

OPPORTUNITY FOR PLACEMENT FELLOWSHIP IN THE WELSH GOVERNMENT

As part of its Placement Fellowship Scheme the ESRC welcomes applications from academics interested in working in a research capacity in the Welsh Government. The Scheme encourages social science researchers to spend time within a partner organisation to undertake policy relevant research and to develop the research skills of partner employees. The Fellowship will be jointly funded by the ESRC and the Welsh Government while the Fellow remains employed by his/her institution.

Project Title

Maximising the Use of Existing Administrative Data Sets for Wales through Computer Modelling and Simulation (Computer Modelling and Simulation Fellowship).

The project is one of a programme of four fellowships aimed at maximising the use of existing survey and administrative data sources for Wales.

Length of Fellowship

It is envisaged that the fellowship would be for a period of 12 months on a full time basis. Applications for candidates interesting in working part time or as part of a job share would be considered.

Proposed start date

To be agreed with a successful applicant.

Location of Fellowship

The Welsh Government, Cathays Park, Cardiff but with some travel within Wales/the UK. In particular, the fellow will be required to spent time at the various locations of our partner organisation, the Health Modelling Centre Cymru (HMC2), including the Cardiff University School of Mathematics.

Project objective

To develop and complete a set of demonstration projects, analysing administrative data sets, in order to support WG policymaking and deliver some 'quick wins' to demonstrate the usefulness of computer modelling and simulation in order to help develop a business case for future investment. The fellowship will use methodologies most commonly associated with operational research to analyse administrative data relating to health and other social services in order to identify where changes could be made that would improve outcomes.

An additional objective that cuts across the suite of four fellowships is to identify any added value that can be gained for key survey and administrative data sources for Wales, whether through computational modelling, improving access or any related field.

Project tasks

The Fellow would work closely throughout with WAG Policy and Knowledge and Analytical Services (KAS) officials and stakeholders as well as the three other programme Fellows, HMC2, the NCRM and other relevant expert bodies and networks. The key tasks and deliverables are as follows:

Key Tasks

- Review, develop and document best practice in methodology for computer modelling and simulation. Since the validation of these models is essential to ensuring their applicability, the identification and utilisation of suitable validation techniques will be an essential component of the studies.
- Develop detailed proposals for two or more demonstration projects, analysing the combined administrative and clinical data sets available to HMC2. This would include advising on the feasibility of proposed projects and may include negotiating the provision of further, WG-held data sets to HMC2. If necessary, this would include managing any data acquisition and cleaning required to produce usable data sets.
- Design and complete computational modelling or simulation for the demonstration projects and write short, 'key findings' reports for dissemination within WG and wider. Methodology lessons learned should be fully documented and disseminated. For each project, a model / simulation should be provided to WG including instructions on how to produce and amend 'what if' scenarios.

Key Deliverables

- A series of best practice guidance documents;
- Acquisition / creation and validation of any new datasets;
- A model / simulation for each demonstration project;
- A key findings report for each demonstration project.

In addition, the Fellow will input into a report outlining options for improving secure access to small area data for Wales (see Data Access Fellowship).

Skills required

Specialist skills

- Experience in manipulating large scale data sets (administrative or social survey but ideally both);
- Experience in undertaking simulation and/or modelling studies on large scale administrative data sets using techniques usually associated with operational research;

Since the majority of the proposed demonstration projects are health-related, the fellowship may suit a candidate with an interest in health services research, although since one objective is to broaden the use of operational research methods beyond health, this is certainly not a necessary requirement

Other skills

- The ability to communicate findings to a lay (policymaking) audience both in writing and verbally.
- Ideally, knowledge of the NHS in Wales and/or the Welsh public services context.
- Ideally, some familiarity with Wales and/or the Welsh Political context.

Background

There has been a drive by government to make better, and more widespread, use of the rich and plentiful data sources that it holds. The push to maximise the use of existing data sources is particularly important at this time when budgets for primary data collections are severely constrained.

