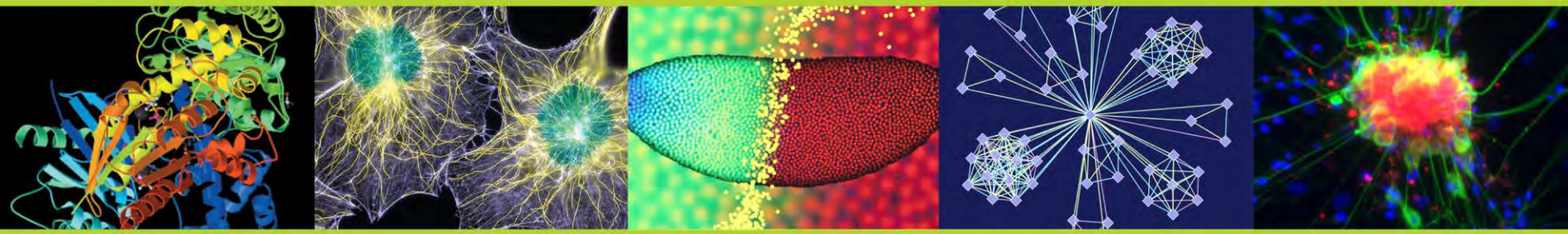
National Institute of General Medical Sciences

Research Initiative for Scientific Enhancement (RISE) Program Webinar

February 7, 2018



Presenters

- Anissa J. Brown, RISE Program Officer
- Luis Cubano, RISE Program Officer
- Adam Barnhart, Grants Management Specialist
- Lee Slice, Scientific Review Officer

Webinar Outline

I. Program Overview

II. Application Overview

III. Budget Overview

IV. Peer Review Overview

RISE Program Overview

- Developmental program that seeks to increase the number of students underrepresented (UR) in the biomedical sciences that complete Ph.D. degrees.

- Aims to help reduce the existing gap in completion of Ph.D. degrees between underrepresented and non-underrepresented students.

RISE Program Website:
https://www.nigms.nih.gov/Training/RISE/Pages/default.aspx

Updated Goals or Outcomes

- An increase in the overall number of underrepresented students that complete a Ph.D. and continue biomedical research careers;
- At least 80% of RISE-supported undergraduate, master's and Ph.D. students will complete their degrees; and
- At least 50% of undergraduate (UG) and 75% of master's RISE-supported students will enter a Ph.D. program within three years after graduation, and 80% of them will complete the Ph.D.

See NOT-GM-17-003 for more details.

Eligibility Information - *Institutions*

- Award science degrees to undergraduate and/or graduate students.
- Have a historical mission or track record of educating underrepresented students in biomedical research.
- Have received less than $6 million dollars per year from R01 and equivalent grant support (total costs) in each of the last two fiscal years.
- Institutions supported by NIGMS IMSD and/or IRACDA (lead institutions) programs are not eligible to apply.

See NOT-GM-17-003 for more details.

First Step in Preparing an Application

Read the FOA, NOT-GM-17-003, NOT-GM-17-018, and SF424 (R&R) Application Guide thoroughly.

Critical Components of Application

- Other Attachments (not equal to appendix)

DO NOT INCLUDE ANY MATERIALS UNDER APPENDIX FOR RISE APPLICATION

- Research & Related Senior/Key Personal
  - Biographical Sketches
- Budget
- Budget Justification
- Research Strategy

Other Attachments

- Advisory Committee
  - Suggested file name “Advisory_Committee.pdf”

COMPLETE tables

- Research Training Table 8A Part I
  - Suggested file name “Table 8A.pdf” ***for renewal applications only***

- Research Training Table 8D Part I
  - Suggested file name “Table 8D.pdf” ***for renewal applications only***

Table 8 A / D Part I

For renewal applications only

- For renewal applications, this table provides information about the use of undergraduate training positions:
  - distribution by faculty member
  - year in program
  - years of support per undergraduate student

- The data permits an evaluation of the effectiveness of the supported training program in achieving the training objectives of the prior award period(s) for up to 15 years.

