

Curriculum Vitae of Dr. Gerald Maarman

Personal Information

Title: Dr
Surname: Maarman
First names: Gerald Jerome
Nationality: South African
Date of birth: 24/04/1984
Place of Birth: Cape Town, South Africa
Gender: Male

Contact Information

E-mail: gmaarman@sun.ac.za

Professional Career and Positions held

- 1) *Stellenbosch University, Division of Medical Physiology, Senior Lecturer (2022-2024)*
- 2) *Acting Head of Division, Division of Medical Physiology, June (2024)*
- 3) *Stellenbosch University, Division of Medical Physiology, Lecturer (2018-2022)*
- 4) *Stellenbosch University, Desmond Tutu TB Centre, Research Manager (2017-2019)*
- 5) *University of Cape Town, Postdoctoral research fellow (2014-2016)*

Registration with Professional Council(s)

- 1) *N/A*

Tertiary Educational Qualifications

- 1) *PGDip NFAQ 8, Theology, Stellenbosch University, registration: January 2022, graduation: December (2025)*
- 2) *PhD, Medical Physiology in Medicine, University of Cape Town, registration: August 2011, completion: December (2014)*
- 3) *MSc., Medical Physiology, Stellenbosch University, registration: January 2008, completion: April (2011)*
- 4) *BSc., Honours Medical Physiology, Stellenbosch University, registration: January 2007, completion: December (2007)*
- 5) *BSc. Human Life Sciences, Stellenbosch University, registration: January 2004, completion: April (2007)*
- 6) *Scimathus post-matric certificate, Stellenbosch University, registration: January 2003, completion: December (2003)*
- 7) *Grade 12 (Matric), Eersterivier Secondary School, (2002)*

Continuing Professional Development, Courses and Other Qualifications

- 1) *Certificate, Good Clinical Practice (GCP)*
- 2) *Certificate, Biosafety GLP*
- 3) *Certificate, NIH Human Subjects Protection*
- 4) *Certificate, Golden Key Society*
- 5) *Certificate, Accreditation of Car, Use and Handling of Laboratory Animals*
- 6) *Certificate, Basic Communication in Xhosa*
- 7) *Certificate, Scientific Writing Skills*
- 8) *Certificate, Engineer Drawings (N1, N2)*

- 9) *Certificate, Terminal & Home-Based Care*
- 10) *Certificate, Trauma Counselling*
- 11) *Certificate, HIV/AIDS peer-counselling*
- 12) *Certificate, Basic & Intermediary First Aid*

Study record, career record, and status as an academic

National exposure

Invited national conference speaker

- 1) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, MAARMAN G, *Exploring the roles of mitochondrial energy metabolism pathways in the pathogenesis of pulmonary hypertension in post-TB lung disease*, Stias, University of Stellenbosch, Post-TB lung symposium, April (2025).
- 2) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, MAARMAN G, *Pulmonary hypertension and right heart disease associated with lung tuberculosis: translating from bench to bedside*, SA Heart Annual Congress, Sandton, South Africa, November (2024).
- 3) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, MAARMAN G, *The preliminary findings of the Puppet II study, and the novel involvement of inflammatory, mitochondrial, endothelial and vascular pathways in the pathogenesis of pulmonary hypertension in post-TB lung disease*, Stias, University of Stellenbosch, Post-TB lung symposium, September (2023).
- 4) MAARMAN G, *The role of mitochondria in cardio-pulmonary vascular research: a research journey*, University of Limpopo Annual Research Day, Polokwane, September (2023).
- 5) MAARMAN G, *Recent developments in PAH Basic Science research and Animal models*, South African Heart Association Annual Congress, Cape Town, January (2013).

National conference presentations

- 1) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, MAARMAN G, *The novel presence of endothelial dysfunction, angiogenic and pulmonary vascular remodelling pathways in post-tuberculosis lung disease and pulmonary hypertension-related heart disease, in a South African cohort*, SA Heart Annual Congress, Sandton, South Africa, November (2024).
- 2) MAARMAN G, Blauwet L, Sliwa K, Lecour S, *Melatonin affords cardioprotection and protects against skeletal muscle from atrophy in pulmonary hypertension, by augmenting mitochondrial efficiency and ADP availability*, EU/SA Cardiovascular Research workshop, the South African Society for Cardiovascular Research in Africa (SASCAR), EU/SA Cardiovascular Research workshop, September (2016).
- 3) MAARMAN G, Ojuka A, *Melatonin rescues hyperuricemia-induced mitochondrial dysfunction, oxidative stress and triglyceride accumulation in C2C12 myotubes*, The Physiology Society of Southern Africa, August, (2016).
- 4) E Marais, S Mzezewa, I Webster, Maarman and A Lochner, *Cardiovascular abnormalities in aged, diet-induced obese rats, to be presented at the Physiology Society of Southern Africa, 35th Annual Congress, Johannesburg South Africa* (2015).
- 5) MAARMAN G, Blauwet L, Sliwa K, Lecour S, *Pulmonary arterial hypertension and the beneficial and cardioprotective effects of melatonin*, the South African Society for Cardiovascular Research in Africa (SASCAR), EU/SA Cardiovascular Research workshop, September (2014)
- 6) *Cardioprotective effect of melatonin on cardiac function in pulmonary hypertension*, Renin-Angiotensin-Aldosterone System (RAAS) Satellite Meeting, July (2014).
- 7) MAARMAN G, Blauwet L, Sliwa K, Lecour S, *Pulmonary arterial hypertension and the beneficial and cardioprotective effects of melatonin*, the South African Society for Cardiovascular Research in Africa (SASCAR) (2013)

- 8) MAARMAN G, Blauwet L, Sliwa K, Lecour S, *The effects of melatonin on cardiac function in a model of pulmonary arterial hypertension*, The World Congress on Paediatric Cardiology & Cardiac Surgery, Cape Town, South Africa (2013).
- 9) MAARMAN G, Du Toit E.F, *The effect of a fatty acid oxidation inhibitor (oxfenicine) on myocardial function and -resistance to ischemia/reperfusion injury in a rodent model of the metabolic syndrome*, Physiology Society of Southern Africa, 36th Annual Congress, Johannesburg, South Africa (2009).
- 10) MAARMAN G, Du Toit E.F, *The effect of a PPAR-alpha agonist (K111) on myocardial function and resistance to ischemia/reperfusion injury in a rodent model of the metabolic syndrome*, Physiology Society of Southern Africa, 35th Annual Congress, Johannesburg South Africa (2008).

International exposure

Invited international conference speaker

- 1) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, and MAARMAN G, *The novel presence of endothelial dysfunction, angiogenic and pulmonary vascular remodelling pathways in post-tuberculosis lung disease and pulmonary hypertension-related heart disease, in a South African cohort*, The Pulmonary Vascular Research Institute (PVRI) Annual Congress, Rio de Janeiro, Brazil (2025).
- 2) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, and MAARMAN G, *Post-TB Pulmonary Hypertension - through the lens of a South African cohort and experimental model*, The Pulmonary Vascular Research Institute (PVRI) Annual Congress, London, UK, January (2024).
- 3) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, and MAARMAN G, *Recent developments in clinical PAH research at Tygerberg Hospital, South Africa: preliminary data*, The Pulmonary Vascular Research Institute (PVRI) Annual Congress, Peru, April (2020).
- 4) Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, and MAARMAN G, *Developments in clinical PAH research at Tygerberg Hospital, South Africa: preliminary data*, The Pulmonary Vascular Research Institute (PVRI) Annual Congress, Egypt, January (2019).
- 5) MAARMAN G, and Lecour S, *Characterisation of mitochondrial function in a model of pulmonary arterial hypertension and right ventricular failure*, 5th Annual International Mitochondrial Physiology School, Cape Town, South Africa May (2015).
- 6) MAARMAN G, Sliwa K, and Lecour S, *Recent developments in PAH Basic Science research and Animal models*, PVRI Annual Congress, Cape Town, January (2012).

International conference oral presentations

- 1) MAARMAN G, Brittany Andrew, D Blackhurst, Ojuka E, *Melatonin rescues uric acid-induced mitochondrial impairment and oxidative stress in C2C12 myotubes* Khütai Austria, July (2016).
- 2) MAARMAN G, Brittany Andrew, D Blackhurst, Ojuka E, *Uric acid impairs mitochondrial respiration, elevates triglycerides, reduce aconitase activity: Melatonin counteracts these effects*, Experimental Biology, San Diego California, United States of America, April (2016).
- 3) F. Thienemann, L. Blauwet, R. Burton, K. Tibazarwa, MAARMAN G, A. Dzudie, A. O. Mocumbi, K. Sliwa, *HIV-associated pulmonary hypertension in a densely populated, peri-urban township in Cape Town, South Africa: clinical presentation and survival*, To be presented at the European Society of Cardiology (ESC) Annual Meeting in Barcelona Spain, August (2014).
- 4) MAARMAN G, Blauwet L, Blackhurst D, Sliwa K and Lecour S, *Cardioprotective effect of melatonin on cardiac function and oxidative stress in pulmonary arterial hypertension*, International Society of Heart Research, Barcelona, Spain (2014).

- 5) MAARMAN G, Blauwet L, Sliwa K and Lecour S, Effects of melatonin treatment on cardiac function in a model of pulmonary arterial hypertension, Pan-African Society of Cardiology Congress, Dakar, Senegal (2013).
- 6) MAARMAN G, Blauwet L, Lecour S and Sliwa K, Can melatonin improve cardiac function in pulmonary arterial hypertension? European Society of Cardiology (ESC) annual congress, Amsterdam, Netherlands (2013).

