

Usefull links to fill in data management plan:

- <https://www.fsw.vu.nl/nl/over-de-faculteit/facultaire-organisatie-en-bestuur/privacy-champions/index.aspx> -- for question about what is privacy and what is annonymos
- <https://libguides.vu.nl/rdm/overview> - to help you filling in the data management plan

Project Title

iGEM Amsterdam 2020 on the use of biotechnology in the production of daily products

Funder

VU Faculty of Science, UvA SILS

Grant number

NA

Abstract

In the context of the international Genetic Engineering Machine (iGEM) competition, a team of students is representing both Amsterdam Universities, Vrije Universiteit and University of Amsterdam. Their aim is to tackle a problem in biotechnology by adjusting an existing algorithm. Introducing this algorithm in the market required knowledge about the desires of the consumers. Therefore, the current opinion of the general Dutch public about the various applications of genetic modification is monitored. Besides, for communication purposes, the influence of the term 'Genetic Modification' on the answers people give is studied. Based on the results, an article trying to stir up the public debate about using genetically modified organisms to make production of certain products more sustainable will be written.

ID

61784

Principle Investigator**Name**

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0. General information***Contact details*****Project**

iGEM Amsterdam 2020

Email

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University

Vrije Universiteit Amsterdam and University of Amsterdam

Faculty/Institute

Swammerdam Institute of Life Sciences (UvA)

Department/Group

Molecular Microbial Physiology

Please list the partner organisations involved in this project and indicate which organisation has the lead

Research is funded by both UvA and VU

Responsible research group is located at the UvA (Molecular Microbial Physiology)

The Demonstrator Lab (collaboration between VU and UvA) is involved in funding and support

Team members are students of VU and/or UvA

The international Genetic Engineering Machine (iGEM) organization is responsible for the organization of the competition where the project is presented

Consulted data management expert

Dr. Brett G. Olivier

1.Data Description

Please specify the origin of the data: will new data be collected or produced and/or will existing data be re-used? If you re-use data, what is their source?

The iGEM Amsterdam team will collect data from individuals. The data will contain personal data consisting of age, demographics, gender and opinions.

How will you collect/access the data

Data will be collected in Qualtrics provided by the VU. A survey will be filled in by the participants.

Describe your data assets at each stage during the research process. In which format is the data at this stage? Also indicate a rough estimation of the volume of the data assets.

Raw data

Data description: Spread-sheet derived from Qualtrics
Format: CSV
Estimated volume: 1GB

Processed data

Data description: Qualtrics report file
Format: PDF
Estimated volume: 2GB

Analysed data

Data description: Google docs file
Format: DOCS
Estimated volume: 100 MB

Research documentation

Data description: Research article
Format: PDF
Estimated volume: 200 MB

2. Legal and ethical requirements

In this section, you describe the legal and ethical requirements that you have to comply with for your proposed research project.

In the Netherlands, there are several laws that pertain to scientific research. It is important to know with which laws your research must comply, as this may have consequences for the storage and security requirements for your data.

Note that if your research project belongs to a larger, international project, you may have to comply with additional laws and legislation. Please contact your faculty's Privacy Champion and discuss with your international colleagues if you are not sure whether or not this applies to your project.

In your research project, you collect or process personal data. This means you have to comply with the General Data Protection Regulation (and the Dutch Implementation Act for the GDPR). More information about personal data, data protection and the European law on privacy, the General Data Protection Regulation (GDPR), can be found in the LibGuide section [Data Protection and Security](#)[Opens in a new window](#).

Since the GDPR applies to your research, it is recommended to contact your [Faculty's Privacy Champion](#)[Opens in a new window](#) for assistance in meeting all of the GDPR requirements. The privacy champion can answer the most common privacy questions, for example: Can we process this personal data without consent of the data subjects? Is a given application suitable for the processing of sensitive personal data? Does the VU have a data processing agreement with the supplier of the application? Can the VU transfer personal data to another organization? If the Privacy Champion is unable to answer your question directly, they will refer you to other experts who will help you with your issue.

An additional concern regarding the GDPR, is the writing of a [data protection impact assessment \(DPIA\)](#)[Opens in a new window](#). The goal of writing a DPIA is to identify what the risks are to your participants' privacy. Not all research that falls under the GDPR necessarily requires a DPIA, but it can be complex to determine when or not this requirement applies. Your [Faculty's Privacy Champion](#)[Opens in a new window](#) can help you determine if a DPIA needs to be completed or not. A DPIA is never a bad exercise to carry out, because it will help you make sure that everything is in order under the GDPR. You can find a translated DPIA template (in English) in the [LibGuide](#)[Opens in a new window](#).

Are there any ethical issues that should be addressed by an ethical review board?

No

Will you use animals for experimental or scientific purposes in your research project?

No

Please list the applicable Codes of Conduct for your research project

iGEM code of conduct (2020) (https://2020.igem.org/Competition/Rules_of_Conduct)

VSNU Netherlands Code of Conduct for Research (2018) (https://vsnu.nl/en_GB/research-integrity)

Code of Ethics for Research involving Human Participants, Faculty of Science, Vrije Universiteit Amsterdam (2018) (https://beta.vu.nl/nl/Images/2-code-of-ethics-for-research-involving-human-participants_tcm235-926376.pdf)

SILS code of conduct (2017) (file:///tmp/mozilla_samiralvdb0/sils-code-of-conduct-2017.pdf)

What other legislation is applicable to your research project? Please describe.

3.Storage and back-up during the research process

During the research process, you have to make sure your data is well-protected and secure to prevent data leaks and loss. Since you are working with personal or other sensitive data, additional security requirements apply. In this section, you describe how you will store, back-up and secure your data during the research process.

