



Position: **Senior Data Scientist (Computational Structural Biologist)** at Toscana Life Sciences Foundation, Siena (Italy)

Duration: 2 years

The Data Science for Health (DaSch) Laboratory is a newly created group at TLS that uses Computational Immunology, Population Genomics, In-silico Structural Biology, Artificial Intelligence and Bioinformatics to transform biomedical research from early discovery of vaccines and monoclonal antibodies to health technology assessment at the societal level.

The DaSch group is on the lookout for an innovative and passionate Computational Structural Biologist, who wants to apply state-of-the art computational tools and algorithms to the study of biomolecular structure and function for use in discovery and drug design.

As our subject matter expert, you will advance the computational structural biology research at TLS and work with multidisciplinary project teams to develop new computational modeling approaches to generate novel design capabilities and transform monoclonal antibody discovery. You will also have access to a VR laboratory for real-time molecular dynamic (MD) simulations and structural modelling, which allows for a better understanding of the dynamics of interaction between molecules.

In this position, you will be in charge of:

- Developing and applying innovative computational methodologies to generate knowledge from biomedical data.
- Establishing collaborations within the research ecosystem, designing and executing computational structural biology projects integrating heterogeneous data from multiple sources.
- Attracting research funding through grants and platform technologies.
- Formulating hypotheses, designing and conducting experiments, analyzing results and disseminating conclusions.
- Presenting findings at conferences and seminars and publishing results in peer-reviewed journals for dissemination.
- Contributing to developing TLS's computational strategy and infrastructure.

The ideal candidate's background:

- PhD degree in computational biology, protein biochemistry, biophysics, structural biology, or related discipline, preferably with three or more years of post-doctoral experience.
- Demonstrated computational experience which includes proficiency with molecular dynamics simulations, ab-initio and Monte Carlo Minimization tools (e.g., Rosetta) deep neural networks (e.g., Alpha Fold), Python and Linux scripting.
- Strong data analytics/machine learning skills, with a keen interest in biomedicine and infectious diseases.
- Strong publication record in In-silico Structural Biology with a track record in attracting research funding.

Other requirements:

- Strong "drive" to catalyze positive collaborations, supervision and strategic planning skills.
- Previous direct/matrix people management and international leadership responsibilities is a plus.

To apply or inquire for further information, please send a motivation letter, your CV and email address of two referees to HR@toscanalifesciences.org