Knowledge is the key to the future.
Open Science and Science Culture

«**Open science** is about the way researchers work, collaborate, interact, share resources and disseminate results. A systemic change towards open science is driven by new technologies and data, the increasing demand in society to address the societal challenges of our times and the readiness of citizens to participate in research. »

Amsterdam Call for Action, p. 4.

Greater Impact with Open Access/Science

- Public access for publicly funded research
- Increased visibility
- Drives innovation
- Enhanced communication
- More comparative and transnational research
- Access in developing countries
- Increased control of scientific misconduct
SNSF policy on Open Research Data – Background and Aims

The SNSF values research data sharing as a fundamental contribution to the impact, transparency and reproducibility of scientific research. In addition to being carefully curated and stored, the SNSF believes research data should be shared as openly as possible.

Funding Regulations Article 47b

«data collected with the aid of an SNSF grant must be made available to other researchers and integrated into recognized scientific data pools»
SNSF policy on Open Research Data – Implementation

The SNSF expects all its funded researchers

• to store the research data they have worked on and produced during the course of their research work,

• to share these data with other researchers, unless they are bound by legal, ethical, copyright, confidentiality or other clauses, and

• to deposit their data and metadata onto existing public repositories in formats that anyone can find, access and reuse without restriction.
Data Management Plan – Part of project submission

- Researchers have to include a data management plan (DMP) in their funding application for most of the funding schemes → DMP is a formal requirement

- DMPs are not part of the review process (no access for external reviewers).

- At project submission, DMPs are considered as drafts.

- Applicants can explain in the DMP if there are any issues linked to data sharing.
Data Management Plan – Structure

1 Data collection and documentation
   1.1 What data will you collect, observe, generate or reuse?
   1.2 How will the data be collected, observed or generated?
   1.3 What documentation and metadata will you provide with the data?

2 Ethics, legal and security issues
   2.1 How will ethical issues be addressed and handled?
   2.2 How will data access and security be managed?
   2.3 How will you handle copyright and Intellectual Property Rights issues?

3 Data storage and preservation
   3.1 How will your data be stored and backed-up during the research?
   3.2 What is your data preservation plan?

4 Data sharing and reuse
   4.1 How and where will the data be shared?
   4.2 Are there any necessary limitations to protect sensitive data?
   4.3 All digital repositories I will choose are conform to the FAIR Data Principles.
   4.4 I will choose digital repositories maintained by a non-profit organisation.
## Data Management Plan – Structure (mySNF)

### Applications and Projects

<table>
<thead>
<tr>
<th>Grant application 27</th>
</tr>
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<tbody>
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<td>Personal data</td>
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<td>Responsible applicant</td>
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<td>Other applicants</td>
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<td>Applicants’ employment</td>
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<tr>
<td>Project partners</td>
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<tr>
<td>Application data</td>
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<tr>
<td>Basic data I</td>
</tr>
<tr>
<td>Basic data II</td>
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<tr>
<td>Use-inspired project</td>
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<tr>
<td>Re-submission</td>
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<tr>
<td>Continuation of</td>
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<tr>
<td>Link to other SNSF projects</td>
</tr>
<tr>
<td>Further requested and available funds (not from the SNSF)</td>
</tr>
<tr>
<td>University or research institution</td>
</tr>
<tr>
<td>Requested funding</td>
</tr>
</tbody>
</table>

### Data Management Plan (DMP)

- Research requiring authorisation or notification
- Exclusion of external reviewers
- General remarks on the project
- Annexed documents (upload)

### 1. Data collection and documentation

**1.1 What data will you collect, observe, generate or reuse?**

*Questions you might want to consider:

- What type, format and volume of data will you collect, observe, generate or reuse?
- Which existing data (yours or third-party) will you reuse?*

**1.2 How will the data be collected, observed or generated?**

**1.3 What documentation and metadata will you provide with the data?**

*Briefly describe the data you will collect, observe or generate. Also mention any existing data that will be re-used. The descriptions should include the type, format and content of each dataset. Furthermore, provide an estimation of the volume of the generated data sets. (This relates to the FAIR Data Principles F2, I3, R1 & R1:2.)*
Data Management Plan – Life cycle

• A “plausible” DMP is a condition for the release of the funds.

