



## **Increasing Resilience to Natural Hazards in Earthquake-prone and Volcanic Regions Announcement of Opportunity**

### **NERC / ESRC: Call for IRNH Knowledge Exchange Fellowship**

**Closing date: 16:00 27 April 2017**  
**Interviews will be held on 15 June 2017**

#### **Summary**

The Natural Environment Research Council (NERC) and Economic and Social Research Council (ESRC) wish to appoint a Knowledge Exchange (KE) Fellow for the [Increasing Resilience to Natural Hazards in Earthquake-prone and Volcanic Regions](#) (IRNH) Research Programme in 2017 for a minimum period of one year. Applications are welcomed on a full or part time basis (between 60% and 100% FTE). Ideally the Fellowship will commence summer 2017. This KE Fellowship will be paid at 80% Full Economic Cost and there is a budget of £60k for salary costs and £10k for travel and subsistence.

#### **Background**

The Increasing Resilience to Natural Hazards programme aims to assist in increasing social and economic resilience in earthquake-prone and volcanic regions by reducing risks from multiple natural hazards. The programme aims, (i) to improve hazard forecasting, risk mitigation and preparedness based upon reliable knowledge of the fundamental processes involved and underpinned by basic science and, (ii) improve the uptake of and responses to scientific advice, based upon the development of risk-based approaches to natural hazards, with full assessment of the uncertainties, and a better understanding of the context-specific communication of this knowledge, in collaboration with and understanding of the communities at risk, and with other stakeholders.

Two consortia were funded for £3.0 million (100% FEC) each to focus on (i) earthquake hazard, resilience, vulnerability and related hazards, and (ii) volcanic hazard, resilience, vulnerability, and related hazards. Both consortia are aiming to improve assessment of the primary hazard and related hazards. In collaboration with stakeholders, both aim to improve multi-hazard risk analysis, risk mitigation and understanding of uncertainties, and the communication of reliable knowledge of these hazards in order to strengthen resilience. These consortium projects started in the summer of 2012 and are funded for six years.

This Fellowship is a continuation of an existing KE Fellowship which began in October 2013 and finished in November 2016 which worked mostly with the STREVA consortium in this programme.

#### **Strengthening resilience in volcanic areas (STREVA)**

Lead Investigator: Professor Jenni Barclay

University of East Anglia

School of Environmental Sciences Norwich Research Park

Norwich NR4 7TJ

Email: [j.barclay@uea.ac.uk](mailto:j.barclay@uea.ac.uk)

Earthquakes without frontiers: a partnership for increasing resilience to seismic hazard in the continents (EwF)

Lead Investigator: Professor James Jackson University of Cambridge

Department of Earth Sciences Downing Street

CB2 3EQ

Email: [jaj2@cam.ac.uk](mailto:jaj2@cam.ac.uk)

The IRNH programme makes a contribution to the Research Councils UK (RCUK) Global Uncertainties Programme. It contributes to the delivery of the NERC Resilience to Environmental Hazards strategy theme and includes partnership funding from the ESRC. It will contribute to delivering the NERC's strategic goal of enhancing UK leadership in the science of natural hazards and the ESRC's strategic goal of influencing behaviour and informing interventions.

One of the principal goals of the IRNH programme is the integration of natural and social science research across the programme to enhance the potential for impact on those affected by natural hazards, in the short and long term. To that end a *co-productive approach* to research is expected involving a framework for the sharing in parallel of knowledge and values between natural and social scientists and by consultation with policy makers, civil society and other stakeholders throughout the research programme.

### **Objectives of the Fellowships**

- To contribute to delivering NERC's strategic goal of enhancing UK leadership in the science of natural hazards and ESRC's strategic goal of influencing behaviour and informing interventions
- To facilitate the communication and application of the science delivered from the IRNH research programme in core disciplines and in wider disciplines such as health and engineering, to a variety of users and stakeholders, including policy makers, government agencies, humanitarian agencies, industry and commerce, both nationally and internationally
- To feedback to the project investigators where the science can have the greatest impact and foster inter-disciplinary working in the priority areas both nationally and internationally
- To use volcanoes and earthquakes as the lens through which to focus lessons for research on a wider range of natural hazards, linking and drawing upon the common areas of the two research consortia in this programme
- To work together to enable information sharing and communication across and between the consortia to strengthen and support the interdisciplinary nature of the research and to ensure that they are able to share best practice in areas such as data integration, methodology and policy linkage.

