# FWO DMP Template - Flemish Standard Data Management Plan

| 1. General Project Information | |
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| Name Grant Holder & ORCID | DMP related to work performed in the lab of Prof. Ludo Van Den Bosch.<br>Name grant holders:<br>**Van Den Bosch, Ludo (VIB/KULeuven)**<br>Timmerman, Vincent (UAntwerpen)<br>Kleinewietfeld, Markus (UHasselt)<br>Wolfs, Esther (UHasselt) |
| | Van Den Bosch, Ludo (https://orcid.org/0000-0003-0104-4067): promoter-spokesperson<br>Timmerman, Vincent (https://orcid.org/0000-0002-2162-0933): promoter<br>Kleinewietfeld, Markus (https://orcid.org/0000-0002-2832-3149): promoter<br>Wolfs, Esther (https://orcid.org/0000-0001-9277-6524): co-promoter<br>Karen Libberecht (http://orcid.org/0000-0001-7345-0246): postdoc<br>Tim Vangansewinkel (https://orcid.org/ 0000-0002-9765-4443): postdoc<br>Bieke Bekaert (https://orcid.org/ 0000-0002-9765-4443): postdoc<br>Melanie Van Brussel (https://orcid.org/0009-0001-9013-1818): predoc<br>Yara Lambrechts (https://orcid.org/0009-0008-4494-4763): predoc |
| Project number[1] & title | - De ontwikkeling van een gehumaniseerd muismodel voor demyeliniserende perifere neuropathieën om nieuwe behandelingen te testen<br>- Creation of a humanized mouse model for demyelinating peripheral neuropathies as a platform for therapeutic testing |
| Funder(s) GrantID[2] | iBOF research grant: iBOF/23/021 |

[1] "Project number" refers to the institutional project number. This question is optional since not every institution has an internal project number different from the GrantID. Applicants can only provide one project number.

[2] Funder(s) GrantID refers to the number of the DMP at the funder(s), here one can specify multiple GrantIDs if multiple funding sources were used.

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| Affiliation(s) | X KU Leuven<br>X Universiteit Antwerpen<br>☐ Universiteit Gent<br>X Universiteit Hasselt<br>☐ Vrije Universiteit Brussel<br>☐ Other:<br>Provide ROR[3] identifier when possible: |
| Please provide a short project description | Charcot-Marie-Tooth disease type 1 (CMT1) is a demyelinating peripheral neuropathy characterized by slowly progressing muscle weakness and the development of sensory problems. CMT1 is a genetic disease caused by mutations or copy number variations in several genes in Schwann cells, responsible for myelination. There is no cure for CMT because of an insufficient understanding of the pathogenesis. In this project, we start from stem cells and develop a humanized mouse model for CMT1. The model will recapitulate the disease, including the impact of inflammatory responses. We inject stem cell derived Schwann cells in the presence of a humanized immune system. We will also get better insights into the disease mechanism by using Schwann cells containing CMT1-causing genetic alterations. The humanized mouse model offers a novel and unique opportunity to validate candidate therapies for dominant and recessive forms of CMT1 and will contribute to a better understanding of CMT.<br><br>**This DMP is related to the work performed in the lab of Prof. Ludo Van Den Bosch.** |

## Research Data Summary

[3] Research Organization Registry Community. https://ror.org/

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data[4].

| | | | | *ONLY FOR DIGITAL DATA* | *ONLY FOR DIGITAL DATA* | *ONLY FOR DIGITAL DATA* | *ONLY FOR PHYSICAL DATA* |
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| Dataset Name | Description | New or Reused | Digital or Physical | Digital Data Type | Digital Data Format | Digital Data Volume (MB, GB, TB) | Physical Volume |
| Electronic lab books | Experiments are registered, documented, checked and preserved through ELN and lab notebooks. | new | Digital | Other | .pdf<br>.txt<br>.doc | <1GB | / |
| Patient stem cell lines for 2D and 3D disease modelling | Development and characterization of stem cell lines (iPSC, DPSC, CMT1A patient vs healthy controls) | new & reused data | Physical | Experimental | / | / | 5 different patient lines, both DPSC and iPSC, including healthy controls. Expected to store > 200 vials of cells in liquid nitrogen |
| Imaging Histology | Different imaging techniques (such as light, fluorescence, | new data | Digital &<br><br>Physical | Experimental | .tif<br>.pdf<br>.cvs<br>.xls | <50TB | Microscope slides (of tissues and cells) will be stored throughout the project. |

[4] Add rows for each dataset you want to describe.

