

UNIVERSITY OF PRETORIA
FORMAT OF CURRICULUM VITAE

1. BIOGRAPHICAL SKETCH

1.1 GENERAL INFORMATION										
Surname	Lall				Maiden name					
First names	Namrita				ID Number		6807100115189			
Citizenship	Indian (Permanent resident of SA since 1997)				Title	Prof	Female	X	Male	
Place of birth	Ranchi (India)				Date of birth		10 th July 1968			
Population group	Africa		Coloured		Indian	X	White	Other (Please specify)		
Department	Plant and Soil Sciences				Position		Professor			
Direct Telephone	+27-12-4202524				Direct Telefax		+27-12-3625099			
E-mail	namrita.lall@up.ac.za									
Date of appointment	1 March 2001				Permanent full-time		X	Temporary full-time		

1.2 ACADEMIC QUALIFICATIONS OBTAINED				
Degree/ Diploma	Field of study	Higher education institution	Year	Distinctions
HDE	Biology, Physical Science	University of Transkei (South Africa)	1992	
BSc (Hons)	Biotechnology	University of Transkei	1994	Cum Laude (Gold medal)

MSc	Biotechnology, enzymatic studies in plants in response to stress	University of Transkei	1996	Cum Laude (Gold medal) and S2A3-GENCORE BRONZE medal for best Master's thesis at the University
PhD	Medicinal Plant Science (Isolation and purification of natural products, susceptibility studies of <i>Mycobacterium tuberculosis</i> , and other bacteria to medicinal plants)	University of Pretoria (South Africa)	2001	

1.3 WORK EXPERIENCE TO DATE

Name of employer	Capacity and/or type of work	Period From (mm//yy to mm//yy)
Umtata Technical College (Eastern Cape)	Lecturer	1991-1996
University of Pretoria	Senior Research Assistant	1997-2000
University of Pretoria	Lecturer	2001-2003
University of Pretoria	Senior Lecturer	2004-2006
University of Pretoria	Associate Professor	2007-2015
University of Pretoria	Professor; IKS/Research Chair; SA	2016-To date

1.4 Online Profiles

Website	Link
UP Departmental	https://www.up.ac.za/plant-and-soil-sciences/article/44825/prof-namrita-n-lall
LinkedIn	https://www.linkedin.com/in/namrita-lall-095b95a/?originalSubdomain=za
ORCID	https://orcid.org/0000-0002-3242-3476

Google Scholar	https://scholar.google.co.za/citations?user=dXWjuV4AAAAJ&hl=en
ResearchGate	https://www.researchgate.net/profile/Namrita_Lall
Publons	https://publons.com/researcher/2994347/namrita-lall/
Loop	https://loop.frontiersin.org/people/444864/overview
Twitter (@Lall_et_al)	https://twitter.com/Lall_et_al

2. TEACHING ACTIVITIES

2.1 Courses presented		
Course	Level (e.g. second year, Masters)	Self developed (Yes or No)
Lectured	N1-N3 students	No
Currently teaching	Guest lecture for Phytomedicine, a third-year module and BOT 783 and BOT 784	Yes
Currently supervising/Co-supervising about 25 Postgraduate students	Hons, Masters and PhD students	Yes
Phytomedicine and Natural Products - Online Course (2019)	Graduates (5 SACNASP CPD Points)	Yes

2.2 Other education and pedagogic courses presented

Course	Year	Institution
Prepared research proposal format for the Department of Science for postgraduate studies	2012	University of Pretoria
Presentation on writing a research proposal to postgraduate students	2012-till date	
Presentation on how to write a scientific paper to Postgraduate students	2010-2013	
Organized a Workshop: "Inclusion of Nanoparticles for Medicinal Plant Research"	2018	
Organized a Workshop: "Secondary Metabolites, Phytochemistry and Pharmacognosy"	2018	
Organized a Workshop: "Building effective industry Partnerships", Capacity building for early career academics".	2020	
Traditional Healer Workshop for traditional health practitioners	2006, 2018	

2. TEACHING OUTPUTS

3.1 Educational publications and products

- **Study guides** for a third-year module BOT 365, "PHYTOMEDICINE", Honours Modules BOT 748 and BOT 749 have been developed.
- All the **lectures** are also available on the University web.
- **Practical guides** for third year module BOT 365, and Honours BOT 747, BOT 748, BOT 749 have been developed.
- Principal applicant in development of a new specialized field (Medicinal Plant Sciences). This field is one of its kind in South Africa.
- Developed a certificate course: "Phytomedicine and Natural Products" in Jan 2019.

4. OTHER TEACHING CONTRIBUTIONS

4.1 Membership of national and international bodies

- Board Member: International Society of Ethno pharmacology.
- Member: The New York Society of Cosmetic Chemists, USA
- Member: "The African Academy of Science" Nairobi, Kenya.
- Member: "The American Chemical Society".
- Member: The Society of Cosmetic Chemists of South Africa.
- Member: South African Association of Botanists.
- Member: "NRF/Indigenous Knowledge System", Programme committee.
- Member: NRF rating specialist committee.
- Member: South African Association for the advancement of Science.
- Member of the Life Science Advisory Board at UNISA, South Africa.
- Member: South African Pharmacopeia on medicinal plants; Task team appointed by DST, SA

4.2 Visits to local and overseas universities as guest professor or lecturer in regard to teaching

- **Guest Professor CNRS, Orleans, France:** Lectured postgraduate students on the evaluation of natural products for TB-treatment (Dec 2003).
- **Guest Professor Birla Institute of Technology, India:** Lectured Postgraduate students on bioactivity of medicinal plants (Dec 2005).
- **Guest Professor** at the St. Xaviers College, Ranchi, India (June 2010).
- **Guest Professor** at the Department of Health Science at the Faculty of Science, University of Mauritius for Phytomedicine modules (Dec 2014).
- **Guest Professor** at Walter Sisulu University for Ethnobotany module (March 2011).
- **Guest Professor** at CPUT, Cape Town, April 2014.
- **Guest Professor** at the University of Limpopo, Feb 2014.
- **Guest Professor** at UNISA, Feb 2014.

4.3 Participation in national and international teaching associations, bodies, committees

International:

- President-Elect for International Society of Ethnopharmacology (ISE)
- Participated as a delegate from South Africa at the following forums, the theme being international cooperation and to discuss issues including intergovernmental cooperation on medicine regulation, standardization, registration and access:

1. South Korea- South Africa joint symposium on Biotechnology; 25TH -28TH October 2008.
2. Indo-South Africa workshop on Traditional medicine system: sharing knowledge and experience; 29th-31st October 2012.
3. The 4th Government Forum on International Cooperation and Development on Traditional Medicine, China, 25th Sep-27th Sep, Chengdu, China, 2013.
4. Festival of Innovations and entrepreneurship, India- New Delhi, 19th -22nd March 2018.

Jury and consultant:

- **L'OREAL – Served as adjudicator for the “The 2005-2013 L'OREAL Fellowships of The FOR WOMEN IN SCIENCE”,** at international level.
- **L'OREAL – Served as the president of the jury for the “The 2008 L'OREAL Fellowships of The FOR WOMEN IN SCIENCE”,**
- **Consultant: UNESCO- L'OREAL Regional fellowship For Women in Science in Sub-Saharan Africa since 2010.**
- **Consultant: “Third world academy of Science” (TWAS),** an international organization, Trieste, Italy.
- **Consultant: African network of Scientific and Technological Institutions (ANSTI)**

Served as a member of the organizing committee of several international conferences:

- International Summit on Pharma & Clinical Trials” Sydney, Australia. June 12-13, 2017.
- “Fifth International Conference on Clinical & Experimental Dermatology”, July 13-15, 2015 at Double Tree New Orleans, USA.
- Second congress of the Indian chapter of the society for Ethnopharmacology, Nagpur, India February 20-22, 2015.

- Fifth Global summit on Medicinal and aromatic plants; Miri, Malaysia. 6-10th December 2013.
- IFSCC conference, Paris. 27-30th Oct 2014.

National

- Appointed to serve on the Natural and life Sciences standing Panel 2022-2024, by the National Research foundation, South Africa.
- Appointed to serve on the Plant Sciences NRF- specialist committee for rating applications 2021-2025, by the National Research foundation, South Africa.
- External evaluator for UNISA Advisory Board for Life Sciences
- Member of the steering committee of the project review committee at Water Research Commission
- Consultant to University of Limpopo and University of Johannesburg with regards to antimicrobial activity of medicinal plants
- Served on the advisory committee of South African National Biodiversity Institute of South Africa.
- Served in “The Hoodia Scientific Committee”; one of the five members selected at international level.
- Served as a reviewer for the Honours Programme at the University of Western Cape (2007-2009).
- Consultant: Curriculum development for Medicinal Plant Sciences at the University of Limpopo, South Africa (2005- till date).
- Consultant: Bachelor for Indigenous knowledge system degree at North west University
- **Coordinator and Project Leader:** Cosmeceutical bioprospecting platform, South Africa.
- **Committee member** of the Annual South African Association of Botanist Conference (2018).

5. RESEARCH ACTIVITIES

5.1 Supervision or co-supervision (completed)				
Name of student	Degree/Title of dissertation/ thesis and date completed	Supervisor	Co-supervisor (s)	Duration of studies (years)
Honours Students				
1. Ms Phillipine Mapiyeye	Hons- A comparative analysis of the concentration of antimycobacterial compounds in the Ebenaceae; 2001	Prof. N. Lall	Prof. JJM Meyer	1 year
2. Mr. Kgosi Maepe	Hons- Isolation and toxicological studies of naphthoquinones in mice; 2003	Prof. N. Lall		1 year
3. Mr. Cornelis Vander Walt	Hons- Quantification of the naphthoquinones in hydroxyl propyl beta cyclodextrin; 2004	Prof. N. Lall		1 year
4. Ms. Pauline Moiba	Hons- Phytochemical constituents of traditional vegetables of South Africa; 2004	Prof. N. Lall		2 years
5. Ms. Johanna Bapela	Hons- Growth variation in naphthoquinones' content of <i>Euclea natalensis</i> ; 2003 (Distinction)	Prof. N. Lall		2 years
6. Ms. Angelique Joubert	Hons- A comparative study of the concentration of <i>Euclea</i> species of South Africa, 2004	Prof. N. Lall		1 year
7. Ms. Abigail Lufonu	Hons- Inhibition of melanin in skin by South African plants; 2005	Prof. N. Lall		2 years
8. Ms. Brigitte Greyweintin	Hons- Antituberculosis and cytotoxic activity of 7- methyljuglone derivatives; 2005 (Distinction)	Prof. N. Lall		1 year

9. Ms. Nomatile Nombewu	Hons- Efficacy of medicinal plants against oral microorganisms; 2006	Prof. N. Lall		1 year
10. Mr. Heino Heyman	Hons- Evaluation of plant extracts against methicillin resistant <i>Staphylococcus aureus</i> ; 2006	Prof. N. Lall		1 year
11. Mr. Garland More	Hons- The inhibitory effect of medicinal plants on pathogens responsible for periodontal diseases; 2007	Mr. ET Tshikalange	Prof. N. Lall	1 year
12. Ms. Brenda Mapunya	Hons- Tyrosinase inhibitory activity of South African plant extracts; 2007	Prof. RV Nikolova	Prof. N. Lall	1 year
13. Ms. Saiyedah Momtaz (Iranian)	Hons- South African plant extracts for melanogenesis; 2007	Prof. N. Lall		1 year
14. Ms. Faith Nongagga	Hons- Antimycobacterial activity of medicinal plants; 2008	Ms. P. Mativandlela	Prof. N. Lall	1 year
15. Ms. Karlien Re Roux	Hons- Anticancer activity of South African plant extracts; 2008; (Distinction)	Prof. N. Lall		1 year
16. Mr. Wai Kuen Cheung (Chinese)	Hons- Evaluation of anti-tyrosinase activity of plants; 2008; (Distinction)	Prof. N. Lall		1 year
17. Ms. Cynthia Smith	Hons- South African plants for combating periodontal diseases; 2008; (Distinction)	Prof. N. Lall		1 year
18. Ms. Antonnette Labuschagne	Hons- Cytokine production of antimycobacterial plant extracts; 2008; (Distinction)	Prof. N. Lall		1 year
19. Ms. Jublee Mahani	Hons- Antituberculosis potential of <i>Euclea undulate</i> ; 2009	Prof. N. Lall		1 year
20. Ms. E. Mogapi	Hons- Identification of compounds from a plant for skin-hyperpigmentation problem; 2009	Prof. N. Lall		1 year
21. Ms. Emma Emerich	Hons- Identification of South African plants with anti-tyrosinase activity at the protein level; 2010	Prof. N. Lall		1 year

22. Ms Xiao Xing Yu (Chinese)	Hons- Anti-tyrosinase activity of selected South African medicinal plants at enzyme and transcript levels; 2010	Prof. N. Lall		1 year
23. Ms Dikon Bodiba	Hons- Mechanism of action of samples effective for periodontal diseases; 2011	Prof. N. Lall		1 year
24. Ms. Danielle Berrington	Hons- Anticancer activity of certain herbs and spices on the cervical epithelial carcinoma cell line; 2012	Prof. N. Lall		1 year
25. Ms. Smeetha Singh	Hons- The mutagenicity of plants from Myrsinaceae family with potential use as cosmeceutical; 2012	Prof. N. Lall		1 year
26. Mr. Carel Oosthuizen	Hons- Potential of synthesized quinones for antituberculosis activity; 2012	Prof. N. Lall		1 year
27. Mr. Marco De Canha	Hons- Greyiaceae plants for the treatment of skin-hyperpigmentation; 2012	Prof. N. Lall		1 year
28. Ms. Anna-Mari Kok	Hons- Do we have an answer for a stimulated immune system against Mycobacterium tuberculosis from Southern African plants? 2013; (Distinction)	Prof. N. Lall		1 year
29. Ms. Nomasomi Gasa	Hons- Inhibitory activity of selected South African plants on Mycothiol reductase enzyme of <i>Mycobacterium tuberculosis</i> ; 2013	Prof. N. Lall		1 year
30. Ms. Mabatho Nqephe	Hons- Plant derived tyrosinase inhibitors: effect on tyrosinase enzyme activity and gene expression; 2013	Prof. N. Lall		1 year
31. Ms. Analike Blom	Hons- Medicinal plants for Progressive macular hypomelanosis; 2014	Prof. N. Lall		1 year
32. Ms. Sunelle Rademan	Hons- Anticancer activity and mechanism of action of plant extracts on squamous cell carcinoma; 2014	Prof. N. Lall		1 year

33. Ms. Isa Lambrechts	Hons- Potential of Lamiaceae – plants for acne vulgaris and skin hyper – pigmentation; 2014	Prof. N. Lall		1 year
34. Mr. Mathew Fischer	Hons- Skin-permeation studies of anti-TB compounds; 2017	Prof. N. Lall		1 year
35. Ms. Murunwa Madzinga	Hons- Antifungal activity of medicinal plants; 2017	Dr Q. Kritzinger	Prof. N. Lall	1 year
36. Ms. Jolanie Stapelburg	Hons- Mechanism of action of tyrosinase inhibitors; 2017	Dr B. Crampton	Prof. N. Lall	1 year
37. Ms Bianca Fibrich	Hons- Plants for anti-ageing; 2016	Prof. N. Lall		1 year
38. Ms. Gugu Radebe	Hons- Anti-elastase activity of aquatic plants; 2017	Prof. N. Lall		1 year
39. Ms. Karina Szuman	Hons- Aquatic plants for periodontal diseases; 2018	Prof. N. Lall		1 year
40. Ms. Lydia Gibango	Hons- Biological assessment of <i>Rapanea melanophloeos</i> as a possible adjuvant for tuberculosis; 2019	Prof N. Lall	Dr CB Oosthuizen	1 year
41. Ms. Lilitha Denga	Hons- Evaluation of South African <i>Salvia</i> species and propolis for acne vulgaris and squalene synthase; 2019	Prof N. Lall		1 year
42. Ms. Jacqueline Maphuta	Hons- Inducing apoptosis of skin cancer cells through the inhibition of the PI3K enzyme by <i>Combretum apiculatum</i> subsp. <i>Apiculatum</i> ; 2019	Prof N. Lall		1 year
43. Aimee Steyn	Hons- Potential of medicinal plants for progressive macular hypomelanosis; 2019	Prof N. Lall		1 year
44. Ms. Siphon Chauke	Hons- Antifungal activity of leaf extracts of indigenous Southern African plants against aflatoxigenic <i>Aspergillus</i> species; 2019	Dr Q. Kritzinger	Prof N. Lall	1 year
45. Ms. Tanyaradzwa Dembetembe	Hons- Potential of selected South African traditional plants for the treatment of sexually transmitted diseases: Antimicrobial activity, cytotoxicity and ointment formulation; 2018	Dr Q. Kritzinger	Prof N. Lall	1 year
46. Ms. Talita Turvey	Hons- The potential cytotoxic effects of South African cycad species on cancer and	Prof N. Lall	Dr. D Twilley	1 year

	liver cells; 2020			
47. Ms. Marize Nel	Hons- Reducing symptoms related to eczema using succulents; 2020	Prof N. Lall	Dr. D Twilley	1 year
48. Ms. Samantha Loggenberg	Hons- The effects of <i>Aloe arborescens</i> Miller varieties on dermal wound healing 2021	Prof N. Lall	Dr. D. Twilley & Dr. M. N. De Canha	1 year
49. Ms Catherine Wilkinson	3. Hons- Identification of active fractions from <i>Rapanea melanophloeos</i> against acne-causing bacteria 2021	Prof N. Lall	Dr. M. N. De Canha	1 year
50. Mr. Jonathan Lloyd Seaman	Hons- Combatting Mycobacterial Quorum Sensing using South African Plants and their Applications in Chronic Pulmonary Ailments, 2021	Prof N. Lall	Dr. Carel B. Oosthuizen	1 year
51. Mr. Willem Boshoff	Hons- Ploidy found in medicinal plants of Southern Africa and the effect on their secondary metabolites	Dr. Kenneth Oberlander	Prof Lall, Dr. Twilley and Dr. Reid	
52. Ms Rochelle De Kock	Hons- Capsicum spp. and their anticancer treatment	Prof Lall	Dr. Twilley	1 year
53. Ms Ine Botha	Hons- Anti-tyrosinase activity of <i>Greyia</i> species with white and red flowers and the identification of genes involved in pigmentary differences	Prof Berger	Prof Lall, Dr. M. N De Canha	1 year
54. Ms. Bianca Diedericks	Hons- Synthesis and inhibitory activities on mycothiol disulfide reductase (MTR), a mycobacterial enzyme by indigenous medicinal plants of South Africa	Prof Lall	Dr. A. Reid, Dr. Vusani Mandiwani	1 year
MSc Students				
1. Mr. Oliver Weignand* (German)	MSc Research- Isolation and identification of compounds from <i>Euclea natalensis</i> and their activity against <i>Mycobacterium tuberculosis</i> , pathogenic bacteria and fungal species; 2002 (Distinction)	Prof. N. Lall		2years
2. Ms. P. Mativandela	MSc Research- Evaluation of isolates and identified phenolics from <i>Pelargonium</i>	Prof. N. Lall		3 years

