1 Advertisement

Post Title: Research Fellow
School/department: School of Engineering and Informatics
Hours: Full time or part time hours considered up to a maximum of 1 FTE. Requests for flexible working options will be considered (subject to business need).
Contract: Fixed Term for 3 years
Reference: 2471
Salary: Starting at £41,526 to £44,045 per annum pro rata
Placed on: 4 November 2019
Closing date: 3rd December 2019. Applications must be received by midnight of the closing date.
Expected Interview date: December 13th or 16th 2019
Expected start date: January 1st or as soon as possible thereafter

The School of Engineering and Informatics at the University of Sussex wishes to appoint a Research Fellow to work on a 3 year European project on cultural transformations to sustainability.

The successful candidate will have experience in qualitative research, working with arts organisations and turning research insights into impact.

They will work closely with Ann Light, Professor of Design and Creative Technology as well as colleagues at universities in Helsinki, Barcelona, and Utrecht and a range of arts organisations and NGOs. They will be a member of the DIPSlab (Design for Inclusion, Participation and Sustainability) and the Creative Technology Group.

The project draws on pilot research¹ showing that collaboration, reflection and direct engagement are key to changing publics’ orientation to ecological issues. The research fellow role will help identify and evaluate the design of significant aspects of these transformations across contexts through three interrelated components, with a particular emphasis on the first of these:

- an Observatory, identifying and mapping existing, fragmented and often hidden transformational creative practices;

• a Laboratory, supporting new experimentation and direct engagement with diverse stakeholders, including members of the public, by mounting several different scales and types of arts production, and;
• an Evaluation phase, testing new and existing creative practices in a systematic and concerted way for their impact.

Applications should be accompanied by a full CV, a statement of future research plans and a 300 word creative approach to building an Observatory.

Informal enquiries may be addressed to Professor Ann Light, at ann.light@sussex.ac.uk and Professor Ian Wakeman, Deputy Head of School, at ianw@sussex.ac.uk.

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.

Creative Practices for Transformations to Sustainability

How do we urgently and radically change cultures towards sustainability? And how do we know our practices are having an impact? Come and work on a three-year EU project, running from January 2020 to December 2022, that explores creative practices to make and evaluate transformational cultural change. It will be a collaboration between four universities (Aalto, Sussex, RMIT Europe [Barcelona] and Utrecht) and 10 other partners (including Furtherfield and Superflux in the UK).

Creative practices are underused, even overlooked, in the urgent task of changing cultures towards sustainability. The project promotes action for social and ecological sustainability by identifying those aspects of practice that contribute most effectively to socio-cultural transformation. It will produce an open-access framework to support practitioners and policy-makers in guiding positive change.

The project draws on pilot research\(^2\) that shows that collaboration, reflection and direct engagement are key to changing publics’ orientation to ecological issues. It identifies and evaluates the design of significant aspects (and the impact of different contexts) through three interrelated components:

• an Observatory, identifying and mapping existing, fragmented and often hidden transformational creative practices;
• a Laboratory, supporting new experimentation and direct engagement with diverse stakeholders, including members of the public, by mounting several different scales and types of arts production, and;

• an Evaluation phase, testing new and existing creative practices in a systematic and concerted way for their impact.

The resulting framework will demonstrate some paths to achieving sustainability, social cohesion and peaceful co-existence at a time of rapid change, offering a strategic research agenda for key stakeholders, a set of innovations addressing the cultures and conditions for delivering greater sustainability, and policy recommendations to focus and optimize work in mobilizing the arts for transformational futures.

2. The School of Engineering and Informatics

The School of Engineering and Informatics covers the disciplines of computer, electrical and electronic engineering, mechanical, and automotive engineering, product design, digital media, computer science and informatics.

Distinctive characteristics of the School are: creativity, interdisciplinarity, strong links with industry, and an international outlook in both research and teaching. £10m (£4.9m from HEFCE) has been invested in a new Future Technologies Laboratory as a result of a 60% surge in applications for the School's degrees.

