Application for inclusion of a research project

All sections must be completed before submitting this form to the data protection team.

All research projects using personal data must be registered with the UCL Data Protection Officer before the data is collected. This includes projects approved by the Joint Research Office.

Security of research data It is rarely necessary to store electronic personal data on portable devices such as laptops, USB flash drives, portable hard drives, CDs, DVDs, or any computer not owned by UCL. Similarly, manual personal data should not be regularly removed from UCL premises. In the case of electronic data, to minimise the risk of loss or disclosure, a secure remote connection to UCL should be used wherever possible.

The UCL Computer Security Team has published guidance on the storage of sensitive data on portable devices and media which is available at http://www.ucl.ac.uk/informationsecurity/itsecurity/knowledgebase/securitybaselines/encryption/GuidanceStorageSensitiveData

Encryption If storing sensitive data on portable devices or media all data must be strongly encrypted. General encryption guidance is available at https://www.ucl.ac.uk/informationsecurity/itsecurity/knowledgebase/securitybaselines/encryption

Manual personal data and portable electronic devices should be stored in locked units, and they should not be left on desks overnight or in view of third parties.

Anonymised data Projects using anonymised data do not have to be registered with the Data Protection Team and you do not have to worry about compliance with the Act.

Data is only truly anonymised if it is impossible to identify subjects from that information and, if relevant, any other information that UCL holds. For example, if you have a list of research subjects and anonymise it by giving each one a number, but keep a list of the numbers with the names of the subjects, the information has not been anonymised. In this case, it is personal data, and the project must be registered with the Data Protection Team.

Further guidance is available at https://www.ucl.ac.uk/finance/legal/dp-research

Approval We may have some questions about the information you provide, but you will normally be provided with a registration number within a week of submitting the form. However, the period leading up to meetings of the Ethics Committee is always very busy, and you should allow more time for your application to be processed. It is therefore very important to check in good time whether you need to register your project.

Please note that Data Protection Registration numbers will NOT be issued when you submit an application form in person to the Data Protection Team. Please submit this form electronically and send to data-protection@ucl.ac.uk with copies of any information sheets and consent forms that you are using.

UCL Data Protection website

https://www.ucl.ac.uk/finance/legal/dp-foi-overview

Any queries regarding this form please contact data-protection@ucl.ac.uk

This form will be returned to you with the appropriate registration number, which you may quote on your Ethics Application Form, or any other related forms.
Application for inclusion of a research project Form 2

A. APPLICATION DETAILS

A1 Project Title:
Extreme Citizen Science: Analysis & Visualisation (ECSAnVis)

Date of Submission: 23/3/2016
UCL Ethics Project ID Number: 2357/001

Proposed Start Date: 1 September 2016
Proposed End Date: 31 August 2021

A2 Principal Researcher (Please note that a student – undergraduate, postgraduate or research postgraduate cannot be the Principal Researcher for Ethics purposes).

Full Name: Mordechai (Muki) Haklay
Position Held: Professor of Geographical Information Science
Address: Department of Civil, Environmental & Geomatic Engineering, UCL
Email: m.haklay@ucl.ac.uk
Telephone: 020 7679 2745 (x32745)

A3 Data Collector(s) Details (if Applicant is not the Principal Researcher e.g. student details):

Full Name: Jerome Lewis
Position Held: Reader in Social Anthropology
Address: Department of Anthropology, UCL
Email: jerome.lewis@ucl.ac.uk
Telephone: 020 7679 5567

B. DETAILS OF THE PROJECT

Please provide a brief summary of the project

The challenge of Extreme Citizen Science is to enable any community, regardless of literacy or education, to initiate, run, and use the result of a local citizen science activity, so they can be empowered to address and solve issues that concern them. Citizen Science is understood here as the participation of members of the public in a scientific project, from shaping the question, to collecting the data, analysing it and using the knowledge that emerges from it. Over the past 5 years, the Extreme Citizen Science group at UCL has demonstrated that non-literate people and those with limited technical literacy can participate in formulating research questions and collecting the data that is important to them through tools such as Sapelli (sapelli.org) and GeoKey (geokey.org.uk). The new project, Extreme Citizen Science: Analysis and Visualisation (ECSAnVis) takes the next step – developing geographical analysis and visualisation tools that can be used, successfully, by people with limited literacy, in a culturally appropriate way. At the core of the proposal is the imperative to see technology as part of socially embedded practices and culture and avoid ‘technical fixes’. The development of novel, socially and culturally accessible Geographic Information System (GIS) interface and underlying algorithms, will provide communities with tools to support them to combine their local environmental knowledge with scientific analysis to improve environmental management. In an exciting collaboration with local indigenous partners on case studies in critically important, yet fragile...
and menaced ecosystems in the Amazon and the Congo-basin, our network of anthropologists, ecologists, computer scientists, designers and electronic engineers will develop innovative hardware, software and participatory methodologies that will enable any community to use this innovative GIS. The research will contribute to the fields of geography, geographic information science, anthropology, development, agronomy and conservation.

C. DETAILS OF PARTICIPANTS

Data subjects
Who will the personal data be collected from?

The main concern of the project is not about participants as individuals, but as a group. The data that is collected is known as 'Lay, Local and Traditional Knowledge' or 'Traditional Ecological Knowledge' and it requires special protection and handling, to ensure that the rights or indigenous groups are not misused. This is highlighted in the ethics code of the International Society of Ethnobotany (http://www.ethnobiology.net/what-we-do/core-programs/ise-ethics-program/code-of-ethics/) which we follow.

