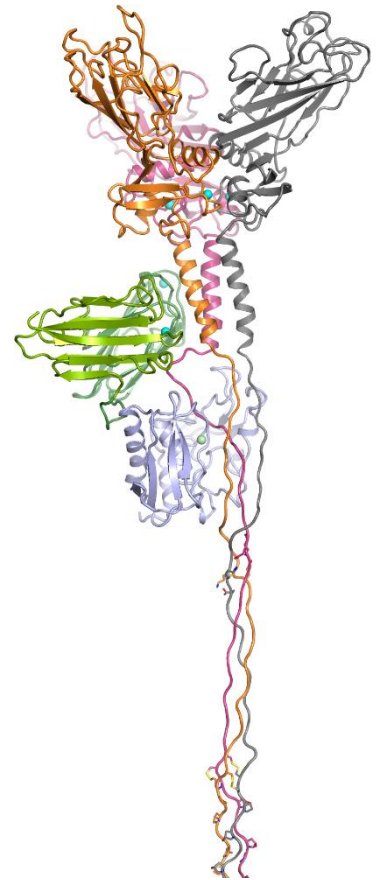


Structure-function analysis of a prominent target in fibrosis: the C-terminal maturation complex of fibrillar collagens

The biosynthesis of fibrillar collagens is severely deregulated in fibrosis, the common and deleterious outcome of a great diversity of tissue injuries. A better understanding of the various steps leading from the synthesis of individual procollagen chains to collagen fibrils would greatly benefit the development of new therapeutic tools. In the *P³-complex* project, we focus on the C-terminal proteolytic maturation of fibrillar procollagens in order to :

- better understand, at the molecular level, how the various components of the maturation complex (substrate, protease, regulatory proteins) associate and work together. This is done mainly by cryo-electron microscopy and through a combination of biochemical/biophysical approaches.
- learn more about how this complex affects tissue biology and extracellular matrix remodelling using transcriptomics, targeted mass spectrometry and biochemical assays.

This project is funded by the French Research Agency (ANR) and is performed in collaboration with the OPIC (Oxford Particle Imaging Center) facility in Oxford for cryo-EM and with the University Hospital of Dijon for fibrosis samples. It will contribute to optimize innovative tools, currently under development in the group, to diagnose and treat fibrosis.



- Skills :**
- Excellent theoretical and practical knowledge of molecular biology and protein biochemistry
 - Experience in running protein-protein interaction analyses (ideally SPR) and biochemical assays to measure protein concentrations (ELISA, targeted mass spectrometry)
 - Knowledge in structural biology; previous experience in cryo-EM would be an advantage
 - Knowledge in extracellular matrix biology

More details here : <https://emploi.cnrs.fr/Offres/CDD/UMR5305-CATMOA-006/Default.aspx?lang=EN>

We invite highly motivated PhD candidates to apply directly on the above website (detailed CV with publication list and names of 2 references, cover letter) before **October 15, 2022**. The position is already open and can start immediately.

