DR EMAN TEER MBCHB, PHD

Stellenbosch, South Africa ■ +27 71 148 3194 ■ emanteer@sun.ac.za ■ eman.ab.teer@gmail.com

RESEARCH SCIENTIST

Born in Libya, Dr Teer has been studying and working in South Africa since 2013. Beginning her career in paediatrics, she has since developed a specialisation in cardiometabolic diseases and the immunology of HIV/AIDS. Dr Teer has a demonstrated track record of research productivity, teaching and the development of cross-disciplinary collaborations within and outside the department. She exercises expert judgment in selecting methods, techniques, and evaluation criteria for obtaining results.

PROFESSIONAL ATTRIBUTES

IT skills: FlowJo, Prism 7, MS Office
Languages: Ful professional proficiency in English, native Arabic
Laboratory skills: Planning, preparing and controlling experiments; wet and/or dry bench research
People management: Coordinate staff activities; liaise with subject experts and collaborate with colleagues

EDUCATION

2017 **PhD Medical Sciences (HIV and AIDS)** **Stellenbosch University, South Africa**
Topic: Immune Activation in HIV-Positive Patients on Combined Anti-Retroviral Treatment (cART) as a High-Risk Group for the Development of Cardiovascular Diseases

2007 **Clinical Training Programme** **National Taiwan University, Taiwan**
Department of Laboratory Medicine, Flow Cytometry and Morphology

2006 **Bone Marrow Transplant Training Course** **Nasser Institute, Cairo, Egypt**

1992 **MB.ChB Medical Sciences (Clinical)** **Alfateh University of Medical Science, Libya**

CAREER SUMMARY

Dates	Positions	Organisations
01/2018 – Present	Postdoctoral Fellow	Stellenbosch University, South Africa
01/1997 – 04/2011	Medical Doctor	African Oncology Institute, Libya
01/1994 – 12/1996	Paediatrician	Sabratah Teaching Hospital, Libya
09/1993 – 12/1994	Medical Intern	Tripoli Central Hospital, Libya

AREAS OF EXPERTISE

ACADEMIC Supervision of Honours, Masters and PhD candidates with in-depth knowledge of several educational programmes (especially immunology courses). Guidance and mentoring of students.

FLOW CYTOMETRY Immunophenotyping design, analysis, and data interpretation.

RESEARCH

Basic Immunology of HIV/AIDS Infection
Biological Sciences
Cardiometabolic Diseases
Cardiovascular Diseases
Clinical Immunology
Flow Cytometry
Haematology
Immunology
Immunometabolism
Immunopathology

PROFESSIONAL EXPERIENCE

01/2019 – Present Postdoctoral Fellow: Stellenbosch University, South Africa

- Conduct clinical research on HIV and links to heart disease.
- Supervise Honours, Masters and PhD students in the Department of Physiology.
- Prepare curriculum material on Immunology.
- Conduct flow cytometry research.
- Analyse blood smear (Haematological changes in HIV).

01/1997 – 04/2011 Medical Doctor: African Oncology Institute, Libya

- Worked in the Department of Flow Cytometry and Diagnostic Haematology.
- Interpreted peripheral blood films including oncologic diagnostics.
- Interpreted bone marrow samples.
- Diagnosed leukaemia, including typing and classification (morphology).

01/1994 – 12/1996 Paediatrician: Sabratah Teaching Hospital, Libya

- Managed patients presenting to paediatric OPD and emergency.
- Treated patients admitted to paediatric wards and ICU.
- Conducted clinical research in the department.
- Presented scheduled seminars.

