Data-Driven Life Science – Epidemiology and Biology of Infection

Request for descriptions of proposed national data services to be included in the SciLifeLab Data Platform

Descriptions of proposed services should be submitted to the Umeå Data Science Node by 30th September 2024 (23:59 CET), to Oliver Billker, Head of RA EBI, via email: oliver.billker@umu.se .

Background: SciLifeLab and partners have built a national Data Platform for data-driven life science research that includes a range of advanced data analytics support services. The overall aim of the Platform, is to make resources and services available for the community. These need to be as FAIR and open as possible.

Within the SciLifeLab and Wallenberg National Program for Data-Driven Life Science (DDLS), each priority area has created a Data Science Node (DSN) that serves its respective research community. These nodes develop, maintain, and manage national data services, and connect to analysis and bioinformatics support within their respective DDLS strategic research area. The SciLifeLab Data Centre, on the other hand, operates the central resources of the SciLifeLab Data Platform, coordinates national activities, and provides the link to underlying e-infrastructure resources (computing, storage) needed for providing the services. Access to computational or bioinformatics resources may involve a separate application process and user fees.

Data services and user support for the DDLS research area in Epidemiology and Biology of Infection come from the DSN hosted by Umeå University. The work will be carried out by a dedicated system developer, a data engineer, and a data steward, collaborating with the SciLifeLab Data Centre.

Scope: In this community consultation, the data science node requests descriptions of proposed national data services in Epidemiology and Biology of Infection. We ask you to suggest data services that would be openly available to researchers and data-producing facilities in Sweden. Data services should fill a gap in Swedish data-driven infection research and not duplicate other national or international services.

Eligibility - proposed services will be considered if they are:

- Aligned with DDLS and SciLifeLab Data Platform objectives (DDLS Strategy).
- Relevant to the DDLS Epidemiology and Biology of Infection subject area.

Assessment - Proposed services will be ranked on these criteria for further discussion and implementation:

- Novelty and uniqueness (as in not duplicating existing services).
- Impact on Swedish data-driven research in the infection area.
- National user reach, and potential to integrate with existing national data services.

- Open Science aspects considering FAIR data sharing, FAIR software standards.
- Feasibility given existing resources.

Relevant resources: DDLS Strategy

DDLS homepage: https://www.scilifelab.se/data-driven/

Instructions for submitting a description of a DDLS national data service in epidemiology and biology of infection

- Describe how the national data service would provide infection researchers access to data or novel data-driven methods relying on machine learning, artificial intelligence, or other computational techniques to visualise, analyse, integrate or interpret data. [max 1 page]

- Describe the functionality of the national data service. What makes it novel and unique? [max 1 page]

- Describe the national user reach of the data service. Consider how it can be integrated with existing national data services. [0.25 page]

- If you can, try to estimate the human resources needed to create and maintain the data service. Also try to estimate necessary e-infrastructure resources (computation, analysis and storage). Consider initial and long-term needs. You may contact the DSN for a preliminary consultation [0.25 page]

- Describe how the national data service contributes to FAIR data sharing, FAIR software and/or open standards. [0.25 page]