Table 8D Part II. Recent Graduates

Is not required for new applications

Data Tables Summary

Table	Title of Table	New Applications	Renewals
A	Current Student Development and Research Training Programs	YES	YES
B	Cumulative Institutional Baseline Data	YES	YES
C	Institutional Faculty Data	YES	YES
D1	Institutional Undergraduate Graduation Data	YES	YES
D2	Institutional Master's Degree Graduation Data	YES	YES
D3	Institutional Ph.D. Degree Graduation Data	YES	YES
E1	RISE-supported Participant Data	N/A	YES
E2	Outcomes of Undergraduate (UG) RISE-supported Participants	N/A	YES
E3	Outcomes of M.S. RISE-supported Participants	N/A	YES
E4	Outcomes of Ph.D. RISE-supported Participants	N/A	YES
8A / 8D	Program Outcomes: Predoctoral / Undergraduate	N/A	YES

Applications that do not include these data in the body of the text will not be reviewed.

Suggested Tables for All Applicants

- **Table A - Current Student Development and Research Training Programs**

Title	Program Title
Project Duration (Years) Start and Ending Dates	5 years 10/01/2015 – 09/30/2020
Funding Entity	US Department of Education
Program Goals	• Student Financial Support • Educational Environment Improvement
Participant Number	10 undergraduate students
Target Audience	Undergraduate students
Eligibility Criteria (if applicable)	• Good Academic Standing • Underrepresented students

Suggested Tables for All Applicants

Table B - Cumulative Institutional Baseline Data

INSTITUTIONAL BASELINE DATA	Total Number	UR* Number (%)	Non-UR Number (%)
A. Total Students enrolled at the Institution (last 5 years)	25,240	24,620 (98%)	620 (2%)
B. Total Enrollment Data in RISE-relevant departments (last 5 years)			
B1. UG	9,460	9,460	0
B2. M.S.	730	720 (98.6%)	10 (1.4%
B3. Ph.D.	330	320 (97%)	10 (3%)
C. Graduation Data in RISE-relevant sciences (last 5 years)			
C1. UG	4,880	4,880 (100%)	0
C2. M.S.	170	170 (100%)	0
C3. Ph.D. and/or M.D./Ph.D.	0	0	0
D. Advanced Degrees Pursued by Alumni (last 10 years)	150	150	0
D1. Completed Ph.D. degrees in RISE-relevant sciences	10	10	0
D2. Completed M.D. degrees	30	30	0
D3. Completed other professional technical degrees (e.g., D.D.S., D.M.D., D.V.M., J.D., Ed.D. etc.)	0	0	0
List of departments included in this table: Biology and Chemistry			

Suggested Tables C for All Applicants

- **Table C - Institutional Faculty Data**

Total Tenure-Track Faculty	Institution-wide	RISE-relevant Departments				
		Biology Number (%)	Chemistry Number (%)	Physics Number (%)	Other:___ Number (%)	TOTALS (%)
A. Total	370	70 (19%)	100 (27%)	50 (14%)	0	220 (59%)
B. Total UR*	230	60 (26%)	50 (22%)	40 (17%)	0	150 (65%)
C. Total Non-UR*	140	10 (7%)	50 (36%)	10 (7%)	0	70 (50%)
D. Faculty participating in externally funded research	180	30 (17%)	40 (22%)	40 (22%)	0	110 (61%)

Suggested Tables D1,D2 & D3 for All Applicants

- **Table D1 - Institutional Undergraduate Graduation Data**
- **Table D2 - Institutional Master's Degree Graduation Data**
- **Table D3 - Institutional Ph.D. Degree Graduation Data**

Graduation Data	RISE-relevant Departments				
	Biology Number (%)	Chemistry Number (%)	Physics Number (%)	Other:__ Number (%)	TOTALS (%)
A. Total Graduated	70 (41%)	70 (41%)	30 (18%)	0 (0%)	170 (100%)
B. Total UR*	70 (41%)	70 (41%)	30 (18%)	0 (0%)	170 (100%)
C. Total Non-UR*	0	0	0	0	0

Additional Suggested Tables for Competitive Renewals

Table E1 - RISE-supported Participant Data
Table E2 - Outcomes of Undergraduate (UG) RISE-supported Participants
Table E3 - Outcomes of M.S. RISE-supported Participants
Table E4 - Outcomes of Ph.D. RISE-supported Participants

- Provide the information for total number of RISE-supported participants only (students that received salary wages), as applicable.
- Applications with only one previous funding cycle must include information from the last funding cycle.
- Applications with more than one previous funding cycle must include information from the last three consecutive funding cycles, as applicable.

