



**Stellenbosch**  
UNIVERSITY  
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UNIVERSITEIT

forward together  
sonke siya phambili  
saam vorentoe

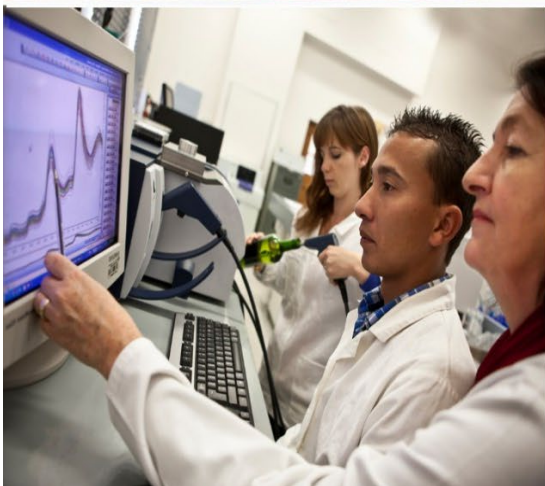
## **SOUTH AFRICAN GRAPE AND WINE RESEARCH INSTITUTE DEPARTMENT OF VITICULTURE AND OENOLOGY**



**Postgraduate Training and Research  
in Grapevine and Wine Sciences  
and Wine Biotechnology**



***Prospectus***  
**2023**



# 1. Introduction

Postgraduate Training and Research in Grapevine and Wine Sciences and Biotechnology at the Department of Viticulture and Oenology (DVO) is coordinated by the South African Grape and Wine Research Institute (SAGWRI) at Stellenbosch University. SAGWRI operates across faculties as an open institute that can accept students with a diverse array of undergraduate and postgraduate degrees. This brings tremendous opportunities to perform transdisciplinary research and students with a range of undergraduate backgrounds (Agricultural Sciences, Natural Sciences, Engineering etc) can be accommodated in our postgraduate programmes.

For more information on the functioning of the SAGWRI, please contact Prof MA Vivier ([mav@sun.ac.za](mailto:mav@sun.ac.za)) and visit our website at <https://sagwri.sun.ac.za/>

# 2. Research



## 2.1 Introduction to the research topics of SAGWRI

The core research disciplines of the Institute includes Viticulture, Oenology, Biotechnology, Sensory and Consumer Science, Chemistry and Spectroscopy as well as Data Science. These disciplines converge and form the base of the “Integrated Grape and Wine Sciences core that underlie our various research themes/programmes.

The main research programmes/themes include:

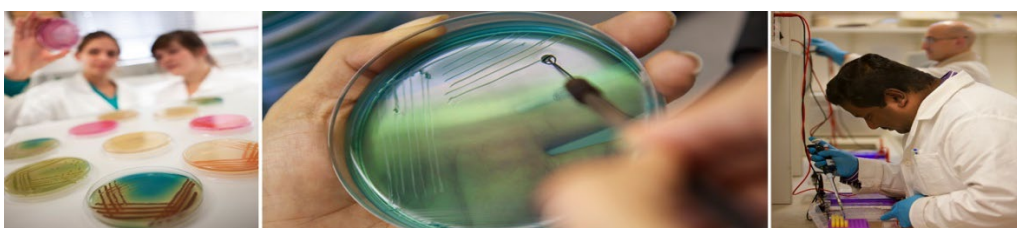
1. Grapevine Biology, Biotechnology and Improvement
2. Grapevine x Environment x Management (GEMs) Interactions
3. Digital Viticulture “New Tools for Precision Management”
4. Wine Microbial Ecosystems And Biotechnology
5. Wine Production
6. Spectroscopic Applications in Grape and Wine Sciences
7. Sensory and Consumer Science of Wine

### Short explanation of the programmes that are included in our research portfolio:

- **The Grapevine Biology/Biotechnology and Improvement programme** includes aspects of Grapevine Genetics, Genomics and Metabolomics. Projects in this programme may be co-supervised by several researchers as the projects are typically cross-cutting in their scope. In general, all research makes use of a combination of molecular tools, plant tissue culture, analytical techniques and computational approaches to answer questions surrounding grapevine cellular physiology in response to environmental and developmental cues.
- **The Grapevine x Environment x Management Interactions (GEMs) programme** involves the study of grapevines in interaction with their biotic and abiotic environments. In this GEMS programme research is being conducted that integrates aspects of vineyard characterization in terms of the site and climate, as well as the performance of the grapevines in terms of growth and fruit production and ripening. Very often, model vineyards are used to

evaluate the impacts of particular abiotic, or biotic stresses to inform, or improve management practices. These projects typically span from the vineyard to the final products (wine or table grapes) and is therefore integrating different types of data. The use of remote sensing tools and/or the development of novel sensors to monitor the grapevine responses is also a key driver. Several academics contribute to this programme and a range of viticultural, physiological, molecular, analytical and advanced data analyses tools are routinely used. Students from diverse backgrounds (even if you do not have a background in Viticulture and Oenology) would be able to contribute to the research of this programme.