Health Modelling Centre Cymru (HMC2), under the Directorship of Prof. Paul Harper, School of Mathematics, Cardiff University, is an initiative of the Wales Institute of Mathematical and Computational Sciences (WIMCS), a joint University collaboration between Aberystwyth, Bangor, Cardiff, Glamorgan and Swansea. The Cardiff Operational Research Group is a partner group within the LANCS initiative (www.lancs-initiative.ac.uk), a collaboration of four UK Universities with a total investment of £13m (£5.4m from an EPSRC Science and Innovation award) to support the development of research capacity in Operational Research.

HMC2 builds on the current expertise in this field across Wales, fostering collaboration across different research areas of the mathematical and computational sciences, to create a more vibrant and effective interface between the mathematical research community, the medical research community, NHS Wales, the Welsh Government and the Health industry. Activities within HMC2 focus on producing high quality research, transitioning that research into effective outcomes, building capacity, and promoting the interaction between mathematical and computational modelling and better service delivery and informed policy making.

As a basis for seeking additional future funding, this fellowship would aim to demonstrate the value of computer modelling and simulation, including processes to combine data sets in order to feed into model building, by completing at least two demonstration projects closely linked to WG priorities. The modelling techniques likely to be used include Discrete Event Simulation (DES) and System Dynamics (SD), which between them permit both operational and strategic modelling approaches providing risk-related information when guiding effective policy decision making. The key added value represented by these techniques is better decision making based on a more robust assessment of risk. These techniques offer a 'whole systems' approach that takes into account the kinds of uncertainty that inevitably exist in the real policy implementation environment and allows the impacts of decisionmaking both up and down stream to be simulated.

The specific demonstration projects will be specified in detail in consultation with both HMC2 and WG as part of the initial stages of the project. It is envisaged that at least two demonstration projects can be completed within the fellowship period but, should time allow, additional projects can be undertaken. The number of projects that can be completed will depend on the availability of data and the scale of the modelling required. Example demonstration projects for which strong policy requirements have already been identified include:

- A study of the scheduling of cardiac surgery;
- Modelling future social care systems; and
- Pathways for scheduled and unscheduled care.

For each demonstration project, the fellow would provide a simulation / model, giving WG the ability to run 'what if' scenarios as a basis for decisionmaking. The fellow would write short, 'key findings' reports for each project for dissemination within WG and wider. The projects should additionally demonstrate and therefore encourage a more

joined up approach to WG decision-making when modelling systems that cross policy department boundaries and have multiple interacting stakeholders.

In addition, the fellow would feed into the work of the Data Access Fellow to identify any added value that can be gained for administrative data sources for Wales, whether through computational modelling, improving access or any related field.

Where the main focus of HMC2 work to date has been in the area of health, a key objective of the fellowship will be to identify lessons that can be applied more broadly to other public services in Wales through the use of modelling and simulation techniques. External stakeholders (including the HE sector in Wales) will be provided with the ability to have input into the project via a consultative group.

APPLICATIONS TO THIS CALL MUST BE SUBMITTED THROUGH THE JOINT ELECTRONIC SUBMISSION SYSTEM. THE CLOSING DATE IS 29 June 2011

For further detail on the content of the call email: Sarah.Lowe@Wales.GSI.gov.uk

Any enquiries please email: lesley.lilley@esrc.ac.uk

CALL GUIDANCE NOTES ARE BELOW. PLEASE ENSURE THAT YOU READ THESE CAREFULLY BEFORE SUBMITTING YOUR APPLICATION.

PUBLIC SECTOR FELLOWSHIPS 2011 – WAG 4

Maximising the Use of Existing Administrative Data Sets for Wales through Computer Modelling and Simulation

Notes for Guidance for Applicants

This is a guidance document created to assist applicants to this Scheme in the completion of their application. It is specific to this scheme and should be used in conjunction with the following information:

• ESRC Research Funding Guide-

http://www.esrc.ac.uk/funding-and-guidance/guidance/applicants/research-funding-guide.aspx

- ESRC Frequently Asked Questions, 'How do I put together a good research application?'- http://www.esrc.ac.uk/funding-and-guidance/guidance/applicants/how-to.aspx
- **Je-S Help text** is available in every page of your Je-S form, click on the word 'HELP' in the top right hand corner of each page or scroll through the following pages- http://192.171.198.243/JesHandBook/jesHelp.aspx?m=s&s=109
- **Je-S Help desk** (for all Je-S system enquiries) <u>JeSHelp@rcuk.ac.uk</u> or 01793

