The Academy of Pharmaceutical Sciences takes pleasure in sharing postgraduate students’ success. The titles of the research projects provide insight into the scope and nature of pharmaceutical research that is happening in the country. Unfortunately, due to space limitations, only the main supervisor of each research project has been listed.

Please note that this list is incomplete, as not all universities have submitted details of graduates and their research to the SAPJ.

The Academy congratulates all graduates and wishes them well in their future careers.

Nelson Mandela University

MPharm (Research)

AC Bobbins (Cum laude)
Delivery of pharmaceutical services and care at three primary healthcare clinics with different dispensing models in the Nelson Mandela Bay Health District
Supervisor: Prof SF Burton

K Cumberlege
Pharmacists’ perceptions of the effects of the Consumer Protection Act of 2008 on the pharmacy profession in South Africa: an exploratory study
Supervisor: Prof I Truter

BHC Gebers
Pharmacy personnel practices with regard to the sale of non-prescription asthma medication in community pharmacies in the Eastern and Western Cape
Supervisor: Dr LC Kritiotis

NM Kemp
Barriers to picking and packing in pharmaceutical warehousing and distribution in South Africa
Supervisor: Mr YE Kadernani

Y Khan (Cum laude)
A proposed baseline South African antimicrobial stewardship curriculum for the Bachelor of Pharmacy programme
Supervisor: Dr JA Mc Cartney

ST Ndzamela
Patients and healthcare professionals’ experiences of medicine unavailability at a primary healthcare centre in the Nelson Mandela Bay Metropole
Supervisor: Prof SF Burton

PhD (General Health Sciences)

MC Raman
Development of a framework for a proposed antimicrobial usage reporting tool for public sector hospitals
Supervisor: Dr JA Mc Cartney

MPharm (Course work)

PDT Louw
Method validation for the quantification of casticin in Vitex agnus-castus fruit using a Fourier Transform infrared multivariate chemometric model
Supervisor: Prof G Kilian

S Singh
Proportional scale-up of plasma-derived factor VIII by increasing the mass of cryoprecipitate for dissolution
Supervisor: Prof G Kilian

MSc (General Health Sciences)

VP Dakada
The medicinal chemistry of selected halogenated diketopiperazines cyclo (C/S-PRO-4F-PRO) and cyclo (L-PHE-41-VAL)
Supervisor: Prof EE Ferg

WA Gwimo (Cum Laude)
Development and characterisation of miconazole nitrate loaded solid lipid nanoparticles for incorporation into a vaginal mucoadhesive system
Supervisor: Prof G Kilian

PhD (General Health Sciences)

MN Nyambe
The anti-proliferative activity of Drimia altissima and a novel isolated flavonoid glycoside against hela cervical cancer cells
Supervisor: Prof M van de Venter
D Oelofse
Haematological malignancies in a South African population: a study in cancer transition
Supervisor: Prof I Truter

MPharm

AP Akinrogunde
Bipolar disorder in the South African private health sector: Longitudinal analysis of prevalence, comorbidities and prescribing patterns
Supervisor: Prof MS Lubbe

HL Bester
Testosterone undecanoate associated polycythaemia in males with late-onset hypogonadism in a private practice
Supervisor: Dr J du Plessis

V Booyse
Adherence to post-operative pain medication following day case orthopaedic surgery at a South African private hospital
Supervisor: Prof JR Burger

R de Kock
Prevalence of carbapenem resistance in adult patients admitted to a private hospital in Daspoort, Tshwane
Supervisor: Dr DM Rakumakoe

M du Toit
Therapeutic drug monitoring of gentamycin and amikacin in hospitalised patients in a private hospital, Western Cape
Supervisor: Dr DM Rakumakoe

WP Greffrath
Triglyceride levels after six months of lopinavir/ritonavir therapy as an indicator for pancreatitis risk
Supervisor: JM du Plessis

J Jaquire
Provision of pharmaceutical care and public health services in an ambulatory elderly population
Supervisor: Dr R Joubert

L Joubert
Prescribing patterns of ADHD medication in children under the age of eighteen years in the Western Cape from 2005-2013
Supervisor: Prof JR Burger

M Obeng-Kusi
Research methods for conducting pharmacoepidemiological studies using medicines claims data
Supervisor: Prof JR Burger