- **The Digital Viticulture “New Tools for Precision Management” programme** focuses on Improving the efficiency and quality of wine and table grape production through sensors, robots and advanced analytics. Our projects are related to climate change impacts on agriculture, estimations of water consumption using models and micrometeorological techniques, development of new computational and technological tools for precision viticulture and plant physiology and detection of water stress using Thermography, Remote sensing and Unmanned Aerial Vehicles.
- **The Wine Microbial Ecosystems And Biotechnology programme** is a multidisciplinary, integrated program uses diverse complementary tools to assess the diversity of microorganisms in vineyards and wine fermentation processes and further explores the impact of mono- and mixed-cultures on wine properties. The molecular mechanisms underpinning interspecies interactions in diverse settings are investigated using a combination of microbiology, molecular biology and systems biology approaches. The current research topics include: Influence of viticultural practices on vineyard and fermentation microbiome; Yeast-yeast and yeast-bacteria interaction during fermentation; Yeast-microalgae for wine wastewater bioremediation; Using omics technologies to study microbial physiology and metabolism; Microbial strain improvement using biotechnology, breeding and directed evolution approaches; and Biochemical and oenological characterization of strains.
- **The Wine Production programme** focusses on processes that can influence the quality and composition of wine in a cellar environment. These can include, among others, grape processing, juice treatments, fermentation and oxidation control and ageing regimes of wine. The aim of this program is to generate results that could be applied in a cellar set up to positively influence wine production and composition.
- **The Spectroscopic Applications in Grape and Wine Sciences programme** works towards non-destructive analytical methods for process monitoring and quality control in Viticulture, Oenology and Wine Biotechnology. The analytical technologies used are near- and mid-infrared spectroscopy coupled with multivariate data analysis tools. Applications, mostly in the form of classification and regression models, using multivariate classification and calibration algorithms, are developed and transferred to industry. Infrared spectra are coupled to flavour chemistry (using mass spectrometry and chromatography) and sensory data on same samples for multi-block analysis. An important application area of infrared spectroscopy is multi-scale quality monitoring of table grapes – in the vineyard, at the packhouse and during cold storage. In another application the combination of spectroscopy, chemometrics and process control strategies can be used to implement process engineering solutions during wine fermentations.
- **The Sensory and Consumer Science of Wine programme** involves the development and application of fit-for-purpose methods to obtain sensory profiles of wines; research into consumers’ perceptions, acceptance of products; and rejection thresholds for off-flavour compounds in wine; chemical profiling of wines related to sensory studies and interaction studies within wine matrices.



## 2.2 Project leaders and respective fields of expertise

RESEARCH TOPICS OF ACADEMIC STAFF	
GRAPEVINE BIOLOGY/BIOTECHNOLOGY/ IMPROVEMENT; PRACTICAL VITICULTURE; DIGITAL VITICULTURE; GRAPEVINE X ENVIRONEMENT X MANAGEMENT INTERACTONS	
Dr Albert Strever	Grapevine cultivation ; Grapevine and climate; Remote sensing
Mrs Eunice Avenant	Table grape production (rootstocks, dormancy management, plant bio regulators); Water use efficiency
Dr Erna Blancquaert	Ecophysiology of berry ripening ;grapevine abiotic and biotic stress; grapevine resources
Dr Carlos Poblete-Echeverria	Precision viticulture and water management
Ms Thalita Venter	Practical Viticulture; Vineyard management; Research skills for students
Prof Melané Vivier	Grapevine Biology and Biotechnology; Functional genomics; grapevine field-omics; grapevine abiotic and biotic stress biology
Dr John Moore	Grapevine biochemistry and cell wall profiling
Dr Philip Young	Functional genomics; abiotic and biotic stress biology; terpenoid metabolism; flavour and aroma biosynthesis
Dr Justin Lashbrooke	Functional genetics and genomics, molecular breeding, secondary metabolism
BIOLOGY AND BIOTECHNOLOGY OF WINE MICRO-ORGANISMS; MICROBIAL DENSITY, ECOLOGY & EVOLUTION	
Prof Florian Bauer	Yeast molecular and cellular biology, NRF Research chair in Integrated Wine Sciences
Prof Benoît Divol	Microbial interactions and spoilage – impact of microorganisms on wine properties
Prof Maret du Toit	Cellular and molecular biology of lactic acid bacteria (LAB); evaluation of natural LAB resources as potential starter cultures; Yeast-LAB interactions; MLF and wine aroma
Dr Evodia Setati	Wine Microbiology with focus areas in: vineyard and wine microbiomes; population dynamics and microbial interactions
Dr Debra Rossouw	Yeast molecular and cellular biology, lactic acid bacteria, microbial biotechnology, fermentation, systems biology
OENOLOGY / WINE PRODUCTION/ SENSORY SCIENCE	
Prof Wessel du Toit	Wine ageing, aroma, wood, phenolics, oxidation, and sensory of wine
Dr Marianne McKay	Wine aroma, wine faults and sensory evaluation of wine. Smoke taint and volatile phenol interactions; Teaching methodologies: Innovative, collaborative & transformative learning in wine science.
Dr Jose Aleixandre	Development of integrated systems to optimize the winemaking process. Phenolic compounds. Winemaking practices. Spectroscopy and chemometrics applications. Static and on-line/in-line applications for process monitoring and optimization.

## Current Research Opportunities for Post-graduate students



A number of projects are available for prospective Hons, Masters and PhD level studies. This will soon be updated for 2023



Further information on current opportunities for prospective students for 2023 can be obtained from our web site at the following link:

<https://sagwri.sun.ac.za/prospective-students/>



### 3. Postgraduate programme

The following postgraduate programmes in Grapevine and Wine Science can be followed to obtain the following degrees: HonsBSc, MSc or PhD.



