## Position Description

<table>
<thead>
<tr>
<th>College/Division:</th>
<th>ANU College of Health &amp; Medicine</th>
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</thead>
<tbody>
<tr>
<td>Faculty/School/Centre:</td>
<td>John Curtin School of Medical Research</td>
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<tr>
<td>Department/Unit:</td>
<td>Division of Genome Sciences and Cancer</td>
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<tr>
<td>Position Title:</td>
<td>Postdoctoral /Research Fellow</td>
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<tr>
<td>Classification:</td>
<td>Academic Level A/B</td>
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<td>Position No:</td>
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<tr>
<td>Responsible to:</td>
<td>Dr Tanya Soboleva, John Curtin School of Medical Research</td>
</tr>
<tr>
<td>Number of positions that report to this role:</td>
<td>1</td>
</tr>
<tr>
<td>Delegation(s) Assigned:</td>
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### PURPOSE STATEMENT:

ANU College of Health and Medicine (CHM) has an international reputation for research and education relevant to the health and well-being of the population of Australia, as well as that of the developing world. This is achieved through discovery research, applied research in health service settings, research-led teaching in health and medical sciences, and the translation of research findings into practice and policy. The ANU College of Health and Medicine comprises the Research School of Psychology, the ANU Medical School, the John Curtin School of Medical Research and the Research School of Population Health. These schools work together to deliver world-class research and education across the spectrum of medicine and health-related fields, working in partnership with the health sector at local, national and international levels.

Research in the Division of Genome Science and Cancer of the John Curtin School of Medical Research combines advanced experimental and computational approaches with sophisticated genetic models to connect genotype with phenotype, understand mechanisms of cell differentiation, development or pathology, and generate novel therapies for cancer and other diseases.

The Postdoctoral/Research Fellow is expected to undertake work in all three areas of academic activity – research, education and service (including outreach). For this position, 90% of the activity is expected to be dedicated to research. The Postdoctoral/Research Fellow will also be required to supervise or assist in the supervision of students and laboratory personnel and contribute cooperatively to the overall intellectual life of the School, College and University.

### POSITION DIMENSION AND RELATIONSHIPS:

The Postdoctoral Fellow will be an important member of the laboratory led by Dr Tanya Soboleva. The laboratory is a part of the John Curtin School of Medical Research. The Postdoctoral Fellow will report to Dr Soboleva and liaise with members of the Department, JCSMR and University staff, consultants and external stakeholders.

The Research Fellow will be a second senior member of the Germ Cell and Cancer Epigenetics group at the John Curtin School of Medical Research, accountable to Dr Tanya Soboleva, the leader of the group. The Research Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within group as well as with all academic and professional School and College staff, students and honorary appointees. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

### Role Statement:

In their role as an Academic Level A the Postdoctoral Fellow is expected to:

1. Undertake research in the area of cancer molecular biology in order to develop new methodological approaches and enquire a novel fundamental knowledge by targeting histone proteins and inhibiting their function.
2. Carry out all experimental laboratory work that is required. Maintain excellent and accurate record keeping and data management.
3. Work efficiently and independently as well as a part of the team on the projects that are subject to deadlines.
4. Develop pilot research projects and assist in supervision and training of students and other laboratory staff members. Aiding other lab members in preparation of reports and presentations.
5. Oversee laboratory team members in bench work and sample and data management, advise where appropriate on laboratory protocols and laboratory safety.
6. Prepare drafts for publication of original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national level.
7. Maintain high academic standards in all research endeavours.
8. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
9. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
10. Other duties as required that are consistent with the classification of the position.

In their role as an Academic Level B the Research Fellow is expected to:
1. Undertake research in the area of cancer molecular biology in order to develop new methodological approaches and enquire a novel fundamental knowledge by targeting histone proteins and inhibiting their function.
2. Drive the project independently but in coordination with the group leader via regular weekly/fortnightly meetings.
3. Carry out all experimental laboratory work that is required to achieve the aims of the project. Maintain excellent and accurate record keeping and data management.
4. Work efficiently and independently as well as a part of the team on the projects that are subject to deadlines.
5. Develop pilot research projects and assist in supervision and training of students and other laboratory staff members. Aid other lab members in preparation of reports and presentations.
6. Oversee laboratory team members in bench work and sample and data management, advise where appropriate on laboratory protocols and laboratory safety.
7. Be an active contributor to preparation of publication of original and innovative results in refereed journals, present research at academic seminars and at national and international conferences and collaborate with other researchers at a national and/or international level.
8. Help with the preparation and submission of research proposals to external funding bodies.
9. Maintain high academic standards in all research-related endeavours.
10. Actively contribute to some aspects of the operation of the School. This may include representation through committee memberships.
11. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
12. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
13. Other duties as required that are consistent with the classification of the position.

