

Job Description: Research Fellow Cancer Data Science

Faculty:	Medicine, Health and Life Sciences
Department/Subject:	Medicine
Salary:	Grade 8: £39,355 to £45,413 per annum together with USS pension benefits
Hours of work:	35 hours per week (full time)
Number of positions:	1
Contract:	This is a fixed term position to 31st March 2028
Location:	This position will be based at the Singleton Campus

Main Purpose of Post

The successful candidate will be working within the Population Data Science group at Swansea University on various cancer related projects aligned to the Cancer Research Strategy for Wales (CreST) through the Health and Care Research Wales (HCRW) funded Wales Cancer Research Centre (WCRC). The primary focus will be maximising the use of multi-modal, routinely collected cancer data to research epidemiology of cancers and explore new methodologies in early detection and precision medicine of cancer. This is a research fellow post in which we expect the successful applicant to have autonomy over their research agenda and be active in seeking new funding opportunities to strengthen the existing team and develop their career independence. The role provides an exciting opportunity to Swansea University Medical School located in beautiful Southwest Wales. Swansea University Medical School provides an interdisciplinary approach, educating and training the next generation of doctors, life scientists, data scientists and health professionals. We collaborate with the NHS, business and the third sector in a spirit of open innovation and has established itself as a world-class place to learn, research and innovate.

Key Duties and Responsibilities:

- 1. To deliver on the Cancer Research Strategy for Wales (CreST), particularly Theme 1 'Precision and mechanistic oncology' and Theme 6 "Population health-based cancer prevention, early diagnosis, primary care & health services research". https://walescancerresearchcentre.org/wp-content/uploads/CReSt-English-FINAL.pdf
- 2. Support the translation of research questions into methodologies that can be run against the SAIL Databank. Actively develop methodologies to produce high impact academic publications.
- 3. Identify and undertake research activities that make use of linked multi-modal cancer data such as genomics, imaging, unstructured data and electronic healthcare records. Wales has a rich variety of data resources with vast potential for novel cancer research.



- 4. Form collaborations with researchers and clinicians across the WCRC to identify new opportunities for research. The WCRC will fund a vibrant research community until 2030 that expects make huge strides towards placing Wales as a global leader in cancer research.
- 5. Engage with and contribute to WCRC events such as research networking events and the WCRC annual conference.
- 6. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication. The writing and publishing of research papers, particularly those intended for publication in refereed (e.g., international) journals or comparable is an integral part of the role. As a Research Fellow you will be expected to develop an extensive track record of publications as the principal author.
- 7. Identify and pursue sources of external funding to support your own work and that of others within the Faculty. This may be through research fellowships, PhD studentships or project-based grant funding.
- 8. Establish research independence by participating in and developing internal and external networks to build personal reputation and a recognised independent research niche. Identify sources of funding, generate income, obtain consultancy projects and build professional relationships to support your development as an independent researcher.
- Contribute to Swansea University Medical School organisational matters such as being an active member of internal committees.
- 10. Engage with inter and cross faculty learning opportunities such as staff seminars.



11. Manage, direct, or supervise the work of others, for example in research teams or projects. 12. Contribute to the teaching and learning programmes in the Faculty and to supervise postgraduate or project research students if required. 13. Keep informed of developments in the discipline in specific terms and the wider applications of these developments. 14. Demonstrate and evidence own professional development, identifying development needs with reference to the Vitae Researcher Development Framework, particularly with regard to probation, appraisal, and performance reviews, and participation in training events. 15. Observe best-practice protocols in maintenance and retention of research records as indicated by HEI and Research Councils records management guidance. 16. Represent Swansea University at external events and foster collaboration opportunities. 17. To promote equality and diversity in working practices and maintain positive working relationships. 18. 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. **General Duties** 19. To ensure that risk management is an integral part of any decision-making process, by ensuring compliance with the University's Risk Management Policy. 20. Any other duties as agreed by the Faculty/Directorate/Service Area. **Essential criteria:** 21. A PhD or equivalent in e.g., Epidemiology, Statistics, Data Science, Public Health, Bioinformatics, Biology, Psychology, or a relevant subject. 22. Evidence of writing and publishing research papers, particularly for refereed journals. 23. Evidence of contributing to applying for external research funding. 24. The ability to exhibit a degree of independence in terms of specifying the focus and direction of the research. 25. Previous experience of teaching or learning support or demonstrate the ability to undertake this. 26. Project management skills and experience of managing a research project or similar. 27. Experience of working with very large, linked data. Specifically, in working with routine data such as primary care and hospital admissions records. 28. Evidence of the ability to build and use complex SQL queries to interrogate complex large datasets. Person 29. Evidence of the ability to run appropriate analysis on large datasets using statistical/programming language **Specification** such as R, Stata or Python. 30. Demonstrate an understanding of clinical coding thesauri and their use in the NHS. **Desirable Criteria** 31. Postdoctoral experience and evidence of published research work related to cancer research. 32. Experience of working with genomics, imaging or unstructured data for research purposes. 33. Experience of line management and mentoring colleagues in research. 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 Welsh Language completing a one-hour training course. For more information about the Welsh Language Levels please refer to Level the Welsh Language Skills Assessment web page, which is available here. Additional Informal enquiries: a.s.lacey@swansea.ac.uk or laura.e.thomas@swansea.ac.uk Information







