

FWO DMP Template

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.

1. General Information	
Name applicant	Joris Winderickx
FWO Project Number & Title	G0C7222N Deciphering the regulatory mechanisms controlling organellar crosstalk and cellular longevity.
Affiliation	<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:
2. Data description	
Will you generate/collect new data and/or make use of existing data?	<input checked="" type="checkbox"/> Generate new data <input checked="" type="checkbox"/> Reuse existing data

<p>Describe the origin, type and format of the data (per dataset) and its (estimated) volume</p> <p><i>If you reuse existing data, specify the source of these data.</i></p> <p><i>Distinguish data types (the kind of content) from data formats (the technical format).</i></p>	<p><u>Generation of new data</u></p> <p>New vectors and sequencing: own generated plasmids for yeast protein expression – sequencing fee-for-service data fully owned – VNTI format – total <10 GB + vectors stored @ -20°C and <i>E. coli</i> glycerol stock @ -80°C</p> <p>Own generated strains: validated yeast mutant strains – description in Filemaker Pro – total 1 GB + glycerol stock stored @ -80°C</p> <p>Western blots: digital photographs of immunodetection – .tiff format – total <5 GB</p> <p>Widefield microscopy: fluorescence and BF pictures - metadata and raw pictures in .lif format, processed pictures in .tiff format - 2MB/each – total <100 GB</p> <p>Confocal microscopy: digital fluorescence and DIC images - .czi and .jpeg format – total <20 GB</p> <p>pH measurements: data sheet with plate readout - Excel files containing raw and analyzed data – <1GB</p> <p>Bioluminescence and calcium data: raw data - .dat and .xlsx format / processed data - .org and .pzf format – total <10 GB.</p> <p>Growth curves: own samples - data sheet with plate readout - Excel files containing raw and analyzed data – <1GB</p> <p>processed data - .pzf format – total <5 GB.</p> <p>Flow cytometry: data sheet with plate readout - protocols in FCS format, protocols in WSB format – 45MB/each - <5GB</p> <p>Epistasis analysis: scan images – .jpeg format – 1GB</p> <p>Spot assay images: scan images - .jpeg format - <5 GB</p> <p>Statistical data: generated in Prism 7 - .pzn & .jpeg format <5 GB</p> <p><u>Existing data:</u></p> <p>Published existing data: reuse public fully published data (e.g. phosphoproteome) – not stored-pubmed database</p> <p>SGD (Saccharomyces Genome Database) data: reuse info from SGD - not stored</p>
---	--

3. Ethical and legal issues

<p>Will you use personal data? If so, shortly describe the kind of personal data you will use AND add the reference to your file in your host institution's privacy register.</p> <p><i>In case your host institution does not (yet) have a privacy register, a reference is not yet required of course; please add the reference once the privacy register is in place in your host institution.</i></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <ul style="list-style-type: none"> - Privacy Registry Reference: - Short description of the kind of personal data that will be used:
<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, add the reference to the formal approval by the relevant ethical review committee(s).</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <ul style="list-style-type: none"> - Reference to ethical committee approval:
<p>Does your work possibly result in research data with potential for tech transfer and valorisation? Will IP restrictions be claimed for the data you created? If so, for what data and which restrictions will be asserted?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, please comment: Albeit it is not the primary goal of the FWO project to generate patentable data, we will look at possible valorisation possibilities together with KU Leuven-LRD in case novel regulatory mechanisms or potential biomarkers are identified. This may lead to spill-over projects for further validation.</p>
<p>Do existing 3rd party agreements restrict dissemination or exploitation of the data you (re)use? If so, to what data do they relate and what restrictions are in place?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, please comment:</p>

4. Documentation and metadata

What documentation will be provided to enable understanding and reuse of the data collected/generated in this project?	<p>Protocols in lab guide available as .docx, summary data growth analysis, pH measurements in .xlsx, experiments in lab notebook (hardcopy)/electronic lab notebook with references to data stored on a shared network drive J – KU Leuven. A file with standard operating procedures will be available.</p> <p>Protocols available in lab notebooks (bound notebook type or word documents) with references to data stored on network drive J - KU Leuven.</p> <p>Further, we have migrated to LUNA within the department, where every researcher has his/her own 'Personal' (I), 'Shared' (J) and 'Archive' (K) network drives.</p>
Will a metadata standard be used? If so, describe in detail which standard will be used. If not, state in detail which metadata will be created to make the data easy/easier to find and reuse.	<p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> <p>If yes, please specify:</p> <p>For now, no metadata standard will be used, though a clear coding for all data files related to the project will be used and experimental data will be stored per work package. Templates will be provided by the PI to everyone associated to the project to allow consistent documentation. In the concluding stage of the project, a master index file containing the combined information for all WPs will be compiled which will be stored on the 'Personal', 'Shared' and 'Archive' drives. Altogether, this should allow any secondary analyst to use the data accurately and effectively.</p> <p>Samples taken during the experiments will be documented and stored in freezers for up to 5 years after the end of the project. Microbial strains will be preserved as freezer stocks, and a file with strain details (in Filemaker Pro) (identification/source of origin/main characteristics/storage medium/revival guide/location in the freezer) will be maintained. Hard copy notebooks will be stored for at least 5 years after the end of the research.</p>

