

# NELSON MANDELA

UNIVERSITY



**April 2022**

**Autumn Graduation**

**Ceremony 21**

Faculty of Science

30 APRIL 2022 | 14:30





## **VISION**

To be a dynamic African university, recognised for its leadership in generating cutting-edge knowledge for a sustainable future

## **MISSION**

To offer a diverse range of life-changing education experiences for a better world

## **VALUES**

Excellence

Diversity

Ubuntu

Social justice and equality

Integrity

Environmental stewardship



Excellence

Diversity

Ubuntu

Social justice  
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Integrity

Environmental  
stewardship

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# Congratulatory Message

Graduation is a significant milestone in life. It is the culmination of an academic journey that reflects your ambition, determination, commitment, perseverance and hard work. We know that this journey is often not yours alone, as many have travelled with you - your friends, your lecturers, your supervisors, your mentors and your family. They have invested in you financially, encouraged you to persevere, guided your studies and above all, believed in your ability to succeed and achieve this graduation dream.

Today your joy is our joy too. Such a significant moment – your graduation day – must be celebrated for it not only recognises all that you have achieved but also focuses on all the potential and possibilities to come. It offers great hope for the future – and you are that bright future.



The coronavirus pandemic has transformed our lives – the way we work, study and live. Today, however,

we are filled with joy and gratitude to be able to celebrate your graduation together in person.

We are also extremely pleased that many more are able to join us virtually via livestreaming.

As a student who had to navigate your studies in

unprecedented circumstances, we especially salute and applaud your achievement as you pioneered this path. It could not have been easy.

We wish you all the very best for your future endeavours wherever they may take you as a proud alumnus of Nelson Mandela University. Continue learning through-out your life journey. Allow the flame of your curiosity for the new and yet to be discovered to burn brightly. Education is your passport to the future – and also to the future hopes of our country and our continent. It is indeed a foundation for a better world. Or as Nelson Mandela so eloquently put it:

***“Education is the most powerful weapon which you can use to change the world.”***

Congratulations!

## Umyalezo wokuvuyisana

Uthweso zidanga ludumo olubaluleke kunene ebomini. Yinkcochoyi kuhambo lwemfundo enomsila echaza ukunxanwa kwakho, ukuzimisela, ukuzinikela, ukunyamezela kwanomsebenzi onzima. Siyayazi ukuba olu hambo asilolenu kuphela, nanjengoko uninzi luthle lwakhenketha nani – abahlobo benu, abahlohi beny, abaphathi benu, amakhankatha akho kwakunye nosapho lwenu. Babinze kuni ngokwezimali, banikhuthaza ukuba ninyamezele, banikhokela kwizifundo zenu, kwaye, kuyo yonke into, bakholelwa kumxakatho wenu wokuphumelela kwanokuzuza eli phupha lokuthweswa isidanga.

Namhlanje uchulumanco lwakho luchulumanco lwethu. Ilixa elibaluleke kunene – usuku lothweso sidanga – kufuneka lubhiyozelwe kuba aluqapheli nje kuphela konke othe wakuzuza kodwa likwagxila nakumandla kwanakumathuba azayo. Lisinika ithemba elikhulu kwikamva – kwaye ulelo kamva liqhakazileyo.

Intsholongwane yekhorona ibutshintshile ubomi bethu – indlela esisebenza, esifunda nesiphila ngayo. Kodwa namhlanje, sizele luvuyo nombulelo wokukwazi ukubhiyozela uthweso zidanga zenu Sisonke njengeziqu. Siyavuya kakhulu nanjengoko abanye abaninzi bekwazi ukuba yinxalenye yethu ngokobuxhakaxhaka bosasazo ngqo.

Njengomfundi oye waqhuba izifundo zakhe ngeendlela ebezingalindelekanga, sikothulela umnqwazi

Dr Geraldine Fraser-Moleketi  
Chancellor

ngokukhethekileyo futhi sikuqhwabela izandla kokuzuzileyo. Akukhange kubelula.

Sikunqwenelela okuhle kodwa, kwiinzame zakho zekamva elizayo, naphi na apho ziza kuthatha zikuse khona njengobesakuba ngumfundi ozingcayo weYunivesithi iNelson Mandela.

Qhubeka nokufunda kubude bohambo lobomi bakho. Vumela intlantsi yokunxanelwa ulwazi ukuba izalwe ngokokutsha kwaye iqanduselele ukutshikalela ekukhanyeni. Imfundo sisazisi sakho sobomi – kwakunye nakwithemba lekamva lelizwe lethu kwakunye nezwekazi lethu. Ngaphandle kwamathandabuzo, isisiseko sekamva elingcono. Okanye nanjengokuba uNelson Mandela eyibeka ngokucacileyo:

***“Imfundo lelona krele lakhe  
lanamandla ongathi ulisebenzise  
ukutshintsha ihlabathi.”***

#### Huntshu!

Gradeplegtigheid is 'n belangrike mylpaal in jou lewe. Dit is die hoogtepunt van 'n akademiese reis wat jou ambisie, vasberadenheid, toewyding, deursettingsvermoë en harde werk weerspieël. Ons weet dat hierdie reis dikwels nie net joune alleen was nie, aangesien baie mense saam met jou gereis het – jou vriende, jou dosente, jou studieleiers, jou mentors en jou familie. Hulle het finansiële in jou belê, jou aangemoedig om te volhard, jou studies gelei en bowenal geglo in jou vermoë om sukses te behaal en hierdie gradeplegtigheidsdroom te bewaarheid.

Vandag is jou vreugde ook ons vreugde. So 'n belangrike oomblik – jou gradeplegtigheidsdag – moet gevier word, want dit erken nie net alles wat jy bereik het nie, maar fokus ook op al die potensiaal en moontlikhede wat voorlê. Dit bied groot hoop vir die toekoms – en jy is daardie blink toekoms.

Die koronaviruspandemie het ons lewens verander – die manier waarop ons werk, studeer en leef. Vandag is ons egter gevul met vreugde en dankbaarheid om jou gradeplegtigheid persoonlik saam te kan vier. Ons is ook baie bly dat baie meer mense virtueel by ons kan aansluit via die regstreekse uitsending.

As 'n student wat jou studies in ongekende omstandighede moes navigeer, salueer en loof ons veral jou prestasie as baanbreker op hierdie pad. Dit kon nie maklik gewees het nie.

Ons wens jou alles van die beste toe vir jou toekomstige pogings waar hulle jou ook al mag neem as 'n trotse alumnus van Nelson Mandela Universiteit.

Gaan voort om deur jou lewensreis te leer. Laat die vlam van jou

nuuskierigheid helder brand vir dit wat nuut is en nog ontdek moet word. Opvoedkunde is jou paspoort na die toekoms – en ook na die toekomshoop van ons land en ons vasteland. Dit is inderdaad 'n grondslag vir 'n beter wêreld. Of soos Nelson Mandela dit so welsprekend gestel het: Veels geluk!

***“Opvoedkunde en onderwys  
is die kragtigste wapen wat jy  
kan gebruik om die wêreld te  
verander.”***



**Professor Sibongile Muthwa  
Vice-Chancellor**



# About Nelson Mandela University



Nelson Mandela University is the only university in the world to carry the name of Nelson Rolihlahla Mandela.

With this honour comes the responsibility of leading our University into a new era of transformative innovation, development and change in line with the ethos and values of our namesake.

Living the legacy of Mandela should be reflected in the way we teach, learn, do research, engage with our partners, and work, study and live as staff, students and alumni.

We are on a journey to achieve this and become the learning destination for staff and students who:

- are pioneering change agents for a better world
- are committed to creating jobs in an entrepreneurial economy
- work together across disciplines in seeking solutions and innovations to achieve quality of life and a healthy environment for all people, and
- are instilled with a deep need to serve and give back.

