Soc-B CDT Biosocial **Research Student** Handbook

2023-24











THE SOC-B CENTRE FOR DOCTORAL TRAINING (CDT) IN BIOSOCIAL RESEARCH

This handbook covers material that applies to students across all three participating Soc-B institutions: UCL, the University of Manchester and the University of Essex. Please refer to your local institution department for local information such as seminars, teaching opportunities and some individual training modules.

1. What is the Soc-B Centre for Doctoral Training (CDT)?

The Soc-B CDT is a unique PhD training programme in biosocial research funded by the Economic and Social Research Council (ESRC) and the Biotechnology & Biological Sciences Research Council (BBSRC) in order to build capacity in this growing area of interdisciplinary scientific endeavour.

2. Structure of the Soc-B CDT

The Soc-B CDT is comprised of three UK Higher Education Institutions (HEI): University College London (UCL), the University of Manchester and the University of Essex. The CDT is overseen by the Soc-B Board of Directors which includes Co-Directors from each Soc-B HEI (Professor Anne McMunn at UCL, Dr Nick Shryane and Professor Rebecca Elliott at the University of Manchester, and Professor Meena Kumari and Professor Leonard Schalkwyk) in addition to the CDT Director, Professor Yvonne Kelly who is based at UCL.

3. Structure of the Soc-B CDT programme

The Soc-B is a four-year PhD programme. The first year is comprised of two compulsory one-week biosocial modules, two ten-week project rotations, and core methodology training.

The first compulsory biosocial module, 'The Biosocial Life Course,' takes place at UCL from 25-29 September 2023. The second compulsory biosocial module, 'Biosocial Systems,' will take place at the University of Manchester during the week 8-12 January 2024 (TBC). Soc-B will cover travel and accommodation expenses for students who are not enrolled at the institution which is hosting the Soc-B module where the expense(s) complies with the relevant institutional and funder policies. Unfortunately, we are unable to cover travel/accommodation costs for students enrolled at the host institution.

4. Training & Training Needs Assessments

4.1 Year 1 Training

In addition to the two core compulsory modules in terms 1 & 2, students are expected to attend one methodology training module each term in the first year. Students will choose these modules, with support from their local board members and project supervisors, from a list of those available at their local HEI. Modules must cover the ESRC Postgraduate Training Requirements (i.e., data collection, management, quality control and analysis, and/or the integration of qualitative and quantitative data, see Annex 1).

In addition to core methods training, in term 3 of the first year, Soc-B students will select a local module in social or biological sciences, depending upon needs identified in their first Training Needs Assessment.

4.2 Training Needs Assessments (TNA)

Each student will complete a Training Needs Assessment (TNA) in conjunction with their local Soc-B board member by the end of October in Year 1. The purpose of the TNA is to identify training required in relation to substantive areas social or biological science, methodological and analytic techniques, and more general transferrable skills, and the courses that will be attended in the first year to meet the needs identified. Students will then complete TNAs annually at the beginning of each academic year, in conjunction with their PhD supervisors.

5. Year 1 project rotations

Soc-B students benefit from the opportunity to participate in two ten-week project rotations in terms 1 and 2 of the first year of study. The purpose of these is to allow students to experience new areas of science before settling on their PhD topic and supervisors in term 3 of year 1. Students will select rotations from a handbook of projects. Students will have time prior to starting the PhD to consider project options and speak with potential supervisors and will meet with CDT board members in mid-September 2023 to discuss rotation options. Students are encouraged to approach potential project supervisors directly.

After the completion of each rotation, students are asked to do a presentation on their project rotation to their local Soc-B peers or to submit a short report (no more than 1,000 words) describing their activities on the rotation and reflecting on what they have learned.

6. Progression milestones, monitoring & expectations

In the third term of year 1, Soc-B students will be supported by their selected supervisors, and the project proposal writing module, to write a project proposal of up to 10,000 words maximum.

This should include:

- some background to the topic
- research questions to be addressed
- a description of the data and preliminary analysis plan for addressing them
- an indication of the impact strategy that will be used throughout the PhD.

