Post Doctoral Fellow - Wheat Genetics

CSIRO Plant Industry, St Lucia, QLD
$65K - $72K [Australian$] plus Superannuation
Reference Number: *2007/603*

The Wheat Fusarium research team develops and applies advanced knowledge of pathogen biology and epidemiology; genes and gene networks that control host-pathogen interactions and genetics of resistance to deliver disease resistant elite material to breeding ventures.

We require a motivated postdoctoral scientist with demonstrated knowledge in the area of QTL mapping with different molecular marker systems and a good track record of achievement in research on plant genetics using conventional and molecular tools to improve the understanding of genetics of crown rot resistance in wheat, to generate new knowledge and tools and to use these in incorporating resistance genes into elite genetic backgrounds.

The successful applicant will have a PhD in plant genetics or a related discipline with a good publication record and be able to demonstrate strong organisational abilities. Excellent verbal and written communication and presentation skills, ability to work independently and use initiative plus the ability to work cohesively in a team environment are essential. Experience in cytogenetics would be desirable.

Main Responsibilities:

Under general/limited direction:

1. Undertake research in Australia on wheat resistance to Fusarium crown rot. The primary tasks will be to generate segregation populations and use them to locate genes/loci conferring resistance and to identify markers closely linked to each of the gene/locus. The identified markers will then be used to incorporate the genes/loci into elite Australian backgrounds and to generate near-isogenic lines for further study of the resistance.

2. Collaborate with scientists across CSIRO Plant Industry and other research providers to investigate the relationship between resistance to CR and FHB diseases which can be caused by the same pathogens

3. Communicate cooperatively with Chief, Program Leader, peers, project staff and other local, national and international collaborators on project plans and progress.

4. Adopt high scientific standards in the conduct and organisation of the project and in the writing up and communication of research results.

5. Participate, as appropriate, in duties and activities that enhance the operation and status of the program, division and organisation.

SELECTION CRITERIA

Pre-requisite: PhD in Plant Genetics, Breeding or a related discipline.

PROFESSIONAL/TECHNICAL SKILLS AND EXPERIENCE

1. Extensive experience and a proven track record of achievement in research on plant genetics or breeding using conventional and molecular tools.

2. Experience in QTL mapping and plant cytogenetics would be highly desirable;

3. Evidence of research collaboration and active participation in cooperative research activities.

PERSONAL ATTRIBUTES

1. PhD and/or equivalent and documented research in Plant Genetics, Molecular Breeding or a related discipline;

2. Demonstrated conceptual and practical knowledge in plant genetics and breeding applying traditional and molecular skills;

3. Demonstrated experience in QTL mapping with different marker systems;

4. Excellent interpersonal, written and oral communication, negotiation and representational skills;

5. Demonstrated ability to work as part of a multi-disciplinary research team;

6. Experience in cytogenetics and a current driver license are desirable.

For selection documentation and details on how to apply visit www.csiro.au/careers. If you are unable to lodge your application online you can post your application to: CSIRO Careers Online, PO Box 225, DICKSON, ACT 2602, Australia or fax your application (quoting reference number *2007/603* to 612 6276 6707)

If after reading the selection documentation you require further information please contact Dr. Chunji Liu email chunji.liu@csiro.au or phone (617) 3214 2677