

FWO DMP Template - Flemish Standard Data Management Plan

Version KU Leuven

Project supervisors (from application round 2018 onwards) and fellows (from application round 2020 onwards) will, upon being awarded their project or fellowship, be invited to develop their answers to the data management related questions into a DMP. The FWO expects a **completed DMP no later than 6 months after the official start date** of the project or fellowship. The DMP should not be submitted to FWO but to the research co-ordination office of the host institute; FWO may request the DMP in a random check.

At the end of the project, the **final version of the DMP** has to be added to the final report of the project; this should be submitted to FWO by the supervisor-spokesperson through FWO's e-portal. This DMP may of course have been updated since its first version. The DMP is an element in the final evaluation of the project by the relevant expert panel. Both the DMP submitted within the first 6 months after the start date and the final DMP may use this template.

The DMP template used by the Research Foundation Flanders (FWO) corresponds with the Flemish Standard Data Management Plan. This Flemish Standard DMP was developed by the Flemish Research Data Network (FRDN) Task Force DMP which comprises representatives of all Flemish funders and research institutions. This is a standardized DMP template based on the previous FWO template that contains the core requirements for data management planning. To increase understanding and facilitate completion of the DMP, a standardized **glossary** of definitions and abbreviations is available via the following [link](#).

1. General Project Information	
Name Grant Holder & ORCID	Benedetta Frizzi http://orcid.org/0000-0001-8194-3796
Contributor name(s) (+ ORCID) & roles	Ludo Van Den Bosch (Supervisor) http://orcid.org/0000-0003-0104-4067 Katarina Stoklund Dittlau (Co-supervisor) https://orcid.org/0000-0003-2776-2892
Project number ¹ & title	11PGF24N ‘Investigating astrocyte toxicity in amyotrophic lateral sclerosis using human motor units’
Funder(s) GrantID ²	D-2024-2688
Affiliation(s)	<input checked="" type="checkbox"/> KU Leuven <input type="checkbox"/> Universiteit Antwerpen <input type="checkbox"/> Universiteit Gent <input type="checkbox"/> Universiteit Hasselt <input type="checkbox"/> Vrije Universiteit Brussel <input type="checkbox"/> Other: ROR identifier KU Leuven: 05f950310

¹ “Project number” refers to the institutional project number. This question is optional. 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.

Please provide a short project description	<p>Amyotrophic Lateral Sclerosis (ALS) is a neurodegenerative disorder which is lethal within five years after diagnosis. Although a significant contribution of reactive astrocytes to ALS is recognised, the underlying mechanisms mediating their toxicity remain still elusive. This project aims to elucidate how the interplay between the Wnt/β-catenin pathway, defects in cell-cell communication and the secretion of toxic molecules from reactive astrocytes plays a role in dismantling the neuromuscular junctions. Our innovative approach relies on the use of iPSC-derived human tripartite synapses in microfluidic devices, which allows studying cell-cell interaction in a compartmentalized microenvironment. To achieve this objective, I will investigate the nature of the β-catenin activation as well as the dysregulation of gap junctions and their impact on the astrocyte-motor neuron cross-talk. Moreover, proteomics on the astrocyte secretome will reveal the soluble key players of astrocyte-mediated toxicity. Lastly, gene silencing and pharmaceutical drugs will be used to unravel the impact of the loss of support and the secretion of toxic factors in activating the Wnt/β-catenin pathway and in inducing defects in motor neurons and in neuromuscular junctions. Overall, this study will pave the way for the identification of candidate targets for a therapeutic approach to mitigate mutant astrocyte-mediated toxicity in ALS.</p>
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2. Research Data Summary

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 ³.

Dataset Name	Description	New or Reused	Digital or Physical	ONLY FOR DIGITAL DATA	ONLY FOR DIGITAL DATA	ONLY FOR DIGITAL DATA	ONLY FOR PHYSICAL DATA
				Digital Data Type	Digital Data Format	Digital Data Volume (MB, GB, TB)	Physical Volume
Microscopy data	Immunofluorescence of <i>in vitro</i> mono and co-cultures experiments. Raw data, analysed images and analysed data	<input checked="" type="checkbox"/> Generate new data <input type="checkbox"/> Reuse existing data	<input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input checked="" type="checkbox"/> Images <input type="checkbox"/> Sound <input checked="" type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other:	.tiff .xls	<input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input checked="" type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	
Western blot, Immunoprecipitation	Raw gels, analysed images and data	<input checked="" type="checkbox"/> Generated new data <input type="checkbox"/> Reuse existing data	<input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input checked="" type="checkbox"/> Images <input type="checkbox"/> Sound <input checked="" type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other	.tiff .jpeg .xls	<input checked="" type="checkbox"/> < 1GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	
Incucyte morphology	Raw time points data, analysed	<input checked="" type="checkbox"/> Generated new data	<input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input type="checkbox"/> Images	.txt .xls	<input checked="" type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB	

