

# Forest Molecular Genetics (FMG) Programme



The Forest Molecular Genetics (FMG) Programme focuses on the genetic control of growth and development in fast-growing plantation trees with a view to enhance biomass production and improve wood properties for timber, pulp, paper, and biomaterials production. We also aim to understand molecular disease resistance mechanisms in trees for woody biomass protection. We are affiliated with the Forestry and Agricultural Biotechnology Institute (FABI), and the Genomics Research Institute (GRI) at UP. We work in close collaboration with South African forestry companies through the FMG Consortium (FMGC) to develop capacity and resources for the application of tree biotechnology in tree improvement programmes.

## Position Available:

**Description:** Two full-time (40 hours per week), contract Research Assistant positions are available in the DNA Fingerprinting and Marker Analysis Team of the FMG Programme. The candidates will work as part of a dynamic research team responsible for microsatellite and SNP marker analysis of *Eucalyptus* and pine tree species for various applications (genetic mapping, tree identification, clonal identify determination, forensics, parentage analysis, pollen contamination analysis, molecular breeding, etc.). In particular, the candidates will be responsible for microsatellite data generation (sample preparation, high-throughput DNA isolation, multiplex PCR and GeneScan analysis), primary and secondary analysis and interpretation of microsatellite data, report writing, assistance with sample tracking and laboratory organisation.

**Requirements:** B.Sc. Hons. degree or MSc (or equivalent training) in Genetics, Molecular Biology or Biotechnology, including at least one year of molecular biology or molecular genetics laboratory experience, specifically using DNA markers. Ability to work efficiently as part of a team. Highly organised and able to learn and work fast, accurately and independently. Experience with MS Office is essential.

**Recommended:** Postgraduate experience in DNA marker analysis. Proficiency using software such as GeneMarker, PowerMarker, Mega, CERVUS, STRUCTURE, Genetix, SVS8 and GenomeStudio. Experience in R would be beneficial.

The closing date for applications is **30 September 2018**. Interviews will be scheduled on an ad hoc basis and the appointment will be made as soon as possible.

Please submit applications (CV and covering letter) to the FMG Administrative Assistant Mrs Thandeka Ngondo, at [thandeka.ngondo@up.ac.za](mailto:thandeka.ngondo@up.ac.za), Tel: 012 420 5033

<http://www.fabinet.up.ac.za/index.php/research-groups/forest-molecular-genetics>



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