



**Grains Research &  
Development Corporation**

# **AUSTRALIAN CENTRE FOR PLANT FUNCTIONAL GENOMICS**

**Australian Research Council  
and  
the Grains Research and Development Corporation**

**Guidelines for Applicants  
for funding commencing  
2002**

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## Acronyms

<b>ARC</b>	Australian Research Council
<b>CRC</b>	Cooperative Research Centre
<b>GRDC</b>	Grains Research and Development Corporation

## 1. INTRODUCTION

The Australian Research Council (ARC) and the Grains Research and Development Corporation (GRDC) have agreed to jointly establish a major research entity to be known as the Australian Centre for Plant Functional Genomics. The Centre will receive up to \$20M over five years to fund a critical mass of talented people in this exciting field of research. The Centre will contribute to ensuring that Australia maintains its international competitiveness in a crucial area of plant science research and that continuous innovation occurs in crop production and processing in the grains industry.

### 1.1. Background

The Stocker Report (*Priority Matters*) identified the need to set strategic research priorities as well as to encourage a research environment that allows innovative ideas to flourish and contribute to the national economy. The national biotechnology strategy (*Australian Biotechnology 2000 – a National Strategy*) and the report of Dr Batterham, the Chief Scientist (*The Chance to Change, 2000*), also emphasized the need to build critical research mass and to capitalize on Australia's strengths in biotechnology. *Backing Australia's Ability* gave substance to these sentiments by committing substantial new funding to research and development.

In accord with these policies, the ARC and GRDC sponsored workshops in 1999 to explore the development of research strategies in the area of plant and animal genomics. The workshops were attended by leading researchers and representatives of industry with expertise in genomics and gene technology. A recommendation of the report (*National Strategic Workshop on Genomics and Gene Technology*) published in March 2000 was that the ARC and GRDC examine the feasibility of initiating a research partnership in an area of core science and technology mutually identified as being of high priority. The establishment of the Australian Centre for Plant Functional Genomics is a result of these deliberations.

The establishment of the Australian Centre for Plant Functional Genomics is separate from, but complementary to, the establishment of a Centre of Excellence in Biotechnology as described in *Backing Australia's Ability*.

The production and processing of grains is important to the Australian economy. For the 22 year period from 1977/78 to 1998/99, total productivity on Australian grain farms is estimated to have increased by an average of 3.2% a year (Knopke et al 2000). However, this improvement has been offset by fierce competition for market share in international markets, particularly as a result of subsidized exports, with the result that farmers' terms of trade (the ratio of prices received relative to prices paid) have declined by just over 3% a year over the same period. Declining terms of trade are expected to continue as the phenomenon is principally attributable to technological advances enabling profitable production of larger quantities of a commodity at lower prices.

The productivity growth achieved in the Australian grains industry has been driven by research innovation and adoption on farm of new technologies. Some 40-50% of this productivity increase is attributable to better crop varieties with the balance attributable to

advances in agronomy and other disciplines. Declining terms of trade can at least be partially offset by capturing higher proportions of premium paying markets, with major advances being made by Australia over a number of decades by ensuring that grain quality meets specifications of those markets prepared to pay premiums for high quality grain.

Another critical issue facing Australian agriculture concerns preservation of the natural resource base. Soil and water quality have been compromised by unsustainable farming practices, which have caused erosion, salinity and nutrient deficiencies and toxicities and other production constraints. These effects have caused immediate economic loss and have compromised the long term sustainability of many farming enterprises.

It is against this background that the ARC and the GRDC will establish a major research centre in plant genomics in Australia focused on developing opportunities and solving problems for the grains industries. The Centre will develop a critical mass of activities in focused areas of research strength and commercial opportunity and will encourage the formation and maintenance of strong networks between research programmes and their associated commercial activities.

## **1.2. Outcomes Sought**

The Centre will achieve excellence in research and development (R&D) in the field of plant functional genomics, in the management of that R&D, in the management of the intellectual property that is generated by the research program and in commercialisation of intellectual property generated.

The Centre will have a critical mass of capability in plant science. The capability of the Centre in terms of infrastructure and management will be sufficient to attract world-class researchers and high quality students by providing access to advanced facilities and key platform technologies that will enable the Centre to become an important player in plant genomics globally.