**SELECTION CRITERIA**

_for Academic Level A the Postdoctoral Fellow: (Address all selection criteria, point by point, with detailed address of criteria 3 and 4; Please note that applications that do not address specific selection criteria will not be considered):_

1. A PhD (or awarding of a PhD within six months of appointment commencement) in Molecular and Cellular Biology, Biochemistry or Genetics, or equivalent qualifications and experience in a related area.
2. A track record of independent research in the field of cellular and molecular biology/biochemistry/genetics as evidenced by publications in peer-reviewed journals and conference presentations.
3. Proven evidence of independent experimental skills in the following:
   a. Viral transduction and transfection of mammalian cell lines for the purpose of knock-down or overexpression of proteins
   b. Molecular cloning (i.e., for the purpose of gene overexpression, vector modification, mutagenesis)
   c. Protein expression and purification from bacterial cultures
   d. Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP, co-IP, or chromatin -IP); protein co-localisation analysis (i.e., FRET/Bio-ID)
   e. HTP screening of small molecule inhibitors/siRNA
   f. Preparation of samples for quantitative or qualitative mas-spectrometry
   g. Protein interaction analyses (i.e., Kd/Ka measurements)
   h. Preparation of samples for NGS (i.e., RNA-seq, ATAC-seq, ChiP-seq)
   i. Bioinformatic skills
4. Experience in either of the following research areas would be an advantage:
   a. intracellular delivery of active molecules
   b. Identification of writers/readers of post-translational protein modifications and identification of their inhibitors
   c. Deciphering of any cellular molecular mechanisms.
5. Demonstrated ability to drive a project largely independently and deliver high-quality results within a deadline.
6. Demonstrated ability to assist in the supervision of students working on research projects.
7. Demonstrated ability to work as part of a team and to meet deadlines.
8. A high standard of written skills as evidenced by the ability to prepare and present results for reports and for publications.
9. Demonstrated experience in assessing academic literature and using electronic databases and other resources for research purposes.
10. Experience in developing and implementing standard operating procedures and protocols in a laboratory research environment.
11. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
12. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

SELECTION CRITERIA

for Academic Level B the Research Fellow: (Address all selection criteria, point by point, with detailed address of criteria 4 and 5; Please note that applications that do not address specific selection criteria will not be considered):

1. A PhD in Molecular and Cellular Biology, Biochemistry or Genetics, or equivalent qualifications
2. Demonstrated uninterrupted experience in related areas for the minimum of 4 years post PhD award (excluding interruptions related to disease or carer responsibilities).
3. Excellent track record of independent research in the field of Cellular and Molecular biology, Epigenetics or Biochemistry as evidenced by publications in peer-reviewed journals, conference presentations and awards.
4. Proven evidence of independent experimental skills in the following:
   a. Viral transduction and transfection of mammalian cell lines for the purpose of knock-down or overexpression of proteins
   b. Molecular cloning (i.e., for the purpose of gene overexpression, vector modification, mutagenesis)
   c. Protein expression and purification from bacterial cultures
   d. Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP, co-IP, or chromatin -IP); protein co-localisation analysis (i.e., FRET/Bio-ID)
   Demonstrated experience in the following skills would be an advantage:
   e. HTP screening of small molecule inhibitors/siRNA
   f. Preparation of samples for quantitative or qualitative mass-spectrometry
   g. Protein interaction analyses (i.e., Kd/Ka measurements)
   h. Preparation of samples for NGS (i.e., RNA-seq, ATAC-seq, ChIP-seq)
   i. Bioinformatic skills
5. Experience in either of the following research areas would be an advantage:
   a. intracellular delivery of active molecules
   b. identification of writers/readers of post-translational protein modifications and identification of their inhibitors
   c. deciphering of any cellular molecular mechanisms.
6. Demonstrated ability to drive a project independently and deliver high-quality results within a deadline.
7. Demonstrated ability to supervise and graduate high quality PhD/Masters research students
8. Demonstrated ability to work as part of a team, contributing to team management and meeting deadlines.
9. A high standard of written skills as evidenced by the ability to prepare and present results for publications in peer-reviewed journals.
10. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
11. Demonstrated experience in assessing academic literature and using electronic databases and other resources for research purposes.
12. Experience in developing and implementing standard operating procedures and protocols in a laboratory research environment.
13. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Delegate Signature: __________________________ Date: __________________________
Printed Name: __________________________ Position: __________________________

References:

Academic Minimum Standards