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| | confocal and electron microscopy) will be performed throughout the project on cells and tissue sections, including the analysis | | | | | | > 20 microscope slide boxes (capacity 100 slides) will be stored in cabinets at room temperature or -20°C freezer |
| iBOF_micorfluidics2D | 2D cell model data created in our lab | ☒ Generate new data<br>☐ Reuse existing data | ☒ Digital<br>☒ Physical | ☐ Observational<br>☒ Experimental<br>☐ Compiled/ aggregated data<br>☐ Simulation data<br>☐ Software<br>☐ Other<br>☐ NA | ☐ .por<br>☐ .xml<br>☒ .tab<br>☒ .csv<br>☒ .pdf<br>☒ .txt<br>☐ .rtf<br>☐ .dwg<br>☐ .tab<br>☐ .gml<br>☒ other: .czi, .tsv<br>☐ NA | ☐ < 100 MB<br>☐ < 1 GB<br>☐ < 100 GB<br>☐ < 1 TB<br>☒ < 5 TB<br>☐ < 10 TB<br>☐ < 50 TB<br>☐ > 50 TB<br>☐ NA | At least 3 cryovials of each iPSC line or created reporter cell line (i.e. in-house banking).<br><br>> 100 samples prepared for SEM<br><br>> 100 samples prepared for histology and immunostainings.<br><br>> 100 DNA/RNA/protein or cell pellet samples. |

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| Molecular techniques | qPCR, Western blot, omics analysis including RNA sequencing. Homogenates of cells and tissue lysates will be generated and stored, including data analysis. | new data | Digital &<br><br>Physical | Experimental | .xml, .czs, .cvs, .pdf, .txt, .tif, .jp2, .dwg, .xls… | <1TB | Cell and tissue homogenates will be stored in eppendorf tubes at -80°c or liquid nitrogen:<br>>1000 samples will be stored |
| In vitro: live cell imaging & myelination assays | Live cell imaging and 3D myelination assays | new data | Digital<br><br>Physical | Experimental | .tif<br>LSM<br>Lif<br>Nd2 | <10TB | / |
| Functional data from in vivo | Electrophysiological recordings, motor and other functional tests performed on mice | new data | Digital<br><br>Physical | Experimental | .pdf<br>.cvs<br>.xls<br>.tif<br>.mov<br>.mp4 | <1TB | / |
| Non-invasive imaging in vivo | BLI and PET/MRI imaging performed on mice | new data | Digital | Experimental | .dicom<br>.tif | <50TB | / |

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| *Guidance:*<br>*Data can be digital or physical (for example biobank, biological samples, …). Data type: Data are often grouped by type (observational, experimental etc.), format and/or collection/generation method.*<br>*Examples of data types: observational (e.g. survey results, sensor readings, sensory observations); experimental (e.g. microscopy, spectroscopy, chromatograms, gene sequences); compiled/aggregated data[5] (e.g. text & data mining, derived variables, 3D modelling); simulation data (e.g. climate models); software, etc.*<br>*Examples of data formats: tabular data (.por,. spss, structured text or mark-up file XML, .tab, .csv), textual data (.rtf, .xml, .txt), geospatial data (.dwg,. GML, ..), image data, audio data, video data, documentation & computational script.*<br>*digital data volume: Please estimate the upper limit of the volume of the data per dataset or data type.*<br>*physical volume: Please estimate the physical volume of the research materials (for example the number of relevant biological samples that need to be stored and preserved during the project and/or after).* | |
| If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type. | We will reuse bulk RNA sequencing data related to a previous publication from our lab:<br>DOI: 10.1093/brain/awae158 |

[5] These data are generated by combining multiple existing datasets.

