



## Curriculum Vitae

### Personal information Zinhle Makatini

#### Work experience

Jan 1999 – April 2000: Senior House Officer : Monklands Hospital, Airdrie, Scotland, UK  
May 2000 – February 2003: Registrar in Virology: National Institute of Virology (NICD)  
January 2003 – December 2003: National Programme Manager: National Institute of Health (Bethesda, Washington)/South African Defense Force Military Health Services  
January 2003 – Dec 2006: Head of Laboratory: National Institute of Health (Bethesda, Washington)/South African Defense Force Military Health Services  
October 2006 – September 2008: Registrar in Virology: Sefako Makgatho Health Sciences University/National Health Laboratory Services  
October 2008 – Consultant Clinical Pathologist (Virology & Immunology): Sefako Makgatho Health Sciences University  
May 2018 – May 2024: Senior Consultant Clinical Pathologist (Virology & Immunology): University of Witwatersrand  
June 2024 - Current: Professor & Head of Department (Virology): University of Free State

#### Education and training

1992: Kings College, University of London, UK : BSc Honors Biochemistry  
1993: London School of Tropical Medicine & Hygiene, UK, University of London: Master of Science – Immunology of Infectious Diseases  
1998: University of Sheffield, UK MBChB (Medicine)  
2001: University of Stellenbosch: Diploma in HIV Management in the Workplace  
2001: University of Glasgow, UK: Diploma in Travel Medicine  
2002: University of Witwatersrand: Diploma in Tropical Medicine & Hygiene  
2004: College of Medicine of South Africa: Diploma in HIV Management  
2004 : University of Pretoria: Certificate in Monitoring and Evaluation  
2005/2006: University of Witwatersrand: MMED in Epidemiology and Biostatistics (completed 2 of 3 years)  
2008: College of Medicine of South Africa: FCPATH Viro (Pathologist in Virology & Immunology)  
2022: Sefako Makgatho Health Sciences University: PhD in Virology

#### Additional information

##### Publications

##### Publications

Makatini Z, Mda S, Towobola O, Mthiyane H, Miles P, Blackard JT. Characterisation of protease resistance mutations in a South African paediatric cohort with virological failure, 2011 – 2017. *S Afr Med J.* 2019 Jun 28;109(7):511-515. doi: 10.7196/SAMJ.2019.v109i7.13705. PMID: 31266578.

Makatini, Z.N., Blackard, J.T., Mda, S., Miles, P. and Towobola, O., 2021. High virological failure rates in HIV-1 perinatally infected children in South Africa: A retrospective cohort study. *South African Medical Journal*, 111(3), pp.255-259.

Makatini, Z N et al. Immunological and virological outcomes in children on lamivudine monotherapy: A South African public sector experience. *South African Medical Journal*, [S.l.], v. 112, n. 6, p. 413-417, may. 2022. ISSN 2078-5135

Reddy B, Cassim N, Treurnicht F, Makatini Z. Factors influencing the high rejection rates of HIV 1/2 serology samples at Charlotte Maxeke Johannesburg Academic Hospital and the cost implications. *South Afr J HIV Med.* 2022 Jan 11;23(1):1326. doi: 10.4102/sajhivmed.v23i1.1326. PMID: 35169497; PMCID: PMC8832030.

Characteristics of hospitalized COVID-19 patients during the first two waves of the pandemic in a large quaternary hospital, Gauteng. L Sikhosana, Jassat W, Makatini Z. (Accepted SAJID – 434-4739-ED)

Umunnakwe, C.N., Makatini, Z., Maphanga, M., Mdunyelwa, A., Nijhuis, M., Wensing, A., Tempelman, H. (2022). Prolonged SARS-CoV-2 RNA shedding in a young man recovering from traumatic pneumothorax. *SAMJ* 112(2):81-5. doi: <https://doi.org/10.7196/SAMJ.2022.v112i2.16052>.

Umunnakwe, C.N., Makatini, Z., Maphanga, M., Mdunyelwa, A., Mlambo, M., Manyaka P., Nijhuis, M., Wensing, A., Tempelman, H. Evaluation of a Commercial SARS-CoV-2 Multiplex PCR Genotyping Assay for Variant Identification in Resource-Scarce Settings. *PLOS ONE* (2022)

Mashishi B, Makatini Z, Adu-Gyamfi C. The evolving HIV epidemic and its impact on the HIV testing algorithm: Is it time to change the HIV testing algorithm in South Africa?, *Journal of Clinical Virology*, Volume 144,2021,104990,ISSN 1386-6532, <https://doi.org/10.1016/j.jcv.2021.104990>

Subramoney K, Mtileni N, Bharuthram A, Davis A, Kalenga B, Rikhotso M, Maphahlele M, Giandhari J, Naidoo Y, Pillay S, Ramphal U, Ramphal Y, Tegally H, Wilkinson E, Mohale T, Ismail A, Mashishi B, Mbenenge N, de Oliveira T, Makatini Z, Fielding BC, Treurnicht FK; Network for Genomics Surveillance in South Africa. Identification of SARS-

CoV-2 Omicron variant using spike gene target failure and genotyping assays, Gauteng, South Africa, 2021. *J Med Virol.* 2022 Aug;94(8):3676-3684. doi: 10.1002/jmv.27797. Epub 2022 May 8. PMID: 35441368; PMCID: PMC9088381.

