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	Antje Jacobs Orcid: 0000-0001-7839-9590
Contributor name(s) (+ ORCID) & roles	Karin Hannes Orcid: 0000-0002-5011-3615
Project number [1] & title	Project no: 11Q4S24N (Old) Title: Imagining the post-Anthropocene in the BioFutures Lab: Responding to power outage from a multispecies perspective (New Title: Imagining the post-Anthropocene in the BioFutures Lab: Responding to climate disasters from a multispecies perspective)
Funder(s) GrantID [2]	FWO
Affiliation(s)	**X KU Leuven** ☐ Universiteit Antwerpen ☐ Universiteit Gent ☐ Universiteit Hasselt ☐ Vrije Universiteit Brussel **X Other: the University of Melbourne** 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	In a time that is troubled by climate change and climate disasters, what role can bio art play in strengthening citizens' resilience to climate disasters? This doctoral study represents a research-creation project that particularly departs from speculative thinking practices and multispecies entanglements presented in and through bio art. Using the theoretical framework of posthumanisms and feminist materialisms, I engage with the question how bio art can spark collective creativity and speculative imagination to design post-anthropocentric futures in which all organisms become partners in responding to climate change and its disasters, while taking into account climate injustices. First, I investigate bio artistic approaches via a qualitative multimethod study based on artist interviews, artist observations, and visual and context analysis of bio artworks. Secondly, I will develop a BioFutures Lab approach to involve citizens with different levels of exposure to natural disasters, from various regions across the world (South-Africa, Melbourne, potentially Ukraine, Belgium), as co-creators in developing speculative (multispecies) designs and approaches to cope with natural disasters in the future. These insights will be integrated in a BioFutures Field Guide and disseminated through the BioFutures Exhibition.

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].

				ONLY FOR DIGITAL DATA	*ONLY FOR DIGITAL DATA*	*ONLY FOR DIGITAL DATA*	*ONLY FOR PHYSICAL DATA*
Dataset Name	Description	New or Reused	Digital or Physical	Digital Data Type	Digital Data Format	Digital Data Volume (MB, GB, TB)	Physical Volume
WP 1: Conceptualization of bio art							
Observational data	Video and audiotapes of artist interviews	New	Digital	Audiovisual	.aac .mp4 .mp3	<1GB	/
Analyzed data	Transcripts of artist interviews	New	Digital	Textual	.doc .pdf	<1GB	/
WP2: BioFutures Lab							
Observational data	Video and audiotapes of BioFutures Lab	New	Digital	Audiovisual	.aac .mp4 .mp4	<100 GB	/
Observational and analogue data	Speculative designs created by participants	New	Digital Physical	Multimedia	.jpg .jpeg .png .aac Physical	Data: <1GB	Undefined
Observational data	Narratives created by participants	New	Digital	Textual	.doc .pdf	<1GB	/
P3: Valorization							
Analogue data	Artworks and designs	New	Physical	Multimedia	/	/	Undefined

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

GUIDANCE: *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 described under documentation/metadata.* *RDM Guidance on data*	
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.	/
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.	☐ Yes, human subject data; provide SMEC or EC approval number: ☐ Yes, animal data; provide ECD reference number: ☐ Yes, dual use; provide approval number: ☒ No ● Additional information: In the BioFutures Lab, participants create *speculative* prototypes that speculatively also include living materials (e.g. algae, plants, bacteria, etc.). The speculative prototypes could be transformed into real objects in which living matter actually would be included. However, this 'manufacturing' would happen in potential future research and does not fall into the boundaries of this research.
Will you process personal data[4]? 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).	☒ Yes (provide PRET G-number or EC S-number below) ☐ No Additional information: PRET = G-2023-6226

[4] See Glossary Flemish Standard Data Management Plan

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 ☒ No: not in this phase of the research. The co-created speculative prototypes and design might be leveraged for commercial valorization. If yes, please comment:
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 ☐ No If yes, please explain: I am conducting a joint PhD between KU Leuven and the University of Melbourne. KU Leuven is my home institution, the University of Melbourne is my guest institution. Role of the researchers: The researchers at the University of Melbourne are the PhD student's (co-)supervisors and will have access to the data to provide clear and expert guidance on the research process of the PhD student. The researchers at the University of Melbourne will have access to non-anonymized research data, including the generated ideas/prototypes of the participants, participants' identification and personal data, educational and training, occupation, and photographs and recordings of the participants. A confidentiality arrangement about sharing confidential information has been made in **the Agreement for Jointly Awarded Doctor of Philosophy Between KU Leuven and The University of Melbourne**: the confidentiality agreement emphasizes that confidential information may be shared during the term of the agreement, but the receiving party must not disclose the confidential information without first obtaining consent of the disclosing party in writing. It further highlights that the University of Melbourne must take reasonable steps to provide for the safe custody of the confidential information in its possession and to prevent unauthorized access to or use of the confidential information. This agreement also addresses IPR as following: "As a general rule, the Parties agree with respect to any Intellectual Property contributed to, or arising from, a research topic or project as follows: (a) each Party will retain the rights to its Background Intellectual Property which is contributed to the other Party for the purposes of the Program; (b) each Party provides the other Party with a royalty-free, non-exclusive license to use its Background Intellectual Property for the purposes of the Program; (c) each Party will own the Intellectual Property it creates with respect to the research topic or project and provides the Parties with a

	royalty free, non-exclusive license to use such Intellectual Property for the purposes of the Program; and (d) where the Parties jointly create Intellectual Property as part of the Program, the Parties will own such jointly created Intellectual Property as tenants in common in shares which are proportionate to their contribution to the jointly-created Intellectual Property, and each Party grants the other Party a non-exclusive, royalty-free license to use such Intellectual Property for the other Party's own non-commercial, teaching and research purposes."
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 ☐ No If yes, please explain: The lab approach in this study is based on a participatory research-creation methodology. In participatory research, the boundaries between the researcher and the participant is blurred. The BioFutures Lab is a participatory research and creation process. This means that participants have authorship and ownership of the ideas co-created during the BioFutures Lab and share this ownership with all the other participants. The created ideas and prototypes are approached as the result of the collaborative work of the entire group (and not of specific individuals). Ideas and inputs will be disconnected from individual contributors and the right to share is assigned to the researchers. This information is shared with participants during an info session, through an GDPR information sheet, and through the informed consent document.

