

PARTICIPANT INFORMATION SHEET

PEOPLE'S BIOLOGICAL RESPONSE TO HEAT (POETH)

You are being invited to take part in some research. Before you decide whether or not to participate, it is important for you to understand why the research is being conducted and what it will involve. Please read the following information carefully.

What is the purpose of the research?

The health impacts from changing climatic conditions, including increasing frequency, severity, and duration of heat, are being felt by millions across the world and are projected to worsen. Climate change is no longer a future problem, with five of the ten highest recorded temperatures in the UK occurring in the last 7 years ($>+36^{\circ}\text{C}$). Here our goal is to understand sex-specific effects of heat on biological responses within the cardiovascular system (including the blood) and the skin as these are central to the thermoregulatory response.

Who is carrying out the research?

The study is organised and carried out by the SWansea IMmunology (SWIM) research group at Swansea University and is overseen by Professor Cathy Thornton. This research has been given a favourable ethical opinion by Swansea University Medical School (SUMS) Research Ethics Committee (RESC), project reference 2 2024 9822 9856.

What happens if I agree to take part?

Taking part in this study first involves answering a few questions about yourself (e.g., your age, sex and ethnicity) and your health (e.g., smoking, any chronic disease, and any contraceptive status). If you agree to help with this research, you will be required to provide multiple sample types during a period of elevated ambient heat ($\geq 26^{\circ}\text{C}$). Sample types include physiological measures like heart rate which will be made for set durations during the monitoring period using a wearable device (Polar Verity Senses). These will be complemented by measurements of blood pressure, body temperature, and peak expiratory flow measures once before a heat event, the day immediately after where heat exceeds 26°C , and again 10-14 days after a heatwave or over an equivalent non-heatwave

control period. Physiological sampling will take place in the morning between 8am and 10 am and evening between 6 pm and 12 am. Biological sampling will only be conducted in the evening between 6 pm and 12 am and will include saliva, urine, sweat, and blood. All equipment will be provided, and sampling will be carried out by you, the participant. Participants who complete the study will receive a £20 shopping voucher and keep the thermometers, peak flow meters and blood pressure devices.

Data Protection and Confidentiality

Your data will be processed in accordance with the Data Protection Act 2018 and the General Data Protection Regulation 2016 (GDPR). All personal information collected will be kept strictly confidential. You will be assigned a unique study number that will be used to label your samples and link to the laboratory data gathered using your samples. The personal information provided by you will only be viewed by Professor Cathy Thornton and her immediate research team. All collected identifiable data will be destroyed on or before 28th February 2027 when it is no longer required for these research endeavours.

All electronic data will be stored on a password-protected computer file on a Swansea University laptop. All paper records will be stored in a locked filing cabinet in Professor Cathy Thorntons lockable office. Your consent information will be kept separately from your responses to minimise risk in the event of a data breach.

What will happen to the information I provide?

An analysis of the information will form part of our report at the end of the study and may be presented to interested parties and published in scientific journals and related media. *Note that all information presented in any reports or publications will be anonymous and unidentifiable.*

Is participation voluntary and what if I wish to later withdraw?

Your participation is entirely voluntary – you do not have to participate if you do not want to. If you decide to participate, but later wish to withdraw from the study, then you are free to withdraw at any time, without giving a reason and without penalty. You can withdraw by contacting immunology-studies@swansea.ac.uk.

Data Protection Privacy Notice

The data controller for this project will be Swansea University. The University Data Protection Officer provides oversight of university activities involving the processing of personal data and can be contacted at the Vice Chancellors Office.

Your personal data will be processed for the purposes outlined in this information sheet. Standard ethical procedures will involve you providing your consent to participate in this study by completing the consent form that has been provided to you.

The legal basis that we will rely on to process your personal data will be processing is necessary for the performance of a task carried out in the public interest. This public interest justification is approved by the Swansea University Research Ethics Committee.

The legal basis that we will rely on to process special categories of data will be processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes.

How long will your information be held?

All collected identifiable data will be destroyed on or before 28th February 2027 when it is no longer required for these research endeavours. The laboratory data that we generate using your blood will be held for 10 years after the study has finished. This is so that we can ensure all our findings from the study are published in scientific journals and comply with the regulations regarding this.

What are your rights?

You have a right to access your personal information, to object to the processing of your personal information, to rectify, to erase, to restrict and to port your personal information. Please visit the University Data Protection webpages for further information in relation to your rights.

Any requests or objections should be made in writing to the University Data Protection Officer:-

University Compliance Officer (FOI/DP)

Vice-Chancellor's Office

Swansea University

Singleton Park

Swansea

SA2 8PP

Email: dataprotection@swansea.ac.uk

How to make a complaint

If you are unhappy with the way in which your personal data has been processed, you may in the first instance contact the University Data Protection Officer using the contact details above.

If you remain dissatisfied, then you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: -

Information Commissioner's Office,

Wycliffe House,

Water Lane,

Wilmslow,

Cheshire,

SK9 5AF

www.ico.org.uk

What if I have other questions?

If you have further questions about this study, please do not hesitate to contact us:

Immunology-studies@swansea.ac.uk

