

Postdoctoral research fellow position (tutor Petr Kopáček)**Project title: *Tick-borne pathogen transmission*****Hosted by: *The Laboratory of Vector Immunology,******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 Laboratory of Vector Immunology (LVI) is long-term focused on molecular interactions between tick and tick-borne pathogens. The research in LVI covers three main areas which have a promising potential in the pathogen transmission control: (i) tick innate immunity; (ii) blood digestion and (iii) iron metabolism. The model species is the hard tick *Ixodes ricinus*, the European vector of tick-borne encephalitis and Lyme disease.

The methodological approach is based on the reverse genetics involving identification of genes of interests, assessing their function by RNA interference, tissue and stage profiling by quantitative real-time PCR, production and characterization of recombinant proteins, *in vivo* and *in vitro* phagocytic assays, immunolocalization by confocal and electron microscopy, and pathogen transmission experiment from infected ticks to laboratory model animals.

For more details of research, projects, publications and staff see: <http://www.paru.cas.cz/en/section/ticks-and-tick-borne-diseases/laboratory-of-vector-immunology/>

Position summary: The fellow will pursue research in exploiting the established robust and reliable **model for quantification of pathogen transmission** from infected ticks to experimental animals. This project will be primarily focused on molecules of the tick immune system involved in acquisition, persistence and transmission of the spirochetes from the *Borrelia burgdorferi* sensu lato complex and will be further extended for transmission model of the rickettsia *Anaplasma phagocytophilum* and the protozoan parasite *Babesia divergens*. The candidate is supposed to have previous experience with ticks or another blood feeding disease vector, willing and authorized to work with experimental animals (mice, guinea pigs, rabbits and gerbils) and be involved in tick field collection and laboratory rearing. Good background in light, confocal and electron microscopy as well as methods of functional genomics (RNAi) would be beneficial. The candidate is supposed to supervise 1-2 undergraduate student diplomas solving partial tasks of the project.

The work will include a 3-month stay abroad at a laboratory focused on the innate immunity of blood-feeding disease vectors (e.g. INSERM/CNRS Strasbourg, France - Dr. Stephanie Blandin or Max Planck Institute for Infection Biology, Berlin, Germany – Prof. Elena Levashina).

Pedagogical activities: Supervising of 1-2 undergraduate diplomas. Teaching the course Biology of Disease Vectors.

Other activities: Cooperation with the other tick research groups at the Institute of Parasitology in implementation of advanced immunolocalization methods.

Duration of contract: Selected candidate will be offered a position for up to 22 months starting from September 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 22 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 August 21st, 2013** by submitting the following documents and information to **P. Kopáček** (kopajz@paru.cas.cz), C/c 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 August 2013 and candidates will be immediately informed of the results.