

INVESTMENTS IN EDUCATION DEVELOPMENT

Postdoctoral research fellow position (tutor Vladimír Košťál)

Project title: *Insect diapause and cold tolerance*

Hosted by: *Laboratory of insect diapause*

Biology Centre of the Academy of Sciences, Czech Republic

The position will be co-financed by the European Social Fund and the state budget of the Czech Republic.

Workplace:

The laboratory of insect diapause conducts basic research on insect adaptation to seasonality and overwintering. Two major research directions focus on: (a) the functional participation of clock genes and circadian clock system in perception of daylength and diapause induction; (b) the physiological mechanisms of high cold tolerance in diapausing insects and development of long-term cryopreservation techniques.

For more information see: <http://www.entu.cas.cz/kostal/>.

Position summary:

Research: The fellow will pursue research on molecular, biochemical and physiological characterizations of the developmental switch from direct ontogeny to diapause. Pathways leading to the arrest of cell division cycle in the target tissues and protection of cells from apoptotic death. Mechanisms of cellular and tissue protection against the effects of low temperatures and principles of chill- and freeze-injury repairs.

Abroad stay: The work will include a 4-month stay abroad at the Department of Bioscience, University of Aarhus, Denmark (contact persons: Martin Holmstrup, Mark Bayley, Jesper Sørensen) where the fellow is expected to establish working contacts and learn techniques of biochemical (NMR, HPLC) and transcriptomic analysis of the organismal response to environmental stress.

Pedagogical activities: The fellow will supervise one doctoral student and will cooperate, share experience, methods and techniques with other students in the Laboratory of diapause.

Other activities: The fellow is expected to actively communicate with other research groups in the Biology Centre ASCR and the Faculty of Science, University of South Bohemia. Within the frame of this position, he will visit international conferences where he is expected to present his results. He will publish his main results in renowned scientific journals.

Duration of contract:

Selected candidate will be offered a position for up to 34 months starting from September 1st, 2012. 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 34 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 July 31st, 2012 by submitting the following documents and information to **A. Navrátilová** (navratilova@bc.cas.cz):

- Cover letter explaining the candidate's research interests
- Detailed CV including a list of publications and other achievements
- Certified academic transcripts and diplomas (scanned copies)
- List of minimally two referees who can testify on the candidate's character and performance
- Declaration of the candidate's proficiency in English

Announcement of results:

The Evaluation Committee will convene in August 2012 and candidates will be immediately informed of the results.