SHARE (Social Sciences & Humanities Access to Research Experience) Research Experience Placements - Projects

(The University of Cambridge School of the Humanities and Social Sciences and the University of Cambridge ESRC Doctoral Training Partnership (DTP)

	Title	Department	Full or Part Time	Scheme
<u>1</u>	Mapping historical epidemics	Department of Geography and the Cambridge Group for the History of Population and Social Structure (CAMPOP)	Both	ESRC
<u>2</u>	Arctic Legal Geographies: Exploring the Svalbard Treaty	Department of Geography and Scott Polar Research Institute	Both	ESRC
<u>3</u>	Reference to person, time and space in second language acquisition	Theoretical and Applied Linguistics (TAL), Faculty of Modern and Medieval Languages and Linguistics	Both	ESRC
<u>4</u>	Research on Play in Education, Development and Learning	Faculty of Education	Both	ESRC / SHARE
<u>5</u>	Parish GIS of England c. 1830	Faculty of History	Full time only	ESRC / SHARE
<u>6</u>	<u>Defending Land Rights in</u> <u>Times of Artificial Intelligence</u>	Department of Sociology	Both	ESRC / SHARE

1. Department of Geography and the Cambridge Group for the History of Population and Social Structure (CAMPOP)

Project title

Mapping historical epidemics

Supervisor

Professor Alice Reid, Department of Geography, Director, The Cambridge Group for the History of Population and Social Structure

Project overview

The Covid-19 pandemic has increased public awareness of the risk factors for infectious diseases and the way that outbreaks spread over space. Although each disease is different, insight can be gained by studying the progress and character of historic epidemics, and this project aims to guide interns through the process of calculating and mapping historic mortality rates from infectious disease. The project will use existing databases of deaths (1871-1910) and populations at risk (census data 1871-1911) for the town of Ipswich which have already been cleaned and coded. The work will involve using GIS software to create a map of the enumeration districts for the town of Ipswich in 1911; allocating deaths to enumeration districts according to street address; generating populations at risk from census data; and calculating and mapping mortality rates from different diseases for Ipswich. If time allows, a comparison will be undertaken with the town of Kilmarnock in Scotland (1861-1901) for which a map has already been created and deaths allocated to districts. It is anticipated that the project will culminate in a publication.

The project will be based in the Cambridge Group for the History of Population and Social Structure (Campop), in the Department of Geography, which is a long-standing research unit with deep expertise in demographic methods, historical mortality and disease statistics, and GIS creation and analysis.

The project will benefit you by:

- Providing experience in using Geographic Information Systems (GIS) software;
- Providing experience in manipulating large datasets using MS Access and/or R;
- Teaching a practical understanding of demographic mortality calculations;
- Encouraging an understanding of the influences on infectious disease mortality and its spatial spread;
- Providing an opportunity to see a focussed research project through from start to finish;
- Providing an opportunity to engage in collaborative research (with each other and with the supervisory team);
- Providing the opportunity to contribute to a co-authored publication.

This internship will be funded by the ESRC (Economic and Social Research Council) and will be hosted by the Cambridge ESRC Doctoral Training Partnership (DTP).

This placement is available on a full-time or part-time basis.

Entry Requirements

You should be studying an undergraduate degree in a relevant social science discipline (e.g. Geography, History, Sociology, Social Statistics, Anthropology, Economics) and have an interest in health or mortality. Some background in either quantitative research methods or GIS would be highly desirable but not essential.

2. Department of Geography and Scott Polar Research Institute

Project title

Arctic Legal Geographies: Exploring the Svalbard Treaty

Supervisors

Professor Alex Jeffrey, Professor of Human Geography Professor Richard Powell, Professor of Arctic Studies

Project overview

This internship will provide the opportunity to explore how international law is made. The project will involve archival research in the Scott Polar Research Institute to investigate the legal deliberations around the 1920 Svalbard Treaty, a forerunner to other international agreements to manage access and control of contested parts of the globe. Drawing on the resources available from the Scottish Spitsbergen Syndicate collection, you would examine the actors and perspectives that shaped this agreement. Some of the discussions formed the backdrop to the founding of the Scott Polar Research Institute. The direct output of the project will be a short paper (target journal: Area) and a report published on websites of the Department of Geography and the Scott Polar Research Centre, both using archival detail to explore struggles over sovereignty and protection of the Arctic. You will gain valuable skills in archival research, textual and visual analysis and presenting ideas to established academic and postgraduates. This project also provides an opportunity to widen participation in legal analysis of the polar regions.