Table E1

E1. RISE-supported Participant Data (reporting period: 7/1/2012 – 6/30/16)

Academic Level	Total Number	Graduated	Currently Enrolled	Withdrew
UG	90	76	10	4
M.S.	0	0	0	0
Ph.D.	0	0	0	0
TOTALS	90	76	10	4

Table E2

Table E2 - Summary of Student Participants - Undergraduate (UG) Student Data

Reporting Period:

Program Outcomes Number of:	Current funding cycle (Insert funding years)	Cumulative numbers (Insert funding years)
Participant positions awarded per Notice of Award		
Unfilled positions		
Participants appointed (unique individuals)		
Participants who remain in the Program		
Participants who participated in an academic year research experience at any location		
Participants who participated in a summer research experience at any location		
Participants who withdrew from the program (student initiated)		
Participants who transitioned to other support		
Participants who were terminated from the program		
Participants who earned a baccalaureate degree		
Participants in post-bac program funded by PREP		
Participants who completed PREP program		
Participants in other post-bac programs		
Participants who completed other post-bac programs		
Participants who matriculated in a biomedical Master's degree program		
Participants who earned a biomedical Master's degree		
Participants who matriculated in a biomedical Ph.D. program		
Participants who earned a biomedical Ph.D.		
Participants who matriculated in an M.D. or D.O. program		
Participants who earned an M.D. or D.O.		
Participants who matriculated in an M.D./Ph.D. program		
Participants who earned a M.D./Ph.D.		
Participants who matriculated in other doctoral research degrees		
Participants who earned other doctoral research degrees		
Participants who matriculated in other biomedical professional degree programs		
Participants who completed other biomedical professional degree programs		
Participants who remain in graduate training		
Participants who withdrew from graduate training		
Participants who entered the biomedical workforce (industry, government, etc.)		
Participants who entered non-research-related positions		

Biographical Sketches

- Provide biographical sketches for :
  - PD/PI
  - Program Coordinator
  - All Key Personnel
  - Program Faculty / Mentors
- New Biosketches are limited to five pages - http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-032.html
- Should reflect past records in training and mentoring students, including but not limited to teaching and/or research achievements, and extramural research support.

Research Strategy

- Research Education Program Plan must include:
  - Proposed Research Education Program
  - Program Director/Principal Investigator
  - Program Faculty
  - Program Participants
  - Institutional Environment and Commitment
  - Plan for Instruction in the Responsible Conduct of Research
  - Evaluation Plan
  - Dissemination Plan

Institutional Self Assessment

- Determine capacity to support students to attain undergraduate and/or graduate degrees in the biomedical sciences.
- Provide baseline data on the number of students retained and graduating in the biomedical sciences
- Include information related to:
  - Institutional mission and core themes, current resources and capacity
  - Indicators of effectiveness toward achieving its mission as it relates to the biomedical science disciplines.

Research Education Program

- Distinguish itself from current research training and education programs.
- Address the overall goals and specific measurable objectives including anticipated milestones.
- Provide programmatic details on the design to improve UR students' competitiveness for completion of Ph.D. degree in biomedical sciences.

Research Education Program Page 1

- Outline the schedule of research experiences and courses for skills development.
- Discuss impediments to implementing activities and alternative strategies to achieve the specific aims.
- Demonstrate that students will have a meaningful research experiences.

Proposed summer research experiences must be at least 2 consecutive months in duration.

Research Education Program Page 2

Typically applications that include research experiences during the academic year or summer at Research Intensive institutions, institutions with IMSD and/or T32 grants are scored more favorably by reviewers.

Remember to include letters of support from these institutions.

Research Education Program Page 3

- Address
  - Future impact of the proposed program on the institutional demographics of both the UG and/or graduate student pool.
  - Overall number of UR students at the institution that complete degrees in biomedical sciences; and matriculate in Ph.D. programs.

Program Director/Principal Investigator

- Describe arrangements for administration of the program.
- Provide evidence that the PD/PI is actively engaged in research and/or teaching, and can organize, administer, monitor, and evaluate program.
- For multiple PDs/PIs:
  - describe the complementary and integrated expertise of the PDs/PIs;
  - their leadership approach; and governance appropriate for the planned project.

Program Director/Principal Investigator cont.

