# Position Description

## Research Projects – CSOF4

The following information is for applicants

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| Advertised Job Title**:** | Experimental Scientist – Black Mountain MicroImaging Centre (BMIC) |
| Job Reference: | 59219 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | [ ]  Australian Citizens Only[x]  Australian/New Zealand Citizens and Australian Permanent Residents Only* [ ]  All Candidates
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| Percentage of Client Focus - Internal: | 70% |
| Percentage of Client Focus - External: | 30% |
| Reports to the: | Research Scientist, Manager of BMIC |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries  | Vivien Rolland, vivien.rolland@csiro.au |
| Contact Details For Applying | Call 1300 984 220 or email careers.online@csiro.au.  |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon  |

## Role Overview:

Research Projects staff in CSIRO collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work. Research Projects staff may be involved in providing consulting services, science management and/or industry liaison.

The Black Mountain MicroImaging Centre (BMIC) is a state-of-the-art Centre which builds and fosters human and scientific capabilities, to produce innovative cross-discipline research and deliver impact in crop science. BMIC is equipped with general PC2 lab facilities, confocal, fluorescent, scanning electron, dissecting and brightfield microscopes, embedding and sectioning equipment and Fourier Transform Infra-Red spectroscope/microscope. The successful applicant will work as an integral member of the BMIC team, a small, energetic and motivated team, and collaborate with scientists on individual projects as required and as nominated by Dr. Rolland, Manager of BMIC. This role also involves training of students, postdocs, technicians and scientists in the use of microscopy instruments and in specific microscopy techniques and contributing to project design. The role will involve a high level of collaboration with and support for the BMIC manager, and a strong work ethic around health and safety. The successful candidate will be expected to be highly self-motivated and to willingly contribute to the effective running of BMIC as a whole, including by taking on the role of BMIC lab custodian.

## Duties and Key Result Areas:

Under limited direction, undertake the following activities:

* Under the general direction of the BMIC manager, participate in planning of the microscopy component of a wide range of projects focussed on crops and other plants, with responsibility for the scheduling and completion of project work, including allocating and directing tasks where appropriate and documentation of methods and procedures.
* Provide timely, accurate and professional advice to staff about structural and developmental aspects of their research.
* Adapt and/or develop original experimental methods, concepts and ideas for the imaging component of existing and further research, promptly addressing where methods may not be defined. Initiative is required in seeking new approaches to meet experimental objectives.
* Develop high-level expertise in various types of microscopy, and/or digital image analysis and image management.
* Make significant contributions to the interpretation and communication, both internal and external, of research results and collaboration on drafting and delivering presentations to, and/or detailed written reports for, clients and the scientific and technology community.
* A significant component of this position is to provide on-the-job training and instruction in microscopy, imaging, and other relevant instruments and techniques to colleagues, including visitors, students and postdocs, and managing resources to meet objectives, as required.
* Ensure the smooth operation of BMIC by carrying out the role of lab custodian. This includes maintaining adequate levels of consumables, keeping the laboratories tidy, assisting in upkeep of specialised equipment and software, conducting regular PC2 audits and promoting best HSE practices in BMIC.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.

## Competencies: DO NOT DELETE OR EDIT

1. **Teamwork and Collaboration: Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.**
2. **Influence and Communication: Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.**
3. **Resource Management/Leadership: Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.**
4. **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **Adaptability:** Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## Selection Criteria:

*Under CSIRO policy only those who meet all selection criteria can be appointed.*

1. PhD in Molecular or Cellular Plant Biology, or equivalent experience.
2. Demonstrated knowledge of, and experience in analysis of plant structure and functional plant anatomy.
3. Demonstrated experience in specimen preparation for light and electron microscopy and in use of light, fluorescence, confocal and electron microscopes.
4. Experience in digital imaging and image analysis.
5. Proven ability to work with minimum supervision, both independently and as part of a team, on a variety of research topics.
6. Demonstrated ability to use initiative in solving technical and research problems.
7. Demonstrated ability to organise data and resources, and to work to defined timelines and milestones.
8. Excellent written, oral and interpersonal communication skills, including the ability to liaise with staff at all levels with professionalism. This includes the ability to train staff and students on the use of specialized equipment as well as provide basic guidance in the design of experiments using these instruments.
9. Demonstrated ability to adapt to changes during the course of a project.
10. Demonstrated interest in application of research to achieve industry outcomes.

## Desirable Criteria:

1. Experience in presentation of results at conferences and in publication of scientific papers.
2. Experience in cross-program and cross-institution research collaborations.
3. Demonstrated knowledge and experience in the specialist areas of image analysis, including deconvolution and 3D reconstruction will be considered highly desirable.
4. Experience in resin-embedding, sectioning and immunostaining of plant tissues for light and electron microscopy.
5. Experience in lab management.

## Special Requirements:

Appointment to this role may be subject to conditions including security/national police/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <https://ielts.com.au/>

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Find out more about CSIRO [Agriculture and Food](https://www.csiro.au/en/Research/AF)