

Job Description: Research Officer & Data Scientist

Faculty:	Faculty of Medicine, Health & Life Science
Department/Subject:	Swansea University Medical School
Salary:	Grade 8: £39,355 to £45,413 per annum together with USS pension benefits
Hours of work:	Full-time (35 hours per week)
Number of positions:	1
Contract:	42 months
Location:	This position will be based at the Singleton Campus.

The Research Officer & Data Scientist will be part of CHILI Hub. CHILI is short for Child and adolescent Health Impacts of Learning Indoor environments under net zero. CHILI is a group of researchers from a range of backgrounds, including engineering, public health, clinical medicine, mental health research and education, working together to ensure that children's education is supported and improved as school and nursery buildings are being made environmentally sustainable. CHILI is one of seven transdisciplinary research hubs exploring ways to ensure the UK's transition to net zero also protects and promotes physical and mental health. The hubs are funded by UK Research and Innovation (UKRI) and the National Institute for Health and Care Research (NIHR), more information can be found here: https://www.ukri.org/news/42m-funding-to-ensure-health-is-central-to-net-zero-strategies/ Organisations leading CHILI include: University College London, Imperial College London, London School of Hygiene & Tropical Medicine, Swansea University, UK Health Security Agency, University of Leeds and the Stockholm Environment Institute University of York.

- 1. Work with large-scale linked data (particularly within trusted research environments (TREs) and Secure Data Environments (SDEs) from across the UK, such as the SAIL Databank), developing linked data for analysis that answers important research questions.
- 2. Use SQL and other query languages in database systems and apply expertise in record linkage methods and techniques.
- 3. Acquire and understand new data, ensuring that all relevant information governance requirements are met and adhered to (particularly for use and incorporation into TREs/SDEs). Lead or participate in discussions with data providing organisations, ensuring security and governance are followed.
- 4. Participation in working with collaborators and other researchers to support the translation of research questions into appropriate solutions and developments.
- 5. Support and/or train collaborators to enable them to carry out their research, who may have a range of previous experience or skill levels. Take responsibility for knowledge transfer between stakeholders from different organisations and disciplines.
- 6. Undertake complex and structured data analysis, dealing appropriately with duplicate, missing and erroneous data. Produce metadata and documentation for any newly derived data preparations completed. Document any methodological decisions or developments that lead to associated report writing and contributions to the preparation of outputs.
- 7. Develop data management approaches and statistical data analysis, and support developing and sharing of good practices among collaborators. Utilising appropriate version control and documentation processes contributes to shared learning and development by sharing developed scripts and code, analytical methods and associated documentation.
- 8. Contribute to the interpretation of project findings and produce or contribute to the production of project outputs, including reports, publications and grant applications.
- 9. Participate actively in all relevant project meetings. Also, represent the organisation by attending meetings and giving presentations at meetings, events and conferences.
- 10. Independently manage the delivery of personal and project activities to meet deadlines without the need for day-to-day supervision, but raising risk and asking questions as needed.
- 11. Participate in and undertake other activities appropriate to their experience and skills, managing expectations in line with the role's project delivery, training, and general delivery.

Main Purpose of Post



General Duties	 To promote equality and diversity in working practices and maintain positive working relationships. To conduct the job role and all activities in accordance with safety, health and sustainability policies and management systems in order to reduce risks and impacts arising from the work activity. To ensure that risk management is an integral part of any decision-making process, by ensuring compliance with the University's Risk Management Policy. Any other duties as agreed by the Faculty / Directorate / Service Area.
Person Specification	 Essential criteria: A PhD in a relevant subject or equivalent experience. Evidence of active engagement, personal role and capacity in, and contribution to writing and publishing research outputs (including but not limited to reports and publications in refereed journals and abstracts to national and international conferences). Experience actively engaging in research design and/or contributing to developing external research funding applications, including the writing and organisation of the application(s). Evidence of skills and research project management experience, including independently managing analysis, research, and administrative activities to meet project deadlines. Evidence of the ability to manipulate, interrogate and summarise data in a programming language, with data held on a relational database via Structured Query Language (SQL). Experience in data and document management skills, including developing and maintaining research data, associated version control and documentation/metadata. Demonstratable understanding of the use of data towards research, including experience in programming skills with statistical software, such as R or Python. Experience working with large-scale linked "big data", preferably in health and social care. Evidence of skills in using data visualisation techniques and methods to produce research outputs and communicate findings with/to various audiences. Experience in statistical analysis (including but not limited to health and social care appropriate analysis methods and techniques, such as descriptive statistics, survival analysis methods, generalised linear models and meta-analysis). A commitment to Continuing Professional Development, including a willingness to acquire expertise in the field of data science, informatics and associated disciplines. Experience of using linked environmental data
Welsh Language Level	Level 1 – 'a little' - pronounce Welsh words. Able to answer the phone in Welsh (good morning / afternoon). Able to use very basic every-day words and phrases (thank you, please etc.). Level 1 can be reached by completing a one-hour training course. For more information about the Welsh Language Levels, please refer to the Welsh Language Skills Assessment web page, which is available here .
Additional Information	Informal enquiries: Professor Rich Fry (<u>r.j.fry@swansea.ac.uk</u>), Dr Amy Mizen (<u>a.r.mizen@swansea.ac.uk</u>)







