Prifysgol Abertawe Swansea University

Job Description: Research Officer & Data Scientist

College/School:	Faculty of Medicine, Health & Life Science
Department/Subject:	Swansea University Medical School
Salary:	Grade 8 £39,105 - £45,163 per annum pro rata together with USS pension benefits
Hours of work:	Full-time (35 hours per week)
Contract:	Fixed term until 31 st March 2026
Location:	This position will be based at the Singleton Campus

The Population Data Science group at Swansea University (https://popdatasci.swan.ac.uk/) supports world-leading research to develop cutting-edge analytical tools and methodologies to address the most pressing health research challenges. Our team of experts develops and applies advanced data science methods using clinical, biological, genomic, and other multi-dimensional health data to address the public's most pressing health research challenges.

The Population Data Science group is home to leading Researchers & Data Scientists who focus on a range of projects and programmes that seek to improve services and people's lives through population data science research. This multidisciplinary team works in a fast-moving, agile environment and is committed to demonstrating the value of data science to a range of technical and non-technical audiences. Working in the purpose-built Data Science building on Swansea University's Singleton Park campus, the post holder will participate in innovative research, engage with partners, demonstrate the practical application and strategic expertise, and prioritise efforts and expertise to gain a significant impact.

Introduction:

The Health and Care Research Wales' Evidence Centre is a multidisciplinary collaboration between researchers, policymakers, and service leads, across Welsh Government, academia, public health, health and social care, and third-sector organisations in Wales. The Health and Care Research Wales Evidence Centre will deliver evidence on the most important priorities in Wales across health and social care, and its primary aim is to ensure that policies and services put in place are relevant, effective and result in improvements for the Welsh population and a fairer society.

As a core partner, the Population Data Science group at Swansea University will support and lead rapid evaluation / primary research activities for the Health and Care Research Wales Evidence Centre. Utilising the Secure Anonymised Information Linkage (SAIL) Databank's (www.saildatabank.co.uk) rich anonymised population-scale, individual-level, linked data sources to

answer important population-level questions that inform policy, and evaluate national programmes and projects. The Welsh public is at the heart of our work from start to finish and will be a core and vital component of the centre, which will inform priorities, advise on evaluations, and ensure that our outputs are relevant, clear and impactful. Background We are looking for a Research Officer & Data Scientist to join our team who will work closely with information: various stakeholders, organisations, and groups. Our team regularly collaborates as part of many funded research projects and programmes nationally and internationally. Applications are sought for applicants with skills and experience in routine data analysis (preferably in health or social care) and a background in any of the following areas/backgrounds: epidemiology, statistics, operational research, or related informatics backgrounds to work on research in statistical methodology and data science. This document aims to provide an over-arching job description clarifying for potential applicants in broad terms what is expected of them and what they are expected to do. It includes, but is not limited to, the areas outlined below: Work with large-scale linked data (particularly within a trusted research environment such as the SAIL Databank), developing linked data for analysis that answer important research questions. 2. Use SQL and other query languages in database systems and apply expertise in record linkage methods and techniques. Acquire and understand new data ensuring that all relevant information governance requirements are met and adhered to (particularly for use and incorporation into a trusted research environment such as the SAIL Databank). Lead or participate in discussions with data providing organisations, ensuring security and governance are followed. Participation in working with collaborators and other researchers to support the translation of 4. Main Purpose of research questions into appropriate solutions and developments. Support and/or train collaborators to enable them to carry out their research, who may have Post: 5. 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 meta-data and documentation for any newly derived data preparations completed, document any methodological decisions or developments, leading 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 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 skill, managing expectations in line with the role's project delivery, training, and general delivery.
- 12. To promote equality and diversity in working practices and maintain positive working relationships.
- 13. To fully engage with the University's Performance Enabling and Welsh Language policies.
- 14. To conduct all activities within the University's environmental requirements as set out in its Sustainability Policy and Environmental Management System to minimise individual and departmental impact.
- 15. To conduct the job role and all activities according to safety, health and sustainability policies and management systems to reduce risks and impacts arising from activities.
- 16. Ensure that risk management is an integral part of any decision-making process by ensuring compliance with the University's Risk Management Policy.

Essential criteria:

- 1. A degree (or equivalent) in a relevant subject or equivalent experience.
- 2. 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).
- 3. Experience actively engaging in research design and/or contributing to developing external research funding applications, including the writing and organisation of the application(s).
- 4. Evidence of skills and research project management experience, including independently managing analysis, research, and administrative activities to meet project deadlines.
- 5. 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).
- 6. Experience in data and document management skills, including developing and maintaining research data, associated version control and documentation/meta-data.
- 7. Demonstratable understanding of the use of data towards research, including experience in programming skills with statistical software, such as R or Python (other analytical/statistical software with transferrable skills can be used, including SAS, SPSS, STATA, etc.)
- 8. Experience working with large-scale linked "big data", preferably in health and social care.
- 9. Evidence of skills in using data visualisation techniques and methods to produce research outputs and communicate findings with/to various audiences.
- 10. 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).
- 11. A commitment to Continuing Professional Development, including a willingness to acquire expertise in the field of data science, informatics and associated disciplines.
- 12. Excellent written and oral communication.

Desirable Criteria

- 13. A higher or postgraduate degree in a relevant subject.
- 14. An understanding of clinical coding thesauri & their use in the NHS.
- 15. Experience supervising undergraduate or postgraduate students or external projects/collaborators (or similar).

Person Specification:

Welsh Language:

Level 1 – 'a little' (you do not need to be able to speak any Welsh to apply for this role) e.g. pronounce Welsh words, place names, and department names. Able to answer the phone in Welsh (good morning/afternoon). Able to use or learn basic everyday words and phrases (thank you, please, excuse me). 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 may be made to e-mail: Ashley Akbari at a.akbari@swansea.ac.uk





