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AGRISCIENCES
EYENZULULWAZI NGEZOLIMO
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DEPARTMENT OF VITICULTURE &
OENOLOGY
DEPARTEMENT WINGERD EN WYNKUNDE

SOUTH AFRICAN GRAPE AND
WINE RESEARCH INSTITUTE
SUID-AFRIKAANSE WINGERD- EN
WYNNAVORSINGSINSITUUT

Postdoctoral Research Fellowships 2024

Microbial ecology and Molecular Interactions between Species

The South African Research Chair in Integrated Wine Science invites applications for two post-doctoral fellowships.

Scope of Research: All species are part of ecosystems with multiple levels of interaction and interdependence. While broad categories of interaction such as mutualism and competition have been well defined and studied in macroscopic ecosystems, our understanding of the dynamics within microbial ecosystems remains limited. Microbial ecosystems are considered to be more robust and have broader capabilities than traditional single species systems, but they are harder to control and molecular insights into how these ecosystems are established and maintained remains poorly understood.

To better understand how biotechnologically important microorganisms such as yeasts and microalgal species communicate, and to identify interaction specific molecular signatures, we invite applications from dynamic, highly motivated and committed researchers who would like to be part of a diverse team focused on investigating microbial interactions.

The projects will build on genomic and transcriptomic datasets exploring physical and metabolic interactions between yeast-yeast and yeast-microalgae synthetic ecosystems. Two positions are currently available.

Requirements and/or applicable skills:

- PhD in Microbiology, Molecular Biology, Microbial Ecology or a related field, obtained within the past five years.
- Experience in basic bioinformatics – including genomic (SNP analysis, genome annotation) and transcriptomic (RNA-Seq) data analysis.
- Experience in experimental molecular biology.
- Good writing and organisational skills.
- Evidence of publications/research outputs in the fields of microbiology, molecular biology, microbial ecology, or a related discipline.
- Ability to collaborate effectively and work well in a team.
- Ability to work autonomously and to meet deadlines.

Responsibilities

- Experimental planning, execution, data analysis and interpretation
- If desired, co-supervision of postgraduate students.
- Contribute to project administration including progress reporting to funders.
- Publish research findings in peer-reviewed journals.
- Present work at research forums, conferences, and industry events.
- Assist with laboratory management.

Commencement of duties: May/June 2024

Closing date: 15th April 2024

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

Annual remuneration of a minimum of R350 000 is available, subject to renewal for an additional year if satisfactory progress is made.

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

Florian F Bauer

*Distinguished Professor in Wine Biotechnology and South African Research Chair in Integrated Wine Sciences
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Please request that referees forward confidential reports by the closing date directly to fb2@sun.ac.za