	<i>sidooides</i> against <i>Mycobacterium tuberculosis</i> , other bacteria and fungi; 2005; (Distinction)			
3. Ms. Johanna Bapela	MSc Research -Seasonal variation of naphthoquinones in <i>Euclea natalensis</i> ; 2007	Prof. N. Lall		3 years
4. Ms. Saeideh Momtaz (Iranian)	MSc Research - Characterisation of inhibitory compounds from plants belonging to Fabaceae family on melanin inhibition; 2007 (Distinction)	Prof. N. Lall		2 years
5. Ms. Brenda Mapunya	MSc Research - Identification of antityrosinase compounds from <i>Greyia flanaganae</i> ; 2010	Prof. N. Lall		2 years
6. Ms. Nolitha Nkobole	MSc Research - Hypoglycemic activity of medicinal plants; 2009	Prof. N. Lall		2 years
7. Ms. B. Binneman	MSc Research - Potential of naphthoquinones for cancer prevention (Distinction); 2008	Prof. N. Lall		2 years
8. Ms. Antonnette Labuschagne	MSc Research - Immunomodulation activity of potential antituberculosis samples; (Distinction); 2011	Prof. N. Lall		2 years
9. Ms. Karlien Le Roux	MSc Research - Mechanistic activity of anticancer compounds using Raman spectroscopy; (Distinction); 2011	Prof. N. Lall		2 years
10. Ms. Richa Sharma	MSc Research	Prof N. Lall		2 years
11. Ms. CJ Smith	MSc Research - Cytokine evaluation of supernatants obtained from oral epithelial cells on exposure to periodontal- bacteria and selected compounds from medicinal plants; 2011	Prof. N. Lall		2 years
12. Mr. Garland More	MSc Research - Antimicrobial constituents of <i>Artemisia afra</i> against periodontal pathogens; 2012	Dr. E. Tshikalange	Prof. N. Lall	4 years

13. Ms. Danielle Berrington	MSc Research- Evaluating the anticancer and antioxidant activity of Southern African plants and their mechanism of action; 2014; (Distinction)	Prof. N. Lall		2 years
14. Ms. Smeetha Singh	MSc Research- Cultivation studies of two commercially important plants; Seasonal variation of <i>Ceratonia siliqua</i> and propagation trials on <i>Athrixia phylicoides</i> ; 2014	Prof. N. Lall		2 years
15. Mr. Carel Oosthuizen	MSc Research- Antimycobacterial, immunomodulatory and hepato-protective activities of quinones and organosulphur compounds; 2014; (Distinction)	Prof. N. Lall		2 years
16. Mr. Marco De Canha	MSc Research- Antimicrobial and anti-inflammatory effect of southern African plants against <i>Propionibacterium acnes</i> ; 2014; (Distinction)	Prof. N. Lall		2 years
17. Ms. Nomasomi Gasa	MSc Research	Prof N. Lall		2 years
18. Mrs Anna-Mari Kok	MSc Research Anti-mycobacterial and hepatoprotective potential of South African plant species	Prof N. Lall		2 years
19. Ms. Isa Lambrechts	MSc Research- Antimicrobial <i>Plectranthus</i> species against <i>Propionibacterium acnes</i> ; 2017; (Distinction)	Prof. N. Lall		2 years
20. Ms. Analike Blom	MSc Research- Potential of medicinal plants for Progressive macular hypomelanosis 2017; (Distinction)	Prof. N. Lall		2 years
21. Ms. Sunelle Rademan	MSc Research- Anticancer activity of <i>Combretum</i> species; 2017.	Prof. N. Lall		2 years
22. Ms. Dikonketso Bodiba	MSc Research- Antimicrobial activity of medicinal plants against bacteria which causes periodontal diseases 2017; (Distinction)	Prof. N. Lall		2 years

23. Ms. Bianca Fibrich	MSc Research - Anti-elastase activity of medicinal plants 2018; (Distinction)	Prof. N. Lall		2 years
24. Ms. Karina Suzman	MSc Research - Aquatic plants for periodontal diseases 2018; (Distinction)	Prof. N. Lall		2 years
25. Ms. Siphon Hayley Chauke	MSc Research - Unravelling the potential of selected South African indigenous plants as biocontrol agents against aflatoxin-producing <i>Aspergillus</i> species; 2019	Dr. Quenton Kritzing	Prof. N. Lall	2 years
26. Ms. Murunwa Madzinga	MSc Research - Anti-dermatophytic activity of selected South African indigenous plants; 2019 (Distinction)	Dr. Quenton Kritzing	Prof. N. Lall	2 years
27. Andrea Jais Josiah	MSc Research - A comparative study of Cannabidiol & Cannabidiol capped nanoparticles as potential non-melanoma skin cancer topical chemotherapies 2021	Prof S. Sinha Roy	Dr. S.K. Pillai, Prof. W. Cordier & Prof. N. Lall	2 years
28. Ms. Jacqueline Maphutha	MSc Research	Prof N. Lall	Dr. D. Twilley	
29. Ms. Marize Nel	MSc Research	Prof N. Lall	Dr. D. Twilley	
30. Ms. Samantha Loggerenberg	MSc Research Wound healing properties and anticancer treatment of Southern African plants	Prof N. Lall	Dr. D. Twilley	
31. Mr. Jonathan Seaman	MSc Research Antimycobacterial activity and biofilm inhibition of <i>Salvia aurea</i>	Prof Lall	Dr. C.B. Oosthuizen	
32. Mr. Brandon Alston	MSc Research Therapeutic potential of medicinal plants against COVID-19	Prof Lall	Dr. M. N. Canha and Dr. A. Reid	
PhD Students				
1. Mr. Quenton Kritzing	PhD - Antimicrobial activity and fumosins associated with Cowpea; 2004	Prof. T. Aveling	Prof. N. Lall	4 years
2. Mr. Benedict	PhD (Pharmacology) – Intracellular and antimycobacterial activity of	Prof. CE Medlen	Prof. N. Lall	4 years

Bapela#	naphthoquinones from the roots of <i>Euclea natalensis</i> and their <i>in vitro</i> toxicity; 2005			
3. Ms. Anelie Rabie	PhD - Bioactivity of extracts and components of <i>Pteleopsis myrtifolia</i> ; 2005	Prof. N. Lall		4 years
4. Ms. Cristina Mathabe	PhD Isolation of terpenoids from <i>Spirostachys africana</i> Sond with anti-diarrhoeal activity; 2006	Prof. RV Nikolova	Prof. N. Lall	4 years
5. Mr. Samie Amidou (Cameroonian)	PhD (Microbiology) - Antimicrobial, immuno-stimulatory and phytochemical profiles of plants against <i>Entamoeba histolytica</i> and <i>Campylobacter jejuni</i> ; 2008	Prof. CL Obi	Prof. N. Lall	4 years
6. Ms. Patience Mativandlela	PhD Identification of novel compounds from <i>Galenia Africana</i> for antituberculosis activity; 2009	Prof. N. Lall		4 years
7. Mr. Monde Nyila	PhD Antilisterial compounds with effect on Biofilm formation from <i>Acacia karroo</i> and <i>Plectranthus eckolii</i> ; 2010	Prof. N. Lall		5 years
8. Mr. Silva Mulhuvu (Mozambican)	PhD Potential of Mozambican plants for Tuberculosis and HIV; 2010	Prof. N. Lall		6 years
9. Ms. V. Thaver	PhD Mechanism of action of antituberculosis compounds using potassium and calcium transport; 2011	Prof. N. Lall		5 years
10. Mrs. M. Deutschlander	PhD Effect of selected compounds from medicinal plants used traditionally for diabetes on glucose uptake by adipose cells and myoblasts; 2010	Prof. N. Lall		4 years
11. Ms. Saiyedah Momtaz (Iranian)	PhD Investigation of cytotoxic effects and reduction of oxidative stress in cancer cells by <i>Hyaenanche globosa</i> and <i>Maytenus procumbens</i> "; 2012.	Prof. N. Lall	Prof. M. Abdollahi	4 years
12. Mrs Richa Jangid (Indian)	PhD - The antibacterial, anti-inflammatory activities and cytotoxic effects of <i>Syzygium jambos</i> and <i>Leucosidea sericea</i> plants addressing acne vulgaris; 2014	Prof. N. Lall		4 years

13. Ms. Monna Ellithey (Egyptian)	PhD - Bioactivity of marine organism-derived natural products; 2014	Prof. D. Meyer	Prof. N. Lall	
14. Ms. Richa Sharma	PhD	Prof N. Lall.		4 years?
15. Ms Cynthia J Smith*	PhD - Medicinal plants for periodontal diseases; 2015	Prof. N. Lall		4 years
16. Ms. N. Noluyulo Mogemane	PhD - Activity of <i>Greyia</i> for skin-hyperpigmentation 2017		Prof. N. Lall	3 years
17. Mr. Emmanuel Tshikalange	PhD -Medicinal plants for StDS		Prof. N. Lall	4 years
18. Miss Bibi Sharmeen Jugreet	MPhil/PhD - Pharmacological and cosmeceutical potential of essential oils from Mauritius 2017	Prof. F. Mahomoodally	Prof N. Lall	
19. Mrs Danielle Twilley^^	PhD - Modulation of melanoma metastasis and angiogenesis by <i>Buddleja Saligna</i> Willd and its isolated compound 2018	Prof. N. Lall	Dr. Langhansova	4 years
20. Mr Marco De Canha	PhD - Antibacterial activity of <i>Helichrysum odoratissimum</i> L. Sweet against <i>Propionibacterium acnes</i> and its role in the prevention of acne vulgaris progression	Prof. N. Lall	Prof Slavko Komarnytsky	4 years
21. Mr. Carel Oosthuizen	PhD - The efficacy of coumarin derivatives against persistent mycobacterial biofilms	Prof. N. Lall	Dr. A. Ojha	4 years
22. Ms. Anna-Mari Reid	PhD - Pharmacokinetics and hepatoprotective effects of <i>Lippia scaberrima</i> Sond. & <i>Aspalathus linearis</i> (Burm.f.) R. Dahlgren	Prof. N Lall	Prof. Markku Pasanen	4 years
23. Mr. Patrick Ageh	PhD - Biopiracy of plant resources and the rights of indigenous people in Cameroon and South Africa	Prof. Steve Cornelius	Prof. N. Lall	4 years
25. Ms. Isa Lambrechts	PhD - Antimicrobial <i>Plectranthus</i> species against <i>Propionibacterium acnes</i>	Prof. N. Lall		
27. Ms. Bianca Fibrich	PhD - Anti-elastase activity of medicinal plants	Prof. N. Lall	Prof Chung-Ho Lin	

28. Analike Blom van Staden	PhD- <i>Aspalathus linearis</i> (Burm.f.) R.Dahlgren for progressive macular hypomelanosis 2021	Prof N. Lall	Prof Mauro Picardo	4 years
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A few significant achievements of my postgraduate students are as follows:

*Mr. Oliver Weignand, received an "**Award for the best Master-thesis in 2002** in Wood Science and Technology" (among 30 students who submitted a thesis in 2002) at the University of Applied Sciences Eberswalde (Germany).

#Mr. Benedict Bapela was awarded with **FULLBRIGHT SCHOLARSHIP** which provided him with an opportunity to visit Colorado University, USA to conduct part of his research project and acquire necessary skills needed for his project.

*Ms CJ Henley-Smith was awarded with the "**Gen Foundation Grant from UK**": The Gen Foundation is a charitable trust which principally provides grants to students/researchers in biological, chemical, botanical, and food sciences. Since 1998, awards have been granted to over 80 people studying or researching within these fields. Applications are submitted yearly, in writing before 31 March to The Gen Foundation, United Kingdom.

^Mrs Danielle Twilley Received the GAP (Gauteng Accelerator Program) Biosciences Innovation Award 2nd Prize (2016) Danielle - **L'Oreal-UNESCO for women in science International rising talents (2018), one of the 15 recipients internationally**, L'Oreal-UNESCO for Women in Science Sub Saharan regional doctoral fellowship (2015)

Student supervision from University outside South Africa:

- Mrs OM Osatuyi; PhD (The international institute of tropical agriculture, Ibadan, Nigeria; May 2001 to December 2001: HPLC analysis and possible identification of compounds from Khaya spp.
- Ms Trine Neilsen; MSc: University of Denmark; Masters project on tuberculosis research
- Mr. Oliver Weignand; MSc: University of Eberswalde: Masters project on Phytochemistry of plants.
- Ms S. Jugreet; MPhil/PhD: University of Mauritius: Pharmacological and cosmeceutical potential of essential oils from Mauritius.
- Miss Shahin Kauroo; MPhil/PhD: University of Mauritius: An interdisciplinary approach towards screening selected Mauritian Phytomedicines for Anticancer and Cosmeceutical Leads.

Postdoctoral Researchers

- Dr. Anita Mahapatra: CSIR, India, 10 months; (2003)
- Prof. Ahmed Hussein: Cairo University, Egypt, 4 months every year for 8 years; (2002-2009)
- Dr. Kuete Victor: University of Cameroon: two years; (2008-2009).
- Dr. Navneet Kishore: Banaras Hindu University, India; (2013-2017).
- Dr. Vivek Kumar: Niper, India; (2015-2017).

