Postdoctoral Research Fellow
National Wine and Grape Industry Centre
Office of the Deputy Vice-Chancellor (Research, Development and Industry)

<table>
<thead>
<tr>
<th>Position Number</th>
<th>660594</th>
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<tbody>
<tr>
<td>Campus</td>
<td>Wagga</td>
</tr>
<tr>
<td>Classification</td>
<td>Level A</td>
</tr>
<tr>
<td>Delegation</td>
<td>This position has delegated authority to Band XX.</td>
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<tr>
<td>Special Conditions</td>
<td>Flexible working schedule</td>
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<tr>
<td>Nature of Employment</td>
<td>Fixed term (5 years)</td>
</tr>
<tr>
<td>Employee Contribution to Superannuation</td>
<td>7% (flexible contribution options available)</td>
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<tr>
<td>Employer Contribution to Superannuation</td>
<td>17%</td>
</tr>
<tr>
<td>Workplace Agreement</td>
<td>Charles Sturt University Enterprise Agreement 2013 - 2016</td>
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<tr>
<td>Date Last Reviewed</td>
<td>September 2017</td>
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</tbody>
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Research Centre – Organisational Environment

Since 1997 the National Wine Grape Industry Centre (NWGIC), an alliance of Charles Sturt University (CSU) NSW Department of Primary Industry (DPI) and the NSW Wine Industry Association (NSW WIA), has brought together experts in Wine Science and Viticulture within fully equipped facilities on the CSU Wagga Wagga campus.

The research capability of the NWGIC is unique in that we provide a continuum of research from the vine to wine, to sensory profile and consumer perception. The main research priorities are linked to:

1. Grapevine physiology
2. Ecophysiology of berry ripening and fruit composition
3. Vine disease management
4. Wine chemistry
5. Process engineering
6. Sensory and consumer sciences
Organisational Chart

National Wine and Grape Industry Research Centre (NWGIC)

Reporting Relationships

This position reports to: Project Leader
This position supervises: N/A
Position Overview

Charles Sturt University (CSU), NSW Department of Primary Industry (DPI) and the NSW Wine Industry Association (NSW WIA) have entered into collaboration with the University of Adelaide as part of the ARC Industrial Transformation Training Centre (ITTC) for Innovative Wine Production.

The successful candidate will conduct research as part of the ARC Training Centre for Innovative Wine Production. The candidate will participate in a research project related to grape berry development with an emphasis on vascular transport mechanisms. The primary role will be to examine the anatomical, metabolic and transcriptomic factors that drive water, nutrient and sugar accumulation by the grape berry.

Principal Responsibilities

1. Conduct hypothesis-driven experiments on xylem and phloem functioning through the grapevine and into the grape berry
2. Design and conduct controlled environment experiments that examine developmental changes in vascular anatomy and functioning as berries proceed through growth, ripening, maturity and senescence.
3. Responsible for the design, implementation, execution and management of the above research, in consultation with the project supervisory team (Department of Primary Industries NSW, Charles Sturt University, University of Adelaide and Western Sydney University).
4. Ensure that all experimentation complies with Occupational Health and Safety principals.
5. Prepare and update Standard Operating Procedures for use of instruments used for the analysis of grape and sap samples.
6. Statistically analyse results and prepare research findings for peer-reviewed scientific and industry publications, for dissemination via extension and communication personnel and activities, and for incorporation into learning and teaching materials.
7. Assist in the project planning and training of higher degree students and technical staff associated with the project.
8. Travel to the University of Adelaide, CSIRO Canberra and Western Sydney University and other required locations to conduct experimentations and learn new methodologies.
9. To uphold the values and represent the National Wine and Grape Industry Centre, NSW Department of Primary Industries and Charles Sturt University in a professional manner at all times.