Students will present their project proposals at a workshop at the University of Essex on 22-24 May 2024 (TBC). This will provide Soc-B members of staff an opportunity to provide students with feedback on their project ideas. Students will submit their project proposals to their local Soc-B board members on 21 June 2024 (date TBC) and will be provided feedback on their projects mid-July.

Project proposals will be assessed for:

- topic coverage (i.e., a biosocial topic)
- feasibility
- demonstration of familiarity with appropriate methodological techniques
- · clarity of communication

This, alongside the second TNA meeting which will take place at the start of year 2, will provide an opportunity, prior to enrolling for the PhD in years 2-4, to ensure that students have a workable project proposal and supervisory team in place, and that they have met expectations in terms of attendance and engagement with modules and learning throughout year 1 as described above.

Where project proposals are deemed to not meet the requirements laid out above, students will be provided with support to rewrite their proposals, and where TNAs suggest that a student is not engaging with training, a system of more frequent, termly, TNAs will be put in place to support engagement. Awards will only be terminated in cases where students have been given these additional opportunities to demonstrate core skill and competencies but continue to make unsatisfactory progress.

During year 2, students will participate in two modules in advanced methods. The TNA at the end of year 2 will correspond with an upgrade process from MPhil to PhD registration at UCL and the University of Essex,¹ and will also be used to support students in identifying a non-academic partner for an Internship Placement (IP). The final TNA at the end of year 3 will ensure students have a timeline for completion and thesis submission.

Please continue to the next page for flowcharts of a full-time Soc-B studentship and a part-time Soc-B studentship (based on 0.5% FTE).

 $^{^{1}}$ Students at the University of Manchester participate in an annual review process rather than an upgrade procedure.

Studentship Flowchart (Full-Time Student)

	Whole Cohort Welcome TNA 1			
Year 1	25-29 Sept 2023: The Biosocial Life Course Module, UCL	Oct-Dec 2023: Local core methodology training module	2 Oct 2023: 10-week Project Rotation	
	8-12 Jan 2024 (TBC): Biosocial Systems Module, Manchester	Jan-March 2024: Local core methodology training module	15 Jan 2024: 10-week Project Rotation	
	April-June 2024: Local specific Biology or Social Science modules	April-June 2024: Local core methodology training module	April- June 2024: Locally delivered project proposal writing guidance	
	22-24 May 2024 (TBC) Soc-B Workshop, Essex: Student workshop presentations			
	21 June 2024 (TBC): Submission of Summer Project Proposal. Oct 2024: TNA 2			
Year 2	PhD Year 1 Research	Termly full Soc-B Workshops	Advanced training in methods and specific biological and social science modules	
	TNA 3 (MPhil-PhD Upgrade UCL & Essex) / Identify 3 rd year placement			
Year 3	PhD Year 2 Research	Termly full Soc-B workshops	IP Placement with Non-Academic Partner	
	TNA 4: timeline for completion and submission			
Year 4	PhD Year 3 Research Writing & Submission	Termly full Soc-B workshops	Presenting at conferences, publishing	

Studentship Flowchart (Part-Time Student)

	Whole Cohort Welcome / TNA 1			
	25-29 Sep 2023 The Biosocial Life Course Module UCL	2 Oct 2023 Project Rotation 1 (Oct to Mar)	Oct 2024 to Mar 2024 Local core methodology training module	
Year 1	8-12 Jan 2023 (TBC): Biosocial Systems module, Manchester	8 Jan 2024 Project Rotation 1 continues (Oct to Mar)	Jan to Jun 2024 Local core methodology training module	
	May to Nov 2024 Project Rotation 2 (May to Nov – note Project 2 continues into Years 2)			
Year 2	Oct to Nov 2024 Project Rotation 2 continues			
	Jan to June 2025 Write project proposal			
	April 2025 Locally delivered project proposal writing guidance			
	21-23 May 2025 (TBC) Soc-B Workshop, Essex: student workshop presentations			
	20 June 2025 (TBC) Submission of summer project proposal			
Year 3	PhD Year 1 Research	Termly Soc-B Workshops	Advanced training in methods and specific biological and social science modules.	
	TNA 2			
Year 4	PhD Year 2 Research	Termly Soc-B Workshops	Advanced training in methods and specific biological and social science modules.	
Year 5	PhD Year 3 Research	Termly Soc-B Workshops		
	TNA 3: (MPhil-PhD Upgrade UCL & Essex) / Identify 3rd year placement			
Year 6	PhD Year 4 Research	Termly Soc-B Workshops	Internship with Non- Academic Partner	
Year 7	PhD Year 5 Research Writing	Termly Soc-B Workshops	Presenting at conferences, publishing	
	TNA 4: timeline for completion and submission			
Year 8	PhD Year 6 Research Writing & Submission	Termly Soc-B Workshops	Presenting at conferences, publishing	