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| Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, please describe these issues further and refer to specific datasets or data types when appropriate. | ☒ Yes, human subject data<br>☒ Yes, animal data<br>☐ Yes, dual use<br>☐ No<br>If yes, please describe:<br><br>Experiments with both human stem cell models and a newly created mouse model will be performed:<br><br>- Human stem cell models:<br>For patient biosamples regarding the created iPSC lines, KULeuven adheres as a hub to the biobank, and follows the best practice ethics as recommended by the medical ethics committee of the KU Leuven and University Hospital UZ Leuven (Gasthuisberg). KULeuven has separate ethical approvals for generating iPSC lines from Belgian and foreign patients and controls, and we respect the privacy of the origin of these lines. The lab of Prof. Van Den Bosch (CBD VIB-KULeuven) has the approved 'umbrella' project (reference S67294) for the use of human cells, and also another study (reference S50354) for the collection and storage of HBM. All human materials, including cell lines imported to our department, as well as all genetically modified cells will be automatically registered in the Biobank KULeuven-VIB according to the Belgian Law of 19 December 2008 concerning the Procurement and Use of Human body Materials with the aim at Human Medical Application of Scientific research (as amended, "Law on Human Material") and related royal decrees. The KULeuven research database contains all relevant ethics info regarding this project, including "ethics & integrity" and "processing of personal data".<br><br>- Humanized mouse model:<br>Animal data will be used in this project, particularly during and following the creation of our humanized mouse model. Animal data will only be collected after approval from the Ethical Committee for Animals (ECD) from the respective universities, KULeuven, UAntwerp and UHasselt. All animals are housed and handled according EU directive 2010/63/EU and Belgian animal welfare legislation (in particular the law of 14 August 1986 and the related royal decree of 29 May 2013). |

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| Will you process personal data[6]? If so, briefly describe the kind of personal data you will use. Please refer to specific datasets or data types when appropriate. If available, add the reference to your file in your host institution's privacy register. | ☐ Yes<br>☒ No<br>If yes:<br><br>- Short description of the kind of personal data that will be used:<br>- Privacy Registry Reference: |
| Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, …)? If so, please comment per dataset or data type where appropriate. | ☒ Yes<br>☐ No<br>If yes, please comment:<br><br>We do not exclude that the proposed work could result in research data with potential for tech transfer and valorization. Ownership of the data generated belongs to KULeuven and/or UAntwerp and/or UHasselt in accordance with the framework agreement of these institutes. KULeuven has a policy to actively monitor research data for such potential. If there is substantial potential, the invention will be thoroughly assessed, and in a number of cases the invention will be IP protected (mostly patent protection or copyright protection). As such, the IP protection does not withhold the research data from being made public. In the case a decision is taken to file a patent application, it will be planned so that publications need not to be delayed. |

[6] See Glossary Flemish Standard Data Management Plan

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| Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements, research collaboration agreements)? If so, please explain to what data they relate and what restrictions are in place. | ☒ Yes<br>☐ No<br>If yes, please explain:<br><br>3rd party agreements may restrict dissemination or exploitation of data in the following cases:<br>- Data generated with cell lines obtained from repositories must adhere to restrictions on data dissemination specified in the material transfer agreement (MTA). Some of the iPSC patient lines are created by companies and are therefore obtained through a material transfer agreement.<br>- Data generated with samples obtained from humans are subject to patient consent forms and, if applicable, material transfer agreements, and the therein specified restrictions on data dissemination and/or exploitation.<br>- The MISTRG mouse model was generated by Yale University and Regeneron, and we need to follow the guidelines on data dissemination and/or exploitation as specified in the MTA. |
| Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain to what data they relate and which restrictions will be asserted. | ☒ Yes<br>☐ No<br>If yes, please explain:<br><br>If the restriction of data sharing is a consequence of securing Intellectual Property (IP), the researcher involved and the IP team of the TechTransfer office shall make the necessary arrangements in order to maintain the embargo on the public access (dissemination) of research data, at least until the essential steps in securing intellectual property (e.g. the filing of a patent application) have been taken. However, reasonable efforts will be made to avoid delays in publication. Personal data will only be published after de-identification and identifiers will not be published (e.g. age, sex and mutation of patient from patient-derived iPSCs will be published). If despite all efforts it is not possible to protect the identities of subjects even after removing all identifiers, personal data will not be made public. |

## 2. Documentation and Metadata

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| Clearly describe what approach will be followed to capture the accompanying information necessary to keep **data understandable and usable**, for yourself and others, now and in the future (e.g. in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, Codebook.tsv etc. where this information is recorded). | Data will be generated following standardized protocols. Metadata will be documented by the research and technical staff at the time of data collection and analysis, by taking careful notes in an electronic laboratory notebook and in dedicated folders on the secured servers of KULeuven/VIB. Antibodies (conditions), vectors (wild type and mutant), cell lines (artificial or patient-derived) and their modifications are catalogued in the in-house JKL drive (subjected to daily back-ups including to an offsite server and monthly stored on tape).<br><br>Cryotubes of cell and biological samples stored at -80°C or in LN tanks will be labelled with a reference number that links to an entry in our KULeuven-VIB JKL database, which holds information on sample source, storage location, and quality and quantity.<br><br>All datasets will be accompanied by a README.txt file containing all the associated metadata.<br><br>The data will be generated following standardized protocols. Clear and detailed descriptions of these protocols will be stored in our lab protocol database, and published along with the results. |

