

# GC4R Proposal Solicitation

## Collaborative Advances in Biomedical Computing (CABC)

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### Program Solicitation

*GC4R-2009-01- modification 1*

Request for proposals posted: Friday, February 27, 2009

**Proposal deadline: Monday, May 4, 2009 at 5:00 pm**

Target starting date for funding: August 15, 2009

*Funding for this program is made possible by the John & Ann Doerr Fund for Computational Biomedicine.*

*This and related documents can be found at <http://k2i.rice.edu/events/cabc2009>*



**Gulf Coast Center for Computational Cancer Research**

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## Program Summary

**Program Title:** GC4R Seed Grant: Collaborative Advances in Biomedical Computing (CABC)

### Program Synopsis

The GC4R Seed Grant solicitation provides an opportunity for Rice faculty and researchers and their partners in the Texas Medical Center to receive funding for new and innovative projects in support of bridging information technology and high performance computing with opportunities in computational biomedicine. The goal is to encourage and support new projects bridging information technology research at Rice and biomedical research in the Texas Medical Center with applicability to cancer research. The program aims to support efforts that:

- explore opportunities at the interface of information technology and biomedicine
- involve ideas and faculty crossing institutions in the Texas Medical Center
- support community building efforts with a potential high return on investment

Proposals that demonstrate potential for lasting impact, give rise to **new collaborations**, and demonstrate great potential for external long-term funding are strongly encouraged.

### Primary Contacts

- **Jan E. Odegard**, Executive Director, Ken Kennedy Institute for Information Technology, George R. Brown School of Engineering, Rice University. Phone: 713.348.3128; E-mail: [odegard@rice.edu](mailto:odegard@rice.edu)
- **Amy Kavalewitz**, Institute Coordinator, Ken Kennedy Institute for Information Technology, George R. Brown School of Engineering. Phone: 713.348.5823; E-mail: [amy.k@rice.edu](mailto:amy.k@rice.edu)

### TMC Contacts (for the respective collaborating institutions)

- **Jiajie Zhang**, Dr. Doris L. Ross Professor and Associate Dean for Research, School of Health Information Sciences, University of Texas Health Science Center at Houston. Phone: 713.500.3922; E-mail: [Jiajie.Zhang@uth.tmc.edu](mailto:Jiajie.Zhang@uth.tmc.edu)
- **Bradley Broom**, Associate Professor, Department of Bioinformatics and Computational Biology, University of Texas M. D. Anderson Cancer Center. Phone: 713.792.2617; E-mail: [BMBroom@mdanderson.org](mailto:BMBroom@mdanderson.org)

### Eligibility Information

- **PI eligibility limit:** Regularly appointed full-time tenured or tenure track faculty, faculty fellows, and research professors at Rice are eligible to be lead principal investigators (PIs).
- **Inter-institutional collaboration:** Each proposal **must** have at least one named collaborator from the Texas Medical Center (other than Rice).
- **Proposal limit:** A faculty member can only be a PI/Co-PI on one proposal.
- **Additional:** Applicant(s) does **not** need to be a member of GC4R.

### Deadlines/Proposal Submission

- **Proposal deadline:** Monday, May 4, 2009 at 5:00 pm. Only electronically submitted proposals will be accepted. Information about submitting proposals and a copy of this RFP will be published at <http://k2i.rice.edu/events/cabc2009> shortly.

## Award Information

- **Anticipated funding amount:** Plan to fund up to \$500,000 (at Rice), based on availability of funds. Maximum single award not to exceed \$100,000 (\$5,000 for planning grants) direct expenditures and a maximum of 20% of the budget can be for faculty support (salary plus fringes). Award period not to exceed two years. Additional matching funds may be available to collaborators from TMC partner institutions (please contact the respective institutional representatives listed above for details).
- **IRB requirements:** When applicable the appropriate Institutional Review Board (IRB) approvals must be obtained from involved institutions before final award will be approved and research can start.

## Program Details

For 40 years, Rice University and the Texas Medical Center have partnered on a wide array of undertakings, including joint degree programs, collaborative research, teaching, and outreach projects. These activities have enabled both Rice and the Texas Medical Center to leverage hard-won achievements in many fields. Rice brings to the partnership complementary strengths in nanotechnology, biotechnology, and information technology as well as assets in management education, social sciences, and the humanities. The medical schools and hospitals of the Texas Medical Center bring to the table extremely rich sources of expertise and scholarship across all biomedicine, in both basic and clinical sciences.