M Sello
Clinical outcomes and renal safety in HIV/AIDS patients on tenofovir-containing regimens in Lesotho
Supervisor: Dr DM Rakumakoe

T Smit
The prevalence and configuration of nausea in patients receiving intravenous chemotherapy in a private oncology centre in South Africa
Supervisor: Dr J du Plessis

F Wafawanaka
Usage of central nervous system medication in HIV/AIDS patients: Longitudinal analysis (2005-2015) of prevalence and prescribing pattern changes
Supervisor: Prof MS Lubbe

MSc

E Aucamp
An investigation of indanone derivatives as inhibitors of monoamine oxidase
Supervisor: Prof A Petzer

C Bakker
The synthesis and evaluation of bezosuberone derivatives as inhibitors of monoamine oxidase
Supervisor: Prof A Petzer

C Bezuidenhout
Mechanisms of in vitro cytotoxicity of antimicrobial peptides in combination with stabilising excipients
Supervisor: Prof LH du Plessis

S Bushoff
Investigation of the stabilising effects of niosomes on the amorphous forms of roxithromycin
Supervisor: Prof ME Aucamp

DJ Cloete
The synthesis and evaluation of tetralone derivatives as inhibitors of monoamine oxidase
Supervisor: Prof JP Petzer

ES de Ridder
Comparative study of transdermal delivery of oestradiol, oestradiol and progesterone from multidrug formulations
Supervisor: Prof J du Plessis

I du Plessis
The development of simple HPLC methods to separate methylene blue and its metabolites
Supervisor: Prof JC Wessels
L Erasmus
Investigation of surfactant-drug pharmacokinetic interactions
Supervisor: Dr C Gouws

M Erasmus
In vitro cytotoxicity of *Siphonochilus aethiopicus* in combination with selected fillers for tableting
Supervisor: Dr JM Viljoen

CL Erichsen
Pharmacological evaluation of an alpha2C selective antagonist in an animal model of posttraumatic stress disorder
Supervisor: Prof BH Harvey

J Fourie
Evaluation of efavirenz on neurochemical and oxidative stress markers and addictive-like behaviours in rats
Supervisor: Dr M Möller-Wolmarans

A Haasbroek
Drug absorption enhancement capacities and mechanisms of action of *Aloe vera* gel materials
Supervisor: Prof JH Hamman

MC Haigh
Anticancer activities of oxidant-redox drug combinations in lipid excipients
Supervisor: Prof LH du Plessis

S Hattingh
Development of lipid matrix tablets containing a double fixed dose combination of artemisone and lumefantrine
Supervisor: Dr JM Viljoen

JJ Heyns
Investigating the absorptive and secretory transport of selected anti-malaria drugs
Supervisor: Dr C Gouws

C Jacobsz
Pharmacokinetic interactions: the effect of herbal extracts and supplements on drug permeation
Supervisor: Dr JD Steyn

HD Janse van Rensburg
5-Hydroxy-1-tetralone analogues as dual A1/A2A receptor antagonists for the potential treatment of neurological conditions
Supervisor: Prof G Terre’Blanche

MG Labuschagne
Comparative study of the transdermal delivery from testosterone formulations
Supervisor: Prof J du Plessis

FAW Laux
Development of micro-beads that contain functional excipients for effective oral delivery of macromolecular drugs
Supervisor: Prof JH Hamman

JS Lotter
Studies on *Garcinia mangostana* Linn as a therapeutic intervention in an immune-inflammatory model of schizophrenia
Supervisor: Dr M Möller-Wolmarans

L Marais
Synthesis and evaluation of 3,4-Dihydro-3-methyl-2(1H)-quinazoline derivatives as monoamine oxidase inhibitors
Supervisor: Prof LJ Legoabe

KC Ngoy
Formulation of a multiple-unit pellet solid oral delivery system for metformin and gliclazide
Supervisor: Prof JH Steenekamp

JAC Nieman
Development of a multiple-unit sustained release dosage form containing gliclazide
Supervisor: Dr JM Viljoen

L Pieterse
Adenosine A1/A2A receptor antagonistic properties of selected 2-substituted benzoazainone and quinazolinone derivatives
Supervisor: Prof G Terre’Blanche

C Rudman
A retrospective descriptive investigation into the clinical profile of HIV patients in the North West Province switched to third-line regiments
Supervisor: Dr M Viljoen

