NIGMS BTRC Software Dissemination Proposal

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This proposal is a request for funding to continue the development of the BTRC dissemination web site for P41 Centers. Originally created in 2008 as a central location for dissemination of information between program managers and directors, the site has since grown into a larger, more collaborative place for researchers to share information. The SCI Institute proposes continuing the expansion of this central information repository from a simple search among Center related data and software to a more custom exploration interface that will have improved indexing and searching.

### 1 2008 BTRR Dissemination Wiki

The history of the first BTRR software dissemination wiki began in February 2008 when the Scientific Computing and Imaging (SCI) Institute began a collaboration with the NCRR program manager as well as a small group of Biomedical Technology Research Resources (BTRR) Center directors. The discussion identified the need to improve the dissemination of NCRR/BTRR resources and the potential benefits of creating a singular web presence for dissemination that would promote more in-depth collaboration by leveraging research and development between the existing and future P41 Centers. Broad community involvement required that the site be set up independently of the NIH/NCRR structure. The intent was that with each Center’s participation, the ability to leverage developments (i.e. data, code repositories, disseminated software solutions, etc) would increase and promote not only more collaboration in research, but with industry as well.

The SCI Institute spearheaded this project and within a few months, the site shown in Figure 3.1(a) was complete. As per the original requirements, a Wiki framework was used because it was the least complicated and most widely used collaborative solution at the time. SCI Institute web developers created the structure, gathered and populated profile pages for each P41 Center, provided documentation for involvement, and instructions for adding resources to the directory. At this point communication was sent to each P41 Center director inviting them to participate. Though initial interest and involvement was sparse across the 50 Centers, those that did participate indicated that a system such as this could be beneficial to the centers.

### 2 2010 BTRC Dissemination Site

SCI Institute developers revisited the project in September, 2010 and identified technologies that would benefit the Center’s page. At this point it was decided that re-implementing the wiki using Google sites would simplify the adding and editing of content, foregoing the previous need for users to learn basic wiki markup. This approach was more widely received and the directory of software and data resources grew significantly with involvement from additional Centers. A screen capture of this site can be seen in Figure 3.1(b). With the reorganization of NIH, the site was modified to reflect the removal of NCRR and its Center’s transition to NIGMS and NIBIB. This forced a third redesign and restructure of the BTRC Software Dissemination site (shown in Figure 3.2). It resides in this state with steady participation and an ever growing resource directory with 62 distributed software packages and 21 datasets currently being made available. You can visit the site at: nihbtrc.org

### 3 Future BTRC Dissemination Site

We are seeking assistance in developing and deploying a custom web interface for the NIGMS/BTRC community which would act as an exploration engine for all of the Centers’ content. Resources and expertise would be tagged through an interactive ontology and provide the ability to visualize the relationships between these resources. Similar work is already in development between the SCI Institute and the University of Utah’s Technology Commercialization Office. Here, a searchable web-based interface was created for intellectual property generated from university patents. We have designed this system to scale to meet the needs of not only the NIGMS/BTRC institutions, but also other federal agencies that are providing data and software tools for research. We plan to leverage this design to promote further collaboration and provide the necessary transparency of research. This will foster growth in the scientific community and spur collaboration with industry partners.
Figure 3.1: Screen captures of the (a) 2008 BTRR dissemination wiki and (b) 2010 BTRC dissemination site.

Figure 3.2: The current NIGMS/BTRC Software Dissemination site
DETAILED BUDGET FOR INITIAL BUDGET PERIOD
DIRECT COSTS ONLY

List PERSONNEL (Applicant organization only)
Use Cal, Acad, or Summer to Enter Months Devoted to Project
Enter Dollar Amounts Requested (omit cents) for Salary Requested and Fringe Benefits

<table>
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<th>NAME</th>
<th>ROLE ON PROJECT</th>
<th>Cal. Mnths</th>
<th>Acad. Mnths</th>
<th>Summer Mnths</th>
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<th>SALARY REQUESTED</th>
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<tr>
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<td>PD/PI</td>
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<td>9,765</td>
<td>3,613</td>
<td>13,378</td>
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<tr>
<td>Nathan Galli</td>
<td>Media Manager</td>
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</table>

| SUBTOTALS       | 9,765           | 3,613      | 13,378      |

CONSULTANT COSTS

EQUIPMENT (Itemize)