- Dr. Surjeet Verma: CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow; India; (2018-2020)
- Dr. Danielle Twilley: University of Pretoria; (2018-till date)
- Dr. Carel Oosthuizen: University of Pretoria; (2018-2020)
- Dr. Marco De Canha: University of Pretoria; (2019-till date)
- Dr. Kumkukani Nyirendra: University of Malawi, College of Medicine, Pharmacy Department, Malawi; (2019-2020).
- Dr. Alice Nabatanzi: Makerere University, Department of Plant Sciences, Microbiology and Biotechnology School of Biosciences College of Natural Sciences Kampala, Uganda, East Africa (2019-2020).
- Dr. Anna-Mari Reid: University of Pretoria; (2020-till date)

5.3 Obtaining research funds (Optional)			
Origin of research funds	Title of research project or programme	Duration	Money allocated
Plantamed (Pharmaceutical company, Germany) International (together with Prof Meyer)	Antiviral activity of medicinal plants	3 Years 1997-99	R 300000
Medical Research council (South Africa) (together with Prof Meyer)	Isolation of anti-TB compounds from medicinal plants	5 years 1998-02	R 750000
Research development programme (University of Pretoria)	Naphthoquinones' efficacy as potential antituberculosis agents	2 years 2002-2003	R 40000
NRF/Thuthuka (Women in research grant)	4. Natural products from medicinal plants with antituberculosis activity	1 year 2002	R 80000
Mobility grant	Anti-HIV testing of medicinal plants	2 months 2004	R 12000
NRF (South Africa)	Bioactive agents from plants	2003	R 68000
NRF (South Africa)	Bioactive agents from plants	2004	R 96000

National innovation fund (together with Prof. Meyer)	New, improved treatment of TB	3 years 2003-05	R11.3 million for 3 years
Mobility grant (South Africa)	Anti-diabetes investigation of medicinal plants	2 months 2005	R 18000
NRF/Royal society grant, International	Mode of action of anti-TB compounds	2 years 2005-06	320000
Mobility Grant (South Africa)	Micropropagation of <i>Drosera capensis</i>	1 month 2005	R 32000
Novel Drug Development platform (Together with Prof. Meyer)	Antidiabetic activity of plants	2005-07	R 420000
NRF (South Africa)	Bioactive agents from plants	2005	R 315000
NRF (South Africa)	Bioactive agents from plants	2006	R 255000
Faculty of Natural and Agricultural Sciences (UP)	Phytochemical evaluation of medicinal plants (Visiting Scientist)	2006	R 25000
NRF (South Africa)	Bioactive agents from plants	2007	R 255000
NRF/Research niche area (together with Prof. Meyer)	Phytoderived drugs with medicinal potential	2007-2011	R 300000
NRF/Royal society grant, International	Mode of action of anti-TB compounds	2008	R 40000
Medical Research Grant	Novel antituberculosis agents	2009-2011	R 130000
NRF Incentive grant for rated researchers	Incentive grant for rated researchers	2008-2014	R 40000
NRF/KISC The NRF key international science capacity (kisc) initiative (international)	KISC Grant for research on tuberculosis	2009-2011	R 300000
NRF	Mobility grant: Invited scientist to train postgrads for mechanistic studies using Mycothiol enzymes	2011	R 15000

University of Pretoria	Postgraduate mentor bursary	2009-10	R 140000
DST (Department of Science and Technology, SA)	Cosmeceutical project	2008-2013	R 16 million
NRF South Africa)	Economic growth and competitiveness	2008-2011	R 1.8 million
DST (Department of Science and Technology, SA)	Human capital	2009	R 90000
NRF (competitive grant for rated researchers)	Phytoderived drugs and cosmeceuticals	2012-2014	R 1.5 million
Medical Research Grant	Mechanism of action of antituberculosis agents	2012-2014	R 420000
SA/India bilateral (international)	Pharmacological evaluation of medicinal plants from India and South Africa based on indigenous knowledge for anticancer and antituberculosis potential	2014-2016	R 450000
H. CHC. M. CHRISTIAN COURTIN France (international)	<ul style="list-style-type: none"> Ethnobotanical database development and biological activities of medicinal plants in villages under the Jongilanga traditional council, Mpumalanga 	2012-2014	R 500000
NRF/IKS grant	Harnessing the potential of plants used by a Traditional health practitioner for cervical cancer	2014-2016	R 1.5 million
DST (Department of Science and Technology, SA)	Cosmeceutical Project	2015-2017	R 26 million
Water Research Commission, SA	Green innovation from Aquatic plants	2015	R 200000
SARCHI/NRF	Plant Health Products from IKS	2016-2020	R 8 million

TIA	Industrializing GR Active	2015-2017	R 13 million
TIA Seed Fund	Development of an adjuvant for TB patients from a South African plant	2016	R500 000
TIA Seed Fund	Commercialization of an anticancer product form an indigenous plant	2017	R500 000
ICGEB with Prof Joyce Govinden Soulange from the University of Mauritius (international)	Bioprospecting Mauritian Phytomedicines for anticancer leads	2016-2017	Euros 18000
The Australia-Africa Universities Network – Partnership and Research Development Fund 2019 with Prof Dharine Sivakumar (TUT) and Prof Yasmina Sultanbawa from the University of Queensland, Australia (international)	High value dehydrated products from traditional vegetables in South Africa as a low-calorie meal replacement with health benefits	2019-2020	Aus Dollars: 10000
Water Research Commission	Cosmeceuticals from Aquatic plants	2020-2023	R 2.3 million

<p>a. Specialty Crop Block Grants Awarded to Grow Production within Missouri agriculture With Prof Chung-Ho Lin (international)</p>	<p>Explore the Economic Opportunities and Health Benefits of the Pawpaw in Missouri</p>	<p>2019-2021</p>	<p>USD 46689</p>
<p>b. Specialty Crop Block Grants Awarded to Grow Production within Missouri agriculture With Prof Chung-Ho Lin (international)</p>	<p>Explore the Economic Opportunities and Health Benefits of the Elderberry in Missouri</p>	<p>2019-2020</p>	<p>USD 5000</p>
<p>c. Specialty Crop Block Grants Awarded to Grow Production within Missouri agriculture With Prof Chung-Ho Lin (international)</p>	<p>Identify Novel Uses of Black Walnut and Its Byproducts through Global Metabolomics Profiling and High-throughput Screening</p>	<p>2019-2020</p>	<p>USD 5000</p>
<p>d. The University of Missouri South African Education Program (UMSAEP) With Prof Mark Morgan (international)</p>	<p>Minimizing the environmental effects of Asian carp by developing various value-added products.</p>	<p>2020-2021</p>	<p>USD 6000</p>
<p>e. Sarchi/NRF</p>	<p>Plant Health Products from IKS</p>	<p>2021-2025</p>	<p>R 14.5 million</p>

6. RESEARCH OUTPUTS

6.1 Publications in peer-reviewed or refereed journals

1. De Canha, M. N., Thipe, V. C., Katti, K. V., Mandiwana, V., Kalombo, L., Ray, S. S., Rikhotso, R., **Lall, N.** (2021). The activity of gold nanoparticles synthesized using *Helichrysum odoratissimum* against *Cutibacterium acnes* biofilms. *Frontiers in Cell and Developmental Biology*. (Impact factor: 6.684).
2. Bvenura, C., Witbooi, H., Oguntibeju, O.O., Reid, A., Lall, N., Kambizi, L. (2021). The effects of root zone temperature on biological activity of some pigmented *Solanum tuberosum* L. cultivar extracts. *Applied Sciences*. DOI: <https://doi.org/10.3390/app11156971>. 11, (15), pp. 6971 (Impact factor: 2.679)
3. Coles, Z. S., Du Toit, E. S., **Lall, N.**, Payne, B., Steyn, J. M. (2021). The influence of photoselective shade netting on vegetative growth and bioactivity of *Myrsine Africana* L. for cosmeceutical production. *Journal of Applied Research on Medicinal and Aromatic Plants*. DOI: [10.1016/j.jarmap.2021.100324](https://doi.org/10.1016/j.jarmap.2021.100324). 24, pp. 100324. (Impact factor: 3.400)
4. Zhang, X., Song, Z., Li, Y., Zhang, W. S., Reid, A., **Lall, N.**, Zhang, J., Wang, C., Lee, D., Ohizumi, Y., Xu, J., Guo, Y. (2021). Cytotoxic and antiangiogenic Xanthenes inhibiting tumor proliferation and metastasis from *Garcinia xipshuanbannaensis*. *Journal of Natural Products*. 84, (5), pp. 1515-1523. (Impact factor: 4.050)
5. Maphutha, J., Twilley, D., & **Lall, N.** (2021). Inhibition of phosphatidylinositol 3-kinase (PI3K) enzyme and human skin carcinoma cell growth by *Combretum apiculatum* Sond. *South African Journal of Botany*, 140, 95-102. (Impact factor: 2.315). DOI: [10.1016/j.sajb.2021.03.031](https://doi.org/10.1016/j.sajb.2021.03.031)
6. Josiah, J. A., Twilley, D., Pillai, S. K., Ray, S. S., **Lall, N.** (2021). Pathogenesis of Keratinocyte Carcinomas and the Therapeutic Potential of Medicinal Plants and Phytochemicals. *Molecules*, 26 (7), 1979: <https://doi.org/10.3390/molecules26071979>. (Impact factor: 4.411)
7. Knoll, K. E., Lindeque, Z., Adetomiwa, A. A., Oosthuizen, C., **Lall, N.**, & Loots, D. T. (2021). Elucidating the antimycobacterial mechanism of action of ciprofloxacin using metabolomics. *Microorganisms / 2021040443* (doi: 10.20944/preprints202104.0443.v1). (Impact Factor 4.128)
8. Blom van Staden, A., Oosthuizen, C.B. & **Lall, N.**, 2021. The effect of *Aspalathus linearis* (Burm.f.) R. Dahlgren and its compounds on tyrosinase and melanogenesis. *Scientific Reports* 11 (7020), pp. 1-14. <https://doi.org/10.1038/s41598-021-86410-z> (Impact Factor 4.379)
9. Zhang, S., An, L., Li, Z., Wang, X., Wang, H., Shi, L., Bao, J., Lan, X., Zhang, E., **Lall, N.** and Reid, A.M., 2021. Structural elucidation of an immunological arabinan from the rhizomes of *Ligusticum chuanxiong*, a traditional Chinese medicine. *International Journal of Biological Macromolecules*, 170, pp. 42-52. <https://doi.org/10.1016/j.ijbiomac.2020.12.069> (Impact Factor 6.953)
10. Lambrechts, I.A. and **Lall, N.**, 2021. Traditional usage and biological activity of *Plectranthus madagascariensis* and its varieties: a review. *Journal of Ethnopharmacology*, 269(113663), pp. 1-13. <https://doi.org/10.1016/j.jep.2020.113663> (Impact Factor 4.360).
11. Knoll, K. E., Lindeque, Z., Adeniji, A. A., Oosthuizen, C. B., **Lall, N.**, Loots, D. T. (2020). Elucidating the antimycobacterial mechanism of action of decoquinic acid derivative RMB041 using metabolomics. *Antibiotics*. 10 (6), pp. 693. (Impact factor: 4.639)
12. Verma S., Twilley D., Esmear T., Oosthuizen C.B., Reid A.M., Nel M., **Lall N.** 2020. Anti-SARS-CoV natural products with the potential to inhibit SARS-CoV-2 (COVID-19). *Frontiers in Pharmacology* 11, 1514.

- doi:10.3389/fphar.2020.561334 (*Impact Factor 4.400*).
13. Twilley, D., Moodley, D., Rolfes, H., McGaw, L.J., Madikizela, B., Summers, B., Raaff, L., Lategan, M., Kgatuke, L., Mabena, E.C., **Lall, N.** 2020. Ethanolic extracts of South African plants, *Buddleja saligna* Willd. and *Helichrysum odoratissimum* (L.) Sweet, as multifunctional ingredients in sunscreen formulations. South African Journal of Botany 138, pp. 171-182. (*Impact Factor 2.315*).
14. Howes MRJ, Quave CL, Collemare J, Tatsis EC, Twilley D, Lulekal E, Farlow A, Li L, Cazar ME, Leaman DJ, Prescott TAK, Milliken W, Martin C, De Canha MN, **Lall N**, Qin H, Barnaby E. Walker, Londoño CV, Allkin B, Rivers M, Monique S.J. Simmonds, Bell E, Battison A, Felix J, Forest F, Leon C, Williams C and Lughadha EN., 2020. Molecules from Nature: Reconciling biodiversity conservation and global healthcare imperatives for sustainable use of medicinal plants and fungi. *Plants, Planet, People*, 2(5), 463-481. <https://doi.org/10.1002/ppp3.10138>. (*Impact Factor N/A*).
15. **Lall N**, Mohomoodally MF, Esposito D, Steenkamp V, Zengin G, Steyn A, Oosthuizen CB. 2020. Editorial: Cosmeceuticals from Medicinal Plants. *Frontiers in Pharmacology*. 11:1149. doi: 10.3389/fphar.2020.01149 (*Impact Factor 4.400*).
16. Twilley D, Rademan S, **Lall N.** 2020. A review on traditionally used South African medicinal plants, their secondary metabolites and their potential development into anticancer agents. *Journal of Ethnopharmacology*, 261, 113101. (*Impact Factor 4.360*).
17. Gibango L, Oosthuizen C, **Lall N.** 2020. Potential implications of the use of *Rapanea melanophloeos* (L.) Mez against mycobacteria. *South African Journal of Botany*. 132, 388-394. (*Impact Factor 2.315*).
18. Fibrich B, Gao X, Puri A, Banga A, **Lall N.** 2020. In vitro antioxidant, anti-inflammatory and skin permeation of *Myrsine africana* and its isolated compound myrsinoside B. *Frontiers in Pharmacology*, volume 10, doi: 10.3389/fphar.2019.01410 (*Impact Factor 4.400*).
19. Canha MN De, Steyn A, Van Staden AB, Fibrich B, Lambrechts IA, Denga LL, **Lall N.** Book Review: Herbal Principles in Cosmetics: Properties and mechanism of action. *Frontiers in Pharmacology*, Volume 10: doi: 10.3389/fphar.2019.01513 (*Impact Factor 4.400*).
20. Reid A, Oosthuizen CB, **Lall N.** 2020. *In vitro* antimycobacterial and adjuvant properties of two traditional South African teas, *Aspalathus linearis* (Burm. f.) R. Dalgren and *Lippia scaberrima* Sond. *South African Journal of Botany*, 128: 257-263. (*Impact Factor 2.315*)
21. De Canha M, Komarnytsky S, Langhansova L, **Lall N.** 2020. Exploring the anti-acne potential of *Impepho* (*Helichrysum odoratissimum*) to combat *Cutibacterium acnes* virulence. *Frontiers in Pharmacology*. 10:1410. Doi: 10.3389/fphar.2019.01559 (*Impact Factor 4.400*).
22. Sehlakgwe PF, **Lall N**, Prinsloo G. 2020. ¹H-NMR Metabolomics and LC-MS analysis to determine seasonal variation in a cosmeceutical plant *Leucosidea sericea*. *Frontiers in Pharmacology*. 11:219. Doi: 10.3389/fphar.2020.00219 (*Impact Factor 4.400*).
23. Dong B, Yang X, Liu W, An L, Zhang X, Tuerhong M, Du Q, Wang C, Abudukeremu M, Xu J, Lee D, Shuai L, **Lall N**, Guo Y. 2020. Anti-inflammatory neo-Clerodane Diterpenoids from *Ajuga pantantha*. *Journal of Natural Products*. 83: 894-904. <https://dx.doi.org/10.1021/acs.jnatprod.9b00629>. (*Impact Factor 4.050*).
24. Liang Y, Zhang Qi, Yang X, Li Y, Zhang X, Li Y, Du Q, Jin DQ, Cui J, **Lall N**, Tuerhong M, Lee D, Abudukeremu M, Xu J, Shuai L, Guo Y. 2020. Diterpenoids from the leaves of *Casearia kurzii* showing cytotoxic activities. *Bioorganic Chemistry*. 98: 103741. <https://doi.org/10.1016/j.bioorg.2020.103741>. (*Impact Factor 5.275*).
25. An L, Ma J, Yang X, Liang Y, Wang H, Tuerhong M, **Lall N**, Abudukeremu M, Zhang Y, Lee D, Xu J, Wu X, Gao Y. 2020. Caseahomopene A, a ring-expanded homotriterpenoid from *Casearia kurzii* showing anti-inflammatory activities *in vitro* and *in vivo*. *Bioorganic Chemistry*. 98: 103758. <https://doi.org/10.1016/j.bioorg.2020.103758>. (*Impact Factor 5.275*).
26. Nabatanzi A, Nkadimeng SM, **Lall N**, Kabasa JD. 2020. Ethnobotany, Phytochemistry and Pharmacological activity of *Kigelia Africana* (Lam.) Benth. (Bignoniaceae). *Plants*. 9: 753. Doi:10.3390/plants9060753. (*Impact Factor 3.935*).