- Describe the administrative structure and leadership succession plan for critical positions (e.g., PD/PI).
- If PD/PI is serving in a leadership role for multiple training programs at the applicant institution, describe how the PD/PI's duties will not overlap.
- Describe the institutional administration, how the PD/PI will interface with it, and how the proposed structure will allow the PD/PI to implement RISE Program activities.

Program Faculty

- Researchers from diverse backgrounds are encouraged to participate as preceptors/mentors.
- Mentors should have research expertise and experience relevant to the proposed program.
- Mentors may be faculty members at the applicant institution or external faculty who participate in the proposed program.
- All mentors must be committed to continue their involvement throughout the total period of the mentee's participation in this award.

Program Faculty - continued

Typically applications that include program faculty with active research funding at the home institution or partner institution are scored more favorably by reviewers.

Remember to include letters of support.

Program Participants

- Describe the intended participants, and the eligibility criteria and/or specific educational background characteristics.
- Include career levels for the proposed program and student selection qualifications and criteria.
- Include a description of the applicant pool based on the selection and retention criteria.
- **Must be appointed for a minimum of 12 months**

Institutional Commitment

Include:

- The commitment by the senior leadership to research training and education, and success of students.
- A plan for institutionalization of RISE-supported activities no later than two years after the activity is initiated.
- Specific institutional commitments should be reflected in the institutional letter of support.

Institutional Environment

Include a brief description of:

- Current student development and research-training programs using Table A.
- Counseling/mentoring services available.
- Success in preparing and graduating underrepresented students.
- *If applicable, a justification should be included for sites other than the applicant institution in the program narrative.*

Recruitment Plan to Enhance Diversity

- New applications must include a description of strategies to enhance the recruitment of trainees from underrepresented backgrounds.

- Renewal applications must include a detailed summary of experiences in recruiting individuals from underrepresented backgrounds during the previous funding cycle
  - Individuals who applied for admission
  - Individuals who were offered admission
  - Individuals who participated

Applications lacking a diversity recruitment plan will not be reviewed.

Evaluation Plan

- Specify baseline metrics
  - (e.g., numbers, educational levels, and demographic characteristics of participants)

- Specify measures to gauge the short or long-term success of the program in achieving its objectives.

Evaluation costs are allowed up to a maximum of $3,000 for the 5-year project period.

Dissemination Plan

- A specific plan must be provided to disseminate nationally any findings resulting from or materials developed under the auspices of the research education program.
- Examples: sharing course curricula and related materials via web postings, presentations at scientific meetings, workshops.

Letters of Support

- A letter of institutional commitment **must** be attached as part of Letters of Support.
- The letter must address the institutionalization plan.

Resource Sharing Plans

- Required for any application seeking $500,000 or more in direct costs in any single year
- https://grants.nih.gov/grants/policy/data_sharing/
- Sample: https://www.niaid.nih.gov/research/sample-data-sharing-plan

Appendix

New Policy Eliminates Most Appendix Material for NIH Applications Submitted After January 25, 2017.

https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-129.html

DO NOT INCLUDE ANY MATERIALS UNDER APPENDIX FOR RISE APPLICATION

Plan for Instruction in the Responsible Conduct of Research

- All applications must include a plan to fulfill NIH requirements for instruction in the Responsible Conduct of Research (RCR).
- The plan must address the five required components:
  1) Format
  2) Subject Matter
  3) Faculty Participation
  4) Duration of Instruction
  5) Frequency of Instruction

Applications lacking a RCR plan will not be reviewed.
See NOT-OD-10-019 for more details.

Common Pitfalls

- Not reading the FOA and Notice thoroughly
- Specific aims do not align with institutional assessment and resources
- Proposed project lacks novelty and innovation
- Incomplete and/or complete tables that don't align with institutional self assessment and proposed project.
- All: Failure to state program weakness and strategies to address them.
- For resubmissions, failure to address reviewer's comments.

Budget Overview

Updated Personnel Costs

- Salary support for the PD/PI and collaborators (or combination of multiple PDs/PIs collaborators) is limited to up to 3.6 person months (i.e., 30% on a 12-month basis)

- The combined total salary support for other administrative personnel, and the salary for any other single support position are limited to up to 6.0 person months (i.e., 50% on a 12-month basis), depending on person months devoted, and on the size and scope of the program.