The Centre will apply genomics research to critical problems and opportunities relevant to the Australian grains industry, and will commercialise those results through novel products that will contribute to the sustainable prosperity of the Australian grains industry.

## **1.3. The Investors**

### **1.3.1. The Australian Research Council**

The role of the Australian Research Council (ARC) is to advise the Government on research funding and policy and, through its management of the National Competitive Grants Programme, to promote the conduct of research and research training that is of the highest quality for the benefit of the Australian community. The Council's Mission is to *Advance Australia's capacity for quality research to the economic, social and cultural benefit of the community*. The Government's December 1999 White Paper, *Knowledge and Innovation: A Policy Statement on Research and Research Training*, identified an enhanced strategic role for the Council in contributing to national innovation, with a focus on:

- helping to form and maintain effective linkages between the research sector and the business community, government organisations and the international community;
- developing and improving public understanding and appreciation of the contribution that research makes to the community; and
- reporting on the comparative performance of Australia with other research active countries and assessments of the national return on investment in research.

### **1.3.2. The Grains Research and Development Corporation**

The Grains Research and Development Corporation (GRDC), is a statutory corporation established under the *Primary Industries and Energy Research and Development Act 1989*. It is funded by a levy on the production of grain by graingrowers, which is matched by a contribution from the Federal Government. There are, at present, 25 leviable crops spanning temperate and tropical cereals, oilseeds and pulses. The functions of the GRDC include:

- Investigating and evaluating the requirements for R&D in the grains industry;
- Co-ordinating or funding the carrying out of R&D activities; and
- Facilitating the dissemination, adoption and commercialisation of the results of R&D.

The GRDC invests approximately \$100 million per annum in grains research and development.

## **2. OBJECTIVES**

The *scientific* objectives of the Centre are to:

- establish programs of research that deliver a mix of economic, environmental and social benefits relevant to Australia in the short-, medium- and long-term.
- make discoveries and prove concepts in plant functional genomics that are in the forefront of developments internationally;
- establish a training program that will develop for Australia the next generation of researchers in the field;
- build relationships in the field of plant functional genomics nationally and internationally;
- build on existing research programs;
- use key platform technologies;
- access world class facilities and equipment; and
- attract from within Australia, and from abroad, researchers of international standing, and the most promising research students.

The *commercial* objectives of the Centre are to:

- ensure that all aspects of the research program are clearly focussed on delivering tangible industry outcomes;
- develop a creditable business plan;
- establish key results areas for monitoring the performance of the Centre;
- proactively and seamlessly ensure that outputs from the research program are incorporated in products and are commercialised for the benefit of Australia;

- attract the participation of Australian and international companies in collaborative research programs and in commercialisation; and
- identify, protect and commercially exploit the intellectual property for the benefit of Australian researchers and industry.

The *community* objectives of the Centre are to:

- provide opportunities for world class researchers to work in Australia and to enable world class Australian scientists to remain in, or return to, Australia;
- provide an effective, transparent and balanced view of the scientific impacts of applied gene plant technology;
- raise awareness of the role of science in Australia, and particularly its contribution to industrial innovation and maintaining international competitiveness; and
- raise awareness about innovation in agriculture and its role in the “new economy”.

### **3. CHARACTERISTICS OF THE CENTRE**

#### **3.1. Scientific Focus**

In broad terms, the ARC and GRDC invite submissions that will deliver benefits to Australia in ways that are consistent with the priorities identified in this paper. The submissions should deliver economic, environmental and social benefits to Australia, and the agricultural sector specifically.

While the ARC and GRDC do not wish to narrowly prescribe areas of research activity, areas of interest may include:

1) General areas:

- plant molecular biology;
- plant cellular processes;
- plant morphogenesis;
- plant adaptation and environment.

2) Specific areas:

- agronomic traits
  - input traits: insect resistance, herbicide tolerance;
  - output traits: yield;
  - abiotic stress
  - drought and water use efficiency;
  - heat/temperature;
  - nutrient deficiencies and toxicities;
  - salt tolerance.
- grain quality traits
  - ratios of major components (protein/oil/carbohydrates);

- novel proteins, oils and starches;
- baking quality;
- malting;
- traits related to human nutritional value
- biotic stress
  - rust diseases of cereals;
  - diseases of pulse and / or oilseed crops;
  - genetic systems for disease resistance.