The security risks that accompany the acquisition, storage and processing of your research data will need to be addressed by appropriate security measures, both technical and organisational. To determine your security risks in terms of availability, integrity, confidentiality, and where applicable privacy, you should complete [this data classification tool \(beta version\)Opens in a new window](#). The results of this data classification will help IT and “IT for Research” support you in determining appropriate technical security solutions, and will also help you identify where you should integrate organisational security measures.

What is the security level needed for your project?

Privacy: High
Availability: Medium
Integrity: High
Confidentiality: Low

What measures will you take to secure and protect data during the research process? Please describe, for your data assets, how you will ensure data security and who has authorization to access the asset.

Raw data

Security measures: Make sure that the raw data isn't leaking and kept on a protected server.
Access: Kelly Klomp

Processed data

Security measures: Keep on the Qualtrics server of the VU. Qualtrics is GDPR (General Data Protection Regulation) compliant and all response data are stored on their EU data centre are encrypted using the industry standard AES-256 cypher
Access: Kelly Klomp

Analysed data

Security measures: Keep on a server which is not shared with others, the data set will be anonymous
Access: IGEM team members

Research documentation

Security measures: The research documentation will be completely anonymous, no reference to the person who filled them in.
Access: Public/open source

Is it necessary to transfer the (physical or digital) data assets to other locations or research partners? If yes, please describe how you secure the file transfer.

No

Please describe, for your data assets, where and how you will store and back them up during the research process.

Raw data

Storage: In the Qualtrics provided by the VU domain

Back-up: On the VU personal server of Kelly Klomp (SSH)

Processed data

Storage: On a shared google drive, shared only within the team.

Back-up: On the VU personal server of Kelly Klomp (SSH)

Analysed data

Storage: .. On a shared google drive, shared only within the team.

Back-up: On the VU personal server of Kelly Klomp (SSH)

Research documentation

Storage: On a shared google drive, shared only within the team./ will be published online where everyone has access to, (read-only)

Back-up: On the VU personal server of Kelly Klomp (SSH)

4.Data sharing and long term preservation

After your research project is completed, you should archive your data, metadata and code. The duration for which data are archived depends on the purpose of archiving. All publication-related data must be archived for a mid-term period; archiving and publication of data for long-term storage depends on a variety of factors. For more information on archiving durations and how to apply this to your data, review this [page Opens in a new window](#) of the LibGuide.

Regardless of the archiving term, at the VU, we subscribe to the FAIR principles. This means that all information necessary to recreate the research results should be Findable, Accessible, Interoperable, and Reusable.

Note that data do not necessarily need to be open to be FAIR. The FAIR principles allow for controlled access, which can be important for certain types of data, for example due to legal, intellectual property, privacy- or security-related issues. The guiding principle is always that data should be as “as open as possible, as closed as necessary”. If data cannot be openly shared, because they are too sensitive, then [“the FAIR approach would be to make the metadata publicly available and provide information about the conditions for accessing the data itself.”Opens in a new window](#)

Be aware that since your data fall under the GDPR, you should always contact your [Faculty's Privacy ChampionOpens in a new window](#) before making data available to third parties for reuse. Do this at the start of your research because consent plays a role in the sharing of this data: it will be easier to share the data with other parties if you obtain consent during the data collection phase.

At the VU, we have three long-term storage options: DataVerseNL, ArchStor and DarkStor. They differ in their suitability for sensitive data, dataset size, etc. You can find more information on the storage options on the [RDM LibGuideOpens in a new window](#). Alternatively, you can find a list of repositories [hereOpens in a new window](#). Be aware that if your data fall under the GDPR, they can only be shared in external repositories with which the VU has a processing agreement. Discuss with your Faculty's Privacy Champion if you can share data in an external repository. Do this as early as possible in your research; don't wait until you are ready to share your data.

I think we only need to store our data temporarily and think longer term data is not necessary

In which digital repository (or data archive) will you archive your data? Please provide a name and link.

ArchStor

What is the persistent identifier (e.g. DOI-code) that refers to the dataset?

NA

In which online catalogue or web portal will you register your data assets? Please provide a description and a link.

NA

Are there restrictions to data sharing? If yes, please specify the reasons and list the data assets you do not wish to share publicly.

No

When will you share the data (e.g. immediately after completion of the project, or after an embargo period)? If not immediately, please specify the reasons.

After analysis & publication

Please indicate the license and/ or terms of use under which you share your data.

NA

For how long will the data be available in the archive/ repository?

For 3 years.

Will the research publication resulting from this research project be openly accessible?

Yes

5.Documentation and Data quality

How will you document your data?

We will analyze the data in Qualtrics and then write down the results in a google docs file

Will you follow a specific metadata standard? If yes, please provide a name and link.

No

If there are no standards in your discipline, describe what metadata will be created and how.

Will you use standard vocabulary for all data types present in your dataset? If not, will you provide mapping to more commonly used ontologies (naming conventions)?

Yes

What methods or software tools are needed to access and use your data?

Qualtrics analyzing software in the online environment.

Will you take measures to ensure data quality? Please describe these, if applicable.

No

6.Data management responsibilities and resources

Who will be responsible for management of the data assets after completion of the project (e.g. the project lead/ dedicated data manager/ department head)?

Name: Filipe Dos Santos
Function: Supervisor of the IGEM project/ Groupleader
University: University of Amsterdam
Faculty/ Institution: SILS - Swammerdam Institute for Life Sciences
Department/ Group: MMP - Molecular Microbial Physiology

What resources (for example financial and time) will be dedicated to research data management? Please estimate their cost.

One month - No financial costs