

The Leipzig Health Atlas – A Repository for Research Data and Models

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The publication of research results is part of good scientific practice and is increasingly expected and demanded. The FAIR data principles of data sharing are an important guideline even if medical data sharing makes it necessary to define access restrictions.

The Leipzig Health Atlas (LHA) is a project to support presentation and secure sharing of publication results from a wide range of medical topics, (bio)medical data (e.g., clinical, epidemiological and molecular data sets), as well as models and tools, e.g. for risk assessment of breast cancer. In order to meet the goals, a repository for sharing research data and models was setup aiming to make data FAIR (findable, accessible, interoperable, and reusable).

The LHA repository uses the research data sharing platform SEEK as a foundation and provides some additional functionalities. To improve findability, contributors can annotate their uploaded content with concepts from the Human Disease Ontology. Upon request, clinical study data are accessible via the study data querying tool i2b2 for feasibility studies. Moreover, contributors can deploy their uploaded models into a continuous integration and delivery platform, where models are enhanced with a web interface (e.g. R-Shiny apps) as live demo.

The target audience of the LHA consists in particular of clinicians, epidemiologists, molecular and human geneticists, pathologists, biostatisticians and modellers and is publically available at www.health-atlas.de.

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