The Bridges Programs Webinar

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18 August, 2016
Webinar Overview

- Program Overview
- Goal and Objectives
- Awards Overview
- Eligibility & Number of Applications
- PHS 398 Research Plan Component
  - Specific Aims
  - Research Strategy
  - Human Subjects
  - Tables Needed
- Peer Review
- Grants Management
- Questions?
The Bridges Programs

**PAR-16-110** Bridges to the Baccalaureate (B2B)

CC → 4year

**PAR-16-109** Bridges to the Doctorate (B2D)

Master’s → Ph.D.

Additional Resources:

- Guide Notices: [GM-16-113](#), [GM-16-114](#)
- Bridges Programs’ Websites:
  - [https://www.nigms.nih.gov/Research/Mechanisms/Pages/BridgesBaccalaureate.aspx](https://www.nigms.nih.gov/Research/Mechanisms/Pages/BridgesBaccalaureate.aspx)
  - [https://www.nigms.nih.gov/Research/Mechanisms/Pages/BridgesDoctoral.aspx](https://www.nigms.nih.gov/Research/Mechanisms/Pages/BridgesDoctoral.aspx)
Goal of the Bridges Programs

The over-arching goal of these NIGMS R25 programs is to support creative educational activities that enhance the diversity of the biomedical research workforce.

- Courses for Skills Development (B2B, B2D)
- Research Experiences (B2B, B2D)
- Curriculum or Methods Development (B2B)
Objectives of Bridges Programs

• To develop and implement an integrated plan of individual and institutional activities that will increase students preparation and skills as they advance academically in the pursuit of baccalaureate/doctoral degrees in biomedical sciences.

A program application must include each applicable activity, and describe how they will be synergized to make a comprehensive program.
What makes an ideal program?

• Baseline Data and Measurable Outcomes
  o previous 5 years
  o Institutional assessment is critical to sound evaluation

• Strong Pool of Program-Eligible Students
  o Recruitment and Retention Plans is required

• Well-integrated Student Development Activities

• Evidence of Institutional Commitment

• Evidence of Partnership (articulation agreement B2B)

• Evidence that effective Bridges-supported activities have been institutionalized – evidence in Renewal Applications
# Award Overview

## Allowable Costs

<table>
<thead>
<tr>
<th></th>
<th>B2B</th>
<th>B2D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Direct Costs</td>
<td>Limited to $300,000 /year</td>
<td></td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>8% of modified total direct costs*</td>
<td></td>
</tr>
<tr>
<td>Salary Support</td>
<td>Limited to 30% of total direct costs annually#</td>
<td></td>
</tr>
<tr>
<td>Research Supplies</td>
<td>Not to exceed $2,000**</td>
<td>Not to exceed $3,500**</td>
</tr>
<tr>
<td>Evaluation Costs, limited to</td>
<td>$3,000 for entire project period</td>
<td></td>
</tr>
<tr>
<td>Student Support</td>
<td>20 hours/week (Academic Year)</td>
<td>40 hours/week (Summer)</td>
</tr>
</tbody>
</table>

* exclusive of tuition and fees, consortium costs in excess of $25,000, and expenditures for equipment.
# salary support for faculty mentors is not allowed. The 30% administrative cap includes subawards.
** per student per year
Eligibility & Number of Applications

• Institutions
  o Type: Domestic, Higher Education (Public/Private) Institutions
  o Commitment: adequate staff, facilities, and educational resources
  o Partnership/Consortium: CC → 4yr (B2B) Master’s → Ph.D. (B2D)

• Program Directors/Principal Investigators (PD/PI)
  o PD/PI from each participating institution-full-time appointment
  o Multi PD/PI plan required (Lead/ Contact PD/PI and Partner PD/PI)

• Participants
  o U.S. citizens, non-citizen nationals, or permanent residents
  o Nationally underrepresented individuals in the biomedical sciences
  o Enrolled full-time in Associate’s or Master’s program
Research Plan Component

Specific Aims - (1 page limit)

• State concisely the **Goals** and **Objectives** of the proposed plan based on **self-assessment** and in measurable terms.

