

Postdoctoral Fellowships (2): "Involvement of nitric oxide on behavioral and molecular changes induced by exposure to an intense stress: possible effect of Cannabidiol on these responses". AND "Participation of mCPF in the rapid and sustained effect of drugs in a model of depression resistant to conventional antidepressants: possible involvement of endocannabinoid modulation on the cortical glutamatergic system"

About this opportunity

The Laboratory of Neuropsychopharmacology (NPPLab) of the School of Pharmaceutical Sciences of Ribeirão Preto (co-headed by Sabrina Lisboa and Sâmia Joca) is looking for two postdoctoral researchers to develop cutting-edge research in the area of brain mechanisms of stress-related diseases and cannabidiol (CBD) effects. The projects are linked to a FAPESP Thematic Project (Process 2017/24304-0).

In the **Project #1**, *"Involvement of nitric oxide on behavioral and molecular changes induced by exposure to an intense stress: possible effect of Cannabidiol on these responses"*, the aim is to investigate molecular mechanisms related to nitric oxide in the anxiogenic effect and impairment of fear extinction induced by exposure to an acute traumatic stressor, as well as to evaluate the potential of cannabidiol in modulating such alterations. This project will involve combining various Molecular Biology techniques (qPCR, Western-blot, ELISA, Immunohistochemistry, gene silencing), and confocal microscopy with animal behaviors.

In the **Project #2**, *"Participation of mCPF in the rapid and sustained effect of drugs in a model of depression resistant to conventional antidepressants: possible involvement of endocannabinoid modulation on the cortical glutamatergic system"*, the main objective is to identify the neural circuits and molecular mechanisms involved in antidepressant resistance, as well as to evaluate the therapeutic potential of cannabidiol in this condition. This project will combine Molecular Biology techniques (qPCR, Western-blot, and immunohistochemistry), manipulation of neural circuits by chemogenetics (DREADD) and animal behavior.

Required qualifications:

- PhD degree and training in the fields of Neuroscience, Pharmacology, or related fields obtained in the last 7 years.
- Experience with scientific writing
- History of publications in high profile international journals

Required skills

- Experience in conception, design and performance of neuroscience-related experiments, including stereotaxic surgery and intracerebral infusions
- Experience with behavioral assessment in mouse or rat models
- Experience with Molecular biology techniques (qPCR, Western-blot, ELISA, gene silencing)
- Experience with Immunohistochemistry and confocal microscopy
- Experience with cell culture (Project #1)
- Experience with chemogenetics (Project #2)
- Good writing skills, evidenced in peer-reviewed publications
- Skills in statistical analysis in GraphPad Prism, SPSS or other relevant programs

- Experience with epigenetic and related techniques is a plus.
- Experience with bioinformatic is a plus.

Required abilities

- Exceptionally motivated and innovative
- Must be able to work independently and take the initiative in research projects
- Collaborative team player
- Contribute to the development of NPPLab activities, including tutoring young students and scientists
- Excellent communication skills

Location:

The position will be based primarily in the NPPLab (npplab.com.br), located at the Department of BioMolecular Sciences of the School of Pharmaceutical Sciences of Ribeirão Preto, University of São Paulo, Ribeirão Preto, São Paulo, Brazil.

The NPPLab (npplab.com.br) is committed to creating an environment of diversity and tolerance, so that applications from all those who qualify for the vacancy will be equally considered, regardless of color, gender, country of origin, gender identity, religion and sexual orientation.

The University of São Paulo is a large Brazilian public university, with several campi across the São Paulo State, including Ribeirão Preto. It is a major educational and research institution, responsible for educating a large part of Brazilian Masters and Ph. D's. It is responsible for a large part of scientific publications in our country.

Details:

Everyone must send in the subject line of the email: "PostDoc NPPLab".

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

Short-listed candidates will be called for a video call interview.

Vacancies are open to Brazilians and foreigners.

It is possible to apply for both positions.

The duration of the scholarship is two (2) years, and the beginning of the term is scheduled for 01/01/2022.

The selected candidate will receive a FAPESP Post-Doctoral Scholarship in the amount of R\$ 7,373.10 per month and a Technical Reserve equivalent to 10% of the annual scholarship amount to cover unforeseen expenses directly related to the research activity. More details can be found at <https://fapesp.br/bolsas/pd> and <https://fapesp.br/en/postdoc>. The modality of the PD fellowship is 1a (Post-doctorate fellowships linked to Research Projects).

To apply, please follow the instructions bellow for each project:

Project #1

Please send, until November 1, 2021, the following documents to Profa. Dra. Sabrina F. de S. Lisboa (sabrinalisboa@usp.br) and npplab@fcfrp.usp.br: curriculum vitae, letter expressing the reasons for interest in the position and 2 names to be consulted for recommendation.

Project #2

Please send, until November 1, 2021, to Prof. Dr. Sâmia Joca (samia@usp.br) and npplab@fcfrp.usp.br the following documents: curriculum vitae, letter expressing the reasons for interest in the position and 2 names to be consulted for recommendation.

Review of the applications will begin immediately after the deadline (November 1st). The position will start 01/01/2022.