Teaching

Programme	Year	Module	Teaching modality
Undergraduate teaching			
MBChB I	2022-2024	Form and Function: Cardiovascular Physiology	Lecturing and assessment
MBChB I	2022-2024	Form and Function: Gastrointestinal Physiology	Lecturing and assessment
MBChB I	2019-2023	Molecular Biology	Lecturing and assessment
MBChB I	2019-2023	Muscle Physiology	Lecturing and assessment
MBChB II	2019-2023	Cardiovascular Physiology	Lecturing and assessment
MBChB II	2023-2023	Respiratory Physiology	Lecturing and assessment
MBChB III	2019-2023	Musculoskeletal System Physiology	Lecturing and assessment
B. Occ. Ther I	2019-2024	Cardiovascular Physiology	Lecturing and assessment
B. Occ. Ther I	2019-2024	Gastrointestinal Physiology	Lecturing and assessment
Bachelor of Nursing and Midwifery	2019-2024	Immunology	Lecturing and assessment
BSc Physiotherapy, BSc Dietetics and	2019-2024	Gastrointestinal Physiology	Lecturing and assessment
BSc Physiotherapy, BSc Dietetics and	2019-2024	Immunology	Lecturing and assessment
BSc Physiotherapy, BSc Dietetics and	2019-2024	Muscle Physiology	Lecturing and assessment
Form and Function, MBChB I	2022-2024	Cardio and Gastrointestinal	Cycle co-lead
Health & Wellness, MBChB II	2022-2024	Underpinnings	Cycle lead
Postgraduate teaching			
Hons (Med Phys)	2019-2024	Honours programme	Coordinator
Hons (Med Phys)	2018-2024	Cardiopulmonary diseases and research and academic writing	Lecturing and assessment

Hons (Med Phys)	2018-2024	Laboratory skills competency	Training, practical, and assessment
Hons (Med Phys)	2018-2024	Theoretical and Practical Physiology	Marking reports, internal moderating and reviewing of lecturer assessments
MMed	2019-2024	Cardiovascular Physiology	Assessment

Research experience

My research niche is mitochondrial bioenergetics and metabolism in diseases like pulmonary arterial hypertension, cancer, Parkinson's disease and cardiovascular diseases. Many of these diseases either have no cure or impactful treatment, or the pathophysiology is poorly understood. Given the key role of mitochondria in health and disease, my research focuses on delineating mitochondrial processes and mechanisms linked to the development of disease and their role in novel/experimental therapeutic applications. I have published several studies that aimed to understand better the involvement of mitochondrial bioenergetics and metabolism in diseases like cardiovascular disease. I have also established a metabolic lab at Stellenbosch University, which houses the University's first High-Resolution Respirometer, which uses the latest technology to measure mitochondrial bioenergetics and metabolism pathways. A large part of my research is also to investigate the novel Physiological effects and underlying mechanisms of Aspalathus linearis (Rooibos) extracts. In this sphere, my research focuses on testing the protective effects of Rooibos in models like angiotensin-II-induced cardiomyocyte hypertrophy, isoproterenol-induced cardiomyocyte hypertrophy, and growth factor-induced proliferation of human pulmonary artery endothelial and smooth muscle cells. I also investigate the effects of melatonin, a natural antioxidant molecule, in protecting and enhancing skeletal muscle. Through all these research projects, I investigated mitochondrial pathways for bioenergetics and metabolism. I have experience in establishing and using the following experimental models: the isolated rat heart perfusion system (working heart and Langendorff perfusions), in vivo pulmonary arterial banding surgery in mice and rats, in vivo right heart catheterization in mice and rats, commercial cell lines (H9C2, C2C12, HepG2, U-118MG, U-87 cells, HUVECs, and MCF7). I currently have 929 citations and an H-index of 16, based on Scholar. In early 2025, I was nominated to join the SUNRISE programme, and I was further nominated to join the national Future Professors Programme.

Research Metrics

NRF rating

- Y-rating (2024)

Scopus h-index

- 13

Google Scholar h-index

- 16

Google Scholar i10-index

- 22

Published (peer-reviewed) manuscripts

- 1) Cairns M, Andrews J, Odendaal C, O'Brien C, Marais E, MAARMAN G, Sishi B, Joseph D, Rautenbach F, Marnewick JL, and Essop FM. 2025. A sex-dependent investigation into post-reperfusion cardiac mitochondrial function and redox balance in chronically stressed rats, *Physiological Reports* (IF:2.2), e70185. <https://doi.org/10.14814/phy2.70185>
- 2) Payne C, Sanni O, Louw E, Baines N, Allwood B, and MAARMAN G. 2025. Mitochondrial respiratory analysis of cryopreserved PBMCs isolated from human blood, *Cryobiology* (IF:2.3), 118, 105212, <https://doi.org/10.1016/j.cryobiol.2025.105212>
- 3) Jumaar C, Jacobs S, Sanni O, Louw E, Baines N, Maree D, Botha B, Allwood B, and MAARMAN G. 2025. Endothelial Dysfunction Markers Correlate with the Time Since Completion of Tuberculosis Treatment and the Number of Previous Tuberculosis Episodes, *Infectious Disease Reports* (IF:3.2), 17, 21. <https://doi.org/10.3390/idr17020021>
- 4) Buck A, MAARMAN G, Dube A, Bardien S. 2025. Mitochondria-targeted nanoparticles to treat mitochondrial dysfunction in brain disorders, *Frontiers in Bioengineering and Biotechnology* (IF: 4.3) in Press.
- 5) Adu-Amankwaah F, Februarie C, Nyambo K, MAARMAN G, Tshililo N, Mabasa L, Mavumengwana V, Baatjies L. 2025. Targeting mitochondrial function to inhibit glycolysis and oxidative phosphorylation (OXPHOS) for therapeutic intervention in triple-negative breast cancer line (MDA-MB 231) utilising Cape fynbos, *South African Journal of Botany* (IF:3.1), 178, Pages 73-88, <https://doi.org/10.1016/j.sajb.2025.01.016>
- 6) Shaboodien S, Payne C, Parker S, Marais E, Johnson R and MAARMAN G. 2025. Rooibos (*Aspalathus linearis*) exerts a cardioprotective effect against isoproterenol-induced hypertrophy in H9c2 cardiomyoblasts by improving antioxidative ability and mitochondrial function, *South African Journal of Botany* (IF:3.1), 177, Pages 211-224, <https://doi.org/10.1016/j.sajb.2024.11.040>
- 7) Malefane, L. & MAARMAN G. 2024. Post-tuberculosis lung disease and inflammatory role players: can we characterise the myriad inflammatory pathways involved to gain a better understanding? *Chem Biol Interact* (IF 5.192, citations: 6), 387, 110817. <https://pubmed.ncbi.nlm.nih.gov/38006959/>
- 8) Adu-Amankwaah F, Februarie C, Nyambo K, MAARMAN G, Tshililo N, Mabasa L, Mavumengwana V, Baatjies L. 2024. Cytotoxic properties, glycolytic effects and high-resolution respirometry mitochondrial activities of *Eriocephalus racemosus* against MDA-MB 231 triple-negative breast cancer, *BMC Complementary Medicine and Therapies* (IF 3.3, citations: 0). <https://pubmed.ncbi.nlm.nih.gov/39256791/>
- 9) Louw EH, Van Heerden JA, Kalla IS, MAARMAN G, Nxumalo Z, Thienemann F, Huaman MA, Magee M, Allwood BA. 2024. Scoping review of post-TB pulmonary vascular disease: proceedings from the 2nd International Post-Tuberculosis Symposium. *Pulm Circ* (IF:3.017), 4; 14:e12424. <https://doi.org/10.1002/pul2.12424>
- 10) Jacobs, S., Payne, C., Shaboodien, S., Kgatla, T., Pretorius, A., Jumaar, C., MAARMAN G. & Sanni, O. 2024. Pulmonary hypertension and the potential of 'drug' repurposing: A case for African medicinal plants. *African Journal of Thoracic and Critical Care Medicine* (IF 0, citations: 0), 30, 59-66. <https://pubmed.ncbi.nlm.nih.gov/39171151/>
- 11) Jacobs, S., Payne, C., Shaboodien, S., Kgatla, T., Pretorius, A., Jumaar, C., Sanni, O., Butrous, G. & MAARMAN G. 2023. Gut microbiota crosstalk mechanisms are key in pulmonary hypertension: The involvement of melatonin is instrumental too. *Pulm Circ* (IF 3.017, citations: 1), 13, e12277. <https://pubmed.ncbi.nlm.nih.gov/37583483/>
- 12) Louw, E., Baines, N., MAARMAN G, Osman, M., Sigwadhi, L., Irusen, E., Koegelenberg, C., Doubell, A., Nathan, S., Channick, R. & Allwood, B. 2023. The prevalence of pulmonary hypertension after successful tuberculosis treatment in a community sample of adult patients. *Pulm Circ* (IF 3.017, citations: 15), 13, e12184. <https://pubmed.ncbi.nlm.nih.gov/36699148/>
- 13) Grant-McAuley, W., Piwowar-Manning, E., Clarke, W., Breaud, A., Zewdie, K. B., Moore, A., Ayles, H. M., Kosloff, B., Shanaube, K., Bock, P., Meehan, S. A., MAARMAN G, Fidler, S.,

