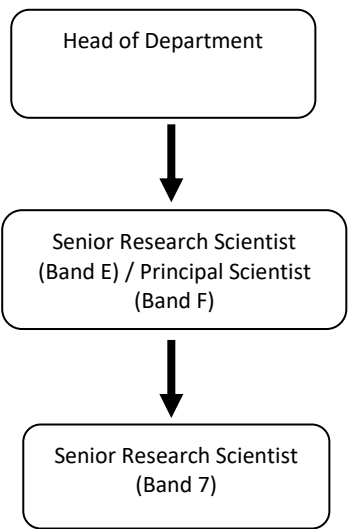


JOB DESCRIPTION

Job title:	Senior Research Scientist 1
Pay Band	Band 7
Department:	Disease Control
Reporting Structure:	 <pre> graph TD A[Head of Department] --> B[Senior Research Scientist (Band E) / Principal Scientist (Band F)] B --> C[Senior Research Scientist (Band 7)] </pre>
Staff reporting to postholder:	None
Main purpose of job:	The aim of the project is to develop a tool to aid environmental surveillance of <i>Toxoplasma gondii</i>, an important zoonotic pathogen, in a changing climate. This innovative, interdisciplinary project will combine a proteomics approach with existing immunomagnetic separation technology to generate a tool which can be utilised by environmental regulators, water stakeholders, and researchers monitoring contamination pathways and catchment vulnerability.

Main duties of postholder:

- Take the lead on an ambitious project to ensure successful completion of objectives.
- Identify abundant *Toxoplasma gondii* oocyst wall proteins and produce them recombinantly.
- Generate antibodies against recombinant *T. gondii* oocyst wall proteins.
- Optimise immunomagnetic separation (IMS) protocol using generated antibodies targeting *T. gondii* oocyst wall proteins.
- Evaluate IMS tool in pilot water catchment study.
- Collate, analyse, and interpret data for presentation to peers and colleagues at national and international meetings.
- Organise meetings with project partners, water industry stakeholders, and international collaborators to ensure successful knowledge exchange and development of workflow.
- Contribute to writing of large grants.

PERSON SPECIFICATION

	Essential	Desirable
Attainments:	PhD in relevant scientific area, preferably parasitology	Previous or current home office personal license holder
	Multiple peer reviewed scientific publications	
Experience:	Experience of working with <i>Toxoplasma gondii</i> oocysts	
	Experience of immunomagnetic separation techniques for the detection of protozoan parasites	Knowledge of quantitative proteomics
	Experience of culturing <i>Toxoplasma gondii</i> <i>in vitro</i>	
	Experience of standard molecular biology and immunology techniques including PCR and ELISA	Experience of recombinant protein production
	Experience of project management and liaising with water industry stakeholders and international collaborators	
	Experience of leading on research project areas	Experience of leading own research project

Skills:

Experience of writing small grants	Experience of writing larger grants with other partners
Experience of working with environmental water samples	
Willingness to conduct and manage <i>in vivo</i> studies	
Experience of report writing	
Experience in managing student projects	
Communication - excellent interpersonal and communication skills when dealing with a wide range of managers and staff Ability to contribute to discussion at meetings plus taking minutes and writing up. Ability to write reports or briefs.	
Managing relationships – ability to deal with a wide range of people with tact and diplomacy Able to build and maintain effective working relationships with a range of people.	
Team working - ability to work flexibly and effectively as part of the team. Able to build and maintain effective working relationships with a range of people.	
Resilience - strong ability to work with ambiguity and constantly changing set of circumstances and issues.	
Planning and organisation - able to prioritise and plan activities taking into account deadlines and resources.	
Decision making – able to take independent action where necessary in line with policies and procedures Ability to quickly assimilate complex information and take effective decisions when required	

Other skills please specify Other requirements please specify	Flexibility – ability to adapt and work effectively with a variety of situations, individuals or groups. Able to understand and appreciate different and opposing perspectives on an issue and to adapt an approach as the situation changes	
	Willingness to undertake work outside of normal working hours when required (e.g. <i>in vivo</i> work).	