27. Ho, K.V., Roy, A., Foote, S., Vo, P.H., **Lall, N.** and Lin, C.H., 2020. Profiling Anticancer and Antioxidant Activities of Phenolic Compounds Present in Black Walnuts (*Juglans nigra*) Using a High-Throughput Screening Approach. *Molecules* 25(4516), pp. 1-13. doi: 10.3390/molecules25194516 (*Impact Factor* 4.411)
29. Nabatanzi A, Nkadameng SM, **Lall N**, Kabasa JD, McGaw L. 2020. Antioxidant and Anti-inflammatory activities of *Kigelia africana* (Lam.) Benth. Evidence-Based Complementary and Alternative Medicine. 2020, Article ID 4352084, 11 pages, <https://doi.org/10.1155/2020/4352084>. (*Impact Factor* 2.629).
30. Qasaymeh RM, Rotondo D, Oosthuizen CB, **Lall N**, Seidel V. 2019. Predictive binding affinity of plant-derived natural products towards the protein kinase G enzyme of *Mycobacterium tuberculosis* (MtPknG). *Plants*, 8 (11) 477. doi:10.3390/plants8110477. (*Impact Factor* 3.935).
31. **Lall N**, Chrysargyris A, Lambrechts I, Fibrich B, Van Staden AB, Twilley D, De Canha MN, Oosthuizen CB, Bodiba D, Tzortzakis N. 2019. *Sideritis perfoliata* (subsp.perfoliata) nutritive value and its potential medicinal properties. *Antioxidants*. 8,521; doi:10.3390/antiox8110521. (*Impact Factor* 6.312).
32. Reid AM, Juvonen R, Huuskonen P, Lehtonen M, Pasanen M, **Lall N**. 2019 *In Vitro* Human Metabolism and Inhibition Potency of Verbascoside for CYP Enzymes. *Molecules*. 24(11):2191. (*Impact Factor* 4.411).
33. De Canha MN, Staden ABV, Fibrich BD, Lambrechts IA, Denga L, **Lall N**. 2019. Book Review: Cosmeceuticals and Active Cosmetics, Third Edition. *Frontiers in Pharmacology*. 10:529. Doi: 10.3389/fphar.2019.00529. (*Impact Factor* 4.400).
34. **Lall N**, Staden ABV, Rademan S, Lambrechts I, De Canha MN, Mahore J, Winterboer S, Twilley D. 2019. Antityrosinase and anti-acne potential of plants traditionally used in the Jongilanga community in Mpumalanga. *South African Journal of Botany*. 126, 241-249. (*Impact Factor* 2.315).
35. Ageh PA, **Lall N**. 2019. Biopiracy of Plant Resources and Sustainable Traditional Knowledge System in Africa. *Global Journal of Comparative Law*. 8, 162-181. (*Impact Factor* 0.29).
36. Reva ON, Rademan S, Visagie MH, Lebelo MT, Gwangwa MV, Klochko VV, Joubert AM, **Lall N**. 2019. Comparison of structures and cytotoxicity of mupirocin and batumin against melanoma and several other cancer cell lines. *Future Medicinal Chemistry* 11(7), 677-691. (*Impact Factor* 3.808).
37. Stapelberg J, Nqephe M, Lambrechts I, Crampton B, **Lall N**. 2019. Selected South African plants with tyrosinase enzyme inhibition and their effect on gene expression. *South African Journal of Botany*. 120, 280-285. <https://doi.org/10.1016/j.sajb.2018.08.013>. (*Impact Factor* 2.315).
38. Aumeeruddy MZ, Aumeeruddy-Elalfi Z, Neetoo H, Zengin G, van Staden AB, Fibrich B, Lambrechts IA, Rademan S, Szuman KM, **Lall N**, Mahomoodally F. 2019. Pharmacological activities, chemical profile, and physicochemical properties of raw and commercial honey. *Biocatalysis and Agricultural Biotechnology*. 18:101005. (*Impact Factor* 2.513).
39. Seebaluck-Sandoram R, **Lall N**, Fibrich B, van Staden AB, Saleem H, Mahomoodally MF. 2019 Antimicrobial, antioxidant and cytotoxic evaluation of two underutilised food plants: *Averrhoa bilimbi* L. (Oxalidaceae) and *Phyllanthus acidus* L. Skeels (Phyllanthaceae). *Biocatalysis and Agricultural Biotechnology*. 18:100998. (*Impact Factor* 2.513).
40. Rademan S, Anantharaju PG, Madhunapantula SRV, **Lall N**. 2019. The antiproliferative and antioxidant activity of four indigenous South African Plants. *African Journal of Complementary and Alternative Medicine*. 16(1): 13-23. (*Impact Factor* 0.553).
41. Oosthuizen CB, Gasa N, Hamilton CJ, **Lall N**. 2019. Inhibition of mycothione reductase and mycobacterial biofilm by selected South African Plants. *South African Journal of Botany*. 120, 291-297. <https://doi.org/10.1016/j.sajb.2018.09.015>. (*Impact Factor* 2.315).

42. Sanmukhiya VMR, Chellan Y, Soulange JG, Lambrechts IA, Stapelberg J, Crampton B, **Lall N**. 2019. Biochemical and phylogenetic analysis of *Eugenia* and *Syzygium* species from Mauritius. *Journal of Applied Research on Medicinal and Aromatic Plants*. 12, 21-29. <https://doi.org/10.1016/j.jarmap.2018.10.004>. (*Impact Factor* 3.400).
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47. Soldatkina MA, Klochko VV, Zagorodnya SD, Rademan S, Visagie MH, Lebelo MT, Gwangwa MV, Joubert AM, **Lall N**, Reva ON. 2018. Promising anticancer activity of batumin: a natural polyene antibiotic produced by *Pseudomonas batumici*. *Future Medicinal Chemistry*. 10(18), 2187-2199 <https://doi.org/10.4155/fmc-2018-0062>. (*Impact Factor* 3.808).
48. Lall N, De Canha MN, Reid A, Oosthuizen CB, Langhansova L, Mahore J, Winterboer S, Hamilton C, Kumar V, Gasa N, Twilley D. 2018. Antibacterial and anticancer activity of ethnomedicinal plants used in the Jongilanga community, Mpumalanga. *International Journal of Pharmacognosy and Phytochemical Research*. 10(1): 25-37. DOI: 10.25258/phyto.v10i01.11928. (*Impact Factor* 1.18).
49. Kishore N, Twilley D, Van Staden AB, Verma P, Singh B, Cardinali G, Kovacs D, Picardo M, Kumar V, **Lall N**. 2018. Isolation of flavonoids and flavonoid glycosides from *Myrsine africana* and their inhibitory activities against Mushroom tyrosinase. *Journal of Natural Products*. 81, 49-56 (*Impact Factor* 4.050).
50. Henley-Smith CJ, Botha FS, Hussein AA, Nkomo M, Meyer D, **Lall N**. 2018. Biological activities of *Heteropyxis natalensis* against Micro-organisms involved in oral infections. *Frontiers in Pharmacology*. 9: 291-300. Doi: 10.3389/fphar.2018.00291. (*Impact Factor* 4.400).
51. Bodiba DC, Prasad P, Srivastava A, Crampton B, **Lall N**. 2018. Antibacterial activity of *Azadirachta indica*, *Pongamia pinnata*, *Psidium guajava* and *Mangifera indica* and their mechanism of action against *Streptococcus mutans*. *Pharmacognosy Magazine*. 14; 53: 76-80. (*Impact Factor* 1.085).
52. Aumeeruddy-Elalfi Z, **Lall N**, Fibrich B, Van Staden AB, Hosenally M, Mohomoodally MF. 2018. Selected essential oils inhibit key physiological enzymes and possess intracellular and extracellular antimelanogenic properties *in vitro*. *Journal of Food and Drug Analysis*. 26: 232-243. doi: 10.1016/j.jfda.2017.03.002. (*Impact Factor* 4.727).
53. Sandoram RS, **Lall N**, Fibrich B, Van Staden A, Mahomoodally F. 2018. Antibiotic-potentiating activity, phytochemical profile, and cytotoxicity of *Acalypha integrifolia* Willd. (Euphorbiaceae). *Journal of Herbal*

- Medicine 171: 11: 53-59. <https://doi.org/10.1016/j.hermed.2017.03.005>. (*Impact factor* 3.032).
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6.2 Books and/or chapters in books

Books:

1. Medicinal Plants for Holistic Health and well-Being; 2017. Edited by **Prof. Namrita Lall**; Elsevier Publisher, ISBN: 978-0-12-812475-8
2. Underexplored Medicinal Plants from Sub-Saharan Africa, 1st Edition. 2020. Edited by **Prof. Namrita Lall**; Elsevier Publisher, ISBN: 978-0-12-816814-1; <https://doi.org/10.1016/C2018-0-01565-0>.
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53. Verma, S., **Lall, N.** and Meyer, D., 2021. A Wonder Plant Withania: Pharmacological and Chemical Perspectives. In *Evidence Based Validation of Traditional Medicines*. Springer, Singapore, pp. 873-900.

6.3 Published full-length conference papers/keynote addresses:

1. **Panel Discussion, Panelist.** Lall, N. (7 September 2021), Key Challenges for NATural Products Research- Perspectives from African Scientists, 69th Virtual International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product REsearch (GA).

2. **Invited webinar.** Lall, N. (25 August 2021), Resolving barriers for girls and women to innovate in STEM. 3rd Annual Women in Science Symposium, Future Africa Campus, Pretoria, South Africa.

3. **Invited webinar.** Lall, N., Lambrechts. I. A. (20-22 July 2021), Innovative Ingredients Inspired by Nature. Biodiversity for Malawi 2063, Joint Research Dissemination Conference, Water Resources Management, Natural Products and Machine Learning for Biodiversity, Nalipiri Ecoresort, Mulanje, Malawi.

4. **Keynote speaker.** Lall, N. (6 July 2021), Challenges and coping strategies faced by female scientists for STEM research. 1st International Conference on Reimagining the Natural Products Industry in Africa (RNPIA), 5-7th July, Imperial Royal Hotel, Kampala, Uganda.

5. **Invited webinar.** Lall, N. (26 April 2021). Power and Opportunity offered by different types of IP in setting up a company- A case study. University of Pretoria. World Intellectual Property (IP) Day: IP & SMEs: Taking your ideas to the market. University of Fort Hare- Innovation Office & the Technology Innovation Agency, South Africa.

6. **Invited Lecture.** Payne, BD, Lall N (31 March 2021). The Potential of Microbial Mediated Fermentation of Herbal Material in Anti-Ageing Cosmetics. The Society of Cosmetic Chemists South Africa, Virtual Lecture, South Africa.

7. **Plenary Speaker.** Fibrich BD, Lall N (8-11 January 2019). A wrinkle in-time: The potential of fermented, gold nanoparticles and ethanolic extracts of *P. senegalensis* on the maintenance of the dermal matrisome in photoaging skin. 45th Annual Congress of the South African Association of Botanists, Johannesburg, South

Africa.

8. **Keynote Speaker.** Lall N (10-11 December 2018). The power of nature captured for graceful skin. International Conference on Herbal & Traditional Medicine. Dubai, UAE.
9. **Plenary Speaker.** Lall N (16th -19th October 2018). Innovation for Industry yet Faithful to Nature. African traditional and natural product medicine conference. Protea Hotel Ranch Resort, Polokwane, South Africa.
10. **Plenary Speaker.** Lall N (8-11th July 2018). Pharmaceuticals and Cosmetics from Medicinal plants. SASBMB-FASBMB International conference. Potchefstroom, South Africa.
11. **Keynote speaker.** Lall N (12-13 June 2017). Medicinal Plants for skin-disorders and Melanoma. International Summit on Pharma & Clinical trials. Sydney, Australia.
12. **Keynote speaker.** Lall N (12-14 June 2017). Are medicinal plants magic Bullets? International Conference on Pharmacology & Regulatory Affairs. Sydney, Australia.
13. **Keynote speaker.** Lall N (29th-30th Nov 2017). Green solutions for anti-ageing. Annual Congress on Cell Science, Stem Cell Research & Regenerative Medicine Atlanta, USA
14. **Keynote speaker:** Lall N (20-21 June 2016). South African medicinal plants with dermatological relevance. 4th African Pharma Congress, Capetown, South Africa.
15. **Keynote speaker:** Lall N, 2015 "Green medicines and cosmeceuticals "5th International Conference on Clinical & Experimental Dermatology", July 13-15, 2015 at Double Tree New Orleans, USA.
16. **Plenary Lecture:** Lall N, 2015 Potential Phytoderived Products for skin-hyperpigmentation and acne problems: 2nd congress of the Indian chapter of the society for Ethnopharmacology, Nagpur, India February 20-22, 2015.
17. **Keynote speaker:** Lall N, 2015, A potential supplement for TB- patients. First Annual International Pharmaceutical Engineering Symposium (IPES May 23-25, 2015), Liaoning Mansion, Shenyang, China.
18. **Keynote speaker:** Lall N, 2014. Green is no longer a grey area for periodontal diseases. BIT'S 1st Annual International Congress of Oral and Dental Medicine (CODM-2014), Nov 13-16, 2014, Haikou, China.
19. **Plenary Lecture:** Lall N (2013), Can plants grown in South Africa contribute towards Pharmaceuticals and cosmeceuticals? 6-10th December 2013, Fifth Global summit on Medicinal and aromatic plants; Miri, Malaysia.

20. **Invited talk; webinar:** Lall N. 26th September 2020. International webinar series, Session-18, Reimagine Ethnopharmacology (Organised by Society of Ethnopharmacology, India and International society of Ethnopharmacology, Switzerland).
21. **Invited talk; Webinar:** Lall N. 12th September 2020. Phytomedicines for pharmaceuticals, Cosmeceuticals and for COVID-19 (Organised by UGC-Human Resource Development Centre, Ranchi, India. .
22. **Invited talk, Webinar:** Lall N. 20th July 2020 Natural Products and Skin Care; United in the Middle. (Organised by African Wellness Initiative, SWAA).
23. **Invited talk, Webinar:** Lall N. 11th June 2020. Exploring Medicinal plants for pharmaceuticals and cosmeceuticals including the COVID-19 (Organised by St Xaviers college, Ranchi India).
24. **Invited talk, Webinar:** Lall N. 15th July 2020. Exploring medicinal plants for Pharmaceuticals and Cosmeceuticals including the COVID-19 (Organised by JSS college of Pharmacy OOTY, India)
25. **Invited talk** Lall N. 03-05th April 2019 Local innovation from Medicinal plants: let it mellow while yellow. 1st VUT International Conference on Traditional Knowledge and Traditional Medicine, Vanderbijlpark Gauteng Province South Africa.
26. **Invited talk:** Lall N. (12-14th June 2019. Reinforce urban skin by connecting with the origins. 19th International Congress of the International Society for Ethnopharmacology, Desden, Germany.
27. **Invited talk** Lall N. (4-5 July **2018**). From Medicinal plants to Cosmeceuticals. Conference of the South African Association of Intellectual Property Law and Information Technology Law Teachers and Researchers, Pretoria, South Africa.
28. **Invited talk** Lall N. (16-19th October **2018**). Invigorating possibilities of Indigenous Knowledge, Medicinal Plants and Cosmeceuticals in South Africa, African Traditional and Natural Product Medicine Conference, Limpopo, South Africa.
29. **Invited talk** Chabalala H, Lall N (2013), African traditional medicines: towards industrialisation on ATM in South Africa. 25th-27th Sep 2013 Traditional Chinese medicine conference, Chandu; China.
30. **Invited talk** Lall N (2012), DST's bioprospecting and product development. SA-India bilateral conference Ooty, India.
31. **Invited talk** Lall N (2011) The antiquity and history of medicinal plants and tuberculosis National SAAB Conference 37th Annual Conference of the South African Association of Botanists (SAAB), Rhodes University, Grahamstown.
32. **Invited talk** Lall N (2010). Is a South African herbal toothpaste ready for the market? An international

meeting at China expo to represent South Africa in Indigenous Knowledge System (IKS) Bio-prospecting Platform, Shanghai, China.

33. **Invited talk** Lall N, (2006). Traditional African pharmaceuticals. African Indigenous Medicine Systems (AIMS) Symposium 28th August 2006, University of Western CAPE (SA)

34. **Invited talk** Lall N (2008). Facets of South African medicinal plants. **Euro-India conference** on Medicinal and Aromatic plants August 2008. Kerala, India.

6.4 Non-refereed publications or popular articles

- **Lall N, Meyer JJM, 2000.** Bioactive agents from natural sources: Multidrug resistant tuberculosis- the superbug battle. Southern African Ethnobotany. The official Newsletter of the indigenous Plant Use Forum. 1 (2): 23-24.

- **Lall N, Prozesky E, 2004.** Modern validation techniques for traditional remedies. South African Pharmaceutical & Cosmetic Review 31 (2): 33-35.

- **Lall N, 2008.** The African Green Gold for Skin Bright and Light. South African Pharmaceutical & Cosmetic Review, 28.

- **Lall N, 2015.** Nature's Medicine. Public Health Association of South Africa, Newsletter.

- Esmear T, Denga L, Oosthuizen CB and **Lall N. 2019.** *Helichrysum*; a ritual plant and its therapeutic potential – A Photo Essay. Ethnopharmacology.org.

<https://www.ethnopharmacology.org/photoessays/Helichrysum/ats00000.htm>

- Esmear T, **Lall N., 2020.** Growing the Businesses of tomorrow. Tertiary Education. Professional Beauty SA, July/Aug issue, pp. 33.

- **Lall, N., 2021.** The potential of South African medicinal plants for the treatment of COVID-19. Commentary for Annals of Phytomedicine: An International Journey.