- Hayes, R., Donnell, D., Eshleman, S. H. & Team, H. S. 2023. Population-level analysis of natural control of HIV infection in Zambia and South Africa: HPTN 071 (PopART). *J Int AIDS Soc* (IF: 4.6, citations: 0), 26, e26179. <https://pubmed.ncbi.nlm.nih.gov/37886843/>
- 14) MAARMAN G. 2022. Pulmonary hypertension in developing countries: Limiting factors in time to diagnosis, specialised medications and contextualised recommendations. *Afr J Thorac Crit Care Med* (IF: 0, citations: 2), 28. <https://pubmed.ncbi.nlm.nih.gov/35891681/>
 - 15) MAARMAN G. 2022. Reviewing the suitability of mitochondrial transplantation as therapeutic approach for pulmonary hypertension in the era of personalized medicine. *Am J Physiol Lung Cell Mol Physiol* (IF: 3.6, citations: 3), 322, L641-L46. <https://pubmed.ncbi.nlm.nih.gov/35318860/>
 - 16) Bell-Mandla, N. F., Sloot, R., MAARMAN G, Griffith, S., Moore, A., Floyd, S., Hayes, R., Fidler, S., Ayles, H., Bock, P. & team, H. s. 2021. Improving retention of community-recruited participants in HIV prevention research through Saturday household visits; findings from the HPTN 071 (PopART) study in South Africa. *BMC Med Res Methodol* (IF: 3.9, citations: 4), 21, 242. <https://bmcmmedresmethodol.biomedcentral.com/articles/10.1186/s12874-021-01415-6>
 - 17) Eshleman, S. H., Piwowar-Manning, E., Wilson, E. A., Lennon, D., Fogel, J. M., Agyei, Y., Sullivan, P. A., Weng, L., Moore, A., Laeyendecker, O., Kosloff, B., Bwalya, J., MAARMAN G, van Deventer, A., Floyd, S., Bock, P., Ayles, H., Fidler, S., Hayes, R., Donnell, D. & Team, H. S. 2020. Determination of HIV status and identification of incident HIV infections in a large, community-randomized trial: HPTN 071 (PopART). *J Int AIDS Soc* (IF: 4.6, citations: 11), 23, e25452. <https://pubmed.ncbi.nlm.nih.gov/32072743/>
 - 18) MAARMAN G. 2020. Making a case for metallothioneins conferring cardioprotection in pulmonary hypertension. *Med Hypotheses* (IF: 2.1, citations: 5), 137, 109572. <https://pubmed.ncbi.nlm.nih.gov/31986470/>
 - 19) MAARMAN G, Shaw, J. & Allwood, B. 2020. Pulmonary hypertension in majority countries: opportunities amidst challenges. *Curr Opin Pulm Med* (IF: 2.8, citations: 14), 26, 373-83. <https://pubmed.ncbi.nlm.nih.gov/32701672>
 - 20) Kriel, J., Muller-Nedebock, K., MAARMAN G, Mbizana, S., Ojuka, E., Klumperman, B. & Loos, B. 2018. Coordinated autophagy modulation overcomes glioblastoma chemoresistance through disruption of mitochondrial bioenergetics. *Sci Rep* (IF: 3.8, citations: 34), 8, 10348. <https://www.nature.com/articles/s41598-018-28590-9>
 - 21) Allwood, B. W., MAARMAN G, Kyriakakis, C. G. & Doubell, A. F. 2018. Post-pulmonary tuberculosis complications in South Africa and a potential link with pulmonary hypertension: Premise for clinical and scientific investigations. *S Afr Med J* (IF: 1.5, citations: 16), 108, 12339. <https://pubmed.ncbi.nlm.nih.gov/30004336/>
 - 22) MAARMAN G. J. 2018. Pulmonary arterial hypertension and the potential roles of metallothioneins: A focused review. *Life Sci* (IF: 5.2, citations: 9), 214, 77-83. <https://pubmed.ncbi.nlm.nih.gov/30355531/>
 - 23) Nduhirabandi, F. & MAARMAN G. 2018. Melatonin in Heart Failure: A Promising Therapeutic Strategy? *Molecules* (IF: 4.2, citations: 62), 23. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6099639/>
 - 24) MAARMAN G & Reiter, R. J. 2018. Melatonin therapy for blunt trauma and strenuous exercise: A mechanism involving cytokines, NFkappaB, Akt, MAF(BX) and MURF-1. *J Sports Sci* (IF: 2.3, citations: 27), 36, 1897-901. [10.1080/02640414.2018.1424491](https://doi.org/10.1080/02640414.2018.1424491)
 - 25) MAARMAN G, Andrew, B. M., Blackhurst, D. M. & Ojuka, E. O. 2017. Melatonin protects against uric acid-induced mitochondrial dysfunction, oxidative stress, and triglyceride accumulation in C2C12 myotubes. *J Appl Physiol* (IF: 3.53, citations: 36), 122, 1003-10. <https://pubmed.ncbi.nlm.nih.gov/28008100/>
 - 26) MAARMAN G, Mendham, A. E., Lamont, K. & George, C. 2017. Review of a causal role of fructose-containing sugars in myocardial susceptibility to ischemia/reperfusion injury. *Nutr Res* (IF: 3.4, citations: 9), 42, 11-19. <https://pubmed.ncbi.nlm.nih.gov/28633867/>

- 27) MAARMAN G, Schulz, R., Sliwa, K., Schermuly, R. T. & Lecour, S. 2017. Novel putative pharmacological therapies to protect the right ventricle in pulmonary hypertension: a review of current literature. *Br J Pharmacol* (IF: 6.8, citations: 16), 174, 497-511. <https://pubmed.ncbi.nlm.nih.gov/28099680/>
- 28) Webster, I., Salie, R., Marais, E., Fan, W. J., MAARMAN G, Huisamen, B. & Lochner, A. 2017. Myocardial susceptibility to ischaemia/reperfusion in obesity: a re-evaluation of the effects of age. *BMC Physiol* (IF: 0.11, citations: 17), 17, 3. <https://pubmed.ncbi.nlm.nih.gov/28302152/>
- 29) Madlala, H. P., MAARMAN G. & Ojuka, E. 2016. Uric acid and transforming growth factor in fructose-induced production of reactive oxygen species in skeletal muscle. *Nutr Rev* (IF: 5.9, citations: 41), 74, 259-66. <https://pubmed.ncbi.nlm.nih.gov/26946251/>
- 30) Ojuka, E., Andrew, B., Bezuidenhout, N., George, S., MAARMAN G, Madlala, H. P., Mendham, A. & Osiki, P. O. 2016. Measurement of beta-oxidation capacity of biological samples by respirometry: a review of principles and substrates. *Am J Physiol Endocrinol Metab* (IF: 5.9, citations: 49), 310, E715-23. <https://pubmed.ncbi.nlm.nih.gov/26908505/>
- 31) MAARMAN G, Blackhurst, D., Thienemann, F., Blauwet, L., Butrous, G., Davies, N., Sliwa, K. & Lecour, S. 2015. Melatonin as a preventive and curative therapy against pulmonary hypertension. *J Pineal Res* (IF: 12.08, citations: 79), 59, 343-53. <https://pubmed.ncbi.nlm.nih.gov/26201290/>
- 32) Kelly-Laubscher, R. F., King, J. C., Hacking, D., Somers, S., Hastie, S., Stewart, T., Imamdin, A., MAARMAN G., Pedretti, S. & Lecour, S. 2014. Cardiac preconditioning with sphingosine-1-phosphate requires activation of signal transducer and activator of transcription-3. *Cardiovasc J Afr* (IF: 1.022, citations: 23), 25, 118-23. <https://pubmed.ncbi.nlm.nih.gov/25000441/>
- 33) MAARMAN G., Lecour, S., Butrous, G., Thienemann, F. & Sliwa, K. 2013. A comprehensive review: the evolution of animal models in pulmonary hypertension research; are we there yet? *Pulm Circ* (IF: 3.017, citations: 218), 3, 739-56. <https://pubmed.ncbi.nlm.nih.gov/25006392/>
- 34) MAARMAN G., Marais, E., Lochner, A. & du Toit, E. F. 2012. Effect of chronic CPT-1 inhibition on myocardial ischemia-reperfusion injury (I/R) in a model of diet-induced obesity. *Cardiovasc Drugs Ther* (IF: 3.1, citations: 38), 26, 205-16. [10.1007/s10557-012-6377-1](https://doi.org/10.1007/s10557-012-6377-1)

Letters to the editor published

- 1) Payne, C., Jacobs, S., Shaboodien, S., Jumaar, C., Pretorius, A., Kgatla, T., Sanni, O. & MAARMAN G. 2023. A pulmonary arterial hypertension diagnostic algorithm for a third-world context: SYMQUICK. *J Investig Med* (IF: 2.5, citations: 0), 71, 542-44. <https://pubmed.ncbi.nlm.nih.gov/36789665/>
- 2) MAARMAN G. & Lecour, S. 2021. Melatonin against pulmonary arterial hypertension: is it ready for testing in patients? *Cardiovasc J Afr*, 32 (IF: 1.022, citations: 4), 111-12. <https://pubmed.ncbi.nlm.nih.gov/34143177/>
- 3) Sloom, R., MAARMAN G, Osman, M., Marx On Behalf Of The Desmond Tutu Tbc Centre-Working Group Data, A. & Modelling, F. M. 2018. Variation in HIV prevalence and the population-level effects of antiretroviral therapy in reducing tuberculosis incidence in South Africa. *S Afr Med J* (IF: 1.5, citations: 2), 108, 12370. <https://pubmed.ncbi.nlm.nih.gov/30182871/>