### **3.2. Transfer of Centre Outputs**

The overall purpose of the Centre is to ensure world class research excellence and application to critical problems and opportunities of interest to the Australian grains industry and wider plant industries. While initial scientific discoveries will occur in the first 3 to 5 years, it is recognized that delivery through to commercial programs may take a further 5-8 years.

In order to rapidly become an important global player in plant genomics research and delivery, the Centre must be designed to ensure that:

- its researchers gain access to appropriate existing biotechnologies, expertise, technical assistance and facilities;
- its researchers have freedom to operate when using third party or background intellectual property both for research and commercialisation purposes; and
- the research outcomes are actually applied for the benefit of grain growers and other plant industry participants through a proactive commercialisation program.

The Centre must draw on appropriate existing genomics technologies wherever possible to ensure that resources are not wasted 're-inventing the wheel' and to increase the speed with which the new technology it develops can be delivered.

Plant functional genomics is a highly competitive field and delivery into existing product pipelines and maintenance of a focus on delivering commercial outcomes is essential. It may be beneficial for the Centre to partner with a major international life science company/s for this purpose. Recent GRDC experience in discussions with a number of the major international plant life science companies that own significant genomics enabling technologies and facilities suggests that they are willing to collaborate with research entities provided that:

- the scale and scope of the proposed collaboration is sufficient to interest them; and
- the enabling technologies and other background intellectual property they may provide are protected from access by their competitors.

In order to maximise the opportunities for Australian industry arising from the Centre's research, the Centre must retain the right to commercialise its intellectual property in Australia, including the right to export grains, plant products or value added products that incorporate Centre intellectual property. In return for access to propriety and enabling technologies and facilities, commercial partner/s may be offered specific intellectual property rights, provided the rights granted allow for a royalty stream, or other benefits, back to the Centre.

The Centre will have a strong emphasis in the commercialisation of intellectual property, both in Australia and internationally. The Centre must have a commercialisation strategy that includes the following:

- commercialisation policies and access to commercialization services to support the commercial exploitation of research outputs for the benefit of Australia;
- policies and practices necessary to foster an entrepreneurial culture amongst its staff.

In addition to providing funding for the Centre, a major objective of the GRDC is to ensure that relevant research outputs are delivered to Australian growers. As an active participant in the Centre, the GRDC will assist the Centre in the development of commercial relationships.

### **3.3. Funding**

It is expected that the funding available from the ARC and GRDC will be of the order of \$20 million over five years. The level of funding is therefore higher than that provided for ARC Special Research Centres or for Cooperative Research Centres. Funding will be provided jointly by ARC and GRDC in equal proportions.

Applicants should note that the ARC's financial contribution to the Centre is subject to the appropriation of moneys and the approval of expenditures under the *Australian Research Council Act 2001*. Approval of expenditures under the Act can only be considered in relation to years for which there is relevant appropriations, currently until 2003. The ARC's funding agreement (Conditions of Grant) with the successful applicant will specify approved expenditures to be made through the ARC in relation to the years for which the relevant appropriations are in force.

Subject to a high level of performance from the Centre, the ARC and the GRDC may recommend ongoing funding for a second five year period.

Matching support, in cash or in kind, will be required from all partners involved in the establishment of this new Centre. It is likely that the successful applicants will bring significant financial and in-kind resources to the Centre.

Distributions of capital or profit by the Centre to its investors may only occur if the Commonwealth approves the distribution.

Funding will be directed through a lead tertiary institution that will also provide the infrastructure services for the Centre. It is expected that the physical headquarters of the new Centre will be located at one institution, be highly visible and provide accommodation for the majority of the Centre's staff. Nodes of the Centre may be located at a limited number of sites elsewhere. This arrangement is designed to ensure that the new Centre will have sufficient scale and be able to develop the critical mass required to make a real difference.

