

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 | Yi Jia Chan (0000-0002-6059-6702) |
| Contributor name(s) (+ ORCID) & roles | Arnout Voet (0000-0002-3329-2703) <i>Supervisor</i> Vitor Bernardes Pinheiro (0000-0003-2491-0028) <i>Co-supervisor</i> Dirk Daelemans (0000-0001-7092-1153) <i>Co-supervisor</i> |
| Project number ¹ & title | Symibs: a new class of designer intrabodies for the development of anticancer treatments targeting unstructured protein domains of MYC and p53. |
| Funder(s) GrantID ² | 1SH8B24N |
| 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 |
| Please provide a short project description | <p>This project will combine protein engineering, structural biology and molecular cell biology methods to engineer the computationally designed SAKe proteins into Symibs. Symibs, or Symmetric intrabodies, may form a novel class of intrabodies capable of targeting disordered peptide motifs, which are currently out of reach for the current preferred intrabody scaffolds (nanobodies or DARPins). Symibs will serve to detect, bind and neutralize peptidic-target sequences, including the MYC-NLS and p53-NES sequences, which are involved during cancer development. The high affinity targeting will be established via directed evolution. The hit proteins will be further characterized by determining the affinity and specificity to their target peptide as well revealing the binding mechanism through crystallography. Validated Symibs will then be further analysed in human (cancer) cells to validate their binding to their target proteins as well as to analyze their anti-cancer properties. Aside from being used as biopharmaceuticals, Symibs also may be used as research probes.</p> |

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.

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 |
| Protocols & SOPs | | <input checked="" type="checkbox"/> Generate new data <input checked="" type="checkbox"/> Reuse existing data | <input checked="" 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 checked="" type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other: | .pdf .docx | <input checked="" 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 | < 50 pages |
| DNA | Purchased oligos & purified plasmids | <input checked="" type="checkbox"/> Generate 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"/> 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 | 100 1.5 mL tubes |
| Purified proteins | | <input checked="" type="checkbox"/> Generate 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"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB | 100 1.5 mL tubes |

³ Add rows for each dataset you want to describe.

| | | | | | | | |
|---|--|--|--|--|--------------------------|---|------------------|
| | | | | <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other: | | <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Glycerol stocks | | <input checked="" type="checkbox"/> Generate 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 | 100 1.5 mL tubes |
| PDB files & protein amino acid/ DNA sequences | | <input checked="" type="checkbox"/> Generate new data <input checked="" 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 type="checkbox"/> Numerical <input checked="" type="checkbox"/> Textual <input checked="" type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other: | .pdb .fasta .txt .pdf | <input checked="" 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 | |
| Fluorescence microscopy | | <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: | .png .jpg .xls | <input type="checkbox"/> < 1 GB <input checked="" type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Agarose, SDS-PAGE, Gel electrophoresis | | <input checked="" type="checkbox"/> Generate new data <input type="checkbox"/> Reuse existing | <input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical | <input type="checkbox"/> Audiovisual <input checked="" type="checkbox"/> Images <input type="checkbox"/> Sound | .png .jpg | <input checked="" type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB | |

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|-------------------------------------|---|---|--|---|--|---|--|
| , Western blot | | data | | <input type="checkbox"/> Numerical <input type="checkbox"/> Textual <input type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other: | | <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| DNA sequencing | | <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 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 .ab | <input type="checkbox"/> < 1 GB <input checked="" type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Protein structural data | Raw x-ray diffraction images generated from synchrotron | <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: | .cbf .h5 | <input type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input checked="" type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Protein structural data (processed) | Processed X-ray 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 checked="" type="checkbox"/> Textual <input checked="" type="checkbox"/> Model <input type="checkbox"/> Software <input type="checkbox"/> Other: | .pdb .fasta .mtz .cif .mcif .hkl .ASCII .ccp4 | <input type="checkbox"/> < 1 GB <input checked="" type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Crystal Images | | <input checked="" type="checkbox"/> Generate new data | <input checked="" type="checkbox"/> Digital <input type="checkbox"/> Physical | <input type="checkbox"/> Audiovisual <input checked="" type="checkbox"/> Images | .png .jpg | <input checked="" type="checkbox"/> < 1 GB <input type="checkbox"/> < 100 GB | |

