

CITATION: LOYISO GORDON NONGXA

Loyiso Nongxa was born in 1953 at Umhlanga, a village in the Indwe district of the Eastern Cape. He was the youngest of five children in a home where his mother kept a small grocery store, and his father was the headmaster of the local primary school. He attended Freemantle High School for Boys and then enrolled at the University of Fort Hare, where he graduated with a BSc (1975), a BSc Honours (1976), and an MSc (1978) in Mathematics, all of these as a *cum laude* graduate. After two years of service as a lecturer in mathematics at the University of Fort Hare, he was selected as South Africa's first black Rhodes Scholar, which allowed him to complete his doctoral studies in mathematics at Oxford University in 1982.

After his return to South Africa, Nongxa joined the Department of Mathematics and Computer Science at the National University of Lesotho as a lecturer in 1982. He then worked as a Senior Lecturer at the Department of Pure and Applied Mathematics at the University of Natal and served as a Professor in the Department of Mathematics and Applied Mathematics at the University of the Western Cape from 1990 - 2000. During this time, he held academic fellowships and visiting scholar appointments at various international universities including at Harvard, Connecticut, Colorado, Illinois and Baylor (Texas).

Professor Nongxa is recognised as an eminent mathematician and has produced acknowledged scholarship in the field of Abelian Group Theory and representations of partially ordered sets, which has been published in highly ranked, prestigious international journals. At the time of completing his studies at Fort Hare University and at Oxford University, he was one of the very few Black South Africans to undertake postgraduate studies in mathematics. Through his love and ability for teaching mathematics, he served as an inspiration to many of the Black South African mathematicians who would follow in his footsteps.

Nongxa has held senior academic leadership roles in the higher education sector. He served as the Dean of the Faculty of Natural Sciences at UWC (1999 - 2000), as the Deputy Vice-Chancellor for Research at Wits (2000 - 2003) and as the Vice-Chancellor and Principal of Wits (2003 - 2013). As the Deputy Vice-Chancellor for Research at Wits, he oversaw a process of significant improvements in the transparency and effectiveness of the distribution of research funds to academics. This remarkable change was particularly positive in supporting junior and emerging researchers. Whilst the details may have changed over the years, the principles of Nongxa's approach to research funding as an instrument for research capacity development remains at Wits and is generally followed throughout the South African higher education sector.

His appointment as the Vice-Chancellor and Principal of Wits University in 2003 came at a critical time for the institution. He was appointed at the helm of the University, after a nine-year period of turbulence and instability in the senior leadership and operations of the University. Nongxa stewarded a turnaround strategy that led to the significant recovery and development of the academic and administrative systems. He led the restructuring of the financial management and reporting systems and ensured that Wits became financially sustainable. He also led the review and recovery of curricula across schools and faculties, and entrenched excellence in academic programmes.

Under his leadership, a new infrastructure development programme was implemented, using an approach that became the model for infrastructure development in South African higher education institutions. This resulted in R2 billion worth of new and refurbished capital projects that benefited students, staff and infrastructure.

As the Vice-Chancellor and Principal of Wits, Nongxa gave strong expression to transforming the academy and student body with regards to race, class and gender. He guided the development and implementation of Wits' Transformation and Employment Equity Plan and secured local and international fundraising to support these initiatives. Black women as emerging academics at the time were a particular focus of his transformation agenda.

Nongxa also responded to the relatively low enrolments of poor students from rural areas at Wits at the time. He established the Bale Scholarship Programme for Black women students in science and engineering studies and the Targeting Talent Programme for students from rural areas. He extended his focus to developing intellectual talent in young people from poor and rural areas through his roles as Chairperson of the SASOL Inzalo Foundation, the Telkom Foundation and the BP South Africa Education Trust.

Nongxa has contributed significantly to South African higher education through his leadership of the Review Committee of the National System of Innovation, the National Innovation Advisory Council Reference Group for the Review of the 1996 White Paper for Science and Technology, the Review Committee of the National Research Foundation's Rating System, the Higher Education South Africa Research and Innovation Strategy Group, the South African National Research and Education Network and the Board of the National Research Foundation. He also served as a member of the Council for Higher Education's Task Team on Higher Education, Institutional Autonomy and Academic Freedom and as the Administrator of the University of Fort Hare (2019 – 2020).

Elected as one of the two Vice-Presidents of the International Mathematical Union (IMU) (2018 - 2022), Nongxa also served as a liaison between the Union, UNESCO, and the International Science Council. In recent years, following his formal retirement as an academic, Nongxa has championed the National Graduate Academy for Mathematical and Statistical Sciences, which focuses on the development of the next generation of mathematicians and statisticians in South Africa. He has sustained remarkable success over the past five years in mentoring, supporting and fundraising for emerging academics in mathematical sciences at several South African universities.

Considering his enormous and continuing contribution to higher education, to mathematics, and for inspiring the next generation of students and academics, both locally and globally, it is therefore befitting that the University of the Witwatersrand, Johannesburg bestows an Honorary Doctorate Degree on Professor Loyiso Gordon Nongxa.

Inspirational mathematician receives honorary degree for