Invited editorials published

- 1) MAARMAN G. 2017. Editorial commentary: "Discovery of a Murine Model of clinical pulmonary arterial hypertension: Mission impossible?" by Dai and Zhao. *Trends Cardiovasc Med* (IF: 7.3, citations: 3), 27, 237-38. <https://pubmed.ncbi.nlm.nih.gov/28189476/>
- 2) MAARMAN G, Chakafana, G. & Sliwa, K. 2020. World Heart Day: a World Heart Federation communique on the future of basic sciences and translational medicine in global cardiovascular research. *Am J Physiol Lung Cell Mol Physiol* (IF: 3.6, citations: 14), 319, L545-L46. <https://pubmed.ncbi.nlm.nih.gov/32726129/>

Book Chapters (peer-reviewed) published

- 1) Sanni, O., Payne, C. & MAARMAN G. 2024. Chapter 21 - Cancer and mitochondrial transplantation, and novel insights into its application in the cancer-like phenotype of pulmonary arterial hypertension. In: OSTOJIC, S. M., KUBAT, G. B., ULGER, O. & GUNAYDIN, S. (eds.) *Mitochondrial Transplantation and Transfer*. Elsevier, Academic Press. <https://www.sciencedirect.com/science/article/abs/pii/B9780443188589000214>
- 2) MAARMAN G. 2019. Chapter 14 - Ischemia-reperfusion injury and the roles of excess fructose: Effects on the heart and other organs. In: PATEL, V. B. (ed.) *Molecular Nutrition: Carbohydrates*. Elsevier, Academic Press. <https://doi.org/10.1016/B978-0-12-849886-6.00014-8>
- 3) MAARMAN G. 2019. Pulmonary Hypertension and the Right Ventricle: The Roles of Mitochondrial Reactive Oxygen Species in Causing Further Right Ventricular Mitochondrial Changes. In: CHAKRABORTI, S., DHALLA, N. S., GANGULY, N. K. & DIKSHIT, M. (eds.) *Oxidative Stress in Heart Diseases*. Singapore: Springer Singapore. https://link.springer.com/chapter/10.1007/978-981-13-8273-4_24
- 4) MAARMAN G. 2017. Natural Antioxidants as Potential Therapy, and a Promising Role for Melatonin Against Pulmonary Hypertension. *Springer, Adv Exp Med Biol*, 967, 161-78. <https://pubmed.ncbi.nlm.nih.gov/29047086/>
- 5) Jumaar C, Jacobs S, Malefane L, Parker MS, Maarman G, Reviewing and highlighting novelties and uncertainties in pulmonary tuberculosis, and post-TB lung disease: A focus on inflammation. *Springer* (in preparation for submission 31 March 2025).
- 6) Jumaar C, Jacobs S, Malefane L, Parker MS, Maarman G, The role of inflammatory biomarkers in patients with severe TB and those with previous TB and reduced lung function. *Springer* (in progress 30 April 2025).

Published abstracts

- 1) Strijdom H, Webster I, Genis A, Boltman T, Mokoena K, Cambell J, Kruger C, Adoga J, Holm J, Maarman G, Everson F. 2024. Exploring mitochondrial function in people living with HIV: Preliminary findings from the Mito-SAKen Study. *SA Heart*. 2024; 21(2): 127. SA Heart Annual Congress, Johannesburg, 8-10 November 2024.
- 2) Cairns M, Marais E, Storbeck K, Joseph D, MAARMAN G, Smith C, and Essop F. 2024. Adding insult to injury: A sex-specific investigation of chronic stress on heart function after regional ischaemia, *SA Heart*. 2024; 21(2): 127. SA Heart Annual Congress, Johannesburg, 8-10 November 2024.
- 3) Kgatla T, Marais E, and MAARMAN G. 2024. The effects of *Aspalathus linearis* (Rooibos) in Angiotensin II-induced hypertrophy and apoptosis, *SA Heart*. 2024; 21(2): 127. SA Heart Annual Congress, Johannesburg, 8-10 November 2024.
- 4) Jumaar C, Malefane L, Jacobs S, Payne C, Sanni O, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Allwood B, and MAARMAN G. 2024. Characterising the inflammatory, endothelial, and mitochondrial pathways putatively involved in post-tuberculosis lung disease and pulmonary hypertension in a South African cohort, *Pulm Circ* (IF: 3.017, citations: 0), 14(2):e12376. <https://onlinelibrary.wiley.com/doi/10.1002/pul2.12376>

- 5) MAARMAN G, Andrew B, Blackhurst D, Ojuka E. 2016. Effects of uric acid and melatonin exposure on mitochondrial complex-I respiration, triglyceride accumulation and aconitase activity in skeletal muscle cells, *FASEB* (IF: 5.834, citations: 1), 30, 1100.14-1100.14
https://faseb.onlinelibrary.wiley.com/doi/abs/10.1096/fasebj.30.1_supplement.1100.14
- 6) MAARMAN G, Blauwet L, Blackhurst D, Sliwa K, Lecour S. 2014. Cardioprotective effect of melatonin on cardiac function and oxidative status in pulmonary arterial hypertension. *Cardiovascular Research* (IF: 13.08, citations: 1), 103(suppl 1):S90, 2014
- 7) MAARMAN G, Blauwet L, Lecour S and Sliwa K. 2013. Can melatonin improve cardiac function in pulmonary arterial hypertension? European Society of Cardiology (ESC) annual congress, Amsterdam, Netherlands 2013, *European Heart Journal* (IF: 39.3, citations: 1); Vol 34(1):476. doi:10.1093/cvr/cvu091.167

Manuscripts under peer review

- 1) Jumaar C, Jacobs S, Malefane L, Sanni O, Louw E, Baines N, Maree D, Botha B, Allwood B, and MAARMAN G, S Windvogel, H Strijdom, B Botha, B Allwood, MAARMAN G. 2025. Delineating the involvement of inflammatory pathways in post tuberculosis lung disease in a South African cohort: an observational study, *Infectious Disease Reports* (IF:3.2).
- 2) Wentley G, Reiter RJ, Wang YX and, MAARMAN G. 2025. the augmenting effects of melatonin on mitochondrial bioenergetics and metabolism of healthy C2C12 myotubes, *Experimental and Molecular Pathology* (IF:2.8).
- 3) Payne C, Louw E, Baines N, Strijdom H, Maree D, Schultz S, Botha B, Feyasa M, Allwood B, and MAARMAN G. 2025. The association between mitochondrial pathways and pulmonary hypertension in a previously treated or active tuberculosis cohort, *African Journal of Thoracic and Critical Care Medicine* (IF:0.0).
- 4) Kgatla TM, Sanni O, and MAARMAN G. 2025. Cardioprotection with herbal plants and the role of mitochondrial function and regulation, *South African Journal of Botany* (IF:3.1).
- 5) Odendaal C, O'Brien C, Cairns M, MAARMAN G, Joseph D, Smith C, Rautenbach F, Marnewick J and Essop F. 2025. *Frontiers in Physiology* (IF:3.2).
- 6) Kgatla T, Parker S, and MAARMAN G. 2025. mitochondrial pathways are central to Rooibos-induced protection against angiotension-II induced hypertrophy, *South African Journal of Science* (IF:2.1)
- 7) Rajah M, Marais E, MAARMAN G, Doubell E, Doubell AF, Herbst PG. 2025. Myocardial fibrosis in severe aortic stenosis in a South African cohort: correlations between cardiac MRI findings and mitochondrial pathways, *Diagnostics* (IF:3.0).

Articles in preparation for submission in March 2025

- 1) Kgatla T and MAARMAN G, metallothionein is a key mediator of Rooibos-induced protection against angiotension-II induced hypertrophy: a brief communication.
- 2) O Sanni, Parker MS, and MAARMAN G, the protective effects of Rooibos against the toxicity of hypoxia-reoxygenation in H9C2 cardiomyoblasts is STAT-3 dependent.
- 3) Parker MS, D Bester, O Sanni, and MAARMAN G, the novel protective effects of *Aspalathus linearis* against bedaquiline-induced cardiotoxicity in H9C2 cells is mediated via enhanced mitochondrial biogenesis and respiration.
- 4) Pieterse J, G Butrous, Z Mabasa, S Sampson, and MAARMAN G. Novel findings of pulmonary vascular remodelling in a tuberculosis mouse model. The potential of a new experimental model for pulmonary hypertension associated with lung tuberculosis.
- 5) Lai D, MAARMAN G, Mavumengwana V and, Baatjies LA comparative analysis of fungal agents with anti-glioblastoma properties.
- 6) Wentley G, Reiter RJ, Wang YX and, MAARMAN G, the augmenting effects of melatonin on mitochondrial bioenergetics and metabolism of healthy C2C12 myotubes.