## Fast Facts and V2030 Strategic Focus Areas



**CAMPUSES**  
NORTH, SOUTH, OCEAN SCIENCES, SECOND  
AVENUE (IN SUMMERSTRAND) MISSIONVALE  
(MISSIONVALE), BIRD STREET (CENTRAL),  
GEORGE (GEORGE CAMPUS IN THE GARDEN  
ROUTE)

**31 860**

**ENROLLED STUDENTS**

**6** INSTITUTIONAL  
**RESEARCH**  
THEMES

**2 230**

**PERMANENT EMPLOYEES**



**867**  
**INTERNATIONAL**  
**STUDENTS**

**258**  
**PROGRAMMES**

(FROM CERTIFICATE THROUGH TO  
DOCTORAL QUALIFICATIONS)

**7 FACULTIES**

(Business and Economic Sciences;  
Education; Engineering, the Built  
Environment and Technology; Health  
Sciences; Humanities; Law and  
Science)



**V2030 STRATEGIC  
FOCUS AREAS**

**51** **DIFFERENT  
COUNTRIES**



# Office-Bearers of the University

## **CHANCELLOR**

Dr GJ Fraser-Moleketi: MAdmin (UP), DPhil (hc) (Mandela University)

## **CHAIRPERSON OF COUNCIL**

Ambassador NP January-Bardill: BA, Cert in Ed(UBL), MA(Essex University, UK), Dip HR Management (Damelin)

## **VICE-CHANCELLOR**

Prof SW Muthwa: BA(SW)(Fort Hare), BA(SW)Hons(Wits), MSc, PhD(London University, UK)

## **DEPUTY VICE-CHANCELLOR: ENGAGEMENT AND TRANSFORMATION**

Prof A Keet: BA, HDE, BEd, MEd (UWC), PhD (Edu Mang, Law and Policy) (UP)

## **DEPUTY VICE-CHANCELLOR: LEARNING AND TEACHING**

Prof CD Foxcroft: BA, BAHons, MA, DPhil(UPE)

## **DEPUTY VICE-CHANCELLOR: PEOPLE AND OPERATIONS**

Mr LE Hashatse: BJourn & Media, BAHons(Rhodes), MA(Edith Cowan University, Australia)

## **DEPUTY VICE-CHANCELLOR: RESEARCH, INNOVATION AND INTERNATIONALISATION**

Dr T Mgwebi: BSc, BScHons, MSc, HDipEd(Unitra); PhD(UCT); PGDeg(Tertiary Education Management)(University of Melbourne, Australia)

## **DEAN OF STUDENTS**

Mr LP Jack: NDip(PMA)(EC Technikon), BTech(PM)(PET), BAPhil(US), MCom(UKZN)

## **EXECUTIVE DIRECTOR: FINANCE**

Mr MR Monaghan: BCom(UPE), BComHons(UNISA), Professional Accountant(SA)

## **REGISTRAR**

Mr EB De Koker: BA(UCT), BAHons(UNISA), MA(Pub Admin) (University of Warwick, UK)

## **PRESIDENT OF ALUMNI ASSOCIATION**

Mr K Blose: BSc(Construction Economics), BScHons(Quantity Surveying)(NMMU)



# Executive Deans of Faculties

## **BUSINESS AND ECONOMIC SCIENCES**

Prof HR Lloyd: BCom, BComHons, MCom, DCom(UPE)

## **EDUCATION**

Dr SF Moeng: BA, HDE, BEdHons(UPE), MSc(St Cloud State University, USA), DEd(NMMU)

## **ENGINEERING, THE BUILT ENVIRONMENT AND TECHNOLOGY**

Prof D Pottas (Acting): BScHons(PU CHE), PhD(RAU), MCSSA

## **HEALTH SCIENCES**

Prof Z Zingela: MBChB(Natal), FCPsych(SA), MMed(UP)

## **HUMANITIES**

Prof P Maseko: BA, BAHons(UWC), MA, Cert in Assessor's Course (Curriculum Development and Assessment in HE), PhD, PGDip in Higher Ed(RU)

## **LAW**

Dr L Biggs (Acting): BCom (Law), LLB(UPE), LLM (Labour Law) (cum laude), LLD(NMMU)

## **SCIENCE**

Prof A Muronga: BSc, UED(UNIVEN), BScHons, MSc(UCT), PhD(University of Minnesota, USA)

## **DEAN OF LEARNING AND TEACHING**

Dr P Kota-Nyati: BA(Vista), BAHons, MA Couns Psych(UPE), DPhil(Mandela Uni)



# Order of Proceedings

## **Entrance of Academic Procession**

## **Moment of silence**

## **Constitution of Congregation and Welcome**

Prof SW Muthwa (Vice-Chancellor)

## **Choral performance**

Nelson Mandela University Choir

## **Awarding of qualifications**

Prof SW Muthwa (Vice-Chancellor)

## **Conferring of Doctoral Degrees**

Prof SW Muthwa (Vice-Chancellor)

## **Message of Congratulations and Dissolution of Congregation**

Prof SW Muthwa (Vice-Chancellor)

## **National anthem**

Nelson Mandela University Choir

## **Departure of Academic Procession**

\* The words *Cum Laude* indicate that the diploma or degree is awarded with distinction to the candidate/s listed.

## **FACULTY OF SCIENCE**

### **DIPLOMA IN ANALYTICAL CHEMISTRY**

BHUDA, Lusanda  
BLOSE, Nomcebo Brilliant  
BOMELA, Sisipho  
DU PREEZ, Michael  
FANI, Pamella  
HALL, Ruan  
JORDAAN, Nathan  
KHALISHWAYO, Thabisile Naledi  
LEWIS, Celeste Farren  
MAGOLEGO, Lerato Constance  
MAISTRY, Naveshan  
MAKELENI, Abongile Lolwethu Akhona  
MAKHABANE, Siyabonga  
MALINDI, Iphile  
MANI, Siphesihle  
MAVAIVAI, Ethel  
MBEWU, Akhona  
MBURWANA, Ovayo  
MDYOBHENI, Billy Sibuso  
MLELE, Lindokuhle  
MLONYENI, Mongikazi  
MPUKU, Baphumle Joseph  
MSUTU, Khulisiwe  
NCAPAYI, Khanya Undigcine  
NCUBE, Bonginkosi  
NDAYINI, Zizile  
NDYENGA, Siphesihle  
NOTYAWA, Sikho  
NTSIME, Baxolele  
POSWAYO, Sesethu Tiny  
QINGALENDLELA, Uviwe  
RAMAKATSA, Kedibone Francina  
SIKO, Anam  
SONTSELE, Vuyo Pearl  
TSHONA, Sandisiwe  
VILI, Lumumba  
VISAGIE, Eden  
WILLEM, Sibulele Sibongile  
Yوبا, Sibulele Zabo

#### **CUM LAUDE**

MAHOLOBELA, Lucia Wandile

### **DIPLOMA IN CHEMICAL PROCESS TECHNOLOGY**

DICKSON, Kabelo  
JADA, Akhona  
KHUMALO, Siphesihle Sijabulelo  
KUMALO, Nobuhle  
MAKHWELO, Makabongwe  
MTYOBILE, Zintle  
NGOMANE, Hlengiwe Gezephi  
SITHOLE, Sanele  
TYALI, Sonwabise  
WAXA, Luthando Lerato

YAFELE, Olwethu  
ZIYA, Agcobile

#### **CUM LAUDE**

KHUMALO, Nombulelo Innocentia  
MDUKISA, Mthuthuzeli  
NDABA, Rodwel

### **DIPLOMA IN POLYMER TECHNOLOGY**

GCANGA, Sithi Mthwakazi  
HOBENI, Thulethu Hope  
MAHASHA, Caroline Mmakole  
MANONI, Axole  
MBAMBISO, Aphiwe  
MOLOTO, Noko Puledi  
MTULANDWE, Lelethu Lisa  
NASH, Mikhail  
NGAMNTWINI, Asemahle  
NGQOBOLOLO, Siyabonga  
RORWANA, Karabo  
TROMP, Shandre Caitlyn  
VAN DER WESTHUIZEN, Annalise Hendrina

#### **CUM LAUDE**

RAVAT, Sumayah

### **ADVANCED DIPLOMA IN ANALYTICAL CHEMISTRY**

MADALA, Sinovuyo  
MTOLI, Sinenjongo  
MTSWENI, Kgothatso Nomhlekhabo  
NELANE, Nondi  
NGCAYISA, Mmabato  
NTONINTSHI, Lunathi  
PEARCE, Kaylin Daniel  
PETER, Unathi  
STRUWIG, Adandre  
TAFENI, Lindelani  
WILSON, Liam David-John

#### **CUM LAUDE**

BUNU, Atupele Anisa

### **BACHELOR OF COMMERCE HONOURS**

ADAMS, Thomas Malcolm  
*(Computer Science and Information Systems)*  
BRAND, Neil John  
*(Computer Science and Information Systems)*  
BURRELL, Astrid Melissa  
*(Computer Science and Information Systems)*  
CHIROVE, Prosperous  
*(Computer Science and Information Systems)*  
DE JAGER, Luke  
*(Information Systems and Business Management)*