National Program Goal:

70% transfer to BA/BS, 50% complete BA/BS (B2B)
60% transfer to Ph.D. program, 60% complete Ph.D. (B2D)

**Make these specific to your program**

**Based on baseline data, self-assessment**

Example: 25% transfer → 38% transfer (avg.: 5 students)
50% graduate → 75% graduate (avg.: 2 students)

**Common Pitfalls:** Lack of clear and well-defined measurable objectives

upload as an attachment
Filename: “SpecificAims.pdf”
Research Strategy (25-page limit)

- Proposed Research Education Program
- Program Director/Principal Investigator
- Program Faculty
- Program Participants
- Institutional Environment and Commitment
- Progress Report (for Renewals)
- Recruitment Plan to Enhance Diversity
- Plan for Instruction in the Responsible Conduct of Research
- Evaluation Plan/Program Assessment
Research Strategy

Proposed Research Education Program

Is there a real need for this program?

Establish **Baseline Data** for UR students in biomedical sciences - all partnering institutions - average last 5 years

- # students enrolled
- # students transferred
- # transferred completing degree
- % UR and non-UR

**Expected Outcome?, Impact?**

**Common Pitfalls:** lack of baseline data make it hard to evaluate the significance of the program; small pool of eligible students; unclear why students aren’t transferring.
Research Strategy
Proposed Research Education Program

• **Response to institutional self-assessment**
  - Identify areas selected for improvement, and rationale for incorporating:
    - **Courses for skills development** (B2D, B2B)
    - **Research experiences** (B2D, B2B)
    - **Curriculum or Methods Development** (B2B)
  - Describe proposed developmental activities-specific details
  - Discuss synergy with existing programs
  - Propose anticipated overall impact of program
  - Describe mutual benefits to partnership institutions-keep in mind overall goal

**Common Pitfalls:** Does it address barriers and obstacles faced by the students? How is the program novel or innovative? How will existing programs be leveraged? How will the proposed activities synergize to achieve program goals?
Research Strategy

• Multi Program Director/ Principal Investigator (MPI)

Multi PD/PI plan is required (applicant is Lead or Contact PD/PI*)

Describe Governance and Organizational structure of leadership team

• Define roles and administrative, technical, and scientific responsibilities

• Include communication plans

• Process for making decisions on scientific direction

• Describe procedures for conflict resolution

Upload as attachment
Filename: “MPIplan.pdf”

*- must have full-time appointment

Common Pitfalls: MPI plan is unclear; PD/PI has little administrative experience
Research Strategy

• Program Faculty
  o Demonstrate relevant research expertise and mentoring experience
  o Delineate roles and expectations of participating faculty-include NIH Biosketch
  o Consider number faculty in both institutions needed to support students

• NRSA Table 2 Participating Faculty Members
  o Allows reviewers to assess the distribution of participating faculty by rank, research interests, and department or interdepartmental program. Faculty mentoring records permit an evaluation of experience of participating faculty in progression of trainees.

• NRSA Table 4 Research Support of Participating Faculty Members
  o Provides evidence of the strength of the research environment, the availability of funds to support research conducted by the trainees, and the appropriateness of the participating faculty in terms of their active research support.