- 7) Wentley G, Reiter RJ, Wang YX and, MAARMAN G, Investigating the novel effects & mechanisms of melatonin against excess fructose-induced toxicity in C2C12 skeletal muscle cells.
- 8) Wentley G, Reiter RJ, Wang YX and, MAARMAN G, Investigating the novel effects & mechanisms of melatonin against excess uric acid-induced toxicity in C2C12 skeletal muscle cells.
- 9) Wentley G, Reiter RJ, Wang YX and, MAARMAN G, Reviewing the roles of melatonin in the context of skeletal muscle performance, and damage and repair pathways: a focus on mitochondria.
- 10) Pretorius A, MAARMAN G, Investigating the novel effects and underlying mechanisms of CBD against VEGF-induced proliferation of endothelial cells.
- 11) Pretorius A, MAARMAN G, Investigating the novel effects and underlying mechanisms of Rooibos against VEGF-induced proliferation of endothelial cells.

Postgraduate Student Supervision and Postdoctoral Fellow Mentoring Experience

PhD	Project title	Role	Student	Institution	Status	Year
1	Delineating the novel effects of <i>Aspalathus linearis</i> (Rooibos) on mitochondrial regulation in an in vitro model of angiotensin II-induced hypertrophy and apoptosis	Main supervisor	Thato Kgatla	Stellenbosch University, Medical Physiology	Graduated	2025
2	Characterising the effects and underlying mechanisms of mitochondrial-targeted, orientin-enriched nanoparticles in MDA-MB-231 breast cancer cells	Main supervisor	Joshua Matthee	Stellenbosch University, Medical Physiology	Enrolled	2025
3	Investigating the mitochondrial effects and mechanisms of melatonin on C2C12 differentiated myotubes	Main supervisor	Garth Wentley	Stellenbosch University, Medical Physiology	Submitting 14 October 2025	2025
4	Investigating aberrant DNA methylation patterns in LOXL2 as a potential predictor of diabetes-induced cardiac dysfunction	Co-supervisor	Melisse Sharne Erasmus	South African Medical Research Council, Biomedical Research and Innovation Platform	Graduated	2020
5	The effects of prolonged fructose consumption on mitochondrial function of cardiac and skeletal muscle	Co-supervisor	Siddiqah George	University of Cape Town, Cape Heart Institute	Submitting March 2025	2025
6	Comparing the effects of the second-generation antipsychotic drug olanzapine on adipose stem cell function between male and female Wistar rats the background of low- and high-sugar feeding	Co-supervisor	Vuyolwethu Mbombela	Stellenbosch University, Medical Physiology	Enrolled	2024
7	Curcumin-encapsulated nanoparticles to target mitochondrial dysfunction in a cellular model of Parkinson's disease	Co-supervisor	Amy Buck	Stellenbosch University, Division of Molecular Biology and Human Genetics	Enrolled	2024

MSc						
	Project title	Role	Student	Institution	Status	Year
1	<i>Investigating the novel effects and mechanisms of Aspalathus linearis (Rooibos) against isoproterenol-induced hypertrophy in H9C2 myoblasts</i>	Main supervisor	Sara Shaboodien	Stellenbosch University, Medical Physiology	Graduated (cum laude)	2024
2	<i>The involvement of disrupted mitochondrial pathways in pulmonary arterial hypertension as a tuberculosis sequela in a South African cohort</i>	Main supervisor	Carmen Payne	Stellenbosch University, Medical Physiology	Graduated (summa cum laude)	2023
3	<i>Characterising pathways that contribute to post-TB lung disease</i>	Main supervisor	Dr Steve Jacobs	Stellenbosch University, Medical Physiology	Graduated (cum laude)	2024
4	<i>Investigating the novel effects and underlying mechanisms of CBD and Rooibos against VEGF-induced proliferation of endothelial cells</i>	Main supervisor	Amy Pretorius	Stellenbosch University, Medical Physiology	Submitting 1 December 2025	2025
5	<i>Investigating the Effects of Rooibos-Enriched Mitochondrial-Targeted Chitosan-Alginate Nanoparticles in an MCF-7 Breast Cancer Cell Line</i>	Main supervisor	Lindiwe Malefane	Stellenbosch University, Medical Physiology	Submitting 1 December 2025	2025
6	<i>Investigating endothelial and inflammatory pathways involved in post-TB lung disease</i>	Main supervisor	Chrisstoffel Jumaar	Stellenbosch University, Medical Physiology	Submitting 1 December 2025	2025
7	<i>Ubiquinone (CoQ) ameliorates mitochondrial bioenergetics & apoptosis in an in vitro model of doxorubicin-induced cardiotoxicity.</i>	Co-supervisor	Sharnay Naidoo	South African Medical Research Council, Biomedical Research and Innovation Platform	Graduated (cum laude)	2024
8	<i>Investigating the efficacy and underlying mechanism of cardioprotection afforded by Rooibos (Aspalathus linearis) in angiotensin-ii induced cardiac hypertrophy & apoptosis</i>	Co-supervisor	Pamela Sithelo	Stellenbosch University, Medical Physiology	Graduated	2019
9	<i>Chronic stress elicits sex-specific mitochondrial respiratory functional changes in the rat heart</i>	Co-supervisor	Caitlin Odendaal	Stellenbosch University, Medical Physiology	Graduated (cum laude)	2023
10	<i>Potential neuroprotective effects of a grape seed-derived polyphenol extract via modulation of redox signalling</i>	Co-supervisor	Kabelo Mfisa	Stellenbosch University, Internal Medicine, Experimental Medicine	Enrolled	2024
11	<i>Proteomic assessment of trace amine metabolism dysregulation in autism spectrum disorder</i>	Co-supervisor	Tamera Moodley	Stellenbosch University, Internal	Enrolled	2024

				Medicine, Experimental Medicine		
12	Comparing the effects of the second-generation antipsychotic drug olanzapine on adipose stem cell function between male and female Wistar rats the background of low- and high-sugar feeding	Co-supervisor	Natasha Marnewick	Stellenbosch University, Medical Physiology	Enrolled	2024

BSc. Hons.						
	Project title	Role	Student	Institution	Status	Year
1	Investigating the effects of Rooibos (<i>Aspalathus linearis</i>) on mitochondrial bioenergetics in a model of cardiac hypertrophy	Main supervisor	Cornel Vlok	Stellenbosch University, Medical Physiology	Graduated (Cum Laude)	2021
2	Investigating the effects of <i>Aspalathus linearis</i> (Rooibos) on mitochondrial bioenergetics in a H9c2 model of angiotensin-II induced hypertrophy and apoptosis	Main supervisor	Dinisha Giga	Stellenbosch University, Medical Physiology	Graduated (Cum Laude)	2021
3	Investigating the potential association between inflammatory markers and different stages of pulmonary TB	Main supervisor	Lindiwe Malefane	Stellenbosch University, Medical Physiology	Graduated (Cum Laude)	2023
4	Investigating the involvement of pro-inflammatory, cardiac damage, and endothelial dysfunction markers in the progression of tuberculosis to pulmonary arterial hypertension	Main supervisor	Steve Jacobs	Stellenbosch University, Medical Physiology	Graduated	2022
5	Rooibos-induced cardioprotection in a cardiomyoblast model of hypertrophy, and the Investigating the involvement of oxidative stress and overall antioxidant status	Main supervisor	Sara Shaboodien	Stellenbosch University, Medical Physiology	Graduated (Cum Laude)	2021
6	Investigating the effects of green Rooibos (<i>Aspalathus linearis</i>) extracts on liver antioxidant status in diet-induced obese male Wistar rats	Co-supervisor	Erin Robson	Stellenbosch University, Medical Physiology	Graduated (Cum Laude)	2021
7	Characterising mitochondrial network dynamics in a fatty acids-induced Insulin-resistant H9c2 model	Co-supervisor	Jeffrey Pieterse	Stellenbosch University, Medical Physiology	Graduated (Cum Laude)	2023
8	Melatonin protects against uric acid-induced mitochondrial dysfunction, oxidative stress, and triglyceride accumulation in C2C12 myotubes	Co-supervisor	Brittany Andrew	University of Cape Town, Sports Science Institute of South Africa	Graduated	2015
9	The effect of beta-oxidation or TCA cycle inhibition on mitochondrial function and the	Co-supervisor	Priska Osiki	University of Cape Town, Sports	Graduated	2015

	sensitivity of high-resolution respiratory detection			Science Institute of South Africa		
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Postdoctoral research fellows and technical assistants

Incumbent	Level	Year
Dr. Olakunle Sanni	Postdoctoral research fellow	2022-2024
Mr Sadam Parker	Technical/Research assistant	2023-2024
Miss Danelle Botha	Technical/Research assistant	2023-2024

Supervisor for MBChB elective IV/V

	Student	Institutions	Year
1	Kyle Adams	Tygerberg Hospital, Stellenbosch University	2024-2025
2	Zaahir Petersen	Tygerberg Hospital, Stellenbosch University	2024-2025
3	Jay Sinha	Tygerberg Hospital, Stellenbosch University	2024-2025
4	Megan Ray	Tygerberg Hospital, Stellenbosch University	2024-2025
5	Ross Fourie	Tygerberg Hospital, Stellenbosch University	2024-2025
6	Wonhee Lee	Tygerberg Hospital, Stellenbosch University	2024-2025
7	Zaahier Petersen	Tygerberg Hospital, Stellenbosch University	2024-2025
8	Nkosinathi Kunene	Tygerberg Hospital, Stellenbosch University	2024
9	Moramadi Magongoa	Tygerberg Hospital, Stellenbosch University	2024
10	Matthew Pretorius	Tygerberg Hospital, Stellenbosch University	2024
11	Tinashe Chifamba	Tygerberg Hospital, Stellenbosch University	2024
12	Ashoerah Mwinami	Tygerberg Hospital, Stellenbosch University	2024
13	Tarryn Pangel	Tygerberg Hospital, Stellenbosch University	2023
14	Tommy Sachin	Tygerberg Hospital, Stellenbosch University	2023