Prospective applicants may explore the possibility of bringing together strong complementary research teams by forming an active research consortium, perhaps involving a number of universities, CSIRO, or state government instrumentalities. The Centre may also undertake individual research projects with organisations that are not partners in the

Centre provided that an appropriate contract is entered into between the Centre and the organisation concerned sufficient to protect the rights of all parties concerned.

### **3.4. Appointment and Responsibilities of the Director**

A Director or Interim Director will be appointed to lead the Centre. The Director or Interim Director will be placed in a unique position to attract outstanding researchers from within Australia and from overseas. National and international applicants with outstanding profiles will be sought for this position. The Director or Interim Director, in consultation with the Board, will be responsible for setting the research focus of the Centre, implementing the policies of the Board, and establishing the Centre. Where the Centre or its projects involves more than one organisation, the Director or Interim Director will be responsible for coordination of the research effort and the reporting structures across the organisations involved. The Director or Interim Director will also be responsible, in consultation with the Board, for the establishment and operation of the Centre's intellectual property management and commercialisation work.

It is expected that proposals for the Centre will be generated from within Australia under the leadership of an Interim Director. It is expected that the key positions of Director and research group leaders will be internationally advertised.

The Director is required to work on the activities of the Centre on a full time basis.

Applications must name the Director or Interim Director.

## **4. ELIGIBILITY**

### **4.1. General**

The Australian Centre for Plant Functional Genomics may involve the participation and cooperation of universities, industry, state Governments and CSIRO.

The Centre must include a higher education institution as the lead agency. Government (ARC) funding will be directed through the Australian higher education institution.

Institutions are able to submit one application only as lead agency although they may be involved in more than one application.

### **4.2. Institution Eligibility**

Higher education institutions eligible to act as lead institutions are listed in Appendix 1.

### **4.3. Cross-Scheme Eligibility**

The principal work of the Centre will be carried out by full time researchers appointed or seconded to the Centre. Any researcher associated with the Centre including the Director will be eligible to apply as a Principal or Partner Investigator for ARC Discovery-Project Grants

and Linkage-Project Grants provided that the proposed research is outside the core business of the Centre (which has already been funded by the Commonwealth through the ARC). The ARC reserves the right to make the final decision on whether a proposal is outside the core business of the Centre.

Any researcher associated with the Centre will be eligible to act as a Partner Investigator on ARC Discovery-Project applications in which the Chief Investigator is outside the Centre.

Applicants for funding of the Centre for which they are the proposed staff may also lodge concurrent applications for Discovery-Project Grants as a Chief or Partner Investigator, if eligible. Such proposals may be within the core business of the Centre, but if the Centre application is successful, the Discovery-Project Grant will not be awarded or will be relinquished.

Applicants should note the eligibility criteria for access to other ARC funding schemes.

Researchers of the Centre will be eligible to apply for research funding from sources other than those provided by the ARC and the GRDC.

Researchers associated with the Centre may apply for other GRDC research funds provided that the proposed research is outside the core business of the Centre.

## **5. APPLICATION PROCESS**

The application process will take place in two stages. The first stage will involve the submission of an expression of interest by potential applicants and the second will involve the submission of a full proposal by selected short listed applicants.

### **5.1. Stage I**

#### **5.1.1. Information Forum**

Information Forums will be held in Canberra on Thursday 4<sup>th</sup> October and Monday 22<sup>nd</sup> October, 2001, to provide background information to prospective applicants. This Forum is designed to consult with potential applicants, disseminate information about the Centre, answer questions and encourage collaborations. Details of the Forum will be widely advertised and will also be available on the ARC and GRDC web sites.

#### **5.1.2. Expression of Interest**

**Lead institutions are asked to submit a four- page expression of interest that includes the details and contact information of the lead and partner institutions and a summary of the proposal. Expressions of interest will be evaluated according to the following criteria:**

- the description of the research focus of the Centre and the proposed research programme;

- the description of the structure of the Centre;
- the description of the education programme of the Centre;
- the notional budget for the first 5 years; and
- the procedures for the protection and commercialisation of intellectual property

**The expressions of interest will be assessed by an Expert Advisory Committee who will recommend a short list of applicants to the ARC/GRDC Steering Committee. The short listed applicants will then be invited to submit a full application.**

The ARC and the GRDC reserve the right to explore with applicants modification of their submission with respect to any matters including the participating institutions, the focus of the proposed research and the proposed intellectual property and commercialisation arrangements.

