PARTICIPANT INFORMATION SHEET

PROJECT TITLE: Biomarkers for ME/CFS – A two phase study
HUMAN RESEARCH ETHICS COMMITTEE APPROVAL NUMBER: H-2020-134
PRINCIPAL INVESTIGATOR: Dr Michael Musker

Dear Participant,

You are invited to participate in the research project investigating Myalgic Encephalomyelitis / Chronic Fatigue Syndrome (ME/CFS).

What is the project about?

Our research is taking a multidisciplinary approach to investigate ME/CFS which aims to take some blood, urine and faecal samples from 60 people (including 20 healthy controls), during two phases of illness. We intend to examine the components in your blood (biomarkers) that may inform us about the differences between what is often called an ME/CFS crash (where the person feels very unwell) and then we will re-examine blood and urine biomarkers when the same person is feeling considerably better. Biomarkers include 'cytokines' that may inform us about inflammation and how your body is responding to your current period of illness. By matching a period when you feel sick and a period of when you are well, we may see some differences.

Who is undertaking the project?

This project is being conducted by Dr Michael Musker SAHMRI & Adelaide University, Dr Martin Lewis SAHMRI & Adelaide University, Dr Niranjan Bidargaddi (Flinders University), Professor Rob Adams (Flinders University), Dr Tiffany Gill Adelaide University, and Associate Professor Leonie Heilbronn Adelaide University, Dr Amy Reynolds Flinders University. This research has been funded by The Judith Jane Mason & Harold Stannett Williams Memorial Foundation National Medical Program (Alzheimer's disease & Chronic Fatigue Syndrome).

Why am I being invited to participate?

You are being invited as you have expressed an interest in our research. You have a diagnosis of ME/CFS from your GP, or you would like to take part as a healthy participant (control).

What am I being invited to do?

You are being invited to participate in the study by allowing us to take a sample of your blood. We will also collect a faecal sample and urine samples from you (so that we can investigate your microbiome - which is the bacteria that are part of our body's healthy functioning), and you will provide us with information about your health. We will collect a blood samples on two occasions. The first set of bloods will be used to provide a baseline measurement of standardised health measures such as iron levels, and other blood characteristics. The baseline assessment will require a series blood samples which requires approximately 19mls plus 36mls for the cytokine assessment.

The second occasion will require less blood to compare with the first (36mls). You are also invited to have your sleep monitored for one night (wearing a monitor in your home). A sleep monitor will be applied at an agreed time, monitoring your sleep during your usual rest period (the monitor is left with you once attached). You are also invited to have your blood sugar measured across one week. A sugar monitoring patch will be applied to your arm for one week, and we will collect your diet and movement information. We will ask you to provide a dietary and activity diary during that week.

We will ask you to complete a series of questionnaires, about you, about your behaviour, and about MECFS, and some of these will be done by interview at the same interview time the blood samples are taken. The questionnaires will focus on ME/CFS symptoms, and about how you are feeling at the time when the samples are taken. We will take your body measurements – BMI, hip/waist ratio. (Interview and sampling will take around 2 hours).

We will ask you to use a computer app that will allow you to track your symptoms across the period of the study and it will be specifically focused on your ME/CFS symptoms. This is not compulsory. The symptoms to track will be chosen from a list of MECFS symptoms selected by you and completed at a frequency selected by you e.g. daily / weekly/ or preferred frequency.

How much time will my involvement in the project take?

The specimen sampling period and questionnaires will take approximately 2 hours.
The sleep study set up takes around 1 hour, then you are left with it overnight.
The second sampling period will take approximately 30 minutes.
The online app is at a frequency (between daily to weekly) selected by you, and each occasion taking between 2 to 5 minutes.
You will be asked to wear a blood sugar monitoring patch for one week.

Are there any risks associated with participating in this project?

