

# Increasing the Diversity of the NIH-Funded Workforce

## Building Infrastructure Leading to Diversity (BUILD) Initiative

BUILD Planning Grant Webinar

RFA-RM-13-001

[BUILDNRMNWebinars@mail.nih.gov](mailto:BUILDNRMNWebinars@mail.nih.gov)

April 3, 2013



# BUILD Planning Grant Webinar

Participants will be in Listening Mode and will not be able to ask questions verbally or via chat.

Please e-mail any questions to:

[BUILDNRMNWebinars@mail.nih.gov](mailto:BUILDNRMNWebinars@mail.nih.gov)

# Agenda



## **Background: Why are we developing this program, and what is the goal?**

M. Roy Wilson, Deputy Director

National Institute on Minority Health and Health Disparities, NIH

## **Why is this a Common Fund Program?**

Elizabeth Wilder, Director

Office of Strategic Coordination, Division of Program Coordination, Planning, and Strategic Initiatives, Office of the Director, NIH

## **Overview of BUILD Initiative, Purpose of Planning Grants, and Timeline**

Michael Sayre, Program Official

Division of Scientific Programs, National Institute on Minority Health and Health Disparities, NIH

## **Application Review Process**

Delia Olufokunbi Sam, Scientific Review Officer

Center for Scientific Review, NIH

## **Selected FAQs and Participant Questions**



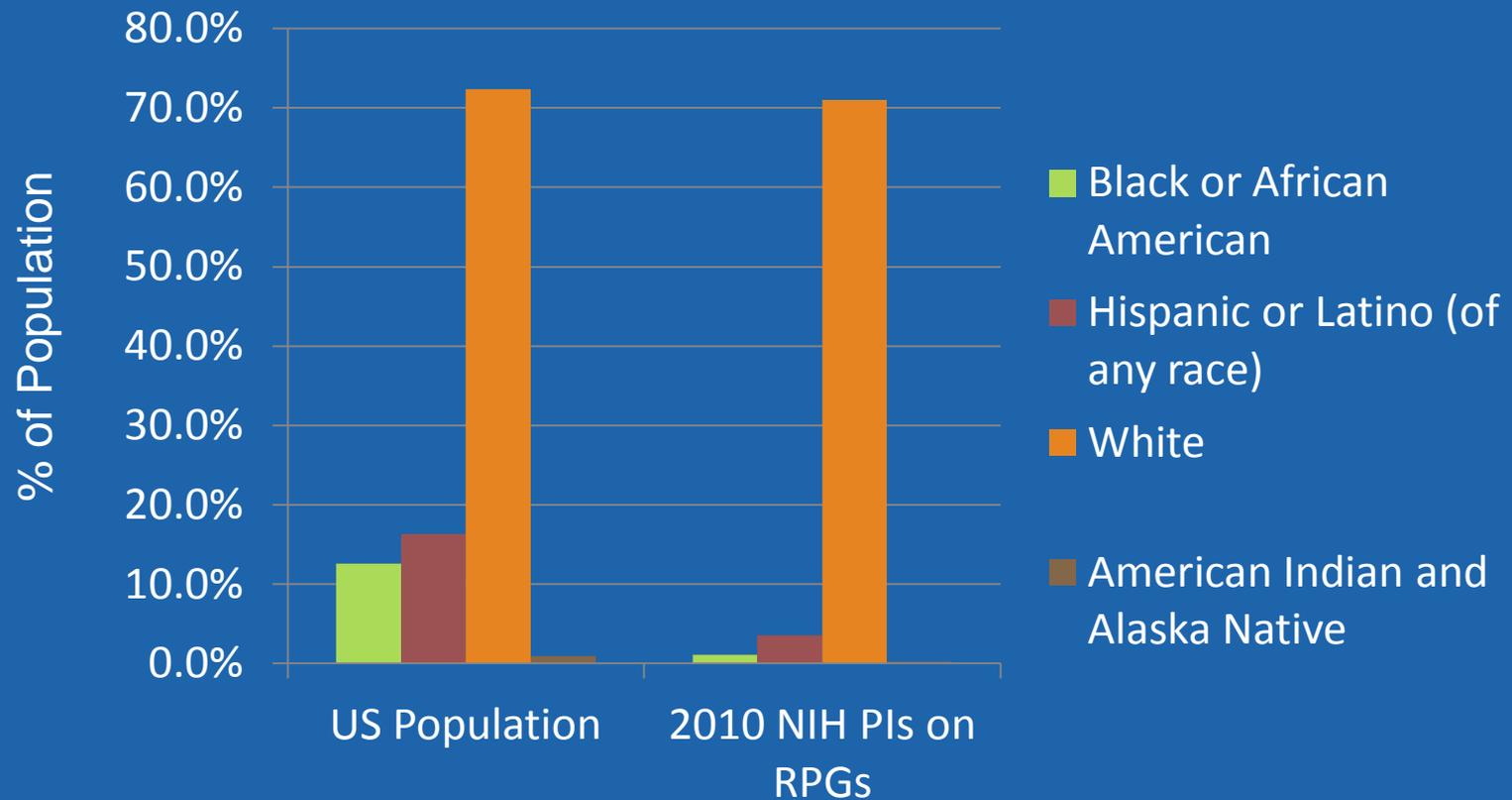
**Why are we developing this program?**  
**What is the goal?**

