

The Infectious Diseases and Oncology Research Institute (IDORI), Wits Faculty of Health Sciences invites you to a

## RESEARCH SEMINAR

# Advancing Cancer Research from Basic Biology to Organoid Innovations

*CPD points available*

### PRESENTERS

**Prof. Mandeep Kaur**  
**Naaziyah Abdulla**  
**Ruth Aronson**

#### DATE:

Tuesday, 15 October 2024

#### TIME:

15h00 - 16h30

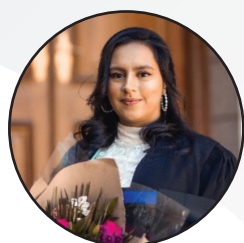
#### VENUE:

Classroom 4 (Room 516), Teaching and Learning Resource Centre, Wits Health Sciences Faculty, 7 York Road, Parktown Campus, Johannesburg



**Prof. Mandeep Kaur** is a Professor at the School of Molecular and Cell Biology, University of the Witwatersrand. The core of her research is to understand the biological complexities of cancer using cell biology and bioinformatics-based approaches. Her research interests include delineating the role of cholesterol in cancer, devising new cancer therapeutics, understanding of cancer drug resistance mechanisms and

biomarker identification. Prof. Kaur's vision is to establish cutting-edge biological research platforms in Africa and to train the next generation of African scientists. In this direction, her lab has successfully established 3D mini-gut organoid models from South African colorectal cancer patients' tissues and her team is involved in innovative research to find ways to overcome cancer drug resistance and to develop new personalised treatment strategies.



Driven by a keen passion to understand the molecular underpinnings that drive cancer, **Naaziyah Abdulla** is currently pursuing a PhD degree in the Integrative Cancer Biology Research Laboratory (University of the Witwatersrand). Under the supervision of Professor Kaur, she is leading a team that serve as pioneers in establishing intestinal patient-derived organoids in South Africa. Her latest research endeavour includes co-culturing cytotoxic T-cells with organoids to delineate the role of cholesterol

in the tumour microenvironment. The goal is to utilise this novel work towards uncovering the complex cross talk between cholesterol metabolism, the immune system, and cancers to improve therapeutic outcome.



**Ruth Aronson** is a senior PhD candidate at Prof Kaur's lab, specialising in Molecular and Cell Biology, with a focus on colorectal cancer and chemotherapy resistance. She holds an MSc (with Distinction) from the Wits University. Ruth's PhD research involves the groundbreaking use of patient-derived organoids (PDOs) to model colorectal cancer, aiming to understand and overcome chemotherapy resistance. She is a part of the team to be the first in successfully culturing colorectal cancer PDOs from a South African cohort. Her current work explores the potential of using these organoid

models to explore the role of cholesterol in mediating drug resistance, with the aim of improving treatment outcomes and reducing side effects.



INVITATION