Common Pitfalls: weak external research funding; lack of experience; lack of NIH biosketches
Table 2- Participating Faculty

Table 2. Participating Faculty Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>Rank</th>
<th>Primary Department or Program</th>
<th>Research Interest</th>
<th>Training Role</th>
<th>Pre-doctorates in Training</th>
<th>Pre-doctorates Graduated</th>
<th>Predoctorates Continued in Research or Related Careers</th>
<th>Post-doctorates in Training</th>
<th>Post-doctorates Completed Training</th>
<th>Post-doctorates Continued in Research or Related Careers</th>
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</thead>
</table>

http://grants.nih.gov/grants/funding/424/datatables.htm

New Applications

New Predoctoral Training Submit Tables: 1, 2, 3, 4, 5A, 6A, 8A (B2D)

New Undergraduate Training Submit Tables: 2, 3, 4, 5C, 8D (B2B)
Table 2-Participating Faculty Members

Required for both Bridges Programs:

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>Rank</th>
<th>Primary Department or Program</th>
<th>Research Interest</th>
<th>Training Role</th>
<th>Pre-doctorates in Training</th>
<th>Pre-doctorates Graduated</th>
<th>Pre-doctorates Continued in Research or Related Careers</th>
<th>Post-doctorates in Training</th>
<th>Post-doctorates Completed Training</th>
<th>Post-doctorates Continued in Research or Related Careers</th>
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</thead>
<tbody>
<tr>
<td>Brown, P. H.</td>
<td>Ph.D.</td>
<td>Prof</td>
<td>Chemistry</td>
<td>Organic Synthesis</td>
<td>PD/PI</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Smith, A.</td>
<td>M.S.</td>
<td>Asst. Prof.</td>
<td>Biochemistry</td>
<td>Protein Structure, Folding, and Immunogenicity</td>
<td>Preceptor</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Brown, K. J.</td>
<td>Ph.D.</td>
<td>Prof</td>
<td>Biology</td>
<td>Apoptosis</td>
<td>PD/PI</td>
<td>18</td>
<td>16</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Sandoz, Miguel J.</td>
<td>M.D., Ph.D.</td>
<td>Assoc. Prof.</td>
<td>Neuroscience</td>
<td>Developmental Genetics in Drosophila</td>
<td>PD/PI</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Summarize and Refer explicitly in Background and Program Faculty Section
Table 4- Research Support

Table 4. Research Support of Participating Faculty Members

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Funding Source</th>
<th>Grant Number</th>
<th>Role On Project</th>
<th>Grant Title</th>
<th>Project Period</th>
<th>Current Year Direct cost</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Average Grant Support per Participating Faculty Member

http://grants.nih.gov/grants/funding/424/datatables.htm

New Applications
New Predoctoral Training Submit Tables: 1, 2, 3, 4, 5A, 6A, 8A (B2D)
## Table 4. Research Support

### Bridges to the Doctorate Program only:

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Funding Source</th>
<th>Grant Number</th>
<th>Role On Project</th>
<th>Grant Title</th>
<th>Project Period</th>
<th>Current Year Direct cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones, Janine L.</td>
<td>NIH</td>
<td>1 R01 GM76259-01</td>
<td>PD/PI</td>
<td>Structure and Function of Acetylcholine Receptors</td>
<td>06/2014--05/2018</td>
<td>$190,000</td>
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<tr>
<td>Mack, Thomas R.</td>
<td>NSF</td>
<td>PCM 80-12935</td>
<td>PD/PI</td>
<td>Cell Culture Center</td>
<td>12/2012-11/2015</td>
<td>$180,000</td>
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<tr>
<td>Zachary, Andrew</td>
<td>NIH</td>
<td>1 U01 AI28507-01</td>
<td>PD/PI</td>
<td>Human Monoclonal Antibodies as a Therapy for Staphylococcal Enterotoxin</td>
<td>07/2013-06/2018</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

**Average Grant Support per Participating Faculty Member $177,500**

### How will trainees be supported here?

Masters degree and Ph.D-granting Institution(s)

Upload as “other attachment” Filename: “Table4.pdf”

Summarize and Refer explicitly in Program Faculty Section
Research Strategy

Program Participants

- Provide the institutional baseline data
- Describe criteria & procedures for identification, selection, and retention of students in the Bridges programs
- NRSA Table 6A. Applicants, Entrants, and their Characteristics for the Past Five Years: Predoctoral

  - Allows reviewers to evaluate the ability of participating departments/interdepartmental programs to recruit trainees, assess the selectivity of the admission process, the competitiveness of the training program, and appropriate number of positions to award.

