**Postdoc in structural biology of amyloids (ERC supported)**

**Molecular basis of taupathies**

Amyloid aggregates are highly ordered protein assemblies that can be both functional and pathogenic. The intrinsically disordered protein called tau is directly implicated in several neurodegenerative diseases, including Alzheimer's disease, where it forms amyloid aggregates. In these diseases, called tauopathies, tau can adopt different conformations, which are directly correlated with the pathological phenotype. Yet, to date, the challenge of understanding what dictates the structural differentiation of tau has remained unmet.

 Our group studies the formation of tau aggregates and more generally the molecular basis of tauopathies. This project aims at characterizing tau aggregation pathways leading to the formation of specific tau assemblies that recapitulate brain-extracted properties (structure, seeding, etc...). The position will focus on revealing the influence of different biomolecules on the biophysical and structural features of tau amyloids. The position is part of an ERC startup project “CofacTau” held by Dr. Yann Fichou.

We are looking for a highly motivated candidate seeking to expend their research experience. The ideal candidate will have a strong background in structural biology, in particular cryoEM or/and NMR spectroscopy applied to amyloids. This is a great opportunity to embrace a multidisciplinary project combining biochemistry, biophysics and structural biology. The successful candidate will be independent and thrive in a small and synergetic team.

The position will take place at the CBMN Laboratory (UMR5248) in the team of Y. Fichou (www.fichou-lab.cnrs.fr), located at the European Institute of Chemistry and Biology (IECB) near Bordeaux. The IECB is a multidisciplinary institute at the interface of biology and chemistry, and is equipped with several platforms (biochemistry, bacteriology, crystallography, NMR, cryo-electron microscopy) that will be accessible during the postdoctoral project.

Please reach out to Yann Fichou (y.fichou@iecb.u-bordeaux.fr) for any query.