

## 1 Advertisement

**Post Title:** Research Fellow in Innovation Studies/Science Policy

**School/department:** University of Sussex Business School, (USBS) – the Science Policy Research Unit (SPRU)

**Hours:** Full time considered up to a maximum of 1.0 FTE. Requests for flexible working options will be considered (subject to business need). The position may be suitable as a job share.

**Contract:** Fixed term for 11 months

**Reference:** 9633

**Salary:** starting at £43,414 to £51,805 per annum, pro rata if part time

**Placed on:** 06 September 2022

**Closing date:** 28 September 2022. Applications must be received by midnight of the closing date.

**Expected Interview date:** To be confirmed.

**Expected start date:** To be confirmed.

- The Science Policy Research Unit (SPRU) within the University of Sussex Business School, working with the Schmidt Science Fellows, is seeking applicants for a research fellow position, initially for one year, but with potential for extension into further years. We are looking for applicants who have the potential and ambition to become leading international experts on interdisciplinary research (IDR) and its impacts.
- The first part of this project involves developing a systematic review of the previous literature on IDR and its impacts in both the international academic and wider policy literatures. The candidate will need to search for, and structure a corpus of work, and then systematically review the evidence in the material.
- This work builds on previous studies undertaken at SPRU and seeks to update and expand the studies that have been analyzed and deepen the analysis to take into account the reasons why findings may agree or differ across different settings.
- A key focus will be on the underlying methods and research designs, and any potential biases that may be found. The aim is to be able to integrate a rather fragmented literature and show how different measures, settings and research designs influence outcomes, and when and where they agree and disagree. A solid understanding of modern social science research design is therefore an essential skill.
- The project aims to contextualize the findings and make sense of the differences found in the literature in light of national, disciplinary, historical and organizational settings, to provide an informed assessment of the quality of findings, and their overall robustness. A solid background in the economics, sociology, history, or philosophy of science, especially bibliometric analysis and econometrics, would be very useful.
- The successful applicant will be provided with extensive training and support during this project to build any skills that they feel are lacking or could be improved.
- For some studies it may be desirable to replicate the findings, so advanced quantitative skills would be useful.
- The project requires the ability to organize a significant amount of material and analyze it in a structured way.

- The project team is committed to open science, making research reproducible, and sharing data, methods and tools. Candidates should have a commitment to improving the quality of research.
- The final outputs of the project will be a series of academic papers and a final report for the funder. An ability to write at a high academic standard is therefore essential. The funders require regular updates on progress and the candidate should be prepared to present findings and update them at several points throughout the project.
- The project is inherently interdisciplinary and we welcome candidates from a wide variety of backgrounds. The team will work with the candidate to develop their future research career and will provide mentoring and guidance on developing a future independent research career.

Please contact Prof. Paul Nightingale ([p.nightingale@sussex.ac.uk](mailto:p.nightingale@sussex.ac.uk)) for informal enquiries.

For full details and how to apply see our [vacancies page](#)

*The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds.*

## **2. The School / Division**

### The University of Sussex Business School

The University of Sussex Business School was formed in 2009 and comprises the Department of Accounting and Finance, the Department of Strategy and Marketing, the Department of Management, the Department of Economics and the Science Policy Research Unit (SPRU). With a new home in the Jubilee Building, a state-of-the-art academic building at the heart of the campus, the Business School is a vibrant, ambitious and dynamic School with a strong research focus.

### SPRU (Science Policy Research Unit)

Established in 1966, the SPRU is the longest-running science-policy department in the world. With over 70 faculty, SPRU is one of the largest and most diverse science-policy departments in the world. As such, the department attracts many externally funded research projects and Sussex is in fact the third largest business school in the UK by research income <https://charteredabs.org/wp-content/uploads/2019/04/75287-CABS-Research-Income-Report-2019-1.pdf>.

This means there are opportunities for career development as a researcher in this environment. With a community of over 140 MSc and doctoral students from all over the world, SPRU is also well known for its high quality, research-led teaching programmes.