Common Pitfalls: Lack of description of bridges students; how students are identified? Retained?
Table 6A- Applicants, Entrants, and their Characteristics for the Past Five Years: Predoctoral

Table 6A. Applicants, Entrants, and their Characteristics for the Past Five Years: Predoctoral

Part I. Counts

<table>
<thead>
<tr>
<th>Most Recently Completed Year: 2013-2014</th>
<th>Total Applicant Pool</th>
<th>Applicants Eligible for Support</th>
<th>New Entrants to the Program</th>
<th>New Entrants Eligible for Support</th>
<th>New Entrants Appointed to this Grant (Renewal/Revision Applications Only)</th>
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<td>Total</td>
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<thead>
<tr>
<th>Previous Year: 2012-2013</th>
<th>Total Applicant Pool</th>
<th>Applicants Eligible for Support</th>
<th>New Entrants to the Program</th>
<th>New Entrants Eligible for Support</th>
<th>New Entrants Appointed to this Grant (Renewal/Revision Applications Only)</th>
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<td>Total</td>
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<table>
<thead>
<tr>
<th>Previous Year: 2011-2012</th>
<th>Total Applicant Pool</th>
<th>Applicants Eligible for Support</th>
<th>New Entrants to the Program</th>
<th>New Entrants Eligible for Support</th>
<th>New Entrants Appointed to this Grant (Renewal/Revision Applications Only)</th>
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<td>Total</td>
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http://grants.nih.gov/grants/funding/424/datatables.htm

New Applications

New Predoctoral Training Submit Tables: 1, 2, 3, 4, 5A, 6A, 8A (B2D)
**Table 6A (Parts I and II)**

**Bridges to the Doctorate Program only:**

**Table 6A. Applicants, Entrants, and their Characteristics for the Past Five Years: Predoctoral Part I. Counts**

<table>
<thead>
<tr>
<th>Most Recently Completed Year: 2013-2014</th>
<th>Total Applicant Pool</th>
<th>Applicants Eligible for Support</th>
<th>New Entrants to the Program</th>
<th>New Entrants Eligible for Support</th>
<th>New Entrants Appointed to this Grant (Renewal/Revision Applications Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Renovation/revisions only</td>
</tr>
<tr>
<td>Department of Chemistry &amp; Biochemistry</td>
<td>45</td>
<td>30</td>
<td>12</td>
<td>6</td>
<td><strong>College A</strong></td>
</tr>
<tr>
<td>Department of Molecular &amp; Cell Biology</td>
<td>30</td>
<td>12</td>
<td>10</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Department of Computational Biology</td>
<td>12</td>
<td>6</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>College B</strong></td>
</tr>
<tr>
<td>Department of Chemistry</td>
<td>35</td>
<td>26</td>
<td>12</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Department of Biology</td>
<td>27</td>
<td>18</td>
<td>14</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>149</strong></td>
<td><strong>92</strong></td>
<td><strong>56</strong></td>
<td><strong>27</strong></td>
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</tbody>
</table>

Masters degree-granting Institution(s)

Summarize and Refer to explicitly in Program Participants section

Upload as “other attachment”
Filename: “Table6A.pdf”
### Table 6A (parts I and II)

#### Table 6A. Applicants, Entrants, and their Characteristics for the Past Five Years: Predoctoral Part II. Characteristics

