Plan Overview

A Data Management Plan created using DMPonline

Title: Development of Research Partnership in Hypertension Assessment with Smart E-textile Wearable Technology (RPHA)

Creator: Henry Li

Project Administrator: David Blundell

Affiliation: University of Manchester

Funder: Natural Environment Research Council (NERC)

Template: NERC Template Customised By: University of Manchester

Project abstract:

This project aims to develop new international partnerships and networks between UK and Taiwan in the area Medical & health interface (environment & health) for the purpose of underpinning the development of long-term sustainable collaborations in hypertension assessment. The focus of the project will be on assessing the dynamics of hypertension development for predicting health risks and promoting health management of hypertension patients by modelling and simulating human blood circulation and thermoregulation system and its interaction with environments and developing innovative smart e-textile wearable monitoring system (SEWMS). The cross-disciplinary research team in advanced materials and wearables (Prof. Yi LI, PI) and cardiovascular sciences (Prof. Xin Wang, Co-I) in University of Manchester (UK) will develop long term partnership with the research team in biomedical engineering (Prof. Chuang-Chien Chiu, PI, Feng Chia University, Taiwan, ROC) and clinical practice (Dr. Shoou-Jeng Yeh, Associate-I, Taichung Cheng-Ching General Hospital, Taiwan, ROC).

ID: 74857

Start date: 01-11-2021

End date: 31-10-2022

Last modified: 30-03-2021

Copyright information:

The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customise it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

Development of Research Partnership in Hypertension Assessment with Smart E-textile Wearable Technology (RPHA) - Outline DMP

Manchester Data Management Outline

1. Will this project be reviewed by any of the following bodies (please select all that apply)?

- Funder

2. Is The University of Manchester collaborating with other institutions on this project?

- Yes - Part of a collaboration and owning or handling data

UoM team will collaborate with the PI in Feng Chia University, Taiwan.

3. What data will you use in this project (please select all that apply)?

- Acquire new data

4. Where will the data be stored and backed-up during the project lifetime?

- University of Manchester Research Data Storage Service (Isilon)

5. If you will be using Research Data Storage, how much storage will you require?

- 1 - 8 TB

6. Are you going to be working with a 3rd party data provider?

- No

7. How long do you intend to keep your data for after the end of your project (in years)?

- 0-4 years

Questions about personal information

Personal information, also known as personal data, relates to identifiable living individuals. Special category personal data is more sensitive information such as medical records, ethnic background, religious beliefs, political opinions, sexual orientation and criminal convictions or offences information. If you are not using personal data then you can skip the rest of this section.

Please note that in line with data protection law (the General Data Protection Regulation and Data Protection Act 2018), personal information should only be stored in an identifiable form for as long as is necessary for the project; it should be pseudonymised (partially de-identified) and/or anonymised (completely de—identified) as soon as practically possible. You must obtain the appropriate ethical approval in order to use identifiable personal data.

8. What type of personal information will you be processing (please select all that apply)?

- No sensitive or personal data

9. How do you plan to store, protect and ensure confidentiality of the participants' information (please select all that apply)?

- Not applicable

10. If you are storing personal information (including contact details) will you need to keep it beyond the end of the project?

- Not applicable

11. Will the participants' information (personal and/or sensitive) be shared with or accessed by anyone outside of the University of Manchester?

- Not applicable

12. If you will be sharing personal information outside of the University of Manchester will the individual or organisation you are sharing with be outside the EEA?

- Not applicable

13. Are you planning to use the personal information for future purposes such as research?

- No

14. Who will act as the data custodian for this study, and so be responsible for the information involved?

Prof. Henry Yi Li

15. Please provide the date on which this plan was last reviewed (dd/mm/yyyy).

2021-03-30

Outline DMP

Project Title

Development of Research Partnership in Hypertension Assessment with Smart E-textile Wearable Technology (RPHA)

Principal Investigator(s) / Grant Holder

Prof. Henry Yi Li

Will the grant produce data?

- Yes

Nominated Data Centre(s)

- Other e.g. Archaeology Data Service

Scientific data from modeling and simulation and e-textile wearable development testing.

Briefly list the datasets that the project will produce. If the total is likely to be larger than 1TB please indicate.

Scientific data from modeling and simulation and e-textile wearable development testing.