### Partnering for Biomedical Research

The productive partnership between Rice University and the Texas Medical Center includes joint cancer research. Through this partnership, it has become apparent that dramatic advances in cancer research, and research in other areas of biomedicine, will depend increasingly on computational approaches. Exploiting this opportunity requires the development of new algorithms and software that must not only provide new capabilities but must also run efficiently on modern, high-performance computer architectures. Addressing this need will require research into new algorithms and software strategies at the interface of disciplines. Without this, the biomedical research community will not have the resources to develop all of the applications needed to achieve the dramatic advances possible through the use of information technologies.

With this seed grant program made possible by the John & Ann Doerr Fund for Computational Biomedicine, GC4R seeks to encourage the development of both emerging activities and existing areas in information technology and its applications to biomedicine. Proposed projects should engage and help develop relationships with collaborators in the Texas Medical Center. Proposals leveraging information technology and computer and computational science to incubate **new collaborations** and significantly expand existing collaborations for advancing biomedical computing are strongly encouraged. Proposals that demonstrate great potential for establishing long term cross-institutional research programs with potential for attracting external funding in the near term will be prioritized.

### Program Description

The primary purpose of this program is to provide **seed** funding for novel and exciting ideas in the early stages of research development. We expect that successful projects will be able to obtain long-range sustained funding through public and private sources.

## Goal

GC4R seeks proposals that fit the broadest possible definition of information technology and have the greatest possibility of placing Rice and its collaborators in the Texas Medical Center in a position for receiving future joint funding from external sources. Proposals that leverage favorably reviewed but not funded external proposal or offer to inaugurate new research areas and interdisciplinary collaboration are particularly encouraged. The guiding principle for funding is short-term seed funding (one to two years) for new initiatives that demonstrate a clear potential for impacting TMC institutions role as leading institutions in bridging information technology and biomedical research.

In addition to awarding one- and two-year regular seed grants we may also award a small number of planning grants. Planning grants are one-year community-building awards aimed at supporting the process of developing inter-institutional communities around areas of perceived faculty strength, targeting future regular seed grants and building partnerships that can successfully attract external funding.

## Proposal Preparation and Guidelines

### Regular Seed Grant Proposal Requirements

The main proposal body is limited to 6 pages. This does not include the cover page, budget, bibliography and other supporting material. The proposal should be organized as follows:

- Cover page (web form that you fill in online when submitting the proposal)
  1. Project title
  2. Program (select CABC 2009)
  3. Start date, end date (use July 1, 2009 as start date)
  4. List of investigators
  5. Name of partner investigator(s) in TMC
  6. Amount of total funding requested
  7. Brief project summary
  8. Attach the main body of your proposal
  9. Attach the budget for your proposal
  10. Letter of commitment from TMC collaborator(s)
    - The letter(s) from TMC collaborator should explain why this project is important for their work and why he/she is willing to put time in it.
- **Main body of proposal** (max 6 pages)
  - Problem and Specific Aims of the Proposal (max 1 page)
  - Background and Related Work by the PIs (max 1 page)
  - Methods (max 3 pages)
    - Include a description of the research proposed and its computational aspects.
  - Project Plan and Future Plans (max 1 page)
    - Who will work on the project, timeline and plans for leveraging funding.
- **Budget** (a simple spreadsheet or table will suffice, see attached sample)

There is no institutional F&A on these grants but you must include fringes and/or tuition remission on any salary requested.
- **Additional information** (there is no page limit)
  - Short (max 2 pages) CV for each PI (required)

- Bibliography
- Other relevant information

### **Planning Grant Proposal Requirements**

Submit a short proposal (1-2 pages) outlining the intellectual core and discuss the external funding prospects associated with developing the proposed area (sub-community). Carefully state your long-term goals and potential for external funding. List all faculty members that will be involved.

### **Proposal Review Information**

A committee appointed by the Gulf Coast Center for Computational Cancer Research will coordinate and review all proposals. Reviewers will consider the following criteria:

- inventiveness/significance/feasibility of the proposal
- plan for the execution of the proposal
- how the proposed research will expand collaboration between researchers at Rice and colleagues in the Texas Medical Center and lead to external funding

### **Reporting, Communications, and Conditions**

Pre award:

Each project, prior to finalizing the award, is required to provide to GC4R:

- (a) a signed memorandum of understanding (see attached sample) of deliverables,
- (b) a link to a web page describing the project and committing to maintain the web page for the purpose of highlighting research accomplishments,
- (c) a revised and updated project description and
- (d) (if required by the proposed research) submit a copy of the appropriate and approved IRB approvals (projects may require IRB approval from more than one institution).