<table>
<thead>
<tr>
<th>Most Recent Program Year: 2013-2014</th>
<th>Total Applicant Pool</th>
<th>Applicants Eligible for Support</th>
<th>New Entrants to the Program</th>
<th>New Entrants Eligible for Support</th>
<th>New Entrants Appointed to this Grant (Renewal/Revision Applications Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Months of Prior, Full Time Research Experience (range)</td>
<td>108 (3-156)</td>
<td>54 (9-85)</td>
<td>48 (9-54)</td>
<td>18.0 (9-24)</td>
<td></td>
</tr>
<tr>
<td>Prior Institutions</td>
<td>Cornell (3)</td>
<td>Fisk (3)</td>
<td>Cornell (1)</td>
<td>Fisk (3)</td>
<td>Cornell (2)</td>
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<tr>
<td></td>
<td>Utah (3)</td>
<td>Utah (1)</td>
<td>Ohio St. (2)</td>
<td>Towson (2)</td>
<td>Towson (2)</td>
</tr>
<tr>
<td>Percent with a Disability</td>
<td>11</td>
<td>11</td>
<td>12.5</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Percent from Underrepresented Racial &amp; Ethnic Groups</td>
<td>44</td>
<td>89</td>
<td>50</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Mean GPA (range)</td>
<td>3.4 (2.9-4.0)</td>
<td>3.1 (2.9-3.5)</td>
<td>3.6 (3.0-4.0)</td>
<td>3.1 (3.0-3.5)</td>
<td></td>
</tr>
<tr>
<td><strong>College B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Months of Prior, Full Time Research Experience (range)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Prior Institutions</td>
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<tr>
<td>Percent with a Disability</td>
<td></td>
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<tr>
<td>Percent from Underrepresented Racial &amp; Ethnic Groups</td>
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<tr>
<td>Mean GPA (range)</td>
<td></td>
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</table>

**Bridges to the Doctorate Program only:**
Masters degree-granting Institution (s)
Research Strategy

• Institutional Environment and Commitment
  o Location and Proximity of partner institutions and rationale for selection
  o Biomedical sciences-related disciplines offered, curriculum
  o Counseling and mentoring services available
  o Current student development and research training programs (Sample Format Table A)
  o Senior Leadership commitment
  o Plans for Institutionalizing Bridges-supported activities
  o Support of Department Chair, Dean, College…
  o Financial and Other Support for Bridged students
  o Letters of Support
## Sample Format Table A

### Required for both Bridges Programs:

**Sample Format Table A**, Bridges to Doctorate Active Biomedical Science-Related Academic Programs

<table>
<thead>
<tr>
<th>College or University A</th>
<th>PREP</th>
<th>RISE</th>
<th>MARC USTAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start and End Project Dates</td>
<td>2014-2019</td>
<td>2012-2016</td>
<td>2013-2018</td>
</tr>
<tr>
<td>Funding Source</td>
<td>NIH</td>
<td>NIH</td>
<td>NIH</td>
</tr>
<tr>
<td>Number of Participants</td>
<td>10</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Target Participant Eligibility</td>
<td>BS</td>
<td>BS, MS, PHD</td>
<td>BS</td>
</tr>
<tr>
<td>Program Disciplines Included</td>
<td>Biology, Chemistry</td>
<td>Biochemistry</td>
<td>Biology</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>College or University B</th>
<th>IMSD</th>
<th>BUILD</th>
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<tbody>
<tr>
<td>Start and End Project Dates</td>
<td></td>
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</tr>
<tr>
<td>Funding Source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target Participant Eligibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Disciplines Included</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research educational programs may complement ongoing research training & education occurring at the applicant institution, but they must be distinct.

Table is downloadable from Bridges websites.

Part of 25-page research strategy
Research Strategy

- Progress Report (for Renewals)
  - Provide information on past funding cycle(s)*
  - Summarize specific **accomplishments** of the program in the context of the stated goals and objectives of the program.
  - Describe the **impact** of the Bridges program (e.g. increases in student retention rate, student academic achievement, number of students transferring to and successfully completing degree in biomedical sciences)
  - See the FOA for additional requirements

Provide data on student outcomes:
- Update CareerTrac System
- Include NRSA Table 8A or 8D

*- for applications with more than one previous funding cycle

Upload table as attachment Section G1
Filename: “Table8.pdf”
Table 8. Program Outcomes