• DMPs are editable. Researchers have the possibility to update the content of their DMP at any time during the funding period of the research project.

• Once SNSF funding has ended and the final scientific report has been approved, the DMP cannot be modified anymore.

• The DMP is shared on P3 (SNSF’s public database) at the end of a project.
Data sharing – Principles

• SNSF expects data of a publication to be shared.

• Data needs to be shared as soon as possible on data repository, but at the latest at the time of publication of the respective scientific output.

• Additional data can be shared if the researcher wishes to do so.

• Repositories need to be digital and conform to the FAIR data principles.
FAIR Data Principles

**FAIR principles:** data sets are prepared so that they are

**Findable:**
- Attribution of Persistent Identifiers (e.g. DOI)
- Provide metadata
- Data set indexed in a searchable resource

**Accessible:**
- Data access and location is clearly described and defined
- Metadata accessible even when data access is restricted

**Interoperable:**
- Use of standard/controlled vocabularies
- Qualified references to other data present

**Reusable:**
- Metadata is richly described
- Data usage license is defined
- Domain-specific community standards used?

non-exhaustive list; for more information see: FAIR Principles: Wilkinson et al., 2016. Scientific Data
Data sharing – Cost contributions

• A maximal cost contribution of CHF 10'000 per grant is installed for:
  - data uploading costs and
  - related data preparation costs (prior to and for upload only).

• Data uploading costs are not paid if the data repository is commercial.

• Cost contribution can be exceeded, if justified.
Next steps

- First experiences in the different SNSF funding schemes and monitoring (feedback to institutions)

- Collaboration with Science Europe and EOSC Initiative

- Collaboration with swissuniversities: concept for data repositories in Switzerland

- Multi-annual plan SNSF: concept of SNSF actions for fostering data repositories
Open Research Data

Research data should be freely accessible to everyone – for scientists as well as for the general public.

The SNSF agrees with this principle. Since October 2017, researchers have to include a data management plan (DMP) in their funding application for most of the funding schemes. At the same time, the SNSF expects that data generated by funded projects are publicly accessible in digital databases provided there are no legal, ethical, copyright or other issues.

Please consult the webpages of the different funding schemes to see whether a DMP is required when submitting an application.

SNSF policy on Open Research Data

Guidelines and Regulations

FAIR Data Principles for Research Data Management
Contact: ord@snf.ch
UNIGE Research Services

Rencontre avec le FNS
4 septembre 2018
Hugues Cazeaux
Hugues.cazeaux@unige.ch
AVAILABLE e-Services

NAS Académique

catalogue-si.unige.ch/stockage-recherche
plone.unige.ch/distic/pub/nas-acad

HPC

catalogue-si.unige.ch/hpc
baobabmaster.unige.ch

Publication Preservation

catalogue-si.unige.ch/ao-deposer
archive-ouverte.unige.ch

Git Repository

pré-production

gitlab.unige.ch

Division du Système et des Technologies de l’Information et de la Communication (DiSTIC)
FUTURE e-Services

2019
Research Data
Long-term Preservation

Digital Humanities
Portal

2019-
ELN/LIMS
Integration
OCR

IaaS
PaaS
Container

Image Recognition
Crowd Sourcing

... "Strategy not yet decided in details"
Support & Expertise

Chercheurs

Service Recherche
Conseil, assistance : Gérer un projet de recherche, FNS, H2020, NIH, Carrières, Politiques

Service Juridique
Conseil, assistance juridique : cloud, licences, propriété intellectuelle, GDPR, LIPAD, ...