# Why?

The Biomedical Research Enterprise  
requires the best and brightest  
minds.

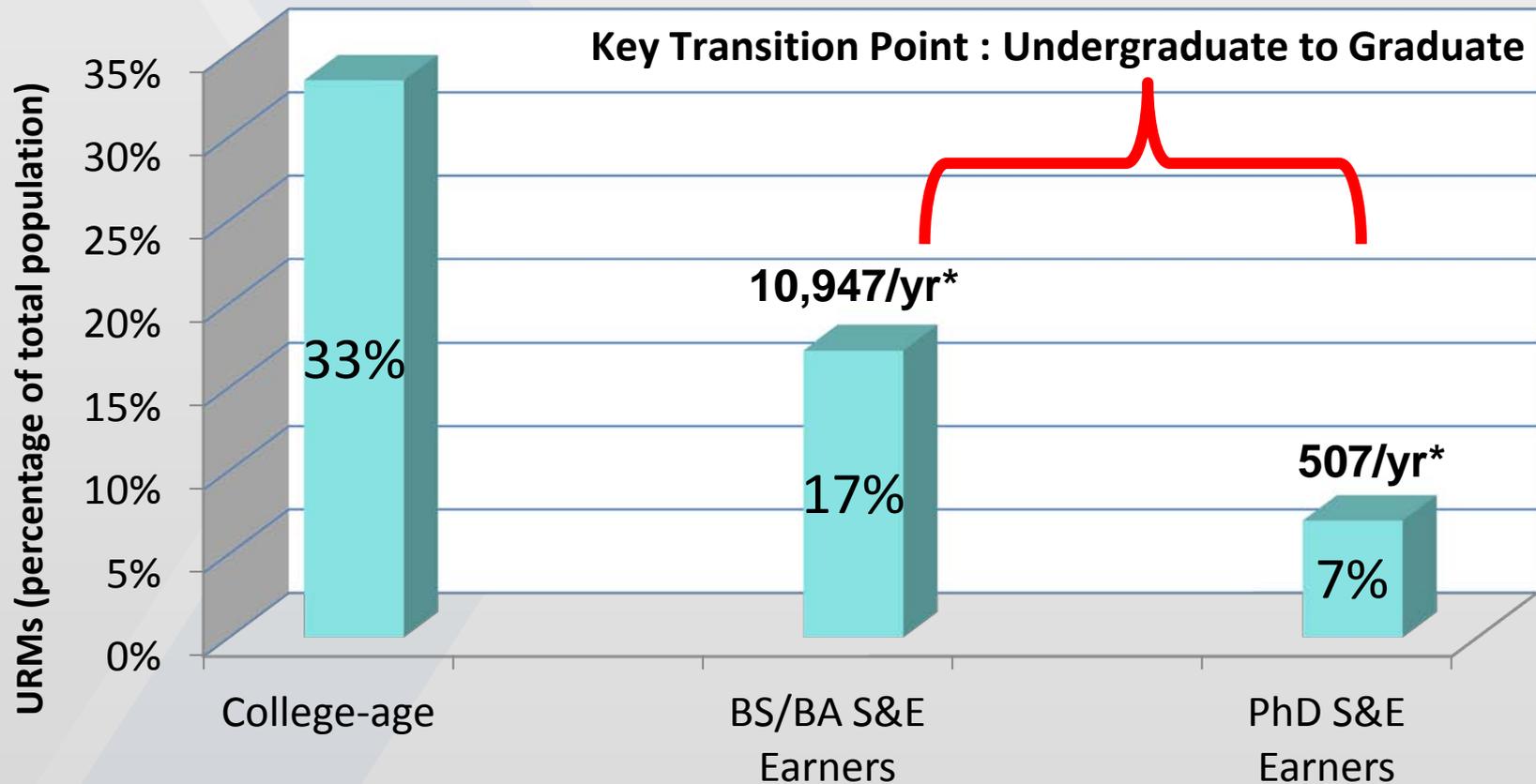
And yet...

