



SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY

OFFICE OF THE DEPUTY VICE CHANCELLOR: ACADEMIC & RESEARCH

ELECTRON MICROSCOPE UNIT

Sefako Makgatho Health Sciences University (SMU) is an institution that offers professional health sciences training and education in a range of fields through excellence in teaching, learning, innovative research and community engagement. SMU is situated in Ga-Rankuwa (North of Pretoria) and the following position(s) is/are currently available:

Senior Medical Natural Scientist (1 Post)

Ref: 14/2023/JSM/P7

The incumbent will be responsible for the operation of electron microscopes and ancillary preparation equipment, practical instruction and training to long-term users, and conducting research in line with the university's teaching and research strategy. He/She will report to the Director, and must meet the requirements and be responsible for the following key performance areas:

REQUIREMENTS

- Doctoral degree in Life-or Materials Science
- Minimum of five (5) years' working in a multi-user electron microscopy laboratory
- Experience in electron microscopy techniques such as e.g. SEM, TEM, STEM, EDS, HRTEM, Cryo-SEM, Cryo-TEM and tomography
- Proficiency in preparation of variable samples for light- and electron microscopy, including ultramicrotomy and/or cryo-ultramicrotomy
- Evidence of collaborative research and publication output

COMPETENCIES

- Proven ability to work with minimum supervision both independently and as part of a team
- Knowledge in the use of specialised instrumentation and laboratory methods
- Accurate interpretation of results and demonstrable ability in solving research problems
- Keeping abreast of developments within the microscopy field
- Good writing, communication, and presentation skills
- Good interpersonal skills and self-motivation
- Ability to identify problems and troubleshooting

KEY PERFORMANCE AREAS

- Liaise with researchers to assess their microscopy needs, and advise on suitable analytical- and preparation methods for their samples
- Maintain the optimal operation of electron microscopes and ancillary equipment
- Train patrons to use light- and electron microscopes

- Hands-on training in the operation of preparation equipment available in the Unit
- Supervision and mentorship of students in research and presentation
- Assist users with interpretation and analysis of results
- Image analysis and data processing
- Conduct research independently and through collaboration with colleagues within the university, as well as national and international collaborators in line with the University's strategic objectives
- Writing of publications for peer-reviewed journals
- Produce scientific progress reports for funders, as well as reports for internal and external stakeholders applying for local and international grants
- Facilitate and present at training workshops for microscopy- and preparation techniques
- Promote the available microscopy services
- Contribute to the overall development of SMU and actively improve institutional culture
- Any other duties assigned by the Head of Department

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Closing date: 28 March 2023

Applications through Employment Agencies will not be considered.

Typed applications (**quoting the reference number**) which should contain a comprehensive curriculum vita, certified copies of all qualifications and contact details of three referees, should be forwarded, for the attention of **Mr JS Mahlaola**, to the Human Resources Department, P.O Box 68, Medunsa, 0204 or by E-mail at hr.recruitment3@smu.ac.za

The applications must be hand delivered to:

Human Resources Department, 5th Floor, Clinical Pathology building, Sefako Makgatho Health Sciences University, Molotlegi street, Ga-rankuwa, OR Human Resources Department, P.O Box, 68, MEDUNSA, 0204

It is the applicant's responsibility to have foreign qualifications evaluated by the South African Qualification Authority (SAQA). Failure to submit the requested documents/information will result in your application not being considered.

Telephonic enquiries regarding conditions of service: (012) 521-3906.

The Sefako Makgatho Health Sciences University is an Equal Opportunity and Affirmative Action Employer.

Correspondence will be limited to short-listed candidates only. Applicants who have not been contacted within 30 days of the closing date must consider their applications as unsuccessful.

The University reserves the right not to make an appointment.