Description: An opening for a postdoc candidate to work on an exciting project at NTU, in tropical Singapore, is available.

The project aims to develop methods for early detection of root wood decay, which is a serious threat to urban trees. To this end, the postdoc candidate will perform metagenomic and metabolomic comparisons of soil samples from healthy and diseased trees and use knowledge gained on pathogenic fungi and their signature volatiles to fine-tune cutting-edge methods, including DNA barcoding and electronic nose, to detect signature volatiles of the fungal pathogens.

Requirements:
The postdoc candidate should have a strong background in bioinformatics and preferably experience in basic lab methods, such as DNA isolation and plant growth.

The project would encompass:
1) Sequencing and comparison of metagenomes
2) Analysis of metabolomic (GC-MS) data
3) Use and machine learning-based training of an electronic nose for detection of the fungal pathogen volatiles

The position is for three years with an attractive salary package.
The project is a great opportunity to learn to use cutting-edge genomic and metabolomic methods to study plant pathogens. Furthermore, NTU and Singapore are fantastic places to live and do research!

Nanyang Technological University, School of Biological Sciences, Singapore
Young and research-intensive, Nanyang Technological University (NTU, Singapore) is ranked 11th globally. It is also placed 1st among the world’s best young universities. NTU offers an excellent environment for research and training of scientific skills.
Why Singapore?

Singapore is a city-state with one of the highest standards of living in the world seeking to become an international hub for the biomedical and life sciences. Singapore is a vibrant and safe tropical city, with rich Asian heritage and modern style of living, an ideal gateway to explore Asia. With our good base of life sciences players, highly skilled and educated workforce, excellent communication systems, good industry infrastructure and a stable government, Singapore offers an exceptional professional and personal experience.

Please send your CV and reference contact to Asst. Prof. Marek Mutwil (Mutwil@ntu.edu.sg).