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|-------------------------------|-----------------------------------|---|--|---|----------------------------------|---|--|
| | | <input type="checkbox"/> Reuse existing data | | <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 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Chromatograms | SEC, IEX, Affinity chromatography | <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: | .ASCII .txt .png .jpg | <input type="checkbox"/> < 1 GB <input checked="" type="checkbox"/> < 100 GB <input type="checkbox"/> < 1 TB <input type="checkbox"/> < 5 TB <input type="checkbox"/> > 5 TB <input type="checkbox"/> NA | |
| Bio-Layer interferometry 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: | .txt .xls .pdf .jpg .png | <input checked="" 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 | |
| Spectroscopy 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: | .txt .png .jpg .ASCII .xls | <input checked="" 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 | |
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| <p>GUIDANCE: <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>Protocols & SOPs : Protocols delivered in frequently used kits (GeneJET plasmid Miniprep Kit, etc.) or existing standard lab protocols.</p> <p>DNA & DNA sequences : SAKe proteins (PDB: 7ONC and 7ONA) are used as scaffold to create and compare to Symibs protein.</p> <p>Protein amino acid sequences : Fluorescent protein sequences (e.g. mVenus etc.) & routinely used tags (e.g. FLAsH, FLAG, AVI, etc.)</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 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 checked="" type="checkbox"/> No</p> <p>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 type="checkbox"/> Yes (provide PRET G-number or EC S-number below) <input checked="" type="checkbox"/> No</p> <p>Additional information:</p> |
| <p>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.</p> | <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please comment: Proteins : The Symibs proteins that can bind and neutralize peptidic-cancer-target sequences, can be further valorized.</p> |

⁴ See Glossary Flemish Standard Data Management Plan

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| <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</p> <p><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</p> <p><input checked="" type="checkbox"/> No</p> <p>If yes, please explain:</p> |

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.](#)

Each experiment is documented in a(n) (electronic) lab notebook by the performing scientist following standard operating procedures (SOPs), which will be or have been written down. Each lab notebook has a table of summary containing the background/ rationale with the objective, protocols and samples used, results (referencing digital data) and conclusion.

The raw data of each experiment will be sorted per experiment type and stored in separate folders.

Processed data will be stored in separate folders with the same name containing links to their respective raw data files. Separate documents of non-experimental nature will be sorted and stored in a documents folder. The data contains a README.txt file explaining the design/protocol, analysis methods, results, labels used and references to the electronic lab notebook.

Metadata will link the data files, lab samples and experimental notes (including descriptions of equipment, setting and used experimental settings).

For the various forms of publication that require a combination of data from multiple experiments, new folders will be created for the processed data with links to respective raw data. The folder will be created per publication.

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:

When depositing data in a local or public repository, the final dataset will be accompanied with a README.txt file containing all relevant information, following the Dublin Core Metadata standard (*if no other meta-standard is available yet*). 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. This will allow the data to be understood by other members of the laboratory and add contextual value to the dataset for future reuse.

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

| | |
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| <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 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 checked="" type="checkbox"/> Other: NAS (Network-Attached Storage) </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 type="checkbox"/> Standard back-up provided by KU Leuven ICTS for my storage solution <input checked="" type="checkbox"/> Personal back-ups I make (The data on the local workstation will be frequently backed up on the NAS) <input checked="" type="checkbox"/> Other (specify): The data from the Voet lab is saved on a double backup NAS (Synology), which is secure and requires access authorization. The data from Rega Institute will be stored on KUL ICTS-managed system, failure-proof systems that have snapshot capabilities. </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 The KU Leuven ICTS provide sufficient storage and archival capacity during and after the PhD project. Additionally, the Voet lab has 55 TB of free space on the NAS system, which will cover all research generated data for the next 4 years. </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>Guidance on security for research data</p> | <p> The data is secured by the Luna system of the ICTS service of the KU Leuven, while the Synology NAS system is only accessible through authorization. Confidential data can and will be protected with a password that is only available for the (co-)promotors. Visitors, master thesis and internship students as well as other unauthorized persons will not have access to the data. </p> |