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| Will a metadata standard be used to make it easier to **find and reuse the data**?<br><br>If so, please specify which metadata standard will be used. If not, please specify which metadata will be created to make the data easier to find and reuse.<br><br>*REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.* | ☒ Yes<br>☐ No<br>If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used:<br><br>To a feasible extent, digital files will be collected following a standard procedure, so that all the names of all files in a given dataset will be in the same format: all names will start with the date, followed by the project acronym, a short but specific descriptive name and a version number. Whenever possible names will be kept under 32 characters. Names will only contain letters, numbers and underscores. Dots will only be used for version control indicators (minor revisions indicated by decimal numbers, and major revisions by whole numbers): YYYYMMDD_iBOF_Experiment_version.format. This code can be adapted during the project when necessary.<br><br>Data files will be stored in suitably labelled and organized folders and sub-folders, accompanied by a README file containing all the associated metadata. File names and locations will be recorded in the electronic notebook to allow electronic records to be linked to the raw data.<br><br>Specific naming and search procedures will be applied to:<br><br>- Omics and sequencing data: Digital files, raw sequencing data files mainly (.fastq, .fastq.gz), will be named following an in-house procedure, so that all the name of all files in a given dataset will be in the same format. All names will start with a project 3 letter code (Project Code) and a random 6-alphanumeric character code (unique to each sample given the Project Code), followed by a specific descriptive name of the sample and the technology used (e.g.: 10x). Names will only contain letters, numbers and underscores.<br>- Human induced pluripotent cell lines (iPSCs): Newly created cell lines will be named according to the nomenclature rules established by the hPSCreg.eu database (https://hpscreg.eu/about/naming-tool). Names consists of a maximum of 15 characters and have the following structure: up to 6 characters for the institution, an i or e indicating the cell line type, 3 characters for the unique donor ID and finally a letter that is incremented depending on how many cell lines are generated by the same donor. Subclones are indicated by a hyphen followed by the subclone number.<br>- Manuscripts: Metadata information will be submitted alongside the final version of the manuscript, |

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| | including the names, titles, email addresses, ORCIDs and affiliations of all authors. Upon publication, if requested by the publisher, this metadata information will also be submitted to bibliographic databases such as Medline. All manuscripts will be assigned a unique Digital Object Identifer (DOI) by the publisher. Manuscripts will be given a descriptive title, and will be accompanied by keywords provided by the authors in order to maximize their findability. |

| 3. Data Storage & Back-up during the Research Project | |
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| Where will the data be stored? | - Digital files will be stored on KULeuven-VIB servers.<br>- All human tissue samples are registered in our KULeuven-VIB biobank, in compliance with the Belgian law on human body material (dd 19-12-2008).<br>- Sanger sequencing data is stored on the centralized JKL system, initially in the staging area and later in the archive area.<br>- All nucleic acid and protein sequences generated during the project will be stored internally on the servers of the KULeuven-VIB. These servers have RAID 6 or equivalent disk setup for protection of the data. |

