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**Part 1 – Summary Project Details**

Application Financial Year: 2000/2001  
CRDC Project Number: CSP 134C  
Travel Start Date: 2 Jun 2001      Cease Date: 10 Jun 2001  
Travel Destination: The ICGI 2001 Workshop, Montpellier, France

**Part 2 – Project Contact Details**

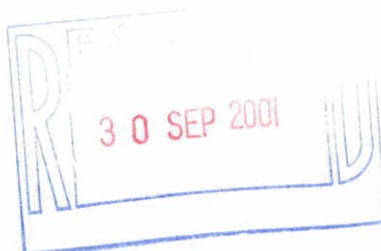
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## Purpose of Travel

Liz Dennis and Curt Brubaker were invited to attend the International Cotton Genome Initiative ICGI 2001 workshop in Montpellier France. Dr. Dennis was invited to present a summary of the current state of Cotton Functional Genomics; Dr. Brubaker was invited as member of the ICGI Steering Committee and a Discussion Leader for one of the Workshop sessions.

The International Cotton Genome Initiative is a new organization that came into being during a Cotton Marker Workshop held in Canberra 16-18 February, a workshop partially funded by the CRDC. CSIRO Plant Industry feel strongly that the ICGI is an important development in cotton research, and that the Australian Cotton Industry must be represented in the ICGI. While CSIRO PI had a member on the Steering Committee (CLB), CSIRO PI felt strongly that the CRDC may want to be involved directly, and sent a letter to Ralph Schulze to this effect (Attachment 1). From a variety of options, CRDC elected to participate in the ICGI 2001 Workshop by sponsoring Drs. Dennis' and Brubaker's travel to the meeting and thus was listed as an ICGI Workshop sponsor.

## Outcomes and Highlights

As described in the letter to Ralph Schulze, the ICGI is designed to facilitate cotton genomics internationally, by fostering communication and collaboration. The ICGI 2001 Workshop attracted many of the key cotton genomics researchers from the US, Australia, and France. The first day of the workshop was devoted to looking at other crop genome initiatives as examples they may be followed. The second and third days were devoted to progressing the initiative by formalizing the structure, identifying funding sources, and planning future meetings. The outcomes of the Workshop appear in an ICGI Workshop Proceedings that accompanies this report. The resolutions of the meeting are summarized below.

Of particular interest to the Australian Cotton Genomics community,

- Liz Dennis is now a member of the expanded ICGI Steering Committee
- Curt Brubaker is now deputy chair of the expanded ICGI Steering Committee
- ICGI posters (coordinated by CLB) will be placed at the Beltwide and Plant, Animal, and Microbe conferences Jan 2002
- The Plant, Animal, and Microbe conference will include an ICGI cotton workshop
- A proposal to the US National Science Foundation to partially fund the ICGI over the next five years was submitted June 2001
- The ICGI 2002 workshop will most likely be held in China, resident hosts have been contacted.
- The World Cotton Research Conference will also host an ICGI workshop

In summary, the ICGI 2001 Workshop was highly productive and it is clear that over the next few years, the ICGI will play an increasingly important role in international cotton genome research. It will be important for the Australian Cotton Research community to maintain its representation and participation in the ICGI. With three representatives (Bruce Lyon of the Univ. of Sydney is also a SC member) on the Steering Committee, the Australian Cotton Genomics Research Community is well represented, and is in a position to benefit from and influence the International Cotton Genome Initiative.

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# Resolutions of the ICGI 2001 Workshop

## Recruitment

### Membership Coordinator

Recruitment is a critical issue and needs to be under the supervision of a Steering Committee member. The goal of the ICGI is to be as inclusive as possible. To this end Russell Kohel was designated the membership coordinator. To foster recruitment, a dedicated ICGI web site was established at <http://algodon.tamu.edu/icgi>.

Background information on ICGI and the membership list are available here. A secondary page/form allows participants to input information and new participants to join the ICGI. Notification of the ICGI was placed on the ICAC listservers, and international cotton researchers were individually contacted.

### Future Travel & Promotion

Several key countries currently are not represented in the ICGI, viz., India, Egypt, Argentina, China, Brazil.

