

Research Associate at the Elettra Protein Facility for collaborative research on brain tumors CUP D95F21002460002

Deadline: 28 January 2022

Ref: DA/21/36

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 new 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. A new generation, diffraction-limited storage ring light source denoted as Elettra 2.0 is under development. See http://www.elettra.eu for more information.

Beamline/Activity/Project description

At Elettra, a Structural Biology Laboratory (SBL) is active, which applies molecular and structural biology tools to study key molecular mechanisms that are deregulated within the cell and lead to diseases such as cancer, neurodegeneration, and infectious disorders. Our expertise is on protein drug targets and biomarkers supporting structural-based drug discovery. The Elettra Protein Facility (EPF) is part of the SBL. It focuses on recombinant protein expression, purification, and characterization, supporting users and collaborators from public or private laboratories. This state-of-the-art facility works in tight collaboration with the Elettra beamlines and, in particular, with the x-ray diffraction beamline XRD2.

The Protein Facility is a partner of the regional project "GLIOMA: research and therapy" that aims to establish a center for translational research and preclinical development of innovative and predictive therapeutic strategies for treating brain tumors. The project is financed by the Regional Law 13/2021 art.8, and has a duration of 3 years. The role of EPF within the project is to produce and characterize recombinant proteins that are essential players in glioma. The more promising proteins for the development of a treatment - being drug targets, biomarkers, or biotherapeutics - will be selected for further investigations using biochemical and structural tools. Project partners include the Azienda Sanitaria Universitaria Friuli Centrale, IOM-CNR, Centro di Riferimento Oncologico (Aviano), SISSA and the University of Udine.

More information can be found at:https://www.elettra.trieste.it/labs/structural-biologyand http://www.elettra.eu/PEOPLE/index.php?n=PaolaStorici.HomePage.

Job description

The successful candidate will be the focal point for the project at Elettra and will be in charge of production and characterization of the proteins more relevant for the project. He/she will follow the whole project workflow from literature scouting, to experimental design, protein production, biochemical and biophysical characterization, and possibly structural analysis. Additionally, he/she will have the opportunity to cross-refer his/her results with preclinical and clinical data provided by the project partners. The aim will be to deliver proteins and to understand their biochemical/structural properties useful to develop and validate novel therapies for glioma.

The candidate will be working in collaboration with the other scientists of the EPF, of the SBL, and of the Elettra beamlines and in especially close collaboration with scientists of the project partners. Finally, he/she will participate in and present the results at the project meetings and other conferences and prepare and submit articles to scientific peer-reviewed journals.

Qualifications

A Ph.D. in biotechnology, biochemistry, structural biology, medicinal chemistry, or a closely related subject is required. At least 5 years of relevant experience in biological research is expected. Hands-on experience in molecular biology, protein expression (in bacterial and/or eukaryotic systems), and protein purification is essential. Demonstrated experience in biochemical and biophysical characterization of proteins, protein biotechnology as well as in structural biology (especially crystallization and macromolecular crystallography) is a distinctive advantage. Previous experience and knowledge of the

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scientific literature in cancer biology, drug discovery in oncology, and in fields related to the project research topics would be considered a plus.

Good time management skills and the ability to prioritize are expected, together with the ability to interact with collaborators and tutor younger scientists, as well as work as part of a multidisciplinary team.

Excellent oral and written communication skills in English are essential.

The appointment will be a fixed term contract with an initial duration of 12 months with the possibility of extension until project closure. The salary will be commensurate with previous experience and qualifications of the candidate.

Applications should include full curriculum vitae signed by the applicant (preferably using the European Curriculum Vitae Format in PDF), with the names and contact information (including electronic mail) of at least two professional references.

Due to the situation related to the COVID-19, the interviews will be performed through video conferencing. **The deadline** for the submission of the application is January 28, 2022.

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=2302