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| How will the data be backed up?<br><br>*WHAT STORAGE AND BACKUP PROCEDURES WILL BE IN PLACE TO PREVENT DATA LOSS? DESCRIBE THE LOCATIONS, STORAGE MEDIA AND PROCEDURES THAT WILL BE USED FOR STORING AND BACKING UP DIGITAL AND NON-DIGITAL DATA DURING RESEARCH.*[7]<br><br>*REFER TO INSTITUTION-SPECIFIC POLICIES REGARDING BACKUP PROCEDURES WHEN APPROPRIATE.* | The KULeuven-VIB JKL is submitted to daily back-ups on an offsite server, as well as to daily internal back-ups (RAID6). Desktops at KULeuven-VIB are submitted to daily backups through Retrospect. Local data storage servers at KULeuven-VIB are synchronized for active backup purpose using snapshot technology protecting against cryptolockers.<br><br>Raw data generated at KULeuven-VIB are stored following the US-CERT recommended back up practice 3-2-1 (3 copies of the data, 2 different storage media, 1 off site copy), including separate back up on tape for long term archival. All servers have RAID6 (or equivalent) redundancy.<br><br>Specifically for omics data, KULeuven-VIB has adopted US-CERT recommended backup practice 3-2-1 (n-d-o) for omics data. We have three copies of the data, two different storage media and one offsite copy. Our servers have a direct in-house online backup, a third copy (n = 3) is stored on a tape (d = 2). At this moment the data remains onsite, but in a different room (o = 1).<br><br>Local data of the researcher's computer are also backed-up daily using the Retrospect software, and stored on the servers of KULeuven-VIB. When a researcher leaves, a copy will made of the hard disk of the computer used during the research period.<br><br>For cloud storage, Microsoft OneDrive is available and guarantees our data security in Office 365 through the following measures:<br>- Redundancy on multiple layers of the service ensure that data loss is prevented as much as possible.<br>- Internal and external audits ensure that Microsoft meets the requirements set by data protection and security legislation.<br>- Versioning up to 500 versions per file, only by restoring yourself.<br>- Deleted items up to 90 days back in your "trash"<br>- Restore points<br>- Deleted OneDrive accounts can be restored by Department up to 30 days after removal<br>At this moment, cloud storage is not expected to be our main storage type. |

[7] Source: Ghent University Generic DMP Evaluation Rubric: https://osf.io/2z5g3/

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| Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available, then explain how this will be taken care of. | ☒ Yes<br>☐ No<br>If yes, please specify concisely:<br><br>Meta-data is stored on the in-house JKL drive in SQL format. There is +/- 700TB of online storage available for the use in house. We increase this yearly to the needs of the centre. For offline backup, tapes are used that store 2.5TB/tape. These have an expected life span of 15-30 years. |
| How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?<br><br>*CLEARLY DESCRIBE THE MEASURES (IN TERMS OF PHYSICAL SECURITY, NETWORK SECURITY, AND SECURITY OF COMPUTER SYSTEMS AND FILES) THAT WILL BE TAKEN TO ENSURE THAT STORED AND TRANSFERRED DATA ARE SAFE.* [7] | Physical access to the building (Gasthuisberg – O&N5) is employee badge-protected.<br><br>At KULeuven-VIB, data is protected by domain controlled authorization and authentication. The data can only be accessed after login (username + password) and can be further restricted per project and per group. Researchers have access only to de-identified information. The building is restricted by badge system so only employees are allowed in and visitors are allowed under supervision after registration. Our JKL system uses Role Based Access Control (RBAC), maintained and verified by PI and HR. Communication with the JKL database is encrypted and follows secured https.<br><br>Only the PI and medical team members will be granted access to the server to deposit private data. The PI and medical team members will be the only responsible for linking patient information and/or samples, and will strictly respect confidentiality. |

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| What are the expected costs for data storage and backup during the research project? How will these costs be covered? | The costs for storage and back up during the project on KULeuven-VIB servers are as follows:<br>- Storage (2 copies, snapshots, RAID6): 83€/TB/Year<br>- Cloud : 23-51 € / TB / month (this is not expected to be our main storage type)<br><br>Storage costs for other digital data (images, excel files, word files,...) on the departmental server is covered by the central departmental budget to which our research team contributes financially on a semester-based invoice.<br><br>Electricity costs for the -80° freezers and LN tanks present in the labs are included in general lab costs.<br><br>Data storage and backup costs are included in general lab costs. |

| **5. Data Preservation after the end of the Research Project** | |
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| Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies...). | The minimum preservation term of 5 years after the end of the project will be applied to all datasets. All datasets will be stored on the KULeuven-VIB central servers with automatic back-up procedures for at least 5 years. |
| Where will these data be archived (stored and curated for the long-term)? | We store our data following our 3-2-1 principle for the foresee-able future. In case data would be archived, we would duplicate our tape and store this in the optimal environment, which has an estimated lifespan of 15-30 years.<br><br>Long-term cloud storage options (e.g. AWS Glacier) are available, but more expensive. |

