

# RUN DESCRIPTION

<b>POSITION:</b>	Registrar
<b>DEPARTMENT:</b>	Pathology Genetics
<b>PLACE OF WORK:</b>	Auckland City Hospital
<b>RESPONSIBLE TO:</b>	Clinical Director and Manager, through a nominated Consultant/Physician.
<b>FUNCTIONAL RELATIONSHIPS:</b>	Healthcare consumer, Hospital and community based healthcare workers
<b>PRIMARY OBJECTIVE:</b>	To facilitate the management of patients under the care of the Service.
<b>RUN RECOGNITION:</b>	This run is recognised by the RCPA as a training position for specialist qualification
<b>RUN PERIOD:</b>	36 months

## Section 1: Registrar's Responsibilities

<i>Area</i>	<i>Responsibilities</i>
<b>General</b>	<p>Registering, testing and reporting, under appropriate supervision, the referrals for genetic analysis that are received by the Diagnostic Genetics section of LabPLUS, Auckland City Hospital</p> <p>Receive training, and become competent, in all aspects of genetic analysis techniques undertaken by staff of the Diagnostic Genetics section of LabPLUS, Auckland City Hospital.</p> <p>Receive training, and become competent, in reporting genetic test results.</p>
<b>On-Duty</b>	<p><b>Knowledge and Experience</b></p> <ul style="list-style-type: none"> <li>• Study the principles of basic molecular genetic techniques, as well as more advanced technologies, and how they apply to clinical situations.</li> <li>• Study the complexities of genotype:phenotype correlations in the context of multi-</li> </ul>

Area	Responsibilities
	<p>gene defects.</p> <ul style="list-style-type: none"> <li>• Study the identification of DNA variants and be aware how they can be used to determine disease risk.</li> <li>• Understand and apply molecular genetic techniques in a diagnostic setting.</li> <li>• Liaise with Clinical geneticists and other clinicians in analysing cases and suggesting approaches for confirmation of a clinical diagnosis.</li> <li>• Present case studies and diagnostic developments of new tests to address a clinical need.</li> </ul> <p><b>Molecular Genetic Skills</b></p> <ul style="list-style-type: none"> <li>• Prepare nucleic acids from a variety of human tissues to an appropriate purity standard.</li> <li>• Design oligonucleotide primers to ensure PCR sensitivity and specificity.</li> <li>• Establish PCR protocols for differing applications (singleplex and multiplex).</li> <li>• Perform fluorescence-based amplification for subsequent sizing purposes.</li> <li>• Perform dosage analysis using custom array-based platforms.</li> <li>• Perform hemizyosity studies using PCR amplification of microsatellite loci.</li> <li>• Perform sequencing of amplicons</li> <li>• Perform screening for known mutations, and full gene screens.</li> <li>• Perform array-based analysis of whole genomes and targeted genes in terms of dosage and LOH studies.</li> <li>• Isolation of RNA and conversion to cDNA for mutation analysis.</li> <li>• Perform massively parallel sequencing reactions and bioinformatic analysis of data.</li> <li>• Master all the basic aspects relating to the pre-analytical and analytical phase of a molecular genetics laboratory.</li> <li>• Apply basic aspects to advance molecular genetics-based testing to address clinical need.</li> <li>• Undertake necessary developmental work.</li> </ul> <p><b>Clinical Consultation</b></p> <ul style="list-style-type: none"> <li>• Advise clinicians on relevant samples and preservatives required for specific tests.</li> <li>• Advise clinicians on requirements for duplicate testing where it is warranted, including the need for positive and negative controls.</li> <li>• Request provision of pedigree information for familial conditions.</li> <li>• Maintain patient confidentiality and privacy, as well as safety, while performing sample collections and dealing with test results</li> <li>• Master all aspects of dealing with patients and clinicians in an ethically sound and culturally sensitive manner.</li> <li>• Monitor patient outcomes in consultation with clinicians.</li> </ul> <p><b>Product validation, analysis, reporting and storage of laboratory data</b></p> <ul style="list-style-type: none"> <li>• Examine issues surrounding reagent usage, waste disposal, costs and record keeping.</li> <li>• Analyse, interpret, record, report and compile tests results.</li> <li>• Undertake trouble shooting of tests.</li> <li>• Design, trouble shoot and validate in-house tests.</li> <li>• Analyse, interpret, record, report, compile and check quantitative and qualitative test results in the context of the clinical question.</li> <li>• Monitor workflow within the laboratory to ensure that samples are analysed in a timely fashion.</li> <li>• Review QA/QC with senior scientists.</li> <li>• Familiarity with all aspects of validation and regulatory compliance.</li> <li>• Participation in laboratory testing programs (in-house and external QA).</li> </ul> <p><b>Academic contribution and teaching</b></p>