#### HonsBSc ( Wine Biotechnology)

**Entrance requirements:** A BSc, BScAgric or BEng degree that is accepted by the Senate with any relevant discipline as major subject, e.g. Biochemistry, Botany, Chemistry, Genetics, Physiology, Microbiology, Plant Pathology, Food Science, Viticulture, Oenology, Chemical Engineering, etc. Only students who have attained an average of at least 60% in these subjects in the final year will be considered for admission to the honours programme.

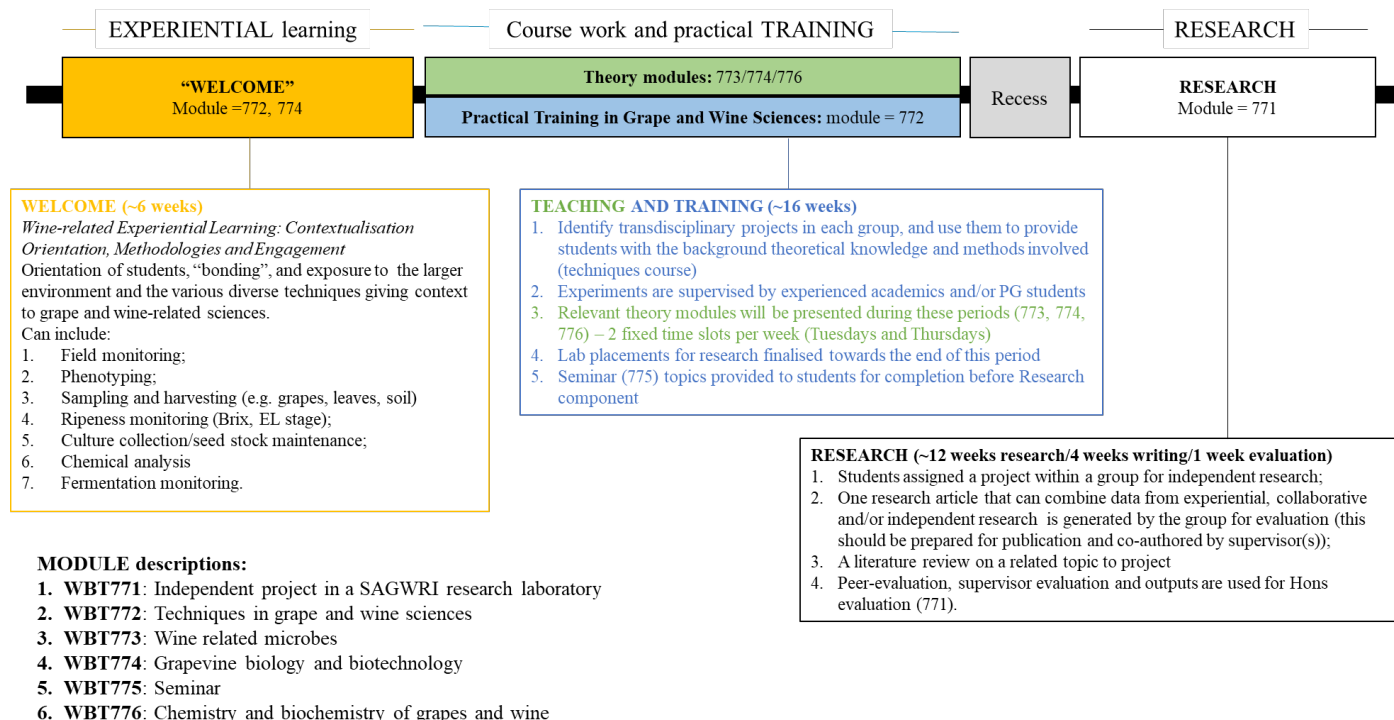
**Programme composition:** The Hons programme for 2022 comprises out of the following three sections, with modules being presented in the first two sections alongside practical and research training activities (refer to Figure 1 for an overview):

A number of factors necessitated a revamp of our Wine Biotechnology Honours programme (implemented from 2021). SAGWRI is an “open” research institute, and as such post-graduate students are recruited from various departments (Genetics, Microbiology, Biochemistry, Chemistry, Mathematics) and faculties (Sciences, AgriSciences, Engineering, etc). This makes it an exciting multi-disciplinary environment; but it also means that students enrolling for “Wine Biotechnology” do not necessarily have any previous exposure to grape and/or wine sciences. Post-graduate students also typically feel they lack “industry-relevant” (work) experience after completing an academic post-graduate degree (in research).

