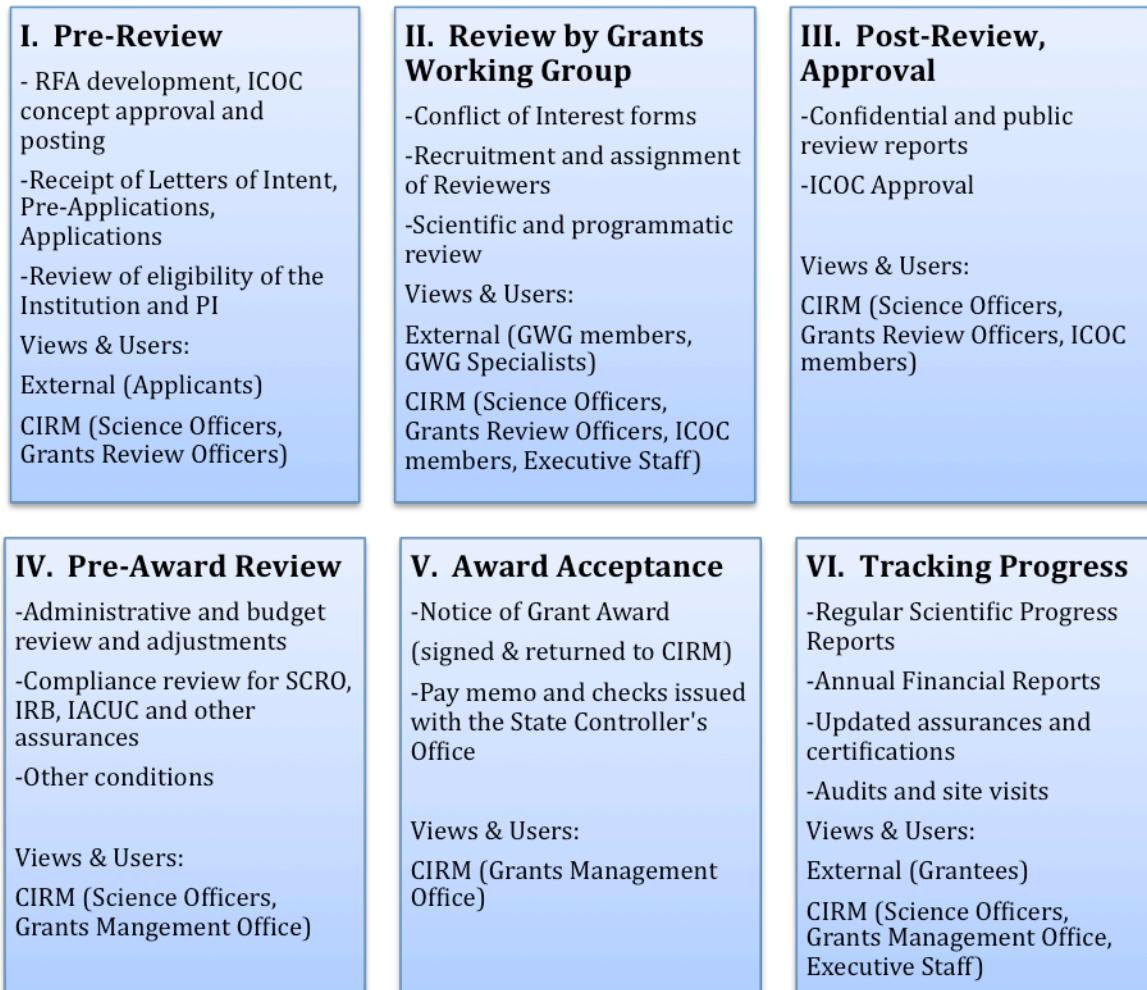


# Report to ICOC Governance Subcommittee On CIRM Grants Management Systems

## Agenda Item # 6 8/3/10 Governance Subcommittee Meeting

At the meeting of the ICOC on June 22/23, 2010, it was requested that CIRM provide further information on its Grants Management Systems. We are doing this as an update to the Governance Subcommittee of the report we provided in December 2009. A copy of that report is attached for reference.

As we have stated in previous reports, grants management is a complex, far-reaching activity that involves people, software and equipment. An overview of the steps involved in the life of a grant program at CIRM is summarized in the figure below.



To briefly recap CIRM's history with grants management software<sup>i</sup>, previous to 2009 CIRM has twice surveyed the market to evaluate commercially available software to see if it could

meet CIRM's needs. CIRM spent almost two years working diligently with the last vendor selected. However, that implementation effort failed because CIRM's needs rapidly evolved beyond the scope of the original contract and the two parties mutually agreed to terminate the relationship.