## **5.2. Stage 2**

Selected applicants will be invited to submit a detailed application. This application will be the prime source of information available to the Expert Advisory Committee, and applicants should submit their projects as mature research plans ready for implementation. The application should contain all the information necessary for assessment of the proposal without the need for further written or oral explanation, or for reference to additional documentation, unless requested by the Expert Advisory Committee. All details on the application, particularly those concerning existing funding and research grants, must be current.

Where an application involves more than one institution, the application must detail the administrative and reporting structure, including allocation of responsibility for coordination and reporting across the institutions involved.

The full applications will be reviewed by the Expert Advisory Committee to decide the ranking of applicants. Applicants may also be evaluated through interview and site visits to decide the successful application. The successful application will be announced early in 2002.

The ARC and the GRDC reserve the right to explore with applicants modification of their full applications with respect to any matters including the participating institutions, the focus of the proposed research and the proposed intellectual property and commercialisation arrangements.

## **5.3. Application Form**

Applicants must use the application forms available on the web sites of the ARC and GRDC ([www.arc.gov.au](http://www.arc.gov.au) and [www.grdc.com.au](http://www.grdc.com.au)) to submit both the expression of interest and full application.

Full applications will consist of three parts – application form, additional text, and curriculum vitae and supporting documentation.

## **5.4. Deadlines**

**The deadline for expression of interest is Friday 23<sup>rd</sup> November, 2001.**

**The deadline for detailed applications is Friday 25<sup>th</sup> January, 2002.**

**Late applications will not be accepted.**

**Replacement pages will not be accepted after submission.**

## **5.5. Submission**

Full applications must be submitted by the lead university, not by individual researchers. Applications should be despatched:

By **mail** to:

Executive Director (Biological Science  
and Biotechnology)  
Australian Research Council  
GPO Box 9880  
CANBERRA ACT 2601

By **courier** to:

Executive Director (Biological Sciences and  
Biotechnology)  
Australian Research Council  
AGSO Building  
Cr Hindmarsh Drive and Jerrabombera Avenue  
SYMONSTON ACT 2609

## **5.6. Application Format**

Both the expression of interest and the full application should be in black type, size 12 font on white A4 paper, single-sided and unbound. Only the following font types should be used: Arial, Courier, Palantino, Times New Roman and Helvetica.

## **5.7. Copies of Application**

An original and ONE identical copy only are required. The application must be clipped with fold back clips - not stapled.

## **5.8. Limit on the Number of Applications**

Each eligible higher education lead institution is limited to submitting one full application. Participating organizations may be involved in more than one application.

## 5.9. Timetable

Date	Year	Event
October	2001	Advertisement for Expressions of Interest. Guidelines made available on ARC and GRDC web sites
Thursday 4 October	2001	Information Forum (Combio Conference, Canberra)
Monday 22 October	2001	Information forum (Canberra)
Friday 23 November	2001	Closing date for Expressions of Interest
November	2001	Assessment of Expressions of Interest by the Expert Advisory Committee and the Steering Committee. List of Expressions of Interest made available on the ARC and GRDC web sites
Friday 7 December	2001	Invitations to submit full applications sent
Friday 25 January	2002	Closing date for full applications
Friday 1 February	2002	Full applications sent to Expert Advisory Committee
Monday 25 February	2002	Expert Advisory Committee meeting to consider full applications
Monday 4 March	2002	Recommendations submitted to the ARC and GRDC for approval
Friday 29 March	2002	Successful applicants announced
Friday 21 June	2002	Conditions of Grant signed
Monday 1 July	2002	Funding commences

## 6. SELECTION CRITERIA

### 6.1. General Criteria for Expression of Interest

Expressions of interest will be assessed according to the criteria listed in Section 5.1.2.

### 6.2. General Criteria for Full Application

To ensure that the Centre objectives are met, full applications will be assessed against the following criteria. The descriptors following each criterion are not all-inclusive. Applicants submitting a full application need to address each of these selection criteria.

