: Drosophila Molecular Genetics

Hosted by: The Laboratory of Molecular Genetics (LMG)

Biology Centre of the Academy of Sciences, Czech Republic

The position will be supported by the European social fund and the Czech state budget.

Workplace: The LMG is well equipped for molecular genetic and cell biology methods. The team pioneered targeted gene disruption and homologous recombination in Drosophila and silkworm and has fruitful international collaboration. Major research areas related to the PostDoc project:

- A.** Drosophila response to nematobacterial infection
- B.** Molecular signaling involved in Drosophila energy homeostasis
- C.** Gene targeting by TAL-effector nucleases

For more details of research, projects, publications and staff see:

<http://www.entu.cas.cz/en/departments/department-of-molecular-biology-and-genetics/laboratory-of-molecular-genetics/>

Position summary: The fellow will conduct genetic analysis of signal transduction pathways involved in insect innate immunity and energy homeostasis. The work will include characterization of Imaginal disc growth factors (IDGFs) – a protein family involved in the regulation of antimicrobial response and downregulation of catabolic reactions in Drosophila body. There are six members of IDGF family, which seem to have partially overlapping functions. There are two human homologs (HCgp39 and YKL40) involved in inflammations and autoimmunity. The project should involve characterization of IDGF mutants, the study of role of IDGFs in nematobacterial response, as well as analysis of biochemical properties of IDGF proteins in tissue culture.

Prerequisites – good knowledge of insect physiology and genetics

The work will include a 3-month stay abroad in the lab of Ulrich Theopold, (University of Sockholm, Sweden)

Pedagogical activities: Participation in courses: Molecular genetics of model organisms and Molecular Genetics II, taught in the Faculty of Science, University of South Bohemia

Duration of contract: Selected candidate will be offered a **position for up to 19 months starting from May 1st, 2013**. The salary is about 1800 EUR brutto per month and this amount corresponds to a good living standard in the Czech Republic. Extension of the contract beyond 19 months may be possible, pending renewed funding.

Qualifications: Interested candidates must have successfully obtained their Ph.D. degree in a relevant discipline after March 29th, 2008. A good knowledge of English language (corresponding to CAE or equivalent) is required. Some knowledge of the Czech language will prove useful.

How to apply: **Interested candidates should apply no later than April 28st, 2013** by submitting the following documents and information to **M. Žurovec** (zurovec@entu.cas.cz), C/c to xxx and to **A. Navrátilová** (navratilova@bc.cas.cz): (1) Cover letter explaining the candidate's research interests; (2) Detailed CV including a list of publications and other achievements; (3) Certified academic transcripts and diplomas (scanned copies); (4) List of minimally two referees who can testify on the candidate's character and performance; (5) Declaration of the candidate's proficiency in English.

Announcement of results: The Evaluation Committee will convene in late April 2013 and candidates will be immediately informed of the results.