During those years, CIRM still needed to post RFAs and receive applications and process all of the other documents involved in a grants program. CIRM met its day-to-day needs by relying upon a combination of commercially available software and custom created software applications. For example, since 2006 CIRM RFAs have used Adobe LiveCycle Designer to create applications that can be completed by researchers using Adobe Acrobat and members of CIRM's Grants Working Group use a custom built module to prepare their conflict of interest forms and to access applications.

As stated in our previous report, since the Spring of 2009 CIRM's efforts to engineer a full lifecycle robust grants management program have made considerable headway. Each of the steps in the grants management program diagramed above was evaluated on a modular basis (most often referred to as the application module, the review module, the progress report module). The MicroEdge Gifts<sup>ii</sup> program was installed to track post-award activities (steps V-VI in the figure above) and a decision was made to keep, and further develop, our custom module for managing the grant review process (steps II-IV) after consultation with experts from the Taine Group<sup>iii</sup> and Turner Consulting Group<sup>iv</sup>, which boasts of having "more experience in federal grants management than any other company,"<sup>v</sup>.

In December 2009, the components remaining to be evaluated included the application module (step I) and the progress report module (part of step VI). This was accomplished using a process that required considerable time from staff members and guidance from an expert on the installation of grants management systems (Turner Consulting). The steps followed were:

1. Rigorously define CIRM's needs – flexibility was identified as a high priority
2. Survey the marketplace to determine what commercial products were available.
3. Interview vendors (7) and identify the best candidate.
4. Test a prototype of the preferred commercial system against an in-house, custom-built prototype.

In the end the decision to build "in-house" was unanimous for many reasons. Among the most important were the facts that an in-house system could be created with the flexibility that CIRM requires and it could be seamlessly integrated with the existing in-house built review module. In addition, it was clear that any commercial product would require extensive customization, which would result in unknown increases in costs and time.

Since making that decision, considerable progress has been made in creating a module for managing progress reports (box VI). This custom progress report module is web based and is built on the same software framework as CIRM's custom-built review module.

Active grantees use this self-service online progress report module to fulfill their ongoing reporting requirements with CIRM. Their direct use of this module is significantly more

efficient than the more manual process it replaced and greatly reduces the possibility of incorrect data entry by staff since human processing and data conversions are no longer required.

CIRM has also begun work on the application module. The online pre-application module is entering final testing at the start of August 2010 and will be released for initial use on the Basic Biology III RFA at the start of September 2010. The complete online application module will begin development in September 2010 and will be incrementally released over subsequent RFAs.

For this project to be completed successfully and in a timely manner, it is essential to engage the right personnel. In December 2009, 2 programmers were working at CIRM but their primary focus was on maintaining the current systems so that CIRM could continue to release RFAs. A third programmer was working remotely, transferring data from earlier RFAs into CIRM's new software system for post-award monitoring but his contract has ended.

Based on advice from several sources, it was clear that CIRM needed an Information Technology Advisor to help manage this project and oversee CIRM's other IT needs, including programming and daily desktop, server and network support. CIRM released an RFP seeking a contractor for:

- The coordination and management of CIRM's IT development and software integration initiatives;
- The management of CIRM's existing IT operations (which are currently handled by various contractors and consultants);
- The establishment and maintenance of an enterprise architecture plan for CIRM; and
- The establishment and maintenance of IT policies and processes for CIRM.

That position was filled in April 2010 with an exceptionally qualified individual who has held the role of Vice President or Director of Software Engineering and Architecture at five different companies over his 18 years in the industry.

To ensure successful outcome of our internal software development efforts we are implementing many industry best practices to help control the scope of the systems produced and ensure that they will be correct and maintainable in the future. We using a small but highly skilled set of developers (one was hired in April and a second will start in early August), with tightly controlled delivery timelines, who regularly interact with the internal science office users as well as external users of our systems. Such transparency helps keep the development efforts on track to meet the needs of the users without over-engineering the system, a trend when technologists work in isolation. Further, we are using common open source languages and toolsets in our internal development, which will help maximize the ease of maintaining and supporting these systems in the future.

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<sup>i</sup> For a more fulsome recap of CIRM's history with grants management software please see the report given to the Governance Subcommittee of the ICOC on December 2, 2009 (agenda item number 5), as well as the report given to the ICOC on October 3, 2007 (agenda item 10).

<sup>ii</sup> MicroEdge is a vendor of grants management software. The software that CIRM licensed from MicroEdge (GIFTS) is recognized as the "leading software solution for grants management and charitable giving organizations" according to the MicroEdge website (<http://www.microedge.com/Products/GIFTS.aspx>) and other industry sources.

