

The University of KwaZulu-Natal (UKZN) is committed to meeting the objectives of Employment Equity to improve representativity within the Institution. Preference will be given to applicants from designated groups in accordance with our Employment Equity Plan.

COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE

POSTDOCTORAL RESEARCH

**ONE YEAR FIXED TERM APPOINTMENT
SCHOOL OF LIFE SCIENCES**

**PIETERMARITZBURG CAMPUS
REFERENCE NO.: SLS 37/2024**

A postdoctoral fellowship is currently available in the field of **Redox Systems Biology**. The project will be performed in the lab of Dr Ché Pillay (UKZN), in collaboration with Prof Johann Rohwer (Stellenbosch University) and Dr Elizabeth Veal (University of Newcastle, UK). This position is funded by UKZN for an initial period of one year, which may be renewable for a further year. The position is available immediately.

This project focuses on post-stress recovery dynamics following oxidative stress. It is well known that oxidative stress triggers profound metabolic, signalling and transcriptional changes within cells. However, the recovery trajectories followed by cells after receiving this stress have received less attention. This project aims to determine how the thiol redox systems within the model organism *Schizosaccharomyces pombe* reset following an oxidative insult. In particular, we will focus on the sulfiredoxin, Srx1, and how the Pap1 and Atf1 transcription factors regulate this response.

The preferred incumbent must have a strong skill set in molecular cell biology. Expertise in yeast genetics, CRISPR/Cas, fluorescent sensor technology, and data analysis in Python would be advantageous. S/he must be prepared to invest in building those skills they might be lacking and travel to collaborator labs. The incumbent will also be required to be involved in general laboratory operations and the training and supervision of postgraduate students. Candidates should possess strong communication skills, good time management, teamwork, and problem-solving skills. Independent thinking, record keeping and use of online and electronic platforms to store, document and manage data, experiments and samples will also be required.

Minimum Requirements:

- A PhD in a relevant field obtained within the last five years, and candidates must not be more than 45 years of age at the time of application.
- A recent peer-reviewed publication in an accredited journal.
- Demonstrable experience with molecular cell biology techniques (e.g.) western blotting, RT-qPCR, or cell-based assays.

Comprehensive applications are invited, comprising of the following:

- Submit a cover letter summarising your background and interests and how your skills match those required for the project.
- A detailed CV including ISI-listed publications.
- Letters of support and contact details of two academic referees.
- An academic transcript listing the award of a PhD thesis.
- A representative publication.

Enquiries and details regarding this post may be directed to Dr Ché Pillay (pillayc3@ukzn.ac.za).

The closing date for receipt of applications is 21st October 2024.

Application documentation must be sent to Ms Shereen Samuels, e-mail: samuelss@ukzn.ac.za Advert Reference number MUST be clearly stated in the subject line. Late applications will not be considered.

Please note that correspondence will be limited to short-listed candidates. The School of Life Sciences reserves the right not to make an appointment.

Kindly note that the University of KwaZulu-Natal ("the University") is required to process any Personal Information (as defined by the Protection of Personal Act, 2013 "POPIA") submitted by candidates when applying for positions at the University. The provision of the Personal Information is a requirement in terms of the University's recruitment and selection process. The retention of any personal information is as a consequence of the University being bound by legislative requirements and / or good governance practices as well as record keeping for statistical purposes. The University will endeavour to ensure that the appropriate security measures are in place and implemented for both electronic and paper-based formats that are used for processing of the personal information recorded through this recruitment and selection process.