If you experience difficulties using Je-S or have questions regarding its use, helpdesk staff can be contacted Monday to Friday 9am - 5pm UK time (excluding Bank holidays and other holidays)

Out of hours: please leave a Voice Mail message

When reporting problems by e-mail or telephone, please supply the following information: Your name, organisation and userid, the date and time, what part of the form or system you were working on, the nature of the problem

• Scheme Specific Guidance

For further information contact the case office for the Scheme: <u>Lesley.lilley@esrc.ac.uk</u> 01793 413033

Important: Where information and guidance issued in this document differs from the general guidance offered in these sources; **this document should be adhered to.**

Joint Electronic Submissions (Je-S)

All applications under this scheme must be made through the Research Council's Joint Electronic Submissions (Je-S) process. You must have a Je-S account to gain access to the system. If you are unsure about this you should contact your Research Office for further guidance. Further information can be found on the ESRC website at

 $\underline{\text{http://www.esrc.ac.uk/funding-and-guidance/guidance/applicants/Je-S-electronic-applications.aspx}}$

Before creating your application

- Research applications may <u>only</u> be made on Research Councils Joint Electronic Submission (Je-S) Forms.
- Please note that the deadline for Research Organisation submission of proposals is 4.00pm on
- < 29 June 2011 >. It is recommended that you allow sufficient time for completion of the Research Organisation submission process checks/authorisation.
- Your application will actually be sent to Je-S/ESRC from the submitter pool at your Research Organisation. In other words, there is a further layer of administration between your submission of the application and the application being submitted to the ESRC, via Je-S. This Research Organisation's submission route usually includes both an approver (ie Head of Department) and submitter pool (ie central finance office) and the ESRC cannot accept responsibility for any delay which may occur as a consequence. We strongly advise applicants to secure confirmation from their relevant administrator that the application has been successfully submitted to the Je-S team. (see also 'section 4. Tracking Proposal').

Je-S Registration

- If you want to submit proposals electronically, first check that the organisation through which you intend to submit the proposal has completed the Je-S registration process
- Only Je-S account holders may be named as principal applicants. If you are in any
 doubt as to your registration status, you are strongly advised to seek timely
 confirmation from your Research Organisation's administration or Je-S
 Helpdesk. Please note that only the submitting organisation needs to have
 obtained Je-S registration.
- All main UK Research Organisations are already registered. If you are in any doubt, you are strongly advised to seek timely confirmation of your Research Organisation's registration status from your Research Organisation's administration.

Organisations needing to register for Je-S should contact the Je-S Helpdesk (see below). Users wishing to access the Je-S system for the first time are asked to check with their central administration on the status of the organisation's Je-S registration before pursuing the option of creating an account through the Je-S system. Organisations must comply with ESRC funding eligibility regulations before Je-S registration can proceed. People without a Je-S account should apply for registration through Je-S helpdesk JeSHelp@rcuk.ac.uk. We strongly advise potential applicants to apply to register, if necessary, as early as possible.

Please be assured that the information you provide regarding your date of birth, gender, ethnic origin and any disability will not be divulged to those involved in the assessment

of any proposal you might submit to the ESRC. These data are for collection and analysis at an aggregate rather than individual level to allow us to examine our data on proposals and grants by a number of key variables and to review whether we might be disadvantaging certain groups. As a public body we are required to collect and publish such statistical data. For these reasons we would ask you to complete the relevant Je-S 'MyDetails' data fields to help us in meeting these requirements. There are two types of Je-S accounts that can be held;

Je-S registered account – (which Je-S Helpdesk has verified the account holder details via the submitting organisation) The account holder can be selected as any person associated against a proposal (ie PI/COI, staff member, project partner etc). The account holder can prepare/submit proposals

Je-S unregistered account – The account holder can be selected as staff member project partner or referee against a proposal. The account holder can prepare proposals (and submit if a fellowship proposal).

1. Creating your proposal

Log in to Je-S at https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx

First Screen:

Add New Document

Second Screen:

Select 'Call search' (highlighted at top of screen), type in the call title, eg **PUBLIC SECTOR FELLOWSHIPS 2011 – WAG 4** and select from the list created.