MOLOSE, Sivuyisiwe  
*(Computer Science and Information Systems)*  
 SOUNDARARAJAN, Sridharan  
*(Computer Science and Information Systems)*  
 TALJAARD, Isabelle  
*(Computer Science and Information Systems)*  
 VAN DER WESTHUIZEN, Niel  
*(Information Systems and Business Management)*  
 WALTERS, Grant Mark  
*(Computer Science and Information Systems)*  
 ZOTHANI, Libongolethu  
*(Computer Science and Information Systems)*

#### **CUM LAUDE**

JONES, Ashley  
*(Computer Science and Information Systems)*  
 VENTER, Marco  
*(Computer Science and Information Systems)*

#### **BACHELOR OF COMMERCE HONOURS IN MATHEMATICAL STATISTICS**

MHLAULI, Vuyisa Qhayiya  
 NGXAFANE, Ncumisa Bongeka Candice  
 NOTUNUNU, Sandisiwe

#### **BACHELOR OF SCIENCE**

ABRAHAMS, Saabirah  
 AGHERDIEN, Rafeeq  
*(Physical Science and Mathematics)*  
 ALVEN, Nombasa Yonela  
*(Biochemistry, Chemistry and Microbiology)*  
 ARMSTRONG, Kieran Joseph  
*(Computer Science)*  
 ARNOLDS, Matthew Cecil Christopher  
*(Biochemistry, Chemistry and Microbiology)*  
 ASIEMA, Christian Amollo  
*(Biochemistry, Chemistry and Microbiology)*  
 BEKKER, Courtney Paige  
*(Biochemistry, Chemistry and Microbiology)*  
 BHAGWANDIN, Adhika  
*(Computer Science)*  
 BONANI, Sinalo Olothando  
*(Biochemistry, Chemistry and Microbiology)*  
 BOSCH, Nicola  
*(Biological Sciences)*  
 BOUCHAREB, Djamila  
*(Biochemistry, Chemistry and Microbiology)*  
 BROWN, Samantha Candice  
*(Computer Science)*  
 BURGER, Magaretha Magdalena  
*(Biological Sciences)*  
 CADLES, Mishka  
*(Biochemistry, Chemistry and Microbiology)*  
 CHETENI, Takudzwa Perpetua  
*(Biochemistry, Chemistry and Microbiology)*  
 CLARK, Selina Eileen  
*(Biological Sciences)*  
 CLEMENCE, Chloé  
*(Computer Science)*

CLOETE, Shalin Matthew  
*(Biochemistry, Chemistry and Microbiology)*  
 DANGAZELE, Aviwe  
*(Biochemistry, Chemistry and Microbiology)*  
 DANSAS, Yididya Tilahun  
*(Biochemistry, Chemistry and Microbiology)*  
 DAVIE, Isa  
*(Biochemistry, Chemistry and Microbiology)*  
 DE BEER, Nathan Philip  
 DE KOKER, Francois  
*(Biochemistry, Chemistry and Microbiology)*  
 DUDLEY, Shanè  
*(Biochemistry, Chemistry and Microbiology)*  
 DUOF, Natalie  
*(Biological Sciences)*  
 DYANI, Sanelisiwe Anelisa  
*(Biochemistry, Chemistry and Microbiology)*  
 EMEKADUOME, Somtochukwu Michael  
*(Biochemistry, Chemistry and Microbiology)*  
 ENYEKA, Deborah Isako  
 FELIX, Micah Shelea  
*(Biochemistry, Chemistry and Microbiology)*  
 FERREIRA, Steven Peter Edward  
 FRIEND, Maryke  
*(Biochemistry, Chemistry and Microbiology)*  
 GOVENDER, Marishka  
*(Biological Sciences)*  
 GQAMANA, Khanya  
*(Biochemistry, Chemistry and Microbiology)*  
 GREGORIOU, Nicholas  
*(Biochemistry, Chemistry and Microbiology)*  
 GUNGQISA, Mpumezi  
 GWILIZA, Sihle  
*(Computer Science)*  
 GXEKWA, Phathiswa  
*(Biochemistry, Chemistry and Microbiology)*  
 HUMAN, Faith Hope  
*(Biochemistry, Chemistry and Microbiology)*  
 IKIN, Chad Joshua  
 JACOBS, Carmen  
*(Biochemistry, Chemistry and Microbiology)*  
 JOUBERT, Lise  
*(Biochemistry, Chemistry and Microbiology)*  
 JWARA, Mbali Bridget  
*(Biochemistry, Chemistry, Microbiology and Physiology)*  
 KATE, Kuhle Lelethu  
*(Biochemistry, Chemistry and Microbiology)*  
 KETSE, Sesethu  
*(Biochemistry, Chemistry and Microbiology)*  
 KHAN, Laeeqa  
 KHOSA, Vutomi Hazel  
*(Biochemistry, Chemistry and Microbiology)*  
 KLAAS, Lulama  
 KOEN, Jonathan Tennant  
*(Biochemistry, Chemistry and Microbiology)*  
 KOSAN, Hussein  
 KOTZE, Tyla  
 KRUYER, Jaime Ruth  
*(Biochemistry, Chemistry and Microbiology)*  
 KURTEN, Dylan  
*(Computer Science)*

LETSOALO, Sefenya Lesego Simon  
*(Biochemistry, Chemistry and Microbiology)*  
 LIGEGE, Rotondwa  
*(Biochemistry, Chemistry and Microbiology)*  
 LINGANI, Zimi  
 LOMBARD, Cornelius Johannes  
*(Computer Science)*  
 LOOKMANJEE, Abuzer  
*(Computer Science)*  
 MABEKA, Sphenathi Josephina  
*(Computer Science)*  
 MACKAY, Jason  
*(Biochemistry, Chemistry and Microbiology)*  
 MAKALIMA, Awakhiwe Makhosi  
*(Biochemistry, Chemistry and Microbiology)*  
 MAKAPELA, Lindiwe  
*(Biological Sciences)*  
 MALINGA, Thandeka Pamela  
*(Biochemistry, Chemistry and Microbiology)*  
 MANCI, Nomthandazo Kindness  
*(Biochemistry, Chemistry and Microbiology)*  
 MANDLA, Amahle Annitta  
*(Computer Science)*  
 MATINKETSA, Lebogang  
 MATIWANE, Ovayo  
*(Computer Science)*  
 MAYEZA, Xoliswa  
*(Biochemistry, Chemistry and Microbiology)*  
 MAZIBUKO, Siyanda  
*(Biochemistry, Chemistry and Microbiology)*  
 MBALO, Siphosethu  
*(Computer Science)*  
 MBOUNJA MISSE, Claire-Karen Morena  
*(Biochemistry, Chemistry and Microbiology)*  
 MBUMBULWANA, Luzuko  
*(Biochemistry, Chemistry and Microbiology)*  
 MILNE, Justin Dylan  
*(Computer Science)*  
 MKHENCELE, Thulisa  
*(Biochemistry, Chemistry and Microbiology)*  
 MNGUPHANE, Zukisa  
 MNQANQENI, Siphathisenkosi  
 MOKETOSE, Phooka Daniel  
*(Computer Science)*  
 MOKOTEDI, Lerato Princess  
*(Computer Science)*  
 MORGAN, Erin Jessica  
*(Biochemistry, Chemistry and Microbiology)*  
 MTAKATI, Lwandile  
*(Biochemistry, Chemistry and Microbiology)*  
 MTAYISI, Sineyethu Princess  
*(Biochemistry, Chemistry and Microbiology)*  
 MTHOMBENI, Dzunani  
*(Biochemistry, Chemistry and Microbiology)*  
 MTILENI, Tlangelani  
*(Computer Science)*  
 MUJEYI, Leah Tariro  
*(Computer Science)*  
 MUSETSHO, Mpho Meligan  
*(Computer Science)*  
 MYBURGH, Lisa  
*(Biochemistry, Chemistry and Microbiology)*