National (existing) research collaborations

	Collaborator(s)	Affiliation	Project title	Year
1	Prof. Anna-Mart Engelbrecht	Stellenbosch University, Department of Physiology	Exploring novel applications of senolytics in cervical cancer treatment resistance, Targeting Metastasis and Chemoresistance in Cervical Cancer, Cancer Risks Associated with Water Borne Chemicals in the South African Context	2024
2	Prof. Vuyo Mavumengwana, Dr Lucinda Baatjies	Stellenbosch University, Division of Molecular Biology and Human Genetics	Cytotoxic properties, glycolytic effects and high-resolution respirometry mitochondrial activities of Eriocephalus racemosa against MDA-MB 231 triple-negative breast cancer	2023-2024
3	Prof. Carine Smith	Stellenbosch University, Internal Medicine, Experimental Medicine	Modelling non-communicable diseases in autism spectrum disorder: a pharmacological approach including measuring mitochondrial pathways in a zebrafish model of autism spectrum disorder	2023-2024
4	Prof. Soraya Bardien	Stellenbosch University, Division of Molecular Biology and Human Genetics	Curcumin-encapsulated nanoparticles to target mitochondrial dysfunction in a cellular model of Parkinson's disease	2023-2024
5	Prof. Admire Dube	University of the Western Cape, School of Pharmacy	Rooibos and Orientin loaded, mitochondrial-specific nanoparticles	2023-2024
6	Prof. Sandrine Lecour	University of Cape Town, Cape Heart Institute	The effects of prolonged fructose consumption on mitochondrial function of cardiac and skeletal muscle	2019-2024

7	Prof. Rabia Johnson	South African Medical Research Council, Biomedical Research and Innovation Platform	Ubiquinol, as an antioxidant prophylactic, attenuates Doxorubicin-induced cardiotoxicity in an in vitro H9c2 cell model	2022-2024
8	Prof. Rabia Johnson	South African Medical Research Council, Biomedical Research and Innovation Platform	Investigating aberrant DNA methylation patterns in LOXL2 as a potential predictor of diabetes-induced cardiac dysfunction	2021-2024
9	Prof. Faadiel Essop	CARMA, Faculty of Medicine and Health Sciences, Stellenbosch University	Chronic stress elicits sex-specific mitochondrial respiratory functional changes in the rat heart	2022-2024
10	Dr. Jacobus Hendriks	University of Limpopo, Department of Physiology and Environmental Health	In vitro assessments on the effects of belactectin-A and galectin-3, and their chemotherapeutic efficacy in MDA-MB 231 breast cancer cells	2024
11	Dr Kelly Petersen-Ross	Stellenbosch University, Internal Medicine, Experimental Medicine	Potential neuroprotective effects of a grape seed-derived polyphenol extract via modulation of redox signalling, and Proteomic assessment of trace amine metabolism dysregulation in autism spectrum disorder	2023-2024
12	Dr. Hanel Sadie van Gijzen	Stellenbosch University, Division of Medical Physiology	Comparing the effects of the second-generation antipsychotic drug olanzapine on adipose stem cell function between male and female Wistar rats the background of low- and high-sugar feeding	2023-2024
13	Prof. Hans Strijdom	Stellenbosch University, Division of Medical Physiology	Altered mitochondrial function and HIV-associated cardiometabolic disease in populations from South Africa and Kenya (MitoSAken) study	2023-2024
14	Prof Marshall Keyster, Prof Vuyo Mavumengwana, Dr Lucinda Baatjies	University of the Western Cape, Stellenbosch University	Bioprospecting for bacterial based Cancer therapies	2023-2024

Social responsiveness, community interaction and service delivery

- 1) BSc. Honours (Medical Physiology) Programme Coordinator (2018-2024)
- 2) Member of the Faculty Committee for Postgraduate Teaching (2024)
- 3) Member of the Division of Medical Physiology Committee for Postgraduate Teaching (2020-2024)
- 4) Division of Medical Physiology Social Impact Annual Sandwich Drive and school visit at Voorbrug Secondary School in Delft (2019-2024)
- 5) Division of Medical Physiology Equality and Transformation Representative (2021-2024)
- 6) Scimathus, SU, public representative and funder-raising agent (2010 - 2023)
- 7) I was involved in a health promotion schools' outreach in Soweto, South Africa, with the Cape Heart Institute at the University of Cape Town, under the leadership of Prof. Sandrine Lecour and Prof. Karen Sliwa.
- 8) I was involved with the Division of Medical Physiology's Social Impact team and our annual school outreach at Voorbrug Secondary School in Delft.
- 9) I was involved in the annual Thuthuka-South African Institute of Chartered Accountants camp for grade 12 maths, science, and biology, and served as camp leader and guest speaker.
- 10) I did a national book tour in several underprivileged communities with my book, "Born for Greatness", which is a book I wrote and published through Naledi and on Amazon. The tour

took me to several communities throughout South Africa to do youth and community development work in network with churches (Full Gospel Church of God, the Assembly of God, Apostolic Faith Mission).

- 11) *I am a member of the Canon Collins Educational Trust in South Africa, where I serve as a motivational speaker and mentor to postgraduate students at universities.*
- 12) *A member of the community outreach team of the South African Society for Cardiovascular Research (SASCAR).*
- 13) *I am a champion/representative to promote the Scimathus programme of Stellenbosch University, and to motivate educators and learners.*
- 14) *I actively mentor postgraduate students within the faculty as part of the Division of Medical Physiology's mentorship programme.*

Enhancement of competence and learning

Courses/workshops/training attended

- 1) *SUNRISE Programme 2025*
- 2) *National Future Professorship Programme (FPP) 2025*
- 3) *Postgraduate student supervision workshop/training attended at Stellenbosch University (2018).*
- 4) *Systematic Review writing workshop/training attended at Stellenbosch University (2018).*
- 5) *NIH grant writing workshop/training attended at Stellenbosch University (2018).*
- 6) *Scientific writing workshop/training attended at Stellenbosch University (2018).*
- 7) *Siyakhula series workshop/training attended at Stellenbosch University (2019).*
- 8) *Flow cytometry Basics workshop/training attended at Stellenbosch University (2021).*
- 9) *Heart Corporate Governance, South African Heart Association workshop/training attended (2018).*
- 10) *Equality Unit Disability Indaba workshop/training attended at Stellenbosch University (2019).*
- 11) *Project Management workshop/training attended at Stellenbosch University (2018).*
- 12) *Understanding the policies relevant to the management of research contracts workshop/training attended at Stellenbosch University (2021).*
- 13) *Statistics in Research and the basics of R software workshop/training attended at Stellenbosch University (2018).*
- 14) *South African Veterinary Council animal ethics workshop/training attended at the University of Cape Town (2011).*
- 15) *Problem-based learning workshop/training attended at the University of Cape Town (2011).*

Courses/workshops/training hosted/presented

- 1) *Oroboros O2k data analysis workshop, Stellenbosch University (2023-2024)*
- 2) *Basic laboratory skills to honours students, Stellenbosch University (2019-2024)*
- 3) *Mitochondrial function workshop for conference delegates, University of Cape Town (2015)*
- 4) *Mitochondrial function workshop to honours students, University of Cape Town (2015)*
- 5) *Mitochondrial function workshop to honours students, University of Cape Town (2013)*
- 6) *Scientific writing skills to honours students, Stellenbosch University (2018)*

Professional associations and congresses

- 1) *Pulmonary Vascular Research Institute's Global Taskforce for Pulmonary Vascular Infections (2018-2024)*
- 2) *Pulmonary Vascular Research Institute's Consortium for Infections and Pulmonary Vascular Diseases (iPVD) Exco Member (2019-2024) <https://ipvdc.org/about-us/>*
- 3) *American College of Chest Physicians (2019-2024)*
- 4) *American Heart Association (2019-2024)*
- 5) *American Thoracic Society (2019-2024)*

- 6) *European Society of Cardiology (2019-2024)*
- 7) *South African Society of Cardiovascular Research (2019-2024)*
- 8) *Physiological Society of Southern Africa (2019-2024)*
- 9) *South Africa Heart Association (2019-2024)*
- 10) *International Society of Heart Research - European Section (2012-2014)*

Managerial, leadership and administrative capacities

- 1) *Division of Medical Physiology's Committee for Postgraduate Programmes, Stellenbosch University (2019-2024)*
- 2) *Faculty Committee for Postgraduate Teaching, Stellenbosch University (2024)*
- 3) *MBChB selection committee (B1, B2, B3, FMHS, SU) (2022-2024)*
- 4) *HPCSA Accreditation panel for MBChB (2024)*
- 5) *BSc. Faculty Honours Task Team, Faculty of Medicine & Health Sciences, Stellenbosch University (2023-2024)*
- 6) *South African Society for Cardiovascular Research - secretary (2020-2023)*
- 7) *South African Society for Cardiovascular Research - Public Relations (2024-2026)*
- 8) *PhD committee/panel member for the project of Ms Jana Coetzee, Faculty of Medicine & Health Sciences, Stellenbosch University (2022)*
- 9) *PhD project evaluation panel chairperson for Mr Bernie Groenewald, Faculty of Medicine & Health Sciences, Stellenbosch University (2024)*
- 10) *Social & Ethics Committee, Division of Medical Physiology, Faculty of Medicine & Health Sciences, Stellenbosch University (2019-2024)*
- 11) *Dean's Advisory Committee for Transformation, Faculty of Medicine & Health Sciences, Stellenbosch University (2017-2022)*
- 12) *Coordinator of BSc. Honours program in Medical Physiology, Faculty of Medicine & Health Sciences, Stellenbosch University (2018 - 2024)*
- 13) *Pulmonary Vascular Research Institute Annual Congress organizing committee member (international, 2024)*
- 14) *Post-TB Research Symposium's Annual congress, organizing committee member (national & international, 2023-2025)*
- 15) *International Mitochondrial Physiology School's, annual conference - local organising committee member, University of Cape Town (2015)*