Maximising the Use of Existing Administrative Data Sets for Wales through Computer Modelling and Simulation

The three selection fields will be automatically populated.

- Create Document

2. Completing your proposal

From the **Document Menu** page the following sections should be completed. Information supplied in any other sections will be disregarded.

The details given are not inclusive 'step by step' guidance and it is recommended that you refer to the Je-S helptext for additional information.

Please note you may return to 'edit' saved documents at any time.

2.1 Edit Project Details

- Select organisation and department from drop down lists
- 'Your Reference' should be supplied by your Research Organisation (consult your Research Office). If your administration cannot provide a reference, a suitable reference of your own choice will be acceptable.
- Enter Project Title (maximum limit of 150 characters)
- For Proposal Call, select Public Sector Fellowships 2011 WAG 4

Please note that the option will only be available once the call is live.

Maximising the Use of Existing Administrative Data Sets for Wales through Computer Modelling and Simulation

2.2 Edit Disciplines

Enter the main discipline under which you consider this proposal to fall and select any applicable secondary disciplines from the list provided in the form.

2.3 Edit Applicant

Enter the name of the Applicant, who must be from the organisation that will administer the grant. The Applicant will take leadership of the project and this individual will be the person with whom ESRC correspondence can be undertaken. Applicants are responsible for ensuring that successful Fellowships are undertaken and completed in the manner specified. Please note that it is mandatory that you answer 'positively' to the question 'Post will outlast project?'. To clarify, there is an expectation that the Applicant's post will be in place for the duration of the project.

2.4 Edit Objectives

List the objectives of your research (4,000 character limit) You should take account of the call for this Fellowship.

2.5 Edit Summary

Provide a plain English summary of how you propose to conduct the Fellowship in a language that could be publicised to a general, non-academic audience (4,000 character limit). You should take account of the call for this Fellowship and demonstrate how your knowledge and skills will be used to take the project forward.

2.6 Edit Academic Beneficiaries

Please summarise how your proposed Fellowship will contribute to knowledge, both within the UK and globally. This should include how the Fellowship will benefit other researchers in the

field and identify whether there are any academic beneficiaries in other disciplines and, if so, how they will benefit and what will be done to ensure that they benefit.

Please list any academic beneficiaries from the Fellowship and give details of how they will benefit and how the results of the proposed research will be disseminated. Also describe the relevance of the Fellowship to beneficiaries. (4000 character limit)

Please note that this section may be published to demonstrate the impact of Research Council funded research. Please ensure confidential information is not included in this section

For further detailed guidance please access the helptext page linked to this Je-S section.

2.7 Impact Summary

Please address the following three questions;

Who will benefit from this Fellowship? List any beneficiaries from the Fellowship, for example those who are likely to be interested in or to benefit from the proposed Fellowship – both directly or indirectly. Beneficiaries **must consist of a wider group** than that of the investigators' immediate professional circle carrying out similar research.

How will they benefit from this Fellowship? Describe the relevance of the Fellowship to these beneficiaries, identifying the potential for impacts arising from the proposed work.

What will be done to ensure that they have the opportunity to benefit from this Fellowship? Please detail how the proposed Fellowship project will be managed to engage users and beneficiaries and increase the likelihood of impacts.

(4000 character limit)

Please note that this section may be published to demonstrate the potential impact of Research Council funded research. Please ensure confidential information is not included in this section.

2.8 Edit Staff Duties

Summarise any other commitments that the Applicant has during the Fellowship. (2,000 character limit).

2.9 Edit Resources

All resources requested must be fully justified in the Justification attachment.

T&S- add each item of Travel and Subsistence required for your project. You should indicate the calculations upon which this figure is based in the 'Destination and Purpose' box. The maximum allowable for T&S is £6,000 over the course of the Fellowship.

Other Directly Allocated Costs- include Applicant's salary; superannuation and NI costs.

For more details please see the appropriate Je-S help text: http://192.171.198.243/JesHandBook/jesHelp.aspx?m=s&s=109

2.10 Edit Estates and Indirect Costs

ESRC pays **50%** of Indirect Costs for applications to this Scheme and this is the figure that should be submitted.

Estate costs can be claimed if the Fellowship is for between three and six months in duration but not for Fellowships that last between seven and twelve months.