Mthiyane H, Makatini Z, Tsukulu R, Jeena R, Mutloane M, Giddings D, Mahlangu S, Likotsi P, Majavie L, Druker T, Treurnicht F. HIV self-testing: A cross-sectional survey conducted among students at a tertiary institution in Johannesburg, South Africa during 2020: HIV self-testing awareness and access among South African students. *Journal of Public Health in Africa*, Paper no. 2227 Accepted.

Viana R, Moyo S, Amoako DG, Tegally H, Scheepers C, Althaus CL, Anyaneji UJ, Bester PA, Boni MF, Chand M, Choga WT, Colquhoun R, Davids M, Deforche K, Doolabh D, du Plessis L, Engelbrecht S, Everatt J, Giandhari J, Giovanetti M, Hardie D, Hill V, Hsiao NY, Iranzadeh A, Ismail A, Joseph C, Joseph R, Koopile L, Kosakovsky Pond SL, Kraemer MUG, Kuate-Lere L, Laguda-Akingba O, Lesetedi-Mafoko O, Lessells RJ, Lockman S, Lucaci AG, Maharaj A, Mahlangu B, Maponga T, Mahlakwane K, Makatini Z, Marais G, Maruapula D, Masupu K, Matshaba M, Mayaphi S, Mbhele N, Mbulawa MB, Mendes A, Mlisana K, Mnguni A, Mohale T, Moir M, Moruisi K, Mosepele M, Motsatsi G, Motswaledi MS, Mphoyakgosi T, Msomi N, Mwangi PN, Naidoo Y, Ntuli N, Nyaga M, Olubayo L, Pillay S, Radibe B, Ramphal Y, Ramphal U, San JE, Scott L, Shapiro R, Singh L, Smith-Lawrence P, Stevens W, Strydom A, Subramoney K, Tebeila N, Tshiabuila D, Tsui J, van Wyk S, Weaver S, Wibmer CK, Wilkinson E, Wolter N, Zarebski AE, Zuze B, Goedhals D, Preiser W, Treurnicht F, Venter M, Williamson C, Pybus OG, Bhiman J, Glass A, Martin DP, Rambaut A, Gaseitsiwe S, von Gottberg A, de Oliveira T. Rapid epidemic expansion of the SARS-CoV-2 Omicron variant in southern Africa. *Nature.* 2022 Mar;603(7902):679-686. doi: 10.1038/s41586-022-04411-y. Epub 2022 Jan 7. PMID: 35042229; PMCID: PMC8942855

Scheepers C, Everatt J, Amoako DG, Tegally H, Wibmer CK, Mnguni A, Ismail A, Mahlangu B, Lambson BE, Martin DP, Wilkinson E, San JE, Giandhari J, Manamela N, Ntuli N, Kgagudi P, Cele S, Richardson SI, Pillay S, Mohale T, Ramphal U, Naidoo Y, Khumalo ZT, Kwatra G, Gray G, Bekker LG, Madhi SA, Baillie V, Van Voorhis WC, Treurnicht FK, Venter M, Mlisana K, Wolter N, Sigal A, Williamson C, Hsiao NY, Msomi N, Maponga T, Preiser W, Makatini Z, Lessells R, Moore PL, de Oliveira T, von Gottberg A, Bhiman JN. Emergence and phenotypic characterization of the global SARS-CoV-2 C.1.2 lineage. *Nat Commun.* 2022 Apr 8;13(1):1976. doi: 10.1038/s41467-022-29579-9. PMID: 35396511; PMCID: PMC8993834.

Wolter N, Jassat W, Walaza S, Welch R, Moultrie H, Groome M, Amoako DG, Everatt J, Bhiman JN, Scheepers C, Tebeila N, Chiwandire N, du Plessis M, Govender N, Ismail A, Glass A, Mlisana K, Stevens W, Treurnicht FK, Makatini Z, Hsiao NY, Parboosing R, Wadula J, Hussey H, Davies MA, Boule A, von Gottberg A, Cohen C. Early assessment of the clinical severity of the SARS-CoV-2 omicron variant in South Africa: a data linkage study. *Lancet.* 2022 Jan 29;399(10323):437-446. doi: 10.1016/S0140-6736(22)00017-4. Epub 2022 Jan 19. PMID: 35065011; PMCID: PMC8769664.