DIS
Conseil, assistance : bonnes pratiques, rédaction DMP, EPN, Formation et sensibilisation à la GDR, Gestion de l'Archive ouverte

CI facultaires
Assistance Environnement de travail IT

Centre de services virtuel
researchdata, CSN, Support SI

DISTIC SOLID
e-research
Gestion des données actives, archivage long terme, interfaces intégration, conseil, assistance

CUI
Algorithmes, recherches HPC, développement, accès au CSCS, conseil, assistance

DISTIC PRODS
Systèmes HPC
Gestion / évolution des ressources HPC, fourniture d'applications (OCR, statistiques, analyse d'images, analyse sémantique, deep learning, ...), installation assistée d'applications avec Easybuild, gestion des jobs, conseils techniques, assistance

DISTIC PRODS
Stockage NAS
Gestion / évolution des espaces de stockage (fourir des ressources sécurisées, restaurer, ...), conseil, assistance

Gestion / évolution des ressources HPC, fourniture d'applications (OCR, statistiques, analyse d'images, analyse sémantique, deep learning, ...), installation assistée d'applications avec Easybuild, gestion des jobs, conseils techniques, assistance

Chaque groupe à un coordinateur local

Division du Système et des Technologies de l’Information et de la Communication (DiSTIC)
Merci de votre attention

Questions ?
Data management information meeting

Ethics: To which commission should I submit my research project?

Christel Nigg, Scientific assistant

University of Geneva, Tuesday, September 4, 2018
Commissions for Ethics in Research

University of Geneva

Faculties

Cantonal
Cantonal Commission for Ethics in Research (CCER)

- In application of the Federal Law on Research on Human Beings since 2014 (LRH)
  

- Researchers from any institution based in Geneva can contact the CCER (e.g. UNIGE, HUG, pharma companies, …)

- Focuses primarily on medical research and research on populations of patients

[Link to CCER's website](http://ge.ch/sante/commission-cantonale-dethique-de-recherche-ccer/commission-cantonale-dethique-de-recherche-ccer)
University Commission for Ethics in Research (CUREG)

- Restricted to researchers of UNIGE
- Evaluate all projects that are:
  - Outside the field of LRH;
  - Conducted with human participants
  - Within faculties that do not have a commission for Ethics

https://www.unige.ch/commissionethique/
Faculty Commissions for Ethics in Research

These faculty commissions only evaluate research projects conducted by a faculty collaborator or faculty member.
LRH or not LRH, can you guess?

- Research project including painful stimulation on a healthy population.
- Research project in psychology involving the use of the electroencephalogram with a healthy population.
- Research project studying the specificities of reading by comparing good adult readers to adults who have had difficulty learning to read in childhood (i.e., dyslexia).
- Research project to study reading skills in children with strabismus.
- Research project in which behavioural and fMRI studies will be conducted.
Thank you for your attention
Commissions for Ethics in Research

Internet links

- CCER: [http://ge.ch/sante/commission-cantonale-dethique-de-recherche-ccer/commission-cantonale-dethique-de-recherche-ccer](http://ge.ch/sante/commission-cantonale-dethique-de-recherche-ccer/commission-cantonale-dethique-de-recherche-ccer)
- CUREG: [https://www.unige.ch/commissionethique/](https://www.unige.ch/commissionethique/)
- FPSE: [https://www.unige.ch/fapse/faculte/organisation/commissions/commission-ethique/](https://www.unige.ch/fapse/faculte/organisation/commissions/commission-ethique/)
- FTI: [https://www.unige.ch/fti/fr/faculte/organisation/commissions/ethique/](https://www.unige.ch/fti/fr/faculte/organisation/commissions/ethique/)
- SdS: [https://www.unige.ch/sciences-societe/faculte/organisation/commissions-de-la-faculte/commission-dethique/](https://www.unige.ch/sciences-societe/faculte/organisation/commissions-de-la-faculte/commission-dethique/)
SERVICE RECHERCHE

https://www.unige.ch/recherche/fr/

Service Recherche
Directrice Dre Laure Ogois-Zaugg

Bâtiment de la SIP,
10 rue des Vieux Grenadiers.
5 ème étage

Permanence au Campus Biotech
le mardi et jeudi après-midi

Pole of support for the Leman and National Research
(PoLN)
(par interim)
Dre Eliane Abou Mansour