SUPPLIES (Itemize by category)

TRAVEL

INPATIENT CARE COSTS

OUTPATIENT CARE COSTS

ALTERATIONS AND RENOVATIONS (Itemize by category)

OTHER EXPENSES (Itemize by category)

CONSORTIUM/CONTRACTUAL COSTS

DETAILED BUDGET FOR INITIAL BUDGET PERIOD

| SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD (Item 7a, Face Page) | $ 13,378 |
| CONSORTIUM/CONTRACTUAL COSTS | DIRECT COSTS |
| TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD | $ 13,378 |

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Budget Justification

Personnel

Nathan Galli: Nathan Galli is the Media Manager at the Scientific Computing and Imaging Institute at the University of Utah. We are requesting 15.223% or 1.83 months of salary support for Nathan.

Fringe Benefits - The benefits rate is calculated based on an average of the amount charged to the position / person over a period of a few months. As such the rate will vary based upon the position / person. The percentage rates applied are below:

Nathan Galli: 37%

Indirect Costs

The University of Utah’s indirect costs rate is calculated from the total direct costs less capital (<$5,000) equipment. The negotiated rate is 50.5%.
Program Director/Principal Investigator (Last, First, Middle): Johnson, Chris

CHECKLIST

TYPE OF APPLICATION (Check all that apply.)

☐ NEW application. (This application is being submitted to the PHS for the first time.)

☐ RESUBMISSION of application number:
  (This application replaces a prior unfunded version of a new, renewal, or revision application.)

☐ RENEWAL of grant number:
  (This application is to extend a funded grant beyond its current project period.)

☒ REVISION to grant number: 8P41GM103545
  (This application is for additional funds to supplement a currently funded grant.)

☐ CHANGE of program director/principal investigator.

Name of former program director/principal investigator:

☐ CHANGE of Grantee Institution. Name of former institution:

☐ FOREIGN application Mask Domestic Grant with foreign involvement List Country(ies) Involved:

INVENTIONS AND PATENTS (Renewal appl. only) ☐ No ☐ Yes
  If "Yes," ☐ Previously reported ☐ Not previously reported

1. PROGRAM INCOME (See instructions.)
All applications must indicate whether program income is anticipated during the period(s) for which grant support is requested. If program income is anticipated, use the format below to reflect the amount and source(s).

<table>
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<th>Budget Period</th>
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2. ASSURANCES/CERTIFICATIONS (See instructions.)
In signing the application Face Page, the authorized organizational representative agrees to comply with the policies, assurances and/or certifications listed in the application instructions when applicable. Descriptions of individual assurances/certifications are provided in Part III and listed in Part I, 4.1 under Item 14. If unable to certify compliance, where applicable, provide an explanation and place it after this page.

3. FACILITIES AND ADMINISTRATIVE COSTS (F&A)/ INDIRECT COSTS. See specific instructions.

☒ DHHS Agreement dated: April 27, 2007

☐ DHHS Agreement being negotiated with Regional Office.

☐ No DHHS Agreement, but rate established with Date

CALCULATION* (The entire grant application, including the Checklist, will be reproduced and provided to peer reviewers as confidential information.)

a. Initial budget period: Amount of base $13,378 × Rate applied 49.50% = F&A costs $6,622

b. 02 year Amount of base $x Rate applied % = F&A costs $

c. 03 year Amount of base $x Rate applied % = F&A costs $

d. 04 year Amount of base $x Rate applied % = F&A costs $

e. 05 year Amount of base $x Rate applied % = F&A costs $

TOTAL F&A Costs $6,622

*Check appropriate box(es):

☐ Salary and wages base ☒ Modified total direct cost base ☐ Other base (Explain)

☐ Off-site, other special rate, or more than one rate involved (Explain)

Explanation (Attach separate sheet, if necessary):

4. DISCLOSURE PERMISSION STATEMENT: If this application does not result in an award, is the Government permitted to disclose the title of your proposed project, and the name, address, telephone number and e-mail address of the official signing for the applicant organization, to organizations that may be interested in contacting you for further information (e.g., possible collaborations, investment)? ☒ Yes ☐ No