- Payne, B.D. and **Lall, N., 2021.** Products & Skincare: United in the Middle. SWAA Digital Magazine April-June 2021, pp. 35-37

Editorships:

- Topic editor for a special edition for Pharmaceuticals **“Pharmaceuticals and Cosmeceuticals from Plants: Molecular Pharmacology and Toxicology”**

- Guest editor for a special edition for Frontiers in Pharmacology **“Pharmacology of Plant Polyphenols**

in Human Health and Diseases”

- Topic editor for a special edition for Frontiers in Pharmacology “**Research Topic: Cosmeceuticals from Medicinal Plants**”
- Guest editor for a special edition for a journal “**Evidence-Based Complementary and Alternative Medicine**”
- Associate editor for the journal; **Frontiers in Pharmacology**
- Associate editor for the journal; **Pharmacognosy Magazine**
- Associate editor for the journal; **BMC Complementary and Alternative Medicine**
- Associate editor for the journal; **Calabash: Journal of African Indigenous Knowledge Systems.**
- Associate editor for the journal; **The Applied Biology & Chemistry Journal**
- Consulting editor for the journal; **Annals in Phytomedicine**

6.5 Patents

1. Patent Title: Anticancer activity of a *Buddleja saligna* compositions

Patent/Application number: ZA 2019/00387

Date of Filing/Grant: Filed 21-01-2019

Inventors: Danielle Twilley, Navneet Kishore and **Namrita Lall**

Countries Filed: South Africa

PA 170561/PCT, international patent published; Publication date: 30 July 2020;

Publication number: WO 2020/152577 A1

Countries Granted: None

2. Patent Title: Skin Lightening

Patent/Application number: ZA 2012/05718

Date of Filing/Grant: Filed 30-07-2012 Granted 29-10-2014

Inventors: Smeetha Singh and **Namrita Lall**

Countries Filed: South Africa

Countries Granted: South Africa

3. Patent Title: Plant extracts having anti-tyrosinase activity

Patent/Application number: ZA 2009/06638

Date of Filing/Grant: Filed 23-09-2009 Granted 26-05-2010

Inventors: **Namrita Lall**, Saiedeh Momtaz and Ahmed Adbel-Fattah Hussein

Countries Filed: South Africa

Countries Granted: South Africa

4. Patent Title: Shoot extract and composition of *Euclea natalensis* for immune modulation and hepatoprotection

Patent/Application number: PCT/IB2014/064986

Date of Filing/Grant: Filed 01-10-2013 Granted 29-11-2017

Inventors: Carel Basson Oosthuizen and **Namrita Lall**

Countries Filed: South Africa, India

Countries Granted: South Africa

5. Patent Title: Extract of *Greyia radlkoferi* and use thereof

Patent/Application number: PCT/IB2013/054054

Date of Filing/Grant: Filed 18-05-2012 Granted 23-12-2015

Inventors: Marco Nuno De Canha and **Namrita Lall**

Countries Filed: South Africa, Europe, China, USA, Malaysia, India, South Korea

Countries Granted: South Africa, Europe, China, USA, Malaysia, India, South Korea

6. Patent Title: Oral Care

Patent/Application number: PCT/IB2013/058016

Date of Filing/Grant: Filed 27-08-2012

Inventors: C.J. Henley-Smith, **Namrita Lall**, Francina Susana Botha and Ahmed Abdel-Fattah Hussein

Countries Filed: South Africa, ARIPO, Europe, Japan, Chile

Countries Granted: South Africa, ARIPO, Europe, Japan, Chile

7. Patent Title: Probability of inhibition prediction

Patent/Application number: ZA 2016/01560

Date of Filing/Grant: Filed 07-03-2016 Granted 31-05-2017

Inventors: C.J. Henley-Smith, **Namrita Lall**, Francina Susana Botha and Francois Steffens

Countries Filed: South Africa

Countries Granted: South Africa

8. Patent Title: Extracts and compositions of *Helichrysum odoratissimum* for preventing and treating skin cancers

Patent/Application number: PCT/IB2014/065038

Date of Filing/Grant: Filed 03-10-2013

Inventors: Danielle Twilley and **Namrita Lall**

Countries Filed: South Africa, USA, Australia

Countries Granted: South Africa, USA, Australia

9. Patent Title: Skin Care

Patent/Application number: PCT/IB2013/056343

Date of Filing/Grant: Filed 02-08-2012

Inventors: Richa Sharma, **Namrita Lall** and Ahmed Abdel-Fattah Hussein

Countries Filed: South Africa, ARIPO, Europe, India, South Korea

Countries Granted: South Africa, ARIPO and Europe

10. Patent Title: Topical skin care compositions comprising *Myrsine africana* extracts

Patent/Application number: PCT/IB2016/057427

Date of Filing/Grant: Filed 14-06-2018

Inventors: Isa Lambrechts and **Namrita Lall**

Countries Filed: South Africa, Japan, Europe and USA

Countries Granted: Europe

11. Patent Title: Anti-acne pharmaceutical compositions

Patent/Application number: ZA 2018/08307

Date of Filing/Grant: Filed 10-12-2018

Inventors: **Namrita Lall** and Isa Anina Lambrechts

Countries Filed: South Africa

Countries Granted: None

12. Patent Title: Naphthoquinone derivatives and their use in the treatment and control of tuberculosis

Patent/Application number: PCT/IB2000/000837

Date of Filing/Grant: Filed 10-12-2018

Inventors: **Namrita Lall** and JJM Meyer

Countries Filed: South Africa, Russia, Japan, Germany, China, Australia, ARIPO, USA

Countries Granted: South Africa, Russia, Japan, Germany, China, Australia, ARIPO, USA

Product development:

- Eleven cosmeceutical products from Plants have been developed. One Product for skin-hyperpigmentation problem has been commercialized in European countries and in South Africa.
- Two pharmaceutical products, for periodontal disease and for Tuberculosis with immunomodulatory and hepatoprotective effects have been developed.

7. OTHER SCHOLARLY RESEARCH-BASED CONTRIBUTIONS

7.1 Participation in conferences, workshops and short courses - specify type of contribution

7.1.1 National

1. Nel M, Twilley D, Blom van Staden A, Oosthuizen CB, **Lall N.** (8-9 September **2021**). Reducing symptoms related to eczema using succulents. Society of Cosmetic Chemistry South Africa, 2021 The Beauty Odyssey Face-Off, Digital
2. Seaman J.L and **Lall, N.** (5-7 July **2021**). Combatting mycobacterial quorum sensing using South African plants and their applications in chronic pulmonary ailments. 23rd Indigenous Plant Use Forum (IPUF 2021), Johannesburg, Gauteng, South Africa.
3. Lambrechts, IH, **Lall, N.** (5 & 6 May **2021**). Ethnic skin care seminar. The Society of Cosmetic Chemists South Africa, Virtual Lecture, South Africa. Online seminar.

4. **Lall, N.** (26 April **2021**). Power and Opportunity offered by different types of IP in setting up a company- A case study. World Intellectual Property (IP) Day: IP and SMEs: Taking your ideas to the market. University of Fort Hare, Eastern Cape. Virtual presentation.
5. Van Staden A, Hardman J, **Lall N.** (8-11th January **2019**). Skin re-pigmentation through melanin transfer using *Aspalathus linearis*. 45th Annual Congress of the South African Association of Botanists, Johannesburg, South Africa.
6. Madzinga M, **Lall N**, Kritzinger Q. (8-11th January **2019**). Investigating the potential of selected South African Plants for their inhibitory activity against common dermatophytes. 45th Annual Congress of the South African Association of Botanists, Johannesburg, South Africa.
7. Fibrich B, Kishore N, Madikizela B, Gao X, Puri A, Banga A, **Lall N.** "Mother Nature's remedies to reduce the appearance of wrinkles. 44th Conference of the South African Association of Botanists. Pretoria, South Africa. (9-12 Jan. 2018).
8. Oosthuizen CB, Kishore N, Kumar V, Ohja A, **Lall N.** (9-12 January **2018**). Natural coumarin derivatives as inhibitors of Mycobacterial biofilms. SAAB Conference 44th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
9. Blom van Staden, A., Kovacs, D., Cardinali, G., Picardo, M., Lebeko, M., Khumalo, N., Suprakas, R., **Lall, N.**, (5-6 September **2018**). Skin re-pigmentation through melanin transfer using *Aspalathus linearis*. The Society of Cosmetic Chemists (Coschem), Midrand, South Africa.
10. Chauke S, Kritzinger Q, **Lall N.** (9-12 January **2018**). The effect of seven South African indigenous plant extracts against aflatoxigenic *Aspergillus flavus*. SAAB Conference 44th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
11. Radebe G, Fibrich B. **Lall N.** (9-12 January **2018**). Fighting aging through elastase inhibition using South African aquatic plants. Sou SAAB Conference 44th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
12. Twilley D, Kishore N, Langhansova L, Moodley I, Rolfes H, **Lall N** (9-12 January **2018**). South African plants for potential treatment and prevention against skin cancer. SAAB Conference 44th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
13. Reid A, Oosthuizen C. B, Kishore N, Huuskonen P, Juvonen R, Pasanen M, **Lall N** (9-12 January **2018**). A pharmacokinetic and hepatoprotective evaluation of *Lippia scaberrima* Sond. in combination with *Aspalathus linearis* (Burm.f.) R. Dahlgren. SAAB Conference 44th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
14. Bodiba DC, Prasad P, Srivastava A, Crampton B, **Lall N.** Antibacterial Activity of *Azadirachta indica*,

Pongamia pinnata; *Psidium guajava* and *Mangifera indica*; and their Mechanism of Action against *Streptococcus mutans*. SAAB Conference 44th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa **2018**.

15. Lambrechts, I.A, **Lall, N (2018)**. An indigenous South African plant targeting inflammation and antibiotic resistance associated with acne vulgaris. African Traditional and Natural Product Medicine Conference, Limpopo, South Africa.

16. Fibrich B, **Lall N (8-11 October 2018)**. The wonders of Wetland Plants for Ageing Skin. National Wetlands Indaba Conference

17. Radebe G, **Lall N (8-11 October 2018)**. Fighting aging through elastase inhibition using South African wetland plants. National Wetlands Indaba Conference. Best Poster Award.

18. Lall N (4TH July 2018). From Medicinal Plants to Cosmeceuticals. The South African Association of Intellectual Property Law and Information technology law Teachers and Researchers. AIPLITL Conference.

19. Blom van Staden, A., Kovacs, D., Cardinali, G., Picardo, M., and **Lall, N. (27-30 August 2017)** The stimulation of melanin production and melanin transfer in human melanocytes by an indigenous South African plant. 2nd Annual Conference on Medicinal Plants and Economic Development (SOMPED). at Birchwood Hotel and OR Tambo Conference Centre, Johannesburg, South Africa.

20. Bodiba, DC, Crampton, B, **Lall, N (8-12 July 2017)** Biological activity of *Heteropyxis* (Heteropyxidaceae) and its mechanisms *against Streptococcus mutans*. IPUF Conference 20th Annual Indigenous Plant Use Forum (IPUF), Pretoria, South Africa.

21. Twilley D, Kishore N, Langhansova L, **Lall N. (9-12 July, 2017)**. Exploring a South African botanical and a novel compound for anti-melanoma and anti-angiogenic activity. Indigenous Plant Use Forum Annual conference. Pretoria, South Africa.

22. Twilley D, Kishore N, Langhansova L, Moodley I, Rolfes H, Moodley D, de Canha M, **Lall N. (13-14 September 2017)**. South African botanicals against skin cancer and as photoprotectants. Society of Cosmetic Chemists Annual conference. Midrand, South Africa.

23. Blom van Staden, A., Picardo, M., Lebeko, M., Khumalo, N.P., **Lall, N. (28th-29th September 2017)** A possible solution for progressive macular hypomelanosis from a South African plant. International Conference on Medical, Biological and Pharmaceutical Sciences (ICMBPS) Cape Town, South Africa.

24. Lambrechts, I.A, **Lall N. (13-14 September 2017)**. Potential of South African Plants and Essential Oils for Acne Vulgaris. Society of Cosmetic Chemists South Africa, 2017.

25. Masinga, L., Whittington-Banda, G., Mullah, N, Rademan, S., and **Lall, N (9-12 July 2017)**. Exploring South African plants used traditionally for the treatment of cervical cancer and related symptoms. IPUFF

Conference, 20th Annual Conference of the Indigenous Plant Use Forum (IPUFF), Pretoria, South Africa.

26. Fibrich B, Kishore N, Puri A, Gao X, Banga A, Lall N (14-15 September **2017**). Mother Nature's remedy for your wrinkles: New approaches to fighting the signs of skin ageing. The Society of Cosmetic Chemists (Coschem), Midrand, South Africa.

27. Fibrich B and Lall N (8-12 July **2017**). The ancient roots of modern practice: going back in time to reduce the appearance of wrinkles. IPUF Conference 20th Annual Indigenous Plant Use Forum (IPUF), Pretoria, South Africa.

28. Oosthuizen CB, Kishore N, Kumar V, Ohja A, Lall N. (9th – 12th June **2017**). "Inhibition of Mycobacterial biofilms by natural Coumarins." Indigenous Plant Use Forum 20th Annual Conference. Back to basics - Discovering our indigenous roots. Pretoria, South Africa. Awarded best paper by a young scientist

29. De Canha MN, Moodley I. Lall N. (13-14 September **2017**) Medicinal plants showing their worth as potential global competitors for treating skin-hyperpigmentation. Society of Cosmetic Chemists Annual Conference, Midrand, South Africa.

30. De Canha MN, Komarnytsky S, Kishore N, Lall N. (9-12 July, **2017**). Investigating a South African *Helichrysum* species against *Propionibacterium acnes* and the pathway associated with the progression of acne. Indigenous Plant Use Forum 20th Annual Conference, Pretoria, South Africa.

31. Reid A, Oosthuizen C, Kishore N, Juvonen R, Pasanen M and Lall N (9-12 July **2017**). A Pharmacokinetic analysis and antimycobacterial activity of *Lippia scaberrima* Sond. And in combination with *Aspalathus linearis* (Burm.f.) R. Dahlgren. Indigenous Plant Use Forum (IPUF), Pretoria, South Africa.

32. Blom van Staden, A., Kovacs, D., Cardinali, G., Picardo, M., and Lall, N. (27-30 August **2017**) The stimulation of melanin production and melanin transfer in human melanocytes by an indigenous South African plant. 2nd Annual Conference on Medicinal Plants and Economic Development (SOMPED). at Birchwood Hotel and OR Tambo Conference Centre, Johannesburg, South Africa.

33. Fibrich B, Lall N, Bodiba D, Kentane, T, Mabena, E. "Bioprospecting and Product Development Platform: Cosmeceuticals". The 4TH IKS Interface. Venda, South Africa. (3-7 Dec. **2016**).

34. Fibrich B and Lall N. "The role of South African Plants in Turning Back the Clock". The Society of Cosmetic Chemists. Midrand, South Africa. (14-15 Sept. **2016**).

35. Szuman KM, Madikizela B, Lall N, "Can we develop skin even-tone cosmetic products from South African freshwater aquatic and wetland plants?" Society of Cosmetic Chemists South Africa. Midrand, South Africa. (14-15 September **2016**).

36. Szuman KM, Lall N, Madikizela B. "Sustainable economy from sustainable ecology: The therapeutic value of wetlands". Green Youth Indaba. Pretoria, South Africa. (30 June **2016**).

37. Blom van Staden, A.; Rademan, S.; Kovacs, D.; Cardinali, G.; Picardo, M. and **Lall, N.** (14-15 September **2016**). Natural solutions for progressive macular hypomelanosis. COSCHEM conference, South Africa.
38. K.M. Szuman, **N. Lall**. Expanding the use of natural resources from terrestrial to aquatic ecosystems. Ecosystems Research and Innovation Symposium. **2015**. Hartbeespoort, South Africa
39. Fibrich B and **Lall N.** "Sustainable cultivation of aquatic plants for a greener economy". The second annual Green Youth Indaba. Pretoria, South Africa. (30 Sept. **2015**). **Oral**.
40. Rolfes H, Berrington D, **Lall N.** The development of a carrier formulation for an anti-cancer plant extract-stability and bioavailability. South African Society of Cosmetic Chemists. **2015**. Midrand, Johannesburg, South Africa.
41. Twilley D, Moodley I, **Lall N.** Searching for Southern African botanicals as SPF boosters. South African Society of Cosmetic Chemists. **2015**. Midrand, Johannesburg, South Africa.
42. Canha M, Sharma R, Moodley I, **Lall N.** The potential of South African plants as alternative anti-acne agents. South African Society of Cosmetic Chemists. **2015**. Midrand, Johannesburg, South Africa.
43. Lambrechts I, **Lall N.** Potential of Lamiaceae Plants for Acne Vulgaris and Skin Hyper-Pigmentation. South African Society of Cosmetic Chemists. **2015**. Midrand, Johannesburg, South Africa.
44. Rademan S, **Lall N.** The potential of *Combretum molle* in the treatment of skin cancer. South African Society of Cosmetic Chemists. **2015**. Midrand, Johannesburg, South Africa.
45. Blom A, Canha M De, Nqephe and **Lall N** (11th-15th January **2015**). Medicinal plants for Progressive Macular hypomelanosis. SAAB, University of Venda, Tshipise Forever Resort.
46. Lambrechts IA, Canha M De, Nqephe and **Lall N** (11th-15th January **2015**). Plants for acne vulgaris and skin-hyperpigmentation. SAAB, University of Venda, Tshipise Forever Resort.
47. Rademan S, Bodiba D, Berrington D and **Lall N** (11th-15th January **2015**). Anticancer activity and mechanism of action of plant extracts on squamous cell carcinoma. SAAB, University of Venda, Tshipise Forever Resort.
48. Twilley D and **Lall N** (30th June -3rd July **2014**). Southern African Plants for Skin and Cervical Cancer, IPUF (Indigenous Plant Use Forum) conference. University of Free State, Qwaqwa campus, Phuthaditjhaba.
49. Canha M De and **Lall N** (30th June -3rd July 2014). *In vitro* activity of southern African plants addressing acne vulgaris, IPUF (Indigenous Plant Use Forum) conference. University of Free State, Qwaqwa campus, Phuthaditjhaba.
50. Sharma R and **Lall N** (20-24 January **2013**). Evaluation of anti-inflammatory and antibacterial activity of two plants belonging to family Myrtaceae and Rosaceae to combat acne vulgaris. SAAB Conference 39th Annual Conference of the South African Association of Botanists (SAAB), Drakensberg, South Africa.