**1. Research Program**

- excellence, focus and coherence;
- creativity and innovation;
- potential to lead to a significant advancement of knowledge;
- potential to lead in an area of research with high economic, environmental and social impact;
- extent to which social and ethical issues will be addressed.

**2. People**

- achievements of participants (director and associated researchers);
- plans to attract researchers of international standing and promising research students;
- contribution to postgraduate education and postdoctoral training;
- achievements of senior participants in managing intellectual property and commercialisation.

**3. Linkages/Networking**

- existence of strong, effective links between all participants;
- multidisciplinary, multisectorial approaches;
- integration of existing research in the field;
- sharing of equipment and research facilities;
- links with researchers, and leading research centres, in other countries.

**4. Industry Linkages and Commercialisation Plans**

- willingness to develop commercial linkages with local and international firms both in relation to licensing in existing enabling technologies and to licensing out new Centre intellectual property;
- likelihood that new products, processes or services can be commercialised;
- adequacy of plans for facilitation of technology transfer including commercialisation.

**5. Management**

- cash and in-kind contributions from participants
- adequacy of proposed management structure, including financial, operational and research management arrangements;

**6. Intellectual Property**

- adequacy of intellectual property identification, protection and management(see Section 6.1.5);
- adequacy of commercialisation planning and management;

**7. Communication**

- ability to support informed debate about opportunities and risks associated with genetic research and the development of gene technologies.

## **6.3. Specific Requirements**

### **6.3.1. Budget**

Applicants must submit a notional budget for the first five years under the following headings:

Direct costs

- (a) Personnel
- (b) Teaching relief
- (c) Equipment
- (d) Services
- (e) Travel
- (f) Other

In-kind contributions

- (a) Personnel
- (b) Equipment
- (c) Infrastructure
- (d) Services
- (e) Other

The cost of large-scale capital items such as buildings will not be supported.

### **6.3.2. Corporate Governance and Legal Structure**

The legal structure under which the Centre operates will influence its success. The Centre should be a stand alone entity with a structure that will be effective in delivering the Centre's outcomes and flexible enough to accommodate organisational changes over time.

The application will need to detail the type of legal entity the Centre will be, such as a joint venture, a company limited by shares, company limited by guarantee etc. For example, one possibility is for the Centre to be a joint venture with a separate incorporated company within the Centre responsible for the protection and commercialisation of the Centre's intellectual property and for the licensing in-background or third party intellectual property. It is the GRDC's preference that the Centre be incorporated or, at the very least, that the Centre forms an incorporated vehicle to; hold and manage intellectual property, enter into commercial arrangements, and be capable of employing staff in its own right. The GRDC and consortium members may be shareholders of the company. The ARC is not seeking to benefit directly from the Centre's commercialisation activities. Applications must be supported by letters from all consortium partners confirming their agreement to these arrangements.

The organisational and corporate structure of the Centre must:

- be flexible enough to allow entry of new partners at any time and exit of partners (for example commercial firms) at defined points in time, such as at the conclusion of component research programmes or other activities;
- provide for rigorous intellectual property management of both background and developed intellectual property;
- ensure equality of access to resources for all participants; and
- provide clear linkages to potential commercialising partners.

### **6.3.3. Role of Board**

The Board of the Centre will be a skills-based Board of Governance with scientific and commercial skills and will have broad representation from the scientific, commercial and user communities. This is the first time that the ARC has joined with another organisation to jointly invest in a priority area of research. The ARC and the GRDC will therefore each have a representative on the Board to assist in monitoring the progress of the Centre and its adherence to the Centre objectives. The Board will be responsible for the scientific focus of the Centre, its structure and general operating principles, and intellectual property and commercialisation management. The Board may establish both a Scientific Advisory Committee and a Commercial Advisory Committee.

In consultation with the Director and the Scientific and Commercial Advisory Committees, the Board will set the research priorities of the Centre and be responsible for approving the entry and exit of additional participants.

### **6.3.4. Physical Structure and Location of the Proposed Centre**

The new Centre must have a clearly defined single physical location at one research institution although nodes of the Centre may also be located at a limited number of locations elsewhere.