Area	Responsibilities
	<ul style="list-style-type: none"> <li>• Prepare clinical cases for peer group presentation.</li> <li>• Review clinical cases for peer group presentation</li> <li>• Contribute to the education and training of medical students, postgraduate medical trainees and other health professionals</li> <li>• Demonstrate ability to justify decisions</li> <li>• Demonstrate an awareness of the latest advances in pathology and have an up to date knowledge of medical and pathological literature in journals, books, conference presentations and electronic media</li> <li>• Contribute to the education and teaching of medical laboratory scientists, medical students, postgraduate medical trainees and other health professionals</li> </ul>
Administration	<p><b>Obtain informed consent for procedures within the framework of the Medical Council guidelines which state:</b></p> <ol style="list-style-type: none"> <li>1. <i>“The practitioner who is providing treatment is responsible for obtaining informed consent beforehand for their patient. The Medical Council believes that the responsibility for obtaining consent always lies with the consultant – as the one performing the procedure, they must ensure the necessary information is communicated and discussed.”</i></li> <li>2. <i>“Council believes that obtaining informed consent is a skill best learned by the house surgeon observing consultants and experienced registrars in the clinical setting. Probationers should not take informed consent where they do not feel competent to do so.”</i></li> </ol> <p><b>If absent due to unexpected circumstances (e.g. health, other), contact the RMO Support Unit or Duty Manager directly as well as the Consultant to which the registrar is clinically responsible in the absent duty</b></p> <p><b>As an RMO working at ADHB you will be provided with a Concerto login and ADHB email account which will be used for all work related communication. It is your responsibility to ensure you check this regularly</b></p>

## Section 2: Training and Education

### *Training and Education*

#### **Clinical/Scientific Meetings:**

Registrars are expected to organise and participate in clinical and clinicopathological meetings, in particular regular attendance at:

Cardiology Inherited Disease Group Meeting  
1100 Weekly Tuesdays  
Physiology Meeting Room  
Level 3, Auckland City Hospital

Neurogenetics Meeting  
1230 Fortnightly Tuesdays  
CEC, Level 5, Auckland City Hospital

Paediatric Grand Round  
1300 Weekly Fridays  
CEC, Level 5, Auckland City Hospital

Maternal Fetal Medicine:Genetics MDM  
1300 Monthly Wednesdays  
Level 2, Building 30  
Auckland City Hospital site

Diagnostic Genetics Scientific Meeting  
1300 third Thursday of each month  
Big Rangitoto Room  
LabPLUS, Building 31, Auckland City Hospital site

#### **Education:**

The Registrar needs to identify their educational objectives at 3 monthly intervals. The Registrar's specific objectives should be discussed with the Scientific Director, Diagnostic Genetics, LabPLUS, Auckland City Hospital.

There is a minimum of 2 hours per week medical learning, which includes the weekly tutorial, journal club and pathology session.

## Section 3: Roster

### *Roster*

#### **Hours of Work**

Ordinary Hours: Monday to Friday 0800 – 16:30

The Diagnostic Genetics Section of LabPLUS, Auckland City Hospital, does not routinely have an after-hours service, but staff of the cytogenetics sub-section do have a weekend roster. It is not anticipated that the registrar will not be involved in this roster.

## Section 4: Cover

### *Other Resident and Specialist Cover*

There are no SMOs, House Officers or Registrars in Diagnostic Genetics of LabPLUS, Auckland City Hospital. Diagnostic Genetics is a section of LabPLUS that has approximately 40-odd scientific staff and a part-time Consultant Haematologist. The section comprises teams that fall into the disciplines of cytogenetics, molecular genetics and molecular haematology.

Scientific specialist cover is provided by the Head of Molecular Genetics, Diagnostic Genetics, LabPLUS, Auckland City Hospital, as well as the Director of Diagnostic Genetics, LabPLUS, Auckland City Hospital

## Section 5: Performance appraisal

<i>Registrar</i>	<i>Service</i>
<p>The Registrar will;</p> <ul style="list-style-type: none"> <li>At three monthly intervals, meet with the Scientific Director of the Diagnostic Genetics Section of LabPLUS, Auckland City Hospital, to discuss goals and expectations for the following three months, review and assessment times, and one on one teaching time;</li> <li>Ensure an assessment is completed at the end of each three months that will involve a discussion between the Registrar and the Scientific Director;</li> <li>After any assessment that identifies deficiencies, implement a corrective plan of action in consultation with the Scientific Director;</li> <li>Sight and sign assessment reports provided by the service.</li> </ul>	<p>The service will provide;</p> <ul style="list-style-type: none"> <li>An initial meeting between the Scientific Director of the Diagnostic Genetics Section of LabPLUS and the Registrar to discuss goals and expectations for three monthly intervals, review and assessment times, and one on one teaching time;</li> <li>An interim assessment report on the Registrar eight <b>(8)</b> weeks into the first three months of training, after discussion between the Registrar and the Scientific Director of the Diagnostic Genetics Section of LabPLUS;</li> <li>The opportunity to discuss any deficiencies identified during the attachment. The Scientific Director of the Diagnostic Genetics Section of LabPLUS responsible for the Registrar will bring these to the Registrar's attention, and discuss and implement a plan of action to correct them;</li> <li>An assessment report on the Registrar at the end of each three months, a copy of which is to be sighted and signed by the Registrar.</li> </ul>

## Section 6: Hours and Salary Category

<i>Average Working Hours</i>		<i>Service Commitments</i>
Basic hours (Mon-Fri)	40	The Service, together with the RMO Support Unit will be responsible for the preparation of any Rosters.
Rostered additional hours (inc. nights, weekends & long days)	2.5	
All other unrostered hours	3	
Total hours per week	45.5	

**Salary** The salary for this attachment will be as detailed in an E run category.