ICGI members traveling this year are encouraged to use these opportunities to recruit participation. The following individuals have agreed to make contacts in the following countries:

- Bill Hugie—China
- Marc Giband—China
- Frank Shotkoski—China, Argentina, Brazil
- Jean-Marc Lacape—Vietnam
- John Yu—China

## Communication

### A report of the ICGI 2001 Workshop

The proceedings of the ICGI 2001 Workshop are to be written up and distributed to the steering committee members, sponsors, and new participants.

The proceedings will be available as hard copy, and on the web.

Curt Brubaker agreed to compile the ICGI 2001 report.

### Cotton Genome Center Website

To facilitate communication and recruit participants a listserver (<http://cottongenomecenter.ucdavis.edu>) was set up and is hosted by the Cotton Genome Center Website maintained by Thea Wilkins. The

purpose of this listserver is to foster an active exchange of resources and information and to provide an open forum for discussing emerging technologies.

To subscribe:

- send an email address to [listproc@ucdavis.edu](mailto:listproc@ucdavis.edu)
- Put the following one line in the email into the main body of the message:

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sub cottongenomelist your_firstname your_lastname
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[For example, if your name is John Smith, you should type "sub cottongenomelist John Smith"]

### **ICGI website**

Thea Wilkins was designated the Website coordinator.

The ICGI website will be mirrored at cottonDB and linked to other web pages for CGIR and ICGI members.

A skeleton framework will be posted initially, incorporating the ICGI Steering Committee membership, mission statement, and the ICGI 2001 report. Additional output, i.e, brochures and posters will be added as they are developed.

### **ICGI Posters**

A Poster will be developed for the 2002 Beltwide and Plant, Animal, and Microbe Genome Conference X 2002. This poster will also be placed on the ICGI websites and available to Steering Committee members traveling to conferences and meetings.

Curt Brubaker agreed to coordinate the preparation of the poster, in conjunction with the ICGI 2001 report.

Russ Kohel is to oversee the abstract submission for the 2002 Beltwide meetings.

Curt Brubaker is to coordinate abstract submission for 2002 Plant and Animal Genome Conference.

### **ICGI logo design**

Curt Brubaker agreed to develop several ICGI logos and send them to the Steering Committee for approval. Several logo designs were developed and the following logos were selected for final confirmation by the Steering Committee. Two formats are proposed, "landscape" and "portrait", to accommodate different applications, i.e., posters, power point presentations, letterheads. Grey-scale and monotone derivations are also available when color printing is not convenient.



## ICGI Finances

### Current Funds

The current funds available to the ICGI were raised prior to the ICGI 2001 workshop. All the contacted stakeholders contributed resulting in a total of \$52,500. The monies were deposited into a research foundation account at New Mexico State University. The funds are available to the ICGI Steering Committee to defray the expenses of ICGI activities and functions. It must be noted that the funds are not available for sponsored research activities.

Roy Cantrell is the current funds manager. ICGI expenditures to-date have been mainly the cost of sponsoring travel for key participants to the ICGI 2001 Workshop in France. The current budget sheet for the ICGI account is presented below: All figures are in \$USD. The above does not reflect the significant "in-kind" support from CIRAD, CSIRO, and CRDC.

Significant financial resources are available to ICGI for 2002 activities and beyond as deemed necessary by the Steering Committee.

### NSF-RCN 2000

Recognizing that bringing researchers together requires money, Roy Cantrell oversaw the preparation and submission (June 2000) of a National Science Foundation (U.S.A) Research Coordination Networks (NSF-RCN) grant. The purpose of NSF-RCN grants is to provide a modest pool of money over five years to allow collaborating scientist to meet face to face. Unfortunately this grant was not selected for funding, but was resubmitted June 2001 (see below)

<i>Amount \$</i>	
<b>Receipts</b>	
Cotton Foundation	5,000.00
Delta and Pineland Co,	8,000.00
Monsanto	8,000.00
Stoneville Pedigreed Seed	2,500.00
Dow AgroSciences	8,000.00
Syngenta	8,000.00
Aventis	8,000.00
Cotton Inc.	5,000.00
<u>Total receipts</u>	<u>52,500.00</u>
<b>Expenses</b>	
Gessler Airtx PO	1,067.50
Paterson Airtx PO	1,456.94
Cantrell Airtx T#	1,235.00
Saha Airtx PO	1,359.80
Kohel AirTX PO	1,332.80
May AirTX PO	1,562.02
Wilkins AirTX PO	1,274.60
Lyon AirTX PO	1,465.90
Dennis expense	1,000.00
<u>Total expenses</u>	<u>11,754.56</u>
<b>Current balance (9/1/01)</b>	<b>40,745.44</b>