<table>
<thead>
<tr>
<th>Trainee</th>
<th>Faculty Member</th>
<th>Start Date</th>
<th>Summary of Support During Training</th>
<th>Degree(s) Received and Year(s)</th>
<th>Topic of Research Project</th>
<th>Initial Position Department Institution Activity</th>
<th>Current Position Department Institution Activity</th>
<th>Subsequent Grant(s)/Role/Year Awarded</th>
</tr>
</thead>
</table>

(B2D) Table 8A
New: Part III
Renewals: Part I & IV

http://grants.nih.gov/grants/funding/424/datatables.htm

New Applications
New Predoctoral Training Submit Tables: 1, 2, 3, 4, 5A, 6A, 8A (B2D)
New Undergraduate Training Submit Tables: 2, 3, 4, 5C, 8D (B2B)
### Table 8. Program Outcomes:

#### Required for both Bridges Programs:

<table>
<thead>
<tr>
<th>Trainee/Participant</th>
<th>Faculty Member</th>
<th>Start Date</th>
<th>Summary of Support During Training</th>
<th>Degree(s) Received and Year(s)</th>
<th>Topic of Research Project</th>
<th>Initial Position Department Institution Activity</th>
<th>Current Position Department Institution Activity</th>
<th>Subsequent Grant(s)/Role/Year Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reynolds, Kristy</td>
<td>Fenselau, Catherine</td>
<td>09/2013</td>
<td>BA, 2015</td>
<td>Breast Cancer</td>
<td>Medical School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sledjeski, Darren</td>
<td>Gammie, Alison</td>
<td>09/2015</td>
<td>In progress</td>
<td>Breast Cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8A (part III). Program Outcomes: Predoctoral (B2D)
Table 8D (part II). Program Outcomes: Undergraduate (B2B)

These data should be in [CareerTrack](#)

Upload as “other attachment”
Filename: “Table 8A.pdf”
Filename: “Table 8D.pdf”

Summarize and Refer explicitly in Research Training Program Plan
Research Strategy

• Recruitment Plan to Enhance Diversity

  o New Applications
    • Describe plans/strategies to enhance recruitment of UR trainees
    • How will they be recruited, paired with mentors

  o Renewals
    • Detailed account of successful/unsuccessful strategies employed
    • Account for individuals who:
      — Number of students that applied to the program,
      — Number of students admitted and retained
      — Number of students that participated in research.

Applications lacking a diversity recruitment plan will not be reviewed
Research Strategy

• Plan for Instruction in the Responsible Conduct of Research
  o Format of Instruction
  o Subject Matter-content
  o Faculty Participation
  o Duration of Instruction
  o Frequency of Instruction

Renewal (type 2) Applications: describe changes in formal instruction, address weaknesses

See [NOT-OD-10-019](NOT-OD-10-019) Requirement for Instruction in the Responsible Conduct of Research

Applications lacking a plan for instruction in responsible conduct of research will not be reviewed.
Research Strategy

- **Evaluation Plan (Program Assessment)**
  - Describe system for monitoring Bridges students progress
  - Provide outcome metrics*
  - Identify strengths/ weaknesses, make improvements
  - Use the NIGMS CareerTrac system to track student progress and outcomes for up to 15 years, if applicable.

*Metrics (for example):
- Number of applications
- Number students accepted to program
- Number students bridged
- Number of students graduating with type of degree(s)
- etc.,
Is this R25 considered Human Subjects Research?

