

Research Associate in Structural Biology at ELETTRA

Deadline: 1 November 2021

Ref: DA/21/26

Company description

Elettra Sincrotrone Trieste is an international multidisciplinary research center operated as a user facility, featuring a 2.0/2.4 GeV, third-generation synchrotron light source (Elettra), a free-electron laser light source (FERMI) and a variety of support laboratories. The extremely high quality of the machines and beamlines has set new performance records and has been producing results of great scientific and technological interest. See http://www.elettra.eu for more information.

Beamline/Activity/Project description

Elettra Sincrotrone Trieste is supporting in-house research on COVID-19. With this purpose Elettra has launched the "E4C@Elettra" internal project as a follow-up to the recently concluded, EU-H2020 financed project, EXSCALATE4CoV (E4C) that had the objective to rapidly identify effective drugs against SARS-CoV-2. The E4C@Elettra project aims to bring to completion the huge amount of data collected within the E4C partnership. The focus is on structural determination by x-ray crystallography of protein targets in complex with small molecules selected throughout the EXSCALATE4CoV platform. The activities will be performed at the Elettra Protein Facility and at the XRD2 beamline to obtain and crystallize the recombinant proteins, collect x-ray diffraction data and solve the 3D structures.

The Protein Facility is a unit of the Structural Biology Lab of Elettra, specialized in recombinant protein expression, purification, and characterization, supporting internal and external researchers from public and private laboratories. This state-of-the-art facility works in collaboration with all Elettra beamlines, and in particular with the x-ray diffraction beamline XRD2, providing technical and scientific support to research collaborators and contributing to their scientific and technical developments. https://www.elettra.trieste.it/labs/structural-biology

Job description

The successful candidate will work on the E4C@Elettra follow-up to the EXSCALATE4CoV project. His/her main task will be to perform protein crystallization trials, crystals handling, x-ray diffraction data collection, structure determination, and data mining. She/he will also be involved in protein production and protein-ligand binding characterization. She/he will refer to the Protein Facility Head and will work in close contact with the other scientists of the group, with the beamline scientists as well as with external scientists from the original E4C partnership. The successful candidate will be involved in the whole research workflow ensuring a proficient exchange of information among the scientists involved in the project. He/she will be also involved in writing scientific reports and publications, as well as in training students.

Qualifications

A Ph.D. in structural biology, biochemistry or related Life Science disciplines (e.g., biology, biotechnology, molecular biology or biophysics) and a postdoctoral experience of at least 3 years are essential.

Hands-on experience in protein expression and purification, strong knowledge in protein crystallography from protein crystallization to structure solution using CCP4 Suite and most popular graphical programs, are mandatory. Previous experience in the structural biology of SARS-CoV-2 target proteins and related drug discovery is also a prerequisite. Experience on antiviral drug discovery and/or viral proteases will be considered a plus, as would be previous experience in biochemical assays and biophysical characterization.

Excellent oral and written communication skills in English are essential. A working knowledge of Italian would be desirable, but is not required.

Good time management skills together with the ability to interact with staff and facility users and to work as part of a multi-disciplinary team is expected.

The deadline for the submission of the application is November 1, 2021.





The appointment envisioned is a fixed term contract of 12 months.

The salary will be commensurate with the previous experience and qualifications of the candidate.

Applications should include full curriculum vitae, contact information (including electronic mail) of at least two references.

In accordance with the provisions of article 21 of the Italian legislative decree no. 39/2013 and in conjunction with article 53 (subsection16ter) of Italian legislative decree no. 165/2001, employees or former employees of any Italian Public Entity who have exercised authority over Elettra Sincrotrone Trieste S.C.p.A. or have negotiated with Elettra - Sincrotrone Trieste S.C.p.A. within the last three years will be excluded from the present selection procedure. We thank all applicants in advance.

For more information, please contact Paola Storici (email: paola.storici@elettra.eu).

To apply for this position please visit the following link: https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=2102