



## Post-Doctoral Research Scientist POSITION DESCRIPTION

<b>Research Group:</b>	Gastrointestinal Viral Oncology Group
<b>Status:</b>	Full-time, one year appointment, subject to a satisfactory probation review. An extension is possible, subject to funding
<b>Salary:</b>	\$81,000 per annum. Salary packaging is available
<b>Reports to:</b>	In the first instance, to Professor Shan Rajendra and Associate Professor Greg Kaplan and for non-clinical matters to the Institute's Human Resources Manager
<b>Background</b>	
<p>The <b>Ingham Institute for Applied Medical Research</b> (the Institute) is a not-for-profit organisation located in Sydney's South West that conducts world-class medical that is rooted in and driven by the needs of the local community and wider Australia.</p> <p>The Institute is the pre-eminent research institute for South Western Sydney. It is home to 360 staff, over 40 research groups, and five (5) research streams who are committed to the vision of Inspiring Health and Transforming Care.</p> <p>The Institute is integral to a unique collaboration with the South Western Sydney Local Health District, Western Sydney University and the UNSW Sydney. Through these collaborations the Ingham Institute is working to radically transform health outcomes both locally and globally.</p> <p>The Gastrointestinal Viral Oncology (GVO) Group broadly focuses on infectious causes of gastro-intestinal cancer with a special emphasis on human papilloma virus (HPV) and Barrett's oesophagus/oesophageal adenocarcinoma. Another new focus of the Group is cancer genetics with or without reference to HPV.</p> <p>The GVO Group were the first in the world to hypothesize and discover that a subset of Barrett' dysplasia and oesophageal adenocarcinoma is human papillomavirus driven with publications in high impact-factor journals.</p> <p>The Group is seeking a Post-Doctoral Research Scientist to further enhance and strengthen its position as world leaders in exploring infectious causes of Barrett's dysplasia and oesophageal cancer.</p>	
<b>Purpose of Position</b>	
<p>The Post-Doctoral Scientist will run the laboratory operations of the Gastro-Intestinal Viral Oncology Group based at the Institute that investigate the role of HPV (using molecular techniques) in oesophageal/gastric tissue and blood.</p> <p>In addition, the candidate will work in cancer genetics involving library preparation, sequencing and interpreting the data with the aid of collaborators skilled in bioinformatics.</p>	

The successful applicant will supervise the Research Assistant and / or PhD candidate/s and write research manuscripts under the guidance of Professor Rajendra and present research findings at seminars and conferences locally, nationally and internationally.

### **Criteria**

#### **ESSENTIAL:**

- A PhD in a discipline that is relevant to the purpose of the position
- Strong organisational skills
- Excellent organisational skills, including the ability to multi- task and meet deadlines
- Excellent communication skills with the ability to communicate results to laboratory colleagues
- High level of accuracy and attention to detail with meticulous record-keeping skills
- Demonstrated advanced writing skills, which will be required for writing laboratory procedures, reports, parts of research papers and Grant applications
- Experience and proficiency with molecular biology techniques, nucleic acid extraction and PCR techniques and with immuno-histochemical as well as in-situ hybridization techniques
- Ability to work with minimal supervision to achieve objectives within a team environment
- Ability to work within a laboratory environment
- Experience in designing and trouble-shooting experiments
- Knowledge of OHS responsibilities and commitment to attending relevant OHS training.

#### **DESIRABLE:**

- Experience in virology (preferably HPV) and or cancer genetics.

Key Accountabilities	Key Performance Indicators
RNA immunohistochemistry including in-situ hybridization	RNA immunohistochemistry including in-situ hybridization is completed as required
Prepare and pretreat FFPE samples for RNAscope	FFPE samples for RNAscope are prepared and pretreated as required
PBMC isolation via Ficcol density gradient separation	Isolation via Ficcol density gradient separation is achieved
Quantitative and qualitative PCR	Successful DNA amplification is achieved
Perform DNA extraction and quantification of tissue and blood samples, frozen and fresh	Effectively performs DNA extraction and quantification of tissue and blood samples, frozen and fresh
DNA/RNA library preparation	Achieves DNA/RNA library preparation for sequencing
Next Generation sequencing	Outsources this task appropriately
Viral Load and integration of HPV measurement in oesophageal tissue	Successfully detects viral copy numbers and successfully classifies integrated, episomal or mixed tissues
Process blood and tissue samples and input into database	<ul style="list-style-type: none"> <li>▪ Blood and tissue samples are processed and input into database in a timely and effective manner;</li> <li>▪ The database is up-to-date at all times.</li> </ul>
Writing manuscripts and submission for publication	Publications are well written and successfully submitted for publication
Develop and evaluate new approaches and pro-actively introduce improvements to the offerings of the GI Viral Oncology Group	New approaches are developed, evaluated and adopted that improve operations of the GI Viral Oncology Group
Work and communicate closely with other group and institute colleagues and support interaction with our Oncology Research Unit partners	Mutually beneficial collaborations are evident

Present research results and discuss methods at weekly/monthly group meetings	Effectively presents research results and discusses methods at weekly/monthly group meetings
Comply with relevant State and Federal Privacy Legislation for the access, use, handling and storage of health data.	<ul style="list-style-type: none"> <li>▪ Adheres to legislative requirements</li> <li>▪ Complies with legislative requirements regarding access and reporting.</li> </ul>
Understand and uphold WHS requirements and responsibilities.	<ul style="list-style-type: none"> <li>▪ Complies with the Institute's WH&amp;S Statement and WH&amp;S Policy and Procedures</li> <li>▪ Is always mindful of workplace safety as it pertains to self.</li> <li>▪ Reports all accidents within 24 hours</li> <li>▪ Makes proper use of relevant safety equipment</li> <li>▪ Attends training programs as directed.</li> </ul>
Work as an Institute team member.	<ul style="list-style-type: none"> <li>▪ Is an effective team member.</li> <li>▪ Attends Institute staff meetings and, where applicable, shares information available at these meetings with unit staff.</li> <li>▪ Complies with Ingham Institute Code of Conduct.</li> <li>▪ Contributes to the research culture at Ingham Institute.</li> <li>▪ Participates in Ingham Institute supporting activities.</li> </ul>