MZIMBA, Siyanda  
*(Biochemistry, Chemistry and Microbiology)*  
 NEL, Cornelia Elizabeth  
 NGANIBANI, Athule  
*(Computer Science)*  
 NGCASANE, Simamkele  
*(Computer Science)*  
 NGCOBOZI, Mihle  
 NGCOKO, Zamokuhle Jimmy  
 NGQUSEKA, Yondela  
*(Biochemistry, Chemistry and Microbiology)*  
 NGXATA, Nkosinathi  
*(Biochemistry, Chemistry and Microbiology)*  
 NGXOVU, Ntombekhongo  
*(Biochemistry, Chemistry and Microbiology)*  
 NHLANGWINI, Libo Andrew Azeasakhe  
*(Computer Science)*  
 NKUMANDA, Ondela  
*(Biochemistry, Chemistry and Microbiology)*  
 NQAYI, Qhawekazi  
*(Biochemistry, Chemistry and Microbiology)*  
 NTEBE, Lihle Abongile Yonela  
*(Biochemistry, Chemistry and Microbiology)*  
 NTSINGILA, Inga Natacia  
*(Biochemistry, Chemistry and Microbiology)*  
 OLIVANT, Ryan James  
*(Biochemistry, Chemistry and Microbiology)*  
 OOSTHUYSEN, Chanae  
*(Biochemistry, Chemistry and Microbiology)*  
 PETER, Sinoyolo  
 PHUTHU, Vhuthuhawe  
*(Computer Science)*  
 PRINSLOO, Petrus Jacobus Christopher  
*(Biochemistry, Chemistry and Microbiology)*  
 RECCHIA, Daniella Lorida  
*(Biochemistry, Chemistry and Microbiology)*  
 REDDY, Christine Anne  
*(Biochemistry, Chemistry and Microbiology)*  
 RHODES, Justin Ernest  
*(Computer Science)*  
 SARAGNESE, Daniella Nadia  
*(Biochemistry, Chemistry and Microbiology)*  
 SCHENK, Sebastian Joachim  
*(Computer Science)*  
 SEKU, Ongeziwe  
*(Computer Science)*  
 SELEKE, Molebatsi Mbali  
*(Biochemistry, Chemistry and Microbiology)*  
 SHEKOE, Tsoarelo Sharmain  
*(Biochemistry, Chemistry and Microbiology)*  
 SIBANYONI, Sizwe Thapelo  
*(Computer Science)*  
 SIPUKA, Onke Mahle  
*(Computer Science)*  
 SITOLE, Lungile  
*(Biochemistry, Chemistry and Microbiology)*  
 SNYMAN, Andre Heinrich  
*(Computer Science)*  
 SOJINI, Nomahlubi  
 SOOBARAMONEY, Justine Margaret-Joy  
*(Biochemistry, Chemistry and Microbiology)*  
 SUGAWARA, Sadeiyaina  
*(Biochemistry, Chemistry and Microbiology)*



SWANEPOEL, Francois Jakobus  
SWARTBOOI, Simthandile  
(*Biochemistry, Chemistry and Microbiology*)  
TAIT, Roslyn  
(*Computer Science*)

TETA, Bulumko  
(*Biochemistry, Chemistry and Microbiology*)  
THABETHE, Nomzamo Nkosizwile  
(*Biological Sciences*)

THEART, Caitlin  
THOMAS, Masilakhe  
(*Computer Science*)

THULARE, Hope Khanyisa  
(*Biochemistry, Chemistry and Microbiology*)  
TIBSHRAENY, Janke  
VAN DER MERWE, Dylan  
(*Biochemistry, Chemistry and Microbiology*)

VAN DER NEST, Ashley Roberta  
VIKWA, Ayathandwa Thubelihle  
(*Biochemistry, Chemistry and Microbiology*)  
VILJOEN, Chris  
(*Computer Science*)

VISAGIE, Shahlaa  
(*Biochemistry, Chemistry and Microbiology*)  
VORGERS, Jarryd Allister  
(*Biochemistry, Chemistry and Microbiology*)  
VORSTER, Lodewikus Francois  
(*Biochemistry, Chemistry and Microbiology*)  
WARD, Nathan Asher  
(*Human Movement Science and Biochemistry*)  
WELGEMOED, Chloe

WOLVAARD, Jesse-Lynn  
(*Biological Sciences*)  
XINGWANE, Nasiphi  
(*Computer Science*)

#### **CUM LAUDE**

AH SING, Tamlin  
(*Biological Sciences*)

CHEN, Yu-Ju  
(*Computer Science*)

CONRADIE, Cameron Liam Pierce  
(*Biological Sciences*)

DARVEL, Jarod Anthony  
(*Computer Science*)

DU PLESSIS, Erich  
HOLMES, Daniel  
(*Computer Science*)

JOHNSTON, Lauren  
(*Biochemistry, Chemistry and Microbiology*)

MNQANQENI, Asavela  
SISUSA, Onwabe  
TAPANES GONZALEZ, Felipe  
(*Computer Science*)

WIENAND, Lauren Rachel

#### **BACHELOR OF SCIENCE HONOURS IN APPLIED MATHEMATICS**

##### **CUM LAUDE**

DE WAAL, Gysbert Nicolaas

#### **BACHELOR OF SCIENCE HONOURS IN BIOCHEMISTRY**

AGHERDIEN, Taufeeq  
FLETCHER, Shirvargo  
MÜLLER, Karla  
RICHARDS, Sean Leonard  
RUDOLPH, Carlen  
VAN DER MERWE, Vicky  
VILJOEN, Zenobia

#### **BACHELOR OF SCIENCE HONOURS IN CHEMISTRY**

ADAM, Muhammad Ameen  
DIKO, Amanda  
DUBE, Tafara Alfred  
HAHN, Chloe Gabrielle  
JAYIYA, Akhanani Azola  
MAKHETA, Siyasamkela Cwenga  
MLATHA, Pilasande  
MOKGOHLOA, Mathule Collen  
SEKONYELA, Busisiwe  
SHANGE, Nomvelo

##### **CUM LAUDE**

CLOETE, Lariney  
CUTHBERTSON, Jarryd Pierre  
FROSLER, Hannah Maggie  
TROLLIP, Danica Brione  
VAN DER VYVER, Kayla

#### **BACHELOR OF SCIENCE HONOURS IN COMPUTER SCIENCE AND INFORMATION SYSTEMS**

BOWERS, Devon Everton  
FAUL, Richard Henry  
GRANT, Amma Oye  
MAMOMBE, Tinashe  
MANYONGA, Silvester  
MORGAN, Tamera Micaela  
PETERSEIL, Michael Dominique  
PORTER, Declan  
SHEPHERD, James Alan Bruce  
SIMON, Stephen Anthony  
VAN DER MERWE, Anne Elizabeth  
VIEIRA, Kirsten Leigh

##### **CUM LAUDE**

BOTHA, Bouwer  
DE JAGER, Amica  
KLEINLUGTENBELT, Ethan Thomas

**BACHELOR OF SCIENCE HONOURS IN  
FORMULATION SCIENCE**

BALOGUN, Deborah Oluwayemisi  
CARLOO, Yusra  
DASI, Lukhanyo  
MOALUSI, Onkgopotse Kemet Tsiane  
NGOBO, Khanya Luthando  
NTETHA, Boniswa Zuzile  
NTSUNDWANA, Vuyisa Fiona  
NYELELE, Lerato Suzan  
RAMABULANA, Cecilia  
SOBAYENI, Nopasika  
TYHALI, Nandipha

***CUM LAUDE***

VAN ROOY, Anneke

**BACHELOR OF SCIENCE HONOURS IN  
MATHEMATICAL STATISTICS**

MAGAYA, Aphiwe  
SEBOLA, Sipiwe Bernard  
STRYDOM, Kristen

***CUM LAUDE***

DAINES, Justin Brad  
SIBIYA, Thandeka Precious

**BACHELOR OF SCIENCE HONOURS IN  
MATHEMATICS**

MATIKA, Saneliso

**BACHELOR OF SCIENCE HONOURS IN  
MICROBIOLOGY**

BARRON, Nikita  
CHAPFIKA, Patience  
KHOBLO, Lufuno Prescious  
LAUBSCHER, Lucian

**BACHELOR OF SCIENCE HONOURS IN  
PHYSICS**

NDZONDA, Siyabonga Dlelphi Elia  
PULLEN, Luchian Charton Morne  
VILJOEN, Peter Joshua

**BACHELOR OF SCIENCE HONOURS IN  
PHYSIOLOGY**

BALOYI, Agreement  
MANYAKANYAKA, Nqabakazi  
MUSWEWESHIRI, Jasper Just  
NGQAKA, Okuhle Kuhle  
THENGWA, Ngwekazi

***CUM LAUDE***

HENDRICKS, Sumaiyah



## MASTER OF SCIENCE (RESEARCH)

ABRAHAMS, Waldo  
(Mathematical Statistics)

Title of dissertation:

CLASSIFICATION AND CLUSTERING-BASED METHODS FOR OUTLIER DETECTION OF SOLAR RESOURCE DATA

Supervisor: Dr CM Clohessy

Co-supervisor: Dr WJ Brettenny

---

BARNARDO, Brandon  
(Chemistry)

Title of dissertation:

SYNTHESIS OF ROOF-SHAPED HOST COMPOUNDS AND AN INVESTIGATION OF THEIR POTENTIAL ABILITY FOR THE SEPARATION OF ISOMERS AND RELATED COMPOUNDS

Supervisor: Prof B Barton

---

BOPAPE, Karabo Michael  
(Chemistry)

Title of dissertation:

CANNABIDIOL: EXTRACTION AND PURIFICATION USING FLOW CHEMISTRY

Supervisor: Prof P Watts

---

DU PLESSIS, Francois Hendrik  
(Computer Science and Information Systems)

Title of dissertation:

AN ANALYSIS OF ANT COLONY OPTIMIZATION ALGORITHM ON DYNAMICALLY CHANGING OBS NETWORKS WITH IMPAIRMENTS

Supervisor: Prof MC Du Plessis

Co-supervisor: Prof TB Gibbon

---

DYANTYI, Nokuzola Ncumisa - **Cum Laude**  
(Chemistry)

Title of dissertation:

CELLULOSIC BIONANOCOMPOSITES DERIVED FROM FOREST WASTE RESIDUES FOR RIGID MATERIAL APPLICATIONS.

