

## Job Description: Post-Doctoral Researcher (Restoration of River Connectivity for Migratory Fish)

Faculty:	Science & Engineering
Department/Subject:	Biosciences
Salary:	Grade 8: £38,205 to £44,263 per annum
Hours of work:	35
Number of positions:	1
Contract:	This is a fixed term position for 36 months starting on September 1st 2025 (negotiable)
Location:	This position will be based at the Singleton Campus, Swansea University

## Main Purpose of Post

The appointed person will join our Free-Flow Lab <a href="https://freeflowlab.org/">https://freeflowlab.org/</a> and play a leading role in the Horizon Europe project <a href="Danube LifeLines">Danube LifeLines</a> that seeks to (1) develop an user-friendly platform for conservation planning of migratory fish; (2) assess the distribution, conservation status, and threats faced by migratory fish in the Danube River Basin (DRB); (3) update existing barrier inventories and habitats impacted by barriers making optimal use of incomplete and heterogenous data; and (4) prioritize restoration strategies based on cost-benefit analysis and trade-offs under various data-deficient scenarios. The post will be expected to help the PI on the following project tasks:

- 1. Lead the inventory of river barriers (including lateral barriers) in the Danube River Basin (DRB)- Task 2.3.
- 2. Lead the quantification of the relative impacts of fragmentation and other stressors Task 2.5.
- 3. Help determine the current and potential distribution of migratory fish in DRB Task 2.2.
- 4. Help with the analysis of river connectivity and barrier prioritization Task 2.6.
- 5. 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.
- 6. 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.
- 7. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed.
- 8. Use creativity to analyse and interpret research data and draw conclusions on the outcomes.
- 9. Interact positively and professionally with other collaborators and partners within the Faculty, elsewhere in the University and beyond both in industry/commerce and academia.
- 10. 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.
- 11. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile.
- 12. 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.
- 13. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience.
- 14. 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.
- 15. Maintain and enhance links with the professional institutions and other related bodies.
- 16. 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	<ol> <li>To promote equality and diversity in working practices and maintain positive working relationships.</li> <li>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>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>Any other duties as agreed by the Faculty / Directorate / Service Area.</li> </ol>
	Essential criteria:
Person Specification	<ol> <li>A PhD degree in Biology, Life Sciences, Physical Geography or equivalent</li> <li>Evidence of active engagement, personal role, and contribution to writing and publishing research papers, particularly for refereed journals.</li> <li>Evidence of the capacity for active engagement in designing research and writing, or contributing to writing, applications for external research funding.</li> <li>Ability to demonstrate significant independence of focus and direction in research – determining 'what, why, when and with whom' to progress work.</li> <li>Highly competent working with GIS</li> <li>Good data analysis skills in R and/or Python</li> <li>A commitment to continuous professional development</li> </ol> Desirable Criteria
	<ul><li>8. Experience working on river fragmentation in relation to migratory fish</li><li>9. Experience assessing the restoration of river connectivity</li></ul>
	10. Experience with Bayesian inference and Machine learning
	11. Experience supervising undergraduate or postgraduate student projects
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 <a href="mailto:here">here</a> .  Informal enquiries: Prof. Carlos Garcia de Leaniz c.garciadeleaniz@swansea.ac.uk
	Shortlisting Date commencing: 26 <sup>th</sup> May 2025
	Interview Date commencing 2nd June 2025
Additional	Line Managers are responsible for assessing whether a role requires a DBS check.
Information	In doing so, each role should be assessed using the <u>Gov.Uk online tool</u> (support is available if required from
	the <u>HR BP Team</u> )
	In cases where a satisfactory DBS Check is required, this must be received and assessed before a start date can be confirmed





