# MICHELLE GOUWS

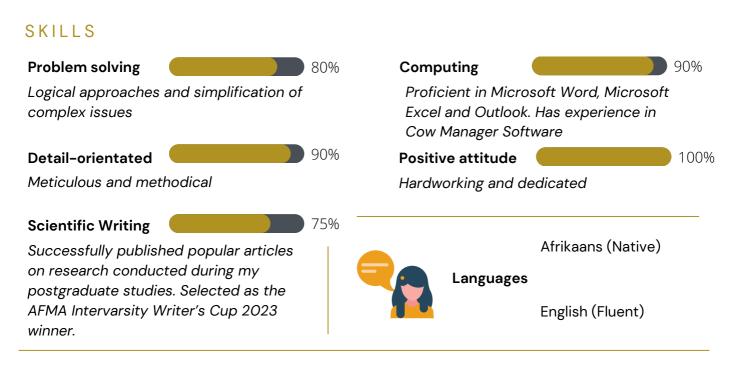
PhD Student (AgriSciences)

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in www.linkedin.com/in/michelle-gouws-059002192

### PROFILE SUMMARY

I am an extremely hardworking, well organised and driven person. I am a team player and excellent communicator. I am passionate and ambitious, always doing more than necessary to reach my goals. I thrive in places where I am able to work with people, and my inquisitive nature means that I am a fast learner, constantly exposing myself to new learning possibilities in order to broaden my skillset.



# EDUCATION

PhD Student Stellenbosch University Dissertation title: Clostridioides difficile in farm environments, food producing animals. and game: Prevalence and genetic profiling to aid in risk control strategies in the Western Cape, South Africa	2023 - present
MSc Animal Science (Cum Laude)	2021 - March 2023
Stellenbosch University	
The research thesis titled 'The comparitive effects of essential oil	

compounds and monensin in the diet of pre-weaned calves on animal growth, performance and the prevalence of antibiotic resistant *Escherichia coli* and *Salmonella* spp.' highlighted the role subtherapeutic antibiotics present in animal feed plays in contributing to multi-drug resistance present in the gastrointestinal microorganisms of South African dairy calves. BScAgric Animal Science (Animal Production Systems)

Stellenbosch University

- Computer skills (Cum Laude)
- Animal Production Science (Cum Laude)
- Monogastric Animal Nutrition (Cum Laude)
- Animal Nutrition Science (Ruminant) (Cum Laude)
- Animal Science\* (Cum Laude)

\* (Final Year Thesis: Genetic and Non-Genetic Factors affecting Tick Resistace in African Beef Cattle)

#### **National Senior Certificate**

HMS Bloemhof

EXPERIENCE

#### Postgraduate Research, MSc

Stellenbosch, Western Cape

- Successful raising of 34 Ayrshire heifer calves up until weaning for MSc research purposes.
- General calf management.
- Essential animal husbandry skills, such as correct disease diagnosis, administering of medication, intravenous fluid therapy, and wound treatment.
- Competent in techniques used in assisted calving.
- Identifying and enumerating of *Eimeria* oocytes form faecal samples using the McMaster method.

#### Intership

Tradouw Ondernemings Bpk., Swellendam

- Successful raising of 18 Jersey bull calves up until weaning for MSc research purposes.
- Systematic improvement of calf rearing unit.
- Practical farm management experience.

#### **Course Tutor**

Animal Nutrition 324, Sheep digestibility Trial

- Supervising students during a practical 3 week trial consisting of caring for and sampling from 49 Dohne Merino sheep.
- Laboratory analysis of animal feed, faeces, and urine.
- Determination of crude protein, crude fibre, fat, moisture, and ash from feed obtained during the trial.
- Assisting in marking of tests and assignments.

#### **Research Assistant**

Centre for Food Safety, Department of Food Science at Stellenbosch University

- Isolation of Salmonella spp. from raw chicken samples using ISO standard method 6579-1:2017
- Laboratory techniques in total viable microbial counts, and isolation of *E. coli* and *Enterobacteriaceae*.

#### 2016 - 2020

April, 2022 – July, 2022

July, 2021 - March, 2022

January , 2021 - June, 2021

2015

September, 2020 - January 2021

#### **Stable Manager**

Maties Equestrian, Stellenbosch

- Consisted of caring for 23 horses, overseeing of billing of clients where each horse would have personalised feeding regimes and seperate veterinary needs.
- Management of staff, grazing fields, and feed orders.
- Management of social media accounts, marketing, and hiring of new staff.

