**Job Description: Research Officer**

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| **Faculty:** | ***FSE*** |
| **Department/Subject:** | ***Biomedical Engineering*** |
| **Salary:** | *Grade 8: £38,205 to £44,263 per annum* |
| **Hours of work:** | ***Full time*** |
| **Number of positions:** | ***1*** |
| **Contract:** | **This is a fixed term position for 12 months duration** |
| **Location:** | **This position will be based at the Bay Campus** |

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| **Main Purpose of Post** | 1. To deliver exceptional innovation, working across multidisciplinary teams, to prescribe safe working limits for a wearable medical device and deliver novel design concepts for this device. Applicant should maximise experience in materials testing, computational modelling, design and medical device development to tackle this challenging innovation project. 2. The project builds on whole-body cardiovascular computational modelling research, blast and ballistic injury research and advanced materials characterisation research. The Research Officer will bring these areas together to create an innovative new design for a wearable medical/protective device. 3. Significant Leadership and Research Contributions to the Research Group and Environment are expected. The Research Officer will be the Senior Researcher in the Lab providing guidance, advice and supervision to junior researchers, postgraduate and undergraduate researchers. Currently >20 Research Officers and PhD Students in the Research Group, with >10 lab-based PhD Students who will require support by this Research Officer Role. 4. The Research Officer will be a part of the Lab Management Structure (with the Lab Manager, PIs/co-PIs and Technical Staff) feeding into strategic decision-making and direction in the space and be expected to lead maintenance strategic activities and core research goals. 5. The post involves significant collaboration across multiple institutions and industry. There are >20 companies, home and overseas institutions currently collaborating with the research group and there will be expectations to contribute towards these wider national/international collaborations. 6. The project aims to ultimately deliver a new medical device maximising computational and experimental resources from the Biomedical Engineering Simulation and Testing (BEST) Lab. The impact of the research associated with this role, in biomechanics, computational modelling, material testing and medical device development alongside industry is expected to be significant. |
|  | 1. 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. 2. 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. 3. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed. 4. Use creativity to analyse and interpret research data and draw conclusions on the outcomes. 5. Interact positively and professionally with other collaborators and partners within the Faculty, elsewhere in the University and beyond both in industry/commerce and academia. 6. 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. 7. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile. 8. 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. 9. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience. 10. 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. 11. Maintain and enhance links with the professional institutions and other related bodies. 12. 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** | 1. To promote equality and diversity in working practices and maintain positive working relationships. 2. 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. 3. To ensure that risk management is an integral part of any decision-making process, by ensuring compliance with the University’s Risk Management Policy. 4. Any other duties as agreed by the Faculty / Directorate / Service Area. |
| **Person Specification** | **Essential criteria:**   1. A PhD in Biomedical Engineering or equivalent 2. Evidence of active engagement, personal role, and contribution to writing and publishing research papers, particularly for refereed journals. 3. Evidence of measurable research impact, such as high citation indices, adoption of research outcomes by industry, or societal benefits. 4. Evidence of the capacity for active engagement in designing research and writing, or contributing to writing, applications for external research funding. 5. Ability to demonstrate significant independence of focus and direction in research – determining ’what, why, when and with whom' to progress work. 6. Evidence of excellence in experimental biomechanics and medical devices (e.g. wearables, garments) 7. Experience in materials/device development, characterisation and modelling. 8. A commitment to continuous professional development.   **Desirable Criteria**   1. Experience working with Industry in the Biomedical Engineering Sector i.e. a proven ability to lead international, multidisciplinary research collaborations with industry and academia. 2. Experience in blast/ballistics injury research. 3. Experience of supervising undergraduate or postgraduate student projects. 4. Evidence of international recognition through awards, invitations to speak at conferences, or leadership roles in global research networks. 5. Experience in creating patentable innovations or contributions to commercialized technologies. 6. Experience in navigating regulatory approval processes for medical devices (e.g., CE marking, FDA). |
| **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](https://www.swansea.ac.uk/welsh-language-standards/compliance/recruitment/). |
| **Additional Information** | Informal enquiries: [hari.arora@swansea.ac.uk](mailto:hari.arora@swansea.ac.uk) |

  