These costs do not require justification in your Case for Support.

2.11 Edit Data Collection

Please refer to the full statement of ESRC's datasets policy and datasets deposition requirements in the Research Funding Guide:

http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/opportunities/research%5Ffunding/

2.12 Edit Project Partners

You should capture the relevant Public Sector partner by entering the name in the 'select organisation' function Note: If the partner organisation is not in the searchable list, use Add New Organisation - found at the bottom of the search window after performing the search. Enter the Department/Division of that organisation if known. Note: this is not mandatory Enter contact details if known. Note: this is not mandatory

2.13 Edit Reviewers

Nominate **one** academic reviewer who should be at a Research Organisations other than the one where you are currently located.

Nominate **one** *'user' reviewers – *a 'user' is defined as a non-academic stakeholder who can Apply research knowledge to policy or practice.

2.14 Edit Classification

Please explain any international dimensions to the proposal including overseas collaborations.

2.15 Edit Attachments

'Case for Support', 'Justification', 'Pathways to Impact' and 'CV', are the standard mandatory Je-S attachments. (For Fellowship proposals there is an additional mandatory attachment of 'Head of Department Statement'.)

'List of Publications', 'Letter of Support', 'Cover Letter', 'Other' are optional.

2.15.1 Case for Support

This is the body of your application and it must not exceed two sides and should include the

following sections:

How will your knowledge and experience be applied to undertake the Fellowship?

You should give examples of any previous engagement with policymakers that is relevant to this call.

A detailed description of the proposed research methods if relevant to this project. Particular care should be taken to explain any innovation in the methodology or where you intend to develop new methods.

If the research involves data collection or acquisition you must demonstrate that you have carried out a datasets review, and explicitly state why currently available datasets are inadequate for the proposed research.

Where possible describe the potential impact of the Fellowship on policy or practice.

2.15.2 Justification of Resources

It is only necessary to justify Travel & Subsistence costs claimed, so a statement of maximum of 2-sides of A4 setting out these costs should be submitted.

The Scheme allows for Travel & Subsistence costs of up to a maximum of £6k over the duration of the Fellowship.

2.15.3 Pathways to Impact – Maximum of 2 sides of A4

The Pathways to Impact is your opportunity to describe how the potential impacts of this Fellowship will be realised. This is specific to users and beneficiaries of the Fellowship who are outside of the academic research community, for example the public sector, commercial private sector, third sector or the wider public in general.

In describing plans to maximise impact, applicants should consider what is achievable and expected for a Fellowship of this nature. If your work is oriented towards academic beneficiaries only, then you should state that a Pathways to Impact Plan is "not applicable" and briefly set out the reasoning behind this. Where this is the case, applicants should note that while ESRC recognises the value of this type of research, reviewers may comment on the applicant's assessment during consideration of the application. Impact can take many forms, manifest at different stages in the research process, and be promoted in different ways. It may be helpful to consider impact in respect of the short term (during the currency of the award), medium term (up to one year afterwards), and the long-term. A statement about ESRC's expectations of the research it funds is at www.esrcsocietytoday.ac.uk/esrcexpectations

Please detail how the proposed Fellowship project will be managed to engage users and beneficiaries and increase the likelihood of impacts. When completing the attachment, please consider and address the following if appropriate to a project of this nature; methods for communications and engagement, collaboration and exploitation in the most effective and appropriate manner. Also detail your track record in this area and the costs of these activities.

For further detailed guidance please access the relevant ESRC specific attachment Je-S helptext page

A CV for the applicant must be included. This should include contact details, qualifications (including class and subject), academic and professional posts held since graduation, a list of the most relevant and recent publications, and a record of research funded by the ESRC and other bodies. This should not exceed two A4 sides.

2.15.4 List of Publications

The bibliography for references cited in the proposal should be attached.

2.15.5 Head of Department Statement

The Applicant's Head of Department should complete a statement in support of the application. The statement should confirm that the Applicant will be released from university duties for the duration of the Fellowship.

2.16 Additional document actions

After all expected sections have been completed, you can select **Validate document** which will indicate (below the Je-S document menu) any missing mandatory or incomplete sections that need to be addressed.

