Postdoctoral position

Project title: **Development of circadian system in mammals**
Supervisor: **Prof. PharmDr. Alena Sumova, DSc.**

Laboratory of Biological Rhythms
Institute of Physiology of the Czech Academy of Sciences
Address: Videnska 1083, 142 00 Prague 4, Czech Republic
Website: **https://fgu.cas.cz/en/research-and-laboratories/research-departments/laboratory-of-biological-rhythms/**

The project aims to **characterize the communication pathways between the maternal circadian system and the fetal and neonatal clocks** using animal models, including laboratory rats, mice, and transgenic mouse models. To achieve this, a wide range of molecular and behavioral techniques commonly used in circadian research will be employed.

Work Environment: Our laboratory routinely employs a range of advanced methods, including immunohistochemical techniques for detecting antigens in tissue sections, confocal microscopy, Western blot analysis, and in situ hybridization using 35S-labeled rRNA probes. We also utilize RT-qPCR, single-cell real-time recording for detecting bioluminescence from organotypic tissue explants of mPer2Luc mice with a circadian luminometer (LumiCycle, Actimetrics, Inc., USA) and the Luminoview LV200 luminescence microscope (Olympus). Additional techniques include AAV transfection and analysis of large data sets obtained through omics technologies. The laboratory offers a friendly and collaborative environment.

Applicant Profile (Requirements):

- PhD degree or equivalent in one of the following fields: Physiology, Neuroscience, Molecular Biology, Biochemistry, Medicine, or related disciplines, or expected to graduate this year
- Fluency in English and strong writing skills are required
- Previous experience with biostatistics, in vivo models (e.g., mouse and rat), and molecular biology techniques is an advantage

Position Details and Benefits:

- Work in a creative, international environment
- Competitive salary based on the Institute's internal policies, as well as the candidate's skills and experience
- Access to state-of-the-art laboratory facilities and resources
- Opportunity to collaborate with diverse international research teams.
- Professional development opportunities and career mentorship
- Working benefits (e.g. health insurance, language courses, meal allowance, childcare, institutional lodging house)
- Full-time position (1.0 FTE)
- 5 weeks of holiday, plus 1 additional week of holiday, and 3 sick days

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Duration
The postdoctoral position with a duration of up to 3 years will start depending on the agreement between the applicant and the supervisor.

How to apply:
Send your **CV** (including a list of publications), contact details for 2-3 **referees** and a **motivation letter** to personalni@fgu.cas.cz