The Bridges Programs
Webinar

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DISCLAIMER

This webinar and accompanying slides are for informational purposes only. They serve as an overview of the Bridges Programs and are not meant to be comprehensive in coverage of all required components of an application.

For any submission, applicants are responsible for following the instructions detailed in the FOA and any Related Notices included in the FOA’s Overview Information section.
Application Overview

Programmatic Perspective

• Goal and Objectives
• Awards Overview
• Eligibility & Number of Applications
• PHS 398 Research Plan Component
  o Research Strategy  o Required Tables  o MPI Plan  o Human Subjects

Peer Review Perspective

Grants Management Perspective

Questions? Answers!
The Bridges Programs

PAR-17-210 Bridges to the Baccalaureate (B2B)
CC  4-year

PAR-17-209 Bridges to the Doctorate (B2D)
Master’s  PhD

Please read and refer to the Funding Opportunity Announcement when planning submission

Additional Resources:

- 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

To enhance the pool of students from underrepresented groups* pursuing advanced training in the biomedical sciences.

NIGMS strives to ensure that the future generation of researchers draws from the entire pool of talented individuals, bringing different aptitudes, perspectives, creativity, and experiences to address complex scientific problems.

* Please read NOT-OD-15-053
Objective of Programs

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

Your institutional assessment is key to identifying what is “right” for your Bridges to prepare the participants’ for successful bridging and degree completion.

A Bridges application must include each applicable activity, and describe how they will be synergized to make a comprehensive program.
# Award Overview

<table>
<thead>
<tr>
<th>Allowable Costs</th>
<th>B2B</th>
<th>B2D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Direct Costs</td>
<td>Limited to $300,000 /year</td>
<td>Limited to $300,000 /year</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>8% of modified total direct costs*</td>
<td>8% of modified total direct costs*</td>
</tr>
<tr>
<td>Salary Support (administration)</td>
<td>Limited to 30% of total direct costs annually#</td>
<td>Limited to 30% of total direct costs annually#</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>$3,000 for entire project period</td>
</tr>
<tr>
<td>Student Salary Support</td>
<td>20 hours/week (Academic Year)</td>
<td>20 hours/week (Academic Year)</td>
</tr>
<tr>
<td></td>
<td>40 hours/week (Summer)</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 (if it is a regular part of their duties). The 30% administrative cap includes subawards.
** - per student per year
Eligibility

• **Institutions**
  - Type: Domestic, Higher Education (Public/Private) Institutions
  - Partnership/Consortium: CC → 4-yr (B2B) Master’s* → Ph.D. (B2D)
  - Large pool of students from UR groups

• **Program Directors/Principal Investigators (PD/PI)**
  - PD/PI from each participating institution—the PIs must have full-time appointment
  - PD/PI should have a eRA commons account—required for grant submission
  - Multi-PD/PI plan required (Lead/Contact PD/PI and Partner PD/PI)

• **Participants**
  - U.S. citizens, non-citizen nationals, or permanent residents
  - Nationally underrepresented individuals in the biomedical sciences (NOT-OD-15-053)
  - Enrolled **full-time** in Associate’s or Master’s program

* Terminal MS degree
Participants Eligibility

A. Individuals from racial and ethnic groups

B. Individuals with disabilities

C. Individuals from disadvantaged backgrounds, defined as:

1. Individuals who come from a family with an annual income below established low-income thresholds. These thresholds are based on family size, published by the U.S. Bureau of the Census; adjusted annually for changes in the Consumer Price Index; and adjusted by the Secretary for use in all health professions programs. The Secretary periodically publishes these income levels at http://aspe.hhs.gov/poverty/index.shtml.

2. Individuals who come from an educational environment such as that found in certain rural or inner-city environments that has demonstrably and directly inhibited the individual from obtaining the knowledge, skills, and abilities necessary to develop and participate in a research career.

The disadvantaged background category (C1 and C2) is applicable to programs focused on high school and undergraduate candidates.
Research Strategy (25-page limit)

The Research Strategy section must be used to upload the Research Education Program Plan, which must include the following components:

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

Upload under Research Plan as ResearchStrategy.pdf
Research Strategy

• Proposed Research Education Program

Institutional Self-Assessment: establish **baseline data** for UR students in the majors of your Bridges for all partnering institutions- average last 5 years

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

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

**Common Pitfalls:** lack of baseline data make it hard to evaluate the significance of the program; small pool of full-time 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 proposed activities:
  - Courses for skills development (B2D, B2B)
  - Research experiences (B2D, B2B)
  - Curriculum or Methods Development (B2B)

- Discuss perceived impediments and alternative strategies

- Discuss synergy with existing programs (added value)

- Propose anticipated overall impact of program on partnership capacity

- 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)*

NOTE: Remember to submit multi-PD/PI plan along with the application

Describe arrangements for administration of the program.

Provide evidence that the Program Director/Principal Investigator is actively engaged in research and/or teaching in an area related to the mission of NIH.