### **Scope of the call**

Applicants should consider the approaches required to best meet the above objectives, both within the IRNH research programme and its broader context. The fellow will be expected to work with the IRNH Strategic Advisor and consortia leads to suggest and set their own deliverables, so as to bring added value

to the fellowship and the programme. However, there are some pre-existing commitments which it would be particularly useful to address within a proposal:

### ***Sharing and developing best practice***

- *Science transfer to other hazards:* Both consortia have now significantly advanced interdisciplinary understanding of earthquake and volcanic hazards and the process of transdisciplinary research. It is timely to develop the evidence for good practice and develop strategies to share how these might apply in increasing social and economic resilience in all hazard-prone regions. This could be done for example by engaging with the UKCDS, UK Alliance for Disaster Research or multi-national organisations such as UNISDR.
- *The development of interdisciplinarity:* As part of the previous IRNH Fellowship, evidence has been gathered for the way in which learning has happened between researchers, partners and other stakeholders during the lifetime of the STREVA consortium and how this learning influences the shape of research and its impact in the wider community. A final independent evaluation and a strategy share widely would be of particular benefit.

### ***Applying and disseminating findings:***

- *Science into Policy:* Working with policymakers and regulators the fellow could work to ensure that policies and frameworks are developed from a sound evidence base, for example engaging with the IRNH programme consortia to ensure that their findings are provided in a format that is both useful and accessible to policymakers.
- *Science into Practice:* Past IRNH Fellow activities have helped to create opportunities to share learning between STREVA, their partners and other stakeholders in country (particularly in Columbia and the Caribbean). Strategies that continue this in the final year of the projects are welcomed.
- Both consortia will have activities to consolidate and integrate research findings, activities that strengthen and increase the impact of this work will be welcomed.
- *Regional lessons: global context;* Activities that help to improve the transferability of lessons learned from the regional context, particularly where they can be applied in the context of the Global Challenges Research Fund.

### ***Other possible Examples:***

- *Data development, management and sharing:* Data generated from IRNH research may be published in a form that is not easily available or understood by potential users. The Fellow could work with programme consortia to help identify potential users, jointly identify their needs and process data into products that are a resource for business or policymakers.
- *Networks:* To advance both knowledge dissemination and the sharing of best practice the Fellow could scope and form novel networks of researchers, practitioners, business users and other stakeholders to support knowledge exchange. Such networks should focus on NERC science but should also include social scientists as appropriate and may provide a mechanism for NERC and ESRC to engage with new market sectors. They need not be restricted to HEIs (higher education institutes) and may involve NERC Research and Collaborative Centres as well as other relevant organisations. They may use mechanisms such as workshops and seminars to bring researchers

together to exchange information, skills and techniques. They can also serve as a means of market research and act as a springboard for future dialogue. Workshops must include users.

## **Reporting, management and governance requirements**

The Fellow will report to the IRNH Programme Strategic Advisor, who will be responsible for oversight of their activities. They will also be required to submit annual reports via ResearchFish. They will operate as part of a UK-wide, NERC Knowledge Exchange Fellows network, to source and share information and good practice.

They will be expected to participate in monitoring, training and networking activities, including:

- regular progress monitoring with the IRNH Strategic Advisor, Professor Peter Sammonds;
- regular contact with members of both IRNH consortia;
- attending meetings of the IRNH Programme Executive Board as appropriate;
- working in co-operation with the NERC Executive;
- attending network meetings with other KE fellows who are working on other NERC and ESRC projects.