Once the proposal has been successfully validated, select **Submit document** from Document Menu. This action submits the proposal to the authorising facility within your organisation (as explained in the Registration section above). Please note that the proposal must be formally submitted by your organisation before 4pm on the <29 June 2011 >.

2.17

Strategic Priorities

ESRC's strategic plan identifies seven areas of strategic challenge for economic and social research. These challenges build on existing research, help consolidate knowledge but also recognise emerging key areas for social science. You must consider if your research project falls within one or more of ESRC's Strategic Challenges

Applicants should note that no funds are 'ring fenced' for these Strategic Challenge areas and applications that fall outside of these areas will not be disadvantaged. The only criteria for funding will be the overall scientific quality of the application and its potential for high scientific and/or user impact.

User Involvement

If 'Users' have been/will be engaged with your research project, please specify the nature of their engagement. Users' are those individuals, groups or organisations who have an interest in or may benefit from the research. 'Users' may be from the public sector, commercial private sector, third sector or the wider public in general. Engaging 'Users' in your research from its conception and development through to the dissemination stage

3. Tracking proposal

Once you have selected **Submit document** the proposal will be processed through your internal organisation's approver/submitter pool.

To enable you to determine when your proposal has been formally submitted to council via Je-S (and therefore whether a call deadline was met) this can be tracked through the 'View Submission Path' and 'Document History' links in the Document Menu of your proposal, via the Management section on the right hand side of the screen.

4. Further Enquiries

Enquiries relating to ESRC research funding rules and application procedures should be addressed to: lesley.lilley@esrc.ac.uk

Tel: 01793 413033

Enquiries relating to technical aspects of the Je-S form should be addressed to: JeSHelp@rcuk.ac.uk
01793 444164

ESRC PLACEMENT FELLOWS SCHEME – FREQUENTLY ASKED QUESTIONS

Q. Is this scheme operating within Full Economic Costing?

A. No. The scheme is currently outside of the FEC rules but applications MUST be made through the JeS.

Q. Will the ESRC pay the researchers' salary costs?

A. The ESRC and the partner organisation will share the total salary and NI/Superannuation costs plus any agreed travel and accommodation.

Q. What costs are 'eligible' for claiming other than salary?

A. We are prepared to pay up to a maximum of 50 per cent of the universities' Indirect Costs but will only pay estate costs for placement of up to, and including, 6 months. Travel & Subsistence costs will also be paid subject to justification and approval.

Q. During the course of the placement will I be employed by the ESRC?

A. No. You will remain employed by your university and they will administer the award on your behalf. The ESRC will deal directly with your Finance Office.

Q. Will I have to attend an interview with the Partner organisation?

A. If they are happy with your application they will ask to meet you at interview. Someone from the ESRC will also attend the interview where possible.

Q. Who will line manage me during the placement?

A. The Partner will appoint someone to line manage you throughout the course of the placement but the ESRC will also assign someone as your 'case officer'.

Q. Will there be any special conditions whilst placed in a Partner organisation?

A. The Fellow will be expected to adhere to the ESRC's requirements of independence from political, commercial or sectional interest and will need to give an undertaking to respect a confidentiality agreement, specifying that data on policy advice and internal debate will be disclosed without prior written agreement of the host department.

Q. Will I still be able to honour my teaching commitments?

A. Yes. As long as the placement is for a minimum of 50 per cent of your time. However, this will be negotiable with the partner.

Q. At what stage in my career will I be eligible for the scheme?

A. We anticipate the successful applicant will have been involved in research for 1-5 years after completing their PhD. However, more senior researchers might be considered.

Q. How will my application be assessed?

A. Your applications will be assessed by two independent academic reviewers before being passed to the partner organisation for consideration for short-listing.

Q. Apart from the project, what else might I be required to do?

A. We hope that Fellows will offer seminars/workshops within their host partner organisation and across other organisations, where appropriate, on research methods in which they have expertise as well as sharing their project findings as they evolve.

Q. What reports am I required to produce?

A. In addition to the project report(s), we expect a report to be written at the conclusion of the project on the placement and another 12 months later reporting on the impact of the placement. (The host organisation will also be asked for their views at this time).

Q. Will Fellows have an opportunity to share their experiences?

A. Yes, during the placement period there will be at least one informal workshop to which all Fellows and those working with them will be invited.