Federated European Genome-phenome Archive Switzerland

Submit your research data to Swiss FEGA

What is FEGA?

- Federated European Genome-phenome Archive: a global resource supporting and maximizing the discovery of, and secure access to, sensitive human data.
- Repository for human genomic, phenotypic and clinical data.
- One national node per country that stores data locally; Swiss FEGA in Switzerland.
- Available datasets searchable via the Central EGA catalogue (public metadata).
- Compliant with national data protection regulations, national genomics initiatives, and data governance.
- See the FEGA website for more information.

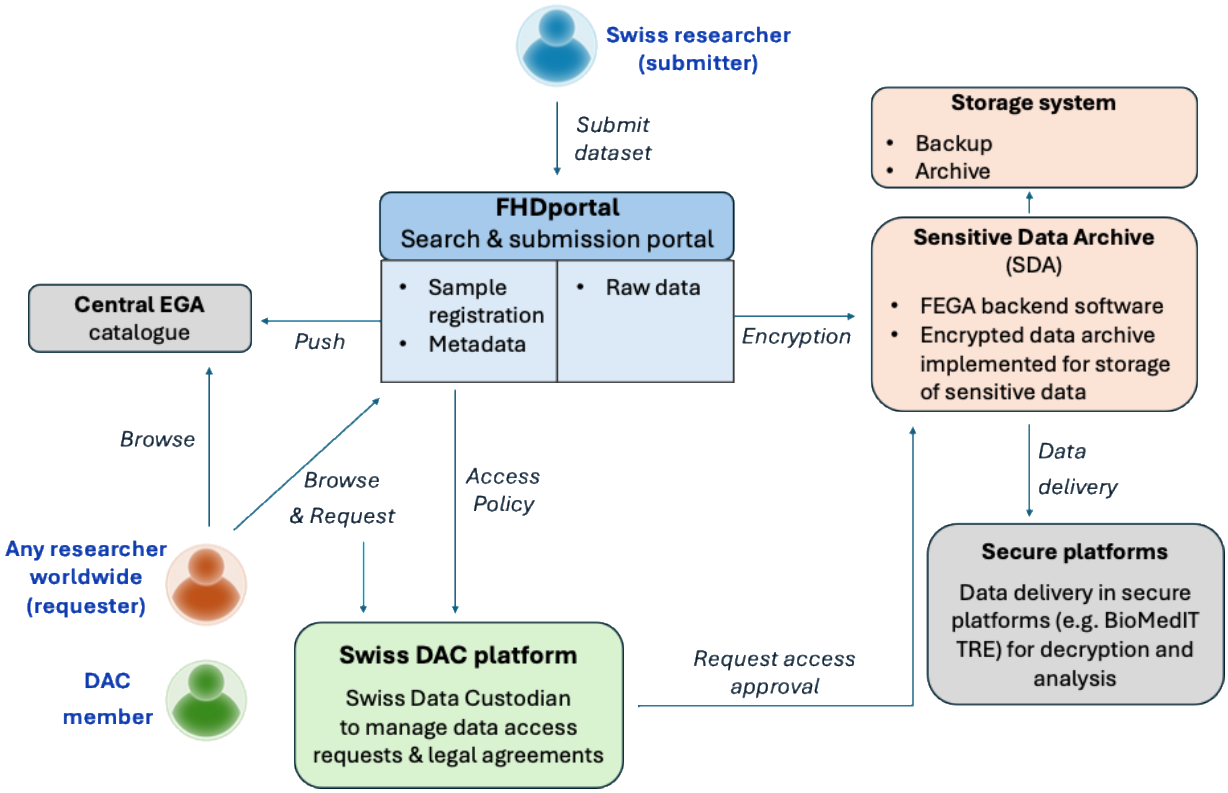
Why deposit your data in Swiss FEGA?

- **Get your work published** by complying with journal and funder requirements for data availability (e.g., accession codes).
- **Allow data sharing and reuse** within the genomic and bioinformatic communities – in line with the FAIR principles (Findable, Accessible, Interoperable, and Reusable) and compatible with interoperability standards adopted by global initiatives (e.g. GA4GH, ELIXIR, 1+ Million Genome Initiative, GDI).
- **Promote your work** within the European and global scientific communities.
- **Help Switzerland unlock patient '-omics' data** to boost healthcare research and personalized medicine.
- **Ensure your shared data remains in Switzerland** under the Swiss law and regulations.
- **Free core archiving services**; there may be costs for additional services such as data processing on Trusted Research Environments or additional analysis support.

What happens with your data?

- On submission, metadata are stored in the Swiss FEGA Portal (powered by FHDportal, hosted on Switch Cloud) where researchers and clinicians can find your data and request access.
- A subset of metadata is pushed to the Central EGA catalogue so researchers and clinicians worldwide can similarly find your data.
- Encrypted data are stored on Switch Cloud, with a copy in their two Zurich data centres.
- Data access is managed by the Data Access Committee (DAC) you nominate, supported by the Swiss DAC platform (provided by the Swiss Data Science Center (SDSC), hosted on Switch Cloud).
- When access is granted, the data can be delivered to requestor organizations or accessed on a Trusted Research Environment (TRE, such as BioMedIT) for decryption and analysis.

Swiss FEGA set up



How do you submit your data?

- Log in the Swiss FEGA Portal (https://fhd-portal.fega.swiss/) using Switch eduID.
- Request a submitter role by signing a Data Transfer and Processing Agreement (DTPA) to let Swiss FEGA handle and publish your dataset.
- Prepare your metadata for submission, aligning with the EGA metadata schema and validating using tools (e.g. FHDportal CLI) from the Swiss FEGA Portal.
- Upload your data and metadata to the Swiss FEGA node via FTP, using the submission form on the Swiss FEGA Portal (https://fhd-portal.fega.swiss/submissions). Note that the submitted data must be encrypted to prevent unauthorized access. The detailed procedure for encrypting your data using crypt4gh is available on the User Manual of the Swiss FEGA Portal.
- Assign a Data Access Committee (either an existing DAC or a new one you create) and an access policy to your dataset.
- Publish your dataset in the Swiss FEGA Portal and the metadata in the Central EGA catalogue.
- Contact the Swiss FEGA Helpdesk at support@fega.swiss if you have any questions or need support to submit your data.

Swiss FEGA is a collaboration between ETH Zürich - Scientific IT Services, Swiss Data Science Center, and Switch, coordinated by the SIB - Swiss Institute of Bioinformatics and supported by the Swiss Personalized Health Network (SPHN).