The mission of St Vincent’s Institute (SVI) is to carry out the highest quality laboratory based biomedical research, in order to make discoveries that will improve the health of the community by prevention or better treatment of common diseases that cause premature death or reduced quality of life. The mission is based on the values of excellence, ethics, innovation, creativity, collaboration, teamwork, individual drive, persistence and integrity.

Job Title: Research Officer (Postdoctoral Fellow)

Location: Genomics and Immunology Laboratory

Reports to: Dr Mark Chong

Hours: Full time

MAIN JOB PURPOSE

The Genomics and Immunology Laboratory studies the development of immune cells, with a particular emphasis on dissecting the role of gene regulatory mechanisms and understanding how dysregulation in these processes contribute to immunologic diseases, such as autoimmunity and cancer. In addition, the lab is interested in understanding the regulation of the microRNA machinery and the implications on basic biology.

The roles of a Research Officer are: 1) to conduct research on a defined project(s) within the overall interests of the laboratory; 2) to assist with the supervision of students; 3) to contribute to the overall maintenance of the laboratory, to 4) to participate associated scientific activities, including institutional seminars, committees, etc.

KEY RESPONSIBILITIES

1. Manage an independent project and conduct experiments.
   - Apply a range of techniques and technologies. These may include, but not limited to:
   - Immunologic characterisation of genetic mouse models by flow cytometry and other approaches
   - In vitro analysis of immune cell development and function
   - Next generation sequencing approaches to study DNA sequence, chromatin, RNA transcription, RNA structure, etc
   - Cloning, construct design and assembly of transgenes, targeting vectors, expression vectors, etc
   - RNA/DNA analyses by PCR, Southern blotting, etc
   - Fluorescence microscopic analyses of tissues, cells, proteins, RNA, etc
   - Protein purification and proteomic technologies, including SILAC and mass-spectrometry
   - Maintain knowledge of relevant scientific literature, techniques/technologies and issues
   - Research is undertaken in a transparent and documented manner, in accordance with the Australian Code for Responsible Conduct in Research and SV’s Research and Governance guidelines

Performance measures
- Experiments are designed carefully and performed competently, efficiently and accurately
- Experiments are completed with the responsible management of resources and consumables
- Knowledge is kept up to date through regular reading of literature to support the experimental aspects of the research and to contribute to defining new directions

2. Contribution to laboratory publications:
   - Analysis of data from experiments
   - Assembly of data into figures for manuscripts and grant applications
   - Writing of manuscripts for publication in consultation with Dr Chong
3. Contribution to laboratory administration/maintenance:
- Maintenance of detailed laboratory notebooks, digital data servers and other records
- Maintenance of biologic collections, such as plasmids, cell lines, antibodies, compounds, etc
- Preparation of common laboratory reagents
- Assist with the stocking of external laboratory supplies if needed
- Assist with the management/genotyping of animals being employed for the project

Performance measures:
- Laboratory notebooks and digital records are up to date
- Laboratory collections are well-maintained
- Laboratory supplies and animal colony are well-maintained

4. Presentation at laboratory and unit meetings:
- Attendance and participation at regulator laboratory and unit meetings
- Preparation of data and presentation at these meetings

Performance measures:
- Active participation and professional contribution at all meetings

5. Supervision and teamwork
- Contribute to the mentoring/supervision of undergraduate and/or graduate students
- Training of laboratory assistants and students in specific techniques
- Positive contribution to the effectiveness of, and positive working relationships within, the laboratory group.
- Working with external collaborators.

Performance measures:
- Strong, harmonious and effective working relationships are developed and maintained with other members of the laboratory and collaborators within SVI and at other institutions
- Knowledge and expertise is shared with team members

6. Participation in activities within the institute and broader scientific community:
- Regular attendance and participation in the weekly institute seminars
- Engagement with the SVI Postdoctoral Association
- Engagement with the Australasian Society for Immunology and/or Australian Society for Biochemistry and Molecular Biology
- Attendance and presentation (when the project is at an acceptably mature stage) at the national scientific meetings of the above societies as well as other local symposia/meetings

Performance measures:
- Active participation with the SVI Postdoctoral Association and relevant scientific societies
- Presentation of seminars

7. Occupational health and safety
- SVI has a duty of care to all employees to provide a safe work environment. All employees must also take responsibility for their own safety, and that of fellow workmates, and should apply a common sense approach to work methods to minimize risk to themselves and others.

Performance measures:
- Adherence to SVI Occupational Health & Safety guidelines, including the wearing of personal protective equipment as provided
- Use equipment in compliance with manufacturers’ or relevant guidelines
SELECTION CRITERIA

QUALIFICATION, SKILLS, EXPERIENCE

- PhD (or equivalent) in biomedical science
- Experience working in a medical research laboratory environment with an immunology or molecular focus.
- Proficiency in a wide range of immunology, molecular biology, genomic and/or proteomic techniques and technologies.

PERSONAL ATTRIBUTES

- Professional approach, including effective project management skills
- Excellent interpersonal and communication (oral and written) skills
- Ability to work within a team cooperatively and actively contribute to team outputs
- Excellent record keeping and organisational skills
- Ability to handle multiple projects simultaneously
- Ability to work independently, but able to exercise appropriate judgement for advice and support
- Punctual and reliable

I understand and agree to undertake the requirements of the role, as described above:

Incumbent Name........................................Signature........................................ Date........