Demonstrate ability to organize, administer, monitor, and evaluate the research education program.

Describe the complementary and integrated expertise of the PDs/PIs; their leadership approach, and governance appropriate for the planned project.

*- must have full-time appointment at the participating institution

Upload as attachment
Filename: “MPIplan.pdf”

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

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

Table 2 Participating Faculty Members
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.

Table 4 Research Support of Participating Faculty Members
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>Post-doctorates in Research or Related Careers</th>
<th>Post-doctorates Completed Training</th>
<th>Post-doctorates Continued in Research or Related Careers</th>
</tr>
</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 in Training</th>
<th>Post-doctorates Continued in Research or Related Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<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>
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<tr>
<td><strong>University B</strong></td>
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</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>
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<tr>
<td>Sandoz, Miguel J.</td>
<td>MD, 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></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mentoring record (Over last 10 years)

Summarize and Refer explicitly in Background and Program Faculty Section

Upload as: “other attachments”
Filename: “Table 2.pdf”
# Table 4- Research Support (B2D)

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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</tr>
<tr>
<td><strong>Average Grant Support per Participating Faculty Member</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</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)
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>
</tr>
<tr>
<td>Jones, Janine L.</td>
<td>NIH</td>
<td>5 K08 AI00091-03</td>
<td>PD/PI</td>
<td>Purification &amp; Identification of Receptors</td>
<td>11/2012-11/2017</td>
<td>$140,000</td>
</tr>
<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>
</tr>
<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

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

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

How will trainees be supported here?
Research Strategy

• Program Participants “students”

  o Must be full-time enrolled
  o Refer to the institutional baseline data
  o Describe criteria & procedures for identification, selection, and retention of students in the Bridges programs
  o Discuss rationale for # slots being requested

Only for B2D
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>
<thead>
<tr>
<th>Part I. Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Recently Completed Year: 2013-2014</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

| Previous Year: 2012-2013 | Total Applicant Pool | Applicants Eligible for Support | New Entrants to the Program | New Entrants Eligible for Support | New Entrants Appointed to this Grant (Renewal/Revision Applications Only) |
| | | | | | |
| Total | | | | | |

| Previous Year: 2011-2012 | Total Applicant Pool | Applicants Eligible for Support | New Entrants to the Program | New Entrants Eligible for Support | New Entrants Appointed to this Grant (Renewal/Revision Applications Only) |
| | | | | | |
| Total | | | | | |

<table>
<thead>
<tr>
<th>New Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Predoctoral Training Submit Tables: 1, 2, 3, 4, 5A, 6A, 8A (B2D)</td>
</tr>
</tbody>
</table>

http://grants.nih.gov/grants/funding/424/datatables.htm
### 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>College A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Chemistry &amp; Biochemistry</td>
<td>45</td>
<td>30</td>
<td>12</td>
<td>6</td>
<td></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>College B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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>Total</td>
<td>149</td>
<td>92</td>
<td>56</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

Bridges to the Doctorate Program only: Masters degree-granting Institution (s) minimally

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 Program only

<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>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 (2)</td>
<td>Fisk (2)</td>
</tr>
<tr>
<td></td>
<td>Fisk (3)</td>
<td>Utah (3)</td>
<td>Fisk (3)</td>
<td>Utah (1)</td>
<td>Towson (1)</td>
</tr>
<tr>
<td></td>
<td>Ohio St. (5)</td>
<td>Towson (4)</td>
<td></td>
<td></td>
<td></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>
</tbody>
</table>

Bridges to the Doctorate Program only:
Masters degree-granting Institution (s) minimally

Renewal/revisions only
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/or Other Support for Bridged participants
  o Letters of Support

Appropriate institutional commitment to the program includes the provision of adequate staff, facilities, and educational resources that can contribute to the planned activities
Sample Format Table A

Required for both Bridges 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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College or University B</th>
<th>IMSD</th>
<th>BUILD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start and End Project Dates</td>
<td></td>
<td></td>
</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
## Table 8. Program Outcomes

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

<table>
<thead>
<tr>
<th>Undergraduate Student 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></td>
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</tr>
</tbody>
</table>

### (B2B) Table 8D
New: Part II  
Renewals: Part I

<table>
<thead>
<tr>
<th>Undergraduate Student 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>
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<td></td>
<td></td>
</tr>
</tbody>
</table>


**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:

<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</th>
<th>Current Position</th>
<th>Subsequent Grant(s)/Role/Year Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reynolds, Kristy</td>
<td>Fenselau, Kristin</td>
<td>09/2013</td>
<td></td>
<td>BA, 2015</td>
<td>Breast Cancer</td>
<td>Medical School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, Darren</td>
<td>Gummie, Allie</td>
<td>09/2015</td>
<td>In progress</td>
<td></td>
<td>Breast Cancer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These data can be archived in CareerTrack

Summarize and Refer explicitly in Research Training Program Plan

Columns 6-9 are not necessary for NEW B2B

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

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

up to last 15 years
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

**Pitfalls:** Programs not filling slots; programs not meeting their measurable objectives; lack of description of lessons learned; lack of using data to inform their programming; lack of mentors

* - for applications with more than one previous funding cycle

Upload table as attachment
Section G1
Filename: “Table8.pdf”
Research Strategy

- Recruitment Plan to Enhance Diversity
  - **New Applications**
    - Describe plans/strategies to enhance recruitment of UR trainees
    - How will they be recruited? How will they be paired with mentors?
  - **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.

