



## Postdoctoral Position available in Structural Biology in Grenoble (France)

### Structural investigation of a HIV-1 gp41 MPER conformation by NMR

The generation of an effective vaccine that protects against HIV-1 infection is still a high priority in HIV-1 research. Although recent advances have demonstrated a number of epitopes that are accessible to broadly neutralizing antibodies on the HIV-1 glycoprotein env, the nature of the antigen that is capable of inducing such broadly neutralizing antibodies by immunization strategies is still elusive. Here we propose to define the structure of a fragment of the env fusion protein subunit gp41 that contains a membrane proximal external region, the target of a number of broadly neutralizing antibodies. The successful candidate will prepare labeled protein samples suitable for NMR analysis, record spectra and analyze data. The structure of this conformation will aid in stabilizing the antibody epitopes in order to develop suitable gp41 immunogens.

The successful candidate will be hosted in the [Biomolecular NMR Spectroscopy](#) group at Institut de Biologie Structurale (IBS, <http://www.ibs.fr/>) in the team directed by Dr Jean-Pierre Simorre and will work on the NMR aspects of the project. He/she will have access to the state of the art NMR facility at IBS containing six high-field spectrometers (950 MHz, 850 MHz, 700 MHz, 3x600 MHz) equipped with latest solid-state NMR and cryogenic liquid-state probes. The candidate will be involved in the collaborative network of the project involving the group of Pr Winfried Weissenhorn at UVHCI specialized in X-ray crystallography and HIV. The candidate will benefit from the exceptional scientific environment provided by the IBS relocated in the fall of 2013 to a new 9500-m<sup>2</sup> building and by the Grenoble Partnership for Structural Biology (PSB), a vibrant European hub for structural biology including EMBL, ESRF and ILL.

Applicants are expected to have doctoral experience in Biomolecular NMR spectroscopy and are invited to send their application with curriculum vitae, a letter of motivation, and 2 reference letters by the end of the year 2014 via email to Jean-Pierre Simorre ([jean-pierre.simorre@ibs.fr](mailto:jean-pierre.simorre@ibs.fr)). The successful candidate will be recruited for 18 months and will benefit from a Gral postdoctoral fellowship. Depending on the circumstances additional funding up to 3 years may be offered.

