NPL's photoacoustic microscopy capability

A Data Management Plan created using dmponline

Creator:

Affiliation:

Template: NPL DMP Project Template

Project abstract:

Data management plan for the Photoacoustic microscopy capability of the Ultrasound and Underwater Acoustics (UUA) Group at NPL. Project a part of the Quantitative imaging medical ultrasound project funded through NMS.

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Copyright information:

NPL's photoacoustic microscopy capability - Pre-Project DMP

Project Data Details

1. Opportunity Owner / Project Manager/ Project Lead

Anant Shah (anant.shah@npl.co.uk) July 2021

2. Technical leader during bidding

Anant Shah

3. What data will be used during this project? Where possible, please list the type of data and the file format it is expected to be stored as.

The photoacoustic microscope generates data in the format of a binary file using a customer software. The binary file is converted to a '.mat' file and is stored along with the meta data on the NPL object store. The '.mat' file consists of the raster-scan waveforms acquired by the microscope.

The NPL Object Store is a storage system for scientific data. It's a Hitachi Content Platform (HCP) system. The matlab code for converting the data and uploading it to the object store is stored in this folder on M:.

The data in its binary format is also stored on M: as a back up, and stored temporarily on the PAM - PC (HPOWER) until it needs to be deleted due to limited storage issues.

4. Will any pre-existing data be used during the project?

- Yes

5. Please give details of the type of data and the origin of the data.

The details of the type and origin of data are provided in Q3. above.

6. Who owns the data that will be used or created? If more than one institution owns the data, please give details.

- NPL

The data will be owned by NPL. For collaborative work, the data will be shared with the other institution.

Commercial Questions

7. Does this project require an NDA? If yes is selected, details must be given in the text box below.

- Yes

For collaborative research work, an NDA is required between NPL and the other institution. An NDA is in place with Bath University and GSK for planned experiments.

8. Does NPL have any existing IP (Background IP) or will any IP be produced during this project (Foreground IP) which needs to be protected? If Yes – what type of IP will this data have?

- None

9. Does an entry in the IP Register relate to this project?

- No

10. Has this idea been captured in the NPI process, or should it be captured?

- No – products are not applicable

Data Security

11. Where do you intend to store the data?

- Internally

12. If internally, please give details (e.g., Object Store, T-drive, SharePoint).

The data is stored on NPL's Object Store: https://pam.npl-science.hcp-p.npl.ad.local/browser/content_input
An additional back up of the data will be stored in the project folder on the NPL M-drive, which may be found here 'M:\Acoustics\Ultrasonics\Anant_data\PAM\Anant_PAM'

13. If externally, how will the security of the data be ensured?

The data will be stored internally.

14. What is the total size of the data that will be stored at NPL? If unknown, please approximate.

- 1 to 100 terabytes

15. How long will the data be retained after completion of the project? Please provide additional information below.

- > 7 years

To drive new research expected in the next 5-10 years.
To allow full exploitation of the data.

16. Are there any ethical issues that could impact on data sharing?

- No

GDPR

18. Will the project be processing personal data?

- No

19. Please provide a link to a completed Data Protection Impact Assessment (DPIA) form QF-10.

Not Applicable