## **New Funding Opportunities**

**NSF-RCN 2001:** A revised NSF-RCN grant will be resubmitted with Thea Wilkins and Roy Cantrell as co-PIs (Deadline June 29 2001). The revised grant will incorporate new initiatives for educational outcomes. While the funds are strictly limited to US scientists, non-US researchers can participate.

**European Union "Growth Program":** Marc Giband and Jean-Marc Lacape will respond to a European Union funding possibility. The European Union, under its "Growth Program" has published a call for expressions of interest related to the funding in support of research infrastructures. Together with the University of Montpellier, CIRAD has sent in an expression of Interest for the creation of a "Virtual Institute on Agriculture and Development" (VIAD). Institutions within VIAD will not be supported for their own research, but for setting up cooperatively a research infrastructure enabling research initiatives to be launched rapidly and effectively. Thus, VIAD will be an opportunity to develop networking within the ICGI. At the time the EU call for proposals will be issued, CIRAD will be seeking the approval of the ICGI-SC to represent the ICGI in the VIAD proposal.

## **Future Meetings**

### **Steering Committee Business Meeting**

The next business meeting of the Steering Committee is planned for the Plant, Animal, and Microbe Genome Conference X 2002.

The Chair of Steering Committee will determine the time and location prior to the conference.

### **Plant, Animal, and Microbe Genome Conference X 2002**

At the 2002 Plant, Animal and Microbe Genome Conference, the ICGI workshop will be linked to Cotton Workshop, and Andy Paterson will coordinate both workshops. The conference organizers approved the time extension.

Steering Committee members will nominate speakers for the ICGI workshop, and ICGI funds may be used to fund non-USA invited speakers.

### **ICGI 2002 Workshop**

Lloyd May and Marc Giband are the 2002 ICGI meeting coordinators. The consensus of the ICGI 2001 meeting in Montpellier, France is to have the 2002 meeting in China, given the wealth of cotton research efforts underway at various institutions in China. Marc Giband recently visited China and made inquiries into the possibility of having the 2002 ICGI meeting in China at a date to be determined. Marc visited with scientists from the Cotton Research Institute, Nanjing Agricultural University and National Laboratory of Plant Molecular Genetics, Institute of Plant Physiology and Ecology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai. The Chinese have expressed keen interest in hosting the meeting. Efforts are continuing to finalize plans for the date and location of the 2002 ICGI meeting and should be announced at the 2002 Plant and Animal Genome meetings in San Diego, CA.

## World Cotton Research Conference 2003—Cape Town

The World Cotton Research Conference-3 (WCRC-3) will be held in Cape Town, South Africa, March 9-13, 2003. Preliminary contacts with Dr Rafiq Chaudhry, Head of the Technical Section, International Cotton Advisory Committee, have allowed the setting aside of a time slot that will be used by the ICGI to hold its 2003 meeting.

Dr J-P Deguine, Head of CIRAD's Cotton Program is member of the International Committee of the WCRC-3, and will do his best to promote the holding of the 2003 ICGI workshop during the course of the WCRC-3.

The 60th Plenary Meeting of ICAC will be held in October 2001 in Zimbabwe, and CIRAD, as an International Observer at ICAC, will take this opportunity to emphasize the need to hold an ICGI workshop during the WCRC-3.

As privileged partners of the WCRC-3 (CIRAD is also a co-sponsor of the meeting) members of CIRAD's Cotton Program will be happy to coordinate the holding of the ICGI workshop if necessary.

## **ICGI Structure**

### **Steering Committee Membership**

Until a formal structure for the ICGI is approved by the entire membership, the existing Steering Committee (Roy Cantrell, Curt Brubaker, Bruce Lyon, Thea Wilkins, and Marc Giband) was asked to continue. However to spread the workload, Russ Kohel, Andy Paterson, Jean-Marc Lacape, Lloyd May, Damian Gessler, Liz Dennis, Sukumar Saha, Bill Hugie, and Siva Kumpatla were asked to join the steering committee. This interim Steering Committee will serve until a formal election by the ICGI membership can take place.

