

Common Fund Diversity Program Consortium

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Background

- In 2012, the **NIH Advisory Committee to the Director Working Group on Diversity in the Biomedical Research Workforce** made recommendations in response to studies showing disparities in the NIH research project grant funded workforce.
- As part of the implementation, the Common Fund established the “Enhancing the Diversity of the NIH-Funded Workforce” known as the Diversity Program Consortium (DPC)



National Institutes of Health

Office of Strategic Coordination–The Common Fund

DPC: A scientific approach to enhancing diversity in the biomedical research workforce



- Three levels of simultaneous impact: **student, faculty** and **institution**
- Integration of **social science research** and **psychosocial interventions** into the process of training and mentoring students and faculty
- Rigorous **assessment and evaluation** of the training and mentoring interventions implemented across the program
- **The long-term impact of this program will be in the broad dissemination of evidence-informed approaches to training and mentoring.**

Phase I Structure: Integrated National Consortium

Coordination and Evaluation Center



Building Infrastructure Leading to Diversity (BUILD)



National Research Mentoring Network



Research and Service Cores

Promoting
Matching and Linking
Mentor Training
Grant Writing Training



Phase I: DPC Highlights



REBUILDetroit



The national evaluation of the NIH Diversity Program Consortium



- **Implemented Training and Mentoring Interventions**
- **Developed Evaluation Plans – Site-Specific & Consortium-Wide**
- **Defined the Hallmarks of Success and Measures**
- **Created a Data Sharing Agreement**
- **Developed and Employed Tracking System for Interventions**
- **Collected Site-Specific and Consortium-Wide Data**
- **Published methods and early outcomes**

DPC – Two Phases



Phase II Competition

Focus on Completion, Sustainability, and Dissemination

- **BUILD** intervention sites and coordination and evaluation center
- **NRMN** resource center
- **New - NRMN – research projects & data coordination center**
- **New - Included capacity building and dissemination awards**



Building Infrastructure Leading to Diversity (BUILD)

National Research Mentoring Network (NRMN)

Phase II: DPC Highlights

Year 6

Year 7

Year 8

Year 9

2024



- BUILD continued interventions and transitioned to sustainable levels
- Collected site-level and consortium-wide data
- NRMN Resource Center sustained and expanded offerings
- NRMN research projects conducted
- NRMN common measures library, data coordination, data portal
- Sponsored programs development launched
- Dissemination and translation interventions tested
- Sites published



Building Infrastructure Leading to Diversity (BUILD)

National Research Mentoring Network (NRMN)

National Research Mentoring Network (NRMN) Resource Center

[Get Started](#)[About NRMN](#)[Our Programs](#)[NRMN Courses](#)[Events](#)[Collaborate](#)[News](#)[Join](#)[Login](#)

8,538 mentors, 15,916 mentees, 30,497 active members. Ready to join our community?

Experience mentorship and professional development programs designed to hone your practices and deepen your connection to the diverse nationwide scientific community.

[Join NRMN](#)

As of May 31, 2024


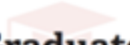
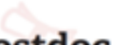
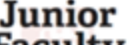
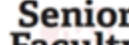
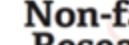

Join MyNRMN Platform

Connect with diverse mentors and mentees from across the country to seek advice and mentoring



Enroll in our courses within MyNRMN:

Phase I: NRMN Cores reached thousands

MATCHING /LINKING	 Undergraduate	 Graduate	 Postdoc	 Junior Faculty	 Senior Faculty	 Non-faculty Researcher	 Administrator
Guided Virtual Mentorships	●	●	●	●	●	●	●
MyNRMN	●	●	●	●	●	●	●
Near Peer Mentoring	●	●	●				
Virtual Collaboratory			●	●	●	●	
TRAINING							
Career Coaching		●	●				
Facilitator Training				●	●	●	●
Grant Writing Coaching Groups			●	●	●	●	
Mentor Certifications				●	●		
Research Mentee Training	●	●	●	●			
Research Mentor Training		●	●	●	●	●	●
Shark Tank			●	●	●	●	
Institutional Mentoring Academy Planning							●
REFERRING							
Career Development Webinars	●	●	●	●	●	●	●
NRMNet Portal	●	●	●	●	●	●	●
PROMOTING							
NRMN Ambassadors	●	●	●	●	●	●	●