Recognition and Awards

Honours, Awards and Scholarly Recognition

	Award name	Institution	Awarded/Nomination	Year
1	<i>TW Kambule-Researcher Award</i>	<i>National Science and Technology Forum</i>	<i>Nomination</i>	<i>2024-2025</i>
2	<i>TW Kambule- Emerging Researcher Award</i>	<i>National Science and Technology Forum</i>	<i>Nomination</i>	<i>2023-2025</i>
3	<i>Y2 rating</i>	<i>National Research Foundation of South Africa</i>	<i>Awarded</i>	<i>2019</i>
4	<i>Award of Excellence</i>	<i>7th Mitochondrial Physiology School</i>	<i>Awarded</i>	<i>2015</i>
5	<i>Clinical Excellence Award</i>	<i>South African Heart Association</i>	<i>Awarded</i>	<i>2012</i>
6	<i>Award of Excellence</i>	<i>Stellenbosch University, Academic Year Day</i>	<i>Awarded</i>	<i>2009</i>

Scholarships and Bursaries received

	Award	Funder	Level	Institution	Amount awarded per annum	Year
1	Fellowship	National Research Foundation of South Africa, Innovation Postdoctoral Research Fellowship	Post-doc	University of Cape Town	R305 000	2015-2016
2	Scholarship	Oppenheimer Memorial Trust	PhD	University of Cape Town	R50 000	2014
3	Scholarship	Harry Crossley Foundation of South Africa	PhD	University of Cape Town	R20 000	2014
4	Scholarship	KW Johnstone	PhD	University of Cape Town	R13 000	2014
5	Scholarship	National Research Foundation of South Africa	PhD	University of Cape Town	R80 000	2014
5	Bursary	University of Cape Town	PhD	University of Cape Town	R60 000	2014
6	Scholarship	National Research Foundation of South Africa	PhD	University of Cape Town	R50 000	2013
7	Financial Aid Bursary	University of Cape Town	PhD	University of Cape Town	R80 000	2012-2013
8	Scholarship	Canon Collins Educational Trust	PhD	University of Cape Town	R60 000	2012-2013
9	Scholarship	Investec	PhD	University of Cape Town	R60 000	2012-2013
10	Grant holder-linked Bursary	National Research Foundation of South Africa	PhD	University of Cape Town	R60 000	2011-2013
11	Bursary	National Research Foundation of South Africa	MSc	Stellenbosch University	R60 000	2008-2010
12	Financial Aid support	Division of Medical Physiology	MSc	Stellenbosch University	R15 000	2008-2010
13	Financial Aid support	Division of Medical Physiology	Honours	Stellenbosch University	R15 000	2007
14	Bursary	National Research Foundation of South Africa	Honours	Stellenbosch University	R30 000	2007

Student awards and the success of students - recognition of excellence transfer.

	Student	Award	Year
1	Carmen Payne	Research & Innovation Excellence Award (postgraduate student category), Stellenbosch University.	2023
		S2A3 Medal Nomination	2023
		Golden Key Society membership awarded	2023
2	Sara Shaboodien	Golden Key Society membership awarded	2023
3	Dr Steve Jacobs	All Abilities Golf Tour golfer award	2024
		South African Disabled Golf Association, disabled golfer (open series) award	2021
4	Thato Kgatla	Golden Key Society membership awarded	2022
		Biocom Postgraduate Award	2022
5	Lindiwe Malefane	Stellenbosch University Postgraduate Scholarship Programme Award	2024

	Highest Academic Achiever Award	2023
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External examining

NRF rating reviews conducted

- 1) Dr. SN Dlamini (2024), NRF rating reviewed
- 2) Prof J Marnewick (2023), NRF rating reviewed
- 3) Dr R Chandran (2022), NRF rating reviewed
- 4) Prof. R Louw (2022), NRF rating reviewed
- 5) Dr AB Oyenih (2022), NRF rating reviewed
- 6) Dr EP Snelling (2022), NRF rating reviewed
- 7) Dr M Cerf (2022), NRF rating reviewed
- 8) Dr P Dladla (2022), NRF rating reviewed
- 9) Prof Rala Goon (Fort Hare University) (2020), MRC RCDI grant application reviewed
- 10) Prof Maya van Gent (Fort Hare University) (2020), MRC RCDI grant application reviewed
- 11) Dr F Michel (Wits) (2019), NRF CPRR grant application reviewed
- 12) Prof R Johnson (SAMRC BRIP) (2019), NRF CPRR grant application reviewed

Research grant reviews conducted

- 1) MRC RCDI, Prof. Rala Goon (Fort Hare University) (2020)
- 2) MRC RCDI, Prof. Maya van Gent (Fort Hare University) (2020)
- 3) NRF CPRR, Dr F Michel (Wits) (2019)
- 4) NRF CPRR, Prof R Johnson (SAMRC BRIP) (2019)

MSc thesis examiner experience

- 1) Mr Haskly Mokoena, University of Limpopo (2024)
- 2) TN Mkhathshwa, University of Limpopo (2023)
- 3) J Coetzee, SU (2022)
- 4) C Sookram, UKZN (2020)
- 5) HM van der Merwe, SU (2019)

PhD dissertation examiner experience

- 1) A Adeoti, UKZN (2022)
- 2) NF Sangweni, SAMRC-SU (2022)
- 3) TM Nyanbuya, UKZN (2021)
- 4) BA Nkala, UKZN (2020)
- 5) HC Miller, NWU (2020)

External moderator for other institutions

- 1) FLGX 329 Cardiovascular Physiology applications module, Northwest University (2022-2023)
- 2) SPLA031 - Environmental influences on the human body module, University of Limpopo (2022-2024)
- 3) Annual Research Day, Abstract scoring and presentation judge, Annual Research Day, University of Limpopo (2023)
- 4) PSSA Annual Congress, Abstract scoring (2024)
- 5) Pulmonary Vascular Research Institute Annual Congress, Abstract scoring (2025)
- 6) Served as a co-editor for the international journal, Frontiers in Endocrinology (impact factor 5.555) (2021-2022)
- 7) UK Research and Innovation (UKRI), Biotechnology and Biological Sciences Research Council, grant application reviewer invitation, University of Glasgow, Long-term implications of host-microbiome crosstalk for host metabolic health (2025).
- 8) ANR French National Research Agency, grant application reviewer, targeting extracellular proteins to preserve capillary integrity in the face of inflammation, Prof. Christophe Guignabert's funding application, France (2024).

- 9) Wyoming AES Competitive Grants Review invitation, University of Wyoming, Effects of sub-clinical expression of high altitude (Brisket) disease on economically important traits in beef cattle (2015).
- 10) Invitation to review grant proposal for the National Science Center, Poland. Prof. Aleksandra Paterek, Understanding the mechanism of development of right heart failure as the first and most important step in the treatment development (2020).
- 11) NRF MSc Bursary Application Review Committee member (NRF, 2023)

Performance marks

- 1) 4.015 (2024)
- 2) 3.70 (2023)
- 3) 3.84 (2022)
- 4) 4.12 (2021)

Grants and Research Funding received

	Description	Funder	Role	Year	Awarded/ Applied	Awarded amount
1	Self-initiated Research Grant	South African Medical Research Council	Principal investigator	2023-2025	Awarded	R600 000
2	Support grant for Y-rated researchers	National Research Foundation of South Africa	Principal investigator	2023-2024	Awarded	R300 000
3	Research Grant	South African Rooibos Council	Principal investigator	2023-2025	Awarded	R 1.52 million
4	Self-initiated Research Grant	South African Medical Research Council	Principal investigator	2018-2020	Awarded	R600 000
5	Research Grant	South African Rooibos Council	Principal investigator	2018-2020	Awarded	R842 406
6	Equipment-Related Travel	National Research Foundation of South Africa	Principal investigator	2022	Awarded	R135 000
7	Equipment grant	Stellenbosch University, Faculty of Medicine and Health Sciences	Principal investigator	2023	Awarded	R511 000
8	Equipment grant	Stellenbosch University, Faculty of Medicine and Health Sciences	Principal investigator	2019	Awarded	R 1.2 million
9	Incentive funding	National Research Foundation of South Africa	Principal investigator	2020-2023	Awarded	R240 000
10	Research funding	Pulmonary Vascular Research Institute	Principal investigator	2024-2025	Awarded	R 1.09 million
11	Subcommittee C	Stellenbosch University, Faculty of Medicine and Health Sciences	Principal investigator	2022-2024	Awarded	R440 000
12	Technical Research Assistant grant	Stellenbosch University, Faculty of Medicine and Health Sciences	Principal investigator	2022-2024	Awarded	R60 000
13	Scientific travel for an international conference	Stellenbosch University, Faculty	Principal investigator	2023	Awarded	R20 000