3. Documentation and Metadata	
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). *RDM guidance on documentation and metadata*.	We will create documentation for the data sets via README.txt files. The README.txt files will provide an overview of the gathered data by listing the general information: e.g. name of files, date of creation, principal investigator, description, keywords, etc.), project information (e.g. abstract, funder, researcher), and the file overview (e.g. number of files, list with names of files, date of creation of files, file formats, software types, etc.), storage information, methodological information, data access and sharing, data specific information, and relationships. We will use the README.txt template provided by KU Leuven. We will create multiple README files; each file is connected to a specific work package.
Will a metadata standard be used to make it easier to **find and reuse the data**? 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. *REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.*	☒ Yes ☐ No If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used: RDR KU Leuven If no, please specify (where appropriate per dataset or data type) which metadata will be created: /

4. Data Storage & Back-up during the Research Project	
Where will the data be stored? *Consult the interactive KU Leuven storage guide to find the most suitable storage solution for your data.*	☒ Shared network drive (J-drive) ☒ Personal network drive (I-drive) ☒ OneDrive (KU Leuven) ☐ Sharepoint online ☐ Sharepoint on-premis ☐ Large Volume Storage ☐ Digital Vault ☐ Other:
How will the data be backed up? *WHAT STORAGE AND BACKUP PROCEDURES WILL BE IN PLACE TO PREVENT DATA LOSS?*	☒ Standard back-up provided by KU Leuven ICTS for my storage solution ☐ Personal back-ups I make (specify) ☐ Other (specify)
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:

How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons? *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.* *Guidance on security for research data*	• OneDrive: sharing folders with only relevant persons. • J-Drive: password on folder • Physical data: locked drawer or cupboard that can only be accessed by the PI.
What are the expected costs for data storage and backup during the research project? How will these costs be covered?	N/A

5. Data Preservation after the end of the Research Project	
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...). *Guidance on data preservation*	☒ All data will be preserved for 10 years according to KU Leuven RDM policy ☐ 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 ☐ Certain data cannot be kept for 10 years (explain)

Where will these data be archived (stored and curated for the long-term)? *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.*	☐ KU Leuven RDR ☐ Large Volume Storage (longterm for large volumes) ☒ Shared network drive (J-drive) ☒ Other (specifiy): During the study the paper data will be stored by the involved student in a locked drawer or cupboard that can only be accessed by themselves. After the thesis or the course has been finished, all paper data will be handed over to the supervisor who will store these data in their office in a locked drawer or cupboard that can only be accessed by themselves.
What are the expected costs for data preservation during the expected retention period? How will these costs be covered?	N/A

6. Data Sharing and Reuse	
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. *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, as open data: The transcripts of the artist interviews can be made available for reuse after/during the project. ☐ Yes, as embargoed data (temporary restriction) ☐ Yes, as restricted data (upon approval, or institutional access only) ☒ No (closed access): The audio and video recordings of the BioFutures will not be made available. ☐ Other, please specify:

If access is restricted, please specify who will be able to access the data and under what conditions.	Only members of the research groups of which the main researcher is part in KU Leuven and the University of Melbourne.
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 ☐ Yes, intellectual property rights ☐ Yes, ethical aspects ☐ Yes, aspects of dual use ☐ Yes, other ☒ No If yes, please specify:
Where will the data be made available? If already known, please provide a repository per dataset or data type.	☒ KU Leuven RDR ☐ Other data repository (specify) ☐ Other (specify)
When will the data be made available?	☒ Upon publication of research results, with inclusion of intermediate research results (e.g. the BioFutures Field Guide might be published in different parts, right after each lab). ☐ Specific date (specify) ☐ Other (specify)

Which data usage licenses are you going to provide? If none, please explain why. *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.* *Check the RDR guidance on licences for data and software sources code or consult the License selector tool to help you choose.*	☐ CC-BY 4.0 (data) ☐ Data Transfer Agreement (restricted data) ☐ MIT licence (code) ☐ GNU GPL-3.0 (code) ☒ Other (specify): to be specified later.
Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here. *INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.*	☐ Yes, a PID will be added upon deposit in a data repository ☐ My dataset already has a PID ☒ No
What are the expected costs for data sharing? How will these costs be covered?	N/A

7. Responsibilities	
Who will manage data documentation and metadata during the research project?	PhD researcher (Antje Jacobs) Supervisor (Prof. Karin Hannes)
Who will manage data storage and backup during the research project?	Internal storage is used via ICTS KU Leuven. Physical storage will be managed by the PhD researcher (Antje Jacobs). After the PhD, the supervisor will take over the storage.
Who will manage data preservation and sharing?	Antje Jacobs
Who will update and implement this DMP?	Antje Jacobs Prof. Karin Hannes