Please find further information regarding the school/division at <https://www.sussex.ac.uk/business-school/>  
<https://www.sussex.ac.uk/business-school/people-and-departments/spru>

## **3. Job Description**

Job Description for the post of: Research Fellow

**Department: University of Sussex Business School**

**Section/Unit/School: Science Policy Research Unit**

**Location: Jubilee Building, University of Sussex Falmer**

**Grade: 8**

**Responsible to:** Prof. Paul Nightingale. Associate Dean for Research.

**Responsible for:** NA

The candidate will be undertaking fundamental research into the value and nature of interdisciplinary research. The first stage of this project, for which this post is assigned, involves undertaking a detailed review of previous studies of the impact of interdisciplinary research. This work will draw on, and update, previous SPRU studies, expanding the corpus of work to include more recent studies and the wider 'grey literature' that has been published by National Academies and research funders. The applicant should be prepared to be established themselves as an international expert on this literature by the end of the initial phase of the project.

To undertake a systematic review of the existing literature, the candidate should be able to lead a review of current work, drawing on existing datasets (such as Web of Science) and be able to use their search functions in a systematic way. This approach will be complemented by a citation follow up search to build an initial dataset of research on IDR and its impacts. Since many papers now describe themselves as IDR there are likely to be many false positives, so experience of working through to find a core corpus would be useful, by finding synonyms, definitions, measures etc. Basic bibliometric analysis will be required, and training for both searching and bibliometric analysis can be provided. The ability to produce an initial taxonomy or typology of kinds of IDR would be useful. The ability to produce an organised workflow and dataset is essential.

The review of the previous material goes beyond a traditional literature review as we are seeking to integrate a rather fragmented literature and assess the research designs that have been used to capture any potential biases. This will involve assessing a variety of biases in the data and problems with methods. An ability to interrogate methodology is a key requirement for this position, and additional training will be provided if needed. Applicants will need to have a solid understanding of the global science system during this project and it would be helpful to have a strong background in the sociology, history, philosophy, economics of science etc., as well as an appreciation of differences across areas of science (with a focus on STEM). A nuanced appreciation of how IDR can be used rhetorically would be useful in this regard. The systematic review will need to intelligently select key documents for analysis, and assess their research designs, findings, biases and consistency with other studies. This will allow the applicant to build expertise about the robustness of findings across definitions of IDR, datasets, disciplines, national settings etc.

If possible, there may be a need to replicate previous studies to understand the causes of any anomalies and differences. Analytical and econometric skills would therefore be desirable.

The final part of the project involves writing up the findings in a concise, academically robust way. The job requires the candidate to work with other members of the team to explore the implications of the findings for science policy and for science funders. This will involve a 'gap analysis' to highlight any mismatches between what the literature shows and what funders

need to know. Working with the wider team this analysis will be used to develop key future research questions for academics, funders and policy. This may involve highlighting the need for better data, or different kinds of analysis.

The project team will be expected to deliver regular updates on progress for the funders, so the ability to write clearly (essential) and present to a critical audience (desirable).

The project aims to operate at the highest standards, so a strong commitment to open science, reproducibility, collaboration and sharing of data, tools and methods is sought.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.

#### **4. Person Specification**

##### **ESSENTIAL CRITERIA**

1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).
2. Evidence of significant independent contribution to the design and execution of research.
3. An emerging track record of publications in reputable journals and other appropriate media of similar standing.
4. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.
5. Ability to work individually on own initiative and without close supervision, and as part of a team.
6. Ability to exercise a degree of innovation and creative problem-solving.
7. Excellent organisational and administrative skills.
8. Ability to prioritise and meet deadlines.
9. Excellent IT skills.

##### **ESSENTIAL ROLE-SPECIFIC CRITERIA**

1. An understanding of Interdisciplinary Research and its potential impacts, and problems.
2. An ability to conduct systematic reviews of evidence and produce high quality summaries of key findings and underlying assumptions.
3. An ability to analyse research designs, methods and data sources, to understand their potential strengths and weaknesses, and how any weaknesses might bias findings in particular directions.

4. An ability to integrate findings across many studies to build a coherent picture of key findings and an assessment of their robustness.
5. An ability to identify gaps in the literature and relate them to the needs of society and research funders.
6. An ability to organise a corpus of material and work to deadlines to produce academic and policy outputs.

#### **DESIRABLE CRITERIA**

7. Econometric and/or bibliometric skills and the ability to replicate existing studies.
8. Deep understanding of interdisciplinary research and the changing context of global science.
9. Experience of science policy and research funding environments.
10. Experience of supervising postgraduate research students.