# Minority Populations are Underrepresented in the NIH Principal Investigator (PI) Pool



# At what stage do URMs leave the pipeline?

## Demographics for URM students in Educational Pipeline (2008)



\*Degree in Biology, Chemistry, and Physics to URMs

# So we have a problem...

- We're missing the brainpower of large segments of our population.
  - Need better data for people with disabilities and those from disadvantaged backgrounds

## What can we do about this?

# The NIH (and many other organizations) are investing in diversity. For example:

- MARC Undergraduate Student Training in Academic Research (U-STAR) Awards
- Research Initiative for Scientific Enhancement (RISE) program
- Support of Competitive Research (SCORE)
- NCMHD Research Infrastructure in Minority Institutions
- Programs to Increase Diversity Among Individuals Engaged in Health-Related Research (PRIDE)
- Biomedical/Behavioral Research Innovations to Ensure Equity (BRITE) in Maternal and Child Health
- Blueprint Program for Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences



# Evidence of impact on trainees:

JOURNAL OF RESEARCH IN SCIENCE TEACHING

VOL. 49, NO. 2, PP. 199–217 (2012)

## **Promoting Minority Success in the Sciences: The Minority Opportunities in Research Programs at CSULA**

Simeon Slovacek, Jonathan Whittinghill, Laura Flenoury, and David Wiseman

...students supported by the MORE programs had higher GPAs at graduation, took less time to graduate, and were more likely to both graduate with a science degree and enter Master's and doctoral programs in the sciences.”

Efforts to date are working very well on the level of the individual trainee.

However, improvement of the overall outcomes of supported institutions is modest and underrepresentation at the national level remains a persistent problem.

How can we create synergy among existing efforts to achieve impact at the population level?

- **June 2011** – At NIH Director’s Request, Advisory Committee to the Director (ACD) Working Group on Diversity in the Biomedical Research Workforce formed
- **August 2011** – Race, Ethnicity, and NIH Research Awards article published in *Science*
- **June 2012** – ACD Working Group makes recommendations in four key areas
  - Pipeline
  - Mentoring
  - Infrastructure
  - Peer Review



# Diversity Initiatives: Overarching Strategy

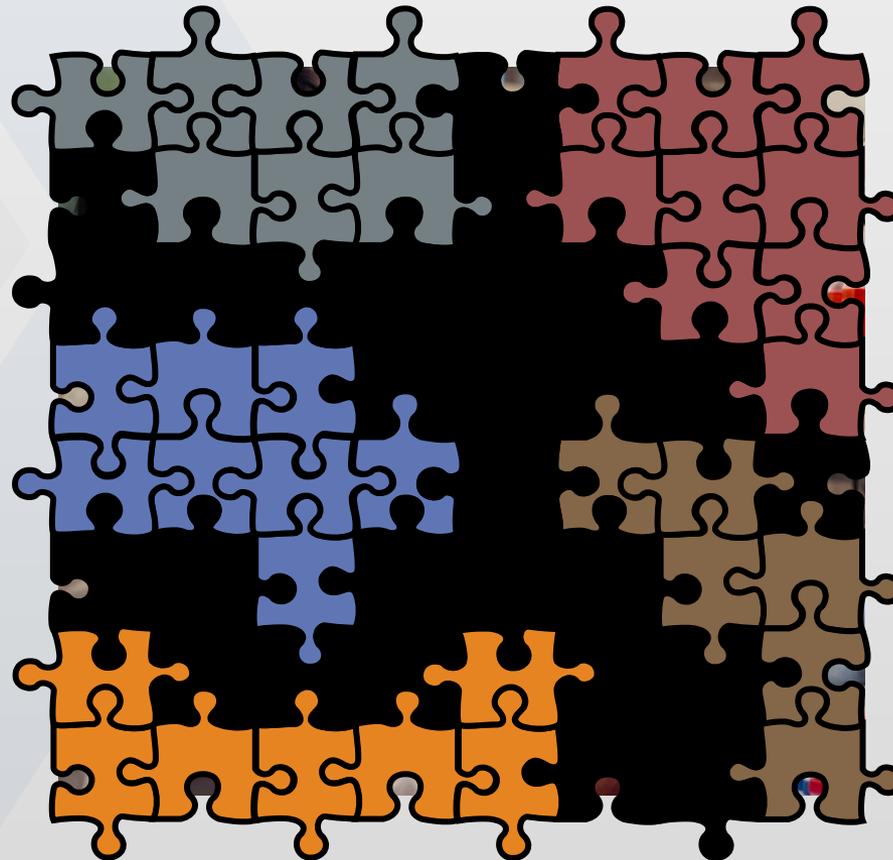
NIH will implement four interrelated approaches:

- **NIH Building Infrastructure Leading to Diversity (BUILD) Initiative**
- National Research Mentoring Network (NRMN)
- Ensuring Fairness in Peer Review
- Increased Engagement by all NIH Leadership

<http://acd.od.nih.gov/Diversity-in-the-Biomedical-Workforce-Implementation-Plan.pdf>

Extramural initiatives to be supported via the NIH Common Fund

The goal of the new initiatives is to create a culture shift, integrating existing efforts, piloting new models for training, and testing new ways of working together.





# Why is this a Common Fund Program?

(and what's the Common Fund?)

# Origins of the Common Fund



One Hundred Ninth Congress  
of the  
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Tuesday,  
the third day of January, two thousand and six*

An Act

To amend title IV of the Public Health Service Act to revise and extend the authorities of the National Institutes of Health, and for other purposes.

*Be it enacted by the Senate and House of Representatives of  
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Institutes of Health Reform Act of 2006".

TITLE I—NIH REFORM

**2004:** NIH Roadmap is launched

**December 9, 2006:** Congress passes NIH reauthorization bill affirming importance of NIH and its vital role in advancing biomedical research to improve the health of the Nation



Establishes the **Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI)** within the Office of the Director and the **NIH Common Fund** as a dedicated source of funding to enable *trans-NIH* research

# Criteria for Common Fund Programs

- **Transformative:** Must have high potential to dramatically affect biomedical and/or behavioral research *over the next decade*
- **Catalytic:** Must achieve a defined set of high impact goals within 5-10 years
- **Synergistic:** Outcomes must synergistically promote and advance individual missions of NIH Institutes and Centers to benefit health
- **Cross-cutting:** Program areas must cut across missions of multiple NIH Institutes and Centers, be relevant to multiple diseases or conditions, and be sufficiently complex to require a coordinated, trans-NIH approach
- **Unique:** Must be something no other entity is likely or able to do

# What are the goals of the Common Fund Diversity initiatives?

- To develop and test innovative approaches for training, mentoring, and networking that have the potential to transform and improve the way individuals from underrepresented backgrounds are recruited and retained within the NIH-funded workforce.
- To integrate with ongoing efforts, leveraging those investments to achieve greater impact for all programs.

# What's the strategy to achieve these goals?

- BUILD: Novel, innovative, **effective models for research training** that dramatically improve the ability of institutions to recruit students from underrepresented backgrounds, motivate them for research careers, and prepare them for success
- NRMN: **Robust, novel, mentoring opportunities**
- Coordination and Evaluation Center (CEC): **Integration and networking, rigorous evaluation** and assessment to determine what works and what doesn't



# Overview of BUILD initiative

## Purpose of the Planning Grants

## Timeline

# BUILD Initiative Overview

- Goal: To develop and test new models for recruitment and retention of individuals from underrepresented groups into the NIH-funded workforce.
- What's the vision?
  - Institutions have a great deal of flexibility to innovate
  - Undergraduates are targeted but also other career stages
  - Comparatively under-resourced institutions with significant numbers of disadvantaged students are targeted because:
    - They have less flexibility to redirect existing funds to develop and test new approaches
    - Commitment to disadvantaged students often comes at expense of infrastructure investments

# BUILD Initiative Overview

- Research training for undergraduate students from backgrounds under-represented in biomedical and behavioral sciences
- Faculty development at comparatively under-resourced institutions with a track record of producing and supporting scientists from diverse backgrounds
- 2 cycles of 5-year BUILD awards over a 10-year period

