

Position Description

Position Title: Research Associate

Position Classification: Level A

Position Number: 317566

Faculty/Office: Faculty of Science

School/Division: School of Molecular Sciences

Supervisor Title: Future Fellow

Supervisor Position Number: 316197

Your work area

The School of Molecular Sciences within the Faculty of Science, is a large, research intensive School with 100 staff, 100 PhD students, and more than 600 undergraduate students. The School is committed to achieving international excellence in teaching, research and service, with activity spanning Chemistry, Biochemistry, Molecular Biology and Molecular Genetics. More broadly, the School of Molecular Sciences provides cutting edge infrastructure and expertise in proteomics, genomics, metabolomics, bioinformatics, and synthetic, analytical and computational chemistry.

The team led by ARC Future Fellow Dr. Heng Chooi currently consists of one staff, six PhD students, and four Honours/Master students. The team also share a vibrant and interactive research space with other Chemical Biology groups led by ARC Future Fellows Dr Josh Mylne and Dr Mark Waters.

Reporting Structure

Reports to: Future Fellow (316197), Dr Yit-Heng (Heng) Chooi

Your role

The appointee will independently carry out research focused on harnessing the genomes of actinomycete bacteria for discovery of novel and lost antibiotics, as part of a multidisciplinary team working on the CRC-P project – *BioAustralis: Toward the Future.* This project aims to use cutting edge microbial genomics, synthetic biology and analytical chemistry tools to uncover bioactive metabolites from a collection of talented Australian microorganisms. The project has strong academia-industry partnerships, which include The University of Western Australia, Macquarie University, Microbial Screening Technologies and Advanced Veterinary Therapeutics.

Key responsibilities

Coordinate and conduct research experiments and activities and interpret results.

Supervise and assist staff and students in laboratory skills.

Plan and develop a range of research activities

Contribute to achieving the CRC-P milestones

Contribute to research reports, milestone reports and seminar presentations

Publish academic papers and other scholarly outputs to a high international standard, and in accordance with the research expectations of the UWA School of Molecular Sciences

Contribute to writing competitive research grants

Other duties as directed

Your specific work capabilities (selection criteria)

Relevant degree and Ph.D. qualification in Microbiology, Molecular Biology, Chemistry or related field Experience with:

Genetic manipulation of actinomycete bacteria (essential)

Knowledge on microbial natural product biosynthesis logic (highly desirable)

Strategies for microbial genome mining of natural products (highly desirable)

Microbial natural product analysis, isolation and structural elucidation (desirable)

Streptomyces heterologous biosynthetic pathway expression (desirable)

Expression, purification and assaying biosynthetic enzymes (desirable)

Good track record of discipline-specific first-author publication(s)

Willingness to assist in supervision of research students

Well-developed organisational skills and ability to set priorities and to meet deadlines

Ability to work independently, show initiative and work productively as part of a team

Well-developed written and verbal communication skills

Knowledge of safety issues relating to the use of laboratory equipment and chemicals

Special Requirements

There are no special requirements.

Compliance

Workplace Health and Safety

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements.

Details of the safety obligations can be accessed at http://www.safety.uwa.edu.au

Inclusion and Diversity

All staff members are required to comply with the University's Code of Ethics and Code of Conduct and Inclusion and Diversity principles. Details of the University policies on these can be accessed at http://www.hr.uwa.edu.au/publications/code_of_ethics; http://www.web.uwa.edu.au/inclusion-diversity