

**Job Description: Research Officer**

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| <b>Faculty:</b>             | <b>FMHLS</b>  |
| <b>Department/Subject:</b>  | <b>Health Data Science</b>  |
| <b>Salary:</b>              | <b>Grade 8: £39,355 to £45,413 per annum together with USS pension benefits</b> |
| <b>Hours of work:</b>       | <b>37 hours</b>   |
| <b>Number of positions:</b> | <b>1</b>  |
| <b>Contract:</b>            | <b>fixed term position until 31<sup>st</sup> September 2027</b>                 |
| <b>Location:</b>            | <b>This position will be based at the Singleton campus</b>                      |

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| <b>Main Purpose of Post</b> | <p>To work on the Diabetes UK funded study preventing diabetic peripheral neuropathy using technology to transform clinical outcomes. The role will be responsible for:</p> <ol style="list-style-type: none"> <li><b>To lead advanced statistical modelling of longitudinal electronic health record (EHR) data.</b><br/>The post-holder will apply and develop multilevel and mixed-effects modelling approaches to estimate individual trajectories of key cardiovascular and metabolic risk factors (HbA1c, fasting plasma glucose, systolic BP, BMI, total cholesterol and triglycerides) associated with the development of diabetic peripheral neuropathy (DPN).</li> <li><b>To integrate epidemiological and AI-based risk modelling to predict and understand DPN development.</b><br/>Working collaboratively with clinicians, data scientists, and AI specialists, the post-holder will link epidemiological analyses with AI-derived retinal biomarkers to explore shared risk pathways. This will support the development of explainable AI models for early detection and prevention of DPN.</li> <li><b>To contribute to high-impact research outputs and translational outcomes.</b><br/>The post-holder will take a lead role in analysing data, interpreting findings, and co-authoring a series of peer-reviewed publications. They will also contribute to data visualisation (e.g. risk factor trajectory heat maps) and translation of results to inform clinical practice and policy.</li> </ol>   |
|                             | <ol style="list-style-type: none"> <li>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.</li> <li>Use SQL and other query languages in database systems and apply expertise in record linkage methods and techniques.</li> <li>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.</li> <li>Participation in working with collaborators and other researchers to support the translation of research questions into appropriate solutions and developments.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Pro-actively contribute to and conduct research, including gather, prepare and analyse data and present results, exhibiting a degree of independence in terms of specifying the focus and direction of that research.</li> </ol> |

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|                             | <ol style="list-style-type: none"> <li>12. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication. The appointee is expected to be actively engaged in the writing and publishing of research papers, particularly those intended for publication in refereed (eg international) journals or comparable as a normal part of their role.</li> <li>13. Contribute pro-actively to the development of external funding applications to support their own work, that of others and the Faculty and the Institution in general. The appointee will be expected as a normal part of their work to be actively engaged in writing, or contributing to writing such applications.</li> <li>14. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile.</li> <li>15. Demonstrate and evidence own professional development, identifying development needs with reference to Vitae Researcher Development Framework particularly with regard to probation, performance reviews, and participation in training events.</li> <li>16. Maintain and enhance links with the professional institutions and other related bodies.</li> <li>17. Observe best-practice protocols in maintenance and retention of research records as indicated by HEI and Research Councils records management guidance. This includes ensuring project log-book records are deposited with the University/Principal Investigator on completion of the work</li> </ol>  |
| <b>General Duties</b>       | <ol style="list-style-type: none"> <li>18. To promote equality and diversity in working practices and maintain positive working relationships.</li> <li>19. 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.</li> <li>20. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University's Risk Management Policy.</li> <li>21. Any other duties as agreed by the Faculty / Directorate / Service Area.</li> </ol>   |
| <b>Person Specification</b> | <p><b>Essential criteria:</b></p> <ol style="list-style-type: none"> <li>1. A Degree or equivalent or equivalent in medical statistics, epidemiology or a closely related discipline</li> <li>2. Evidence of active engagement, personal role, 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).</li> <li>3. Experience of actively engaging in research design and/or contributing to developing external research funding applications, including the writing, and organisation of the applications.</li> <li>4. Ability to demonstrate significant independence of focus and direction in research – determining 'what, why, when and with whom' to progress work.</li> <li>5. Evidence of skills and research project management experience, including independently managing analysis, research, and administrative activities to meet project deadlines.</li> <li>6. 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).</li> <li>7. Experience in data and document management skills, including developing and maintaining research data, associated version control and documentation/metadata.</li> <li>8. Demonstratable understanding of the use of data towards research, including experience in programming skills with statistical software, such as R or Python.</li> <li>9. Experience working with large-scale linked "big data", preferably in health and social care.</li> <li>10. Evidence of skills in using data visualisation techniques and methods to produce research outputs and communicate findings with/to various audiences.</li> <li>11. 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).</li> <li>12. A commitment to Continuing Professional Development, including a willingness to acquire expertise in the field of data science, informatics and associated disciplines.</li> <li>13. Excellent written and oral communication.</li> </ol> <p><b>Desirable Criteria</b></p> |

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|                        | <p>14. A higher or postgraduate degree in medical statistics, epidemiology or a closely related discipline</p> <p>15. Experience of supervising undergraduate or postgraduate student projects</p> <p>16. An understanding of clinical coding thesauri &amp; their use in the NHS.</p> <p>17. Experience supervising undergraduate or postgraduate students or external projects/collaborators (or similar).</p> <p>18. Knowledge of diabetes and related complications</p> |
| Welsh Language Level   | <p>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.</p> <p>For more information about the Welsh Language Levels please refer to the Welsh Language Skills Assessment web page, which is available <a href="#">here</a>.</p>  |
| Additional Information | <p>Informal enquiries: Becky Thomas <a href="mailto:r.l.thomas@swansea.ac.uk">r.l.thomas@swansea.ac.uk</a></p>  |