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| What are the expected costs for data preservation during the expected retention period? How will these costs be covered? | The total estimated cost of data storage during 5 years after the end of the project is under 1000 euro. This estimation is based on the following costs: data storage and backup (JKL database), biobanking at UZ Leuven, cryotheek, electricity -80°C freezers, … Costs will be covered from the laboratory budget to which our research team contributes financially on a semester-based invoice. |

| 6. Data Sharing and Reuse | |
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| Will the data (or part of the data) be made available for reuse after/during the project?<br>Please explain per dataset or data type which data will be made available.<br><br>*NOTE THAT 'AVAILABLE' DOES NOT NECESSARILY MEAN THAT THE DATA SET BECOMES OPENLY AVAILABLE, CONDITIONS FOR ACCESS AND USE MAY APPLY. AVAILABILITY IN THIS QUESTION THUS ENTAILS BOTH OPEN & RESTRICTED ACCESS. FOR MORE INFORMATION: HTTPS://WIKI.SURFNET.NL/DISPLAY/STANDARDS/INFO-EU-REPO/#INFOEUREPO-ACCESSRIGHTS* | ☒ Yes, in an Open Access repository<br>☐ Yes, in a restricted access repository (after approval, institutional access only, …)<br>☐ No (closed access)<br>☐ Other, please specify:<br><br>Anonymous or non-personal research outputs supporting publications will be made openly accessible through open access repositories. Depending on their nature, some data may be made available prior to publication, either on an individual basis to interested researchers and/or potential new collaborators, or publicly via repositories (e.g. negative data). |
| If access is restricted, please specify who will be able to access the data and under what conditions. | N/A |
| Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)? Please explain per dataset or data type where appropriate. | ☐ Yes, privacy aspects<br>☒ Yes, intellectual property rights<br>☐ Yes, ethical aspects<br>☐ Yes, aspects of dual use<br>☐ Yes, other<br>☐ No<br><br>If yes, please specify: Datasets or datatypes can be subjected to IP / valorisation, in consultation with the valorisation department of the KULeuven. |

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| Where will the data be made available? If already known, please provide a repository per dataset or data type. | This depends on the chosen journal. |
| When will the data be made available?<br><br>*This could be a specific date (dd/mm/yyyy) or an indication such as 'upon publication of research results'.* | Data will be made available at the latest at time of publication. Depending on their nature, some data may be made available prior to publication, either on an individual basis to interested researchers and/or potential new collaborators, or publicly via repositories (e.g. negative data). |
| Which data usage licenses are you going to provide? If none, please explain why.<br><br>*A data usage license indicates whether the data can be reused or not and under what conditions. If no licence is granted, the data are in a grey zone and cannot be legally reused. Do note that you may only release data under a licence chosen by yourself if it does not already fall under another licence that might prohibit that.*<br><br>*Example Answer: E.g. "Data from the project that can be shared will be made available under a Creative Commons Attribution license (CC-BY 4.0), so that users have to give credit to the original data creators."* [8] | One of the below repositories will be chosen:<br>1) Data from the project that can be shared could be made available under a Creative Commons Attribution License (CC-BY 4.0), so that users have to give credit to the original data creators.<br>2) Data could be shared under a Creative Commons CC0 1.0 Universal (CC0 1.0) Public Domain Dedication, a Creative Commons Attribution (CC-BY) or an ODC Public Domain Dedication and License. |
| Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here.<br><br>*Indicate whether you intend to add a persistent and unique identifier in order to identify and retrieve the data.* | ☒ Yes<br>☐ No<br>If yes: Depending on the created dataset a PID/DOI/accession number will be created. |

[8] Source: Ghent University Generic DMP Evaluation Rubric: https://osf.io/2z5g3/

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| What are the expected costs for data sharing? How will these costs be covered? | It is the intention to minimize data management costs by implementing standard procedures e.g. for metadata collection and file storage and organization from the start of the project, and by using free-to-use data repositories and dissemination facilities whenever possible. Data management costs will be covered by the laboratory budget. |

| **7. Responsibilities** | |
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| Who will manage data documentation and metadata during the research project? | Metadata will be documented by the research and technical staff at the time of data collection and analysis under control of Prof. Ludo Van Den Bosch. |
| Who will manage data storage and backup during the research project? | The research and technical staff will ensure data storage and back up. Prof. Van Den Bosch is responsible for data storage & back up decisions. |
| Who will manage data preservation and sharing? | Prof. Van Den Bosch is responsible for data preservation and sharing, with support from the research and technical staff involved in the project. |
| Who will update and implement this DMP? | Prof. Van Den Bosch is ultimately responsible for all data management during and after data collection, including implementing and updating the DMP. |