# AWARDS & ACHIEVEMENTS

#### AFMA Intervarsity Writer's Cup Winner

Student Award - Own Research

• Article: The effect of ionophore use and essential oil compounds in calf diets on animal growth and the prevalence of antibiotic resistant *Escherichia coli* 

#### Nominated for the AFMA Student of the Year award (Koos van der Merwe Prize)

2023

2022 - 2023

2022 - 2023

2023

Industry recognition

• Exceptional graduate and postgraduate students that have made significant contributions to field of Animal Nutrition, or students who show general commitment towards the animal feed industry are nominated for this award.

# Selected as one of the Top 10 Student poster presentations at the IAFP European 2023 Symposium

Aberdeen, Scotland

• Poster title: The effect of ionophore use and essential oil compounds in the diet of South African calves on the prevalence of antibiotic-resistant *Escherichia coli* and *Salmonella* spp.

#### Publication of popular articles

- South African Dairy Mail
- AFMA Matrix

#### Conference attendings

- International Association for Food Protection (IAFP) European Symposium held during May 2023 in Aberdeen, Scotland (Poster presentation)
- The 8th All Africa Conference for Animal Agriculture (AACAA) held during September 2023 in Gabarone, Botswana (Poster presentation attended online)
- Animal Feed Manufacturer's Association's 2023 Forum held during September 2023 in Sun City, South Africa
- International Dairy Federation (IDF) held during October 2023 in Chicago, USA (Poster presentation)

#### Other

- A media communication through Stellenbosch University's Corporate communications and media office was made available to the media, which led to multiple articles in popular magazines (Grond tot Mond, Landbou Weekblad), a newspaper article (Die Burger), as well as radio interviews with RSG Landbou and Namakwaland FM.
- Two scientific articles are to be submitted for peer-review early 2024.

# LICENCES & CERTIFICATES

Driver's Licence:	B 60460002CW92	
Artificial Insemination	Course	2022
Rothman Livestock Tr	aining Services	
• Competent in the a	artificial insemination of cattle	
Agri-Management and	Mentorship Course	2021
Stellenbosch Universit	Σ <b>γ</b>	
<ul> <li>Credential ID CeDiD</li> <li>Project Management</li> <li>Expert Leadership statement</li> </ul>	nt.	
Firearm Competency		2018
Western Cape Firearm	ns Training School	
<ul> <li>Completed firearm Carbines, Handgun</li> </ul>	n competency training of handling and using Manually Operated Rifles and Shotgun.	3 or
Dohne Merino Junior C	Course	2018
Dohne Merino Breed S	Society of South Africa	
Competent in Dohr	ne Merino Breed Standards.	
Diploma in South Afric	an Mutton Merino Breed Standards	2018
SAMM Breeder's Socie	ety	
Competent in Sout	h African Mutton Merino Breed Standards.	
Other		
•	tistics (Biometry Course taken in BScAgric Animal Science). howledge of SAS software (Postgraduate data analysis course, Stellenb	osch

- Proficient in Microsoft programmes (Word, Excel, Powerpoint, Publisher, XLStat).
- Competent in AMTS.Cattle and Winfeed Animal Feed Formulating Programs (Ruminant Nutrition and Monogastric Nutrition Courses taken in BScAgric Animal Science).
- Refresher Artificial Insemination course completed in Swellendam (2022).
- Key note speaker at the annual Stellenbosch University Postgraduate Information evening for 2021 and 2022.
- Member of the marketing team for the Department of Animal Sciences during 2021.

# HOBBIES



Photography





Hiking

Music (Violin)

# REFERENCES

Dr Lobke Steyn

Masters Supervisor

lobke@sun.ac.za

**Dr Diane Rip** 

PhD Supervisor

dirip@sun.ac.za

#### Ms Monika Basson

Undergraduate Recruitment and Marketing Faculty of AgriSciences

mh@sun.ac.za

# FUTURE ENDEVOURS

After completing my undergraduate degree in Animal Science, I was faced with the question of "what to do next?" I have always loved research, and so I decided to continue my

studies, completing a master's degree in Animal Science. I am now pursuing a PhD in Agriculture with the focus on an emerging foodborne pathogen, where we are hoping to identify science-based risk control methods to be able to effectively ensure food safety in South Africa.

I have a passion for working with people, and I want to be able to find a career opportunity where I will be able to teach, share knowledge, and uplift the individuals and communities I work with. My hope with this opportunity is to gain invaluable experience and knowledge, and develop a valuable skillset that I may be able to incorporate into all areas of my future career. Looking forward to hear from you, Michelle