To address these issues, we implemented the Honours Wine Biotechnology in three distinct phases, each with specific learning outcomes (refer to figure for a graphic timeline and accompanying activities):

1. The first phase (~6 weeks) is Wine-related Experiential Learning: Contextualisation Orientation, Methodologies and Engagement (or “WELCOME”). The goal is to provide you with exposure to the broader SAGWRI environment and the various diverse techniques giving context and methodologies employed in the grape and wine-related sciences. This can include field monitoring; Sampling and harvesting ((grapes, leaves, soil, etc), ripeness monitoring (Brix, EL stage); fermentation monitoring. This will involve experiential learning (learning by doing). You will participate in ongoing research (field work) with experienced researchers and post-graduate students. This will provide you with a hands-on experience of grapes, wine and the related micro-organisms.
2. For the second phase you will be facilitated in the Biotechnology laboratories at SAGWRI (JH Neethling building). The Hons group will spend ~16 weeks in the laboratories and will work with experienced researchers and post-graduate students on ongoing research programmes with the aim of acquiring the requisite theoretical knowledge and practical competencies in the following techniques (WBT772): General laboratory practice, plant tissue culture, microbiology, winemaking; molecular biology, chemical analysis of grapes and wine; sensory analysis. This will entail collaborative learning (group work). The respective theoretical modules (WBT773, -774, -776) will be presented in this time period (two fixed time-slots for lectures per week).
3. For the final phase, you will select a laboratory (oenology/microbiology or plant) in which to perform individual research under the supervision of experienced researchers and post-graduate students within selected collaborative projects (WBT771). The students will conduct novel research and aim to contribute to a scientific publication.

These are exciting changes, and you will be participating in a unique Honours post-graduate research experience.



**Programme content:** The programme consists of the following modules:

• **Year modules:**

**WBT 771 (30 credits)**

Project proposal	(10%)
Written seminar	(50%)
Seminar oral presentation	(20%)
Labwork	(20%)

**WBT 772 (20 credits)**

Laboratory work	(40%)
Techniques + Poster	(40%)
Winemaking techniques	(20%)

**WBT 773 (20 credits)**

Prof FF Bauer	(35%)
Dr ME Setati	(35%)
Prof M du Toit	(30%)

**WBT 774 (20 credits)**

Dr T Venter	(40%)
Dr PR Young (Systems Biology)	(20%)
Dr PR Young (Genomics)	(40%)

**WBT 775 (10 credits)**

Written Seminar	(50%)
Oral Presentation	(50%)

**WBT 776 (20 credits)**

Prof Wdu Toit	(10%)
Dr J Moore	(30%)
Prof B Divol	(25%)
Dr D Rossouw	(35%)

**771 Research methodology for grapevine and wine biotechnology (30 credits)**

The overall aim/goal of this module is to provide post-graduate students with the requisite knowledge and skills to function competently and independently in a biotechnology research environment. This includes (1) planning, (2) performing and (3) communicating research in Grape and Wine Sciences.

Students will receive training in a functioning research environment throughout the year (during the Biotechnology laboratory rotations as well as during the Research component). Students will be expected to function in a group context (via collaborative learning) as well as perform independent work in a laboratory with appropriate supervision from postgraduate students and researchers. Students will be involved in the entire “value chain” of research, including project planning and experimental design, experimentation, troubleshooting, data analysis and presentation, and preparation of a scientific research outputs (written and oral).

Students are required to assimilate and apply relevant knowledge from related core modules. Assessments for the module are based on: (1) a written research report of the results generated in the project, (2) an oral defence of the research results generated, and (3) the technical competency and functioning the student throughout the year and (3) reporting on scientific research (both in written and oral format).

The research project will be designed in conjunction with the bench supervisor (senior post-graduate student) and the academic supervisor. The student should understand the motivation, research methodology, expected outcomes and timelines for the research.

After completion of the proposed project, a research report must be compiled in the format of a research article and the results presented and defended to the academics and post-graduate environment.

### **772 Techniques in grapevine and wine sciences (20 credits)**

The overall aim/goal of this module is to introduce post-graduate students to the requisite theoretical knowledge, practical skills/competencies for selected techniques in grape- and wine related research. At the end of this module, the students should be able to function safely and effectively in the routine research facilities of the South African Grape and Wine Research Institute/Department of Viticulture and Oenology.

The module will provide the requisite background information and practical competency in techniques in the following fields: (1) Winemaking, (2) Microbiology, (3) Molecular biology, (4) Analytical Chemistry and (5) Plant tissue culture.

This module prepares the post-graduate student for the safe and efficient functioning in a research environment (as required for the research project of module WBT 771). The module will introduce the post-graduate student to the requisite information and techniques for general research in grape- and wine sciences, and includes laboratory safety and etiquette, biological calculations, data analysis, project planning and management, general molecular biology techniques, microbiology, analytical chemistry, plant tissue culture and winemaking.

### **773 Wine-related microbes (20 credits)**

An introduction to the microorganisms occurring on the grapes, in grape juice and throughout the winemaking process, as well as their role (beneficial or detrimental) during this process.

Biotechnology of wine yeasts and bacteria, including genetic aspects and targets for improvement.

### **774 Grapevine biology and biotechnology (20 credits)**

This module provides an introduction to the vegetative and reproductive structures of the grapevine and their development in interaction with the environment, as well as basic viticultural concepts. Students will be provided an overview of grapevine growth and development and the genetic and genomic resources available for grapevine studies including the application of these resources to grapevine biotechnology and breeding.

On completion of the module the students will have an understanding of the challenges involved in grapevine improvement, the genetic and genomic resources available for grapevine, and the application of genetic and genomic resources for grapevine improvement. The students will receive practical computer experience in working with grapevine genomic resources.

### **776 Chemistry and biochemistry of grapes and wine (20 credits)**

Plant growth regulators, major compounds in grapes both volatile and non-volatile, grape ripening and compound accumulation in grape berries during the season. Major and minor chemical compounds in musts and wines, both volatile and non-volatile. Role of enzymes, tannins and additives in winemaking. Concepts and processes related to colour stability, macromolecular composition and sensory (taste and aroma) of different types of wines. The role and processes involved in wine ageing, oxidation processes. Analytical methods (chromatography, spectroscopy, spectrometry) and data analysis tools to evaluate grape and wine chemical and biochemical composition.