51. Berrington D and **Lall N** (15-18 Jan **2012**). Anticancer activity of certain herbs and spices on the cervical epithelial carcinoma (HeLa) cell line. SAAB conference 38th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
52. Oosthuizen CB and **Lall N** (15-18 Jan **2012**). Potential of synthesized naphthoquinones for anti-tuberculosis activity. SAAB Conference 38th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
53. Sharma R, Hussein A and **Lall N** (15-18 January **2012**). Evaluation of antibacterial, antioxidant and mechanistic activities of a plant from Myrtaceae family addressing acne vulgaris SAAB Conference 38th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
54. Singh S and **Lall N** (15-18 January **2012**). Evaluating the mutagenicity & Stability of plant extracts with potential use in the cosmetic field from the Myrsinaceae Family. SAAB Conference 38th Annual Conference of the South African Association of Botanists (SAAB), Pretoria, South Africa.
55. de Canha MN and **Lall N** ((15-18 January **2012**). The potential of two South African plants belonging to the Greyiaceae family for the treatment of skin hyper-pigmentation. Presented at the SAAB conference.
56. **Lall N** (17-19 January **2011**). The antiquity and history of medicinal plants and tuberculosis. SAAB Conference 37th Annual Conference of the South African Association of Botanists (SAAB). Rhodes University, Grahamstown.
57. More G, **Lall N**, Hussein AA, Tshikalange TE (17-19 Jan **2011**). Antimicrobial constituents of *Artemisia afra* Jacq. Ex Willd. Against periodontal pathogens. SAAB Conference 37th Annual Conference of the South African Association of Botanists (SAAB), Rhodes University, Grahamstown.
58. Labuschagne A, **Lall N**, Hussein AA (17-19 Jan **2011**). Mechanistic and synergistic investigations of the in vitro antimycobacterial and immunomodulatory properties of *Knowltonia vesicatoria* (L f) Sims. SAAB Conference 37th Annual Conference of the South African Association of Botanists (SAAB), Rhodes University, Grahamstown.
59. le Roux K, Hussein AA, Prinsloo L, **Lall N** (17-19 Jan **2011**). Selective cytotoxicity of *Crotalaria agatiflora* subspecies agatiflora Schwienf. And mechanistic studies using micro-Raman spectroscopy. SAAB Conference 37th Annual Conference of the South African Association of Botanists (SAAB), Rhodes University, Grahamstown.
60. Henley-Smith CJ, **Lall N**, Botha FS (11-14 Jan **2010**). South African plant extracts in combating potentially pathogenic oral microorganisms. SAAB Conference 36th Annual Conference of the South African Association of Botanists (SAAB), North-West University, Potchefstroom, 2010.
61. Henley-Smith CJ, **Lall N**, Botha FS (25-26 August **2010**). Synergistic activity of essential oils with a South African plant against *Actinomyces israelii*. Coschem Conference. Society of Cosmetic Chemistry. Bytes

Conference Centre, Midrand.

62. Deuschländer MS, **Lall N** and van de Venter M (11-14 Jan **2010**). Isolation and identification of a novel anti-diabetic compound from *Euclea undulata* Thunb. SAAB Conference 36th Annual Conference of the South African Association of Botanists (SAAB), North-West University, Potchefstroom, 2010.
63. Mapunya MB, **Lall N**, Hussein AA (19-22 Jan **2009**). Multifunctional actives from *Greyia flanaganii* (Bolus) with anti-acne and skin-depigmentation activities. 35th Annual Congress of the South African Association of Botanists, Stellenbosch University, Capetown, South Africa.
64. Nkobole N, **Lall N**, Houghton PJ and Hussein AA (19-22 Jan **2009**). Hypoglycaemic compounds from *Terminalia sericea* Burch. Ex DC. (Combretaceae). 35th Annual Congress of the South African Association of Botanists, Stellenbosch University, Capetown, South Africa.
65. Labuschagne A, **Lall N**, Mativandela SPN, McGaw L, Hamilton C. (19-22 Jan **2009**). Antimycobacterial activity of seven herbaceous plants. 35th Annual Congress of the South African Association of Botanists, Stellenbosch University, Capetown, South Africa.
66. Le Roux K, **Lall N**, McGaw L (19-22 Jan **2009**). Anticancer activity of Plant extracts. 35th Annual Congress of the South African Association of Botanists, Stellenbosch University, Capetown, South Africa.
67. Henley-Smith CJ, **Lall N**, Botha FS (2-3 Sept **2009**). South Africa's solution to plaque, gingivitis and periodontitis. Coschem Conference. Society of Cosmetic Chemistry. Bytes Conference Centre, Midrand.
68. Binneman B, Mahapatra A, Meyer JJM, **Lall N**, Newman SP, Jones L, Houghton P (14-18 Jan **2008**). Selective induction of apoptosis in U937 cells by 8-fluoro-5-hydroxy and 2.5-dihydroxy-7-methyljuglone. 34th Congress of the South African Association of Botanists, Drakensville Mountain Resort, South Africa.
69. Heyman HM, **Lall N**, Hussein AA, Meyer JJM (14-18 Jan **2007**). Bioactivity of plant extracts against methicillin-resistant *Staphylococcus aureus*. 33rd Congress of the South African Association of Botanists, University of Capetown, South Africa.
70. Samie A, Obi CL, **Lall N**, Meyer JJM (14-18 Jan **2007**). Determination of cytotoxic activity and antimicrobial effects of selected medicinal plants against clinical isolates of *Campylobacter* species and *Entamoeba histolytica*. 33rd Congress of the South African Association of Botanists, University of Capetown, South Africa.
71. Binneman B, Mahapatra A, Meyer JJM, **Lall N** (14-18 Jan **2007**). Evaluation of medicinal plants and synthesized naphthoquinones on cancer cells. 33rd Congress of the South African Association of Botanists, University of Capetown, South Africa.
72. More GK, Tshikalange TE, **Lall N**, Meyer JJM, Botha FS, Hussein AA (14-18 Jan **2007**). Antimicrobial activity of medicinal plants against oral Microorganisms. 33rd Congress of the South African Association of

Botanists, University of Capetown, South Africa.

73. Tshikalange TE, **Lall N**, Meyer JJM, Mahapatra A (14-18 Jan **2007**). In vitro HIV-1 reverse transcriptase inhibitory activity of naphthoquinones and derivatives from *Euclea natalensis*. 33rd Congress of the South African Association of Botanists, University of Capetown, South Africa.

74. Hamilton CJ and **Lall N** (16-19 Jan **2006**). Mycothione reductase inhibition by anti-mycobacterial naphthoquinones isolated from *Euclea natalensis*: possible mode (s) of biological activity. 32nd Congress of the South African Association of Botanists, Port Elizabeth, South Africa.

75. Ziaratnia SM, **Lall N**, Kunert K, Meyer JJM (16-19 Jan **2006**). Elicitation of 7-methyljuglone in *Drosera capensis*. 32nd Congress of the South African Association of Botanists, Port Elizabeth, South Africa.

76. Bapela MJ, **Lall N**, Meyer JJM (16-19 Jan **2006**). Seasonal variation of naphthoquinones in *Euclea natalensis* subspecies *natalensis*. 32nd Congress of the South African Association of Botanists, Port Elizabeth, South Africa.

77. Mashamba LA, Basson AE, **Lall N**, Meyer JJM (16-19 Jan **2006**). Evaluation of melanin synthesis from South African plants. 32nd Congress of the South African Association of Botanists, Port Elizabeth, South Africa.

78. Mathabe MC, Hussein AA, Nikolova RV, **Lall N** and Meyer JJM (10-14 Jan **2005**). Isolation and identification of bioactive compounds from *Indigofera daleoides*. 30th South African Association of Botanists conference, Bloemfontein, South Africa.

79. Mativandela SPN, **Lall N**, Meyer JJM and Hussein AA (10-14 Jan **2005**). Identification of bioactive compounds from *Pelargonium sidoides*. 30th South African Association of Botanists conference, Bloemfontein, South Africa.

80. Joubert A, **Lall N**, Van der Kooy F and Meyer JJM (10-14 Jan **2005**). A comparative study of the concentration of naphthoquinones in South African *Euclea* species. 30th South African Association of Botanists conference, Bloemfontein, South Africa.

81. Van Rensburg CEJ, Bapela NB, **Lall N** and Fourie BP (13-15 Sept **2005**). Anti-Mycobacterium activity of 7-methyljuglone in combination with other antituberculous drugs. South African Pharmacology Society 39th Annual Congress, Cape Town, South Africa.

82. Mujovo SF, van de Venter M, **Lall N** and Meyer JJM (19-22 Jan **2004**). Antimicrobial and antiviral activity of *Cassia abbreviate*. Poster. 30th South African Association of Botanists conference, University of KwaZulu-Natal, South Africa.

83. Bapela B, Fourie B, **Lall N**, Muthivhi T and Medlen C (19-22 Jan **2004**). Synergistic activity of 7-methyljuglone combined with standard antimycobacterial drugs in vitro against *Mycobacterium tuberculosis*. 30th South African Association of Botanists conference, University of KwaZulu-Natal, South Africa.

84. Tshikalange E, Van de Venter M, Meyer JJM and **Lall N** (19-22 Jan **2004**). *In vitro* anti-HIV evaluation of selected traditional South African medicinal plants. 30th South African Association of Botanists conference, University of KwaZulu-Natal, South Africa.
85. Mativandlela SPN, **Lall N** and Meyer JJM (19-22 Jan **2004**). Antimicrobial activity of *Pelargonium sidoides*. 30th South African Association of Botanists conference, University of KwaZulu-Natal, South Africa.
86. Kooy Van der, Meyer JJM and **Lall N** (5-8 July **2004**). Is *Euclea natalensis* ready for the TB market? Indigenous Plant Use Forum, Clanwilliam, South Africa.
87. Mathabe MC, Nikolova RV, **Lall N** and Nyazema NZ (5-8 July **2004**). Antimicrobial properties of medicinal plants used for the treatment of Diarrhoea in Limpopo Province. Indigenous Plant Use Forum, Clanwilliam, South Africa.
88. Mativandlela SPN, **Lall N** and Meyer JJM (7-11 Jan **2003**). Antibacterial, antifungal and antituberculosis activity of *Pelargonium reniforme* and *P. sidoides*. SAAB AND ISE Joint International Conference, Pretoria, South Africa.
89. Mujovo SF, Mphahlele MT, Fourie B, **Lall N** and Meyer JJM (7-11 Jan **2003**). Screening of Mozambican medicinal plants for antibacterial activity. SAAB AND ISE Joint International Conference, Pretoria, South Africa.
90. Kritzinger Q, **Lall N** and Aveling TAS (7-11 Jan **2003**). Antimicrobial properties of cowpea (*Vigna unguiculata* (L.) Walp) leaf extracts. SAAB AND ISE Joint International Conference, Pretoria, South Africa.
91. Mulhovo S, Isaza-Martinez JH, **Lall N** and Meyer JJM (7-10 July **2003**). Identification of bioactive compounds from *Lippia javanica*. Indigenous Plant Use Forum, Rustenburg, South Africa.
92. Mativandlela P, **Lall N** and Meyer JJM (7-10 July **2003**). An assessment of use of Pelargonium extracts as traditional medicine. Indigenous Plant Use Forum, Rustenburg, South Africa.
93. Bapela MJ, **Lall N**, Isaza-Martinez JH and Regnier T (7-10 July **2003**). Seasonal variation of naphthoquinones from *Euclea natalensis*. Indigenous Plant Use Forum, Rustenburg, South Africa.
94. Tshikalange E, Meyer JJM and **Lall N** (7-10 July **2003**). Medicinal plants used to treat HIV. Indigenous Plant Use Forum, Rustenburg, South Africa.
95. Mapiyeye P, **Lall N** and Meyer JJM (13-16 Jan **2002**). The occurrence of antimycobacterial compounds in the Ebenaceae family, SAAB, Grahamstown, South Africa.
96. Rabie A, **Lall N**, Meyer JJM and Eloff JN (9-12 July **2002**). Extraction and isolation of biologically active compounds from *Pteleopsis myrtifolia* (Welw. Ex. C. Lawson) Engl. & Diels. Indigenous Plant Use Forum, George, Capetown.
97. **Lall N**, Mapiyeye P and Meyer JJM (26-29 June **2001**). *In vitro* inhibition of mycobacteria species by diospyrin and 7-methyljuglone isolated from *Euclea natalensis*. Kimberley.

98. Weigenanad O, Hussein AA, **Lall N** and Meyer JJM (26-29 June **2001**). Antimicrobial activity of natural products isolated from *Euclea natalensis*. Kimberley.
99. Lall N, Weignand O and Meyer JJM (19-23 Nov 2001). Antituberculosis and antibacterial activities of Natural products isolated from *Euclea natalensis*, The Biochemical and molecular basis of disease. Capetown.
100. Meyer JJM and **Lall N** (25-28 July **2000**). Antituberculosis activity of naphthoquinones isolated from *Euclea natalensis*. Louis Trichard, Nelspruit.
101. Meyer JJM, **Lall N**, Prozesky EA and Mathekga ADM (6-9 July **1999**). Natural products with activity against *Plasmodium falciparum*, *Mycobacterium tuberculosis* and other pathogenic bacteria and fungi. Richards Bay, Natal.
102. **Lall N** and Meyer JJM (30 June - 3 July **1998**). *In vitro* inhibition of antibiotic resistant and sensitive strains of *Mycobacterium tuberculosis* by ethnobotanically selected South African plants. Louis Trichardt, Pietersburg.
103. **Lall N** and Bhat RB (15-20 Jan **1996**). The impact of light conditions on the epidermal tissue system of *Impatiens flanaganiae*. 22nd Annual Congress of the South African Association of Botanists. University of Stellenbosch, Cape Town.
104. **Lall N** and Bhat RB (3-7 Nov **1994**). Variations in the epidermal tissue of *Impatiens flanaganiae* Hemsl. grown under different light conditions. 2nd Annual Mini Symposium; University of Natal, Durban.

7.1.2 International

1. Maphutha, J. and **Lall, N., 2021**. Multifaceted induction of apoptosis in skin cancer cells using extracts of South African plants. 8th International Congress of the Society for Ethnopharmacology-India, 27th-29th of August, Pune, Maharashtra, India.
2. Loggenberg, S.R., Twilley, D., De Canha, M.N. and **Lall, N., 2021**. Evaluating the wound healing activity between varieties of an aloe species. 8th International Congress of the Society for Ethnopharmacology-India (SFEC 2021), 27th-29th August, Pune, Maharashtra, India
3. De Canha, M.N. and **Lall, N., 2021**. Protecting intellectual property generated from scientific research, what are your options? Biodiversity for Malawi 2063, Joint Research Dissemination Conference, Water Resources Management, Natural Products and Machine Learning for Biodiversity, 20th-22nd July, Nalipiri Ecoresort, Mulanje, Malawi.
4. De Canha, M.N. and **Lall, N., 2021**. Navigating the sea of intellectual property: Technology transfer and patenting innovative ideas. 1st International Conference on Reimagining the Natural Products Industry in Africa

(RNPIA), 5-7th July, Imperial Royal Hotel, Kampala, Uganda.

5. Loggenberg, S.R., Twilley, D., De Canha, M.N., Meyer, D. and **Lall, N., 2021**. The effects of a promising South African medicinal plant in wound healing. 1st International Conference on Reimagining the Natural Products Industry in Africa (RNPIA), 5-7th July, Imperial Royal Hotel, Kampala, Uganda.

6. Turvey, T. and **Lall, N., 2021**. Comparing the use of 2D and 3D melanoma models to investigate antiproliferative activity in preclinical drug screening. 1st International Conference on Reimagining the Natural Products Industry in Africa (RNPIA), 5-7th July, Imperial Royal Hotel, Kampala, Uganda

7. Reid, A., Oosthuizen, C. B., **Lall, N.** (24-25 June **2021**). *Euclea natalensis* A. DC. as a hepatoprotective adjuvant for tuberculosis. 10th Annual and 1st Virtual Conference for the American Council for Medicinally Active Plants. (Virtual Poster and presentation).

8. Lambrechts, I. A., **Lall, N.** (18-20th April **2021**). A natural choice for antimicrobial protection using an indigenous South African plant for acne vulgaris. 20th International Congress of the International Society for Ethnopharmacology.

9. Payne, B. D., Lin, C-H., **Lall, N.** (18-20th April **2021**). The holistic anti-ageing potential *Persicaria senegalensis* (Meisn.) Sojak ethanolic and fermented extracts. 20th International Congress of the International Society for Ethnopharmacology.

10. Reid A., **Lall, N.** (18-20th April **2021**). The antifibrotic and pharmacokinetic assessment of *Euclea natalensis* A. DC. as a hepatoprotective agent. 20th International Congress of the International Society for Ethnopharmacology.

11. **Lall, N.** (18-20th April **2021**). The regulatory aspects and challenges for commercialization of the natural products. 20th International Congress of the International Society for Ethnopharmacology.

12. Esmear T, Twilley D, Thiye V, Katti K, Mandiwana V, Kalombo L, Rikhotso R, Ray S and **Lall N.** (17-19th December **2020**). The potential of gold nanoparticles of a Southern African plant waste product for SARS-CoV-2. 7th Convention on Society for Ethnopharmacology, India and International Symposium on "Combating COVID-19-Ethnopharmacology and traditional food and medicine".

13. Reid, A., Oosthuizen, C. B., Suprakas, R. S., Katti, K. V., **Lall, N.** (2-4 December **2020**). Synthesis of gold nanoparticles using *Lippia scaberrima* Sond. and the biological activity in combination with *Aspalathus linearis* (Burm.f.) R. Dahlgren. Tuberculosis: Science aimed at ending the epidemic. Virtual eSymposia, Keystone Symposia. *Poster*.

14. Nyirendra, KK., **Lall N.**, MacGaw, L. Morphological and Physiochemical properties of Malawian native cassava starch as potential polymer additives (22-25th July **2019**). The 5th International Conference on

Agricultural and Biological Sciences (ABS 2019); Macao Science Centre, Macau, China.