# BUILD Initiative Goals

- Catalyze substantial increase over the next 10 years in the number of undergraduate students from under-represented backgrounds who progress to PhD programs in biomedical, behavioral, clinical and social sciences
- Boost research productivity and faculty development at comparatively under-resourced institutions with a track record of producing and supporting scientists from diverse backgrounds
- Enhance and expand opportunities for students from under-represented backgrounds to train with active, NIH-funded scientists

# BUILD Components

- Tuition scholarships & stipends for undergraduate studies, and the possibility for loan repayment funds upon acceptance to a PhD program
- Mentored summer research experiences across a wide range of disciplines in the biomedical, behavioral, clinical, and social sciences
- Salary support and infrastructure for key faculty responsible for research training (e.g., release time, equipment and supplies for summer student research projects, sabbatical training to augment the research environment)

# BUILD Components- continued

- Resources for highly effective mentors to train new mentors
- Support for “innovation space” to develop creative and novel approaches to increase the diversity of the student pool that enters the PhD training pathway relevant to biomedical research, e.g., novel curricula, training, mentoring, peer networking and support, social media campaigns, faculty-led research, or other activities considered fundamentally important for preparing students for research careers

# BUILD Eligibility

## Primary (applicant) Institutions

- Baccalaureate degree-granting colleges/universities that receive less than \$7.5 million annually (total costs) of NIH research project grant (RPG) funding and have eligible pool of undergraduate students, at least 25% of whom are supported by Pell grants
- Applicants must address their past successes in recruiting science students, preparing them for research careers, and steering them toward graduate level research training

# BUILD Eligibility

## Potential Partner Institutions/Organizations

- Pipeline Partner institutions
  - 2- or 4-year undergraduate institutions with student populations that will enrich and expand pool of students eligible for scholarships at Primary Institution

# BUILD Eligibility

## Potential Partner Institutions/Organizations

- Research Partner Institutions
  - Research-intensive institutions with NIH-funded investigators who are committed and able to serve as effective research mentors for BUILD scholars
  - Expected to provide scientifically rich environment, expanding available curricula and pool of potential mentors willing to provide hands-on research experiences to under-represented students

# BUILD Eligibility

## Potential Partner Institutions/Organizations

### – Graduate/Medical Partner Institutions

- Institutions that lack undergraduate programs but have a pool of doctoral-level students and receive less than \$7.5M annually in NIH RPG funding (total costs)
- Expected to collaborate with Primary Institution to provide joint programs for undergraduate and graduate students



# Purpose of Planning Grants and Potential Activities

# BUILD Planning Grants

- Provide organizations an opportunity to conduct activities needed in order to successfully develop and submit a multi-year BUILD application
- Develop consortia that can transform participating institutions' ability to recruit and retain scientists from under-represented backgrounds into biomedical research careers
- 6-month project period
- Up to 15 awards selected

# BUILD Planning Grants

- Potential Activities
  - Develop partnerships among organizations and identify infrastructure needs of faculty at participating institutions
  - Assemble baseline data and formulate strategies to increase the percentage of students who progress to PhD programs
  - Establish plans to enhance tutoring/mentoring and research training skills
  - Establish processes for selecting undergraduate students that might be supported via BUILD scholarships
  - Identify and/or develop research and administrative structure needed to manage multi-year BUILD award

# BUILD Planning Grant Budget

- \$150,000 direct cost budget limit
  - Does not include institutional or consortia F & A (indirects)
- Possible uses of planning grant funds
  - Staff time
  - Travel
  - Meeting costs
  - Technical support
  - Evaluation of existing programs
- Planning grant funds may not be used to provide tuition scholarships or support summer research projects for undergraduate students



# Timeline for Submission, Review, and Selection of Planning Grants

# BUILD Planning Grant Timeline

- Letter of Intent Due Date: April 10, 2013
- Application Receipt Date: May 10, 2013
- Peer Review: July, 2013
- Council Review: August, 2013
- Earliest Start Date: September, 2013
- Multi-year BUILD Funding Opportunity Announcement expected in fall of 2013, to be due spring 2014



# Part VI: Application Review Process

# BUILD Planning Grant Review Process

- Applications assigned to National Institute on Minority Health and Health Disparities (NIMHD)
- Center for Scientific Review (CSR) staff assess applications for completeness
- NIMHD program staff assess applications for responsiveness
- CSR Scientific Review Officer assembles expert panel from extramural community to review applications
- Assigned reviewers (at least 3) assess scientific and technical merit based on established review criteria

