

# Fighting infection together

*“CSSB is an oasis for structural and infection biology. It brings together bright minds with fantastic technologies, united in a place that encourages creativity and above all promotes science.”*

*Kira Schamoni-Kast, PhD Student*

Scientific collaboration  
and dialogue are at the  
heart of CSSB.

CSSB Centre for Structural Systems Biology  
c/o Deutsches Elektronen-Synchrotron DESY  
Notkestraße 85, Building 15  
D-22607 Hamburg, Germany

[www.cssb-hamburg.de](http://www.cssb-hamburg.de)



EMBL



Research Center Borstel  
Leibniz Lung Center

HZI HELMHOLTZ  
Centre for Infection Research



CSSB is a cooperation without its own legal identity. All partners act exclusively in their own name and on their own account.  
Images: This page: Tina Mavric; all other photos: Jörg Müller



[www.cssb-hamburg.de](http://www.cssb-hamburg.de)

# Centre for Structural Systems Biology

Infectious diseases are a global threat which cost many lives and have a significant impact on society. The key to effectively fighting infectious diseases is gaining a detailed understanding of the underlying molecular mechanisms of various pathogens.

At CSSB, researchers from three universities and six research institutes work together to understand the structure, dynamics and function of pathogens and their host interactions. Our fundamental research seeks to enable the identification of targets for interventions.



*“CSSB has a really great set of facilities for a range of techniques, making it possible to do a wide variety of experiments. There’s also a lot of expertise in these techniques throughout the building, so it’s easy to ask someone for help when your biology doesn’t work the way you want it to.”* Rory Hennell James, Postdoc

## Our Core Facilities

We use, provide and develop cutting edge technologies.

- The **advanced light and fluorescence microscopy facility** has 14 light microscopes and resources for image analysis and quantification.
- The **electron cryo-microscopy multi-user facility** offers access to 5 high-end microscopes and auxiliary equipment for electron cryo-tomography and single particle analysis.
- The **protein production facility** performs the entire workflow from gene to protein and provides protein samples of highest quality suitable for functional and structural studies.
- The **sample preparation and characterisation facility** supports users with quality control, biophysical studies and high-throughput crystallisation for integrative projects.



We educate and empower scientists from all backgrounds to confidently address the complex challenges of tomorrow.

We actively create an inclusive and diverse community that fosters creativity, drives innovation and encourages new perspectives.



Learn more about our research groups



Learn more about our core facilities



Learn more about our upcoming events