

POSITION

DESCRIPTION

Position Title Graduate Research Officer

Classification Level 5

School/Division Medical School

Centre/Section Centre for Medical Research

Supervisor Title Professor

Supervisor Position Number 313281 Position Number 320584

Your work area

UWA's Medical School brings together the brightest students, experienced clinicians and committed researchers to unlock the greatest health challenges of our day. Celebrating 60 years in 2017, the Medical School is an infinite source of teaching and learning for individuals who share our goal of delivering better health outcomes today and into the future.

This position is based within the Systems Biology and Genomics Laboratory, led by Professor Alistair Forrest and is part of the UWA Centre for Medical Research.

The Forrest lab is comprised of molecular, cellular and computational biologists, forming a multi-disciplinary team environment undertaking a diverse range of genomics and cancer single cell research. We are leading the Western Australian Cancer Single Cell initiative which is using single cell, single nuclei and spatial transcriptomic profiling to characterize hundreds of tumour samples kindly donated by patients around Perth.

Reporting structure

Reports to: Professor

Your role

As the appointee you will, under general direction, provide a high level of technical support to researchers with responsibility to perform experimental molecular and cellular biology work in a collaborative research program. You will primarily assist in the processing of tumour samples for spatial transcriptomic profiling.

Your key responsibilities

Generate spatial transcriptomic libraries and single cell/nuclei libraries from tumour sections

Prepare fresh frozen and FFPE sections from tissues

Prepare single cell and single nuclei preparations from tissues

Receive and store samples from a variety of collaborators to generate the above datasets

Maintain quality control of single cell and spatial libraries

Coordinate RNA extraction and quality assessment

Ensure accurate metadata are recorded for samples coming into the facility

Maintain and order minor equipment and laboratory consumables

Liaise with staff to update and refine methodology and equipment

Record and analyse results

Troubleshoot any technical problems that arise, in consultation with supervisor(s)

Present regular summaries of your work at lab and institutional meetings, and with collaborators Contribute to preparation of manuscripts for publication

Your specific work capabilities (selection criteria)

Relevant degree qualification preferably a BSc (Hons), or equivalent degree in molecular biology, pathology, lab medicine, biomedical science, genetics, biochemistry, or related fields

Substantial experience in at least one of the following (tissue sectioning and staining, single cell or spatial transcriptomics, next generation sequencing)

High level competency in standard techniques used in at least one of the following (histopathology, molecular biology or cell biology)

Highly developed written and verbal communication skills

Proficiency in a range of computing skills including word processing, spreadsheets, databases, internet and email

Strong attention to detail including good organizational skills, and the ability to maintain highly accurate and comprehensive records

Ability to follow established procedures, troubleshoot technical issues, and work to strict deadlines

Ability to work independently, show initiative and work productively as part of a team Proficiency in sterile technique and mammalian cell and or ex vivo tissue culture is desirable

Experience with immuno-fluorescence or in situ hybridization is desirable

Experience with flow cytometry is desirable

Special requirements (selection criteria)

Comply with Human and Animal Ethics requirements

Some out of hours work may very occasionally be required

Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct <a href="https://example.com/http

Inclusion and Diversity web.uwa.edu.au/inclusion-diversity

Safety, health and wellbeing safety.uwa.edu.au/