There are a number of risks for you to consider. Taking blood can cause some bruising and inflammation to the area and involves the insertion of a needle. You will be asked questions about your mood, mental state, and your history. Asking questions can be upsetting for some people and may cause some mild distress. The interviewer is an experienced researcher and clinician. If you are experiencing mental stress, you should advise the researcher or your G.P, and you may also consider contacting these support agencies:

Lifeline: https://www.lifeline.org.au/ or phone **131114**
Beyondblue: https://www.beyondblue.org.au/ or phone **1300 22 4636**
For more information about the ME/CFS support community see the following webpage.
ME/CFS South Australia: http://www.sacfs.asn.au/

Future Research biobank, Storing and Sharing samples

You will be asked if you are willing to allow us to store your sample for future MECFS research. You can decline this by not signing the signature request that specifically asks you about using your sample for future research. This will include potential genetic research which looks at the genetic code, and the expression of information by your genes. Your data and sample will be de-identified prior to sharing with other researchers. You can withdraw consent of sharing samples or information up to 3 months after the last sample has been taken.

What are the potential benefits of the research project?

This research project will help the medical and research community to learn more about how inflammatory responses in the body affect people with ME/CFS. By improving our knowledge about these inflammatory processes, it may assist with future diagnostic methods and treatments. There will be no clinical benefit to you in this research. It is essentially monitoring what is happening in your body. You will be provided with the blood results to discuss with your general practitioner (GP). We will not provide any clinical consultation or feedback about your results. You may discuss the results with your GP. You will be provided with a $50 gift voucher (Coles/Myer) following the first set of interviews and sample collection (if you withdraw following this stage, you can keep this). You will receive a second $50 voucher after we have collected the second set of samples and questionnaires.

Can I withdraw from the project?

Participation in this project is completely voluntary. If you agree to participate, you can withdraw from the study at any time. If you wish for the information we have collected up until the point you withdraw to be removed from the study, and deleted, you may do so.

What will happen to my information?

We will share any relevant information with your general practitioner, for example if you have a high score on the depression scale, we will inform your GP so that they may discuss this with you further. All information collected for research will be anonymised and stored using a reference code. Only the lead researchers (Dr Michael Musker & Dr Martin Lewis) will have access to this information.

Confidentiality and privacy: Participation is anonymous. In some situations, even if identifiers are removed, samples of participants are small and from a discrete population, there may be a remote potential that individuals could be identifiable. The utmost care will be taken to ensure that no personal identifying details are revealed. We will inform your GP of results that we consider need to be discussed with you further.

Storage: The information that is collected will be stored in a secure area (a locked cupboard in a secure area within SAHMRI). Data will be held on a secure server at SAHMRI and will be password protected. Data will be stored against the deidentified reference code. The information will be kept for a minimum of five years at SAHMRI. Biological samples will be stored in freezers in secure laboratories at SAHMRI.

Publishing: Participants will not be identified as part of publications and the dataset will not be published and is considered confidential. We will publish in academic journals (e.g. Brain, Behavior, and Immunity; Metabolic Brain Disease; or BMC Neurology). However, you may be specifically approached if there is an in-person media opportunity about ME/CFS about your experience with the illness or your participation in the research. This will only occur if you provide express consent to participate in such an event, and you will be approached with a separate consent form if the need arises.

Sharing: We will store a sample of your blood and urine for future studies. Any future studies and sharing of data will require a separate ethics application (or amendment). SAHMRI is a teaching facility, so a limited number of students or new researchers who take part in the project as part of our research team will have access to de-identified data. All access to this data will be confidential and access will only be given to those students and researchers working on the ME/CFS research project within SAHMRI. A list of current researchers is provided below. Your information will only

be used as described in this participant information sheet and it will only be disclosed according to the consent provided, except as required by law.

Who do I contact if I have questions about the project?

Project Manager / Lead Researcher Dr Michael Musker can be contacted if you have any questions about the project. The contacts for all researchers are below:

- Dr Michael Musker – SAHMRI 08 8128 4714 or 08 8128 4000 or michael.musker@sahmri.com
- Dr Martin Lewis – SAHMRI
- Dr Niranjan Bidargaddi – SAHMRI 08 8128 4000
- Professor Rob Adams – SAHMRI 08 8128 4000
- Dr Tiffany Gill – SAHMRI 08 8128 4000
- Associate Professor Leonie Heilbronn – SAHMRI 08 8128 4000
- Dr Andrew Vincent – SAHMRI 08 8128 4000
- Dr Amy Reynolds – SAHMRI 08 8128 4000
- Dr Derek Chew – SAHMRI 08 8128 4000

