

PhD Studentship: A PhD studentship is currently available in the Bacterial Genomics and Host Pathogen Interactions (Prof Lucy Moleleki) in the Department of Biochemistry Genetics and Microbiology and Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, South Africa.

Value of Studentship: R120 000 pa for three years

Required Qualifications and Skills: A MSc in Bioinformatics or Microbiology, Genetics, Biochemistry, Molecular Biology, Bioinformatics or any other related field is required. The candidate should have experience working on transcriptome (RNAseq) datasets and large scale comparative genomics. Additional requirements include good writing and oral skills. Working experience in the field of Bacteriology/Molecular Biology/Plant Pathogen Interactions will be an added advantage.

Project Description: In our previous research, we generated transcriptomes of mutant strains of important transcriptional regulators of *Pectobacterium brasiliense* 1692 (see references below). The current project aims to generate RNAseq data of Pb 1692 under various stress conditions mimicking *in planta* stress conditions. Using these whole transcriptome datasets, we seek to identify Pb 1692 stress adaptive regulons and, by combining comparative genomics and transcriptomics, we aim to further identify common stress adaptive modules within Pb 1692 and 100 Soft Rot Enterobacteria genomes available in house.

Publications linked to the research group can be accessed on <https://scholar.google.co.za/citations?user=to1G5HkAAAAJ&hl=en>. Key publications related to this vacancy are listed below.

Belliény-Rabelo *et al.*, **2019** *Applied and Environmental Microbiology* 85(2):e02050-18

Shyntum *et al.*, **2019** *Frontiers in Microbiology* 10: 2379

Belliény-Rabelo *et al.*, **2020** *mSystems* 5(1): e00650-19

Deadline: The closing date for Applications is 28 February 2020. The position will remain open until a suitable candidate is identified. Please apply by forwarding a complete CV with contact details of three referees (including phone numbers and email addresses) to Prof. Lucy Moleleki (lucy.moleleki@fabi.up.ac.za). Applicants should include a cover letter in which they describe their expertise and a short motivation why they should be selected for this position. Please note that unsuccessful applicants will not be contacted.