

POSTDOCTORAL FELLOWSHIP OPPORTUNITY

MSCA Postdoctoral Fellowship

Laboratory of Cholinergic Signaling

Institute of Physiology of the Czech Academy of Sciences, Prague

About the Position

We are seeking a highly motivated postdoctoral researcher with a background in neuroscience to join our **Laboratory of Cholinergic Signaling**. The successful candidate will lead a project focusing on genetic and pharmacological approaches (and their combination) to manipulate acetylcholine receptors expressed by specific neuronal populations and animals' behavior.

The selected candidate will be supported to apply for a **Marie Skłodowska-Curie Postdoctoral Fellowship (MSCA PF)** with full institutional support for proposal preparation. The successful candidate will also be eligible to participate in the internal competition of the Institute of Physiology of the Czech Academy of Sciences for postdoctoral salary support.

Research Focus

The Laboratory of Cholinergic Signaling aims to uncover the functional significance of acetylcholine receptors expressed in specific neuronal types and develop new technologies allowing us to selectively target the unique receptor populations. To achieve this, we are using

- imaging and molecular techniques to measure receptor expression in particular cell types,
- genetic mouse models and viral vectors to control receptor signaling in particular cell types,
- and advanced behavioral analysis to test functional consequences of our manipulations.

In addition, we are developing

- a gene-directed enzyme prodrug system that uses a combination of genetics and pharmacology to control receptor signaling with high precision and flexibility.

What We Are Looking For

- PhD in neuroscience, or a related field
- Experience in some of the following areas: microscopy and image analysis; FISH/RNA scope; cloning and preparation of viral vectors; behavioral testing, including automated behavioral analysis (DeepLabCut, Live Mouse Tracker); primary neuronal cultures; electrophysiology; in vivo calcium imaging;
- Good communication skills in English

What We Offer

- Guidance for fellowship applications, including basic support with proposal structure, requirements, and feedback on key sections
- Support in project management primarily through mentoring, and individual consultation
- Access to well-equipped facilities (sequencing, imaging, animal behavior)
- Interdisciplinary research environment at the Bio-Medical Campus with strong international collaborations
- Opportunities for career development, conference attendance, and independent project development
- Employee benefits: 5 weeks vacation + 3 sick days, Multisport/Edenred, on-site gym and squash court, parking, bike storage, and access to on-site kindergarten

Eligibility

MSCA Postdoctoral Fellowship: PhD awarded by call deadline (September 2026); no more than 8 years of postdoctoral experience; must not have resided in Czech Republic for more than 12 months in the past 36 months.

Timeline

Applications will be accepted until the position is filled. The MSCA PF deadline is September 2026. Early contact is encouraged to allow time for joint proposal development.

How to Apply

Please send your CV, a brief statement of research interests, and contact details for 2–3 references to personalni@fgu.cas.cz.

Helena Janickova, M.D., Ph.D.
Head, Laboratory of Cholinergic Signaling
Institute of Physiology of the CAS, v.v.i.
Vídeňská 1083, 142 00 Prague 4, Czech Republic

The Institute of Physiology of the Czech Academy of Sciences is an equal opportunity employer.