



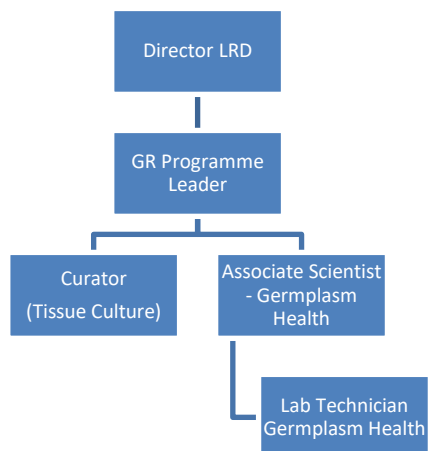
Job Title:	Laboratory Technician – Germplasm Health
Division/Programme and Section/Project (if any):	LRD Genetic Resources / CePaCT
Location:	SPC Narere Campus, Suva, Fiji
Reporting to:	Associate Scientist – Germplasm Health
Number of Direct Reports:	None
Purpose of Role:	To assist the Associate Scientist – Germplasm Health with the functions of the CePaCT’s Molecular Lab and Germplasm Health Unit (GHU) in order to meet a number of key outputs as per recommendations of the Crop Trust Review team which the new CePaCT Business Plan also supports. The position will directly assist the SPC Associate Scientist – Germplasm Health with activities related to germplasm health unit and the molecular facilities to ensure that international standards are maintained.
Date:	<i>July 2024</i>

Organizational Context and Organization Chart

The CePaCT Laboratory includes both Plant Tissue Culture and the Germplasm Health Unit (GHU) – both complementing each other in meeting the Centre’s mission for the effective and efficient conservation and utilization of plant genetic resources to support food and nutritional security in the Pacific.

In a review commissioned by the Global Crop Diversity Trust in August 2017, CePaCT’s GHU work of virus indexing was identified as the key area of the Centre’s operations. The review team also identified a huge backlog of activities contributing to poor ranking in accordance with standard indicators set by the Crop Trust to assess Genebank standards. Thus, a key recommendation from the Crop Trust review report was to recruit well-trained personnel as well as supporting staff to help the Centre improve in this area. This recommendation is also strongly supported by the new CePaCT Business Plan developed under a DFAT grant aimed at supporting SPC’s efforts in upgrading CePaCT to a Centre of Excellence.

The virus Indexing work of CePaCT is the key determining factor for the availability of the Centre’s crops and varieties as well as complying with international Sanitary and Phytosanitary (SPS) standards for the exchange of plant materials on all levels – international, regional and national.



Key Result Areas (KRAs):

The performance requirements of the Key Result Areas are broadly described below

Jobholder is accountable for	Jobholder is successful when
<p>KRA#1 – 35% Virus indexing</p> <ul style="list-style-type: none"> • Virus indexing of CePaCT crop accessions as allocated by the Associate Scientist – Germplasm Health. • Multiplication of clean virus tested crop accessions. • Labelling of CePaCT accessions with the correct health status. • Maintain and update health testing record book and online databases as required by the Associate Scientist – Germplasm Health. • Maintain the hygiene of GHU. • Assist the SPC Associate Scientist – Germplasm Health with other activities related to germplasm health unit to ensure that international standards are maintained. 	<ul style="list-style-type: none"> • At least 100 accessions of the CePaCT collection virus tested as directed by the Associate Scientist – Germplasm Health • At least 8 plantlets per accession produced for both conservation and distribution • All crop accessions are labelled with correct health status • Health testing records are up to date and signed off by the Associate Scientist – Germplasm Health • CePaCT-GHU is neat and clean. • CePaCT-GHU meets FAO Quality management standard (QMS).
<p>KRA#2 – 35% Virus sanitation</p> <ul style="list-style-type: none"> • Carry out virus sanitation research as directed by the Associate Scientist – Germplasm Health. • Virus clean infected materials. 	<ul style="list-style-type: none"> • At least one protocol defined and used for sanitation. • At least 5 accessions virus cleaned.
<p>KRA#3 – 10% DNA fingerprinting</p> <ul style="list-style-type: none"> • Build numbers for the crop accessions for DNA fingerprinting. • Extract DNA from the allocated accessions for DNA fingerprinting. 	<ul style="list-style-type: none"> • At least 100 accessions big enough to permit DNA extraction • DNA of at least 100 accessions extracted and sent for DNA fingerprinting.
<p>KRA#4 20% Support the efficient and effective functions of CePaCT</p> <ul style="list-style-type: none"> • Assist with the conservation and distribution of CePaCT crops upon request. • Monitor virus indexing crops in the PEQ. 	<ul style="list-style-type: none"> • Requests from management and countries met. Crops are effectively conserved, and distributions met.