The School offers a range of undergraduate and postgraduate degrees in its areas of expertise, often in collaboration with other schools at Sussex, to create a distinctive focus which addresses the needs of industry, commerce and society. Examples include joint degrees with the MSc in Artificial Intelligence and Adaptive Systems (AIAS) which includes modules from the Schools of Engineering and Informatics and Psychology; and the MScs in Engineering Business Management, and Management of Information Technology, which were developed in collaboration with the School of Business, Management and Economics.

This interdisciplinary approach also applies to our research, with current and recent externally funded projects with researchers in a wide range of other subject areas including: geomorphology, media practice, medical imaging, neuroscience, anthropology, English literature, epidemiology, geography, international development, mathematics, psychiatry, psychology and sociology.

The School has strong links with industry, and has an established Strategic Advisory Board. Innovative research across the School has led to a number of patents which are being commercialised including: novel electric potential sensors (EPS) licensed to Plessey Semiconductors and marketed as the EPIC sensor chip; and University spin-out companies, including InCrowd Sports, which is deploying delay-tolerant networking to provide smartphone connectivity in large crowds, and TexRAD, which has developed software for the analysis of medical images and has recently demonstrated the ability to detect brain texture anomalies in Asperger’s Syndrome patients. These developments are supported by the University’s Enterprise fund. The EPS sensor technology was awarded the IET Innovation award for ‘Measurement in Action’, and shortlisted for two other IET categories and for a THES award.

The School is, for administrative purposes, comprised of two departments: the Department of Informatics and the Department of Engineering and Design. Staff teach across the School, and undertake research on cross-School, as well as cross-University projects.

In addition, there is a School-wide research group in Creative Technology. The Group brings together a number of academics working in the areas of human-centred technology,
product design, experience design, tangible and physical computing, games, digital media, digital cultural heritage, child-computer interaction, novel interfaces, animal-computer interaction, broadcast technologies and social innovation.

2.1 Department of Engineering and Design

The Department of Engineering and Design has a strong reputation for excellence in research and teaching. Its research outputs were rated as 88%, and impact as 90% 4*/3* (world-leading/internationally excellent) in the REF 2014.

The Department’s students won the automotive category of the Telegraph UK STEM Awards 2014 sponsored by McLaren Group (link to video).

Research activity is focused on mechanical engineering (turbomachinery, dynamics and control, and tribology); and electronic engineering (sensor technology, image and signal processing, and mobile digital communications). There are strong collaborations with industry, including Jaguar Land Rover, General Electric, Plessey Semiconductors and Meggitt Sensing Systems.

The Department’s research is organised into six groups:

- Dynamics, Control and Vehicle Research Group (www.sussex.ac.uk/dcv)
- Industrial Informatics and Signal Processing Research Group (http://www.sussex.ac.uk/iisp/)
- Sensor Technology Research Centre (www.sussex.ac.uk/strc/)
- Thermo-Fluid Mechanics Research Centre (http://www.sussex.ac.uk/tfmrc/)
- Centre for Advanced Communications, Mobile Technology and IoT
- Space Research Group

The Department currently has 665 undergraduate students, 63 taught postgraduate students, and 39 postgraduate research students.

The Department’s undergraduate courses, all of which are accredited and have an industrial placement year option, include:

- MEng (Hons) / BEng (Hons) Automotive Engineering
- MEng (Hons) / BEng (Hons) Electrical and Electronic Engineering
- MEng (Hons) / BEng (Hons) Mechanical Engineering
- BSc (Hons) Product Design.

Both Electrical and Mechanical Engineering can be taken with a Robotics minor.

The Department’s masters level courses, the majority of which are also accredited, are in the process of being reviewed as part of a cross-School process. Courses currently include:

- MSc Advanced Mechanical Engineering
- MSc 5G Mobile Communications and Intelligent Embedded Systems
- MSc Digital Signal and Image Processing
- MSc Robotics and Autonomous Systems
- MSc Engineering Business Management

Detailed information about the Department can be found at www.sussex.ac.uk/engineering

2.2 Department of Informatics
The Department of Informatics is highly rated for its teaching and research. Its researchers work in an environment that was deemed to be wholly 4*/3* (world-leading/ internationally excellent) in the REF 2014.