Wolter N, Jassat W, Walaza S, Welch R, Moultrie H, Groome M, Amoako D, Everatt J, Bhiman J, Scheepers C, Tebeila N, Chiwandire N, du Plessis M, Govender N, Ismail A, Glass G, Mlisana K, Stevens W, Treurnicht F, Makatini Z, Hsiao N, Parboosing R, Wadula J, Hannah Hussey, Davies M, Boule A, von Gottberg A, Cohen. Clinical severity of Omicron lineages BA.4 and BA.5 in South Africa. Accepted (<https://doi.org/10.21203/rs.3.rs-1792132/v1>)

Tegally H, Moir M, Everatt J, Giovanetti M, Scheepers C, Wilkinson E, Subramoney K, Makatini Z, Moyo S, Amoako DG, Baxter C, Althaus CL, Anyaneji UJ, Kekana D, Viana R, Giandhari J, Lessells RJ, Maponga T, Maruapula D, Choga W, Matshaba M, Mbulawa MB, Msomi N; NGS-SA consortium, Naidoo Y, Pillay S, Sanku TJ, San JE, Scott L, Singh L, Magini NA, Smith-Lawrence P, Stevens W, Dor G, Tshiabuila D, Wolter N, Preiser W, Treurnicht FK, Venter M, Chiloane G, McIntyre C, O'Toole A, Ruis C, Peacock TP, Roemer C, Pond SLK, Williamson C, Pybus OG, Bhiman JN, Glass A, Martin DP, Jackson B, Rambaut A, Laguda-Akingba O, Gaseitsiwe S, von Gottberg A, de Oliveira T. Emergence of SARS-CoV-2 Omicron lineages BA.4 and BA.5 in South Africa. *Nat Med.* 2022 Jun 27. doi: 10.1038/s41591-022-01911-2.

Letters to Editor/Short Communication

Sharp increase in influenza A infections in Limpopo: A call for increased influenza vaccinations  
CN Umunnakwe, ZN Makatini, R Maphoto, HA Tempelman. *South African Medical Journal* 112 (1), 3-4

Barker J, Makatini Z, Millard J. Reply to Davis and colleagues: Twice weekly, directly observed treatment for HIV-infected and uninfected tuberculosis patients: cohort study in rural South Africa. *AIDS.* 1999 Dec 24;13(18):2601-2.

In't Veld, Diana Huis, Makatini, Zinhle, Mzileni, Olga, Colebunders, Robert. Proposal to adjust the WHO clinical tagging system. *JAIDS-56;5(2011)*, e133

Tuberculosis and health sector reform: experience of integrating tuberculosis services into the district health system. June 2000. *The International Journal of Tuberculosis and Lung Disease* 4(5):486

Reply to Davis and colleagues: Twice weekly, directly observed treatment for HIV-infected and uninfected tuberculosis patients: cohort study in rural South Africa. December 1999, *AIDS (London, England)* 13(18):2601,

Technical Reports

Research Summit Report: Strengthening research for health, innovation and development in South Africa. Compiled by: B Mayosi, J Mekwa, J Blackburn, Z Makatini et al

Books

Fomundam, H, Makatini Z & Mathews, C et al. Antiretroviral therapy in South Africa: A pocket guide on prevention and management of side effects and drug interactions. 2nd edition. Pretoria: National Department of Health

## Projects

MEMBERSHIP OF PROFESSIONAL BODIES

College of Medicine of South Africa

- College of Pathologist (CMSA) Councillor for Virologists (2018 – 2020; Re-elected for 2020 – 2023 Triennium)
- Secretary for College of Medicine (2018 – 2020; Re-elected for 2020 – 2023 Triennium)
- Member of the College of Medicine (CMSA) Examination and Credentials Committee

National Health Laboratory Service

- Chair of Virology Expert Chair (NHLS) – October 2020
- Chair of Virology Advisory Committee – NHLS PT Scheme

#### South African National Accreditation Systems (SANAS)

- SANAS Assessor/Technical Expert for Blood Transfusion Services
- SANAS Assessor/Technical Expert for Medical Laboratories (ISO15189 and ISO17025).

#### South African Health Regulatory Agency (SAHPRA)

- SAHPRA Clinical Trials Committee (2008 to 2021)
- SAHPRA Clinical Trials Committee (Chair) November 024 -
- SAHPRA Biological Committee (2008 to 2021)
- Medicine Control Council Council Member (served 5 year term)
- Current Member of SAHPRA Board (2021 – 2024)

#### National Department of Health (NDoH)

- Ministerial Advisory Group (MAG) (2020 – 2021)
- Member of the National Certification Committee (Polio) – (October 2020 to date)

#### University of Witwatersrand

- Member of Transformation Committee
- Member of the GEMP 1 & 2 Curriculum Committee

#### Societies

- Deputy Vice President, African Viral Care Society (Former)

#### Former Committee Membership:

- National Health Research Committee
- National Advisory Group on Immunization
- Global Campaign for Microbicides
- Biotechnology Innovation Coordination Committee
- School Research Ethics Committee (SMU)

## Memberships

#### College of Medicine of South Africa

- College of Pathologist (CMSA) Councillor for Virologists (2018 – 2020; Re-elected for 2020 – 2023 Triennium)
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## Other Relevant Information

Member of SAHPRA's Clinical Trials Committee and current Chair (November 2024)

Member of SAHPRA's Biological Committee

Member and Chair of Polio National Certification Committee

Member of University of Free State HSREC (Ethics committee)