### **6.3.5. Commercial Aspects of Proposed Centre Operations**

Key intellectual property and commercialisation activities of the Centre must include:

- ensuring that research objectives and outcomes are driven and delivered commercially;
- procuring access to existing key plant functional genomics tools, expertise and facilities world-wide to ensure that funds are not expended “re-inventing the wheel”, improving speed of delivery to the market place and providing commercialisation pathways;
- ensuring that any third party propriety intellectual property made available to the Centre remains confidential to the Centre;
- ensuring that Centre intellectual property is identified, protected and managed;
- proactively managing commercialisation of Centre research outcomes; and
- on-going management of commercial agreements (possibly beyond the research life of the Centre itself).

The Centre’s commercial operations are likely be enhanced by developing a commercial relationship with a major international commercial partner or partners who:

- owns relevant enabling technologies, has relevant expertise and operates extensive plant genomics research facilities; and
- provides a commercialisation pathway to international markets.

To ensure that Australian growers and industry benefit from the Centre’s research work, the Centre will retain all rights to commercialisation of all Centre intellectual property in Australia including the right to export any crops or other value added products produced in Australia.

Intellectual property management and commercialisation activities will require funding from the Centre's budget at least for the first few years. While Centre intellectual property will have the potential to generate future cash flow, the investors acknowledge that it will be a long time before any commercial revenue is received from sale of products in the market place.

The Centre must comply with the *National Principles of Intellectual Property Management for Publicly Funded Research* and with the intellectual property statute of the host institution.

## **7. SELECTION PROCESS**

### **7.1. Steering Committee**

A Steering Committee comprising representatives of the ARC and the GRDC will oversee the selection process.

### **7.2. Expert Advisory Committee**

An Expert Advisory Committee of international standing will be appointed by the ARC and the GRDC to evaluate the expressions of interest and the final applications according to the selection criteria. The Expert Advisory Committee will prepare recommendations that will be submitted to the Steering Committee and subsequently to the Boards of the ARC and GRDC for endorsement. The recommendations will then be submitted by the ARC to the Minister for Education, Training and Youth Affairs for approval.

### **7.3. Offer of Grant**

Subject to the Minister's approval, the ARC and the GRDC will inform the successful institution in a letter of offer that will indicate the funding to be provided and include the Conditions of Grant.

### **7.4. Naming the Centre**

The research Centre will be known as the Australian Centre for Plant Functional Genomics.

### **7.5. Leadership of the Centre**

The Director of the Centre is expected to work full-time on the activities of the Centre. It is a requirement of the ARC and the GRDC that they be informed of any changes in leadership of the Centre.

## 8. ADDITIONAL INFORMATION

### 8.1. Conditions of Grant

A condition of funding is the execution of a legally binding Conditions of Grant. Funds will not be provided unless this agreement has been finalised and commenced to have effect. The agreement will include specific performance milestones, the payment schedule, reporting and auditing requirements. Funding may be terminated or suspended where the terms of the agreement are breached. The ARC and GRDC will not begin payments before the Conditions of Grant is signed

In respect of funds provided under the *Australian Research Council Act 2001*, the Conditions of Grant will be subject to the requirements relating to funding approvals under that Act and the express conditions specified in that Act. The funding approval made under the ARC Act may be varied where any of the circumstances described in Section 55(3) of the Act occur, namely:

- the involvement of the approved organisation with the research program ends;
- the research program changes so that it is no longer consistent with the description in the funding approval; or
- the person named in the funding approval as the person leading the research program ceases to lead the program.

### 8.2. Reporting Requirements

The Centre will be required to submit to the ARC and GRDC:

- an **Annual Report** on the use and expenditure of grant funds by 31 March in the year following the calendar year for which they were granted; and
- an **Audited Financial Statement**, independent of the lead institutions audited financial statement, by 30 June of the year following the year of the grant.

The Annual Report will be used to monitor the non-financial progress of the Centre against the objectives specified in Section 2 of the Guidelines. The ARC and GRDC reserve the right to suspend payment of further installments of any current grant until the appropriate reports have been received and assessed as satisfactory.

Approval of the Minister is required to carry over any unspent ARC funds from one year to another.

