THE POST

College/Service: **College of Life and Environmental Sciences http://lifesciences.exeter.ac.uk/**

Post: **Associate Research Fellow or Research Fellow**

Reference No: **P57269**

Grade: **E/F**

Reporting To: **Tom Currie**

The above full-time post is available on a 36 month fixed-term basis from 1st September 2017 to 31st August 2020 in College of Life and Environmental Sciences

Job Description

Main purpose of the job:

The post is related to an ERC starter grant awarded to Dr. Thomas Currie entitled "The cultural evolution and ecology of institutions"

Humans live in groups of huge numbers of genetically unrelated individuals. This has been made possible by the evolution of culturally-inherited social rules ("institutions") that structure groups and provide solutions to collective action problems. Despite being issues of long-standing interest a number of outstanding questions remain such as: How should institutions be integrated into models of cultural evolution and the evolution of collective action? Who benefits from hierarchical institutions? How does ecology shape the evolution of institutions? What processes explain the macroevolutionary patterns of institutional diversity? The aim of this project is to develop a cultural evolutionary framework that will fully incorporate institutions, inequality, and ecology into our understanding of the evolution of collective action, and that will develop hypotheses that can be tested against real-world data. The project will use mathematical models & computer simulations to develop a theoretical understanding of the microevolutionary processes that lead to the emergence of institutions for collective action within populations as well as the processes that shape institutional variation across populations at the macroevolutionary scale. The predictions of these models will be systematically tested against new comparative datasets of institutions using innovative statistical techniques.

The advertised post will involve constructing new datasets on cross-cultural institutional diversity and historical changes in social organization and institutions. Data will come from collating existing datasets and assembling new data from sociological, anthropological, historical, or archaeological sources at global and regional scales. The post-holder will analyse these data using statistical techniques in order to test hypotheses about the evolution of institutions.

Associate Research Fellow level

Main duties and accountabilities:

1. To undertake research as appropriate to the field of study including:

- Writing up research work for publication;
- Developing research objectives and proposals for own or joint research;
- Making presentations at national and international conferences and similar events;
- Dealing with problems which may affect the achievement of research objectives and deadlines;

- Analysing and interpreting the results of own research and generating original ideas based on outcomes;
- Using new research techniques and methods;
- Using initiative and creativity to identify areas for research, developing new research methods and extending the research portfolio;
- Using creativity to analyse and interpret research data and draw conclusions on the outcomes.

2.   To contribute to teaching and to be involved in the assessment of student knowledge including assisting in the supervision of student projects and in the development of student research skills.

3.   To work in collaboration with colleagues as appropriate to the field of study including:

- Contributing to collaborative decision making within the research group;
- Contributing to the production of collaborative research reports and publications.
- Preparing papers and presenting information on research progress and outcomes to bodies supervising research, e.g. steering groups.

4.   To communicate complex information, orally, in writing and electronically.

5.   To prepare proposals and applications to external bodies, e.g. for funding and contractual purposes

6.   To contribute to the planning of research projects.

7.   To use research resources, laboratories and workshops as appropriate and to take responsibility for conducting risk assessments, reducing hazards and for the health and safety of others.

8.   To monitor research budgets as appropriate.

9.   To engage in continuous professional development and to be responsible for continually updating knowledge and understanding in field of study or specialism and for developing skills.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility. Please visit the Human Resources website to view the Research Fellow role profiles.

Person Specification

Competency	Essential	Desirable
Attainments/Qualifications	PhD or equivalent in a related field of study.	
Skills and Understanding	Sufficient knowledge in the discipline and of research methods and techniques to work within established research programmes.	Evidence of research activity and published research.
Prior Experience		Experience of undergraduate teaching Experience of conducting risk assessments and understanding of health and safety legislation
	Excellent written and verbal communication skills. Able to communicate material of a specialist or highly technical nature. Able to manage research and administrative activities and to balance the competing pressures of research and administrative demands and deadlines. Able to liaise with colleagues and	

	students. Able to build contacts and participate in internal and external networks for the exchange of information and collaboration. Able to identify potential sources of funding. Actively participate as a member of a research team Engage in continuous professional development. Understand equal opportunity issues as they may impact on areas of research content	