Approach hierarchically:

- Does it meet the definition of human subjects research?
  - Data through intervention or interaction with individuals OR Identifiable private information
  - Living Subjects

- If No, NOT Human subjects research

- If Yes, do any of the Exemptions apply?
  - Yes: Exemption #
  - No: Non-exempt human subjects research

For further information visit: http://www.hhs.gov/ohrp/

Program assessments ≠ Human Subjects Research
Peer Review

All from PAR Section V under Application Review Information

Scored Criteria:
• Significance
• Investigator(s)
• Innovation
• Approach
• Environment

Additional Review Criteria:
• Resubmissions (responses to previous reviews/changes)
• Renewals (progress from last funding period)

Additional Review Considerations: Acceptable/Unacceptable
• Recruitment Plan to Enhance Diversity
• Training in the Responsible Conduct of Research
Peer Review

Tips about Format

Page Limits

• Supply all requested materials within page limits
• Do not use appendices to get around the limits

Appendices

• Follow all instructions for the Appendices as described in the SF424 (R&R) applications guide
• Maximum of 10 attachments
• Relevant material only, such as large tables, survey instruments, publications that are NOT available online
• NO catalogs, lengthy reports, or material that should be in the body of the application
• Encouraged to include summary list of items as 1st attachment.
Peer Review

Application Preparation Tips

Content

• Read the program announcement and ensure that your application contains the necessary elements

• Successful submission through Grants.gov and eRA Commons does not mean appropriate responsiveness to the program announcement

Context

• Present the institutional framework and environment of your program

• Be realistic in your program’s goals
Peer Review

Application Preparation Tips

Comprehensive

- Address all of the requirements of the program announcement
  - For example:
    - If you don’t have institutional baseline data, explain how you plan to obtain it
    - If you haven’t fully formed your evaluation plan, at least acknowledge that you are working on it
- Describe how your program “works”
  - For example:
    - How are students recruited and selected? By whom?
    - What does the advisory committee do? How often do they meet?
    - How have you used evaluation information in designing/improving your program?
Peer Review

Application Preparation Tips

Clear

• Don’t bury important information in appendices or expansive prose
• Don’t expect reviewers to “read between the lines” to figure out what you are proposing
• Present outcomes data in a straightforward manner:
  o Don’t exaggerate
  o Don’t hide data (reviewers will “do the math”)
  o It is far better to present results as they are and address how the program aims to improve
Peer Review

Application Preparation Tips

Current
• Make sure faculty biosketches are up-to-date
• Provide data on current and prior students
• Use the most recent institutional data

Consistent
• Data in tables and text should match
• Data should be consistent across tables
• Match justification to budget items
• Refer to the correct program in text and tables
## Peer Review

### Review Process: Usual Timeline

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(From submission date)</td>
<td></td>
</tr>
<tr>
<td>1 - 2 months</td>
<td>Referral</td>
</tr>
<tr>
<td>2 - 6 months</td>
<td>Review Panel</td>
</tr>
<tr>
<td>6 - 7 months</td>
<td>Summary Statement Available</td>
</tr>
<tr>
<td>7 - 8 months</td>
<td>Advisory Council</td>
</tr>
<tr>
<td>8 - 9 months</td>
<td>Funding Decisions</td>
</tr>
<tr>
<td>9 - 10 months</td>
<td>Award Start Date</td>
</tr>
</tbody>
</table>

The Bridges Programs- Webinar: 18 August 2016
Budget Reminders

• Read Section II, especially the Other Award Budget Information section, Carefully!

• Be aware of the specific award Caps/Restrictions:
  
  - Total Direct Cost limited to $300,000 per year
  
  - Indirect Costs are reimbursed at 8% of modified total direct costs (exclusive of tuition and fees, consortium costs in excess of $25,000, and expenditures for equipment)
  
  - Salary support for program administration, is limited to 30% of the total direct costs annually
  
  - Salary support for faculty mentors is not allowed
  
  - Research Supplies for students not to exceed $2,000 (B2B); $3,500 (B2D)
  
  - $3,000 for evaluation costs for the entire project period, including the costs for evaluation consultants.
Participant Costs

- Participant costs must be itemized in the proposed budget.
- Applicants may request Bridges student participant support for up to:
  - 20 hours/week the academic year
  - 40 hours/week during the summer

at a pay rate that is consistent with the institutional pay scale.
Participant Costs