15. **Lall, N.**, Natural Cosmetics from South African Medicinal Plants (17-18th December 2019). Society of Cosmetic Chemists, 73rd Annual meeting and technology showcase, New York, USA.
16. **Lall N.** Merging the Sciences, Tradition and Innovations (7-8TH December **2017**). Science Forum, SA; CSIR International convention Centre; Pretoria, South Africa.
17. Gao, X., Puri, A., **Lall, N.**, Fibrich, B., Kishore, N., Blom van Staden, A., Banga, A.K. In vitro anti-elastase activity and skin permeation of a novel compound isolated from a plant-based extract. AAPS (American Association of Pharmaceutical Scientists) conference. 12-15th Nov; **2017**. San Diego Convention Center, USA.
18. **Lall, N.**, Oosthuizen, C.B., Gaza, N. Can we have an adjuvant for TB-patients from a South African Plants? 17th Annual international conference on the Science of Botanicals (ICSB). April 3rd-6th **2017**. Mississippi, USA.
19. Twilley D., Kishore, N., Langhansova, L., Rolfes, H., Moodley, D., Moodley, I., and **Lall, N.** South African botanicals add an SPF boost to sunscreens while inhibiting the growth of skin cancer cells. **2017**. The International Federation of Society of Cosmetic Chemists. Seoul, South Korea.
20. Lall, N., Kumar V., Matsabisa, M., Kok A., Oosthuizen C. Possible adjuvants for TB. 23rd International Congress of Clinical Chemistry and Laboratory Medicine. October 22-25th 2017. Durban, South Africa.
21. **Lall, N.**, Twilley, D., Blom, A. The commercialization of academic knowledge; applied research on South African medicinal Plants. 17th Annual international conference on the Science of Botanicals (ICSB). April 3rd-6th **2017**. Mississippi, USA.
22. Fibrich B, **Lall N**, Madikizela B, Puri A, Gao X, Banga A. "Medicinal Plant Farming: Reducing wrinkles and a micro model for fighting unemployment". Spa and Wellness Association of Africa. Mauritius. (7-9 Sept. 2017).
23. **Lall N**, Twilley D, Rademan S (20-21 June **2016**). South African plants and Skin cancer. 4th African Pharma Congress, Capetown, South Africa.
24. Rademan S and **Lall N.** (24-27 July 2016). The potential of *Combretum molle* in the treatment of skin cancer. 9th Joint Natural Products Conference, Copenhagen, Denmark.
25. Reid AM, Oosthuizen CB, **Lall N.** The hepatoprotectant and immunestimulatory effects of *Lippia scaberrima* Sond. against tuberculosis. The International Symposium on Methods for studying Drug Metabolism and Transport, and African Traditional Medicines, Pretoria, **2015**.
26. Oosthuizen CB, **Lall N.** The inhibition of Mycobacterial biofilms by natural coumarin derivatives. The International Symposium on Methods for studying Drug Metabolism and Transport, and African Traditional

Medicines, Pretoria, **2015**.

27. Twilley D, Kishore N, Langhansova L, **Lall N**. The potential of a South African plant for melanoma. The International Symposium on Methods for studying Drug Metabolism and Transport, and African Traditional Medicines, Pretoria, **2015**.

28. **Lall N**. A possible adjuvant for TB-patients from a South African plant. The International Symposium on Methods for studying Drug Metabolism and Transport, and African Traditional Medicines, Pretoria, **2015**.

29. Canha MN de, Kishore N, **Lall N**. Investigating the potential of a South African *Helichrysum sp.* in the fight against acne vulgaris. The International Symposium on Methods for studying Drug Metabolism and Transport, and African Traditional Medicines, Pretoria, **2015**.

30. **Lall N**, 2015 "Green medicines and cosmeceuticals "5th International Conference on Clinical & Experimental Dermatology", July 13-15, **2015** at Double Tree New Orleans, USA.

31. **Lall N**, 2015, A potential supplement for TB- patients. First Annual International Pharmaceutical Engineering Symposium 2015 (IPES May 23-25, 2015), Liaoning Mansion, Shenyang, China.

32. **Lall N**, 2015 Potential Phytoderived Products for skin-hyperpigmentation and acne problems: 2nd congress of the Indian chapter of the society for Ethnopharmacology, Nagpur, India February 20-22, **2015**.

33. **Lall N**, 2014. Green is no longer a grey area for periodontal diseases. BIT'S 1st Annual International Congress of Oral and Dental Medicine (CODM-2014), Nov 13-16, **2014**, Haikou, China.

34. Twilley D, Kishore N, Sharma R and **Lall N**, (27-30th Oct **2014**). Potential of plants grown in South Africa for UV protection and hydration, IFSCC conference, Paris, France.

35. **Lall N** (8-12 Dec **2013**). Can plants grown in South Africa contribute towards pharmaceuticals and cosmeceuticals? 5th Global summit on Medicinal and Aromatic Plants (GOSMAP-5), Miri, Malaysia.

36. Chabalala H and **Lall N** (25th-27th Sep **2013**). African traditional medicine: towards industrialisation on ATM in South Africa. The 4th Government forum on international cooperation and development on traditional medicine. Chengdu, China.

37. Sharma R and **Lall N** (15-19 Oct **2012**). Evaluation of antibacterial, antioxidant and mechanistics activities of a plant from Myrtaceae family addressing acne vulgaris. International Federation of Society of Cosmetics Chemists (IFSCC), Johannesburg, South Africa.

38. **Lall N** 25th -28th Oct **2012**). DST's bioprospecting and product development. SA-INDIA Bilateral

International Workshop, ooty, India.

39. Saeideh M, Hussein AA, Naidoo S, **Lall N** (1-3 Dec **2010**). Evaluation of multifunctional actives on the transcriptional of genes encoding tyrosinase and for skin hyperpigmentation from a plant belonging to Fabaceae family. UMS Biotechnology Symposium IV, Kota Kinabalu, Malaysia.
40. Momtaz S, **Lall N**, Abdollahi M, Ostad SN 12th -14th May 2009). Cytotoxicity effects of *Hyaenanche globosa* and *Maytenus procumbens*. 10th Iranian Toxicology Congress, Tehran.
41. Momtaz S, Mapunya B, Houghton PJ, Edgerly C, Hussein A, Naidoo S and **Lall N** (2-6 Aug **2008**). 7th Joint Meeting of the Association Francophone pour l'Enseignement et la Recherche en Pharmacognosie (AFERP), the American Society of Pharmacognosy (ASP), the Society for Medicinal Plant Research - Gesellschaft fur Arzneipflanzenforschung e.V. (GA), and the Phytochemical Society of Europe. Tyrosinase inhibition by extracts and constituents of stem bark of *Sideroxylon inerme* L., Athens, Greece.
42. Cheung WK, Mapunya BM, Naidoo S, **Lall N**, Houghton PJ (9-14 Nov **2008**). Expression of mRNAs for tyrosinase genes on exposure to plant extract/compounds. World conference on medicinal and aromatic plants, Capetown South Africa.
43. Binneman B, **Lall N**, van de Venter M, du Plessis-Stoman D, Boukes G, Houghton P, Hussein AA and Meyer JJM (9-14 Nov **2008**). Evaluation and mechanistic studies of selected medicinal plants and purified compounds on human cancer cell lines. World conference on medicinal and aromatic plants, Capetown South Africa.
44. Bapela MJ, Kuete V, Du Toit E, Meyer JJM and **Lall N** (9-14 Nov **2008**). The effect of fertilizers on growth, concentration of naphthoquinones and antimycobacterial activity of *Euclea natalensis* (Ebenaceae). World conference on medicinal and aromatic plants, Capetown South Africa.
45. **Lall N**, Mapunya B, Meyer JJM, Mativandlela SPN, Mahapatra A, Hamilton CJ and Houghton P (21-23 Aug **2008**). Facets of South African medicinal plants. 1st International Euro-India Conference on Holistic Medicine: (ICHM-2008): Kottayam, Kerala, India.
46. **Lall N**, Mativandlela SPN, van der Walt M, Oshima Y, Kikuchi H (1-3 Dec **2008**). A novel chalcone with antituberculosis activity from *Galenia Africana*. Emerging Trends in Tuberculosis Research, Biomarkers, Drugs and Vaccines, International Centre for Genetic Engineering & Biotechnology, ICGEB Campus, New Delhi, India.
47. **Lall N**. 2010. Is a South African herbal toothpaste ready for the market? An international meeting at China expo to represent South Africa in Indigenous Knowledge System (IKS) Bio-prospecting Platform, Shanghai,

China.

48. **Lall N**, Meyer JJM, Mapunya MB, Nikolova RV, Houghton PJ (2-6 Sept **2007**). Anti-tyrosinase activity of South African plant extracts. 55th International Congress and annual meeting of the society for medicinal plant research, Graz, Austria, Abstract published *Planta Medica*, Volume 73, August 2007, Page 969.
49. **Lall N.**, Meyer JJM, van der Kooy F (2-6 Sept **2007**). Antilisterial activity of *Euclea natalensis* and naphthoquinones. 55th International Congress and annual meeting of the society for medicinal plant research, Graz, Austria, Abstract published *Planta Medica*, Volume 73, August 2007, Page 854.
50. Nyila MA, **Lall N**, Leonard C, Weyer B and Meyer JJM (2-6 Sept **2007**). Susceptibility testing of *Listeria monocytogenes* using the disk method and micro titre plate (micro broth dilution) method. 55th International Congress and annual meeting of the society for medicinal plant research, Graz, Austria, Abstract published *Planta Medica*, Volume 73, August 2007, Page 848
51. McGaw LJ, **Lall N**, Hlokwe T, Michel A, Meyer JJM and Eloff JN (2-6 Sept **2007**). Bovine tuberculosis: a zoonotic target for medicinal plants. 55th International Congress and annual meeting of the society for medicinal plant research, Graz, Austria, Abstract published *Planta Medica*, Volume 73, August 2007, Page 882.
52. Mativandlela P, Hamilton CJ, **Lall N** (16-19 January **2006**). Mechanistic studies of disulfide reductase inhibition by diospyrin, 7-methyljuglone and related anti- mycobacterial naphthoquinones isolated from *Euclea natalensis*. 4th Advances in Synthesis and Chemical Biology Symposium, Dublin Dec 2nd, 2005.
53. **Lall N**, Binneman B, Mahapatra A, Basson AE, Meyer JJM (3-6 July **2006**). Anti-tuberculosis activity and cytotoxicity of 7-methyljuglone derivatives. Indigenous plant use forum, Gaborone, Botswana.
54. Tshikalange E, Meyer JJM, **Lall N**, Hussein AA, Van de Venter M (3-6 July **2006**). Scientific validation of medicinal properties of plants from Venda, Indigenous plant use forum, Gaborone, Botswana.
55. Deuschländer M, **Lall N**, Van de Venter M (3-6 July **2006**). Evaluation of plant extracts used for the treatment of diabetes by traditional healers, Indigenous plant use forum, Gaborone, Botswana.
56. Momtaz S and **Lall N** (13-14 Sept **2006**). Antityrosinase activity of South African plants. Formulating for Africa
57. **Lall N**, Wang Y, Venter K, Meyer JJM, Franzblau S, Fourie B (23-31 Jan **2004**). Characterization of intracellular activity of antitubercular constituents from the roots of *Euclea natalensis*. IUPAC Conference on Medicinal Chemistry, New Delhi, India.
58. **Lall N**, Zhang F, Venter K, Meyer FS, Fourie B (31 Aug-5 Sept **2003**). Bactericidal activity of

naphthoquinones against non-replicating *Mycobacterium tuberculosis*. Gordon Research Conference, Tuberculosis Drug Development, Oxford, UK.

59. **Lall N** and Meyer JJM (1-6 July **2001**). Antimycobacterial activity of naphthoquinones isolated from the roots of *Euclea natalensis* AIMECS 38th congress Asian Federation of Medicinal Chemistry. Brisbane, Australia.

60. Meyer JJM, **Lall N**, Mathekga ADM, Prozesky EA (26-30 July **1999**). Isolation of natural products from South African medicinal plants with activity against malaria, tuberculosis and other bacteria and fungi. Amsterdam, Netherlands.

61. Nikolova RV, **Lall N**, Bosa AJN. (21-24 June **1997**). Changes in activities of superoxide dismutase, peroxide and catalase from leaves of *Impatiens flanaganiae* in response to light intensity. Roskilde University, Denmark.

62. **Lall N**, Nikolova RV, Bosa AJN (26-29 Aug **1996**). An assessment of the conditions for the rapid propagation of *Impatiens flanaganiae* *in-vitro* and *in-vivo*. International symposium on plant production in closed ecosystems- automation, culture, and environment- Narita, Japan.

7.2 Teamwork and collaboration with others:

Other researchers (national and international)

Teamwork:

- **Team Leader for the research project entitled** “Cosmeceutical Bioprospecting Product development (2010-till date).
- **Member of the team for the research project entitled,** “Bioprospecting of African Traditional Medicine” (2008-till date).

Collaboration:

National

- Dr. E. Tshikalange -Antimicrobial and antimycobacterial activity of medicinal plants, isolation and purification of natural products from medicinal plants, Department of Plant Science, University of Pretoria.
- Prof. D. Meyer- Antiinflammatory activity of plant-compounds, Department of Biochemistry, University

of Pretoria.

- Prof. Heidi Rolfes- Emulsions of pharmaceutical and cosmeceutical products, Department of Chemical Engineering, University of Pretoria.
- Prof Lyndy Mc Gaw- Cytotoxicity of plant- compounds.
- Traditional doctors (TDr) Ephraim Mabena (Mamelodi, Pretoria): Harnessing indigenous knowledge for cosmeceutical and medicinal products.
- TDr James Mahlore (Nelspruit, Mpumalanga: Harnessing indigenous knowledge for cosmeceutical and medicinal products.
- TDr Lulama Masinga (Muthi Futhi, KZN): Medicinal plants for cancer.
- Mrs. B. Carmen (Dept of Pharmacy, TUT)- Listeriosis and medicinal plants
- Dr K Weyer (Medical Research Council)-TB project
- Dr. B. Fourie (MRC) – *In vitro* and *in vivo* efficacy of anti-TB compounds
- Dr. F. Botha (Dept of Dentistry, UP) – Evaluation of inhibitory activity of medicinal plants on tooth pathogens.
- Dr. Maryna Van de Venter (Dept of Biochemistry, NMMU University) – Efficacy of antidiabetic activity of plants.
- Prof. Johan Louw (Dept of Pharmacology, UCT) – *In vivo* efficacy of potent anti-diabetic extracts and compounds in rat models
- Prof. JN Eloff (Onderstepoort Research Institute, UP) – Application of medicinal plants for veterinary purposes.
- Prof. RV Nikolova (University of Limpopo) – Antityrosinase activity of plants
- Prof Suprakas Sinha Ray (DSI/ CSIR National Centre for Nano-Structured Materials)- Synthesis of nanoparticles from South African medicinal plants
- Dr. Kambamba Alexandre (CSIR)- Antiviral testing of South African medicinal plants and formulations against SARS-CoV-2

International

- Dr. Anne Learnerts (University of Colorado, **USA**)- *In vivo* efficacy of anti-TB compounds

- Dr Muranaka in Riken Institute in Yokohama (**Japan**)- Elicitation of secondary metabolites in cell cultures
- Prof P J Houghton (Dept of Pharmacy, University of **London**) – Natural product isolation (I worked for 2 months in his laboratory and was trained in isolation, purification of natural products as well as different chromatographic techniques).
- Dr. PN Panpalia (Birla Institute of Technology, Ranchi, **India**) - Antityrosinase activity of natural products
- Prof. Scott Franzblau (University of Illinois, Chicago, **USA**) – Intracellular activity of anti-TB compounds
- Dr. Chris Hamilton (Queens University, Belfast, **Ireland**) – Interference of anti-TB compounds on mycothiol reductase.
- Dr. Anita Mahapatra (CSIR, RRL, **India**) – Structure-activity relationship of the synthetic derivatives of bioactive compounds
- Dr. Ahmed Hussein (Dept of Pharmaceutical Sciences, **Egypt**) – Phytochemical evaluation of medicinal plants.
- Prof. Toshio Oshima (Tohoku University, **Japan**, Dept of Pharmaceutical Sciences) – Identification of bioactive compounds from South African medicinal plants.
- Dr. Lenka Langhansova (Prague University, **Czech**, Dept of Pharmaceutical Sciences)- Anti-inflammatory activity of samples.
- Prof. Anthony Maxwell (Norwich Research Park, **UK**, Department of Biological Chemistry)-DNA gyrase inhibition by antituberculosis samples.
- Prof. Mauro Picardo (Istituto Dermatologico San Gallicano, University of Rome, **Italy**)- Melanosome transfer to keratinocyte
- Prof. Chung Ho-Lin (University of Missouri) – HR-MS analysis of plant extracts
- Prof. Subbarao Madhunapantula (JSS MedicalCollege) – Anti-cancer activity of medicinal plants
- Prof. Mark Morgan (University of Missouri) – Identification of bioactive compounds from Asian Carp extracts
- Prof Eleni Skaltsa (University of Athens) – Phytochemistry and isolation of medicinal plant extracts

- Prof. Katesh Katti (University of Missouri) – Synthesis of gold nanoparticles
- Dr. GM Vidyasagar (Gulbarga University)- Pharmaceutical and cosmeceutical properties of plant/microbial extracts and compounds
- Prof. Cassandra Quave (Emory University) – Coumarin compounds and derivatives with antimicrobial activity against *Staphylococcus aureus*

Other research institutions (national and international)

Industry

- **Natura, Pretoria:** Quality control and standardization of Phyto-drugs
- **Syringa, Pretoria:** Antimicrobial bioassays of Phyto-drugs
- **Chemgrid, Pretoria:** Stability testing of cosmeceutical products
- **Future Cosmetics, Pretoria:** Clinical studies of Cosmeceutical products
- **Clarins Cosmetic company, France:** Potential of SA plants for cosmeceutical purposes
- **Brunel pharmaceutical company, Pretoria:** Formulation of pharmaceutical and Cosmeceutical products.
- **Botanichem, Pretoria:** Stability of formulated products
- **B & S Biopharm, Capetown:** Pharmacokinetics of Pharmaceutical and cosmeceutical products
- **Natural and Organic formulations, Pietermaritzburg:** Bioactive compounds in medicinal products.
- **Green Chem, India:** MOU signed with the University of Pretoria
- **CEPHYR, Mauritius:** MOU signed with the University of Pretoria

7.3 Membership in national and international bodies

Member:

- Member: The African Academy of Science” Nairobi, Kenya.
- Member: The American Chemical Society.
- Member: The Society of Cosmetic Chemists of South Africa.

