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	**Paul Proost**
FWO Project Number & Title	**G0F8822N Brazilië** **Understanding the role of neutrophil recruitment and activation in arboviral diseases**
Affiliation	☒ KU Leuven ☐ Universiteit Antwerpen ☐ Universiteit Gent ☐ Universiteit Hasselt ☐ Vrije Universiteit Brussel ☒ Other: Univ. of Sao Paulo and CNPEM (both Brazilian partners)
2. Data description	
Will you generate/collect new data and/or make use of existing data?	☒ Generate new data ☐ Reuse existing data

Describe the origin, type and format of the data (per dataset) and its (estimated) volume *If you **reuse** existing data, specify the **source** of these data.* *Distinguish data **types** (the kind of content) from data **formats** (the technical format).*	This application will generate raw data from experiments (numerical) which will be noted in lab books and kept in word, excel files. Some instruments (Mass spectrometry, flow cytometry, microscopy,...) will generate electronic data or raw image files (e.g. Western-blot analysis). These data will be analyzed and used to write manuscripts. Mass spectrometry files (spectra): estimated 1-2 TB total Microscopy images: ± 2 TB Flow cytometry data: estimated 100 MB total Excell, Word and Powerpoint files containing ELISA data, spectrophotometrical measurements,…: total 10 a 20 MB

3. Ethical and legal issues	
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. *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.*	☐ Yes ☒ No If yes: - Privacy Registry Reference: - Short description of the kind of personal data that will be used:
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).	☒ Yes ☐ No If yes: - Reference to ethical committee approval: - P084/2022 for experiments on mice - Ethics Committee Research UZ/KU Leuven: S58418 for use of human leukocytes. The ethical dossier for this project was updated to be compliant with the GDPR and biobank laws.

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?	☒ Yes ☐ No If yes, please comment: All research data generated during this project will be secured by the need for login registration on datacenter/luna and use of u-number and password, which are also restricted. In case of potential IP establishment for one or more pharmacological intervention developed in the project, the restriction will consist of a code for the specific molecule involved and if applicable the type of intervention. All other information will be available without restrictions. These restrictions will be lifted as soon as IP is secured.
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?	☐ Yes ☒ No If yes, please comment:

4. Documentation and metadata

What documentation will be provided to enable understanding and reuse of the data collected/generated in this project?	The data will be published in scientific papers and master and PhD thesis manuscripts available open access through the Lirias database of KU Leuven. Comments on specific data types: 1. Microscopy images: Imaging data is created by default with metadata imprinted by the image acquisition software's automatically. That includes information on user, date and time, duration of experiments, equipment parameters and imaging configurations. The metadata is saved (also in OME format) and transferred with the original imaging file. The created data files will be organized in folders named by the date of the experiment (YYYYMMDD) followed by the researcher who performed it and the title of the experiment. The methodology and protocol of each experiment will be described in detail in a lab book. 2. Flow cytometry data: Flow cytometry templates are saved which automatically stores the parameters (voltages, compensation...) that are used during the acquisition of the data. 3. The numerical data obtained in quantifications and spectrophotometric analyses will be saved in excel and word formats (.xlsx and .doc), which also imprint automatically the metadata (user, date, time, equipment parameters) from those experiments. Moreover, information on quantification and experimentation parameters will be embedded by the users on the document folders in order to improve data reproducibility and maintenance. The methodology and protocol of each experiment will be described in detail in a lab book. 4. The peptide sequences files contain metadata that informs the day, user and procedure of sequencing. 5. Mass spectrometry data are automatically saved with all instrument settings such as voltages on the different lenses, nitrogen flow, accumulation time, etc. 6. A folder on the central laboratory drive contains a detailed description of all protocols

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.	☐ Yes ☒ No If yes, please specify: In terms of folder organization, a logical hierarchy with broader topics at a higher level within specific folders will be created. The folder names will be descriptive for their content. File names will have a clear meaning such as data and number of the experiment. In addition, hardcore logbooks are kept in the laboratory with experiments ordered by date and keeping separate books for each experiment type: e.g. separate logbooks for experiments on cell migration, flow cytometry, peptide synthesis, HPLC and mass spectrometry, protein sequencing, calcium signaling,…

5. Data storage & backup during the FWO project	
Where will the data be stored?	The experimental protocols and time-stamped master copies of data will be kept on the shared drive of our research units. Copies of protocols and data can be made and kept on personal hard drives. In addition, in the central logbooks of the laboratory, an additional hardcopy with basic description of the experiments is stored.
How will the data be backed up?	All electronic data will be stored redundantly during and after the research on our PCs, in external hard-drives, and at univ. data centers (e.g. ICTS Luna storage at KU Leuven, central data centers of the Univ. of Sao Paulo or CNPEM, Rega network adapted storage). Hardcopy lab-books provide an additional safety (but don't contain additional data).
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 ☐ No If no, please specify: Sufficient back-up capacity will be purchased through the KU Leuven ICTS center and data centers of Univ. of Sao Paulo and CNPEM.

What are the expected costs for data storage and backup during the project? How will these costs be covered? *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.*	Estimated at a maximum total of 1500€/year (about 500€/ partner) covered by the consumables money provided in the grant and if needed on other grants of the PI's of the 3 participating organisations.
Data security: how will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?	Access to the personal drives and shared drives is given only to authorized researchers and login with a personal number and password is needed.

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, ...).	all
Where will these data be archived (= stored for the long term)?	We will use the central server storage of KU Leuven (Data centre ICTS Luna storage), which provides a daily automatic back up. Moreover, the data will be backed up on the Rega Institute Virtual Drives (Rega NAS (network adapted storage)) and on external hard-drives kept by the investigators. For the foreign partners data will be archived at the data centers of Univ. of Sao Paulo and CNPEM

What are the expected costs for data preservation during these 5 years? How will the costs be covered? *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.*	Expected cost of max. 500€/year/partner. Partly by the budgets of the grant and if needed supplemented with additional funding obtained by the PI's at the three participating institutions

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 3rd party, legal restrictions)?	☒ Yes ☐ No If yes, please specify: Data that may lead to patents will only be released once the IP has been protected.
Which data will be made available after the end of the project?	All data can be made available upon reasonable request after the end of the project
Where/how will the data be made available for reuse?	☐ In an Open Access repository ☐ In a restricted access repository ☒ Upon request by mail ☐ Other (specify):
When will the data be made available?	Upon publication of the research results
Who will be able to access the data and under what conditions?	Only further free use for research purposes will be allowed and commercial reuse will be possible only after a written agreement has been signed by the partners
What are the expected costs for data sharing? How will these costs be covered? *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.*	Data can be shared for free using Belnet Filesender

8. Responsibilities	
Who will be responsible for the data documentation & metadata?	The principle investigators: Paul Proost at KU Leuven, Fernando Cunha at Univ. of Sao Paulo and Rafael Elias Marques at CNPEM
Who will be responsible for data storage & back up during the project?	The principle investigators: Paul Proost (with help of Rega IT Manager Dieter Devos) at KU Leuven, Fernando Cunha at Univ. of Sao Paulo and Rafael Elias Marques at CNPEM
Who will be responsible for ensuring data preservation and sharing?	The principle investigators: Paul Proost (with help of Rega IT Manager Dieter Devos) at KU Leuven, Fernando Cunha at Univ. of Sao Paulo and Rafael Elias Marques at CNPEM
Who bears the end responsibility for updating & implementing this DMP? *Default response: The PI bears the overall responsibility for updating & implementing this DMP*	Paul Proost