³ Add rows for each dataset you want to describe.

analysis after treatment	data	<input type="checkbox"/> Reuse existing data		<input type="checkbox"/> Sound <input checked="" type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other		<input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	
Omics data	Proteomic and Secretomic raw and analysed data	<input checked="" type="checkbox"/> Generated new data <input type="checkbox"/> Reuse existing data	<input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input type="checkbox"/> Images <input type="checkbox"/> Sound <input checked="" type="checkbox"/> Numerical <input checked="" type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other	.seq .fastq .xls	<input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input checked="" type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	
Gene silencing vectors and drugs	Morpholinos or oligo antisense nucleotides, inhibitors or activators drugs	<input checked="" type="checkbox"/> Generated new Data <input type="checkbox"/> Reuse existing data	<input type="checkbox"/> Digital <input checked="" type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input type="checkbox"/> Images <input type="checkbox"/> Sound <input type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other		<input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	Physical volume
Cell lines	Storage of cells in liquid nitrogen	<input checked="" type="checkbox"/> Generated new data <input checked="" type="checkbox"/> Reuse existing data	<input type="checkbox"/> Digital <input checked="" type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input type="checkbox"/> Images <input type="checkbox"/> Sound <input type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software		<input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	Combination of previously generated cells and new ones kept in 10 9x9 boxes

Cell pellets	Cell pellets collected in 1.5 ml tubes for proteomic, secretomic, western blot analysis and storage	<input checked="" type="checkbox"/> Generated new data <input type="checkbox"/> Reuse existing data	<input type="checkbox"/> Digital <input checked="" type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input type="checkbox"/> Images <input type="checkbox"/> Sound <input type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software		<input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	10- boxes of 9x9 stored at -80 °C
PFA fixed cells	PFA fixed cells in 24 wells and microfluidic devices for confocal microscopy	<input checked="" type="checkbox"/> Generated new data <input type="checkbox"/> Reuse existing data	<input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input type="checkbox"/> Images <input type="checkbox"/> Sound <input type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software		<input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA	20 Plates and 30 microfluidic devices stored at 4 ° C
Graphs and statistic	Graphical representation and statistical analysis performed with GraphPad Prism software	<input type="checkbox"/> Generated new data <input type="checkbox"/> Reuse existing data	<input type="checkbox"/> Digital <input type="checkbox"/> Physical	<input type="checkbox"/> Audiovisual <input checked="" type="checkbox"/> Images <input type="checkbox"/> Sound <input checked="" type="checkbox"/> Numerical <input checked="" type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software		<input checked="" type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 GB <input type="checkbox"/> > 5 GB <input type="checkbox"/> NA	

<p>GUIDANCE:</p> <p><i>The data description forms the basis of your entire DMP, so make sure it is detailed and complete. It includes digital and physical data and encompasses the whole spectrum ranging from raw data to processed and analysed data including analysis scripts and code. Physical data are all materials that need proper management because they are valuable, difficult to replace and/or ethical issues are associated. Materials that are not considered data in an RDM context include your own manuscripts, theses and presentations; documentation is an integral part of your datasets and should be described under documentation/metadata.</i></p> <p>RDM Guidance on data</p>	
<p>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.</p>	<p>I took over cells previously generated by another PhD student of the lab</p>
<p>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, refer to specific datasets or data types when appropriate and provide the relevant ethical approval number.</p>	<p><input checked="" type="checkbox"/> Yes, human subject data; provide SMEC or EC approval number: <input type="checkbox"/> Yes, animal data; provide ECD reference number: <input type="checkbox"/> Yes, dual use; provide approval number: <input type="checkbox"/> No Additional information:</p>
<p>Will you process personal data⁴? If so, please refer to specific datasets or data types when appropriate and provide the KU Leuven or UZ Leuven privacy register number (G or S number).</p>	<p><input checked="" type="checkbox"/> Yes (provide PRET G-number or EC S-number below) <input type="checkbox"/> No Additional information: S67294</p>

