



INSTITUTE OF STRUCTURAL BIOLOGY

UMR 5075


Université
Grenoble Alpes[Structural biology](#)[Proteins](#)[Glycobiology](#)[Cellular processes](#)[Microbiology and immunity](#)

BIOLOGY

KEY FIGURES:

101 
permanent researchers
and lecturers

74 
technical and
administrative staff

94 
PhD students and
postdoctoral researchers

160 
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.

<https://www.ibs.fr/spip.php?lang=en>