



Post: Postdoctoral Fellow in Legume Science
Department: Tropical
Division: Science

Job Description

Key Responsibilities

- Bioinformatics analysis and phylogenetics of hybrid capture DNA data and analysis of trait evolution
- Selection and Extraction of c. 200 samples spanning Papiliondeae for DNA sequencing
- Produce draft assembly of Rhizobial genomes
- Paper writing, conference presentations and other outputs
- Other duties as agreed with line management

Specific Responsibilities

- Identify taxa for DNA extraction, obtain – collating from existing collections - and submit samples for sequencing.
- Analysis of initial (existing) DNA sequence datasets (adding new data as it is received)
- Paper preparation
- Conference attendance (International Legume Conference, International Legume Society Conference)
- Engagement with LPWG and other legume research groups

Person Specification

Skills/Aptitude:	Essential requirements	Desirable for post
<p>Primary Bioinformatics:</p> <p>Analytical and coding expertise in molecular bioinformatics, including experience in handling next generation sequencing (NGS) genomic data</p> <p>Scripting using languages such as bash, Python, R etc</p> <p>Experience in dealing with hybrid capture DNA sequence data</p> <p>Specific experience of phylogenetic analysis using large datasets of next generation DNA sequence data</p> <p>Experience studying trait evolution in phylogenetic contexts</p> <p>Excellent Interpersonal skills</p> <p>Writing and submitting papers for publication Maybe: experience in working with non-model organisms (or plants)</p> <p>Secondary Molecular biology lab skills</p> <p>Experience of DNA extraction and quantification</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

Knowledge:	Essential requirements	Desirable for post
<p>Bioinformatics of NGS DNA sequence data</p> <p>Knowledge of biodiversity genetics/genomics</p> <p>Knowledge of current sequencing technology wet lab protocols</p> <p>Knowledge of HPC and virtual machine management</p> <p>Knowledge of plant systematics and evolution</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

Professional Qualifications:	Essential requirements	Desirable for post
PhD or similar experience in Plant Science, Genomics or related field	X	