STUDENT SUPERVISION

Doctoral at Stellenbosch University

2021. Ms NM Mukonowenzou. HIV-mediated cardiac fibrosis and T helper cells role. *Continuing.*

Masters at Stellenbosch University

2021. Ms LL Dominick. Role of platelet activation in HIV-related cardiovascular diseases onset. *Completed.*
2022. Ms LM Mfiki. Cardiac fibrosis and the role of monocytes macrophages. *Continuing.*

Honours at Stellenbosch University

2020. Ms LM Mfiki. Haematology changes in HIV. *Completed.*
2019. Mr HJ Jaykumar. Increased GLUT 1 expression in HIV serum is linked to immunometabolic remodelling and immune dysregulation. *Completed.*
2018. Ms LL Dominick. The role of regulatory T cell dysfunction in HIV. *Completed.*

PUBLICATIONS

Teer E, Dominick L, Mukonowenzou NC, Essop MF (2022). HIV-Related Myocardial Fibrosis: Inflammatory Hypothesis and Crucial Role of Immune Cells Dysregulation. ***Cells,*** Sep 9;11(18):2825. doi: 10.3390/cells11182825. PMID: 36139400; PMCID: PMC9496784.

Teer E, Mukonowenzou NC, Essop MF (2022). The Role of Immunometabolism in HIV-1 Pathogenicity: Links to Immune Cell Responses. ***Viruses*****,** Aug 18;14(8):1813. doi: 10.3390/v14081813. PMID: 36016435; PMCID: PMC9415820.

Teer E, Joseph DE, Dominick L, Glashoff RH, Essop MF (2021). Expansion of GARP-Expressing $CD4^{+}CD25^{-}$ $FoxP3^{+}$ T Cells and SATB1 Association with Activation and Coagulation in Immune Compromised HIV-1-Infected Individuals in South Africa [J]. ***Virologica Sinica,*** http://dx.doi.org/10.1007/s12250-021-00386-8

Teer E, Joseph D, Glashoff R, Essop MF (2020). Monocyte/Macrophage-Mediated Innate Immunity in HIV-1 Infection: From Early Response to Late Dysregulation and Links to Cardiovascular Disease onset. ***Virologica Sinica,*** www.virosin.orghttps://doi.org/10.1007/s12250-020-00332-0

Dominick L, Midgley N, Swart LM, Joseph D, **Teer E,** Essop MF (2020). HIV-related cardiovascular diseases: The search for a unifying hypothesis. ***American Journal of Physiology-Heart*** **and** ***Circulatory Physiology*** 318: https://doi.org/10.1152/ajpheart.00549.2019

Teer, E. *et al.* (2019). HIV and Cardiovascular Diseases Risk : Exploring the Interplay between T Cell Activation, Coagulation, Monocyte Subsets and Lipid Subclass Alterations. ***American Journal of Physiology-Heart and Circulatory Physiology*** doi:10.1152/ajpheart.00797.2018

Teer E, Essop MF (2017). HIV and Cardiovascular Disease: Role of Immunometabolic Perturbations. ***American Physiological Society (APS)***, 33: 74-82. doi.org/10.1152/physiol.00028.2017

CONFERENCE CONTRIBUTIONS

Teer E, Essop MF (2018). Poster. *Conference of Biomedical and Natural Sciences and Therapeutics (CoBNeST).* Stellenbosch, South Africa | 7-10 October 2018.

Teer E, Glashoff R, Essop MF (2016). Immune Activation in HIV-Positive Patients on Combined Anti-Retroviral Treatment (cART) as a High-Risk Group for the Development of Cardiovascular Diseases. *Pharmaceutical Society of Southern Africa (PSSA). 28-30 August, Cape Town, South Africa.*

Teer E, Sasi N. (2007). Paper Flow Cytometry Results for AML. *Third International Cancer Conference (under auspices of UICC), 19-21 January, Sabratha, Libya.*

REFEREES

Prof MF Essop: Professor and Director, Centre for Cardio-metabolic Research in Africa (CARMA) President: African Association of Physiological Sciences, Division of Medical Physiology, Stellenbosch University. Office: +27 21 938 9388 / Cell: +27 76 901 9474 / Email: mfessop@sun.ac.za

Prof Richard Glashoff: Immunology Unit, Division of Medical Microbiology, Department of Pathology, NHLS Tygerberg and Faculty of Medicine and Health Sciences, Stellenbosch University.
Office: +27 21 938 5228 / Cell: +27 82 703 3716 / Email: rglas@sun.ac.za

Prof. Nahla Al-Shrkawi: Professor of Clinical Pathology, National Cancer Institute, Cairo, Egypt
Email: nahlashrkawi@hotmail.com

Academic transcripts and further details available on request