

Post-doc positions in Ligand-gated ion channel structure and function

Two positions are available in the laboratory of Pierre-Jean Corringer at the Institut Pasteur in Paris, France

(<https://research.pasteur.fr/en/team/channel-receptors/>)

Our laboratory is looking for two highly motivated post-doctoral fellows with strong background and experience in structural biology/biophysics/ion channel structure and function. Our lab studies the structure and function of pentameric ligand-gated ion channels, with a particular emphasis on understanding the structural bases of ion channel gating and regulation by small molecules. All projects in the lab are interdisciplinary in nature and combine structural techniques with functional approaches, and the two proposed positions concern: 1/ voltage-clamp fluorometry, to monitor the ion channel gating by electrophysiology concomitant with protein motions by fluorescence in physiological conditions and 2/ the structural biology of ion channels in complex with small ligands, using both X-ray crystallography and cryo-electron microscopy (cryo-EM). Both projects also involve molecular biology, protein biochemistry and kinetic modeling. Our lab is fully equipped for molecular biology, biochemistry and voltage-clamp fluorometry and has access to the renowned platforms of X-ray crystallography and cryo-EM (with a recently installed Titan Krios microscope) of the Institut Pasteur in Paris. The Institut Pasteur offers a highly dynamic social and scientific environment in the heart of Paris.

The successful candidate must have a PhD (or being in the process of completing one) in a relevant field with a demonstrated track record of productive research, and must be able to work both independently and as part of collaborative team. For the voltage-clamp fluorometry project, previous experience in fluorescence techniques and/or electrophysiology is highly desirable. For the structural biology project, previous experience in cryo-EM is highly desirable, as well as experience in protein production in human cell lines and X-ray crystallography.

One position opens in January 2019, the other opening around July 2019. Post-doc will be funded through an ERC advanced grant for up to five years.

Applications including a cover letter, CV, and the email addresses of two references should be sent to:

Pierre-Jean Corringer, pjcorrin@pasteur.fr
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