<sup>iii</sup> The Taine Group (Bob Bowen) provided CIRM with systems architecture and transition plans (2008/2009).

<sup>iv</sup> Turner Consulting Group won multiple RFPs by CIRM and provided us with project management services (Judith Turner), IT developing and programming services (Kent Reynolds) and Chief Technology Officer level advice (Dr. Robert Buccigrossi).

<sup>v</sup> The full quote from the Turner Consulting Group website (<http://www.tcg.com/drupal/?q=node/11>) is "We have more experience in federal grants management than any other company, with 33 engagements at eight federal agencies. These projects include grants business process reengineering; capital planning and investment control; enterprise architecture; systems architecture, development, deployment, and maintenance; and ancillary services such as help desks, call centers, and outreach. We are familiar with the Grants Management Line of Business (GMLOB) providers, COTS grants management solutions, and grants management policies and developments. Our team brings unmatched knowledge of federal award statutes, legislative requirements, OMB circulars, and executive orders related to grants management."

# Report to ICOC Governance Subcommittee On Grants Management Systems Expenditures

## Agenda Item #6

8/3/10 Governance Subcommittee Meeting  
(ORIGINALLY PROVIDED TO SUBCOMMITTEE IN DECEMBER 2009)

At the meeting of the Governance Subcommittee of the ICOC on June 21, 2009, a request was made for a report summarizing CIRM's expenditures related to grants management. Grants management is a complex, far-reaching activity that involves people, software and equipment. An overview of the steps involved in the life of a grant program at CIRM is summarized in the figure below.

### **I. Pre-Review**

- RFA development, ICOC concept approval and posting
- Receipt of Letters of Intent, Pre-Applications, Applications
- Review of eligibility of the Institution and PI

Views & Users:  
External (Applicants)  
CIRM (Science Officers, Grants Review Officers)

### **II. Review by Grants Working Group**

- Conflict of Interest forms
- Recruitment and assignment of Reviewers
- Scientific and programmatic review

Views & Users:  
External (GWG members, GWG Specialists)  
CIRM (Science Officers, Grants Review Officers, ICOC members, Executive Staff)

### **III. Post-Review, Approval**

- Confidential and public review reports
- ICOC Approval

Views & Users:  
CIRM (Science Officers, Grants Review Officers, ICOC members)

### **IV. Pre-Award Review**

- Administrative and budget review and adjustments
- Compliance review for SCRO, IRB, IACUC and other assurances
- Other conditions

Views & Users:  
CIRM (Science Officers, Grants Management Office)

### **V. Award Acceptance**

- Notice of Grant Award (signed & returned to CIRM)
- Pay memo and checks issued with the State Controller's Office

Views & Users:  
CIRM (Grants Management Office)

### **VI. Tracking Progress**

- Regular Scientific Progress Reports
- Annual Financial Reports
- Updated assurances and certifications
- Audits and site visits

Views & Users:  
External (Grantees)  
CIRM (Science Officers, Grants Management Office, Executive Staff)

CIRM is still a young and evolving organization. At its inception it had one IT employee who focused his efforts largely on the creation of grant applications and the review process.

Other IT functions (network, server and desktop support) were (and still are) contracted out. In 2007 an effort was begun to install a robust grants management software system from the Arlington Group that would track grants from conception to closure. Unfortunately that company went out of business. A second search was then initiated and Grantium was identified as a vendor whose product could meet CIRM's needs. However, that effort failed because CIRM's needs continued to evolve rapidly beyond the original scope, so the two parties mutually agreed to terminate the contract in 2009.

Since the Spring of 2009, CIRM's efforts to install a robust grants management program have made considerable headway. The MicroEdge Gifts program has been installed and is now being used by the Grants Management Office to track post-award activities. It is used to manage most of the tasks in steps V-VI in the figure above. This has been a major step forward toward integrating the information about CIRM's award programs and grantees that now allows staff to report on activities and individuals across grant programs (different RFAs) and across time. A decision was also made to develop software for managing the grant review process "in house" (steps II-IV). This decision was based on a review of our current system and consultation with experts from the Taine Group and Turner Consulting Group. Currently the remaining components that need to be upgraded and integrated include the application process (step I) and the progress reports (part of step VI). The decision that we face is whether to purchase a system from a vendor or build our own with help from contractors and consultants. This is a difficult decision, but a plan is in place to evaluate the leading alternatives and we will make a decision in the next few months.

