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Postdoctoral Research Fellow Position

South African Grape and Wine Research Institute

Department of Viticulture and Oenology

Deadline: 25 February 2022

Project Title: Harnessing microbial ecosystems using data-driven approaches

Scope of Research: Microbial ecosystems are central to all life on earth, and are essential to human survival and well-being, whether in the context of food security (e.g. soil microbiome and plant health) or in the context of human health (e.g. gut microbiome). In biotechnology, this has led to an explosion of microbiome-based projects and the advent of Next Generation DNA Sequencing has provided amazing insights with regards to the species composition of such systems. However, very limited information on the fundamental functioning of such ecosystems (“Functional Microbiomics”) has been generated or scientifically validated. In our research group, we have created new methodologies to generate large quantitative and molecular data sets on the behaviour of microbial consortia. Now, we are seeking a post-doctoral fellow to further expand these existing large data sets and employ artificial intelligence and machine learning approaches to model these systems.

Key Requirements:

- PhD in Wine Biotechnology or closely related field
- Additional training in bioinformatics and data science concepts
- Experience in multi-species culture, particularly yeast consortia
- Experience in transcriptomic analyses of multi-species cultures
- Experience in development and implementation of flow cytometry protocols
- Publication record demonstrating the above skills
- Experience in multi-disciplinary environments

Please note that postdoctoral fellows are not appointed as employees and their fellowships are awarded taxfree. They are therefore not eligible for employee benefits.

Commencement of duties: 1 March 2022

Closing date: 25 February 2022

Enquiries: Send a letter of application, accompanied by a condensed curriculum vitae, including a list of publications and the names and contact details of at least two referees, to Prof. Bauer at fb2@sun.ac.za.