National Research Mentoring Network (NRMN)

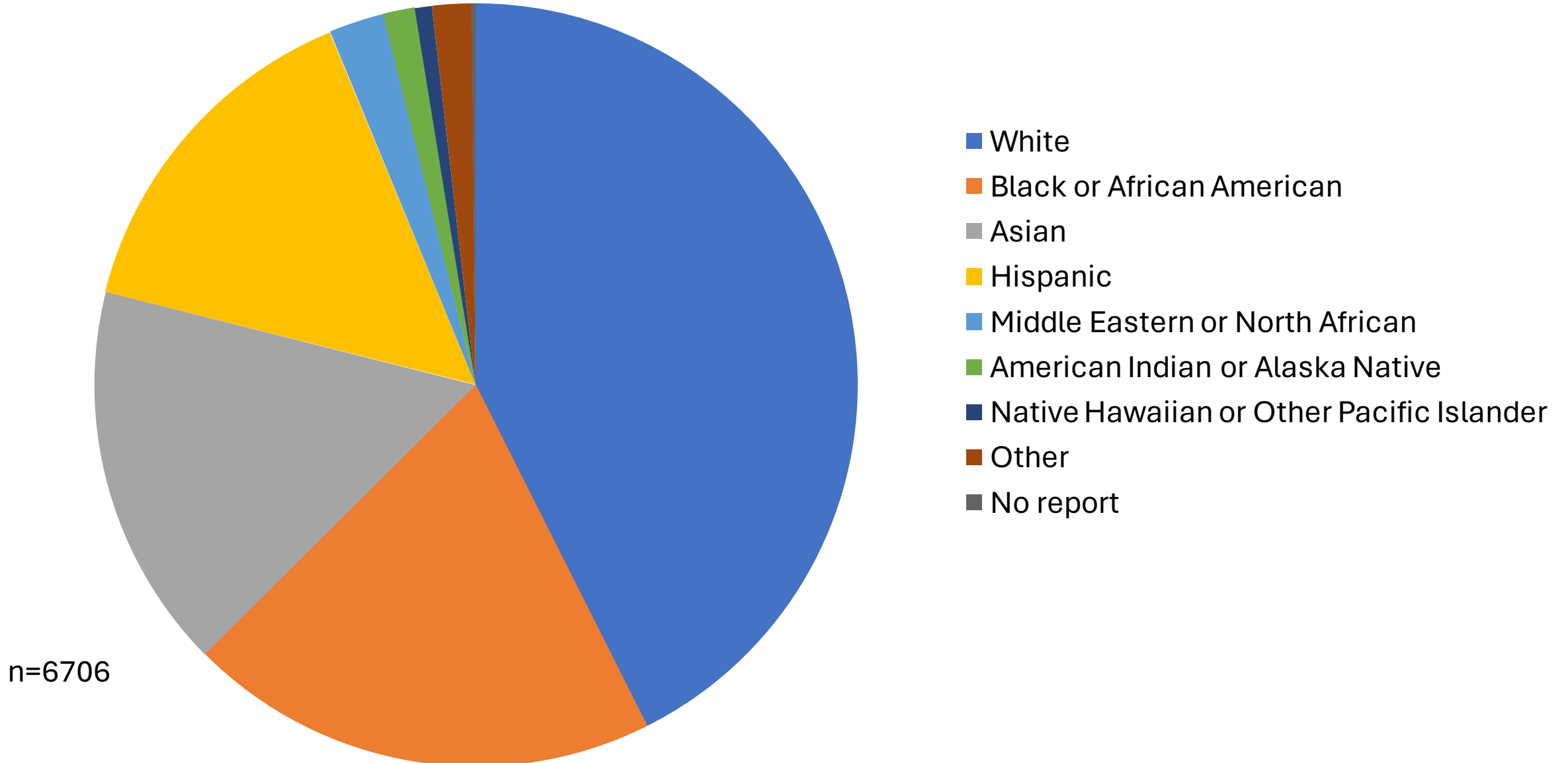
Research Projects and Data Coordination

Location of Participants