## **Who should apply?**

Applicants are welcome from the NERC and ESRC, or related communities at all stages of their careers and must have an appreciation of social science analytical techniques and approaches. It is possible that some mentoring will be provided for those relatively new to knowledge exchange as the Fellow will be included in the cohort of NERC Knowledge Exchange Fellows.

## **Eligibility criteria**

Applicants must be a resident in the UK and be employed by an eligible UK Research Organisation (Higher Education Institution, Research Council Institute or a recognised Independent Research Organisation) as stated in the [NERC Research Grants Handbook](#). This can either be an applicant's current place of work or one where it has been agreed that they can be employed for the duration of the fellowship. Employment terms and conditions of the fellowship will be analogous to those of their host institution.

## **Funding**

Up to £60K is available for this call and the IRNH programme aims to support one fellowship within that budget.

The fellowship will be paid pro-rata at 80% FEC in the same way as NERC Research Fellowships. Payments will be made quarterly to the host institution via the NERC profile payments system. Resources to support the Fellows' activities are eligible where these are demonstrably essential to knowledge

exchange and co-ordination with the research consortia. These could include but are not limited to:

- travel and subsistence;
- establishing clubs, networks or similar;
- events such as workshops, seminars, open days or user training.

### **Accompanying documents that should be read in conjunction with this announcement:**

Further detail can be found at:

<http://www.nerc.ac.uk/research/funded/programmes/resilience/>

<http://streva.ac.uk/home>

<http://ewf.nerc.ac.uk/>

### **Application process**

Applications should be submitted through the Joint electronic Submission (Je-S) system: <https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx>

Guidance notes on submitting Knowledge Exchange Fellowship applications via Je-s are available at:

<http://www.nerc.ac.uk/funding/available/schemes/kefellows/kefellowscall/kefellow-jes-guidance/>

### **Interview and assessment process**

An acknowledgement of receipt will be sent to the applicant within a week. Applications will be processed within NERC and prepared for a selection panel. Short-listed applicants will be invited for interview.

Applicants will be assessed based on evidence of their experience and competencies, as described in this Announcement of Opportunity, and on their performance at interview.

### **Assessment criteria**

Proposals will be assessed on their potential impact **and** the suitability of the applicant to be appointed as a Fellow delivering the requirements of the IRNH Programme. In their proposals, applicants should demonstrate that they have viable plans for improving the uptake of scientific knowledge in the areas covered by the IRNH consortia, and should discuss the means whereby they will increase communication between the consortia and their relevant stakeholders. It is essential to give detailed project accounts in the application so that the panel can clearly visualize how the time will be used. As far as possible, applicants should provide milestones and deliverables in their project outline. Following discussion with the lead investigators of the IRNH consortia, applicants should provide the names of relevant users that are known at the time as well as future possibilities. It is very important that the panel can determine that the Fellows will work effectively with both IRNH consortia and have an impact on end-users. The panel will expect to see evidence of the extent of interactions the applicant has had

with users to date. Applications should include measures of success. If not all details are known in advance it is important to indicate where further groundwork may be required. Applicants should avoid using generic terms when the specifics are known.

## **Key dates**

Closing Date for applications: **16:00 27 April 2017**. Applicants are advised that interviews will be held on 15 June 2017. They should therefore hold this date in case an interview is required.

## **Contacts:**

For further information on the KE Fellowship scheme or the application process: Lynne Porter, Senior Programme Manager (Innovation), NERC. Email: [lyn@nerc.ac.uk](mailto:lyn@nerc.ac.uk); Tel: +44 (0)1793 411791

and

Hannah Perkins, Programme Manager (Research), NERC: Email: [hanrki@nerc.ac.uk](mailto:hanrki@nerc.ac.uk) ; Tel: +44 (0) 1793 411693

For further information on Increasing Resilience to Natural Hazards in Earthquake-prone and Volcanic Regions (IRNH) : Professor Peter Sammonds, NERC Strategic Advisor IRNH. Email: [p.sammonds@ucl.ac.uk](mailto:p.sammonds@ucl.ac.uk); Tel: +44 (0)207 6792422 / 07795056201

