Job Description

Job title	Postdoctoral Research Associate
Department/School	Biology & Biochemistry
Job family	Education and Research
Grade	7
Reporting to	Principal Investigator (PI)
Responsible for	Day to day supervision of other staff e.g. technical staff or co-supervision of doctoral or undergraduate students may be required.
Location	University of Bath premises

Background and context

This position is funded by a German Research Foundation (DFG) grant "Genetic mechanisms of hybrid sterility in house mice." This project integrates approaches from systems biology, evolutionary biology, and reproductive biology to (1) identify networks of interacting genes disrupted in sterile hybrids, (2) determine where and when defects appear during spermatogenesis, and (3) identify and functionally evaluate candidate sterility genes. This research builds on previous studies mapping sterility loci in laboratory crosses and the natural hybrid zone.

The post holder will generate and analyse genome resequencing and RNA-seq data and lead work on Aim 1. Phenotyping and developmental genetics work is underway; the post holder may also contribute to this work, depending on background and interest.

Job purpose

To provide subject-specific research expertise and undertake specific research work to a Principal Investigator (PI) and their research team for a a project funded by the German Research Foundation (Deutscheforschungsgemeinshaft – DFG).

Main duties and responsibilities

	Responsible to the PI/CI for (as appropriate to discipline):

1	Conduct individual and/or collaborative research projects. Take a lead in the experimental design and execution of the project. Collect and analyse existing data related to the project using qualitative and/or quantitative techniques.
2	Writing up results of research and contributing to publishing of results in high-quality peer-reviewed academic literature.
3	Project management: e.g. timetabling and meeting project milestones; participating in regular discussions with collaborative partners. Liaise with key stakeholders/industrial partners and conduct focus groups.
4	Disseminating results of project as appropriate to the discipline e.g. by presentations at conferences, overseas research visits, public engagement activities.
5	Participate regularly in group meetings and prepare and deliver presentations to project team, internal and external stakeholders or funders.
6	Assist with the supervision of graduate students and undergraduate project students and the assessment of student knowledge.
7	Continually update knowledge and understanding in field or specialism to inform research activity.
8	Identify sources of funding and provide assistance with preparing bids to funding bodies. Contribute to securing of own funding e.g. travel grants.
9	Develop research objectives and proposals for own or joint research, with assistance of a mentor if required.
10	Disseminate knowledge of research advances to inform departmental teaching effort.

Person Specification

Criteria	Essential	Desirable
Qualifications		
A PhD degree in subject area of direct relevance for the project.	√	
Experience/Knowledge		
Evolutionary/Disease genomics		√
Association analysis / mapping models		√
Demonstrated significant depth and breadth of specialist knowledge of subject matter to contribute to research programmes and to the development of departmental research activities.	√	
Demonstrated awareness of latest developments in the field of research and in research design	√	
Demonstrated potential to publish in high quality, peer reviewed journals	√	
Skills		
Standard molecular genetics laboratory skills		√
Genomics/trancriptomics analysis		√
Handling of large scale data sets (e.g., sequence, gene expression data)	√	
Computer program languages (e.g., R, PERL, Python, etc.)	√	
Ability to organise and prioritise own workload	√	
Ability to write research reports and to effectively disseminate outcomes	√	
Excellent oral, interpersonal and written communication skills	√	
Attributes		
Innovation and developing creative solutions	√	
Enthusiasm and self-motivation	√	
Organisation – able to plan and deliver work to meet required deadlines	√	
Tenacity – working to achieve own and team objectives and to overcome obstacles	√	

Ability and willingness to work both independently and collaboratively	√	