Development of Research Partnership in Hypertension Assessment with Smart E-textile Wearable Technology (RPHA) - Full DMP

Project information

Project Name

Development of Research Partnership in Hypertension Assessment with Smart E-textile Wearable Technology (RPHA)

Project Number (NERC PIs only)

2508823

Grant Reference

2508823

Principal Investigator

Prof. Henry Yi Li

Organisation

Nominated Data Centre

- Other e.g. Archaeology Data Service

University of Manchester

Data Centre Contact

Prof. Henry Yi Li

Project Data Contact

Prof. Henry Yi Li

Please specify any other team members with responsibility for data

Prof. Xin Wang, University of Manchester

Roles and Responsibilities

Please state all roles and responsibilities throughout the project

PI and Co-I

Data Generation Activities

What data will be created and how?

Modeling and simulations and e-textile wearable device testing

In-Project Data Management Approach

How will the data be managed?

We will follow NERC's regulations and policies in accordance with the General Data Protection Regulation (GDPR).
The PI will have an overall responsibility for the oversight, planning and management of data collection as part of his project management and delivery responsibility, with CoI- Xin Wang and PDRA also undertaking specific activities to ensure quality control. All data will be organised in a data structure following the advice of the UK Data Service. All the data will only be stored for the project period and be securely archived at the end of the project. Users will not have access to the original data but instead work on an appropriate copy to avoid the risk of data corruption. The data will be stored via an appropriately documented XML schema that should provide an understandable data format allowing long-term processing both within the project and by others. All files will be labelled in English according to an agreed protocol for ease of identification.

Metadata and Documentation

Outline plans for metadata, noting standards that will be used

NA

Data Quality

What procedures will be used to control data quality?

Data quality will be controlled using appropriate experimental design, error treatment and statistical analysis for experimental results. Data generated from theoretical modeling will be validated with experimental data.

Exceptions or Additional Services

Clarify any support needed from data centres that exceeds the norm, and show this has been planned / costed.

NA

Data Management Plan Information

Author

Prof. Henry Yi Li

Date

30 March 2021

Version Number

1st

Approved by PI/PM

Prof. Henry Yi Li

Approved by (Data Centre)

UML Research Data

New Datasets

Digital Information

Dataset Description	Contact	Data Volume	Data Format	Issues	Delivery Date	Embargo Date	Reuse Scenario	Preservation Plan
Dataset description	*Dataset contact name*			*Any issues with the data, e.g. legal, access, retention, etc.*	*Date expect to receive data*	*No more than two years after delivery*		*e.g. Keep indefinitely, Do not keep, etc. including destination data centre (if not owning data centre)*
Modeling and simulation	RPHA01	TBD	Scientific	No	2022-11	2025	Scientific Publication	Scientific Publication
E-textile Testing data	RPHA02	TBD	Scientific	No	2022-11	2025	Scientific Publication	Scientific Publication

Hardcopy Records

Dataset Name	Contact	Data Volume	Data Format	Issues	Delivery Date	Preservation Plan		
Name of dataset	*Dataset contact name*			*Any issues with the data, e.g. legal, access, retention, etc.*	*Date expect to receive data*	*e.g. Keep indefinitely, Do not keep, etc.*		
Modeling and simulation	RPHA01	TBD	Scientific	No	2022-11	2025	Scientific Publication	Scientific Publication
E-textile Testing data	RPHA02	TBD	Scientific	No	2022-11	2025	Scientific Publication	Scientific Publication

Physical Collections & Samples

Dataset Name	Contact	Data Volume	Data Format	Issues	Delivery Date	Preservation Plan		
Dataset name	*Dataset contact name*			*Any issues with the data, e.g. legal, access, retention, etc.*	*Date expect to receive data*	*e.g. Keep indefinitely, Do not keep, etc.*		
Modeling and simulation	RPHA01	TBD	Scientific	No	2022-11	2025	Scientific Publication	Scientific Publication
E-textile Testing data	RPHA02	TBD	Scientific	No	2022-11	2025	Scientific Publication	Scientific Publication

Third Party/Existing Datasets

Third Party/Existing Datasets

Dataset Name	Contact	Location	Contents	Estimated Size	Responsibility	Licence Issues	Comments
Name of dataset	*Name of contact for dataset*	*Where is it stored*	*Brief description*		*Who is responsible for sourcing the dataset*		*Any additional information (e.g. licence or use restrictions?)*
Feng Chai University research results	FCU01	Taiwan	Research data obtained in their previous projects and published.	TBD	Yi LI	NA	Nil