

**Participant Information Sheet For Workshop participants**UCL Institute of Archaeology Ethics Committee Approval ID Number: **_TBD_****YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET****Title of Study:** Handling bureaucracy: experimental archaeological workshops recreating ancient fingerprints**Department:** UCL Institute of Archaeology**Name and Contact Details of the Researcher(s):** Pablo Barba, pablo.barba.18cl.ac.uk**Name and Contact Details of the Dissertation Supervisor:** Prof David Wengrow, d.wengrow@ucl.ac.uk**1. Invitation Paragraph**

My name is Pablo Barba and I have recently finished a PhD Degree in Archaeology. Emerging from this degree, I am conducting research with the support of the Egyptian Exploration Society and would like to invite you to take part. Before you decide if you want to take part, it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

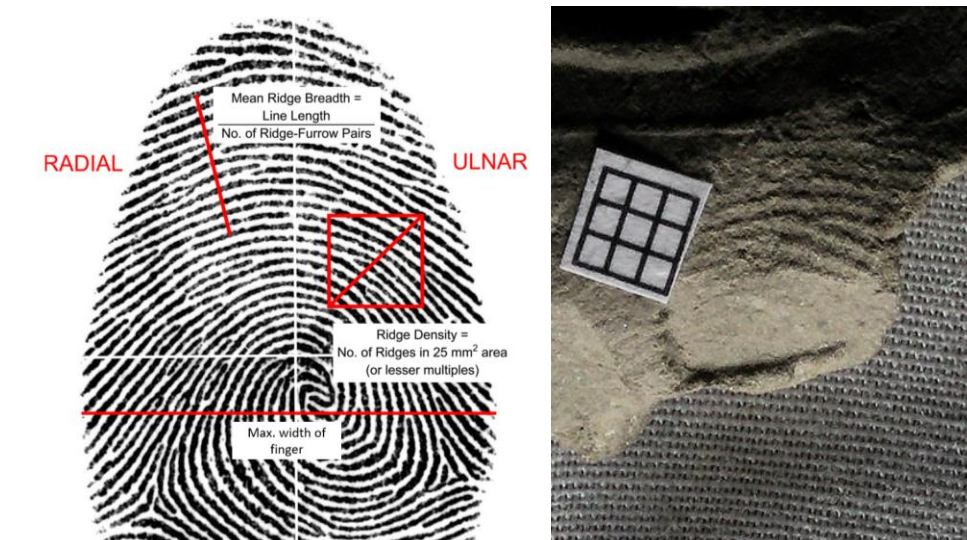
2. What is the project's purpose?

In the last years, several studies have proposed the potential that fingerprints left years ago in wet clay have to studying the age and sex of artefact makers in the past. This project aims to improve the methodology of *paleodermatoglyphics* (or the study of archaeological fingerprints) by studying fingerprints left by participants in workshops.

The shape of your fingerprint is formed during gestation, meaning that the pattern of your ridges remains the same throughout your life. However, as you age and grow up and your hand becomes larger, the distance between the ridges expands. Due to differences in height between sexes and ages, we can measure the distance between ridges in a fingerprint and estimate the age and sex of its owner. Similarly, the breadth of a finger also expands as you grow, and can be used to study sex and age of its owner.

Through your data and the fingerprint lefts in clay artefacts made by you, we want to:

- Assess how accurate is fingerprint analysis in determining the age/sex of its owner. I will measure the width of ridges and fingers to this sample for which we know the age and sex of owner, to check how often we guess right/wrong the identity of the fingerprint owner.
- Improve the accuracy of the method. Only a few studies throughout the world have been carried out to determine correlation between size of the ridges and sex/age of owner. New measurements taken from this sample will improve such methods.



Left: Example of a fingerprint and the three measurements used in archaeology and in this study. Right: fingerprint left by an administrative in a clay seal from Abydos (Egypt), ca. 3000BC.

3. Why have I been chosen?

Anyone can participate in this project. We are hoping to create a sample of about 100-150 participants. We especially welcome infants, children and teenagers. However, if you are a minor (under 18 years of age), you will need the consent of your parent to participate, who must sign the consent form in your behalf. You are only allowed to participate in the study once.

4. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. You can withdraw at any time before and during the workshops without giving a reason and without it affecting any benefits that you are entitled to. Requests for withdrawal from the research can be made up to the end of the workshop: you will not be able to opt out once the fingerprints and information card with your personal data are given to the researcher and stored in a secure location.

5. What will happen to me if I take part?

During the workshop (approx. 1.5-2.5 hours long), and after you reading the information sheet and signing the consent form, you will be given an information card to fill with your personal details (age, sex, height, ethnicity). Then, you will leave some fingerprints of your fingers and palm (see image below and next section) on clay given by the researcher. Afterwards, you will be explained what a sealing is, and why Egyptians used sealings: guided by the main archaeologists (Pablo), you will have the chance to learn how they secured objects by creating your own sealing with a papyrus paper, a lump of clay, and a replica of a scarab. Paying attention to the fingerprints that you have left in the clay, we will finally discuss what information can archaeologists learn by studying and registering fingerprints.

Your fingerprints left in clay, the clay sealings replicas you made, and your personal information will be kept by the main researcher so they can be used to learn more about fingerprint analysis in archaeology and create better models to study ancient fingerprints.

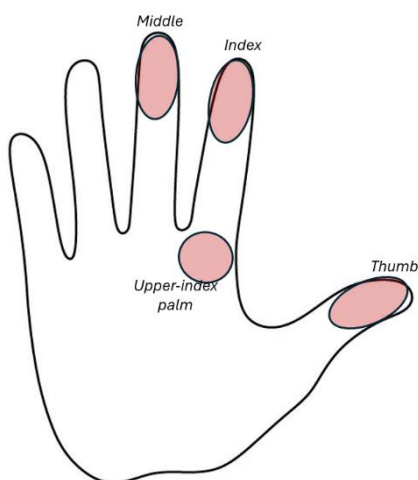
Only the principal researcher (Pablo Barba) will have access to the fingerprints, which will not be published, shared or made available to any other individual in any way. All fingerprints (both from clay artefacts and the photographs taken of them for analysis) will be destroyed once data collection finishes (30th June 2025), with

only de-identified measurements of fingerprints and anonymised personal data (sex, age, height, ethnicity) retained.

The following structure will be followed:

1. Read this information sheet: if you willingly want to participate in this study sign the consent form. If you have any questions regarding the study and the collection of data, please do not hesitate to ask the main researcher, Pablo Barba.
2. Fill in the information card with your height (in cm), sex at birth, current age (in months), and your ethnic background. Do not include your name, surname or identifiable data.
3. You will then be given various pieces of clay to:
 - a. Leave the fingerprints of your thumb, index, middle finger and palm.
 - b. Make a clay sealing (you will be instructed how to do so and will learn why and how Ancient Egyptians made sealings, and what information can archaeologists gain from studying this).
4. If you decide you do not want to participate in the study during the development of the workshops, let the main researcher know: please then destroy your information card and clay with your fingerprints. Please note that you will not be able to opt out from the study once the fingerprints and information card are given to the researcher (step 5).
5. After making these artefacts, give them to the researcher with your information card so they can be securely stored.

6. What information will be collected and why?



We need to know some personal information about you: your height (in cm), sex at birth, current age (in months), and your ethnic background, as these four dimensions affect the size of the ridges in your fingerprint. You will have to write this information in a card provided by the researcher. This information will be anonymised through a random series of letters and numbers given to you card and clay objects after the workshop—we will not record your name, surname or other personal information.

Additionally, we will keep the clay artefacts with your fingerprints that you make. You will be asked to leave the fingerprint of your thumb, index, and middle finger and upper palm of your hand in a clay plaquette, and to make a replica of a sealing (see image on the left).

7. What are the possible disadvantages and risks of taking part?

- If you have any known allergies, consult the researcher regarding the recipe of the clay used that day in the workshops to make sure you are not at risk. Please, let the staff know if you are feeling unwell during the development of the workshop.
- Please pay attention to children especially (under 3 years of age) when handling the clay and replica scarab sealing to prevent the child from eating the clay and from asphyxiation.
- As fingerprint patterns are unique and are used as people's personal identifiers, providing your fingerprints can constitute a risk to your privacy. For this reason, we will not record your name and surname or any other information beyond the required for the study (sex, height, age, ethnicity). Your fingerprints and personal information will be anonymised through a matching random series of letters and numbers to be

registered after the workshops. The clay fingerprints and photographs will be securely stored to protect your privacy and identity.

