



Postdoctoral position: *“The tumour microenvironment – multidisciplinary approaches in defining drivers of tumour progression”*

The Tumour Biology Research Group at the Department of Anatomical Pathology, University of the Witwatersrand, invites applications for a **Postdoctoral Research Fellow** to contribute to their research and training activities.

We are seeking a highly motivated post-doctoral fellow to join our team investigating epigenetic drivers of tumour progression, with a focus on recreating interactions with stem-like cells and immune cells. This exciting opportunity will involve developing 2D and 3D cell culture models, as well as co-culture systems, to investigate the functional impact of manipulating selected histone deacetylases and other molecules. The successful candidate will utilise a range of cutting-edge techniques, including CRISPR and associated validation techniques, qPCR, immunofluorescence microscopy, a range of spectrophotometric-based assays and flow cytometry to conduct their investigations. The successful candidate will gain expertise in metabolomics and/or proteomics, in addition to upskilling their bioinformatics and data analysis proficiency. Furthermore, the successful candidate will play a key role in using the derived data to inform the clinical investigative arm of this project.

This position offers a unique opportunity to engage with the mechanisms underlying cellular interactions within the tumour microenvironment in an exciting translational research space.

A competitive fellowship is available to the post-doctoral fellow for 1 to 2 years renewable, conditional on satisfactory progress.

Core Requirements:

- PhD in Cell or Molecular Biology or related field obtained in the last 5 years
- Experience in cell culture and microscopy essential
- Expertise in PCR or flow cytometry is desirable
- Expertise in omics will be an advantage
- Publication record will be an advantage
- Strong communication and interpersonal skills
- Ability to work collaboratively in an academic setting, independently and as part of a team

Core responsibilities:

- Contribute to efficient operation of the laboratory
- Provide oversight of postgraduate students and staff working in the laboratory (this may include patient sample collection)
- Culturing of a range of cell lines (tumour cell lines/immune cells), development of cell clones and cell line models
- Proficiency in use of selected specialised equipment (training will be provided)
- Prepare methodologies, prepare samples, data and troubleshoot experiments
- Prepare research proposals, reports, ethics clearance applications and grant applications
- Prepare and deliver oral presentations at research seminars and conferences.
- Write and publish scientific manuscripts.
- Training and supervision of postgraduate students

Application Requirements:

- A cover letter and academic CV
- Contact details of three (3) academic referees
- Copy of one first author manuscript (and/or any other publication)
- Certified copies of academic transcripts.

Email applications to:

Professor Tanya Augustine (tanya.augustine@wits.ac.za)

Head: Tumour Biology Research Group (Anatomical Pathology @ Wits)

Co-Director: Wits Digital Pathology Hub

Closing date: 31 August 2025