NOT-GM-17-003

Budget - Participants

- Support is allowed for undergraduate and graduate students in the form of salary and wages. **Stipends are not allowable for the RISE Program.**
- Graduate students may be supported on RISE funding usually up to **two years** if preparing for a M.S. degree and a total of **five years** (including any RISE funding for a M.S. degree) if preparing for a Ph.D. degree.
- Do not use the term “graduate student”. Clearly differentiate M.S. from Ph.D. students.
- Students may not concurrently hold another federally sponsored award that duplicates RISE support.

Participants Cost

- To receive salary support from the RISE Program, students must be a citizen or a noncitizen national of the United States or have been lawfully admitted for permanent residence at the time of appointment.

- **RISE participants are expected to be appointed to at least one consecutive 12-month appointment.**

Budget – Program Expenses

- For new and renewal applications, institutions may request up to a maximum of $10,500/student participant for Other Program-Related Expenses.

Program Expenses Caps Costs

- Consultant costs
- Equipment
- Student academic skills development workshops
- Research supplies
- Travel – Participants and Program Staff
- Evaluation costs

Unallowable costs

- Undergraduate student tuition, housing, food, or recruitment expenses.
- Graduate student housing, food, or recruitment expenses.
- Undergraduate or graduate student support in the form of a stipend
- Support for either graduate or undergraduate students not matriculated at the applicant institution.
- Foreign travel by PD(s)/PI(s), faculty, coordinators, research mentors, other personnel or RISE participants.
- Other prohibited costs. See Notice NOT-GM-17-003 and NIH Grants Policy Statement.

X-Train for Student Appointments

- All RISE R25 participants must have an appointment form submitted through the eRA Commons to X-Train before they may receive their compensation

- If participants cannot continue in the grant program for the full appointment period an amended appointment must be submitted to X-Train with the correct appointment period

xTrain Web Page - application guide, quick reference sheets, FAQs, training materials:
https://era.nih.gov/services_for_applicants/other/xTrain.cfm

Peer Review Overview

Peer Review

- Please read the review criteria while preparing your application to make sure all of the required information is included.

- Review panel will assess your application against the review criteria.

Peer Review - Continued

- RISE applications reviewed by one of 2 standing NIGMS review committees: TWD-C and TWD-D
- Committees are equivalent: applications assigned to one of two committees to balance conflicts and workload
- Receipt letter from scientific review officer will provide information about meeting dates, instructions for providing updates, link for committee roster, and people to contact during the review and post-review process.
- Scores and summary statements accessed through PI's eRA Commons account

Peer Review Cont.

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

Formatting Tips

Check Application

- Allow enough time to carefully check application after submission. We can not accept any missing items after the receipt deadline.

Page Limits

- Supply all requested materials within page limits
- Do not "overstuff" sections that don't have page limits or use appendices to get around the limits

Appendices

- New notice NOT-OD-16-129 eliminates most appendix material for applications submitted after 1/25/2017.

Application Preparation Tips - Page 1

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

Application Preparation Tips - Page 2

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?

Application Preparation Tips - Page 3

Clear

- Don't bury important information
- Don't expect reviewers to "read between the lines" to figure out what you are proposing
- Present outcomes data in a straightforward manner:
  - Don't exaggerate
  - Don't hide data (reviewers will "do the math")
  - It is far better to present results as they are and address how the program aims to improve

Application Preparation Tips - Page 4

Current

- Make sure faculty biosketches are up-to-date, in correct format, and relevant for training program
- 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

Review Process: Usual Timeline

Timeframe (From submission date)	Activity
1 - 2 months	Referral
2 - 6 months	Review Panel
6 - 7 months	Summary Statement Available
7 - 8 months	Advisory Council
8 - 9 months	Funding Decisions
9 - 10 months	Award Start Date

For additional information

- Funding Opportunity Announcement (FOA) PAR-16-361
- Notices NOT-GM-17-003 and NOT-GM-17-018
- RISE Website
  https://www.nigms.nih.gov/Training/RISE/Pages/default.aspx
- Frequently Asked Questions – Application Guide, Electronic Submission of Grant Applications

Agency Contacts

- Anissa J. Brown, Ph.D.
  anissa.brown@nih.gov
- Luis Cubano, Ph.D.
  luis.cubano@nih.gov
- Lori Burge
  burgel@nigms.nih.gov
- Lee Slice, Scientific Review Officer
  slicelw@mail.nih.gov
- Tracy Koretsky, Scientific Review Officer
  tracy.koretsky@nih.gov

Thank you!