Supervisor: Dr MJ John

Co-supervisor: Prof SP Hlangothi

---

ERASMUS, Christopher Daniel - **Cum Laude**  
(Mathematical Statistics)

Title of dissertation:

BOOTSTRAP-BASED TOLERANCE INTERVALS FOR NESTED TWO-WAY RANDOM EFFECTS MODELS

Supervisor: Dr WJ Brettenny

Co-supervisor: Dr CM Clohessy

---

HAWES, Nomashaka Busisiwe Ntombenthe  
(Chemistry)

Title of dissertation:

THE PERFORMANCE EVALUATION OF SLOW-SETTING ANIONIC BITUMEN EMULSIONS AND RESIDUES

Supervisor: Prof SP Hlangothi

Co-supervisor: Dr PT Johannes

Co-supervisor: Mr GAJ Mturi

---

KOEBERG, Bryce Lynton  
(Chemistry)

Title of dissertation:

THE CONTINUOUS FLOW SYNTHESIS OF CANNABIGEROL, AN ANTIBIOTIC FOR METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS AND DRUG RESISTANT GRAM-NEGATIVE BACTERIA

Supervisor: Prof P Watts

---

KRITZINGER, Albert Kahl - **Cum Laude**  
(Computer Science and Information Systems)

Title of dissertation:

A MODEL FOR PREDICTIVE POLICING IN SOUTH AFRICAN SMART CITIES

Supervisor: Prof AP Calitz

Co-supervisor: Dr L Westraadt

---

KRITZINGER, Donne Ashley - **Cum Laude**  
(Biochemistry)

Title of dissertation:

EXPLORING THE COSMETIC PROPERTIES OF TANZANIAN SEAWEEDS IN COMPARISON TO KNOWN COSMETIC INGREDIENTS

Supervisor: Prof M Van De Venter

Co-supervisor: Dr TC Koekemoer

Co-supervisor: Ms NS Dambuza

---

NAUDE, Meggan Kate  
(Computer Science and Information Systems)

Title of dissertation:

USING INFORMATION VISUALISATION TO SUPPORT THE SELF-MANAGEMENT OF TYPE 2 DIABETES MELLITUS

Supervisor: Prof JL Wesson

---

NETSHAMUTSHEDZI, Ndivhuwo  
(Applied Mathematics)

Title of dissertation:

MODELLING AFRICAN SWINE FEVER DISEASE IN DOMESTIC PIGS WITH CULLING AND REMOVAL OF CONTAMINATED FEEDS

Supervisor: Dr W Mbava

---

NTOMBELA, Nompilo Princess  
(Chemistry)

Title of dissertation:

ENCAPSULATION OF FLAME RETARDANTS FOR LITHIUM-ION BATTERY SAFETY

Supervisor: Prof EE Ferg

Co-supervisor: Dr X Van Niekerk

---



OLIVIER, Tiaan - **Cum Laude**

(*Biochemistry*)

Title of dissertation:

*CHARACTERISING THE EFFICACY OF SANADB PRODUCTS AS SELECTIVE CYCLOOXYGENASE-2 INHIBITORS*

Supervisor: Prof V Oosthuizen

Co-supervisor: Prof M Van De Venter

---

WESTCOTT, Amy-Rose - **Cum Laude**

(*Applied Mathematics*)

Title of dissertation:

*AN EVOLUTIONARY ALGORITHM APPROACH TO ECOLOGICAL OPTIMAL CONTROL PROBLEMS*

Supervisor: Dr CJ Pretorius

Co-supervisor: Prof JW Gonsalves

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## DOCTOR OF PHILOSOPHY

BATTISON, Aidan Leigh

*(Chemistry)*

*SYNTHESIS AND APPLICATIONS OF NOVEL FLUORESCENT AND COLORIMETRIC COUMARIN-BASED SENSORS TOWARDS ANALYTE SENSING IN AQUEOUS SYSTEMS*

Supervisor: Dr N Mama

---

JENA, James Farai

*(Physics)*

Title of thesis:

*DEVELOPMENT OF A DISTRIBUTED OPTICAL FIBER SENSOR FOR GEOLOGICAL APPLICATIONS*

Supervisor: Prof TB Gibbon

Co-supervisor: Dr S Wassin

---

KAREMBERA, Reinhard Siwombe

*(Physics)*

Title of thesis:

*A 5G COMMUNICATION SYSTEM BASED ON FLEXIBLE SPECTRUM TECHNOLOGY FOR THE SKA*

Supervisor: Prof TB Gibbon

Co-supervisor: Dr S Wassin

---

LATOLLA, Nehemiah Solomon

*(Chemistry)*

Title of thesis:

*PHYTOCHEMICAL INVESTIGATION AND ANTIDIABETIC ACTIVITY OF CISSAMPELOS CAPENSIS AND STRYCHNOS HENNINGSI THE EASTERN CAPE MEDICINAL PLANTS*

Supervisor: Dr BG Hlangothi

---

MAHANJANA, Lungelwa

*(Chemistry)*

Title of thesis:

*CHEMICAL ANALYSIS OF SELECTED EASTERN CAPE MEDICINAL PLANTS*

Supervisor: Dr BG Hlangothi

Co-supervisor: Prof M Van De Venter

Co-supervisor: Prof FR Van Heerden

---

SOKOPO, Bulelani Joab

*(Mathematics)*

Title of thesis:

*UNBOUNDED DERIVATIONS OF C\*-ALGEBRAS AND UNBOUNDED OPERATOR ALGEBRAS*

Supervisor: Dr M Weigt



## DOCTORAL CITATIONS

## FACULTY OF SCIENCES



# THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

**AIDAN LEIGH BATTISON**

## Previous qualifications:

2015 BSc

2015 BSc Hons

2018 MSc

Nelson Mandela Metropolitan University

Nelson Mandela Metropolitan University

Nelson Mandela University



## Thesis:

*SYNTHESIS AND APPLICATIONS OF NOVEL FLUORESCENT AND COLORIMETRIC COUMARIN-BASED SENSORS TOWARDS ANALYTE SENSING IN AQUEOUS SYSTEMS*

This study focuses on the ionic sensing capabilities of coumarin-based fluorescent and colorimetric sensors in organic and aqueous solvents. Fluorescent sensors were synthesized via Cu(I)-catalyzed 1,3-dipolar azide-alkyne cycloaddition reactions, whilst colorimetric imine and azo derivatives were synthesized from appropriate aldehydes and amines by known organic methods. Results indicated a strong preference of the fluorescent based sensors towards Fe<sup>3+</sup> characterized by a strong emission quenching response, whilst the colorimetric sensors displayed a strong absorbance sensing response towards Hg<sup>2+</sup> characterized by notable changes in the absorbance spectra with the azo derivative further displaying a visible colour change from yellow to red.

