



POSITION DESCRIPTION

Position Title:	Biological Scientist
Position Reference Number:	ECRLD004
Division	Land Division
Position Classification:	S&T3-4 (APS4/5-6)
Position Location:	Fishermans Bend, Victoria
Security Level:	Negative Vetting 1
Minimum Academic Qualification:	PhD (Microbiology or related science)
Enquiries:	Dr Chun Liu, chun.liu@dst.defence.gov.au, (03) 96268091

Academic Disciplines

<input type="checkbox"/>	Aerospace/ Aeronautical Engineering, Naval Architecture	<input checked="" type="checkbox"/>	Chemical, Radiological, Biological, Food sciences	<input type="checkbox"/>	Materials Science
<input type="checkbox"/>	Computer Sciences, IT, Software Engineering, Telecommunications	<input type="checkbox"/>	Mathematics and physics	<input type="checkbox"/>	Psychology and Social Sciences
<input type="checkbox"/>	Mechanical and Mechatronic Engineering (including robotics)	<input type="checkbox"/>	Electronic/ Electrical Engineering	<input type="checkbox"/>	Other

Position Overview

The Biological Scientist will join a science team at DST Group to undertake research in support of the development of medical countermeasures to bacterial pathogens of concern to Defence. We use both cell-based *in vitro* models and the dynamic *in vitro* hollow-fibre infection model to evaluate the efficacy of candidate therapeutics against a variety of bacterial pathogens. We are particularly interested in novel small molecule-based compounds for use as potential broad-spectrum therapeutics against bacterial pathogens, either alone or in combination with current antibiotics. The successful applicant will be expected to have extensive microbiological experience and knowledge in development, testing and evaluation of antimicrobial agents against bacterial pathogens at the physical containment 2 level.

The work program will be enhanced through collaboration with external agencies, including universities. The Biological Scientist will be responsible for reporting on their biological research within the Chemical Biological Defence Major Science & Technology Capability within DST Group.

Position Duties

- Characterisation of Risk Group 2 (or 3) bacterial pathogens using plate assays, phenotypical and biochemical analysis and microscopy techniques.
- Evaluation of antimicrobial agents against bacterial pathogens *in vitro* using microbiological assays, cell culture, DNA sequencing and PCR techniques.
- Demonstrable interpersonal skills to develop and maintain collaborative research projects with external partners.
- Transfer scientific knowledge and communicate microbiological processes and experimental results to stakeholders.

Other Requirements

- Appointees will be initially be engaged on a **BASELINE** security clearance with an upgrade to a **Negative Vetting 1 (NV1) Security Clearance** required upon commencement.
- University degree with PhD or equivalent experience in microbiology or related discipline.
- Experience with handling Risk Group 3 organisms, with expertise in PKPD modelling and data analysis would be advantageous.