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| What are the expected costs for data storage and backup during the research project? How will these costs be covered? | It has been estimated that up to 5 TB storage will be collected in the duration of the project. Currently the ICTS storage pricing is 20 – 70 Euro/(TB*year), we estimated storage costs at 700 – 2450 Euro to cover the duration of the project and long term storage of 10 years, which will be covered with the bench fee. The cloud-based data storage costs will be covered by the research group. |
|---|---|

| 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...). | <input checked="" type="checkbox"/> All data will be preserved for 10 years according to KU Leuven RDM policy <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 <input checked="" type="checkbox"/> Certain data cannot be kept for 10 years (explain) The raw data files from the X-ray diffraction will not be kept for 10 years, if it has been confirmed through processing data it is not necessary, as the cost of storing the large amount of raw imaging data will be unaffordable. |
| Guidance on data preservation | |
| Where will these data be archived (stored and curated for the long-term)? | <input type="checkbox"/> KU Leuven RDR <input type="checkbox"/> Large Volume Storage (longterm for large volumes) <input type="checkbox"/> Shared network drive (J-drive) <input checked="" type="checkbox"/> Other (specify): After the end of the project, the research data will be stored in a glacial archive storage system. Dissemination data containing files corresponding to papers and presentations, will be stored on the PCs of involved PIs and backed-up daily on the departmental server for long term storage. Analysis code will be stored on ICTS-hosted code repositories. |
| 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 . | |
| What are the expected costs for data preservation during the expected retention period? How will these costs be covered? | The dissemination data volume is expected to be relatively low and can be seamlessly embedded in the PIs' allocation on the departmental server. For the research data, we estimate a cost of 2000 Euro/year with the current archiving costs of 10 Euro/(TB*year), which will be covered by the funding acquired by the project PIs in the context of other research projects. |

6. Data Sharing and Reuse

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| <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: HTTPS://WIKI.SURFNET.NL/DISPLAY/STANDARDS/INFO-EU-REPO/#INFOEUREPO-ACCESSRIGHTS</i></p> | <p> <input checked="" type="checkbox"/> Yes, as open data <input type="checkbox"/> Yes, as embargoed data (temporary restriction) <input checked="" 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>Specify: Data on the Symibs protein DNA, crystal structures and its characteristics can be shared upon approval within the duration of the project. Relevant digital data will be published and made available after the end of the project. Data with valuable IP will be protected prior to publication.</p> |
| <p>If access is restricted, please specify who will be able to access the data and under what conditions.</p> | <p>The project collaborators will be authorized to have access to all obtained digital and physical data after the project. For researchers outside of the consortium, the data can be made available upon e-mail request and under the condition that the users agree to give proper credit through co-authorship on their papers that used the data. Data usage for commercial purposes will require a license or an equivalent arrangement.</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 checked="" 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 type="checkbox"/> No </p> <p>If yes, please specify: The protein DNA sequences fall under IP protection.</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 type="checkbox"/> Other data repository (specify) <input type="checkbox"/> Other (specify) </p> |

| | |
|---|--|
| <p>When will the data be made available?</p> | <p><input checked="" type="checkbox"/> Upon publication of research results</p> <p><input type="checkbox"/> Specific date (specify)</p> <p><input type="checkbox"/> Other (specify)</p> |
| <p>Which data usage licenses are you going to provide? If none, please explain why.</p> <p><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></p> <p>Check the RDR guidance on licences for data and software sources code or consult the License selector tool to help you choose.</p> | <p><input type="checkbox"/> CC-BY 4.0 (data)</p> <p><input checked="" type="checkbox"/> Data Transfer Agreement (restricted data)</p> <p><input type="checkbox"/> MIT licence (code)</p> <p><input type="checkbox"/> GNU GPL-3.0 (code)</p> <p><input type="checkbox"/> Other (specify)</p> |
| <p>Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here.</p> <p><i>INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.</i></p> | <p><input checked="" type="checkbox"/> Yes, a PID will be added upon deposit in a data repository</p> <p><input type="checkbox"/> My dataset already has a PID</p> <p><input type="checkbox"/> No</p> |
| <p>What are the expected costs for data sharing? How will these costs be covered?</p> | <p>A restricted access repository can also be implemented on free tools, such as Dropbox, up to a certain volume. If the storage volume is insufficient, time-limited storage systems will be considered to download the data. Upon publications, relevant datasets will be made public via relevant databases (e.g. PDB).</p> |

7. Responsibilities

| | |
|--|---|
| Who will manage data documentation and metadata during the research project? | The researcher will be responsible for data documentation & metadata. |
| Who will manage data storage and backup during the research project? | The researcher will be responsible for data storage & back up during the project. |
| Who will manage data preservation and sharing? | During the course of this project, the researcher, while after completion of this project, the PI will bear the end responsibility of ensuring data preservation and reuse. |
| Who will update and implement this DMP? | The PI bears the end responsibility of updating & implementing this DMP. |