C Strydom
Development of a bead-in-matrix delivery system for insulin
Supervisor: Prof JH Steenekamp

MA Qhobosheane
Design, synthesis and evaluation of quinasolinone analogues as monoamine oxidase inhibitors
Supervisor: Prof LJ Legoabe

A van As
Optimisation and characterisation of Pheroïd® entrapped radio tracer formulations
Supervisor: Dr NI Barnard

PhD

M Barkhuizen
Genetic and perinatal risk factors for movement disorders
Supervisor: Prof AF Grobler
C Burger
Natural oil nano-emulsion dispersions for the topical delivery of clofazimine, artemisone and decoquinate
Supervisor: Prof M Gerber

C Calitz
Establishing three-dimensional cell culture models to measure bio-transformation and toxicity
Supervisor: Dr C Gouws

MP Chelopo Mgobozi
The development and evaluation of a novel hybrid PLGA nanoparticle-Pheroid® with the potential to improve tuberculosis therapy
Supervisor: Prof RK Hayeshi

I Engelbrecht
The synthesis and evaluation of dual inhibitors of monoamine oxidase and catechol-O-methyltransferase
Supervisor: Prof A Petzer

JH Hamman
Development of multiple-unit pellet systems by employing the SeDeM expert diagram system
Supervisor: Prof JH Steenekamp

J Kleynhans
Pheroid® technology as a tool to change the administration route of selected pharmaceuticals from intravenous to oral
Supervisor: Prof AF Grobler

A Lewies
An in vitro evaluation of antibacterial and anticancer properties of the antimicrobial peptide nisin Z
Supervisor: Prof LH du Plessis

SF Steyn
Chronic effects of pre-adolescent pharmacological and non-pharmacological interventions on depressive-like behaviour in rats
Supervisor: Prof CB Brink

M Strydom
Design, synthesis and evaluation of novel levodopa pro-drugs for the treatment of Parkinson’s disease
Supervisor: Prof A Petzer

L van Zyl
Topical delivery of clofazimine, artemisone and decoquinate utilising vesicles as carrier system
Supervisor: Prof J du Plessis

Rhodes University

MSc

H Naidu (Pharmaceutics) with distinction
Formulation, development and assessment of an orodispersible taste-masked sildenafil film for paediatric use
Supervisor: Prof RB Walker

MPharm

TO Duxbury (Pharmacy Practice)
Collaborative health literacy development: A World Health Organization workplace health promotion approach to address tobacco use
Supervisor: Dr S Paphitis

RI Manhanzva (Pharmacy Practice) with distinction
Antimicrobial resistance awareness program at Settlers Hospital
Supervisor: Prof S Srinivas

P Marara (Pharmacy Practice)
Workplace health promotion at Rhodes University: harmful use of alcohol
Supervisor: Prof S Srinivas

Doctor of Pharmacy

N Fouche

N Mdazuka-Dlani

Tshwane University of Technology

MTech Pharmaceutical Sciences

IT Baloyi (Cum laude)
Anti-quorum sensing activity of selected South African medicinal plants used to treat urinary tract infections
Supervisor: Prof A Viljoen

MM Djokam Kamga (Cum laude)
Application of vibrational spectroscopy in the quality control of herbal teas
Supervisor: Prof A Viljoen

LJ Lerotholi (Cum laude)
Phytochemical profiling and quality control of Athrixia phylicoides (bush tea)
Supervisor: Prof A Viljoen

FN Mhlongo (Cum laude)
Investigating the pro-angiogenic activity of South African plants used for wound healing
Supervisor: Prof A Viljoen
KC Mnopele (Cum laude)
Quality control and biopharmaceutics of African olive (Olea europaea subsp. africana)
Supervisor: Prof A Viljoen

K Mokhetho (Cum laude)
Anti-quorum sensing activity of plant volatiles
Supervisor: Prof A Viljoen

E Rubegeta Pavel (Cum laude)
Chemical composition and antimicrobial activity of selected African Myrrh species
Supervisor: Prof A Viljoen

MN Sibanyoni (Cum laude)
Acetylcholinesterase inhibitors from South African Amaryllidaceae
Supervisor: Prof A Viljoen

University of Limpopo (Turfloop campus)

MSc

J Chanyandura (Pharmaceutics)
Formulation and evaluation of gastro-retentive floating tablets of griseofulvin
Supervisor: MS Poka

