

Services offered by Instruct-ERIC

Service/Tool Name	Description	Contact	Mode of access
Crystallisation	A fully automated crystallisation pipeline to achieve high-throughput with short crystallisation plate processing times, high reproducibility, and increased efficiency of the screening process.	Karl Halos, Orly Dym, Alastair McEwen https://instruct-eric.eu/platform-type/crystallisation	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Nanobody Discovery	Nanobodies are single chain antibodies which have revolutionary applications in structural biology. Our Nanobody Discovery service is accessible to all Instruct researchers.	Jan Steyaert, Els Pardon https://instruct-eric.eu/platform-type/nanobody-discovery	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Protein Production	Instruct offers a wide range of expression systems for recombinant proteins including Bacterial, Baculovirus, Cell-free, Mammalian and Yeast. Our techniques allow for expression of challenging proteins along with expert protein purification systems.	Darren Hart, Arnaud Poterszman, Yuguang Zhao, Ray Owens https://instruct-eric.eu/platform-type/protein-production	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Imaging	Imaging techniques including fluorescence microscopy provide an efficient and unique approach to study fixed and living cells because of their versatility, specificity, and high sensitivity.	Leonid Adronov, Jan Pribyl, Jean-Philippe Kleman https://instruct-eric.eu/platform-type/imaging	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Mass Spectrometry	Mass spectrometry is the dominant technology in the field of proteomics, enabling the identification and quantification of cellular proteins and their modified forms.	Justin Benesch, Albert Heck https://instruct-eric.eu/platform-type/mass-spectrometry	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Molecular Biophysics	Instruct offer a wide range of techniques to study macromolecular interactions, including circular dichroism, surface plasmon resonance (SPR), thermal shift assay and calorimetry.	Anastassis Perrakis, Jean-Baptiste Reiser, Catherine Birck, Robert Gilbert, Michaela Wimmerova https://instruct-eric.eu/platform-type/molecular-biophysics	Through peer reviewed application: https://instruct-eric.eu/submit-proposal

Electron Microscopy	The high-resolution electron microscope has evolved into a sophisticated instrument that is capable of routinely providing quantitative structural information on the atomic scale.	Juha Huiskonen, Ludo Renault, Tat Cheung Cheng https://instruct-eric.eu/platform-type/electron-microscopy	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Magnetic Resonance Techniques	NMR allows three-dimensional structural and dynamic information to be obtained in conditions as close as possible to physiological ones. Functional processes can be followed in living cells, and transient protein-protein interactions can be investigated.	Rolf Boelens, Lucia Banci https://instruct-eric.eu/platform-type/magnetic-resonance-techniques	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
X-Ray Techniques	Instruct-ERIC offer a wide range of X ray approaches to determine the three-dimensional shape of proteins at the atomic level.	Martin Walsh, Alastair McEwen https://instruct-eric.eu/platform-type/x-ray-techniques	Through peer reviewed application: https://instruct-eric.eu/submit-proposal
Computational Services	Collection of computational structural biology services and tools provided by member laboratories of Instruct and former partners of the H2020 project West-Life	Martyn Winn martyn.winn [at] stfc.ac.uk https://instruct-eric.eu/compute	Online access to tools and support https://instruct-eric.eu/compute
Training	Instruct organizes and hosts workshops and courses by internationally recognised experts in areas of research where new methods or approaches are evolving. The Instruct Internships scheme funds student placements in Instruct Centre laboratories, funding research visits of 3-6 months duration to Instruct Centres in Europe. The aim is to facilitate valuable collaborations with Instruct research groups applying techniques that are not available in the applicant's laboratory.		https://instruct-eric.eu/opencalls Applications through published open calls.