### **775 Seminar (10 credits)**

The overall aim/goal of this module is to provide post-graduate students with the requisite knowledge, resources and skills to plan, compile, edit and present a comprehensive literature reviews on relevant scientific topics.

Honours students are required to compile written literature reviews on relevant scientific topics in an acceptable style (scientific and/or popular). Oral presentation to an academic audience will occur throughout the year. The use of visual aids (Powerpoint, Prezi or similar) is a prerequisite.

Honours students will be provided opportunities throughout the year to develop both their written and oral presentation skills. Students are expected to prepare and present seminars to the academic environment. The use of visual aids (MS Powerpoint, Prezi or equivalent) is therefore a prerequisite. Oral presentations will occur during scheduled group meetings throughout the year. The students will be expected to prepare a written seminar on a topic related to their research project. The evaluation of the seminar is based on the content, style and ability to select material from the literature.

**Allocation of marks.** A system of continuous evaluation is used to evaluate the students' knowledge and level of proficiency. An examination will be written on completion of each module. Students must obtain a minimum of 50% for each examination, failing which a supplementary exam must be written. The final mark for the whole honours course (120 credits) is calculated by allocating the following credits to the mark obtained for each module. All modules must be passed, as well as a **final mark of 50%** achieved to pass the honours course. A final mark of 75% or higher serves for a distinction (*cum laude*).

## MSc ( Wine Biotechnology)

**Entrance requirements:** An HonsBSc degree in Wine Biotechnology 778; or any HonsBSc-degree that is acceptable to the Senate. Students who completed a four-year Bachelor degree (e.g. BScAgric; BSc FoodScience, BEng) also qualify to enrol directly for the MSc degree.

**Programme content:** For the MSc degree, the student must do independent research on an approved topic in Wine Biotechnology and submit the results in the form of a publishable thesis. Supplementary studies on specific topics may be required. The programme for each student is determined by the supervisor concerned. An oral defense is conducted.

All research projects of postgraduate students fall within the broader research programme of the IWBT.

## PhD (Wine Biotechnology)

**Entrance requirements:** A MSc degree in Wine Biotechnology; or any MSc, MScAgric, MEng or MScEng degree that is acceptable to the Senate.

**Programme content:** A dissertation on an approved topic in Wine Biotechnology that contains the results of original research is required for the PhD degree. An oral defense is conducted.

All research projects of postgraduate students fall within the broader research programme of the IWBT.

The Institute also offers the postgraduate programmes in Viticulture and Oenology to obtain the following degrees:

- MScAgric
- PhD
- DSc

## 878 MScAgric

The master's programmes in Food and Wine Production Systems leads to one of the following qualifications: MScAgric (Oenology), MScAgric (Viticulture). The programme is two years of masters' studies if the student holds an applicable BScAgric-degree.

### MSc Agric in Oenology

33103 : Oenology	818(180): Master's thesis
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- *Specific requirements:* An applicable BScAgric degree; an average final mark of 60% for the final year modules.
- *Duration of programme:* The programme extends over two years
- *Programme content:* You determine your topic for the master's degree in consultation with your supervisor. A research topic can be selected from one of the following themes : wine microbiology; wine chemistry; analytical method development, and sensory methodology and analyses.
- *Assesment and Examination:* After completion of the research you must submit a thesis to the satisfaction of the examiners and present a seminar. You will be expected to defend your thesis during this seminar

### MSc Agric in Viticulture

33081 : Viticulture	818(180): Master's thesis
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- *Specific requirements:* An applicable BScAgric degree; an average final mark of 60% for the final year modules.
- *Duration of programme:* The programme extends over two years
- *Programme content:* You determine your topic for the master's degree in consultation with your supervisor. A research topic can be selected from one of the following themes : molecular aspects of key processes in grapevines; advanced grapevine physiology; climate change; analysis of spatial patterns; and berry ripening and table grapes.
- *Assesment and Examination:* After completion of the research you must submit a thesis to the satisfaction of the examiners and present a seminar. You will be expected to defend your thesis during this seminar



## 978 PhD (Oenology)

**Programme description:** The programmes focus strongly on research in the specialist field of Oenology. You choose a relevant and practically oriented research project which puts you in contact with the industry, leading to problem-solving in the industry concerned, and also prepares you to enter the research or professional market. The programme contributes at a high level to the Faculty of AgriSciences research profile and delivers professional individuals who can play, either as a team member or individually, a meaningful role in national

**Assessment and Examination:** After completion of the research you must submit a dissertation to the satisfaction of the examiners and present a seminar. You will be expected to defend your dissertation during this seminar.

## 978 PhD (Viticulture)

**Programme Description:** The programmes focus strongly on research in the specialist field of Viticulture. You choose a relevant and practically oriented research project which puts you in contact with the industry, leading to problem-solving in the industry concerned, and also prepares you to enter the research or professional market. The programme contributes at a high level to the Faculty of AgriSciences research profile and delivers professional individuals who can play, either as a team member or individually, a meaningful role in national or international research, teaching and policy-making in specialist fields concerned with sustainable and environmentally friendly grape and wine industries.