Supervisor: Dr N Mama

# THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

**JAMES FARAI JENA**

## **Previous qualifications:**

2003 BSc. Hons. Applied Physics  
2013 PG. Dip. Higher Education  
2017 MPhil. Laser and Applied Optics

National University of Science and Technology  
National University of Science and Technology  
National University of Science and Technology



## **Thesis:**

*DEVELOPMENT OF A DISTRIBUTED OPTICAL FIBER SENSOR FOR GEOLOGICAL APPLICATIONS*

The purpose of this study was to construct a distributed optical fiber sensor to detect potential sinkholes and give early warnings before the collapsing of the surface into subterranean cavities. The interferometric, polarisation-based optical fiber sensor developed was compared to a commercial geophone. The fiber sensor exhibited better sensitivity and superior performance. Sinkhole precursors were identified from subsurface responses to ambient noise. Early warning alert was achieved using the spectral analysis algorithm developed. The distributed fiber sensor covered 28km. Positions of identified frequencies had a relative location error of 0.096. The results showed that distributed optical fiber sensing using ambient noise signals allows real-time subsurface monitoring over extended distances with alarms to improve infrastructural safety.

Supervisor: Prof TB Gibbon  
Co-supervisor: Dr S Wassin



# THE DEGREE OF DOCTOR OF PHILOSOPHY (PHYSICS)

**REINHARD SIWOMBE KAREMBERA**

**Previous qualifications:**

2014 Bachelor of Science (Electronic Engineering)

2019 MSc (Electrical and Electronic Engineering)

The University of Namibia

Doshisha University, Kyoto, Japan

**Thesis:**

*A 5G COMMUNICATION SYSTEM BASED ON FLEXIBLE SPECTRUM TECHNOLOGY FOR THE SKA*



Throughout history, radio astronomy research has been affected by radio communication networks. To that end, regulations have established spectrum assignments such that radio astronomy spectrums are protected from other radio communication applications. As the need for spectrum increases, such mitigation techniques are not viable. In this study, a novel solution to realize the 5th generation mobile network (5G) mobile services within radio astronomy areas was proposed. The networks were realized using low-cost optical devices. Data rates meeting 5G standards were achieved. The demonstrated networks were able to avoid (radio-frequency interference) RFI while supporting radio communication services within radio astronomy areas.

Supervisor: Prof TB Gibbon

Co-supervisor: Dr S Wasson

# THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

**NEHEMIAH SOLOMON LATOLLA**

## **Previous qualifications:**

2014 Diploma (Analytical Chemistry)  
2015 BTech (Chemistry)  
2017 MTech (Chemistry)

Nelson Mandela University  
Nelson Mandela University  
Nelson Mandela University



## **Thesis:**

*PHYTOCHEMICAL INVESTIGATION AND ANTIDIABETIC ACTIVITY OF CISSAMPELOS CAPENSIS AND STRYCHNOS HENNINGSII THE EASTERN CAPE MEDICINAL PLANTS*

This study investigated the phytochemistry of two Eastern Cape Medicinal plants, *Cissampelos capensis* (mayisake) and *Strychnos henningsii* (umnonono), used to treat diabetes by locals. Qualitative and quantitative phytochemical profiling of crude extracts were followed by fractionation and purification of extracts to isolate pure compounds and finally, their identification, characterization and in-vitro testing. The study contributes new knowledge in drug discovery as potential lead compounds for diabetes type II were identified through the isolation of the eight novel compounds. The proaporphine alkaloids isolated from *Cissampelos capensis* (*C. capensis*) and pentacyclic triterpenes isolated from *Strychnos henningsii* (*S. henningsii*) showed promising inhibitory potential on alpha-amylase and alpha-glucosidase.

Supervisor: Dr BG Hlangothi

# THE DEGREE OF DOCTOR OF PHILOSOPHY (CHEMISTRY)

**LUNGELWA MAHANJANA**

## **Previous qualifications:**

2010 NDip (Analytical Chemistry)  
2012 BTech (Analytical Chemistry)  
2013 MTech (Chemistry)

Nelson Mandela Metropolitan University  
Nelson Mandela Metropolitan University  
Nelson Mandela Metropolitan University



## **Thesis:**

*CHEMICAL ANALYSIS OF SELECTED EASTERN CAPE MEDICINAL PLANTS*

The work sought to explore and investigate the chemistry and bioactivity of three medicinal plants used in the Eastern Cape province to treat and manage diabetes and HIV/AIDS related ailments. Interdisciplinary approach was used to generate a scientific pathway for assessing phytochemicals that could be effective. The study is the first to confirm the safety and use of the Eastern Cape Bulbine species in managing HIV/AIDS and isolate novel compounds with HIV-protease inhibition activity. The candidate has developed new scientific strategies and methods for analysis that offer an opportunity to evaluate the phytochemistry of medicinal plants, which could play a vital role in developing new or improved drug formulations. A journal article was published from this work.

Supervisor: Dr BG Hlangothi  
Co-supervisor(s): Prof F van Heerden  
Prof M van de Venter

# THE DEGREE OF DOCTOR OF PHILOSOPHY (MATHEMATICS)

**BULELANI JOAB SOKOPO**

**Previous qualifications:**

2012 BSc (*Cum Laude*)  
2013 BSc (Hons) (*Cum Laude*)  
2015 MSc (*Cum Laude*)

Nelson Mandela Metropolitan University  
Nelson Mandela Metropolitan University  
Nelson Mandela Metropolitan University



**Thesis:**

*UNBOUNDED DERIVATIONS OF C\*-ALGEBRAS AND UNBOUNDED OPERATOR ALGEBRAS*

Derivations of bounded operator algebras have been investigated well. However, not very much is known about derivations of unbounded operator algebras. For this, the study showed that every derivation of a simple pro-C\*-algebra is inner. It subsequently went on to extend results on derivations of Banach quasi \*-algebras to general locally convex quasi \*-algebras. These results include conditions under which derivations of locally convex quasi \*-algebras are closable, and this relies on the concept of well-behavedness of a derivation, which this study introduced in the general context of locally convex quasi \*-algebras. Results on derivations of C\*-algebras were also obtained.

Supervisor: Dr M Weigt

# Honorary Doctoral Recipient

## Noxolo Grootboom - Doctor of Philosophy (*Honoris Causa*)



Celebrated media personality, Noxolo Grootboom, was born on 8 October 1960 in Cacadu (formerly Lady Frere) in the Eastern Cape and completed her formative schooling in the area. During her high school years, she studied

at Lamplough High School

and Bethel College, in Butterworth. Moving to Gauteng in 1981 with her siblings, she took a course in computers at a Johannesburg computer academy. Thereafter, she took up a position as a typist at the South African Broadcasting Corporation (SABC) in 1983, seeing this as an opportunity to move into the media space albeit with no formal journalism background.

Three years later, she worked her way up to being appointed as a Production Assistant and received mentoring from fellow journalists. Her love of storytelling and her passion for the isiXhosa language landed her a position as current affairs producer.

A stand-in stint in the newsroom in 1990, reading a news bulletin, impressed the public broadcaster's management and she subsequently became isiXhosa news anchor.

Her ability to authentically deliver fine isiXhosa prose without being theatrical or clichéd in news reporting, and her love for beautiful spoken language and excellent vocal delivery soon resulted in her becoming a much respected and loved news anchor. Her deep understanding of isiXhosa language, culture, customs and traditions, as well as the recognition of our country's linguistic and cultural diversity enabled her to excellently broadcast in isiXhosa, English and other indigenous South African languages.

She prides herself as the storyteller who learnt these ways of knowing through her rural informal teaching in the Eastern Cape. During her SABC years, she anchored the live funeral

broadcasts of high-profile South Africans like Chris Hani, Winnie Madikizela-Mandela, Oliver Tambo, Walter Sisulu, Joe Slovo, Govan Mbeki and the global icon after which our University is named, Nelson Mandela.

With her unique sense of humour and her inimitable knack for the isiXhosa language, Noxolo represents many things that Nelson Mandela University stands for, including the value of healing society from its brutal wounds, while preserving the intellectual heritage of isiXhosa for families across the nation. On 30 March 2021, Noxolo Grootboom delivered her last news broadcast to an audience of almost 4 million people, marking her retirement at the end of a 37-year career. That news broadcast coincided with a "family meeting" by President Cyril Ramaphosa, who duly moved his time slot up by half an hour to allow her audience to witness her final bulletin. A true honour and accolade to a consummate professional of the industry. As with all her bulletins, she ended her broadcast with her well-known mantra, "Ndinithanda nonke emakhaya" which, loosely translated, means "I love you all at home".

Her public service in South African society to translate stories and capture the mood while teaching younger generations of the content and knowledge preserved in language, makes her one of the few news anchors and storytellers who deserve the opportunity to be honoured by "*ukuthweswa isidanga*" (graduation) for the excellent work done in service to society for more than three decades.

For her invaluable work and contribution to journalism, media and communication, as well as her upliftment of the linguistic heritage of South Africa, it is an honour for Nelson Mandela University to confer the degree of Doctor of Philosophy (*honoris causa*) on **Noxolo Grootboom**.



