Prifysgol Abertawe Swansea University

Job Description: Research Officer

Faculty:	Faculty of Medicine, Health and Life Science
Department/Subject:	Medical School
Salary:	Grade 08 £39,105 to £45,163 per annum together with USS pension benefits
Hours of work:	Full time
Number of positions:	1
Contract:	This is a fixed term position for 24 months
Location:	This position will be based at the Singleton Campus

Introduction	We are looking for a motivated biomedical researcher or chemist who would like to develop their scientific skills in biological mass spectrometry and in biomarker discovery field. You will join the oxysterol research group at Swansea University Medical School. The group's research is focused on cholesterol metabolism and its relation to human health and disease. The Swansea oxysterol group are at the frontline of developing cutting edge mass spectrometry techniques for sterol analysis and hold a US patent. You will be part of the sterol biomarker discovery programme for neurodegenerative diseases and infectious disease and involve in wider collaborations with clinicians and international collaborators.
Background information	Dysregulated cholesterol metabolism has been linked to a range of human pathological conditions. The Swansea oxysterol laboratory is well equipped with the state-of-the-art mass spectrometers to quantitatively study cholesterol metabolism pathway. You will be provided training through the course of the project.
Main Purpose of Post:	 Identify sterol biomarkers associated with diseases progression or in response to therapeutics. Mass spectrometry analysis of biological samples collected from patients and controls. Data analysis. Contribute to LC-MS instrument maintenance. Contribute to laboratory running and maintenance.
	 6. 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. 7. 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 (e.g. international) journals or comparable as a normal part of their role. 8. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed. 9. Use creativity to analyse and interpret research data and draw conclusions on the outcomes. 10. Interact positively and professionally with other collaborators and partners within the Faculty, elsewhere in the University and beyond both in industry/commerce and academia. 11. 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.

- 12. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile.
- 13. Keep informed of developments in the field in both technical and specific terms and the wider subject area and the implication for commercial applications and the knowledge economy or academia.
- 14. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience.
- 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.
- 16. Maintain and enhance links with the professional institutions and other related bodies.
- 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.

General Duties

- 18. To promote equality and diversity in working practices and maintain positive working relationships.
- 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.
- 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.

Essential criteria:

- 1. PhD in Biochemistry/ Biomedicine/ Chemistry or a related subject. Applications are welcomed from current PhD students, close to completing their degree.
- 2. Evidence of active engagement, personal role, and contribution to writing research papers, particularly for refereed journals.
- 3. Ability to demonstrate significant independence of focus and direction in research determining "what, why, when and with whom" to progress work.
- 4. A commitment to continuous professional development.

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, department names. Able to answer the phone in Welsh (good morning / afternoon). Able to use of learn very basic every-day 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 <a href="https://example.com/here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-Language-skills-here/beach-to-the-welsh-language-skills-here-s

Desirable Criteria

- 5. Experience working with LC-MS, preferably ultimate 3000 liquid chromatography and Orbitrap mass spectrometers.
- 6. Experience with large scale biomarker discovery project using biofluids, preferably CSF or plasma.
- 7. Experience of synthetic chemistry.
- 8. First author publications in lipid mass spectrometry.
- 9. Experience of supervising undergraduate or postgraduate student projects.

Additional Information

Informal enquiries: Prof Yuqin Wang <u>v.wang@swansea.ac.uk</u> and Prof Willam Griffiths <u>w.j.griffiths@swansea.ac.uk</u>





