

Job Description

Job Title:	Research Fellow - Multi-Coloured Manual
Job Ref:	SCT332B
Campus:	Hendon
Grade:	Grade 7
Salary:	£39,942 per annum inclusive of Outer London Weighting
Hours:	35.5 hours per week, actual daily hours by arrangement
Period:	12 months
Reporting To:	Head of Flood Hazard Research Centre (FHRC)
Reporting to Job Holder:	None

Role Summary

This is an exciting opportunity to join an interdisciplinary research centre and contribute to the Flood Hazard Research Centre's longstanding work estimating the losses from flooding. The Flood Hazard Research Centre (FHRC) has gained international recognition for its research and a methodology into the socio-economic assessment of flood risk and flood risk management options. A series of manuals produced by the Centre have formed the basis of economic appraisal of flood and coastal risk management in the UK.

The post-holder will be based at FHRC in the Department of Natural Sciences at Middlesex University and will contribute to the update and development of the Multi-Coloured Manual datasets and methodologies (www.mcm-online.co.uk), as well as working on associated projects related to flood loss estimation. Under the guidance of the Head of Centre and the Multi-Coloured Manual's team of researchers, the postholder will undertake a range of research, practical and administrative tasks associated with the development of flood loss estimation. This necessitates an appointment with quantitative research experience.

Job Purpose

To undertake a range of research tasks for updating the Multi-Coloured Manual including the identification and selection of relevant data, developing methodologies to improve and/or broaden the range of potential flood losses estimated. In particular, we would like to better consider and represent the uncertainties in estimating flood losses and broaden the flood loss estimation methodologies to represent flood resilience.

To undertake a range of research tasks for the FHRC, as a member of the wider FHRC team. This may include contributing to applications, management and conduct of flood loss estimation research projects and programmes, ensuring they are of the highest standard and deliver the intended results, to the benefit of the School, the University and the wider community.

The Multi-Coloured Manual

The Multi-Coloured Manual (MCM) on the benefits of flood and coastal risk management (www.mcm-online.co.uk) was produced by the FHRC in collaboration in 2013 and the data and associated Multi-Coloured Handbook updated annually. This manual provides the methodologies and data to facilitate an economic (and financial) quantification of the benefits of avoiding a range of direct and indirect impacts and is used to prioritise flood risk management investment. The MCM has three key aims. First it provides methods and data which can be used for the practical assessment of schemes and policies. Secondly it describes new research to update the data and improve techniques. Thirdly it explains the limitations and complications of Benefit-Cost Analysis, to guide decision-making on investment in river and coastal risk management schemes. For various types of residential and non-residential properties the MCM provides a range of synthetically-generated depth damage functions.

Susceptibility curves consider a range of building materials and types and individual inventory items of contents. For residential properties, unique damage functions are provided according to the type and duration of flooding, warning lead time, building type, year of construction and social class; and estimates of damage are provided for the building fabric and contents and the costs of drying and cleaning. In addition to depth-damage curves various other methodologies are provided to consider the other potential losses caused by interruptions to services (e.g. utilities, transport, communication), loss of education and disruption to services. Most recently, we introduced an approach to estimate the economic losses associated with the negative impacts on mental health caused by flooding.

Main responsibilities

Research and knowledge transfer

- Develop new methodologies to understand the breadth of the losses associated with flooding.
- To lead data collection and analysis of flood risk losses (under guidance) using mainly quantitative research methodologies.
- To undertake literature reviews and contribute to the conceptual development and analytical framework of the MCM.
- To provide written project reports and guidance for multiple audiences.
- To independently, and/or with others, conduct and disseminate the outputs of high-quality research, including publication in peer-reviewed journals and appropriate conferences.
- To liaise, report and discuss the inputs, methods and results with external stakeholders.
- To develop and maintain a network of research contacts, in the University and the wider specialist community.
- To continually update own knowledge in their field of specialism.
- To contribute to or lead (under guidance) applications for research and knowledge transfer funding.
- Ensure any personal information is kept and distributed in line with the General Data Protection Regulations (GDPR), Middlesex University (MU) Computer Use Policy, MU Academic Regulations and other local regulations.
- The postholder will actively follow MU policies including Equality & Diversity Policies.

Project management and administration

- Manage research activity and undertake general administrative tasks to ensure the smooth running of the MCM suite, as agreed.
- Advise and coach colleagues as appropriate.
- Undertake other activities, as required and defined by the Head of Centre as appropriate to the post and grade.

Learning and teaching

- Contribute to a small, agreed level of teaching, including assisting in the supervision of projects.
- To assist with the Centre's training for continuing professional development (CPD), where appropriate.

Hours: 35.5 hours per week, actual daily hours by arrangement

Leave: 35 days per annum plus eight Bank Holidays and seven University days taken at Christmas (pro rata for part-time staff) which may need to be taken as time off in lieu.

Flexibility: Please note that given the need for flexibility in order to meet the changing requirements of the University, the duties and location of this post and the role of the post-holder may be changed after consultation. The balance of duties may vary over time and will be reviewed as part of the appraisal process.

PERSON SPECIFICATION

Post Title: **Research Fellow - Multi-Coloured Manual**

Essential requirements:

- PhD (or close to completion) or equivalent research experience in a relevant discipline such as geography, environmental sciences, economics, statistics, computer/data science.
- Research experience in any one (or more) of the following aligned field(s): uncertainty analysis, risk, loss estimation, vulnerability analysis, flood risk management
- Evidence of relevant research outputs of international standard
- Demonstrate understanding of research methods and research design and evidence of undertaking a range of quantitative techniques (e.g. probability analysis, economic assessment, statistical modelling, spatial analysis) using appropriate software (e.g. SPSS, R, GIS etc.)
- Record of success in undertaking research activity and ability to manage workload effectively
- Proven ability to communicate effectively (verbal and written) within a team and experience of communicating with external stakeholders (preferably with communities)
- Ability to work independently, on own initiative, and as part of a team
- Demonstrable commitment to fairness and the principles of equality and inclusion.

Desirable Criteria:

- Demonstrate understanding of the policy and practice of flood risk management in the UK context.

- Experience of using data management tools including databases (e.g. MS Access, [R](#), [Structured Query Language](#)) and/or experience of using computer languages.
- Ability to contribute to learning and teaching and to engage students.

No Parking at Hendon campus: There are no parking facilities for new staff joining our Hendon campus, except for Blue Badge holders. If you are applying for a post at our Hendon Campus please ensure you can commute without using a car.

Information on public transport to Hendon can be found here:

<https://www.mdx.ac.uk/get-in-touch/directions-london>

We offer an interest-free season ticket loan, interest-free motorbike loan, and bicycle and motorbike parking and changing facilities.

We value diversity and strive to create a fairer, more equitable work environment for our staff and students.

We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff diversity networks, campus facilities and services to support staff from different backgrounds.

The postholder should actively follow Middlesex University policies and procedures and maintain an awareness and observation of Fire and Health & Safety Regulations.

What Happens Next ?

If you wish to discuss the job in further detail please contact Dr Sally Priest, Associate Professor and Head of FHRC, S.Priest@mdx.ac.uk, 020 8411 5527.