• Active Bridges student participants in good standing may receive up to two years of compensation:
  
  o Salary and fringe benefits for their participation in academic year/summer research internships. The salary and fringe benefits must reflect an employee-employer relationship between the student and the institution, and be consistent with the institutional salary policies for employees in similar positions. They are paid salary plus fringe benefits, only when such benefits are provided to other employees in similar positions.
  
  o Mandatory preparation for research, e.g., research design workshops, research reporting workshops, etc. However, students may not earn academic credit and salary simultaneously for participating in these activities.
  
  o The two years of student support need not be consecutive, but prior approval from NIGMS program staff is required, and if approved, the returning student must be enrolled full-time at the time of re-enrollment.
Common Issues

- No stipends! Bridges participants receive a salary.

- Participant/Trainee Support Costs:
  - Participant/Trainee Support Costs are not applicable to the Bridges programs. The Bridges student salaries and fringe benefits are included under section B (Other Personnel).

- Provide details and explanation of items of cost in the Budget Justification. If there isn’t a justification for the item, it will be deleted from the awarded budget.
Recent Questions

• Can Former Bridge participants receive compensation for mentoring current Bridge participants?
  
  o B2B: Support for peer mentors or peer supplemental course instructors who are full time third or fourth year undergraduate students at the 4-year institution or former Bridges students who have transferred to the 4-year institution, is allowed.
  
  o B2D: Support for peer mentors who are upper year graduate students or former Bridges students who have transitioned to a PhD program is allowed.
Recent Questions

• Are travel costs for faculty research mentors/advisors allowed?

  o Costs for faculty research mentors (B2B)/advisors (B2D) to attend national scientific meetings if the faculty member is accompanying Bridges students who are presenting at the meeting, are allowed.

  o B2B: costs for the participating faculty at the community college(s) to attend scientific conferences and workshops that are directly relevant to research development, are allowed.

  o B2D: costs for the participating faculty at the master's institution to attend scientific conferences and workshops that are directly relevant to research development, are allowed.
DISCLAIMER

Please read and follow the content of the Funding Announcement

The webinar slides represent a general summary of the announcement
Thank you!

Questions?

NIGMS: Investing in Discovery

**B2B**
Program Officer: Mercedes Rubio, Ph.D.
rubiome@nigms.nih.gov

**B2D**
Program Officer: Patrick H. Brown, Ph.D.
patrick.brown@nih.gov
# Summary of Tables

*modified in FOA by guide notice: NOT-GM-16-113
- Add rows for multiple schools

<table>
<thead>
<tr>
<th>Table</th>
<th>Title of Table</th>
<th>New Application (type 1)</th>
<th>Renewal Application (type 2)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Active Biomedical Science-Related Academic Programs</td>
<td>Yes*</td>
<td>Yes</td>
<td>Include as part of the Research Plan</td>
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<tr>
<td></td>
<td>B2B and B2D</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>2</strong></td>
<td>Participating Faculty Members</td>
<td>Yes</td>
<td>Yes</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td></td>
<td>B2B and B2D (minimally, columns 1-6)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Research Support of Participating Faculty Members</td>
<td>Yes*</td>
<td>Yes</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td></td>
<td>B2D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6A</strong></td>
<td>Applicants, Entrants, and their Characteristics for the</td>
<td>Yes*</td>
<td>Yes</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td></td>
<td>past Five years: Predoctoral</td>
<td>(parts I &amp; II)</td>
<td>(parts I &amp; II)</td>
<td></td>
</tr>
<tr>
<td><strong>8A</strong></td>
<td>Table 8A Program Outcomes: Predoctoral B2D</td>
<td>Yes (Part III)</td>
<td>Yes (Parts I, IV)</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td><strong>8D</strong></td>
<td>Table 8D: Program Outcomes: Undergraduates B2B</td>
<td>Yes (Part I)</td>
<td>Yes (Part II)</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
</tbody>
</table>