5. Data storage & backup during the FWO project

Where will the data be stored?	Data are stored on the 'Personal' (I), 'Shared' (J) and 'Archive' (K) network drives
How will the data be backed up?	Automatic back-up is provided by KU Leuven on two independent servers

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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, please specify:
What are the expected costs for data storage and backup during the project? How will these costs be covered? <i>Although FWO has no earmarked budget at its disposal to support correct research data management, FWO allows for part of the allocated project budget to be used to cover the cost incurred.</i>	Storage capacity is updated yearly for an annual fee of 175 Euro/TB. The lab budget will be used to cover the cost incurred.
Data security: how will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?	Data are mainly are stored in the KU Leuven secure data centre. Only researchers with allocated rights can access data by local IT representative who give access rights to the network folders in LUNA to the researchers involved in the project. Each researcher receives a laptop from the laboratory, which are fully integrated in the LUNA system (LUNA login and password required). At the end of the project, when all data are archived, the researchers hand in their laptop for reformatting.

6. Data preservation after the end of the FWO project

FWO expects that data generated during the project are retained for a period of minimally 5 years after the end of the project, in as far as legal and contractual agreements allow.

Which data will be retained for the expected 5 year period after the end of the project? In case only a selection of the data can/will be preserved, clearly state the reasons for this (legal or contractual restrictions, physical preservation issues, ...).	Digital data: KU Leuven policy on data management will be followed which entails a preservation term of at least 5 years. Sequencing data will be submitted to public databases, where they will be permanently archived to preserve access to the public. Other data accompanying published papers will be archived and are available on request. Physical data: Freezer stocks of microbial strains will be maintained in the lab at -80°C and will be available upon request. Samples from experiments will be stored in freezers (-20°C) for up to 5 years after the end of the project.
---	--

Where will these data be archived (= stored for the long term)?	The data will be stored on the university's central servers (with automatic back-up procedures) for at least 5 years, conform the KU Leuven RDM policy. Published data sets like sequencing data will also be stored in data repositories.
What are the expected costs for data preservation during these 5 years? How will the costs be covered? <i>Although FWO has no earmarked budget at its disposal to support correct research data management, FWO allows for part of the allocated project budget to be used to cover the cost incurred.</i>	Storage capacity is updated yearly for an annual fee of 175 Euro/TB. The lab budget will be used to cover the cost incurred.

7. Data sharing and reuse

Are there any factors restricting or preventing the sharing of (some of) the data (e.g. as defined in an agreement with a 3 rd party, legal restrictions)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please specify:
Which data will be made available after the end of the project?	All the data on which publications were based will be made publicly available or will be available on request (raw data).
Where/how will the data be made available for reuse?	<input checked="" type="checkbox"/> In an Open Access repository <input type="checkbox"/> In a restricted access repository <input checked="" type="checkbox"/> Upon request by mail <input type="checkbox"/> Other (specify):
When will the data be made available?	Data will be made available either upon publication of the research results or after an embargo period of max. 3 years, e.g. when future project applications are considered based on the generated data.
Who will be able to access the data and under what conditions?	Only researchers participating in the project will be able to access the data before publishing. Upon publication everyone can access the data (public repositories) or can have access to the data (raw data) upon request.

<p>What are the expected costs for data sharing? How will these costs be covered?</p> <p><i>Although FWO has no earmarked budget at its disposal to support correct research data management, FWO allows for part of the allocated project budget to be used to cover the cost incurred.</i></p>	<p>Publishing costs will be covered by the FWO project, or the lab. No expected costs for public data repositories.</p>
---	---

8. Responsibilities

Who will be responsible for the data documentation & metadata?	All researchers participating in the project are responsible for data documentation. The PI, Joris Winderickx, will be responsible for both data documentation & metadata.
Who will be responsible for data storage & back up during the project?	The PI, Joris Winderickx, and departmental IT representative are responsible for data storage and back-up
Who will be responsible for ensuring data preservation and sharing?	The PI, Joris Winderickx, will be responsible for data preservation and sharing
<p>Who bears the end responsibility for updating & implementing this DMP?</p> <p><i>Default response: The PI bears the overall responsibility for updating & implementing this DMP</i></p>	The PI, Joris Winderickx, will be responsible for updating and implementing this DMP.