**Assessment and Examination:** After completion of the research you must submit a dissertation to the satisfaction of the examiners and present a seminar. You will be expected to defend your dissertation during this seminar.

## 998 DSc (Oenology)

**Programme description:** For the DSc degree a number of advanced original research and/or creative work in Wine Production Systems is required. Additionally original and previously published work(s) of a high standard are required that show that you have made a real and exceptional contribution to the enrichment of the knowledge base in Wine Production Systems. An oral examination may also be required. See section 2.5 in this chapter for general information on the DSc degree in the Faculty of AgriSciences.

## 998 DSc (Viticulture)

**Programme description:** For the DSc degree a number of advanced original research and/or creative work in Wine Production Systems is required. Additionally original and previously published work(s) of a high standard are required that show that you have made a real and exceptional contribution to the enrichment of the knowledge base in Wine Production Systems. An oral examination may also be required. See section 2.5 in this chapter for general information on the DSc degree in the Faculty of AgriSciences.

**Student and programme fees :** <http://www.sun.ac.za/english/Documents/Yearbooks/Current/2021-StudentFees.pdf>

**Provisional Quotation Given Without Prejudice:** <https://web-apps.sun.ac.za/student-fees-estimate/#/home>



**.Students graduating from our programmes are very successful in the placement of graduates in excellent positions in a wide variety of industries:**

- *Industry* positions were taken up nationally and internationally, for example Assistant winemakers, Research and Development, Quality-, Process and Laboratory managers, sales representatives and other technical assistants.
- *Academic/research* positions like lecturers, researchers, senior technical officers and postdoctoral research fellows are occupied at many institutions (e.g. Stellenbosch University, University of Cape Town, NRF, CSIR, and Agricultural Research Council).

## Where are our Graduates? Viticulturists

- Emma Moffat – Consultant and manager of GenZ vineyard project, VINPRO
- Tessa Moffat – Viticulturist, Rustenburg Wines, Stellenbosch
- Conrad Schutte- Manager at VINPRO
- Etienne Terreblanche – consultant at VINPRO
- Henning Burger – private consultant and producer
- Johan Fouche – Marketing (Table grapes)

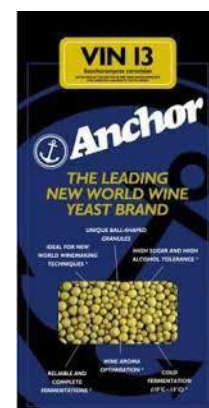
## Winemakers

- Andrea Freeborough –Hons in Viticulture, now Head winemaker at Distell
- Charles Williams – Winemaker, De Toren
- Brendan Smit- Winemaker, Rust and Vrede
- Danie Keulder- winemaker Constantia Uitsig
- Annette Van Zyl- Fairview winemaker
- Chris de Vries and Arlene Mains- Vilafonte
- Nongcebo Langa- winemaker- Delheim
- Elzaan Fourie- winemaker- Groot Constantia
- Rianco van Rooyen- Robertson winery
- Alet de Wet- Kanonkop
- Anri Botha- Lemberg
- Petri de Beer- Longridge
- Marie Bezuidenhout- Friesland wines
- James Walls- VP Winemaking
- Lisha Nelson-de Villiers – Cellar Master; Nelson Wines
- Charl Schoeman – White wine & MCC winemaker; Simonsig
- Abraham De Villiers – Senior Winemaker; Stellenbosch Vineyards
- Yolande van Staden –MSc in viticulture, now winemaker



## Entrepreneurs/ own brands/ companies

- Bertus Fourie- Barista wines
- Hanneli van der Merwe – Founder and co-owner; Barker & Quinn tonic water
- Isabel dos Santos- Singita premier wines- Sabi sands
- Anoinette van Zyl- Enartis
- Elda Lerm – International Brand Manager; Anchor Yeast/Oenobrand
- Niel Groenewald: General manager of Nederburg
- Carien Coetzee-Basic wines consultant
- Christine Wilson: Mondavi wines
- Olaf Morgenroth, brewmaster at The Franschhoek Beer Company



### Local academic/research institutions



- Talitha Venter – Lecturer in Viticulture, SU
- Marisa Nell- DVO, SU
- Anke Berry – Research assistant; SAGWRI
- Riaan Wassung – Winemaker; Welgevallen
- Tara Southey – Postdoc at Geography, Stellenbosch University and CEO of Terraclim
- Anneli Bosman – Lecturer in Viticulture, Elsenburg
- Lorraine Geldenhuys- Lecturer and winemaker- Elsenburg
- Brenton Maarman – Lecturer; Elsenburg
- Marene de Beer – Center of Excellence; Distell
- Hanlie Theron – Viticulture lecturer CPUT

### International Academic/research institutions

- Anita Smit – Researcher; The Netherlands
- Gerhard Rossouw, lecturer in viticulture at Charles Sturt University, Australia
- Sonet van Zyl; lecturer in viticulture, Fresno, USA
- Chandre Joubert, lecturer in viticulture, New Zealand
- Zelmari Coetzee – Senior Research Scientist, Mildura, Australia
- Grace Kanguuehi – Lecturer, Namibia University of Science and Technology