### **Steering Committee Chair**

Because of the increased size of the Steering Committee membership, it was agreed that a chairperson was necessary. Bruce Lyon oversaw the election by the other members of the committee. Three individuals were nominated, namely Marc Giband, Curt Brubaker, and Roy Cantrell. Marc Giband subsequently declined the nomination. Roy Cantrell received nine primary votes and Curt Brubaker received four. Ten members agreed with the suggestion that the runner-up be offered the position of deputy. Roy Cantrell was duly pronounced chairperson and Curt Brubaker deputy chairperson of the interim Steering Committee on 10 July 2001.

## **The Structure of the ICGI**

Although no clear consensus was reached during the meeting, the following model represents a starting point for the next business meeting.

### ***Proposed ICGI structural model***

The ICGI will comprise five functional workgroups that will represent the primary functional units of the organization:

- Structural Genomics
- Functional Genomics
- Germplasm and Genetic Stocks
- Bioinformatics
- Evolutionary and Comparative Genomics

### ***The workgroups will be charged with***

- Executing the ICGI guiding principles under the rubric of the mission statement
- Defining specific research and collaborative goals
- Identifying common shared resources
- Reporting activities to the ICGI as a whole
- Organizing symposia
- Formulating long-term research collaborations

The workgroups will be overseen by the Steering Committee and guided by an Advisory Committee.

The Steering Committee will comprise representatives elected by the workgroups and representation will be proportional to workgroup size.

A Membership Coordinator, a Website Coordinator, and an Administrative Manager will assist the Steering Committee.

The Steering Committee will elect a Chair internally.

The Advisory Committee structure is yet to be determined by the ICGI membership.

The PAG cotton workshop participants agreed that the next logical step was a workshop devoted entirely to developing the ICGI. CIRAD (France) has agreed to host the meeting in Montpellier in early June 2001. The basic agenda will be to:

- Define the structure of the ICGI
  - Reorganize the Steering Committee
  - Organize an Advisory Board of Industry Representatives
- Define the objectives of the ICGI in detail
- Develop a communications forum (e.g., listservers and web pages)
- Develop internet resources to facilitate data exchange
- Plan the way forward

This workshop is the critical step in transforming the idea of the ICGI into reality. At the same time it is vital that Industry partners are involved. To this end, the ICGI Steering Committee has solicited key cotton industry partners to contribute financially and by sending representatives. Syngenta, DowAgro, Deltapine, Stoneville Pedigree Seed, and the U.S. National Cotton Council have contributed financially, and the ICGI now has been promised US\$34,000 to fund the travel of the ICGI Steering Committee and Core Participating Research Scientists to the workshop. This eases the financial burdens on the participating scientists, and, importantly, it adds substance to the ICGI. When the NSF-RCN proposal is resubmitted, the participation of industry partners and their willingness to invest monetarily in the ICGI will greatly increase the probability of success.

CSIRO Plant Industry is committed to the concept of the ICGI. It is a timely idea and a successful ICGI will benefit cotton research in Australia tremendously. It will facilitate new collaborations and contribute to better and more widely available resources for cotton genome research. Liz Dennis and Curt Brubaker will represent CSIRO Plant Industry at the June 2001 workshop. We also think it is critical that the Australian Cotton Industry is involved in the ICGI, and this is a critical stage at which to get involved. The CRDC can participate in three ways. The first is to contribute to the travel costs of Liz Dennis and Curt Brubaker with the understanding that they will represent the interests of the Australian Cotton Industry. In addition, the CRDC could contribute monies directly to the ICGI. The CRDC would then be on record as an ICGI sponsor and would be eligible for representation on the proposed Industrial Advisory Committee. Finally, the CRDC may want to send a CRDC representative to the June 2001 Workshop.

The ICGI is a critical initiative that will influence the future of cotton genome research around the world. It is essential that representatives of the Australian Cotton Industry are present at this important developmental junction so that we can influence the direction of the ICGI and benefit fully from its outcomes.

Sincerely yours

Liz Dennis

Curt L. Brubaker

Cc W.J. Peacock