		<i>of Medicine and Health Sciences</i>				
14	<i>Early Researcher Travel Grant</i>	<i>African Commonwealth Universities</i>	<i>Principal investigator</i>	2023	<i>Awarded</i>	<i>R36 000</i>
15	<i>Early Career Research Award</i>	<i>Stellenbosch University, Faculty of Medicine and Health Sciences</i>	<i>Principal investigator</i>	2018	<i>Awarded</i>	<i>R112 463</i>
16	<i>Research Project Funding</i>	<i>Harry Crossley Foundation of South Africa</i>	<i>Principal investigator</i>	2022	<i>Awarded</i>	<i>R31 500</i>
17	<i>Divisional research grant</i>	<i>Stellenbosch University, Division of Medical Physiology</i>	<i>Principal investigator</i>	2019	<i>Awarded</i>	<i>R50 000</i>

Internationalisation

	Collaborator	Institution	Research title	Collaboration/Visit/Co-author	Year
1	<i>Prof. Ghazwan Butrous</i>	<i>Imperial College of London, UK</i>	<i>Investigating signs of pulmonary vascular remodelling and early signs of pulmonary arterial hypertension in a TB mouse model, and the involvement of the gut microbiome in pulmonary arterial hypertension.</i>	<i>Research collaborator and co-author.</i>	<i>2019-2024</i>
2	<i>Prof. Yong-Xiao Wang</i>	<i>Albany Medical Center, USA</i>	<i>Investigating the novel effects and mechanisms of melatonin-induced protection in skeletal muscle</i>	<i>Research collaborator and co-author.</i>	<i>2019-2024</i>
3	<i>Prof. Russel J. Reiter</i>	<i>UT Health San Antonio University of Texas Health Science Center at San Antonio</i>	<i>Investigating the novel effects and mechanisms of melatonin-induced protection in skeletal muscle.</i>	<i>Research collaborator and co-author.</i>	<i>2019-2024</i>
4	<i>Dr. Celso Khosa, Prof. Ana Mocumbi</i>	<i>Instituto Nacional de Saúde (INS), Moçambique</i>	<i>TB Sequel global cohort study of 2000 patients with newly diagnosed TB: investigating the novel roles of mitochondrial pathways.</i>	<i>Research collaborator and co-author.</i>	<i>2019-2024</i>
5	<i>Prof. Ralph Schermuly</i>	<i>Justus Liebig University Giessen, Excellence Cluster Cardio-Pulmonary System (ECCPS)</i>	<i>Novel putative pharmacological therapies to protect the right ventricle in pulmonary hypertension: a review of current literature</i>	<i>Research collaborator and co-author.</i>	<i>2013-2017</i>
			<i>Research visit: to learn in vivo pulmonary arterial banding surgery in mice</i>	<i>Research collaborator</i>	<i>2013</i>

			<i>and rats, in vivo right heart catheterization in mice and rats, and echocardiography in rats and mice with pulmonary hypertension and right heart failure.</i>		
6	<i>Prof. Rainer Schulz</i>	<i>Institute of Physiology, Justus Liebig University Giessen, Giessen, Germany, and³ Universities of Giessen and Marburg Lung Centre</i>	<i>Novel putative pharmacological therapies to protect the right ventricle in pulmonary hypertension: a review of current literature</i>	<i>Research collaborator and co-author.</i>	<i>2013-2017</i>
7	<i>Prof. Denise Hilfiker-Kleiner</i>	<i>Medizinische Hochschule, Hannover, Germany</i>	<i>Research visit: to learn new laboratory techniques and investigate the pathways and mechanisms involved in peripartum cardiomyopathy in a mouse model.</i>	<i>Research collaborator</i>	<i>2013</i>

Impact

- 1) I am a member of the International Pulmonary Vascular Research Institute (PVRI)'s global Task Force and an Exco member of the PVRI's international consortium on pulmonary vascular disease. Here, I have been actively involved in changing policy regarding the diagnosis of pulmonary hypertension in developing countries, developing novel diagnostic algorithms, and working towards updating the WHO criteria for pulmonary hypertension risk factors.*
- 2) I am a member of the multi-country consortium and international committee commissioned by the American Thoracic Society (ATS) to address challenges in the diagnosis and treatment of pulmonary hypertension in low-to-middle-income countries.*
- 3) I have been a member of the post-TB lung disease national symposium committee for the past three years, where I have contributed to improving health policies regarding the diagnosis and management of post-TB lung disease and pulmonary hypertension in developing countries. The work was recently published in Pulmonary Circulation (2.886).*
- 4) I served as the research manager at the Desmond Tutu TB Centre (DTTC), where I worked closely with the Western Cape Department of Health and other stakeholders, to change policy regarding the use of CD4 count as an indicator for ART initiation, during my time in the PopART study (a study involving 3 million participants). Our protocols were accepted as policy in the provincial and national Government's Department of Health so that now HIV people are immediately placed on ART regardless of CD4 count.*
- 5) I am a member of the steering committee for the South African Rooibos Council and Department of Science and Innovation (from the government) that deals with funding provided for Rooibos research in South Africa reviewing the Rooibos field and reporting back to the Government after the completion of projects.*
- 6) Maarman G, the South African Heart Association, National Journal Club, May (2022).*

- 7) Maarman G, Investigating the cardioprotective effects of Rooibos (*Aspalathus linearis*) in Angiotensin-II induced cardiomyocyte hypertrophy & apoptosis, Hatter Institute for Cardiovascular Research in Africa (HICRA), October, (2020).
- 8) PSSA Annual Congress expert reviewer of submitted abstracts (2024)
- 9) University of Limpopo Annual Research Day- adjudicator (2023)
- 10) Ethics reviewer of a postdoctoral research project - Dr T Shabangu (FMHS, SU) (2023)
- 11) Presenter, South African Heart Association Journal Club (2022)
- 12) BRIP Symposium Judge (2020)
- 13) Human Physiology 271 symposium judge (2019)
- 14) Served as a peer reviewer for 12 journals thus far (2015-2024)
- 15) External moderator - Exit level module FLGX 329, Cardiovascular Physiology applications, of the North-West University for (2021-2023)
- 16) External moderator - the University of Limpopo, SPLA031 course (Environmental influences on the human body) (2023-2024)

Television interviews

- 1) "Discussing the Rooibos research, the focus on CVD, men's health, stress, and reproductive biology", eNCA (2024).
- 2) "Pulmonary hypertension and post-TB lung disease awareness", KLoP (Dstv) (2023)
- 3) "Scimathus awareness", Ivor en die verksilmakers, Via (Dstv) (2020)
- 4) "Pulmonary hypertension awareness", eNCA (2020)
- 5) "A story of second chances", Youtube & Facebook, (2019)
- 6) "Scimathus awareness", SABC 2, Morning Live (2008)

Radio interviews

- 1) "Discussing the Rooibos research, the focus on CVD, men's health, stress, and reproductive biology", Alex FM, 89.1 FM, Radio Kragbron, SA FM, Radio Turf FM, Channel Islam International (2024)
- 2) "Pulmonary hypertension and post-TB lung disease awareness", Radio 786, 100.4 FM, (2020)
- 3) "Pulmonary hypertension and post-TB lung disease awareness", Radio Musika (2020)
- 4) "Pulmonary hypertension and post-TB lung disease awareness", Radio 934 FM (2020)
- 5) "Pulmonary hypertension and post-TB lung disease awareness", Radio Disa 95.5 FM (2019)
- 6) "Pulmonary hypertension and post-TB lung disease awareness", Radio KC 107.7 FM (2019)
- 7) "Pulmonary hypertension and post-TB lung disease awareness", Radio Cape Pulpit (2019)

Articles (newspaper, online or website-based)

- 1) "Jury still out on mitochondrial transplantation as treatment for pulmonary hypertension", SU Website (2022)
- 2) "A killer disease stalks Africa: Pulmonary hypertension", News 24 (2022)
- 3) "SU researchers shed light on pulmonary hypertension", SU Website (2020)
- 4) "Scimathus open deure vir NNS navorser", SU Website (2019)
- 5) "Pulmonary hypertension: why creating awareness is key in Africa", The Conversation (2020)
- 6) "From Failure to Triumph for South African Students", The Voice of America (2010)
- 7) "Second chance for students works miracles for crippled healthcare", The Mail & Guardian (2010)

Extracurricular activities

- 1) *At Heart Community Health/SCAN NPO collaborator on promoting community health and wellness (2022-2023)*
- 2) *NAPTOSA Winelands Branch - Motivational workshop to motivate educators (2023)*
- 3) *Scimathus Social Media Fundraising Campaign to promote funding requisition that can help Scimathus continue with their life-changing work (2022)*
- 4) *The Religious Leaders Task Team of the Western Cape local Government - Expert medical/scientific advisor and consultant during the COVID19 pandemic to educate gatekeepers of the faith communities in Cape Town (2020)*
- 5) *WCED Motivational workshops to motivate educators and learners at various schools (2017-2019)*
- 6) *House of Hope (NPO, held a fund-raising campaign) to help the home care for abandoned children or those removed from abusive homes (2018)*

References and full contact details

International: Prof. Ghazwan Butrous

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Founder and former CEO of the PVRI

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International: Prof. Yong-Xiao Wang

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