8. What are the possible benefits of taking part?

There are some direct benefits for those participating: We are committed to connecting knowledge creation and diffusion. In exchange of providing your fingerprints and information, you will have the chance to learn about sealing practices in Ancient Egypt and about the possibilities of fingerprint analysis through an engaging hands-on activity. Please, feel free to ask Pablo the archaeologist any other question you might have about archaeology and Ancient Egypt!

There are also indirect benefits. Fingerprint analysis constitutes a novel methodology granting many exciting possibilities: by participating in this study, you will help archaeologist learn more about how societies work and change. It is a particularly useful methodology for gender and childhood archaeologies, capable of determining which objects were made by men, women and children. These two latter groups are too often omitted from interpretations of the past, increasing the value of your participation in this project.

Additionally, science is universal, made by all and for all! By participating in this study, you will have the chance to participate in the advancement of scientific and archaeological knowledge.

9. What if something goes wrong?

If something goes wrong during the study, and you wish to make a complaint, you can contact my dissertation supervisor Prof David Wengrow at d.wengrow@ucl.ac.uk. If you feel that your complaint has not been handled to your satisfaction, please raise your concerns with the Chair of the UCL Institute of Archaeology Research Ethics Committee at ioa.ethics@ucl.ac.uk.

10. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential, and only the main researcher will be able to access your data and fingerprints. We will anonymise your fingerprints and personal data through a random number (see sections 5 & 6). You will not be able to be identified in any ensuing reports or publications.

11. Limits to confidentiality

Please note that confidentiality may not be guaranteed when taking part in workshops with other participants. These workshops will have between 10-15 people with whom you will be in contact, and who will know that you participated in this project.

12. What will happen to the results of the research project?

The results of this research will be published in academic journals after the analysis is completed, which will happen in between 2025 and 2026. The results will be published OpenAccess whenever possible, but you can contact the main researcher to receive a copy of any publication if you want so. The anonymised data will be made available through UCL and the journals repository for future researchers to use to create better models for archaeological analysis of fingerprints—you will not be identifiable through this data.

You can also follow the development of the workshops and of the analysis of ancient fingerprints in museum collections through the academic Instagram of the researcher (@nekhenw)

13. Local Data Protection Privacy Notice

Notice:

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk

This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice: <https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>.

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

The categories of personal data used will be as follows:

- Biometric data
- Age (in months)
- Height (in cm)
- Sex
- Ethnicity

The lawful basis that would be used to process your personal data will be performance of a task in the public interest.

The lawful basis used to process special category) personal data (in this study, biometric data and ethnic origin) will be for scientific and historical research or statistical purposes.

This data will only be available to the researcher. Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

14. Who is organising and funding the research?



These workshops and research are funded by the *Egyptian Exploration Society (EES)* through their Centenary Awards, as part of my research project "Handling Bureaucracy: The identity of Egyptian administration as seen through fingerprint analysis in sealings from the Early Dynastic Period". You can find more information on the research I am undertaking as part of the Centenary Awards and on the history and causes of the EES through this link (<https://www.ees.ac.uk/resource/handling-bureaucracy.html>) or by scanning the QR code below.

15. Contact for further information

Please feel free to ask any questions to the main researcher before, during and after the workshop. Do not hesitate to contact the main researcher through the methods below if you have any further questions, or if you want to know more about the development of the study and publication of the research outcomes:

Main researcher:

Dr Pablo Barba
Institute of Archaeology, UCL
Email: pablo.barba.18@ucl.ac.uk (for communication)
Instagram: @nekhenw (to follow the results of the project only)

Supervisor:
Prof David Wengrow
d.wengrow@ucl.ac.uk

If you decide to take part, you will be given a copy of the information sheet and your signed consent form to keep.

Thank you for reading this information sheet and for considering to take part in this research study.