



Participant Information Sheet

Benchmarking Fungal Levels in the existing building of the UK

EPSRC DTP-CASE (ref: EP/R513143/1), Sponsor: Polygon UK, UCL Ethics ID: 20767/001 Approved by UCL REC

PhD Researcher: Spyros Efthymiopoulos

Supervisors: Yasemin D. Aktas (Principal Investigator), Hector Altamirano

Industry Supervisor: Mike Waterfield

UCL Data protection officer: Alex Potts

We would like to invite you to take part in the research project: Benchmarking fungal levels in the building stock of the UK. This project aims to develop a rigorous, reproducible and robust testing protocol for indoor fungal growth assessment and propose benchmarks that will allow the discrimination between typical and atypical levels of indoor fungi in properties that are considered "normal" or otherwise.

Before you decide to join this research, please take time to read the following information carefully. It is important for you to understand why the research is being done and what participation will involve. Please don't hesitate to ask us if there is anything that is not clear or if you would like more information. Thank you for reading this.

Why is UCL doing this research?

This research explores how to assess indoor fungal growth via a rigorous and reproducible testing protocol and aims to propose benchmarks that will allow occupants and building professionals to understand whether a property has sustained damage from fungal growth or needs remediation.

About this project

The project will consist of the following activities:

Air sampling which will involve mixing the indoor air inside the room to be tested via a hand-held blower for a period prescribed by the room size, and sampling of the air using a filter placed on top of a tripod (1 per room).

Surface sampling which will be done by swabbing various surfaces within the room (5-10 per room). The whole process typically takes around 10-20 min and does induce some noise which however is very tolerable. The residents will not be asked to contribute during the sampling.

Completion of a questionnaire will complement the in-situ, through the building/occupancy-related data which will allow the identification of potential relationships between the readings and the building's condition, the building's energy performance, its physical properties, its usage, and its function etc. These interrelationships will allow the discrimination between typical and atypical fungal levels in properties that are considered "normal" or otherwise.

Long-term humidity (RH) and temperature (T) monitoring, which is aimed to be done via small-sized sensors for a small subset of the examined properties. The sensors will record T&RH at a regular interval to gain insight on the diurnal, weekly and seasonal changes of the indoor thermal and moisture conditions.

Why are you invited?

You are invited to take part in this project so that the benchmarking process can be informed by the analysis of a large dataset which involves the collection of samples and data from a large number of properties. We are currently recruiting volunteers and clients of our industry sponsor (Polygon UK) who are interested in participating in our project.

Do you have to take part?

It is completely up to you to decide whether or not to take part in this research. The researcher will be happy to discuss with you any aspect of the research before asking you to make a decision, especially if you have any concerns. If you decide to take part, you will be asked to provide your consent via email or by signing the consent form during our face-to-face meeting, as you prefer.

You can withdraw your consent at any time. If you withdraw your consent, you do not need to give a reason and it will not disadvantage you in any way. If you decide to withdraw your consent, you will be asked what you wish for us to do with the data you have provided up to that point.

What will happen if you decide to take part?

Should you give consent for all activities to be carried out, we will arrange a visit at your property to collect air and surface samples for the assessment of fungal growth and potentially install the relative humidity and temperature monitoring device (*note: its size is approx. 5cm x 5cm*). We will also ask you to complete the questionnaire which will inform the benchmarking process.

If you feel you wish to make a complaint?

In the first instance please contact the Principal Researcher, Dr Yasemin D. Aktas y.aktas@ucl.ac.uk. If you are not satisfied with the way your complaint has been handled, then please contact the Chair of the UCL Research Ethics Committee – ethics@ucl.ac.uk

Will my taking part in this project be kept confidential?

All data collected will be securely stored on UCL servers be fully anonymized, and under no circumstance they can be used to trace back to you. We will not be able to contact you and inform you of the results with regards to the sampling readings or the monitoring as we aim to delete all personal data that could allow tracing back to you. However, we will be assigning a random 5 digit ID to every building and a different 5 digit ID to every room tested so that participants who are interested on receiving information with regards to their property can contact us and get informed of the fungal testing results.

We will ask for your specific consent for all of the above activities and you retain the right to withdraw at any stage during the process, and opt out of either all or several of the listed activities.

You will not be identified in any report or publication that are considered to be produced based on this study. The data collected during the project might be reused in its anonymised form for additional or subsequent research.

Limits to confidentiality

Confidentiality will be fully respected subject to legal constraints and professional guidelines.

What will happen to the results of the research project?

We intend to produce conference papers, journal articles and a thesis with the findings of the project, including the anonymized data gained from the activities conducted. The study is expected to conclude within two to three years.

Data Protection Privacy Notice

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

Further information on how UCL uses participant information can be found here:
<https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice>

Your personal data will be used for the purposes outlined in this notice. The only personal data collected will be your **name and signature** on the consent form should you wish to participate.

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

Your personal data will be processed so long as it is required for the research project. We expect to pseudonymise your personal data and will endeavour to minimise the processing of personal data wherever possible.

You have certain rights under data protection legislation in relation to the personal information that we hold about you. These rights apply only in particular circumstances and are subject to certain exemptions such as public interest (for example the prevention of crime). They include:

- The right to access your personal information;
- The right to rectification of your personal information;
- The right to erasure of your personal data;
- The right to restrict or object to the processing of your personal data;
- The right to object to the use of your data for direct marketing purposes;
- The right to data portability;
- Where the justification for processing is based on your consent, the right to withdraw such consent at any time; and
- The right to complain to the Information Commissioner's Office (ICO) about the use of your personal data.

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.

If you remain unsatisfied, you may wish to contact the ICO. Contact details, and further details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

Data will not be transferred outside the EU.

Who is organising and funding the research?

This research is being conducted and funded by the EPSRC DTP-CASE (UK/EU fees only, ref: EP/R513143/1), Department of Civil, Environmental & Geomatic Engineering (stipend only) and Polygon UK (Research related costs), under the supervision of UCL.

Covid risks control measures

Under the scope of this research control measures to mitigate health and safety concerns regarding the recent outbreak of COVID-19 have been adopted.

- The research team has been double-vaccinated with one of the COVID-19 vaccines currently approved for use in the UK.
- Investigators will be tested regularly (at least once a week) by using rapid lateral flow tests.
- While indoors investigators will constantly use gloves and high tech FFP3 masks.
- Social distancing rules and local government guidelines will be strictly followed

Contact for further information

Please contact Spyros Efthymiopoulos or Dr. Yasemin D. Aktas if you have any queries about this research (contact details are at the bottom of page one).

Thank you very much for taking the time to read this and for considering take part in this research.

Researcher: Spyros Efthymiopoulos

UCL Department of Civil, Environmental and Geomatic Engineering & UK Centre for Moisture in Buildings (UKCMB).

Email: spyros.efthymiopoulos.18@ucl.ac.uk Tel:+44 (0) 758 5377455

Principal Investigator: Yasemin D. Aktas

UCL Department of Civil, Environmental and Geomatic Engineering & UK Centre for Moisture in Buildings (UKCMB).

Email: y.aktas@ucl.ac.uk Tel: +44 (0) 20 7679 1566

UCL Data protection officer: Alex Potts

Email: data-protection@ucl.ac.uk