

## Position Description – Senior Research Fellow in Bioinformatics

Updated 18 April 2024

POSITION DETAILS	
College	College of Medicine and Public Health
Organisational Unit	Flinders Health and Medical Research institute (FHMRI)
Supervisor	Lead, FHMRI Bioplatforms and Bioresources (or Delegate)
Classification	Research (Academic) Level C
Employment Type	Fixed-term, full-time

POSITION SUMMARY
<p>The Senior Research Fellow will primarily provide subject matter expertise in bioinformatics to researchers within the College of Medicine and Public Health, particularly in the areas of high-throughput “omics” analysis.</p> <p>The position will take a lead role in co-design of research projects and analysing research outputs towards expanding the College’s research activities through the attraction of external grants and research contracts, delivering on strategic research objectives, establishing and maintaining industry and research partnerships, and building the University’s national and international reputation through high quality publications and strong research collaborations.</p> <p>The Senior Research Fellow in Bioinformatics may be required to supervise and mentor HDR students and more junior staff.</p>

UNIVERSITY EXPECTATIONS AND VALUES
<p>All staff at Flinders are responsible for understanding their obligations and responsibilities as set out in the University’s code of conduct and are expected to:</p> <ul style="list-style-type: none"> <li>• demonstrate commitment to the University’s values of Integrity, Courage, Innovation, Excellence and the underlying ethos of being Student Centred;</li> <li>• contribute to the efficient and effective functioning of the team or work unit in order to meet the University’s objectives. This includes demonstrating appropriate and professional workplace behaviours, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one’s supervisor;</li> <li>• promote and support an inclusive workplace culture which values diversity and embraces the principles of equal opportunity;</li> <li>• perform their responsibilities in a manner which reflects and responds to continuous improvement; and</li> <li>• familiarise themselves and comply with the University’s Work Health and Safety, Injury Management and Equal Opportunity policies.</li> </ul>

KEY POSITION RESPONSIBILITIES
<p>The Senior Research Fellow in Bioinformatics is accountable for:</p> <ul style="list-style-type: none"> <li>• Provision of subject matter expertise to staff and students in the College of Medicine and Public Health with respect to their bioinformatics needs according to research projects undertaken.</li> </ul>

- To facilitate or conduct bioinformatics analyses, primarily relating, but not limited, to High-throughput “omics” (RNA-seq, small RNA-seq, ChIP-seq, single cell (scRNA-seq), spatial transcriptomics, ATAC-seq, DNA methylation profiling, target-enriched RNA-seq, Whole Genome Sequencing, proteomics, high-throughput cell screening).
- To actively develop the bioinformatics skill sets of staff and students through personalised training or the running of workshops, where appropriate.
- Taking a lead role in the identification, coordination and submission of applications for external research income to support bioinformatics activities.
- Making a significant contribution to ethical, high quality and innovative research through sustained high-quality publications, external research grants and contracts, mentoring and developing early career researchers and presenting at the national and international level.
- Contributing to research leadership by fostering research excellence.
- Actively supervising and mentoring Higher Degree Research students as required.
- Developing and maintaining, in a leadership capacity, productive strategic local, national and international relationships, collaborations and networks with a range of stakeholders including industry, government and other external organisations.
- Any other responsibilities in line with the level of the position as assigned by the Supervisor and/or the University.

*A National Police Certificate which is satisfactory to the University will be required by Flinders University before the successful applicant can commence in this position.*

*An up to date COVID-19 vaccination may be required as a condition of employment, in accordance with the Flinders University [COVID-19 Vaccination Policy \(2022\)](#). If required, any offer of employment will be subject to the successful candidate presenting their COVID-19 Digital Certificate as evidence of vaccination or showing evidence of a valid medical exemption, where relevant.*

#### **KEY POSITION CAPABILITIES**

- Completion of a PhD or equivalent in Bioinformatics
- Demonstrated experience with analysis of high-throughput “omics” data
- Proven skills in script writing in Perl/Python and R (or similar) for data manipulation and bioinformatics analysis in a UNIX environment.
- Previous demonstrated experience delivering project targets in a timely manner.
- High level understanding of molecular biology and genomics technologies undertaken within FHMRI biplatforms/core facilities and research laboratories.
- Evidence of an outstanding research track record (for career stage) in an area aligned with research strengths in Bioinformatics including evidence of sustained high-quality publications (ideally with corresponding authorship) and attraction of competitive grants.
- Demonstrated track record of supervision of honours and higher degree students to successful completion.
- Proven ability to develop and maintain effective research collaborations within the university and wider community including with industry, government and other organisations.
- Previous experience in using independent judgement and initiative, under minimal supervision, to manage, organise and coordinate activities required for the functioning of a research-intensive unit.
- Demonstrated excellent oral and written communication skills and interpersonal skills, including the demonstrated ability to establish effective relationships with staff, students and industry nationally and/or internationally.
- Demonstrated ability to mentor less experienced College Staff.