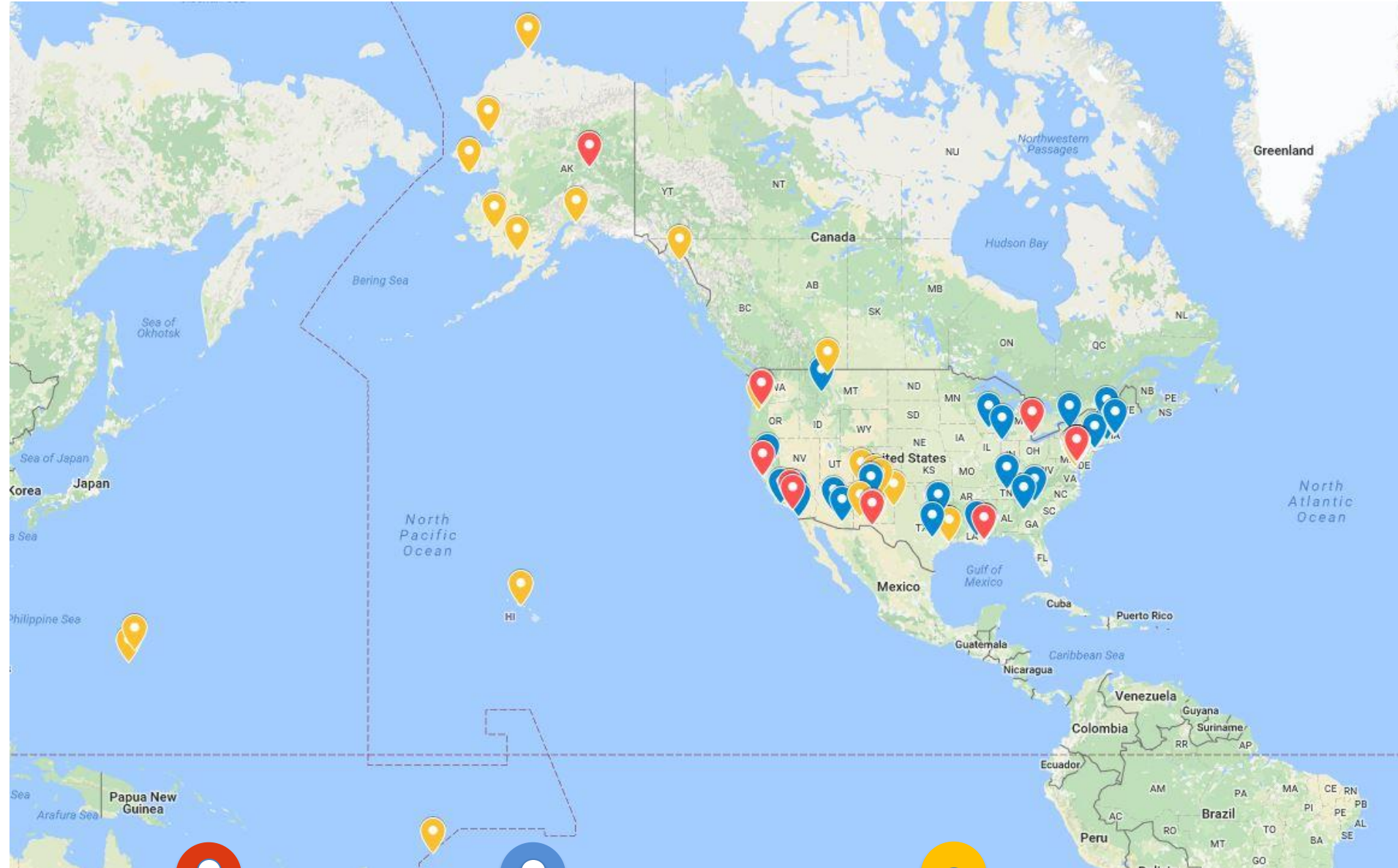


- **11** U01 teams
- **6,389** completed survey records
- **345** organizations
- **54** publications to date
- **2** special issue publications

