



## POSITION DESCRIPTION

<b>Title:</b>	<b>Research Assistant</b>
<b>Area/Group:</b>	<b>Cancer Drug Discovery</b>
<b>Reporting to:</b>	<b>Dr Ashwini Chand</b>
<b>Incumbent:</b>	<b>New position</b>
<b>Date Last Updated:</b>	<b>January 2012</b>

### 1. About Prince Henry's Institute

Prince Henry's Institute is a NH&MRC accredited, not-for-profit, independent medical research institute located at Monash Medical Centre in Clayton, Victoria, Australia. The Institute employs approximately 100 research staff, 20 administration/support staff and 50 undergraduate and postgraduate students.

Our research involves investigation in the fields of reproductive health, hormone action, sex determination, cancer, diabetes, obesity and cardiovascular disease. The Institute works to improve the quality of life by finding and improving methods for prevention, diagnosis and treatment of a variety of health conditions.

### 2. Purpose of Position

The position is located within the Cancer Drug Discovery Laboratory at Prince Henry's Institute, reporting to Dr Ashwini Chand. The position will provide technical support for a defined breast cancer research project.

### 3. Accountabilities and Responsibilities

#### Primary Responsibilities

Provide general assistance with a detailed research project

Competently plan and conduct a range of scientific experiments and techniques under the general direction of senior colleagues including:

#### (1) Molecular Biology Techniques

- DNA, RNA preparation
- agarose gel electrophoresis
- PCR and RT-PCR, DNA cloning
- Transcriptional profiling by microarray and qPCR
- Protein expression and purification
- Cloning, production and transduction of plasmid vectors

#### (2) Cell Culture Techniques

- Transfections
- Mammalian and primary human mammary cell cultures
- Biological assays
- PC2 training

#### (3) Animal Work (mice and rats)

- Collection of mammary tissue, fixation and analysis of protein and RNA
- Dissection and preparation of animal tissues for morphological, histological, immunocytochemical and biochemical analysis
- Routine monitoring of animal health according to ethical guidelines

#### (4) Protein characterisation

- SDS-PAGE and Western blot analysis
- Immunohistochemistry/immunocytochemistry with fluorescence and

- light microscopy endpoints
- Immunoprecipitation

### **General Research Responsibilities**

Conduct routine experiments autonomously and as part of a team  
Conduct day to day planning and execution of experiments and provide research planning advice in relation to the project and work area  
Contribute to the preparation of data for publication  
Keep detailed and accurate records of experimental procedure and outcomes  
Provide accurate analysis and interpretation of experimental results  
Provide regular reporting and discussion of experimental outcomes as they occur  
Survey literature for scientific and methodological advances  
Instruct and assist students, peers, new and visiting staff members in lab procedures and specific techniques

### **General Laboratory Responsibilities**

Competently operate a range of scientific equipment, computer spreadsheet, graphical and statistical analysis programs  
Attend and contribute to research team meetings  
Ensure all laboratory data in area(s) of responsibility is maintained daily, accurately, legibly and securely according to PHI Policy & Procedures  
Contribute to general housekeeping including preparation of specific laboratory reagents, ordering supplies and restocking consumables  
Contribute to overall organisation of laboratory including maintenance and cleanliness of laboratory space, equipment and auxiliary rooms  
Liaise with external suppliers of goods and services as appropriate  
General Involvement with Institute activities and committees  
Actively practice and promote all required safety, ethical and 'good practice' procedures

### **Compliance and Legislative Knowledge**

Comply with PHI policies and procedures and relevant appropriate legislation  
Meet Occupational Safety and Health, anti-discrimination, equal opportunity and other legislative requirements in accordance with the parameters of the position.

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## 4. **Working Relationships**

### **Internal**

Dr Ashwini Chand  
Dr Colin Clyne - Group leader  
Cancer Drug Discovery and Metabolism and Cancer staff  
Other PHI scientific and administration staff

### **External**

Collaborators from outside institutes

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## 5. **Selection Criteria**

### **Qualifications**

#### **Essential**

Honours degree in Biochemistry / Molecular Biology (or related discipline)

### **Knowledge & Skills**

#### **Essential**

Ability to develop new techniques in the laboratory, troubleshoot and interpret data  
Strong computer skills, particularly statistical and assay analysis and MS Office suite  
Excellent communication skills including well developed written and oral presentation skills, interpersonal communication skills and effective active listening skills

General knowledge and understanding of animal and human ethics  
 Excellent project management skills  
 Developed organizational skills and an ability to ensure well documented systems are developed and implemented  
 Demonstrated innovative problem solving and analytical skills  
 Accurate record keeping skills in accordance with good laboratory practice

**Experience**

Essential

Experience with a variety of scientific techniques including:

- DNA, RNA preparation
- agarose gel electrophoresis
- PCR and RT-PCR, DNA cloning
- Transcriptional profiling by microarray and qPCR
- Protein expression and purification
- General cell culture techniques
- Animal handling
- PC2 experience

Experience with standard computerised data entry and processing

Demonstrated research productivity at a high level

Previous experience in a medical or scientific laboratory environment and a proficiency with general laboratory operations

**Personal Qualities**

Essential

Demonstrated ability to work under general direction with independence, as part of a team and in collaboration with others

Meticulous approach to experimental work, data collection and interpretation

Highly motivated and flexible with a practical, hands-on approach

Ability to manage time well, without direct supervision

Willingness to work with laboratory animals

Highly ethical, credible and with strong integrity

**Endorsement**

<b>Name: (Employee)</b>			
<b>Signed:</b>		<b>Date:</b>	____ / ____ / ____
<b>Name: (Supervisor)</b>			
<b>Signed:</b>		<b>Date:</b>	
<b>Name: (HR Officer)</b>			
<b>Signed:</b>		<b>Date:</b>	____ / ____ / ____