The Department maintains a strong emphasis on interdisciplinary teaching and research, and has substantive links with almost all other Schools of study at Sussex. Its research spans the theoretical and applied.

The Department’s research is organised into three groups:

- Data Science (www.sussex.ac.uk/calps/)
- Evolutionary and Adaptive Systems (www.sussex.ac.uk/easy/)
- Foundations of Software Systems (www.sussex.ac.uk/foss/),

and also plays leading roles in cross-disciplinary research centres:

- Sackler Centre for Consciousness Science (www.sussex.ac.uk/sackler/)
- Centre for Computational Neuroscience and Robotics (CCNR) (www.sussex.ac.uk/ccnr/)
- Centre for Cognitive Science (COGS) (www.sussex.ac.uk/cogs/)
- Sussex Humanities Lab (www.sussex.ac.uk/shl/)
- Sussex Neuroscience (www.sussex.ac.uk/sussexneuroscience/).

The Department has long-standing collaborations with a range of external organisations including Animazoo, the Clinical Practice Research Datalink, and American Express, which has sponsored over 120 MSc students in Informatics over the past 10 years.

The Department currently has 596 undergraduates, 71 taught postgraduates, and 62 doctoral students. Undergraduate courses that are accredited by the relevant professional institutions where appropriate, and have an industrial placement year option, include:

- MComp (Hons) / BSc (Hons) Computer Science
- BSc (Hons) Computer Science and Artificial Intelligence
- BSc (Hons) Computing for Business and Management
- BSc (Hons) Computing for Digital Media
- BSc (Hons) Games and Multimedia Environments

The Department's masters level courses currently include:

- MSc Advanced Computer Science
- MSc Computing with Digital Media
- MSc Artificial Intelligence and Adaptive Systems
- MSc Information Technology with Business and Management
- MSc Management of Information Technology.

Detailed information about the Department can be found at www.sussex.ac.uk/informatics
3. **Job Description for Research Fellow**

**CORE JOB DESCRIPTION**

**Job Title:** Research Fellow in Creative Transformations  
**Grade:** Research Fellow, Grade 8  
**School:** EngInf  
**Location:** Chichester or Richmond  
**Responsible to:** Ann Light, through to Head of School  
**Direct reports:** n/a  
**Key contacts:** Members of research group, members of faculty within the School and University.

**Role description:** This Research Fellow is an early career-grade research position with some existing research experience. The post-holder will be expected to contribute to the work of the research team, conduct independent sub-projects and develop their research skills further with support from more experienced members of staff.

**PRINCIPAL ACCOUNTABILITIES**

1. To engage in individual and/or collaborative research activity resulting in high-quality publications and impact; to collaborate across stakeholders in the project and develop deliverables in line with requirements from the funders; to work with the local and overall PI to deliver work packages with an emphasis on observation and evaluation of creative projects and their potential for transformation;
2. To contribute to School teaching activities, develop research funding and knowledge exchange income individually or in collaboration with others, as occasional secondary duties.

**KEY RESPONSIBILITIES**

1. **Research, Scholarship & Enterprise**

1.1 Develop research objectives and proposals for own or joint research, at acceptable levels, with assistance if required.
1.2 Conduct research projects individually and in collaboration with others.

1.3 Analyse and interpret research findings and draw conclusions on the outcomes.

1.4 Produce high-quality research outputs for publication in monographs or recognised high-quality journals, or performance/exhibition, as appropriate, and contribute to the School’s REF submission at acceptable levels of volume and academic excellence.

1.5 Contribute to the preparation of proposals and applications to external bodies, for example for policy or funding purposes.

1.6 Individually or with colleagues, explore opportunities for impact, enterprise activity, knowledge exchange income and/or consultancy, where permissible.

1.7 Build internal contacts and participate in internal networks and relevant external networks in order to form relationships and collaborations, particularly across project partners.