What data will be collected
Please provide details of the type of personal data to be collected

The data that will be collected may include the location of villages, camps, community resources (fruit trees) but also potentially illegal activities such as illegal traps and poaching, illegal logging and other types of information that need to be treated as sensitive and only shared with the consent of the group that collect the data and agree how and with whom it should be shared. What data is collected is developed collaboratively with the group concerned, and as part of a robust Free and Prior Informed Consent (FPIC) process, the implications of each data point are discussed with the group collecting the data to develop protocols for how the data is to be used, to whom it can be shown, with whom it can be shared and so on.

Disclosure
Who will the results of your project be disclosed to?

The results of the project (not the specific data points but the technology and the methodology) will be shared in academic papers. Data points etc associated with a particular project will only be shared according to the wishes of local participants and following a collaboratively developed protocol before any data is collected. This protocol can be adapted to address any issues that might emerge during the lifetime of the project and our collaboration. The information itself might be shared with trusted NGOs, and other intermediaries, following our FPIC process and resulting community protocol – which will have to be agreed with the participants prior to any data collection process. We will analyse the data and, if we have local permission, we might share snippets of maps visually in presentations and talks.
Data Storage

Please provide details on how and where the data will be stored. i.e. UCL network, *encrypted USB stick, *encrypted laptop etc.

While Sapelli is not currently encrypting the data on mobile phones, we will add this ability to the software, so the data is stored encrypted during data collection. Transmission over HTTPS will be used to transmit the data to the GeoKey database, and encryption capabilities will be added to GeoKey so it can store the information securely on the server. Any further sharing of information will follow the FPIC agreement and will be shared on secure (password protected) platforms such as ArcGIS Online. Data will be backed up, encrypted, in the field.

*Advanced Encryption Standard 256 bit encryption which has been made a security standard within the NHS*

Data Safe Haven – Identifiable Data Handling Solution

Will the personal identifiable data collected and processed as part of this research be stored in the UCL Data Safe Haven (mainly used by SLMS divisions, institutes & departments)?

NO

**If no please ensure that you have explained how you will ensure that the data is held securely?**

The community data will be stored on cloud servers that can be accessed by phones in the field and researchers at UCL. This necessitates an end-to-end encryption of data for safe storage. With the NGOs and other trusted parties, we will need to sign a data sharing agreement that follows the guidelines developed with the community in the FPIC process and enshrined in the community protocol.

** Please specify whether the data is encrypted/secure:

Where information was declared during the FPIC process as sensitive, we will encrypt it.

D. CONSENT

Consent

*Please include the information sheet and consent forms you will be using for this project, and or protocol* We will use the FPIC protocol (guidelines attached)

D1 *If you are not including an information sheet and consent form, please explain why:*

Because the work that is described here is with non-literate or mostly illiterate participants, this is inappropriate, and we follow the FPIC guidelines that are documented and turned into a community protocol detailing the terms of engagement with the community and what to do with the data produced in our collaboration (see attached)

E. INTERNATIONAL TRANSFER
**International Transfer**

Will identifiable data be transferred outside the UK as part of this study? **YES**

The eighth principle of the Data Protection Act 1998 prohibits the transfer of personal data to countries or territories outside the European Economic Area (which consists of the 27 EU member states, Iceland, Liechtenstein and Norway).

At the time of writing the following countries have also been deemed adequate for the purposes of the 8th principle Andorra, Argentina, Canada, Faroe Islands, Guernsey, Isle of Man, Israel, Jersey, New Zealand, Switzerland and Uruguay.

In view of the recent European Court of Justice ruling on the validity of the US Safe Harbour agreement. The Data Protection Officer has produced guidance on the implications for UCL, which has recently been uploaded to our website at: [https://www.ucl.ac.uk/finance/legal/dp-data-transfer](https://www.ucl.ac.uk/finance/legal/dp-data-transfer)

If you intend to transfer data to a country not mentioned above, please supply details of adequate safeguards below:

Because the work itself is being carried out in Cameroon, the Republic of Congo, Central African Republic, Democratic Republic of Congo and Brazil, the information will be shared with devices which will be in these countries and we will need to ensure that information is stored in an encrypted and secure format that is acceptable for the participants and the intermediaries. A specific part of the research is on authentication mechanism for non-literate participants.

**F. PUBLICATION**

Will the results of your research be published in an academic journal or other publication? **YES**

*Please note that published results must not contain data by which an individual can be identified.*

**G. NOTIFICATION**

**G1** Notification *(Please note that notification is a prerequisite for registration)*

Have you informed your department's Data Protection Coordinator about your project? **YES**

**H. ETHICS**

**H1** Are you applying to the UCL Research Ethics Committee? **YES**
I. REGISTRATION

Registration: Office use only:

| UCL Data Protection Registration Number: Z6364106/2016/04/91 | Date issued: 2016/04/29 |

Further information

For more information and guidance on the UCL Research Committee, please visit http://ethics.grad.ucl.ac.uk/

When all essential documents are ready to archive, contact the UCL Records Office by email at records.office@ucl.ac.uk to arrange ongoing secure storage of your research records unless you have made specific alternative arrangements with your department, or funder.

For information on the UCL Records Management Service, please visit http://www.ucl.ac.uk/library/about/records-office/transfer-records