You will benefit by

- developing skills in archival research, textual and visual analysis software;
- compiling a short report for web publication;
- being set within the twin contexts of the Legal Geographies graduate group and the SPRI graduate cohort, allowing you to gain an understanding of the context within which research is produced, particularly with current students.

This internship will be funded by the ESRC (Economic and Social Research Council) and will be hosted by the Cambridge ESRC Doctoral Training Partnership (DTP).

This placement is available on a full-time or part-time basis.

Entry Requirements

You should be studying an undergraduate degree with a background in a social science or humanities subject. An interest in international relations would also be of benefit.

3. Theoretical and Applied Linguistics (TAL), Faculty of Modern and Medieval Languages and Linguistics

Project title

Reference to person, time and space in second language acquisition

Supervisor

Professor Henriëtte Hendriks, Professor in Language Acquisition and Cognition

Project overview

The project involves narrative production by Chinese learners of French and English as a second language at four levels of proficiency. The data have been transcribed in CHILDES, but would need linguistic coding and analysis.

Research questions asked in the project are:

- What forms do learners use to express time, space and reference to person in their second language?
- When do these forms become appropriate for the language being acquired, and what is the developmental path of the learners towards the target specific choice of linguistic means?
- Can we see any typological influences on the acquisition of these forms, and is there a larger role for the source language or for the target language in shaping the L2 learners' development?

Areas of linguistics of relevance to this study: Language acquisition; language typology, narrative discourse.

You will benefit from learning skills of interest if:

- you are interested in first or second language acquisition;
- you are interested in the linguistic systems underpinning different languages;
- you have an interest in typological differences between languages, etc;
- you are interested in disseminating the research findings in a scholarly article and featuring as co-authors

This research experience placement will be funded by the ESRC (Economic and Social Research Council) and will be hosted by the Cambridge ESRC Doctoral Training Partnership (DTP).

This placement is available on a full-time or part-time basis.

Entry Requirements

This is suitable for applicants with a background in linguistics, English and/or French. Good computer skills are essential, but the skills required for the coding of the data can be easily acquired and candidates will be trained on this specific feature; it will help to have some theoretical understanding/knowledge of different language systems.

4. Faculty of Education

Project title

Research on Play in Education, Development and Learning

Supervisor

Professor Sara Baker, Professor of Developmental Psychology and Education

Project overview

The Centre for Research on Play in Education, Development and Learning (PEDAL) was established with a donation from the LEGO Foundation. You would be embedded in our everyday research operations, giving you practical experience and building your knowledge of the postgraduate environment. You would work closely with our postgraduates and postdocs, across a range of projects in the Centre throughout the six-week period. Examples of some of the activities and topics that you could assist in are:

- Exploring the debate around randomised control trials in education
- Qualitative work: Different approaches to qualitative interview coding
- Quantitative work: Matching constructs to measures for cognitive measures of children's outcomes
- Coding video data from classrooms
- Making materials with accessible to a range of stakeholders, including children, families, schools and policy makers
- How to disseminate findings and share back to the education community (blog writing, preparing conference posters, newsletters for schools, policy briefs, social media)

You will join a large, cohesive, friendly research centre and work closely alongside current postgraduates. You will build skills in research (e.g. literature search, coding, and communicating with the public), within the exciting and highly relevant field of psychology and education.

This internship may be funded by either the University of Cambridge School of the Humanities and Social Sciences or the ESRC (Economic and Social Research Council).

This placement is available on a full-time or part-time basis.

Entry Requirements

You must have a background in psychology. Training can be offered depending on the skills and interests of the applicant.

5. Faculty of History

Project title

Parish GIS of England c. 1830

Supervisors

Professor Paul Warde, Professor of Environmental History Dr Max Satchell, Research Associate, Department of Geography

Project overview

Parishes represent the principal administrative units of England from the thirteenth to the mid twentieth century. While their boundaries changed substantively from 1844, prior to that date they were largely stable. As such pre1844 parishes are of fundamental importance for mapping and analysis of a wide variety of data and themes for historians, demographers, archaeologists, geographers, economists, place-name scholars and others. However, the current GIS of pre-1844 parishes is not available to non-UK academic users or independent scholars and the boundaries of this GIS are overly generalised and inaccurate - in part due to them being created over 20 years ago. To fix these problems we are creating a new GIS historic parish boundary dataset using the original files of T.C.H. Cockin's excellent paper atlas of pre-1844 parish boundaries: *The Parish Atlas of England* (Barlaston, 2017). The new GIS will be highly accurate, completely free to use and will distinguish between land, intertidal land, lakes and ponds enabling new and superior measures of density. Once completed we will release this as a publicly available Geographical Information System (GIS) boundaries dataset and gazetteer for noncommercial use. This will be freely available in a number of different formats from simple to very advanced to suit all types of users. There will also be online guides as to how the different formats can be used to make maps.