⁴ See Glossary Flemish Standard Data Management Plan

<p>Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, ...)?</p> <p>If so, please comment per dataset or data type where appropriate.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please comment:</p> <p>We do not exclude that the proposed work could result in research data with potential for tech transfer- and valorization. VIB 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 be delayed.</p>
<p>Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements, research collaboration agreements)?</p> <p>If so, please explain to what data they relate and what restrictions are in place.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, please explain:</p>
<p>Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use?</p> <p>If so, please explain to what data they relate and which restrictions will be asserted.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, please explain:</p>

3. Documentation and Metadata

<p>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).</p> <p><i>RDM guidance on documentation and metadata.</i></p>	<p>Metadata will be documented by the researcher and technical staff at the time of data collection and analysis, by taking reporting information related to specific experiments and samples in the electronic laboratory notebook. All datasets will be accompanied by a README.txt file containing all the associated metadata.</p>
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<p>Will a metadata standard be used to make it easier to find and reuse the data?</p> <p>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.</p> <p><i>REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.</i></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used:</p> <p>Ad as a general rule the metadata will be based on a generalized metadata schema such as Dublin Core or DataCite, including the following elements:</p> <ul style="list-style-type: none"> • Title: free text • Creator: Last name, first name, organization • Date and time reference • Subject: Choice of keywords and classifications • Description: Text explaining the content of the data set and other contextual information needed for the correct interpretation of the data, the software(s) (including version number) used to produce and to read the data, the purpose of the experiment, etc. • Format: Details of the file format, • Resource Type: data set, image, audio, etc. • Identifier: DOI (when applicable) • Access rights: closed access, embargoed access, restricted access, open access. <p>For specific datasets, additional metadata will be associated with the data file as appropriate such as experimental procedures to generate Proteomic and Secretomic data.</p> <p>The final dataset will be accompanied by this information under the form of a README.txt document. This file will be located in the top-level directory of the dataset and will also list the contents of the other files and outline the file-naming convention used (see section 7 below). This will allow the data to be understood by other members of the laboratory and add contextual value to the dataset for future reuse.</p> <p>If no, please specify (where appropriate per dataset or data type) which metadata will be created:</p>
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4. Data Storage & Back-up during the Research Project

<p>Where will the data be stored?</p> <p><i>Consult the interactive KU Leuven storage guide to find the most suitable storage solution for your data.</i></p>	<p> <input checked="" type="checkbox"/> Shared network drive (J-drive) <input checked="" type="checkbox"/> Personal network drive (I-drive) <input checked="" type="checkbox"/> OneDrive (KU Leuven) <input type="checkbox"/> Sharepoint online <input type="checkbox"/> Sharepoint on-premis <input type="checkbox"/> Large Volume Storage <input type="checkbox"/> Digital Vault <input type="checkbox"/> Other: </p>
<p>How will the data be backed up?</p> <p><i>WHAT STORAGE AND BACKUP PROCEDURES WILL BE IN PLACE TO PREVENT DATA LOSS?</i></p>	<p> <input checked="" type="checkbox"/> Standard back-up provided by KU Leuven ICTS for my storage solution <input type="checkbox"/> Personal back-ups I make (specify) <input type="checkbox"/> Other (specify) </p>
<p>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.</p>	<p> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No We have more than 1000 TB available, which is enough to store my project's data If no, please specify: </p>

<p>How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?</p> <p><i>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.</i></p> <p><u>Guidance on security for research data</u></p>	<p>Both the L-drive and J-drive servers are accessible only by laboratory members, and are mirrored in the second ICTS datacenter for business continuity and disaster recovery so that a copy of the data can be recovered within an hour.</p> <p>Access to the digital vault is possible only through using a KU Leuven user-id and password, and user rights only grant access to the data in their own vault. Sensitive data transfer will be performed according to the best practices for “Copying data to the secure environment” defined by KU Leuven. The operating system of the vault is maintained on a monthly basis, including the application of upgrades and security patches. The server in the vault is managed by ICTS, and only ICTS personnel (bound by the ICT code of conduct for staff) have administrator/root rights. A security service monitors the technical installations continuously, even outside working hours.</p>
<p>What are the expected costs for data storage and backup during the research project? How will these costs be covered?</p>	<p>Each year €738 will be charged from our ICT service for the use of 5 TB on the L-drive (long term storage) and €51,9 will be charged each year for the use of 100 GB of the J-drive (short term storage). Back-up service is included in the price. These costs are included in the lab budget.</p>

