



POSTDOCTORAL POSITION IN GPCR PHARMACOLOGY

Institut des Biomolécules Max Mousseron (IBMM), Montpellier

Working environment: A 18 months postdoctoral position is available starting on **March 1st 2021** in the “**Cell Pharmacology**” group of the Institut des Biomolécules Max Mousseron (IBMM – UMR CNRS 5247). The IBMM is a multidisciplinary research center that provides a stimulating and collaborative working environment for scientists conducting research on the design, the synthesis and the pharmacology of potential future drugs.

Our group is interested in how the signal is transmitted *via* a particular class of membrane receptors, G protein-coupled receptors (GPCRs). The project in which the post-doctoral fellow will be involved is based on the characterization of the complex formed by the ghrelin and dopamine receptors; this heteromer is directly involved in the control of food intake.

Main mission: The post-doctoral fellow will be in charge of the characterization of bivalent compounds targeting the dimer formed by the ghrelin and dopamine receptors using model systems of increasing complexity (purified receptors, cell lines, animal models), to both validate this complex as a possible target for treating food-intake disorders and illuminate the impact of receptor dimerization on ghrelin-mediated signaling.

Activities: The post-doctoral fellow will have to delineate the pharmacological profiles of the ligands – binding affinity, activation of G proteins, production of second messengers, recruitment of arrestin - using the receptors purified in lipid nanodiscs as well as cell lines expressing the different combinations of receptors. As part of his/her activity, he/she will have to design the experimental plan, implement the corresponding studies, analyze the results, put them back in the context of the literature and communicate them through oral and written presentations.

Qualifications: The post-doctoral fellow will have to perform ligand binding and signaling protein activation experiments using fluorescence and bioluminescence transfer methods, essentially. The candidate will thus need to have an experience in a related topic. He/she must have worked and/or have solid knowledge in biochemistry (protein handling), cell biology (cell culture, transfection), pharmacology (binding assays, production of second messengers, etc.) as well as basic knowledge of medicinal chemistry concepts. Experience and/or knowledge in fluorescence and bioluminescence transfer methods (HTRF, BRET, FRET) will also be appreciated, as will expertise in GPCR pharmacology. The candidate is expected to be able to work both independently and as part of a team and he/she will have with excellent problem-solving, organizational and communication skills.

Lab website: <https://www.ibmmpharmaco.com/>

More information on salary and conditions at: <https://euraxess.ec.europa.eu/jobs/584097>

How to apply: submit a cover letter, a curriculum vitae and contact information of two referees to Jean-Louis Banères at jean-louis.baneres@umontpellier.fr and Jérémie Neasta at jeremie.neasta@umontpellier.fr