

INSTITUTE OF  
STRUCTURAL BIOLOGY

BIOLOGY

UMR 5075



Structural biology

Proteins

Glycobiology

Cellular processes

Microbiology and immunity

## KEY FIGURES:

101 permanent researchers  
and lecturers74 technical and  
administrative staff94 PhD students and  
postdoctoral researchers160 publications per year  
(on average)4 patents over the last  
5 years

## OVERVIEW

The *Institute of Structural Biology* (IBS) is a national and international leader in integrated structural biology. IBS explores the structure and dynamics of biological macromolecules, such as proteins, to understand their functions at atomic scale resolution and in their cellular environment. These studies contribute to the development of innovative vaccine and therapeutic strategies.

## RESEARCH TOPICS

- **Microbiology, infection, and immunity:** Host-pathogen interactions, bacterial pathogenesis mechanisms, bacterial morphogenesis, viral replication, viral entry and budding processes, immune response, therapeutic antibodies.
- **Dynamics, assembly, and reactivity:** Molecular process kinetics, protein flexibility and dynamics, intrinsically disordered proteins, metalloproteins, epigenetics, cryo-electron microscopy, NMR, and super-resolution microscopy for cell biology.
- **Membrane proteins and glycobiology:** Membrane transport, neurological receptors, GPCR signaling, glycan-pathogen interactions, bacteriophages, biosynthesis and diseases related to glycosaminoglycans.