5. Data Preservation after the end of the Research Project

<p>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...).</p> <p>Guidance on data preservation</p>	<p><input checked="" type="checkbox"/> All data will be preserved for 10 years according to KU Leuven RDM policy</p> <p><input type="checkbox"/> All data will be preserved for 25 years according to CTC recommendations for clinical trials with medicinal products for human use and for clinical experiments on humans</p> <p><input type="checkbox"/> Certain data cannot be kept for 10 years (explain)</p>
<p>Where will these data be archived (stored and curated for the long-term)?</p> <p><i>Dedicated data repositories are often the best place to preserve your data. Data not suitable for preservation in a repository can be stored using a KU Leuven storage solution, consult the interactive KU Leuven storage guide.</i></p>	<p><input checked="" type="checkbox"/> KU Leuven RDR</p> <p><input checked="" type="checkbox"/> Large Volume Storage (longterm for large volumes)</p> <p><input type="checkbox"/> Shared network drive (J-drive)</p> <p><input type="checkbox"/> Other (specify):</p>
<p>What are the expected costs for data preservation during the expected retention period? How will these costs be covered?</p>	<p>The K-drive (data archive) storage space of 1 TB is foreseen and will cost €128 each year, this is also expandable in blocks of 100 GB. These costs are included in the lab budget.</p>

6. Data Sharing and Reuse

<p>Will the data (or part of the data) be made available for reuse after/during the project? Please explain per dataset or data type which data will be made available.</p> <p><i>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:</i> https://wiki.surfnet.nl/display/standards/info-eu-repo/#INFOEU-REPO-ACCESSRIGHTS</p>	<p><input checked="" type="checkbox"/> Yes, as open data <input type="checkbox"/> Yes, as embargoed data (temporary restriction) <input type="checkbox"/> Yes, as restricted data (upon approval, or institutional access only) <input type="checkbox"/> No (closed access) <input type="checkbox"/> Other, please specify:</p>
<p>If access is restricted, please specify who will be able to access the data and under what conditions.</p>	
<p>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.</p>	<p><input type="checkbox"/> Yes, privacy aspects <input type="checkbox"/> Yes, intellectual property rights <input type="checkbox"/> Yes, ethical aspects <input type="checkbox"/> Yes, aspects of dual use <input type="checkbox"/> Yes, other <input checked="" type="checkbox"/> No</p> <p>If yes, please specify:</p>
<p>Where will the data be made available? If already known, please provide a repository per dataset or data type.</p>	<p><input checked="" type="checkbox"/> KU Leuven RDR <input checked="" type="checkbox"/> Other data repository (specify) <input type="checkbox"/> Other (specify) Data submission wizards such as EMBL-EBI (www.ebi.ac.uk/submission) will be used to choose the right archive for the data generated in this project.</p>

When will the data be made available?	<input checked="" type="checkbox"/> Upon publication of research results <input type="checkbox"/> Specific date (specify) <input type="checkbox"/> Other (specify)
Which data usage licenses are you going to provide? If none, please explain why. <i>A DATA USAGE LICENSE INDICATES WHETHER THE DATA CAN BE REUSED OR NOT AND UNDER WHAT CONDITIONS. IF NO LICENSE 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.</i> Check the RDR guidance on licences for data and software sources code or consult the License selector tool to help you choose.	<input checked="" type="checkbox"/> CC-BY 4.0 (data) <input type="checkbox"/> Data Transfer Agreement (restricted data) <input type="checkbox"/> MIT licence (code) <input type="checkbox"/> GNU GPL-3.0 (code) <input type="checkbox"/> Other (specify)
Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here. <i>INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.</i>	<input checked="" type="checkbox"/> Yes, a PID will be added upon deposit in a data repository <input type="checkbox"/> My dataset already has a PID <input type="checkbox"/> No
What are the expected costs for data sharing? How will these costs be covered?	Data management costs will be minimized 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

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, by taking careful notes in the electronic laboratory notebook that refer to specific datasets, and additionally compiling applicable metadata along with the data in the manner described above.
Who will manage data storage and backup during the research project?	Data storage will be managed by the researcher and the technical staff involved in the project. Moreover, help will be provided by René Custers and Alexander Botzki for the electronic laboratory notebook and by Raf De Coster for the KU Leuven drives
Who will manage data preservation and sharing?	The PI is responsible for data preservation and sharing, with support from the research and technical staff involved in the project, from René Custers and Alexander Botzki for the electronic laboratory notebook and from Raf De Coster for the KU Leuven drives.
Who will update and implement this DMP?	Benedetta Frizzi and the PI (Ludo Van Den Bosch) have the responsibility of updating and implementing the DMP