<u>Research Fellow level</u>

Main duties and accountabilities:

1.   To undertake research as appropriate to the field of study including:

- Acting as principal investigator on research projects;
- Developing research objectives, projects and proposals;
- Conducting individual or collaborative research projects;
- Identifying sources of funding and contributing to the process of securing funds;
- Extending, transforming and applying knowledge acquired from scholarship to research and appropriate external activities;
- Writing or contributing to publications or disseminating research findings using media appropriate to the discipline;
- Making presentations at conferences or exhibiting work in other appropriate events;
- Assessing, interpreting and evaluating outcomes of research;
- Developing new concepts and ideas to extend intellectual understanding;
- Resolving problems of meeting research objectives and deadlines;
- Developing ideas for generating income and promoting research area;
- Developing ideas for application of research outcomes;
- Deciding on research programmes and methodologies, often in collaboration with colleagues and sometimes subject to the approval of the head of the research programme on fundamental issues.

2.   To contribute to teaching and learning programmes in the School and to supervise postgraduate research students.

3.   To act as research team leader including:

- Mentoring colleagues with less experience and advising on their professional development;
- Coaching and supporting colleagues in developing their research techniques;
- Supervising the work of others, for example in research teams or projects;
- Developing productive working relationships with other members of staff;
- Co-ordinating the work of colleagues to ensure equitable access to resources and facilities;
- Dealing with standard problems and help colleagues to resolve their concerns about progress in research.

4.   To routinely communicate complex and conceptual ideas to those with limited knowledge as well as to peers using high level skills and a range of media and to present the results of scientific research to sponsors and at conferences.

5.   To plan, co-ordinate and implement research programmes including:

- Managing the use of research resources and ensure that effective use is made of them;
- Managing research budgets;

- Helping to plan and implement commercial and consultancy activities;
- Planning and managing own consultancy assignments.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility. Please visit the Human Resources website to view the Research Fellow role profiles.

Person Specification

Competency	Essential	Desirable
Attainments/Qualifications	Be a nationally recognised authority in the subject area. PhD or equivalent in a related field of study.	
Skills and Understanding	Possess sufficient specialist knowledge in the discipline to develop research programmes and methodologies. Record of research output in nationally recognised publications.	
Prior Experience	Experience of teaching at undergraduate level. Experience of managing research projects and research teams. Successful in obtaining grant funding.	Experience of postgraduate teaching and supervision. Experience of acting as principal investigator on research projects.
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking. Able to participate in and develop external networks. Able to identify sources of funding, generate income, obtain consultancy projects, or build relationships for future activities. Able to balance the pressures of research, administrative demands and competing deadlines.	
Prior experience	Experience systematically assembling large datasets concerning some aspect of human culture or social organization (e.g. sociological, political science, economic, anthropological, historical, or archaeological sources) Experience scientifically testing hypotheses using statistical techniques. Experience with the statistical programming language R (or demonstrate suitable familiarity and competence with other similar languages). Ability to work in an	Familiarity with evolutionary theory particularly as applied to human culture and behaviour is desirable. Familiarity with a variety of statistical methods and techniques for model comparison (e.g. AIC, BIC, ABC, Bayes Factors) Familiarity and prior experience of Geographic Information Systems

	interdisciplinary framework.	

Salary
For appointment at Associate Research Fellow level, the starting salary will be from £28,452 on Grade E, depending on qualifications and experience. For appointment at Research Fellow level, the salary will be from £33,943 on Grade F. Appointment at Grade F will be subject to additional criteria and role responsibilities as defined in the job description.

Informal Enquiries
Before submitting an application you may wish to discuss the post further by contacting Thomas Currie (project PI): email T.Currie@exeter.ac.uk.

Terms & Conditions
Our Terms and Conditions of Employment can be viewed here.

Further Information
Please see our website for further information on working at the University of Exeter.