Post award:

One year projects: Submit a final report at the end (within 60 days after the project end date) of the project highlighting the accomplishments and reporting on research expenditures. A web form for submitting reports will be provided.

Two year projects: Submit a mid-term report (60 days prior to first anniversary) and a final report (within 60 days after the project end date). Both reports should highlight the accomplishments and report on research expenditures to date. A web form for submitting reports will be provided.

### **Publications and Rights**

The researcher(s) are encouraged to publish the results of the research. Publications must acknowledge the funding source (e.g., *this work made possible in part through support from the GC4R Seed Grant: Collaborative Advanced in Biomedical Computing 20xx supported by the John and Ann Doerr Fund for Computational Biomedicine*). Research outcomes are subject to applicable university policies and standard institutional intellectual property rights apply.

### **Award Administration**

As soon as required documents have been signed and the budget has been approved a budget entry will be made to the department of the lead PI at Rice. Proposals that request part of the funds as matching funds will, upon request, be provided with a letter of support. Cost sharing funds will not be transferred before an award letter of such funding has been submitted.

# Sample research agreement

## AGREEMENT FOR RECEIVING FUNDING UNDER THE COLLABORATIVE ADVANCES IN BIOMEDICAL COMPUTING (CABC) PROGRAM

### DATE

**THIS AGREEMENT FOR FUNDING UNDER THE GC4R COLLABORATIVE ADVANCES IN BIOMEDICAL COMPUTING (CABC)** (“Agreement”), is by and between the Gulf Coast Center for Computational Cancer Research (“GC4R”), and \_\_\_\_\_ (the “Investigator”), the lead investigator on the research project entitled “\_\_\_\_\_” (the “Project”). The Effective Date of this Agreement is \_\_\_\_\_.

### GC4R’s Obligations

GC4R will pay \_\_\_\_\_ over a period of \_\_\_\_\_ years to fund the proposed research Project. GC4R agrees to pay these funds by transferring first year funding in the amount of \_\_\_\_\_ to the department / fund specified by the Investigator as soon as all pre-award requirements have been met. If sponsored Project is a two year project, second year funding in the amount of \_\_\_\_\_ will only be released after satisfactory review of a mid-term report.

### Investigator’s Obligations

The Investigator agrees to fulfill the following Obligations under this Agreement, and acknowledge that failure to fulfill such obligations may result in termination of the agreement. The Obligations are as follows:

#### *Pre award*

Each project, prior to the release of funding, is required to provide to GC4R with the following:

- a) a link to a simple web page describing the project,
- b) a revised and updated project description, also published on the web page, and
- c) the name and contact information for the person who will manage the funds

#### *Post award*

The GC4R Seed Grant program provides funding for Rice faculty and researchers for new and innovative projects in support of bridging information technology and high performance computing with opportunities in computational biomedicine. The goal is to encourage and support new projects bridging information technology research at Rice and biomedical research in the Texas Medical Center, with a particular emphasis on computational cancer. The program aim is to support projects that demonstrate lasting impact, give rise to new collaborations, and demonstrate great potential for external long-term funding opportunities are encouraged.

There are several post award requirements that must be met. The intent is not to manage or interfere with the research, but rather to evaluate projects and activities so that we can evaluate program success, report on outcomes, and assist in securing further funding.

Each project is specifically required to provide:

- a) If a one-year project, submit a final report within 60 days after then end date of the project.
- b) If a two-year project, submit a written report 60 days before the first year anniversary. Second year funding is contingent on acceptable progress and will not be released without this report. Submit a final report within 60 days of the end of the project.
- c) Publications derived from research funded under this program are required to acknowledge the support by inserting appropriate wording (i.e., “This work made possible in part through support from a Seed Grant from the Gulf Coast Center for Computational Cancer Research funded by John & Ann Doerr Fund for Computational Biomedicine”)

All reports should be sent to the Executive Director for the Ken Kennedy Institute for Information Technology.

The parties have caused this Agreement on funding of the **COLLABORATIVE ADVANCES IN BIOMEDICAL COMPUTING (CABC)** to be executed as of the date first specified above.

Ken Kennedy Institute  _____ Jan Erik Odegard Executive Director, K2I	INVESTIGATOR  _____ Type name here
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