# Honorary Doctoral Recipient

## Lungile Pepeta - Doctor of Health Sciences (*Honoris Causa*) Posthumous



Acclaimed paediatric cardiologist and medical pioneer, Lungile Pepeta, was born on 16 July 1974 in Bizana, Eastern Cape. He matriculated from Bizana Village High School in 1991

and, the following year, enrolled for the MBChB in the Faculty of Health Sciences at the then University of Transkei (now Walter Sisulu University). He graduated in 1997 and completed his internship at Mthatha General Hospital in 1998. In 1999, he joined Frontier Hospital in Komani (formerly Queenstown) and Dordrecht Hospital to fulfil his community service commitments.

Continuing with his studies during his community service year, he obtained a Diploma in Child Health through the Colleges of Medicine of South Africa. In January 2000, Lungile became a Medical Officer in Paediatrics at King Edward VIII Hospital in Durban, KwaZulu-Natal. Six months later, in July 2000, he was appointed as Registrar in Paediatrics at the University of KwaZulu-Natal.

He qualified as a paediatrician in 2003, after passing the Fellowship of Paediatricians of South Africa. Moving back to Frontier Hospital the following year, he was appointed as Head of Paediatrics.

From mid-2004 to the end of 2008, Lungile was a Specialist Paediatrician, full-time Lecturer and Fellow at the Chris Hani-Baragwanath Hospital in Johannesburg - through its affiliated academic institution, the University of the Witwatersrand. During this time, he completed his paediatric cardiology training.

He obtained the Certificate in Cardiology (SA) through the College of Paediatricians of South Africa in 2008.

Returning to his home province in 2009, he spent a short time at the Nelson Mandela Academic Hospital in Mthatha before being appointed as Principal Specialist and later Head

of Department of Paediatrics and Child Health at the Port Elizabeth Hospital Complex. This was where he established the City's first paediatric cardiology unit - at the Dora Nginza Provincial Hospital. He served at this Complex until the end of 2015, while also lecturing in Paediatric Cardiology at the Complex and at Walter Sisulu University. During his time here, he introduced non-invasive procedures to cure heart disorders and defects, such as congenital heart disorder faced by children in the Eastern Cape, and mentored and trained many doctors, particularly in the field of paediatrics.

In 2012 he was awarded a Master of Medicine in Paediatrics from the University of the Witwatersrand and two years later, admitted as a Fellow of the Society for Cardiovascular Angiography and Interventions, USA (FSCAI).

In January 2016, Lungile was appointed as Associate Professor of Paediatrics at Walter Sisulu University and at the Port Elizabeth Hospital Complex. During 2016, he served as the Acting Chief Executive Officer at Dora Nginza Provincial Hospital and Acting Clinical Governance Manager for the same hospital until the end of 2017.

On 1 January 2017, Dr Lungile Pepeta was appointed as the Executive Dean of the Faculty of Health Sciences at Nelson Mandela University. Later that year, he was elected as a member of the Council of Medical Schemes (CMS). He served the Nelson Mandela University community with excellence, demonstrating exceptional leadership through the establishment of the 10th Medical School in South Africa and championing the accreditation of the undergraduate medical programme.

As an active scholar, his contribution in the field of research in paediatric cardiology extends to over 20 research related outputs (inclusive of 11 research articles).

Included in his impressive list of memberships is President of the Paediatric Cardiac Society of South Africa, Vice-President of the South African Heart Association and Executive Member of the South African Paediatric Association.

In 2018, he registered for a Doctor of Philosophy (PhD) in Paediatrics at Stellenbosch University.

As a member of the Board for the Council of Medical

Schemes, he was elected as its chairperson in June 2020, replacing the previous Chair, who succumbed to COVID-19 in May. He was also elected to a 15-member panel of experts, advising the provincial government's COVID-19 taskforce. Later that month, Lungile was hospitalised after contracting the coronavirus and, on 07 August 2020, passed away from complications of the virus at the age of 46.

Professor Lungile Pepeta embodied the Mandela University values, particularly being in the service of society, through public health accountability, advocating for the eradication of the inequities in healthcare provision, especially in remote and under-resourced communities of the Eastern Cape, in particular, and South Africa, as a whole.

For his contributions as a paediatric cardiologist, medical researcher, university professor and activist, and for being a pioneer of the medical industry in South Africa, particularly in child health care, it is an honour for Nelson Mandela University to confer the degree of Doctor of Health Sciences (honoris causa) on **Lungile Pepeta**.



# Honorary Doctoral Recipient

## Sindiso Mfenyana - Doctor of Philosophy (*Honoris Causa*)



Struggle stalwart and ANC veteran, Sindiso Mfenyana was born on 12 March 1940, in Bolotwa, Eastern Cape, and spent his early years in Dophu, near Lady Frere. At the age of five, his family moved to East London, where he began his primary school education.

By 1953, he had passed his primary education with flying colours and was sent to St John's College in Mthatha. He excelled at St John's and, by 1957, was the only matriculant at the school to obtain a first class pass with exemption. During his high school career, his passion for politics began and he regularly attended ANC Youth League (ANCYL) meetings. In matric, he was elected as ANCYL Secretary at St John's.

In 1957, he enrolled for a BSc at Fort Hare University on a scholarship from the Mthatha Bunga (council of tribal chiefs). In December of 1960, Sindiso received an invitation to join the armed resistance that was brewing within the ANCYL. With his father's blessing, he boarded the train from his home in Noupoot and headed for Johannesburg.

During his time in Johannesburg Sindiso learned about the workings and political motivations of the ANC. He also contributed to the struggle by helping to organise the All-in Africa Conference in 1961, where Nelson Mandela was the keynote speaker. The real reason for being in Johannesburg, however, was to prepare him for exile. On 5 January 1962, Sindiso and his cohort left for military training in the Soviet Union. After his training, he was selected to further his MSc Economic Studies at Kiev Economics Institute in the USSR (now Ukraine).

During his time in the USSR, Sindiso met Rita, a graduate in Aeronautical Engineering, whom he married in June 1963 in Kiev. In August 1967, Sindiso graduated from KINE and was posted by the ANC to Hungary, where he remained for three

years, working for the World Federation of Democratic Youth (WFDY). In August 1970, he departed with his family for Cairo to take up the position of ANC representative in Egypt. He was also elected leader of the Afro Asian People's Solidarity Organization during this time. Following his tireless work in Cairo, Sindiso was transferred to the ANC headquarters in Lusaka, Zambia, in 1974. He joined the office of the Secretary General of the ANC and became one of the producers of Radio Freedom, the Voice of the African National Congress and the people's Army uMkhonto Wesizwe. During this time, he also lectured at the Natural Resource Development College in Lusaka.

In 1985, Sindiso was appointed Secretary to then ANC President Oliver Tambo, until he was deployed to the German Democratic Republic (GDR), where he acted as chief representative of the organisation.

In December 1990, as the ANC and Apartheid government began to discuss a peaceful transition of power, Sindiso was called upon, in his capacity as a member of the ANC's National Executive Committee (NEC), to attend talks in Johannesburg. It was the first time he was able to return home in 28 years. He was awarded the Military Veterans Decoration in gold in 1991 for completing 30 years of unbroken service as a committed member of Mkhonto Wesizwe.

In 1992, Sindiso commenced Civil Service training, first at the British Civil Service College in London, and subsequently the US Civil Service College in Pennsylvania.

Just before South Africa's first democratic elections, in March 1994, Sindiso was appointed Under Secretary to the National Assembly and moved to Cape Town. In June 1997, Sindiso was the first Black person to ever be appointed Full Secretary to Parliament in South Africa.

On leaving Parliament, he served as the South African Ambassador in Tanzania from 2004 until his retirement in 2010. After his retirement, he became the member of the ANC Integrity Commission. Whilst in Tanzania, he received an award for meritorious service from the South African Legislatures Secretaries Association. In 2013, he was awarded Batho Pele Life Achiever of the Year, which recognises public servants who

are selfless, dedicated, committed and who go the extra mile in servicing citizens.

In 2017, Sindiso wrote his autobiography “Walking with Giants”, launched by Nelson Mandela University’s Centre for the Advancement of Non-Racialism and Democracy (CANRAD) in April 2018.

For his life-long struggle for South Africa’s liberation, his vocality on anti-corruption and patronage and his firm belief in constitutional democracy, it is an honour for Nelson Mandela University to confer the degree of Doctor of Philosophy (honoris causa) on **Sindiso Mfenyana**.