<ul style="list-style-type: none"> • Assist in the sourcing of equipment's and consumables. • Assist in the up keep of overall CePaCT lab hygiene. • Any other duties assigned by line manager. • Support the field technician with upkeep of screenhouse and field collections. 	<ul style="list-style-type: none"> • Virus indexing crops are growing well in PEQ. • Equipment and consumables are available in timely manner. No delays to CePaCT work unavailability of equipment and consumables. • Low contamination of cultures. • Allocated duties performed to the line manager's satisfaction. • Screenhouse and field collections kept up to date.
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The above performance requirements are provided as a guide only. The precise performance measures for this job will need further discussion between the jobholder and supervisor as part of the performance development process.

Most Challenging Duties Typically Undertaken (Complexity):

<ul style="list-style-type: none"> • Aware of the basic methodologies involved in virus indexing, such as serological and molecular diagnostic. • Ability to keep clear and concise records of their activities, especially for virus indexing. • Ensuring that all germplasm leaving CePaCT is free of pest and diseases. If the GHU fails to deliver on its duties, then CePaCT is likely to lose credibility in its services which may lead to halting of distributions for all germplasm of the affected crop(s).
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Functional Relationships & Relationship Skills:

Key internal and/or external contacts	Nature of the contact most typical
External <ul style="list-style-type: none"> • Member countries 	<ul style="list-style-type: none"> • Virus diagnostic training as requested by Associate Scientist – Germplasm Health.
Internal <ul style="list-style-type: none"> • Library • LRD Colleagues • CePaCT Curator and CePaCT Team 	<ul style="list-style-type: none"> • To obtain research material • For meetings and workshops • Planning and coordination of work

Level of Delegation:

Routine Expenditure Budget: 0 Euro

Budget Sign off Authority without requiring approval from direct supervisor: 0 Euro

Personal Specification:

Qualifications

Essential:	Desirable:
<ul style="list-style-type: none"> • A diploma in science 	<ul style="list-style-type: none"> • Bachelor's in science • Emphasis on Molecular and/or microbiology specialties.

Knowledge/Experience

Essential:	Desirable:
<ul style="list-style-type: none"> • At least 3 years of work experience in a similar setting • A working knowledge of viruses infecting tropical crops and diagnostics. • Good working knowledge of biotechnology lab and equipment. • Excellent writing and communication skills. • Ability to design and implement experiments. 	<ul style="list-style-type: none"> • Plant tissue culture experience • Experience with the latest technologies in virus indexing such as PCR, RT-PCR, ELISA and IC-PCR. • Experience in virus elimination methodologies • Thorough understanding of the role of CePaCT and the Division's efforts for the Centre.

Key Skills/Attributes/Job Specific Competencies

The following levels would typically be expected for the 100% fully effective level:

Expert level	
Advanced level	<ul style="list-style-type: none"> • PCR, RT-PCR, ELISA, IC-PCR, RCA, Symptomatology, Grafting, • Virus elimination methods – meristem culture, chemotherapy, thermotherapy Calibration • Proper operation of GHU lab equipment. • Plant Tissue culture techniques – initiation, sub-culturing, maintenance and acclimatization
Working knowledge	<ul style="list-style-type: none"> • Report writing • Data analysis • Computer literacy
Awareness	<ul style="list-style-type: none"> • Agricultural trends in the Pacific Region • Thorough understanding of regional issues relevant to work activities • SPC staff rules/regulations etc...

Key Behaviours

*All employees are measured against the following **Key Behaviours** as part of Performance Development:*

- Change and Innovation
- Interpersonal Skills
- Teamwork
- Promotion of Equity and Equality
- Judgement
- Building Individual Capacity

Personal Attributes

- High level of professional integrity and ethics
- Friendly demeanor
- Demonstrated high level commitment to customer service

Change to Job Description:

From time to time it may be necessary to consider changes in the job description in response to the changing nature of the work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by SPC. This Job Description may also be reviewed as part of the preparation for performance planning for the annual performance cycle.