## 4. Short courses

The short courses promotes the development of our students, and therefore continually creates training and development opportunities for them. The focus of these actions is to enhance the development of our students to encourage personal growth, as well as academic excellence. The following short courses may be offered to the SAGWRI's postgraduate students on an *ad hoc* basis with the aim to equip them with core competencies to prepare them for the research field:

- Basic statistics
- Oenology sensory training sessions
- Laboratory safety course
- Project management course (with focus on a scientific project)
- Scientific communication and presentation skills

## 5. Postgraduate bursaries



### 5.1 From SAGWRI

SAGWRI may, at its discretion and subject to sufficient funding being available per project, award financial support to full-time registered students, ***if they have not been awarded any other external bursaries.***

**Below is the figures of 2020. It may change from year to year.**

- Honours - up to R60 000 per annum (for 1 year)
- Masters - up to R100 000 per annum (for 2 years)
- Doctoral - up to R120 000 per annum (for 3 years)

Bursaries are awarded in terms of the regulations of Stellenbosch University. In exceptional cases the SAGWRI retains the right to make adjustments to bursary supplementations depending on the total value of the bursaries awarded, as well as the performance of the student.

**Postgraduate funding 2023 booklet:** <http://www.sun.ac.za/english/research-innovation/Research-Development/PG%20Funding/Postgraduate%20funding%202023%20Updated%2013%20May%202022.pdf>

### Incentives to PG students to encourage academic excellence

Training in overseas laboratories (international networks/bilateral collaborations);  
Financial assistance with the attendance of national/international conferences.

### 5.2 Other institutions

Students are strongly encouraged to apply for competitive bursaries (e.g. NRF Free-standing Prestige Bursary, NRF Equity Bursary, US Postgraduate Merit Bursary, etc.) through the University's **Office for Postgraduate Bursaries**. Several private bursaries are also available, eg.:

- Harry Crossley bursary
- Murray bursary for full-time study
- CJ Theron bursary
- Andrew Mellon bursary



## Closing dates and contact details for NRF Bursaries

Funding Opportunities	Eligibility	Closing dates	Contact Person
Honours General Scholarships	Minimum average of 65% for major subjects in the final year of undergraduate study  Only South African citizens and permanent residents are eligible for honours scholarships.	1 September 2022 (students that must undergo a financial means test)  20 November 2022 (for the rest of the applications)	Tammy Abrahams ( <a href="mailto:tammva@sun.ac.za">tammva@sun.ac.za</a> )
SARAO Honours Scholarships	South African citizens and permanent residents  Bachelor of Science - Honours: in Physics and Electronics or Astronomy or Astrophysics or Computer Science  OR  Bachelor of Science - Honours at NASSP (National Astrophysics and Space Science Programme)	20 November 2022 (subject to change)	Tammy Abrahams ( <a href="mailto:tammva@sun.ac.za">tammva@sun.ac.za</a> )
Master's General Scholarships	All fields of study	08 July 2022	Betina van der Merwe ( <a href="mailto:betina@sun.ac.za">betina@sun.ac.za</a> ) Rozelle Petersen ( <a href="mailto:rnp@sun.ac.za">rnp@sun.ac.za</a> )
Doctoral General Scholarships	All fields of study	08 July 2022	Betina van der Merwe ( <a href="mailto:betina@sun.ac.za">betina@sun.ac.za</a> ) Rozelle Petersen ( <a href="mailto:rnp@sun.ac.za">rnp@sun.ac.za</a> )
DAAD (Masters and Doctoral Scholarships)	Only South African citizens and permanent residents  Applicants should have a general interest in an education and cultural exchange with Germany	08 July 2022	Betina van der Merwe ( <a href="mailto:betina@sun.ac.za">betina@sun.ac.za</a> ) Rozelle Petersen ( <a href="mailto:rnp@sun.ac.za">rnp@sun.ac.za</a> )

### Office for Postgraduate Bursaries:

Tel: 021-808 4208

E-mail: [postgradfunding@sun.ac.za](mailto:postgradfunding@sun.ac.za)

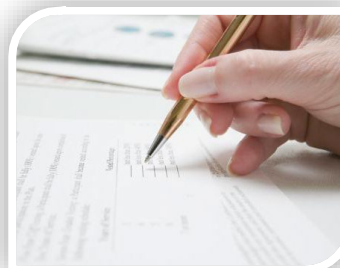
Webpage:

<http://www.sun.ac.za/english/research-innovation/Research-Development/postgraduate-funding-support>

### Postgraduate International Office

(for international students)

<http://www0.sun.ac.za/international/>



## 6. Application and selection

### Applications and deadlines:

- **Honours:** First deadline: 15 August; 2<sup>nd</sup> deadline 15 September 2022
- **MSc:** First deadline: 15 August; 2<sup>nd</sup> deadline: 30 September 2022
- **International Students :** 30 September 2022
- **PhD:** applications considered throughout the year.

- **Conditional selection of candidates** :July – 15 October 2022
- **Offer is made:** Confirmation from students lead to Provisional acceptance to postgraduate study
- Final acceptance at end of Nov/beginning of Dec after final marks are available on the University system (if entry requirements are met).