- Member: Phytomedicine research programme at the University of Mauritius, Mauritius.
- Member: The Advisory Board for the Phytomedicine research at the JSS College of Pharmacy Ooty, India.
- Member: South African Association of Botanists.
- Member: “NRF/Indigenous Knowledge System”, Programme committee.
- Member: South African Association for the advancement of Science.
- Member of the Life Science Advisory Board at UNISA, South Africa.
- Member: South African Pharmacopeia on medicinal plants; Task team appointed by DST, SA

7.4 Visits to local and overseas universities or research institutes as guest professor or researcher

Guest Visits as a Scientist:

- Prof P J Houghton (Dept of Pharmacy, University of London)- **Natural product isolation (I worked for 2 months in his laboratory and was trained in isolation, purification of natural products as well as different chromatographic techniques).**
- Prof. Scott Franzblau (University of Illinois, Chicago, USA)- **4 months, I completed training in the anti-tuberculosis activity of natural products**
- Prof. Mammadou Daffe (CNRS, Toulouse, France)-**2 months, Evaluation of interference of anti-TB compounds on mycolic acid biosynthesis.**
- Prof. Bernard Ryffel (CNRS, Orleans, France)- **2 months, Antilisterial activity of natural products. Evaluation of cytokines by macrophages in the presence of inhibitory compounds**

Guest Professor: already in 4.2

- **Guest Professor** at the St. Xaviers College, Ranchi, India (June 2010).
- **Guest Professor CNRS, Orleans, France:** Lectured postgraduate students on the evaluation of natural products for TB-treatment (Dec 2003).
- **Guest Professor** at the Department of Health Science at the Faculty of Science, University of Mauritius for Phytomedicine modules (Dec 2014).
- **Guest Professor Birla Institute of Technology, India:** Lectured Postgraduate students on bioactivity of

medicinal plants (Dec 2005).

- **Guest Professor at** Walter Sisulu University for Phytomedicine modules (March 2011).
- **Guest Professor at** CPUT, Cape Town, April 2014.
- **Guest Professor at** the University of Limpopo, Feb 2015.
- **Guest Professor at** UNISA, April 2015.

8. ARTISTIC OUTPUTS *(if applicable)*

8.1 Provide full details of artistic outputs, including public reviews of work, coordinating reports by experts in the field, publisher, production company etc

- **Invited to display the pharmaceutical and cosmeceutical products at various events:**
- Cape Parliament, during budget speech; 2013
- National Science week Limpopo; 2012
- IKS international conference; 2013; 2014; 2015
- Invited to write an article on implications of Traditional/complementary medicine for overall health for South Africans. Integrative, Complementary Traditional and Alternative Medicine for PHASA (Public Health Association of South Africa) newsletter that will be published in May 2015.

9. MANAGEMENT AND ADMINISTRATIVE DUTIES

9.1 List your involvement in departmental activities (e.g. administrative functions), faculty (e.g. Faculty Committees) or other university activities.

1. Coordinator Plant Science seminar committee (2002-2013):

- Activity involved arranging and inviting speakers from various institutions nationally and internationally.
- Responsible for BOT 783 and BOT 782 Medicinal plant Science Honours modules, which involves seminar presentation by Hons students.

- Coordinate End of the year Postgraduate symposium where most of the postgraduate Botany students present their yearly research results.

2. Appointment committee:

- Department of Plant Science representative for the appointment selection committee of the faculty.

3. Principal applicant in development of a new specialized field (Medicinal Plant Sciences). This field is first of its kind in South Africa.

4. Served as an acting HOD of the Department of Plant Science on several occasions.

5. Manage Medicinal plant Research team at the department and involved with meetings conducted regularly.

10. COMMUNITY SERVICE OR PROFESSIONAL SKILLS

10.1 Outreach projects

- **Community development In Mamelodi; Pretoria, LillyDale village; Nelspruit' Ndakabazi community; Eastern Cape, Ekadeni community; Muthi Futhi, KZN.**

I have been collaborating with TDr Ephraim Mabena (Mamelodi), James Mahlore (Lillydale village, Luziphoh (Ndakabazi), Lulama Masinga (Ekadeni) respectively with regard to harnessing indigenous knowledge for the development of cosmeceutical and medicinal products. Material transfer agreement, Confidentiality and benefit-sharing agreements have been signed by the THPs of the communities. The community is being trained for cultivating the plants which have been selected for marketed products for cosmeceutical purposes. Postgraduate students visit the traditional healers which strengthens the collaboration between the two groups. The traditional doctors join students in our laboratories to observe our findings. This is part of the training process which I am involved with, which can assist to bridge the gap between the scientific and community having indigenous knowledge. A number of other plants which will entail products are being considered for cultivation by the community under my supervision (Picture attached of the green house established at Mamelodi community).

- Assisted Top Grade 10 learners from different schools in Gauteng, with UP with Science project.
- Assisted a **Grade 10 student** (Richa Sharan) from the United States of America on a science project.

She was awarded first place at the 52nd Annual Science and Engineering Fair of Metro Detroit 2008-2009, in the Health Sciences category for her project entitled 'Antibacterial activity of South African plants against *Prevotella intermedia* and *Actinomyces israelii*' (Regional level). At the 15th Michigan Science & Engineering State Fair, she was awarded 2nd place (Provincial level).

- Assisted a **Grade 9 student** (Rashi Sharan) from the United States of America on a science project entitled "South African plants for skin hyper-pigmentation disorders". Rashi Sharan received second place in the Biochemistry category at the Science and Engineering Fair of Metro Detroit. She was also awarded membership to the Engineering Society of Detroit and received a certificate from the Association of Women GeoScientists
- Assisted in **open days** for teachers and students from disadvantaged communities.
- Involved with the practicals for postgrad students from UNISA as the infrastructure does not exist at UNISA to conduct practicals.
- **Workshop** organized for students, anthropologists, ethnobotanists and traditional healers in Thohoyandou area (Venda) on 20-30th August 2001
- **A post conference workshop entitled "Partnership between ancient and modern worlds in South Africa" at the South African Association of Botanists conference 2006 in January was organized which involved academic institutions, Pharmaceutical and herbal industries, various traditional healing organizations from all over the country.** International guest speakers also participated. Focus was on valuable products obtained from South African flora. Formation of co-operative ventures from the mutual study of the intuitive results obtained from the traditional healers and the scientists was discussed with specific reference to the importance of traditional healing using natural products, medicinal products from plants, plant foods for human nutrition and plants and cosmetics.

10.2 Professional service performed

- A documentary programme on our TB research was broadcast by the BBC in a science programme "Tomorrow's World", in 1999.
- A documentary programme on our TB research was broadcast by the SABC 2 in a programme "Focus", on 28th July 2002.
- Participated on Morning Live SABC 2 on 6th of October 2014.

10.3 Involvement with other universities/scientific institutions

- External examiner of under- and post-graduate courses of **UNISA, Tshwane University of Technology** and **University of North, University of Cape Town, WITS, University of Limpopo, University of Western Cape** at national level and many other institutions such as **University of Mauritius, Birla Institute of Technology, India, University of Dar Es Salaam**, at an international level for several years.

The titles of some of the dissertations evaluated by me are as follows:

- The investigation of indigenous South Africa medicinal plants for activity against *Mycobacterium tuberculosis* (Department of Medicine, Faculty of Health Sciences, UCT)
- The investigation of the efficacy of identified acetolactate synthase inhibitors, peptidyl cysteine protease inhibitors against *Mycobacterium tuberculosis* (Department of Medicine, Faculty of Health Sciences, UCT)
- The antimicrobial and antimycobacterial activity of plants used for the treatment of respiratory ailments in Southern Africa and isolation of anacardic acid from *Ozora paniculosa* (Faculty of Health Science, WITS).
- Serve as an advisor for the curriculum for Phytomedicine modules and research at the University of Limpopo, UNISA, Walter Sisulu University, University of Western Cape, JSS college Ooty India, University of Dar Es Salaam, Tanzania, University of Mauritius.

10.5 Referee duties

I regularly referee articles for the following journals:

- BioMed Research International (*Impact Factor 3.411*).
- Bioorganic and Medicinal Chemistry (*Impact Factor 3.641*).
- BMC Cancer (*Impact Factor 4.430*).
- BMC Systems Biology (*Impact Factor 2.305*).
- Clinical, Cosmetic and Investigational Dermatology (*Impact Factor 2.489*).
- Environmental Science and Pollution Research (*Impact Factor 4.223*).
- Evidence based complementary and Alternative medicine (*Impact Factor 2.629*).
- Frontiers in Pharmacology (*Impact Factor 4.400*).
- Heliyon (Cell) (*Impact Factor 0.84*).
- International Journal of Antimicrobial Agents (*Impact Factor 5.283*).
- Journal of Antimicrobial Chemotherapy (*Impact Factor 5.790*).
- Journal of Ethnopharmacology (*Impact Factor 4.360*).

- Journal of Food Quality (*Impact Factor 1.763*).
- Journal of Herbal Medicine (*Impact Factor 3.032*).
- Journal of Natural Products (*Impact Factor 4.050*).
- Natural Product Communications (*Impact Factor 0.468*).
- Natural Product Research (*Impact Factor 2.861*).
- Pharmacognosy Reviews (*Impact Factor 2.135*).
- Phytomedicine (*Impact Factor 5.340*).
- PLOS One (*Impact Factor 3.240*).
- South African Journal of Botany (*Impact Factor 2.351*).
- South African Journal of Science (*Impact Factor 1.191*).
- The Journal of Biological Chemistry (*Impact Factor 5.157*).

11. AWARDS AND SCIENTIFIC/SCHOLARLY RECOGNITION

11.1 Evaluation status as scientist/scholar

- NRF: C1-rated;
- Next evaluation: Jan 2023
- Google Scholar **H-index: 44**; **i10 –index: 100**
- Scopus **H-index: 32**
- Web of Science **H-index: 30**

11.2 Research awards and prizes

- National Wetland Awards Nominee for Science and Research by the South African Wetland Society. **2020.**
- Top Intellectual Property award by NRF-DST/NIPMO **2019.**
- Finalist for “National Science and Technology Forum” 32 awards (**2017/2018**); TW Kambule NSTF Awards: Researcher.
- **Biotech Fundi Lifetime Contribution Award** by GDARD and Innovation hub (**March 2017**).

- Gauteng Accelerator Programme (**GAP**) innovation competition, (second prize nationally) which identifies emerging technology entrepreneurs for incubation and start up (**Nov 2016**).
- Received the Presidency for the **National Order Presidential Award by the South African President Jacob Zuma** on 27th April **2014**.
- Finalist for “National Science and Technology Forum” award (**2014**).
- "Distinguished Women in Science AWARD for **2011** at national level. The winner was announced on 19th August by the Minister of Science and Technology of South Africa.
- Received “**UNESCO-L’OREAL Award for Women in Science**” in **2002**. The UNESCO-L’OREAL fellowship is awarded to only ten young women scientists, from all over the world, active in the field of life sciences.
- One of the 10 candidates (out of 126 awardees for UNESCO-L’OREAL For Women In Science award) selected by UNESCO-L’OREAL organizations for an interview based on the progress in 10 years (2002-2009) made in my academic career in **2009**.
- Selected for Talented Scientist Award in **2008** by the International adjudicators of an international seminar on medicinal plants and herbal products, Tirupati, India.
- Finalist for Best young women scientist award **2009**.
- Received a prestigious **United Kingdom Royal Society/National Research Foundation, South Africa** grant (**one of the five recipients nationally in 2005**).
- Awarded with a “National Research Foundation/ Center National de La Recherche Scientifique (CNRS) postdoctoral fellowship” during 2004-05.
- One of University’s ‘**Young Exceptional Performers**’ in 2003.
- I contributed significantly to the consortium who received an Innovation Fund Award of Rand 11.3 million for research on tuberculosis (**2003-06**).
- Nominated for **2003** Shoprite Checkers/ SABC 2 Women of the year award,
- Awarded with state merit scholarship for Matriculation examination.
- Council award of a Gold medal for BSc Honours.
- S2A3-GENCOR BRONZE MEDAL by South African Association for the Advancement of Science for MSc for best thesis at the University.

- Council award of a Gold medal for MSc.
- Outstanding achievement certificate for PhD,

11.3 Other outputs resulting from research programme

Six startup companies resulted from research programme namely:

- Bio Indigenous Solution
- Blyde Botanics
- Anoiksen
- Scholareview
- Looksci
- Tone Tribe

11.4 Awards of students

Poster presentations

Anna-Mari Kok IPUF/SEB joint international conference. Clanwilliam, South Africa. (28th June – 2nd July 2015).
Best Poster Medicinal Plant Sciences

Murunwa Madzinga- Indigenous Plant Use Forum 20th Annual Conference. Back to basics - Discovering our indigenous roots. Pretoria, South Africa. (9th – 12th June 2017). Awarded best poster by a young scientist

Gugulethu Radebe - Best poster Wetland Indaba (2018)

Conferences

Danielle Twilley- Best Honours presentation at Fanie de Meillon postgraduate symposium (2011) and

Carel Oosthuizen- Fanie de Meillon Post-Graduate Symposium (23rd Nov 2013). Awarded best presentation

Analike Blom van Staden- Fanie de Meillon Post-Graduate Symposium (23rd Nov 2014). Awarded best presentation

Danielle Twilley- Best oral presentation at the Annual Indigenous Plant Use Forum (2014)

Analike Blom van Staden- ISERD excellent paper award in the category best presentation / best content. Rome, Italy. (1st Nov 2015)
Carel Oosthuizen- Indigenous Plant Use Forum 20th Annual Conference. Back to basics - Discovering our indigenous roots. Pretoria, South Africa. (9th – 12th June 2017). Awarded best paper by a young scientist
Bianca Fibrich - Best young Scientist (South African Association of Scientists, 2018)
Bianca Fibrich - Best presentation by a Masters student (South African Association of Scientists, 2018)
Bianca Fibrich - Best presentation by a PhD student (DePSS - Postgraduate Symposium, 2019)
Analike Blom van Staden – 2 nd Best presentation by a PhD student (DePSS - Postgraduate Symposium, 2019)
Biotech Fundi Award
Danielle Twilley- Gauteng Biotech Fundi Postgraduate Award (2017)
Carel Oosthuizen - Gauteng Biotech Fundi Postgraduate Award (2018)
GAP
Danielle Twilley - The GAP (Gauteng Accelerator Program) Biosciences Innovation Award 2 nd Prize (2016)
TIA Seed Fund Award
Danielle Twilley – Commercialization of an anticancer indigenous plant (2017)
Carel Oosthuizen– The development of an adjuvant for TB patients from a South African plant (2016)
L’Oreal
Danielle Twilley - L’Oreal-UNESCO for women in science International rising talents (2018)
Danielle Twilley - L’Oreal-UNESCO for Women in Science Sub Saharan regional doctoral fellowship (2015)

Margaretha Mes

Danielle Twilley - Margaretha Mes Medal for best Honours student in Plant Physiology/ Biotechnology (2011)

Gugulethu Radebe- Margaretha Mes Medal for best Honours student in Plant Physiology (2018)

Jonathan Seaman- Margaretha Mes Medal for best Honours student in Plant Physiology (2020)

Bianca Diedericks – Margaretha Mes Memorial Prize for best Female student for three third year modules in Plant Science

DST

Danielle Twilley- South African Women in Science Award Doctoral Scholarship (IKS) (2015)

CJ Henley-Smith- South African Women in Science Award Doctoral Scholarship (IKS) (2014)

Isa Lambrechts. DST-Albertina Sisulu PhD Fellowship, South African Women in Science Awards (2018)

Analike Blom van Staden. DST-Albertina Sisulu PhD Fellowship, South African Women in Science Awards (2019)

Bianca Fibrich. DST-Albertina Sisulu PhD Fellowship, South African Women in Science Awards (2019)