(N.B. The above PhD timeline for part-time students will change accordingly if a student switches to full-time study).

7. Student Representation

Each year a student rep will be selected from each of the participating Soc-B CDT universities. Student reps will attend Soc-B CDT Board meetings. The role of the reps is to act as a voice for their student peers at the Soc-B CDT Board meetings as well as to organise social activities for the CDT student body at termly Soc-B CDT workshops.

8. Financial matters

Soc-B students have their tuition fees covered and receive a maintenance grant (or stipend). Students with additional research and training expenses can apply to the CDT for limited additional support. The CDT normally covers costs related to attendance at conferences only if a paper or a poster is presented at the given conference. Students are expected to obtain CDT approval in advance.

9. Plagiarism & Academic malpractice

Plagiarism is the unreferenced use of other author's material in your written work. If you reference other people's work, it must be acknowledged clearly. Plagiarism is a serious academic offence and the consequences of committing such an offence are severe at each of the participating Soc-B HEIs. If you are in any doubt, you must seek guidance from your supervisor.

10. Acknowledging ESRC-BBSRC financial support

As students funded by the UK Research Councils you will be required to register yourself on 'Research Fish' https://www.researchfish.net/ and keep your Research Fish entry up to date. Also, please acknowledge your funding in any publications of your research. The text to use is: 'This work was funded by the ESRC-BBSRC Soc-B Centre for Doctoral Training, ES/T00200X/1'.

11. Soc-B CDT Support & Contacts

Director: Professor Yvonne Kelly (<u>v.kelly@ucl.ac.uk</u>)

UCL Co-Director: Professor Anne McMunn (a.mcmunn@ucl.ac.uk)

Soc-B CDT Manager: Alissa Barette (socbcdt@ucl.ac.uk)

Manchester Co-Director: Dr Nick Shyrane (N.Shryane@manchester.ac.uk)

Manchester Co-Director: Professor Rebecca Elliott (rebecca.elliott@manchester.ac.uk)

Manchester CDT Contact: Sandra Bundy-Palmer (sandra.bundy-palmer@manchester.ac.uk)

Essex Co-Director: Professor Meena Kumari (mkumari@essex.ac.uk)

Essex Co-Director: Professor Leonard Shalkwyk (lschal@essex.ac.uk)

Essex CDT Contact: Felicity Kingsgate (pgresearch@essex.ac.uk)

Annex 1: ESRC Postgraduate Training Requirements

As a result of their training in research methods, students are expected to have developed the following skills and be able to apply them in practical research contexts:

- comprehension of principles of research design and strategy, including an understanding of how to formulate research questions which are amenable to empirical investigation and an appreciation of alternative approaches to research
- competence in understanding and applying a broad range of research methods, (including quantitative, qualitative and mixed methods), and the use of appropriate software for their application
- the development of advanced research skills and techniques relevant to their field of study
- capabilities for managing research, including data management, and conducting and disseminating research in a way that is consistent with both professional practice and the normal principles of research ethics
- understanding of the significance of alternative epistemological positions that provide the context for theory construction, research design, and the selection of appropriate analytical techniques
- understanding of the basics of probability, and a critical understanding of the scientific method and of the nature of reflexivity
- understanding of the application of good ethical practice across the entire research process

Principles of research design

Students must be able to understand the connection between research questions or hypotheses and the tools required to address them and gain practical experience of applying some of those tools. More generally, students must be provided with training that enables them to demonstrate their capability to:

- define and formulate research problems and questions, and, where appropriate, formulate hypotheses that can be tested
- understand the rationale for using particular qualitative or quantitative research methods
- understand the relationship between empirical research and theory generation and testing (theory-evidence links)
- understand different forms of sampling, sampling error, and case selection, and potential implications for the interpretation of research findings
- understand and apply the concepts of generalisability, validity, reliability, and replicability (recognising that there are different perspectives on how these may be defined)
- understand the integrated or complementary nature of the relationship between methods in mixed methods research designs

Data collection, analysis and management

The ESRC expects all students to develop a good level of literacy in both quantitative and qualitative methods through exposure to a wide range of methods of data collection, research design and data analysis. Students must have a good understanding of both the practice and philosophies of social

science research which enables them to understand the advantages and disadvantages of core research methods and apply appropriate methods to different types of research question. Students should be made aware of the basic approaches to both qualitative and quantitative data analysis, including different ontological and epistemological perspectives.

All students are expected to be provided with training that ensures they have a thorough knowledge of the practical and ethical issues involved in social science research. This should include different types of research design, such as:

- different purposes and approaches to interviewing, including with individuals and groups (structured, semi-structured, and in-depth) and modes of questionnaire administration (online, face to face, telephone, postal)
- diverse approaches to data collection, such as longitudinal, cross-sectional and experimental research designs, including field experiments
- ethnographic and case study research designs including participatory research, methods of observation, and analysis of observational data
- combining different methods of data collection and analysis (i.e., mixed-methods research)

Training should expose students to different methods of and approaches to data collection and analysis, such as:

- sampling or selecting cases or subjects
- accessing secondary data (qualitative and quantitative) from existing sources (and an awareness of the rich holdings of the UK Data Service)
- distinctions in various forms of data, such as documentary, narrative, administrative, digital or 'big' data
- dealing with non-response and missing data
- merging and linking data sets, including administrative data
- random and systematic measurement error, how it should be mitigated through instrument design and corrected for during analysis
- inductive and deductive methods
- thematic (framework) analysis and methods for ethnographic analysis
- hypothesis testing, exploratory and inferential methods, and measuring causality
- recording, visualising and representing different modes of data (such as textual, aural and visual)

Students must be able to gain direct practical experience of collecting and analysing data using a range of tools, including appropriate computer packages. By the end of their doctoral training students should be able to demonstrate, through practical application, appropriate analysis of structured (or quantitative), textual and visual data.

All students are expected to have some core training in quantitative methods and to be trained to a basic level of statistical literacy. This would allow them to understand and interpret numerical data

that are presented in tabular or graphical form and understand the basics of statistical inference and modelling in addition to a thorough understanding of simple quantitative analysis (e.g., use of Univariate descriptive statistics, measures of central tendency – i.e., means and medians, and dispersion, and measures of bivariate association). Competency should be developed in the methods appropriate to the student's specific discipline; however, core training for those students specialising in quantitative methods would be expected to include much of the following:

- population inference from cross-sectional and longitudinal sample surveys and inference from research using experimental designs
- inferential statistical tests for parametric and non-parametric data
- linear and non-linear forms of multivariate regression
- data reduction and grouping methods, such as factor and cluster analysis
- an introduction to methods of longitudinal analysis, such as event history analysis

All students are also expected to have some core training in qualitative methods and to be trained to a level that would allow them to understand and interpret a range of phenomenological or textual data. Again, competency should be developed in the methods appropriate to the student's specific discipline; however, core training for students specialising in qualitative methods would be expected to include much of the following:

- analytic methods for offline and online textual, aural and visual data
- participatory, multi modal and arts-based research approaches
- historical, comparative and archival methods
- discourse analysis and narrative analysis
- competency in analysis of qualitative data, using a computer assisted data analysis package, such as NVivo, QSR NUD*IST, or Atlas-ti

Regardless of the specific methods used in their research, all students will be expected to demonstrate competency in the skills required to manage data effectively, whether they are using existing data or creating new data. This includes developing an appreciation of intellectual, practical and ethical issues:

- checking, cleaning, and preparing materials for analysis
- · manipulating and coding data
- · secure data storage
- preparing materials/data for deposit in a repository for wider use (including the relevant documentation)
- safe methods of disposing of data