M Caswel (Pharmacology)
Prescribing patterns of antimicrobial agents for surgical site infections
Supervisor: Prof NZ Nyazema

University of the Western Cape

MPharm

SSMA Almajdoub
Polymer coating of an optimized nano lipid carrier system of Harpagophytum procumbens extract for oral delivery
Supervisor: Dr A Dube

SFI Ebdwi
A comparative in vitro analysis of anti-infective generic and brand medicines in the South African public
Supervisor: Dr KL Ward

NT Guzha
Development of a model to predict the cost of treatment of breast cancer with chemotherapy at Groote Schuur hospital
Supervisor: Prof P Valodia

MR Mhlanga
A pharmacy perspective on the epidemiology of antimicrobial drugs in the Kuilsriver area
Supervisor: Dr K Obikeze

V Ramburan
Integrating complementary and alternative medicines into pharmacy: identifying challenges in meeting professional responsibilities and training needs
Supervisor: Prof NC Butler

MB Sekhonyana-Khetsekile
The development and preparation of the quality control dossier for registration of Artemisia afra capsule
Supervisor: Prof J Syce

MSc Pharm Sciences

MK Abaniwonda
Polycyclic compounds as carriers for neuroactive non-steroidal anti-inflammatory drugs
Supervisor: Prof J Joubert

EN Alonjang
Active encapsulation of diclofenac sodium into liposome for ophthalmic preparations
Supervisor: Dr N Ebrahim

I Denya
Design, synthesis and evaluation of indole derivatives as multifunctional agents against Alzheimer’s disease
Supervisor: Prof J Joubert

MSL Lerata
Discovery of cytotoxic natural products from South African marine sponge
Supervisor: Prof D Beukes

ER Mabande
Antimicrobial discovery from South African marine algae
Supervisor: Prof D Beukes

M Opute Yvette
Novel adamantane-chloroquinoline conjugates to overcome Plasmodium falciparum chloroquine
Supervisor: Prof J Joubert

R Swead
The development of a study protocol, and ethics and regulatory approval documentation, for evaluation of clinical efficacy of Sutherlandia frutescens in adult type 2 diabetes
Supervisor: Prof J Syce
**MSc Pharm Admin**

**E Kabali**
Review of the effectiveness of the medicines regulatory system in Zambia over the period 1995 to 2015  
Supervisor: Dr KL Ward

**ML Kent**
Investigating the economic impact of mandatory electronic prescribing requirements in the United States  
Supervisor: Dr KL Ward

**MF Khalil**
Pharmacoeconomic evaluation in Egypt and its role in the medicine reimbursement  
Supervisor: Dr N Ebrahim

**OL Lekuni**
Cost effectiveness of selecting an enantiopure formulation over a racemic mixture compound  
Supervisor: Ms E Kapp

**S Pillay**
Evaluation of reporting all types of adverse drug reactions by parents of children younger than 18 years in South Africa  
Supervisor: Prof M Viljoen

**L Randall**
The use of complementary and alternative medicines in the treatment of menopausal symptoms by private healthcare patients in Pretoria, South Africa  
Supervisor: Dr M van Huyssteen

**PhD**

**B Magadzire**
Understanding the dynamics of accessing chronic medicines in the public sector: Implications for provision of medicines in South Africa  
Supervisor: Dr KL Ward

**BD Symon**
A reductionistic epistemology utilising brain laterality which investigates pharmacists' ideal interactive environment  
Supervisor: Prof NC Butler

**University of the Witwatersrand**

**MSc (Med)**

**A Ejike**
Antibiotic usage in an intensive care unit of a tertiary level public hospital  
Supervisor: Ms D Johnston

**N Sinyela**
The usage of antibiotics in paediatric patients while admitted to the intensive care unit at a public tertiary hospital  
Supervisor: Ms D Johnston

**MPharm**

**Z Gami (with distinction)**
Endophytes hosted by medicinal plants may potentially exhibit antimicrobial activity  
Supervisor: Prof S van Vuuren

**N Khan**
Codeine use in over-the-counter pain medication: a study of pharmacist knowledge and perception  
Supervisor: Dr N Butkow

**A Stephanou**
Evaluation of patients with multidrug-resistant Gram-negative infections treated with colistin in four private sector hospitals in South Africa  
Supervisor: Prof S van Vuuren