



Position: Data Engineer

at the Data Science for Health (DaSch) Laboratory, Toscana Life Sciences Foundation, Siena (Italy).

Duration: 2 years

[Toscana Life Sciences \(TLS\) Foundation](#) is a non-profit research bio-incubator accounting for ~400 associates amongst the twenty biotechnology companies incubated and the ten research groups and projects, including two ERC-funded labs, and has a cutting-edge asset of research instrumentation to conduct front-line biomedical research.

To create the biomedicine of the future, TLS is establishing a **Data Science for Health (DaSch) Laboratory** under the strategic direction of [Dr. Duccio Medini](#), partnering up with the broad, existing ecosystem, including the [MadLab](#) laboratory led by [Dr. Rino Rappuoli](#) and the [CERM](#) Foundation led by [Prof. Fabio Pammolli](#).

The **DaSch Lab** will use 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.

We invite highly motivated Data Engineers to apply for a Data Engineer position that will support the Data Scientists and other (non) scientific roles within the Lab by designing, developing, integrating, optimizing and engineering data, tools and libraries for Bioinformatics; Machine Learning and advanced data analytics and visualization.

WHAT WE OFFER

- Unfettered flow of biological data from state-of-the-art biomedical facilities, clinical data from industrial-scale development projects and real-world data from a consolidated network of national and international collaborations.
- A dynamic ecosystem of young investigators with different expertise, from immunology and microbiology to cancer immunotherapy, bioinformatics and topological data analysis, and active projects at the forefront of the [fight against COVID-19](#) and anti-microbial resistance.
- Extensive collaborations with [Glaxo Smith Kline \(GSK\) Vaccines](#) and other pharmaceutical companies, based on the same [campus](#) as TLS, and with various industrial and academic research institutions around the world.

WHAT YOU WILL LEARN/DO

- You will be responsible for designing and implementing scalable data processes to support the rapidly growing data consumption needs, and use it to deliver data as a service, enabling scientific insights and strategic decision making.
- Support data science projects by integrating, processing and provisioning heterogeneous data from multiple sources, including high-dimensional biological digital instruments, biomedical datasets and socioeconomical databases.
- Act as Subject Matter Expert supporting Data and Lab Scientists in the definition of the experimental design and analytics strategy, identifying the data-related tooling and infrastructure needs of TLS and contributing to defining and executing the plan to fulfill them.



- Contribute to developing TLS's computational and data management strategy/infrastructure, in close partnership with the IT department.
- Constantly improve the quality of our data and digital tools/infrastructures by fixing bugs and refactoring the code base where necessary.

WHO WE ARE LOOKING FOR

A Data Engineer with

- Degree in Engineering, Computer Science or Informatics, Mathematics or related fields.
- At least 2-3 years of experience in a Data Science, analytical or primarily data focused environment or related specialty, preferably with a track record of manipulating, processing, and extracting value from large biomedical datasets.
- Demonstrated strength in data modeling, processing and data warehousing.
- Very good skills in complex software development and programming using multiple programming languages and development frameworks. Experience building/operating highly available, distributed systems of data extraction, ingestion, and processing of large data sets.
- Experience building data products incrementally and integrating and managing datasets from multiple sources.
- Strong analytical, problem solving and project delivery skills.
- Good networking and communication skills.
- Strong "drive" to catalyze positive collaborations and strategic planning skills.
- Attention to detail: You care about developing quality user experiences for your colleagues.

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

Information about Siena

TLS is located inside the scientific campus of GlaxoSmithKline, in proximity of the city centre of Siena, one of Italy's most beautiful medieval towns in the heart of Tuscany. It is filled with fine examples of Gothic architecture and has one of the world's most unique piazzas - Piazza del Campo, a vibrant and lively atmosphere due to numerous cultural events and the presence of a large University campus. The city and surrounding area (Chianti, Florence etc.) have plenty of interesting places to visit within the reach of public transport and are close to international airports (Pisa, Florence, Bologna, Rome).