With the help of volunteers we have made major progress with the work. All the map files and scans from the Atlas (over 1500) have been *georeferenced* (placed in their correct geographical locations) in relation to the 17 different projections used by the first edition 1:10560 and 1:2500 Ordnance Survey maps. We are now using the automatic digitisation tools of ArcGIS to turn these files into polyline files. The next phase is to identify probable errors using a *topology* (a set of GIS rules) that the polylines should conform comparing the polyline files against the georeferenced files to and then check and where necessary fix the errors identified by the topology. Those polylines that represent intertidal land, lakes and ponds will be identified by comparison with modern data and visual comparison with the scans from atlas. Once the polyline files are fixed then they can be turned into polygons and the GIS will be complete except for labels. With the parish GIS of England complete it is planned to apply for more funding to add to the GIS the historic parishes of Wales, Scotland and later Ireland.

The project will benefit you by:

- Providing training and hands on experience in using ArcGIS, the premier Geographic Information Systems (GIS) software;
- Providing experience in building and assembling complex historical GIS datasets;
- Report writing.

This internship may be funded by either the University of Cambridge School of the Humanities and Social Sciences or the ESRC (Economic and Social Research Council).

The placement is only available on a full-time basis.

Entry Requirements

You must have an undergraduate degree in a relevant social science discipline (e.g. History, Geography, Sociology, Social Statistics, Anthropology, Economics) and have an interest in mapping. Some background in GIS would be desirable but it is not essential.

6. Department of Sociology

Project title

Defending Land Rights in Times of Artificial Intelligence

Supervisors

Dr Ella McPherson, Associate Professor in the Sociology of New Media and Digital Technology and Co-Director of the Centre of Governance and Human Rights (CGHR) Dr Sebastián Lehuedé, CGHR Postdoctoral Scholar

Project overview

The so-called digital era is threatening the wellbeing of local communities and the environment. For example, the proliferation of 'intelligent' machines is requiring the large-scale extraction of minerals and the construction of polluting data centres. As of today, some of these harms are being contested by grassroots and Indigenous communities in different parts of the world. Against this backdrop, this research project, which is run by Dr Sebastián Lehuedé, asks, overall: What is the position of 'land rights' within the global struggle for digital rights? While civic rights such as privacy have been crucial for the digital rights movement, the dangers underpinning recent developments pose profound questions regarding the priorities of this movement and its capacity to build solidarity with land and environmental rights groups.

You will have the following responsibilities:

- Conduct desk research to identify and map land conflicts associated with digital technologies
 across the five continents, including but not limited to communities opposing the extraction of
 minerals (such as lithium) and the construction of digital and data infrastructure (such as data
 centres). You will develop an online map and a short report based on these findings, which will
 be used as backgrounders for the below event and will be published, with the intern as author
 or co-author, on the CGHR website.
- Support De Lehuedé in the organisation of an online event that will take place in September and that will bring together researchers and activists from different contexts. This event is funded by 'The Alan Turing Institute - Post-Doctoral Enrichment Award' granted to Dr Lehuedé. For this event, you will support networking, live captioning, the communications strategy and the virtual environment.
- Assist Dr Lehuedé in the coding of interview data stemming from his fieldwork in South America.

You will:

- Become familiar with qualitative research methods, especially interviewing and coding, and state-of-art research on digital technologies with a decolonial focus.
- Co-author interactive (online map) and written (short report) outputs based on their research that will be featured at the CGHR's website.
- Get a sense of the global landscape of digital-related research and activist networks.
- Gain experience in building relationships with parties from different parts of the world.

This internship may be funded by either the University of Cambridge School of the Humanities and Social Sciences or the ESRC (Economic and Social Research Council).

This placement is available on a full-time or part-time basis.

Entry Requirements

You will have experience in social sciences with an interest in qualitative research and commitment to social justice. Applicants with fluency in other languages, particularly Spanish or Portuguese, are encouraged to apply. Experience in activism would be beneficial but not essential.