1.8 Continually update knowledge and understanding in field or specialism, and engage in continuous professional development.

2. Teaching & Student Support

2.1 Undertake teaching duties, if required.

2.2 Assist in the assessment of student knowledge and supervision of student projects if required.

2.3 Assist in the development of student research skills, for example as part of a postgraduate supervision team.

3. Contribution to School & University

3.1 Attend and contribute to relevant School and project meetings.

3.2 Undertake additional duties, as required by the Principal Investigator and/or Head of School.

4. Role-specific duties

4.1 Work on Work Packages within the project and prepare deliverables for the EU, practitioners and project partners.

4.2 Observe practices within the project for evaluation and form case studies based on this.

4.3 Contribute to the development of methodology for observation and evaluation.

4.4 Conduct desk research on existing practices of socially engaged artists and practitioners.
4.5 Document learning from research encounters and contribute to the project internal materials, including handbook.

4.6 Contribute to defining indicators and evaluation procedures.

4.7 Produce workable but evolving definitions of key terms and contribute to project glossary.

4.8 Plan, arrange and conduct research interviews.

4.9 Plan, arrange and conduct workshops with partners and members of the public.

4.10 Analyze data.

4.11 Propose theoretical approaches based on initial findings.

4.12 Write up draft materials and contribute to the final framework.

4.13 Draft research papers and presentations.

4.14 Assist in the planning, coordination, and production of arts events under the project umbrella (ExPs in local parlance)

4.15 Attend conferences if required.

4.16 Attend European meetings.

4.17 Prepare materials for internal and external consumption.

4.18 Help promote findings to practitioners and policy-makers and assisting in knowledge exchange.

4.19 Collaborate as needed with other project partners.

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.

**INDICATIVE PERFORMANCE CRITERIA**

- A PhD or equivalent scholarly or relevant professional activity
- Pursuing a line of independent research within a research group.
- Publishing research (either from a recently completed PhD or new original research).
- Other forms of externally recognised professional practice or creative output of a standing equivalent to regular publication of original research.
- Initiating, developing or participating in links between the University and external bodies such as business and industry, the professions, community organisations and policy-makers.
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 engagement in high-quality research activity.

3. Excellent presentation skills in English, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.

4. Ability to work individually on own initiative and without close supervision, and as part of a team.

5. Ability to exercise a degree of innovation and creative problem-solving.

6. Excellent organisational and administrative skills.

7. Ability to prioritise and meet deadlines.

8. Excellent IT skills.

9. Ethical approach to data handling.

ESSENTIAL ROLE-SPECIFIC CRITERIA

1. Previous experience overseeing a project and ability to self-manage on a day-to-day basis.

2. Evidence of initiating projects and seeing ideas to completion.

3. Willingness to travel widely and stay in other European cities as part of observation and evaluation activities.

4. High competence in working and communicating with wide range of people (from academia, to arts practitioners, to publics).

5. Evidence of flexible thinking, including interest in interdisciplinary issues and experience of crossing boundaries.

6. Experience of planning and doing research interviews and familiarity with multiple approaches to discourse analysis and other qualitative methods.

7. Experience researching or practicing in the arts or cultural sectors.

8. Demonstrable experience of high-level research skills on a complex project.


10. Demonstrable understanding of socially-engaged art practices, participatory practices and the range of motivations and uses of art with different publics.
11. Lively conceptual understanding of issues in sustainability.
12. Experience of and demonstrable evidence of an ability to theorize from data.
13. Experience of workshop design and facilitation.
14. Demonstrable ability to collaborate with colleagues, partners and members of the public in the generation and presentation of research materials.

DESIRABLE CRITERIA

1. Evidence of an imaginative approach to evaluation and creative forms of encounter.
2. Demonstrable ability to design materials for public engagement.
3. Familiarity with literature and approaches of the posthuman/more-than-human fields.
4. Emerging track record of high-quality publications in reputable journals and other appropriate media of similar standing.
5. Ability to speak another language of the project (Finnish, Spanish, Dutch, Slovenian).