Secretariat of the Research Commission for the Swiss national science foundation (COREC)
(par interim)
Dre Eliane Abou Mansour

Pole of support for the European and International Research
(Euresearch)
Dr Alexander Waehry

service-recherche@unige.ch     corec@unige.ch     euresearch@unige.ch
Mission

• **Ensure strategic monitoring of research and innovation policies** directly related to the stakeholders active at the regional, national and international levels;

• **Translating research and innovation policies into pro-active support** for the research community (from post-doctorat and onward) of UNIGE and the Geneva ecosystem of innovation, in particular Geneva SMEs;

• **Coordinate major research programs** at the Regional, National, European and International levels;

• **Propose to the Rectorate elements** for the development of the research strategy at UNIGE.
Ehique

Gestion des données de recherche

Qualité et évaluation dans la recherche

POLICIES

Gestion des données de recherche

- Gestion des données de recherche H2020 à l’UNIGE (Infosheet)
- Gestion des données de recherche FNS à l’UNIGE (site web DIS)
Ethique

Les enjeux de l’éthique de la recherche occupent une place de plus en plus importante dans la gestion de la recherche tant sur le plan international qu’à l’échelle nationale et ceci est valable pour toutes les disciplines scientifiques (tant en sciences naturelles qu’en sciences sociales et humaines).

À l’Université de Genève, toute démarche éthique décrite ci-dessous se fait dans le respect de la charte d’éthique et de déontologie, établie par le Comité d’éthique et de déontologie qui, au sein de l’Université, est l’organe de référence en la matière.

Recherche avec des êtres humains

Pour que la science (et surtout médecine) puisse progresser, la recherche avec des êtres humains est indispensable. Et pour ce faire, des conditions cadres éthiques et juridiques sont nécessaires. En Suisse, c’est La loi relative à la recherche sur l’être humain (LRH) qui s’applique dans les cas précisés dans son Art. 2 al. 1.

Tout projet de recherche impliquant des participants humains requiert normalement l’approbation d’un Comité d’éthique de la recherche.

À l’Université de Genève, la Commission universitaire d’éthique de la recherche (CUREG) procède à l’évaluation des projets de recherche avec des participants humains menés à l’Université qui ne tombent pas dans le champs d’application de l’art. 2 al. 1 LRH.

Par contre, les chercheurs dont les projets tombent dans le champs d’application dudit article, doivent s’adresser directement à la Commission cantonale d’éthique de la recherche - CCER.

Recherche avec des animaux
CALLS FOR PROJECTS

Procedure

Research project management

Research project management is realised within the framework of rules of ethics, regulations and with the infrastructures support of the University available.

For all projects: UNIGE disposals and tools

- Ethics: Projects requiring authorization (research on stem cells, animals, ...) Specific informations for «Horizon 2020»
- Staff management
- Scientific publications: Open Access
  - Regulations on the funding of Open Access publications of 7 November 2017
  - UNIGE publication funds
- Publish the research data
  - Data Management Plan (DMP) - Guidelines for researchers
- Research valorisation
Questions ???
DMP WORKSHOPS

- 1h30 workshops (French or English)
- Key elements to understand how to fill your own DMP
- Use the registration form
TRAININGS

- Data organization
- Data repository
- Data storage
- Data paper
- Data management plan
- Copyrights and licenses
- Electronic laboratory notebooks

Division de l’information scientifique
CONTACTS

researchdata-info@unige.ch

http://www.unige.ch/researchdata