# Review Criteria

- Overall Impact
- 5 Core Review Criteria:
  - Significance
  - Investigators
  - Innovation
  - Approach
  - Environment

# Overall Impact

Likelihood that project will exert sustained, transformative influence on the field

- in consideration of the following five core review criteria, and
- additional review criteria (as applicable for the project proposed)

**Address this on your Specific Aims page!**

# Significance

- Does this project address an important problem?
- If the aims are achieved, how will knowledge be advanced?
- What will be the effect on concepts or methods that drive this field?
- **Does the applicant convey a vision of building a consortium that will substantially improve recruitment and retention of scientists from diverse backgrounds into research careers?**

# Significance- continued

- Do the planning activities suggest that the program to be developed will ***build from and synergize with existing resources?***
- Are ongoing activities taken into account such that the program to be developed will allow the Primary Institution and its partners to reach many more students than are currently reached and/or to dramatically improve the research training to be provided?

# Investigators

- Are the investigators appropriately trained and well suited to carry out this work?
- Is the work proposed appropriate to the experience level of the PI and other collaborators?
- Does the project team bring complementary and integrated expertise to the project?
- **Do the investigators show evidence of ability to lead, develop, and direct a program focused on biomedical, behavioral, clinical, social science education, training and mentorship for undergraduate students from diverse backgrounds?**

## Investigators- continued

- **Are the key personnel committed to research training for underrepresented student groups, and is there evidence of past success in recruiting students from diverse backgrounds into research careers and preparing them to be successful?**
- **Will planning activities ensure active engagement of faculty from all partner institutions?**

# Innovation

- Does the project employ novel concepts, approaches or methods?
- Are the aims original and innovative?
- Does the project challenge existing paradigms or develop new methodologies or technologies?
- **Are ideas for development of innovative approaches to enhancing diversity compelling?**
- **Will planning activities likely lead to novel and creative approaches to research training and/or mentoring?**

# Approach

- Are the conceptual framework and planned activities appropriate to the aims of the project?
- Does the applicant acknowledge potential problem areas and consider alternatives?
- **Is an appropriate rationale for the selection and inclusion of partner organizations provided?**
- **Does the application describe a process for developing a selection process for BUILD scholars?**

## Approach- continued

- **Are plans described to ensure that students will be appropriately tutored and mentored prior to being eligible for BUILD scholarships?**
- **Is the approach for assessing the capacity building and infrastructure needs of the Primary Institution and partner institutions feasible and inclusive?**
- **Is the process for identifying and developing new and innovative educational, mentorship, or training opportunities identified?**

# Environment

- Does the environment in which the work will be done contribute to the probability of success?
- Does project take advantage of unique features of the environment or employ useful collaborative arrangements?
- Is there evidence of institutional support?
- **Are the combined environments of all partner institutions likely to foster effective collaborations for teaching and mentoring diverse students in coursework and in research?**

## Environment- continued

- **Are partnerships envisioned that will provide robust research experiences for BUILD scholars?**
- **Will the partnerships provide a robust mentoring pool for the students to integrate with and form long-lasting mentor/mentee relationships to help shape their future careers?**



# Part VII: Selected FAQs and Participant Questions

# Selected BUILD FAQs

**Q: Is the BUILD initiative only for undergraduate students from under-represented minority groups?**

A: No, all undergraduate students enrolled in good standing at participating institutions are eligible to participate in activities supported by the BUILD initiative.

**Q. Will planning grantees be given an advantage in the competition for multi-year BUILD awards?**

A: No, applications for the multi-year BUILD award will be reviewed based on their own merits, not on whether or not the applicant is a planning grant recipient.

# Selected BUILD FAQs

**Q: Can institutions apply for BUILD planning grants if they already have NIH-funded undergraduate training programs (e.g., MARC, RISE)?**

A: Yes. Applications should describe strategies for leveraging existing training programs that could significantly enhance progression of under-represented students to PhD programs.

**Q. If I do not apply for the planning grant can I still apply for the BUILD RFA?**

A: Yes. Organizations that consider themselves ready to submit a multi-year BUILD application without the need for a planning grant are not required to apply to the planning grant FOA.

# Questions?



Submit questions via e-mail to:

[BUILDNRMNWebinars@mail.nih.gov](mailto:BUILDNRMNWebinars@mail.nih.gov)

Questions will be de-identified and answered right now. These slides and a recording of today's webinar will be available on our website:

<http://commonfund.nih.gov/diversity/>

# BUILD Contacts

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