Check out these websites for ideas:

https://extramural-diversity.nih.gov/
https://www.nigms.nih.gov/training/diversity/Pages/Approaches.aspx
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](#) Requirement for Instruction in the Responsible Conduct of Research

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

**Pitfall:** Lack of detail of RCR faculty, lack of description about curriculum, format & frequency
Research Strategy

• Evaluation Plan (Program Assessment)
  
  o Describe system for monitoring Bridges students progress
  
  o Provide outcome metrics*
  
  o Identify strengths/ weaknesses, make improvements
  
  o Encouraged use of 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
  - Identifiable private information

- OR 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 allowed page limits
• Do not use appendices or any other section to get around the limits

Appendices

• Follow all instructions for the Appendices as described in the SF424 (R&R) applications guide
• Appendix section is now VERY restricted - see NOT-OD-16-129
• For Bridges applications – only BLANK surveys, questionnaires, data collection instruments are allowed
• NO catalogs, curricula, publications (including lists), biosketches, examples of completed surveys, etc.
• If unallowed materials are included, application will be WITHDRAWN!
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
  o 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”
  o 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>
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:
  o 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.
What makes an ideal program?

• Baseline Data and Measurable Outcomes
  o Full-time students over past 5 years (establishes the pool)
  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 Partnership (articulation agreement B2B)

• Evidence of Institutional Commitment

• Evidence that effective Bridges-supported activities have been institutionalized – evidence in Renewal Applications
### Things to know: Grant Process

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Activity</th>
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<tbody>
<tr>
<td><strong>Deadline</strong></td>
<td><strong>September 25, 2017</strong></td>
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<tr>
<td>CSR--Referral</td>
<td>Oct-Nov 2017</td>
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<tr>
<td>Review Panel</td>
<td>March/April 2018</td>
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<tr>
<td></td>
<td>Scores available 36-48 hours after review</td>
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<tr>
<td>Summary Statement</td>
<td>April/May 2018</td>
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<tr>
<td>Advisory Council</td>
<td>May 2018</td>
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<tr>
<td>Funding Decisions</td>
<td>June-July, 2018</td>
</tr>
<tr>
<td>Award Start Date</td>
<td>August/September 2018</td>
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</tbody>
</table>
Thank you!

Questions?

NIGMS: Investing in Discovery
### 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>A</td>
<td>Active Biomedical Science-Related Academic Programs B2B and B2D</td>
<td>Yes*</td>
<td>Yes</td>
<td>Include as part of the Research Plan</td>
</tr>
<tr>
<td>2</td>
<td>Participating Faculty Members B2B and B2D (minimally, columns 1-6)</td>
<td>Yes</td>
<td>Yes</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td>4</td>
<td>Research Support of Participating Faculty Members B2D</td>
<td>Yes*</td>
<td>Yes</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td>6A</td>
<td>Applicants, Entrants, and their Characteristics for the past Five years: Predoctoral B2D</td>
<td>Yes*</td>
<td>Yes</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td>8A</td>
<td>Table 8A Program Outcomes: Predoctoral B2D</td>
<td>Yes (Part III)</td>
<td>Yes (Parts I)</td>
<td>Include as “other attachments” R&amp;R Other Project Information</td>
</tr>
<tr>
<td>8D</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>
Questions

1. Define establish investigator? Years of experience? Publication requirements? Can the PI hold an educational doctorate (Ed.D.)?

2. Can an academic administrator such as a Dean be eligible?

3. Can a university administrator such as a pipeline director be eligible?

4. What are biomedical sciences-related disciplines?

5. Are MA institutions that offer a PhD program (perhaps not in the discipline of the B2D grant) eligible for the Bridges to the Doctorate?

6. Is a Mutli-PI(PD) plan required?

7. Can we upload a course syllabus in the appendix?

8. Can you recommend ways in which we can demonstrate curriculum or method development?

9. Could you provide any clarification to the instructions for Data Table 8D Part II?
Questions

1. Per the FOA under the Other Award Budget Information section, we understand that the total salary support for program admin (PIs, coordinators, admin) must not be more than 30% of the total annual direct costs. Then underneath that paragraph the FOA states that support for faculty for course development is allowed. Are the development efforts by faculty for course development part of the 30% cap or outside the cap?

2. Also in the FOA it is clear that faculty support for research mentors is not allowed, however is support for faculty or consultants to serve as teachers for the research methodology courses being developed an allowable expense? (These will not be credit or income generating courses). If so, would those full under that 30% cap as well?