



**John Pimanda BSc MBBS (Hons 1) PhD FRACP, FRCPA**  
Professor of Medicine, Prince of Wales Hospital  
Director, Adult Cancer Program and Head, Stem Cell Group  
Lowy Cancer Research Centre  
School of Medical Sciences  
UNSW Sydney  
NSW 2052, Australia

**LOWY  
CANCER  
RESEARCH  
CENTRE**

Post-doctoral Research Fellow- **single cell computational biology**

### **The Opportunity**

- 1FTE, Fixed-term opportunity initially for 12 months with prospects for extension.
- Academic Level A Step 6: \$100K (+ 9.5% superannuation & leave loading)
- Sydney, Australia based
- Full working rights will be required for the duration of the contract.

The School of Medical Sciences (SoMS) is the largest School within UNSW Medicine, and one of the largest at UNSW. The School is based largely within the Wallace Wurth (Medicine) Building on the Kensington campus, but also includes the Lowy Cancer Research Centre. The candidate will be based in the Stem Cell Group, Adult Cancer Program, Lowy Cancer Research Centre and investigate the molecular identity of healthy and diseased blood stem cells and tissues that support their development with a view to translating findings to benefit blood cancer therapy and regenerative medicine.

The Research Fellow will demonstrate the ability to conduct high-quality research in computational biology. The candidate will have the capacity to work creatively and independently- generating hypotheses, exploring data, and building machine learning models of single cell multi-omics, with an emphasis on cell reprogramming and cancer.

The ideal candidate will combine a solid background in single cell computational analytics (e.g., data analysis, machine learning, graph-based single cell representations) with a strong drive to work with experimentalists to translate algorithmic advances into **novel and interpretable biomedical discoveries** across a rich and diverse range of topics that include- blood cancers (Unnikrishnan et al *Cell Reports* 2017, Anande et al *Clinical Cancer Research* 2020), regenerative medicine and developmental biology (Yeola et al *Science Advances* 2021, Tabula Muris Consortium *Nature* 2020, *Nature* 2018), viral infections (Domingo-Gonzalez\*, Zanini\* et al *Elife* 2020, Zanini et al *Elife* 2018) and method development (Faridani et al *Nature Biotechnology* 2016, Hagemann-Jensen et al *Nature Biotechnology* 2020, Zanini et al *Sci Rep* 2020). They will show a strong drive to interact with, advise and when necessary learn from experimentalists.

The role is based in the Stem Cell Group, Adult Cancer Program, Lowy Cancer Research Centre, and reports to Dr Fabio Zanini, Senior Research Fellow and Laboratory Head (data driven biomedicine; <http://fabilab.org>) assisting Professor John Pimanda, Head, Stem Cell

Group and Director of the Adult Cancer Program and Dr Omid Faridani, Laboratory Head (Lowy Cancer Research Centre and Garvan Institute of Medical Research).

### **Skills and Experience**

- A relevant Bachelor's degree in Science with Honours and Doctorate in Philosophy
- Experience with single cell data analysis
- Proficiency with at least one programming language, preferably Python.
- Passion for biological systems- their complexity, redundancy, and subtleties
- Experience working with a range of computer systems and applications.
- Demonstrated superior interpersonal communication skills to initiate and maintain effective stakeholder relationships whilst exercising discretion and confidentiality.
- Excellent time management skills, with a demonstrated ability to respond to changing priorities, manage multiple tasks and meet competing deadlines by using judgement and initiative.
- Excellent written and verbal communication skills, with a high level of attention to detail and the ability to liaise effectively with a range of stakeholders.
- Demonstrated ability to work collaboratively and productively within a team, but also to take initiative and work independently while managing competing demands.
- An understanding of and commitment to UNSW's aims, objectives, and values in action, together with relevant policies and guidelines.
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

**Please apply online - applications will not be accepted if sent to the contact listed.**

### **Contact (For job related queries only):**

Dr Fabio Zanini                      E: [fabio.zanini@unsw.edu.au](mailto:fabio.zanini@unsw.edu.au)

**Applications close:** to be advised

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