# Academic Dress

Special academic attire has been designed for office bearers at Nelson Mandela University to be worn at prestigious academic events like graduation.

Each outfit – from that of the Chancellor and Vice-Chancellor to those of the Executive Deans – has been meticulously selected to signify a particular office; this is a tradition that is consistent with leading universities throughout the world. The gowns, caps and hoods of Nelson Mandela University graduates were similarly inspired and are explained in detail below.

Academic dress for graduates at Nelson Mandela University is as follows:

## Doctoral Degrees

**Gown:** Cardinal red polyester cashmere gown with long pointed sleeves pleated up with blue cord and button and lined with blue satin with 125mm facings and a blue collar.

**Hood:** Full shape hood in cardinal red polyester cashmere lined with faculty colour satin and edged around the cowl with 75mm faculty colour ribbon with 15mm blue ribbon overlaid central. 50mm wide straight neckband in cardinal red polyester cashmere, 25mm faculty colour ribbon in centre of neckband with 15mm blue ribbon overlaid central to faculty ribbon.

**Cap:** Round doctor's bonnet in black velvet with faculty colour cord and tassel.

## Master's degrees

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail is used.

**Hood:** Full shape blue hood lined faculty colour satin and edged around the outside of the cowl with 75mm faculty colour with ribbon. 50mm straight neckband in blue with 25mm faculty colour ribbon centred.

**Cap:** Black mortarboard with blue tassel.

## Postgraduate Diplomas

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

**Hood:** Blue simple shape hood lined silver grey satin. Straight neckband with 15mm faculty ribbon on top edge of neckband and around cowl. 15mm silver grey ribbon on bottom edge of neckband and around cowl spaced 20mm away from the faculty colour.

**Cap:** Black mortarboard with blue tassel.

## Bachelor Honours Degrees

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

**Hood:** Blue simple shape hood lined silver grey satin with 50mm wide straight neckband in faculty colour. Cowl

edged 75mm faculty colour ribbon on the outside.

15mm silver grey ribbon runs along the outer edge of the cowl, overlaid on faculty ribbon and on top edge of neckband.

**Cap:** Black mortarboard with blue tassel.

## Four-Year Bachelor's Degrees (Including Bachelor of Technology Degrees)

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

**Hood:** Blue simple shape hood lined silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside. Silver grey cord runs along the outer edge of the cowl, overlaid on faculty ribbon and on top edge of neckband.

**Cap:** Black mortarboard with blue tassel.

## Three-Year Bachelor's Degrees

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

**Hood:** Blue simple shape hood lined with silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside.

**Cap:** Black mortarboard with blue tassel.

## Advanced Diploma

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

**Hood:** Blue simple shape hood lined with silver grey satin with 50mm wide straight neckband. 15mm faculty colour ribbon on top and bottom of neckband around cowl.

**Cap:** Black mortarboard with blue tassel.

## Diploma

**Gown:** Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

**Hood:** Blue simple shape hood with 50mm wide straight neckband. 25mm faculty colour ribbon on centre of neckband.

**Cap:** Black mortarboard with blue tassel.





## Faculty Colours

**Humanities:**

**Business & Economic Sciences:**

**Health Sciences:**

**Law:**

**Education:**

**Science:**

**Engineering, the Built Environment and Technology:**

**Business School:**

Yellow

Plum

Apple green

Grey blue

Orange

Dark green

Light blue

Black and magenta



Messrs T. Birch & Co (Pty) Ltd and its subsidiary, Croft Magill & Watson (Pty) Ltd, have been appointed as official robe maker to the University and as contracted suppliers of choice to students for graduation academic attire.

Photos In Seconds has been appointed as the official photographer of the University.

# Congratulatory Message from the Alumni Association

## Congratulations on your academic achievement!

Welcome to the Nelson Mandela University family. You are now a Nelson Mandela University alumnus.

We would like to take this opportunity to introduce you to the Nelson Mandela University Alumni Association.

Once you have obtained your Nelson Mandela University certificate, diploma or degree you become an alumna/us of the University and a member of the Nelson Mandela University Alumni Association. The Association is recognised by the University Council as a structure of the University. The Association supports and enhances the realisation of the University's vision and mission through maintaining and expanding positive relationships with its members.

## The Role of the Alumni Association Office

The Alumni Association Office is a public relations and projects department responsible for the day-to-day management and running of the Alumni Association, the University Shop and all matters related to alumni engagement. Primarily, we build relationships and maintain strong links with graduates, parents, friends and supporters of the University through events, networks, services, communications and community engagement.

## The Role of Nelson Mandela University graduate

We encourage you to attend the alumni engagement events, be an active alumni ambassador, support your alma mater in a variety of ways including sharing news, expertise, skills, and contributions in cash and kind. We encourage a culture of giving back especially for student bursaries, which can be accessed on our alumni website.

## Mandela Alumni Connect – the online alumni networking platform

Join the Mandela Alumni Connect community - to stay in touch with fellow alumni, get informed about events, career guidance, mentorship initiatives and expand your network. Register on <https://alumni.connect.mandela.ac.za/> Visit our website and follow or connect to our social media channels for more information regarding our alumni digital networking platform.

We welcome your visit to the Alumni Relations Centre on North Campus in Port Elizabeth.

More info: T +27 41 504 3935 E [alumni@mandela.ac.za](mailto:alumni@mandela.ac.za)

Join us: [@NelsonMandelaUniversityAlumni](#) [NelsonMandelaUniversityAlumni](#)

[www.alumni.mandela.ac.za](http://www.alumni.mandela.ac.za) [@MandelaUni](#)

## University Shop

Visit the University Shop situated at the Sanlam Student Village on University Way, Summerstrand, for all Nelson Mandela University branded clothing, corporate gifts, bags and memorabilia!

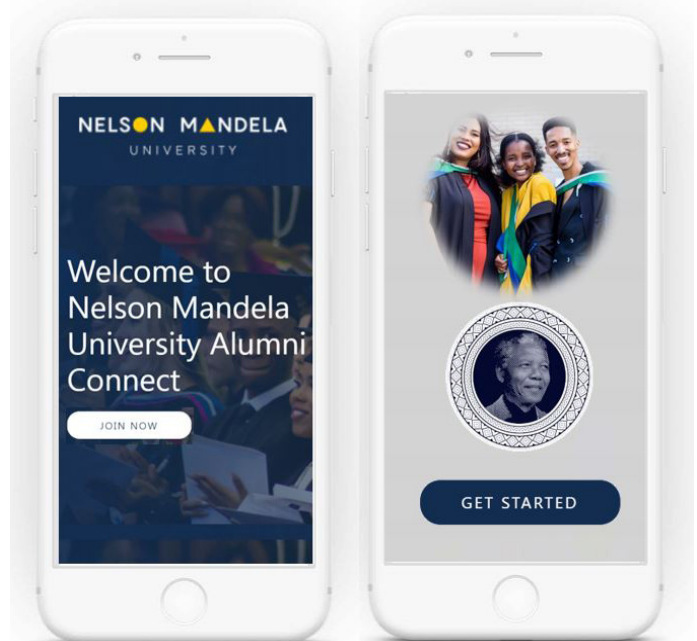
Alternatively, Shop online for all your favourite branded items <https://onlineshop.mandela.ac.za/> Collection and delivery options available online.

More info: T +27 41 504 4371 E [shop@mandela.ac.za](mailto:shop@mandela.ac.za)

Join us: [@UniversityShopMandelaUni](#) [Universityshop\\_mandelauni](#)

[www.shop.mandela.ac.za](http://www.shop.mandela.ac.za) [@universityshopmandelauni](#) [@ShopMandelaUni](#)

**Stay connected to your alma mater! #MandelaAlumni4Life**



<https://alumni.connect.mandela.ac.za/>



<https://onlineshop.mandela.ac.za/>



# NATIONAL ANTHEM

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Nkosi Sikelel'i-Afrika,  
Maluphakanyisw'uphondo lwayo,  
Yizwa imithandazo yethu,  
Nkosi Sikelela, thina lusapho lwayo.

Morena boloka setjhaba sa heso,  
O fedise dintwa le matshwenyeho.  
O se boloke, O se boloke setjhaba sa heso,  
Setjhaba sa South Africa.

South Africa.

Uit die blou van onse hemel,  
Uit die diepte van ons see.  
Oor ons ewige gebergtes  
Waar die kranse antwoord gee.

Sounds the call to come together,  
And united we shall stand.  
Let us live and strive for freedom,  
In South Africa our land.

# Change the World

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