

Postdoctoral Position :

Structural Studies of the Cystic Fibrosis Transmembrane Conductance Regulator

Our group is dedicated to understanding the molecular basis of Cystic Fibrosis and open new therapeutic routes for the disease.

To this end, we rely on a combination of approaches from structural biology and biophysics to cell biology to understand to molecular behavior of CFTR (Cystic Fibrosis Transmembrane Conductance Regulator), the chloride channel involved in the disease . We have developed a collection of CFTR-specific-nanobodies that enable to capture individual conformations and provide novel therapeutic strategies.

We are looking for a highly motivated postdoctoral fellow willing to decipher the conformational landscape of CFTR using high-end structural biology techniques (cryo-EM, X-ray crystallography, smFRET..)

Our group is part of the *Structure and Function of Membrane Biology Laboratory (SFMB)*, affiliated with the *Université Libre de Bruxelles* and is located in Brussels, Belgium.

Candidates should have a recent PhD and have a strong background in structural biology, protein expression and purification, preferably with membrane proteins; molecular biology skills are a plus. The successful candidate must be creative, motivated and enjoy both working independently and in a collaborative setting. Candidate should **not** be Belgian nationals

Applications: Send a CV, a list of publications, a short overview of research activities and the name of two to three references to Cedric.Govaerts@ulb.be.

References:

-Sigoillot M, Overtus M, Grodecka M, Scholl D, Garcia-Pino A, Laeremans T, He L, Pardon E, Hildebrandt E, Urbatsch I, Steyaert J, Riordan JR, Govaerts C. *Domain-interface dynamics of CFTR revealed by stabilizing nanobodies*. **Nat Commun**. 2019 Jun 14;10(1):2636.

-Scholl D, Sigoillot M, Overtus M, Martinez RC, Martens C, Wang Y, Pardon E, Laeremans T, Garcia-Pino A, Steyaert J, Sheppard DN, Hendrix J, Govaerts C. *A topological switch in CFTR modulates channel activity and sensitivity to unfolding*. **Nat Chem Biol**. 2021 Sep;17(9):989-997.