# ESRC Doctoral Training Partnerships (DTPs) 2024 – ESRC Strategic Steers

ESRC will strategically allocate 30% of the studentships to DTPs which evidence strength in our four priority areas:

- Data skills
- Advanced quantitative methods
- Interdisciplinary research which straddles other research council remits
- Pockets of excellence

Proposals will need to provide evidence of strength in these priority areas and demonstrate that it is an area of focus and importance, in order to be considered for these studentships.

The allocation of these additional studentships will initially be for three years. The priority areas will then be reviewed; we reserve the right to change steers and allocations at this point.

#### **Data Skills**

The focus of this steer is developing researchers with the skills to fully exploit the increasing volumes of large and complex data for research purposes. The steer includes survey data and 'big data' (social media, administrative, transactional and geospatial data). Steered studentships can use qualitative and or quantitative approaches and should provide the opportunity for students to develop advanced data skills throughout their studentship. DTPs are encouraged to consider how they can support the breadth of social science disciplines to develop advanced data skills.

When we commissioned DTPs in 2016 the data skills steer focussed on use of ESRC data sets however the last decade has seen researchers able to access new forms of data previously not routinely available and we have broadened the steer to reflect this. These new forms of data include administrative data, unstructured commercial data (such as loyalty card databases) as well as data created through digital interactions between people, people and organisations, and interactions with urban environments (such as transport footfall data). These various types of data are currently a largely untapped, but information-rich resource; and there is a need to ensure we build capacity to allow students to utilise them more effectively.

The data skills required to understand, piece together, clean and produce a robust data resource for research are varied. At one end of the 'data pipeline' are the quantitative and qualitative analytics skills needed to undertake research. But the ability to engineer data together from a range of sources, understand caveats such as potential biases (particularly where data are linked), check and monitor data integrity, as well as curate data and write efficient statistical programme code to ensure that research outcomes can be robustly peer-reviewed and that these data pipelines can be shared again in the future, should not be overlooked; these skills are critical to ensure we build a sustainable and talented data economy.

These skills will benefit researchers directly as tools to undertake their research immediately and later in their careers; but also offer new career pathways in data science beyond academia.

As part of its development and increased provision of linked administrative datasets available for research, <u>ADR UK</u> (Administrative Data Research UK, part of ESRC) will be offering learning opportunities linked to specific administrative data assets and data collections to support DTPs to further develop capacity in the use of administrative data. Resources will include synthetic datasets, training on specific linked datasets, and access to a range of tools to support new users of the data, such as webinars with experts and explainer videos.

## DTPs will need to:

- Evidence their strength in data skills
- Detail how they will support students to develop the skills to work effectively with complex large data.
- Detail how they will ensure the use of large and complex data is a substantive focus for the student's project.
- Identify how the DTP will monitor the on-going training needs for data skills studentships to ensure that these continue to be met.

## **Advanced Quantitative Methods**

The aim of this steer is to provide training related to the use of advanced quantitative methods (AQM) in the social sciences. Training for students on an AQM studentship is expected to be at a level over and above the basic generic and subject-specific methods requirements for that discipline.

### DTPs will need to:

- Evidence their strength in AQM
- Detail how they will support students to develop the skills needed to use AQM
- Detail how they will assess whether the proposed methods for collecting and/or analysing data are of a level that constitutes advanced quantitative methods within the specified discipline.
- Identify how the DTP will monitor the on-going training needs for AQM studentships to ensure that these continue to be met.

## Interdisciplinary Research which straddles other research council remits

We welcome interdisciplinary studentships as we recognise that many of the most pressing research challenges are interdisciplinary in nature, both within the social sciences, and between the social sciences and other areas of research.

The principal aim of this steer is to provide support for students to tackle a project that is genuinely interdisciplinary in nature and straddles the social sciences and other research council remits. The proposed research should include substantive interaction between the relevant scientific areas and the studentship should provide training that is not constrained to one scientific approach.

Studentships steered in this area must be 50 per cent social science and no more than two thirds. Applications must be genuinely interdisciplinary and inclusive; they should not exclude the approaches of either Council and we would not expect any application to have a share ratio greater than 2:1.

Whilst we encourage cross council funding for these studentships, this is not mandatory, and not a requirement of the steer. We do not want funding to hinder opportunities for interdisciplinary studentships.

## DTPs will need to:

- Evidence their strengths in interdisciplinary working
- Provide details on the DTP training offering for interdisciplinary working that will
  prepare the student to work effectively across scientific boundaries.
- Identify how the DTP will monitor the on-going training needs of interdisciplinary studentships to ensure that these continue to be met.

## Research Council Remits

Each of the Research Councils publishes information on its website about its current research grants portfolio. This information can be accessed at:

- Arts & Humanities Research Council
- Biotechnology & Biological Sciences Research Council
- Economic & Social Research Council
- Engineering & Physical Sciences Research Council
- Medical Research Council
- Natural Environment Research Council
- Science and Technology Facilities Council

#### **Pockets of Excellence**

As part of the studentship allocation, we will provide additional studentships to DTP consortia which include pockets of excellence and these studentships can be allocated to any partner / training area.

Applicants should confirm which institutions have been included and provide evidence and justification to support why the institution should be included as a pocket of excellence.