EOSC-Life: Providing an open collaborative space for digital biology in Europe

Description

EOSC, Biological Medical Research Infrastructures, BMS RI, ESFR, Cloud, Data Resources, GDPR EOSC-Life brings together the 13 Biological and Medical ESFRI research infrastructures (BMS RIs) to create an open collaborative space for digital biology. It is our joint response to the challenge of analysing and reusing the prodigious amounts of data produced by life-science. Managing and integrating this data is beyond the capabilities of most individual end-users and institutes. By publishing data and tools in a Europe-wide cloud EOSC-Life aims to bring the capabilities of big science projects to the wider research community. Federated user access (AAI) will allow transnational resource access and authorisation. EOSC-Life establishes a novel access model for the BMS RI: through EOSC scientists would gain direct access to FAIR data and tools in a cloud environment available throughout the European Research Area.

EOSC-Life will make BMS RIs data resources FAIR and publish them in the EOSC following guidelines and standards (e.g. EDMI). Overall this will drive the evolution of the RI repository infrastructure for EOSC and integration of the BMS RI repositories. EOSC-Life will implement workflows that cross disciplines and RI boundaries and address the needs of interdisciplinary science. Through open hackathons and bring-your-own-data events we will co-create EOSC-Life with our user communities, providing a blueprint for how the EOSC supports wide-spread and excellent data-driven life science research. EOSC-Life will address the data policies needed for human research data under GDPR. Interoperable provenance information describe history of sample and data to ensure reproducibility and adherence to regulatory requirements. The goal of the EOSC-Life project is to make sure that life-scientists can find, access and integrate life-science data for analysis and reuse in academic and industrial research. EOSC-Life will transform European life-science by providing an open, continent-scale, collaborative and interdisciplinary environment for data science.

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