Kayla Alexis Midgley

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<u>https://www.fabinet.up.ac.za/index.php/people-profile?profile=1484</u>

EDUCATION

Doctorate in Genetics (PhD Genetics) | 2024 - Present

Hans Merensky Chair in Avocado Research, Forestry and Agricultural Biotechnology Institute (FABI), Department of Biochemistry, Genetics and Microbiology, University of Pretoria

Masters in Genetics (MSc Genetics) | Cum Laude | 2021-2023

Hans Merensky Chair in Avocado Research, Forestry and Agricultural Biotechnology Institute (FABI), Department of Biochemistry, Genetics and Microbiology, University of Pretoria

Bachelor of Science Honours in Genetics (BScHons Genetics) | 2020

Hans Merensky Chair in Avocado Research, Forestry and Agricultural Biotechnology Institute (FABI), Department of Biochemistry, Genetics and Microbiology, University of Pretoria

Bachelor of Science in Biotechnology (BSc Biotechnology) | 2017-2019

Department of Biochemistry, Genetics and Microbiology, Faculty of Natural and Agricultural Sciences at the University of Pretoria

PUBLICATIONS

Midgley KA, van den Berg N, Backer R, Swart V. Identification of *Phytophthora cinnamomi* CRN effectors and their roles in manipulating cell death during Persea americana infection. BMC Genomics. 2024;25(1):435.

Midgley KA, van den Berg N, Swart V. Unravelling plant cell death during *Phytophthora* infection. Microorganisms. 2022;10(6):1139.

CONFERENCES & SYMPOSIUMS

International Society of Molecular Plant-Microbe Interactions Congress, Cologne, Germany | Poster | 2025

Midgley KA., van den Berg N., Boevink P., Swart V. Cracking the code on *Phytophthora cinnamomi* CRN effectors and their role in plant cell death. Poster presentation at the 2025 International Society of Molecular Plant-Microbe Interactions Congress; 13-17 July 2025, Cologne, Germany.

12th International Congress of Plant Pathology, Lyon, France | Poster | 2023

Midgley KA., van den Berg N., Backer R., Swart V. Identification of *Phytophthora cinnamomi* CRN effectors: Foot soldiers of Phytophthora Root Rot. Poster presentation at the 12th International Congress of Plant Pathology; 20-25 August 2023, Lyon, France.

52nd Congress of the South African Society of Plant Pathology, Pretoria, South Africa | Presentation | 2022

Midgley KA, van den Berg N, Swart V. *Phytophthora cinnamomi* CRN effectors and their roles in manipulating cell death to maintain their hemi-biotrophic life-style. Presentation presented at the 52nd Congress of the South African Society for Plant Pathology; 1-3 August 2022; Pretoria, South Africa.

AWARDS

- Received a scholarship on behalf of the French Phytopathological Society & The International Society for Plant Pathology, to attend the 12th annual International Congress of Plant Pathology (ICPP2023) in Lyon, France.
- Acknowledged as one of the top five student presenters at the 52nd Congress of the South African Society of Plant Pathology (SASPP2022).
- Awarded the Grace Waterhouse Fellowship by the British Society for Plant Pathology (BSPP) to fund a research visit to The James Hutton Institute in 2025.

MEMBERSHIPS IN NATIONAL AND INTERNATIONAL BODIES

- South African Society of Plant Pathology (Student member since October 2022)
- British Society of Plant Pathology (student member since April 2024)

EXPERIENCE

CPHB Mentor | DSI-NRF Centre of Excellence in Tree Health Biotechnology (CPHB) mentorship programme, University of Pretoria | 2024

As a CPHB mentor, I facilitated a comprehensive introduction to the world of postgraduate studies, offering firsthand exposure to the daily routines and intricacies of academic research. My responsibilities included guiding a third year undergraduate student through laboratory techniques and fundamental concepts essential for success in research and academia. Through personalized mentoring sessions, I provided support, encouragement, and practical insights to empower my mentee in their educational and professional journey.

Demonstrator | Department of Biochemistry, Genetics and Microbiology, University of Pretoria | 2020 - Present

As a demonstrator at the University of Pretoria, I actively contributed to the academic development of undergraduate and honours students by assisting lecturers in conveying complex concepts during tutorial sessions. My role involved not only facilitating discussions and clarifying doubts but also marking tutorial tests, semester examinations, and final exams. I had the privilege of serving as a demonstrator for a range of microbiology and genetics modules, as well as an honours laboratory techniques course.

Genetics representative for Postgraduate Student Association for the Natural and Agricultural Sciences (PSANA) | University of Pretoria | January 2021 – April 2022

As the Genetics representative for PSANA, I served as an advocate for the interests of postgraduate students within the faculty. My responsibilities included representing the concerns and perspectives of postgraduate students in faculty structures, ensuring their voices were heard and their needs addressed effectively. Additionally, I played a role in facilitating communication between faculty and departmental structures, ensuring the smooth flow of critical information.

REFERENCES

Dr Velushka Swart | Research Supervisor Lecturer

Hans Merensky Chair in Avocado Research Forestry and Agricultural Biotechnology Institute (FABI), Department of Biochemistry, Genetics and Microbiology, University of Pretoria

Email: velushka.swart@up.ac.za

Prof. Noëlani van den Berg | Research Co-supervisor Chair and Full Professor

Hans Merensky Chair in Avocado Research Forestry and Agricultural Biotechnology Institute (FABI), Department of Biochemistry, Genetics and Microbiology, University of Pretoria

Email: noelani.vandenberg@up.ac.za