## 6.1 Application procedure

STEP 1	Stellenbosch University's application form (official application)	<p>Current SU students: Own portal at My.Sun (Undergraduate-Studies-Application Postgraduate studies)</p> <p>Electronic: <a href="http://www0.sun.ac.za/pgstudies/how-to-apply.html">http://www0.sun.ac.za/pgstudies/how-to-apply.html</a></p> <p>Application form: <a href="http://www0.sun.ac.za/signup">Signup (sun.ac.za)</a></p> <p>Foreign students: apply online at <a href="http://www0.sun.ac.za/international">http://www0.sun.ac.za/international</a></p>
	Not applicable for current SU students	<p>Please attach the following documents to your online application form:</p> <ul style="list-style-type: none"> <li>• A certified copy of your <b>academic transcripts (marks)</b> [and English translation if in a foreign language]</li> <li>• Certified copies of <b>degree(s)</b> obtained. (Please note: if you have been, or currently are, registered as a student at Stellenbosch University, SAGWRI will request your academic transcripts from Administration. There is therefore no need to attach them to this application).</li> <li>• A complete <b>Curriculum Vitae</b> (only for master's and doctoral applications)</li> <li>• A copy of your <b>ID/Passport documents</b></li> <li>• Foreign students, whose mother tongue is not English, are requested to complete a <b>TOEFL test</b>.</li> </ul>
STEP 2	Referees	PhD applicants are requested to nominate <b>at least TWO referees</b> and provide us with their contact details. For the selection process we also need a short motivation on why you wish to study at SAGWRI. MSc and Hons students just need to send the motivation.

## 6.2 Selection procedure

Candidates are selected by the SAGWRI on **merit** and according to the following **criteria**:

- undergraduate academic results
- postgraduate academic results (if applicable)
- practical proficiency
- personal motivation

Feedback from referees (if applicable) is also taken into consideration to evaluate an applicant.( PhD students).

All applications are subject to the availability of funded research projects and laboratory space.

Students who successfully meet the acceptance criteria and can be accommodated into our programmes, are firstly accepted **provisionally** if the current degree is not completed. The students must pass their exams or thesis with a minimum average of **60%**, before they can be **finally accepted** for the postgraduate study. An email of acceptance from SAGWRI will then be issued, but students are required to wait for the official acceptance letter from the University before attempting to register for their studies.



## 7. Frequently asked questions

**? I am an international student who will be starting my degree at the SAGWRI. I was informed that I do not have any hostel accommodation. What can I do?**

The International Office have on their webpage a list of available private housing as well as a list of useful websites.

<https://www0.sun.ac.za/international/about/accommodation-in-stellenbosch/letting-agencies-in-stellenbosch.html>

**? I am an international student and want to know if someone will meet me at the airport when I arrive?**

The International Office does provide such a service, but you need to complete the arrival sheet and email it to them.

<http://www0.sun.ac.za/international/accommodation-a-arrival>

**? What will the cost of my degree be?**

Please enquire at the Student Account Office in person or phone Sean Davids at 021-808 3530.

**For international students** it is different and they can enquire at <http://www0.sun.ac.za/pgstudies/fees.html>

**? When and how must I register for my degree?**

Online registrations via MYMATIES should be available during January or you can register with Mrs Cheryl Nieuwoudt in person at the Administration Building Block A, room 2034, Van Ryneveld street. HonsBsc students needs to register by the end of January. Master's and Doctoral students can register until end of March. New doctoral students can only register after a Faculty meeting was held in February and after they have been informed. For international student it is mostly the same , but they register at the International Office.

**? Will I receive a bursary from the SAGWRI?**

We strive to mostly promote projects for the new intake that have adequate financial support available, including bursaries. It is however imperative, and will count in your favour, if you have obtained, or are applying for bursaries independently as well.

## 8. Enquiries

### At SAGWRI

- Web site: <https://sagwri.sun.ac.za/>
- **Administrative enquiries on postgraduate applications:**  
Ms Lorette de Villiers: Postgraduate Coordinator  
Tel. 021-808 3770 (international: +27-21-808 3770)  
E-mail: [lorette@sun.ac.za](mailto:lorette@sun.ac.za)
- **Academic enquiries for PG studies**  
Dr Philip Young [pryoung@sun.ac.za](mailto:pryoung@sun.ac.za) /021-8089204
- **Interim Director (SAGWRI):**  
Prof Melane Vivier [mav@sun.ac.za](mailto:mav@sun.ac.za)

### At Stellenbosch University

- **Web site** [www.sun.ac.za](http://www.sun.ac.za)
- **Admissions & Accommodation**(Stellenbosch University)  
Tel: 021-808 9111 (international +27-21-808 9111)
- **Division for Student Fees** (Stellenbosch University)  
Tel. 021-808 4913 (international +27-21-808 4613)  
Email: [studentaccounts@sun.ac.za](mailto:studentaccounts@sun.ac.za)  
<http://www.maties.com/what-will-it-cost.html>
- **Division for Postgraduate Bursaries**  
Tel. 021-808 4208  
Email: [Postgradfunding@sun.ac.za](mailto:Postgradfunding@sun.ac.za)
- **Postgraduate and International Office**  
Tel. +27-21-808 2565  
E-mail: [interoff@sun.ac.za](mailto:interoff@sun.ac.za)  
<http://www0.sun.ac.za/international>
- **Accommodation International Students**  
[Tel:+ 27-21-808 6702](tel:+27218086702) (Grant Leukes) / E-mail: [interhouse@sun.ac.za](mailto:interhouse@sun.ac.za)





## 9. GALLERY

### PHOTOS PG INFORMATION SESSION