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number H-2020 - 134). This research project will be conducted according to the NHMRC National Statement on Ethical Conduct in Human Research 2007 (Updated 2018). If you have questions or problems associated with the practical aspects of your participation in the project, or wish to raise a concern or complaint about the project, then you should consult the Principal Investigator. If you wish to speak with an independent person regarding concerns or a complaint, the University's policy on research involving human participants, or your rights as a participant, please contact the Human Research Ethics Committee's Secretariat on:

Phone: +61 8 8313 6028

Email: hrec@adelaide.edu.au

Post: Level 4, Rundle Mall Plaza, 50 Rundle Mall, ADELAIDE SA 5000

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If I want to participate, what do I do?

Contact Dr Michael Musker by email or phone on michael.musker@sahmri.com or 08 8128 4714 or reception 08 8128 4000

Yours sincerely,

Dr Michael Musker; Dr Martin Lewis; Dr Niranjan Bidargaddi; Professor Rob Adams; Dr Tiffany Gill; Associate Professor Leonie Heilbronn; Dr Andrew Vincent; Dr Amy Reynolds; Dr Derek Chew.

Version 1.1 Participant Information Sheet form 27/7/2020

Human Research Ethics Committee (HREC)

CONSENT FORM

1. I have read the attached Information Sheet and agree to take part in the following research project:

Title:	**Biomarkers for ME/CFS – A two phase study**
Ethics Approval Number:	**H-2020-134**

2. I have had the project, so far as it affects me, and the potential risks and burdens fully explained to my satisfaction by the research worker. I have had the opportunity to ask any questions I may have about the project and my participation. My consent is given freely.

3. I have been given the opportunity to have a member of my family or a friend present while the project was explained to me.

4. Although I understand the purpose of the research project is to improve the quality of health/medical care, it has also been explained that my involvement may not be of any benefit to me.

5. I agree to participate in the activities as outlined in the participant information sheet.

    1. Have two series of blood samples taken (19mls baseline assessment and 36mls) i.e. 51mls initial assessment then 36mls within the following year.
    2. Any unused portion of these samples will be stored for future research studies.
    3. Provide a urine and faecal sample
    4. To have a sleep assessment
    5. To complete a series of questionnaires
    6. To have my glucose, movement and diet monitored (using a diary) for one week. To wear a glucose monitoring patch for 1 week.
    7. To provide information about my ME/CFS symptoms during the period of study.

    NB: The questionnaires and blood samples are essential minimum activities, but you can opt out of the other activities.

6. I understand that I am free to withdraw from the project at any time and that this will not affect medical advice in the management of my health, now or in the future. I can ask for my information and details to be withdrawn from the project if I decide to withdraw within 3 months of my second sample being provided. To withdraw your consent from samples and data being used for future studies please contact the researchers, and your data will be withdrawn from any analysis not already undertaken.

7. I have been informed that the information gained in the project may be published in a book/journal article/thesis/news article/conference presentations/website/report but this information will always be de-identified.

8. I have been informed that in the published materials I will not be identified, and my personal results will not be divulged.

9. I understand that a condition of my participation is that I consent to my GP being provided with my baseline blood laboratory results and that any results of concern will be passed onto to my GP.

   Yes ☐ No ☐

10. I agree to my information being used for future research purposes as follows:

    - Any research undertaken by any researchers Yes ☐ No ☐
    - Genetic related research Yes ☐ No ☐

11. I understand my information will only be disclosed according to the consent provided, except where disclosure is required by law.

12. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

13. Samples will be stored in a biobank which may be shared for future studies which would include other institutions researching MECFS. Future research may include genetic research. Your information will be deidentified, but there is potential risk for individuals to be identified from their genomic data.

    Are you willing for your samples to be stored as part of our MECFS biobank and used for future research as described above: Yes ☐ No ☐

Participant to complete:

Name: _____ Signature: _____ Date: _____

Researcher/Witness to complete:

I have described the nature of the research to _____ *(print name of participant)* and in my opinion she/he understood the explanation.

Signature: _____ Position: _____ Date: _____