Capabilities

1. Qualified candidates should have experience in plant physiology and/or biochemistry.
2. Critical thinking, data synthesis and interpretation of scientific data are required to assess experiments in the robust manner required of research that will be subjected to review by peers.
3. Scientific writing skills for preparation of manuscripts for peer review and final report.
4. Communications skills for presentation of results to peers, supervisors and external stake holders associated with the wine industry.
5. Knowledge and ability to apply statistical methods of data analysis for interpretation of analytical results pertaining to experimental factors within a multidiscipline project.
6. The ability to build and maintain both internal and external networks/relationships for the purposes of professional collaboration and collegiality.
Physical Capabilities

The successful candidate must be physically fit and capable of working within a diverse group of people.

The position will involve travel and the participant will be expected to stay overnight at other locations.

The appointee must have sufficient mobility to obtain samples spread across sites within a vineyard and to carry out vine measurements in field and greenhouse conditions.

Some aspects of the work will involve manual handling of grapevines. The appointee must also be able to operate and carry for short-distances portable equipment used in the study of plant physiology.
Selection Criteria

Applicants are expected to address the selection criteria when applying for this position.

Essential

1. PhD in the plant sciences or a related discipline
2. Demonstrated skills in the design and implementation of innovative research in the plant sciences, enabling novel contributions to a rapidly developing research theme
3. An emerging record of research relevant to the discipline area, which demonstrates a capacity to make an autonomous contribution for publishing peer-reviewed research in national and international journals
4. Developing experience in planning, preparing and conducting experiments on pot or field-grown plants in a timely and resource-efficient manner.
5. High level communication and presentation skills for writing reports, peer review articles, procedures and briefs at a technical and scientific level demonstrated by high impact peer reviewed publications in fields associated with plant or wine science.
6. Ability to work flexible hours; ability to travel within the context of the project.
7. Well-developed organisational skills and time management.
8. Understanding of and ability to apply OHS in the workplace, with specific emphasis on risk management.
9. Understanding of and ability to apply EEO in the workplace.
10. Understanding of and ability to apply risk management principles and processes in the workplace.
11. Ability to monitor and review risk registers within the respective area of responsibility, and report on emerging risks that warrant immediate attention.

Desirable

1. Knowledge or the ability to rapidly acquire knowledge of vascular transport processes within plants
2. Experience in the extraction and analysis of genetic material from plants, or the ability to rapidly acquire skills in these techniques
3. Experience or the ability to rapidly acquire skills in microscopy techniques
4. Experience in GCMS method development and validation of protocols for quantification of targeted and non-targeted compounds, or the ability to rapidly acquire skills in this area
5. Experience with programmable data loggers for tasks such as weather and soil moisture monitoring
6. Current driver’s licence

Further information is available from

Dr Leigh Schmidtke
Acting Director
Phone: 0269332016
Email: lschmidtke@csu.edu.au
Information for Prospective Staff

Your Application

E-recruitment is the method by which CSU manages its recruitment processes and it is preferred that all applications be lodged using this method. Please refer to www.csu.edu.au/jobs/.

If intending applicants are unable to access this website, please contact the HR Service Centre on 02 6338 4884.

Staff Benefits

CSU is committed to providing an employment environment that fosters teamwork, innovation, reflective practice, continual learning, knowledge sharing and opportunities for staff to achieve their full potential. CSU is committed to providing a flexible working environment that encourages employees to live a balanced lifestyle, combining work and family responsibilities.


Essential Information for Staff

- All employees have an obligation to comply with all the University’s workplace health & safety policies, procedures and instructions and not place at risk the health and safety of any other person in the workplace;
- All employees are required to be aware of and demonstrate a commitment to the principles of equal opportunity in the workplace;
- All employees are to ensure the creation and maintenance of full and accurate records of official University business adheres to the University’s Records Management Policies; and
- All employees are expected to undertake an induction program on commencement.

Further information regarding the policy and procedures applicable to Occupational Health and Safety and Equal Opportunity can be found on the CSU website http://www.csu.edu.au/division/hr/.

Further information regarding the policies and procedures of CSU can be found in the CSU Policy Library at: https://www.csu.edu.au/about/policy.

The following links are listed from CSU Policy Library on relevant specific policies:

- Code of Conduct
- Staff Generic Responsibilities Policy
- Delegations and Authorisations Policy
- Outside Professional Activities Policy
- Intellectual Property Policy