SA Grape and Wine research Institute

Programme/Project Info for

Prospective MSc and PhD Students

# Programme: GRAPEVINE X Environment X management interactions (gems)

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| 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. |

# OpPortunities for 2023

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| 1. Evaluating the impact of seaweed extracts as potential grapevine biostimulants |  |
| 1. Evaluating the impact of seaweed extracts as potential in Chardonnay |  |
| 1. CLIMAVIN - Exploring the influence of climate change on the microbial wine terroir: from vineyard soil to high quality wine |  |
| 1. Grapevine's Response to Water Stress Using Different Scion/Rootstock Combinations |  |
| 1. Water use efficiency and water foot print assessment of table grape production systems (conventional and under overhead protection). |  |
| 1. Table grapevine’s response to GA3 and other plant bioregulator treatments to optimise yield and production. |  |

# general Contact information

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