However, managing the grants process involves more than software and IT development. More than half of CIRM's staff participates centrally in some part of the grant lifecycle. The table on the following page summarizes CIRM's expenditures and investments in human resources related to the grant-making process between 2005 and June 2009 and the footnotes that follow provide support information. The first section on activities illustrates the rapid growth of work in this area. The number of RFAs has increased from 1 in 2005-6 to 5 per year for the past two years. Perhaps the two most striking figures are the total number of grants under management, which has grown from 16 in 2005-6 to more than 300 today, and the workload related to progress reports. The first 16 progress reports were submitted by grantees in 2006-7. In 2009-10, the number will exceed 230.

It is also evident from this table that CIRM has invested considerably in consultants and contracts to assist in this effort. That is in part due to the Institute's 50-employee cap. In planning for staffing needs it has long been clear that the workload on the Science Office will grow significantly and that the Institute will have difficulty hiring adequate numbers of Science Officers to meet its needs without exceeding 50 employees. Thus a decision was made to contract out for IT services, including system architecture and planning as well as daily desktop, server and network support, and specific grants management software support.

CIRM Fiscal Year runs July 1- June 30

	Fiscal Year 05/06	Fiscal Year 06/07	Fiscal Year 07/08	Fiscal Year 08/09
<b>CIRM Grants Management Activities</b>				
Number of RFA Programs	1	3	5	5
Number of Applications received (not including LOI)	26	384	126	322 (plus 208 Pre- Applications)
Number of Grants Working Group Meetings (not including Facilities Working Group Meetings)	1	3	5	4
Number of Grants awarded to date <sup>i</sup> (Total \$ awarded)	16 (\$37 million)	133 (\$207 million)	207 (\$558 million)	295 (\$765 million)
Number of Annual Progress Reports received (not including interim reports)	n/a	16	116	113 (118 received in first couple of months of FY 09-10)
Compliance Site Visits to Grantees				8
<b>Human Resources<sup>ii</sup></b>				
Grants Management Officers	1	1	3	3 (currently 5)
IT Specialists	1	1	1	.5 (currently 0)
Science Officers	2	8	8	11 (currently 12)
Grants Review Officers	2	2	2	2.3 (currently 3)
<b>Contractors/Consultants providing IT Services</b>				
Arlington Group	\$0	\$56,571	\$0	\$0
Aethion <sup>iii</sup>	\$46,477	\$60,500	\$59,900	\$42,000
Grantium	\$0	\$0	\$86,135	\$183,077
Kutir <sup>iv</sup>	\$0	\$0	\$0	\$165,465
MicroEdge <sup>v</sup>	\$0	\$0	\$0	\$44,385
Turner Consulting Group <sup>vi</sup>				
- Programmer	\$0	\$0	\$0	\$161,711
- Project Manager	\$0	\$0	\$0	\$43,426
Taine Group <sup>vii</sup>	\$0	\$0	\$0	\$49,750
25by7 <sup>viii</sup>	\$0	\$0	\$0	\$98,274

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- <sup>i</sup> Numbers are based on dates the ICOC made decisions on grant awards.
- <sup>ii</sup> The positions listed are all centrally involved in aspects of the grant-making enterprise. Others on CIRM's staff (not listed) play more minor roles in this process.
- <sup>iii</sup> Aethion provided CIRM with Network, Server & Desktop support from CIRM's founding until Fiscal Year 08/09 when CIRM bid out a Request for Proposal (RFP) for a Network, Server & Desktop support vendor who could provide an increased and more complex set of services.
- <sup>iv</sup> Kutir Corporation won an RFP in October 2008 to provide CIRM with IT Development services. The programmers supplied by Kutir Corporation have worked on all aspects of CIRM's grants management systems supporting the full grants management lifecycle.
- <sup>v</sup> MicroEdge is a vendor of grants management software. The software that CIRM licensed from MicroEdge (GIFTS) is the leading software package among the grant making community according to the Idealware Guide to Grants Management Systems. (<http://www.solpath.org/results.html> - Site visited August 10, 2009.) In addition to licensing the software, the fees paid by CIRM to MicroEdge will include training, consultation and customization.
- <sup>vi</sup> Turner Consulting Group won two separate RFPs by CIRM. The first RFP was in June 2008 for an IT Developer/Programmer. The second RFP was in December 2008 and was for an IT Project Manager.
- <sup>vii</sup> The Taine Group provided CIRM with systems architecture and transition plans as CIRM attempted to integrate its custom built components with Grantium.
- <sup>viii</sup> 25by7 won an RFP in November 2008 to provide CIRM with Network, Server & Desktop support. The contract with 25by7 replaced the contract with Aethion. The expenditures included in 25by7's row on this chart include an expanded set of services as well as purchases of updated IT systems hardware and software (totaling approximately \$31,000) where 25by7 was able to offer the best purchase terms to CIRM.