The audited financial statement must be prepared by a qualified auditor. Qualified auditor means:

- (a) the Auditor-General of a State, of the Australian Capital Territory or of the Northern Territory; or
- (b) a person registered as a company auditor or a public accountant under a law in force in a state, the Australian Capital Territory or the Northern Territory; or
- (c) a member of the Institute of Chartered Accountants in Australia, or of the Australian Society of Certified Practising Accountants; or

- (d) a person approved by the Minister in writing as a qualified auditor for the purposes of the *Australian Research Council Act 2001*.

### **8.3. Monitoring and Evaluation**

The performance of the Centre will be reviewed in the fourth year of its operation. Broadly, the fourth-year review examines the extent to which the Centre has met its previously stated aims and objectives, the progress against the Centre's performance targets, the quality of outcomes to date, the management of the Centre and the extent to which it has met its agreed objectives. Considerable progress towards these objectives must be achieved in order to receive further funding.

Ad hoc reviews may also be held in special circumstances, such as a change in the Director. Persons nominated by the ARC and the GRDC are to be given full access to all accounts, records, documents and premises relevant to the research being funded by the ARC and the GRDC.

Applicants should be aware of provisions of Part 8 of the *Financial Management and Accountability Act 1997*, which provides the Auditor General or an authorised person with the right to have, at all reasonable times, access to information, documents and records.

### **8.4. Privacy of Individuals**

Documents containing personal information are handled and protected in accordance with the provisions of the *Privacy Act 1988* which sets standards for the collection, storage, use and disclosure of, and access to, personal information. Personal information is disclosed only with permission of the individual to whom it relates or where the Act allows.

### **8.5. Confidentiality**

Information contained in applications is regarded as confidential unless otherwise stated and will be received and treated as confidential by the ARC, GRDC, institutions and assessors.

### **8.6. Incomplete/misleading information**

If an application is incomplete or contains information which is considered misleading, it will be excluded from any further consideration for funding. If the ARC or GRDC believes that omissions of inclusion of misleading information are intentional, or if there is evidence of malpractice, the ARC will refer the matter to the National Investigations Unit of the Department of Education, Training and Youth Affairs. The Commonwealth Government is committed to protecting its revenue, expenditure and property from any attempt, either by members of the public, contractors, sub-contractors, agents, intermediaries or its own employees to gain financial or other benefits by deceit.

Examples of malpractice include, but are not restricted to:

- providing fictitious track records; and
- falsifying claims in publications records (eg. describing a paper as accepted for publication when it has only been submitted).

Applicants acknowledge that giving false or misleading information is a serious offence under the *Criminal Code*.

## **8.7. Contacts**

Enquiries about this Centre may be addressed to:

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## **9. REFERENCES**

Knopke, P, O'Donnell, V. and Shepherd, A. (2000). *Productivity Growth in the Australian Grains Industry*. ABARE Research Report 2000.1, Canberra

## APPENDIX 1

### Eligible higher education institutions

#### Higher education institutions receiving Commonwealth funding on a triennial basis

##### New South Wales

Charles Sturt University  
Macquarie University  
Southern Cross University  
The University of New England  
The University of New South Wales  
The University of Newcastle  
The University of Sydney  
University of Technology, Sydney  
University of Western Sydney  
University of Wollongong

##### Victoria

Deakin University  
La Trobe University  
Monash University  
RMIT University  
Swinburne University of Technology  
University of Ballarat  
The University of Melbourne  
Victoria University

##### Queensland

Central Queensland University  
Griffith University  
James Cook University  
Queensland University of Technology  
The University of the Sunshine Coast  
The University of Queensland  
University of Southern Queensland  
Bond University

##### Western Australia

Curtin University of Technology  
Edith Cowan University  
Murdoch University  
The University of Notre Dame Australia  
The University of Western Australia

##### South Australia

The Flinders University of South Australia  
The University of Adelaide  
University of South Australia

##### Tasmania

University of Tasmania  
Australian Maritime College

##### Northern Territory

Batchelor College  
Northern Territory University

##### Australian Capital Territory

The Australian National University  
University of Canberra

##### Multi-State

Australian Catholic University