National Research Mentoring Network (NRMN) Research Collective Demographic Data



BUILD Network Connected Over 100 Institutions



BUILD site

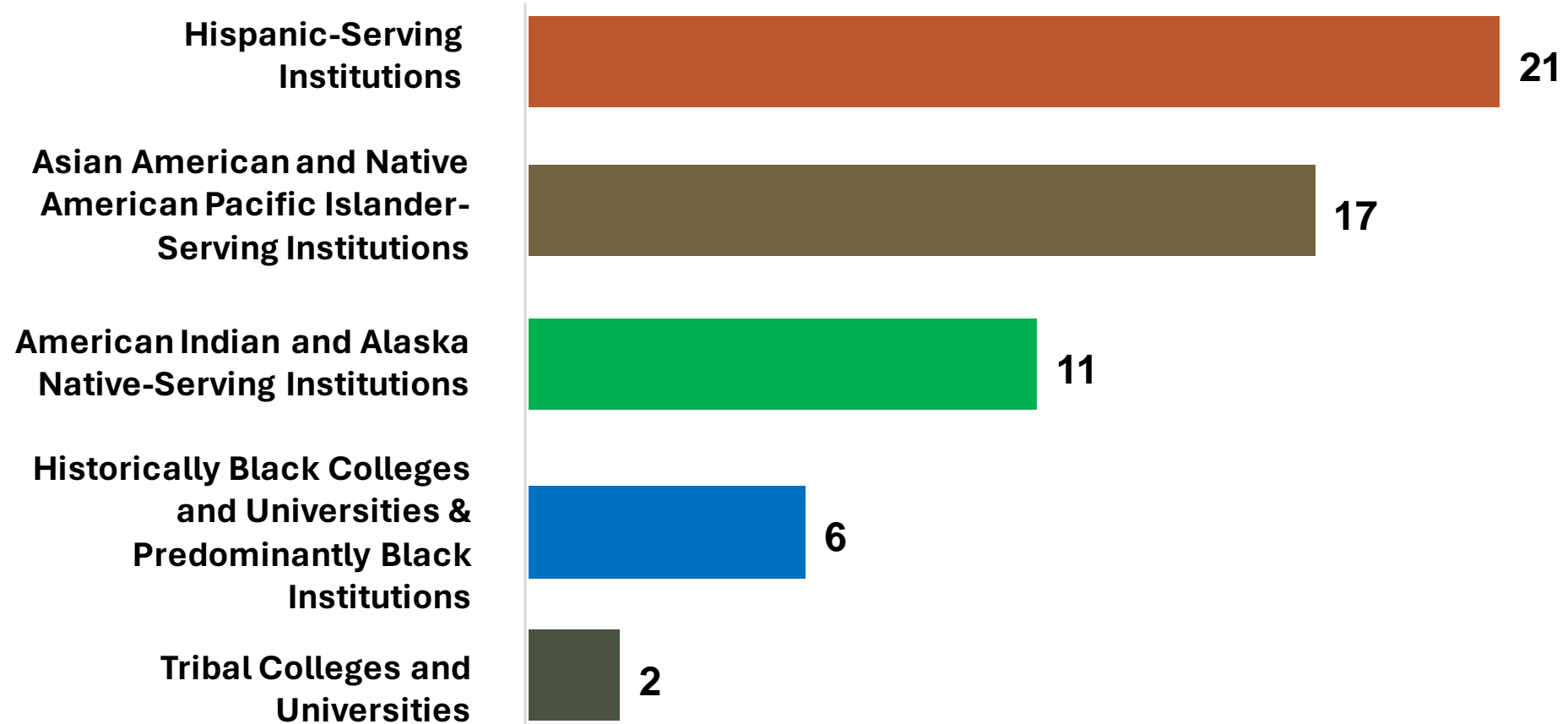


Research Intensive



Pathway Partner

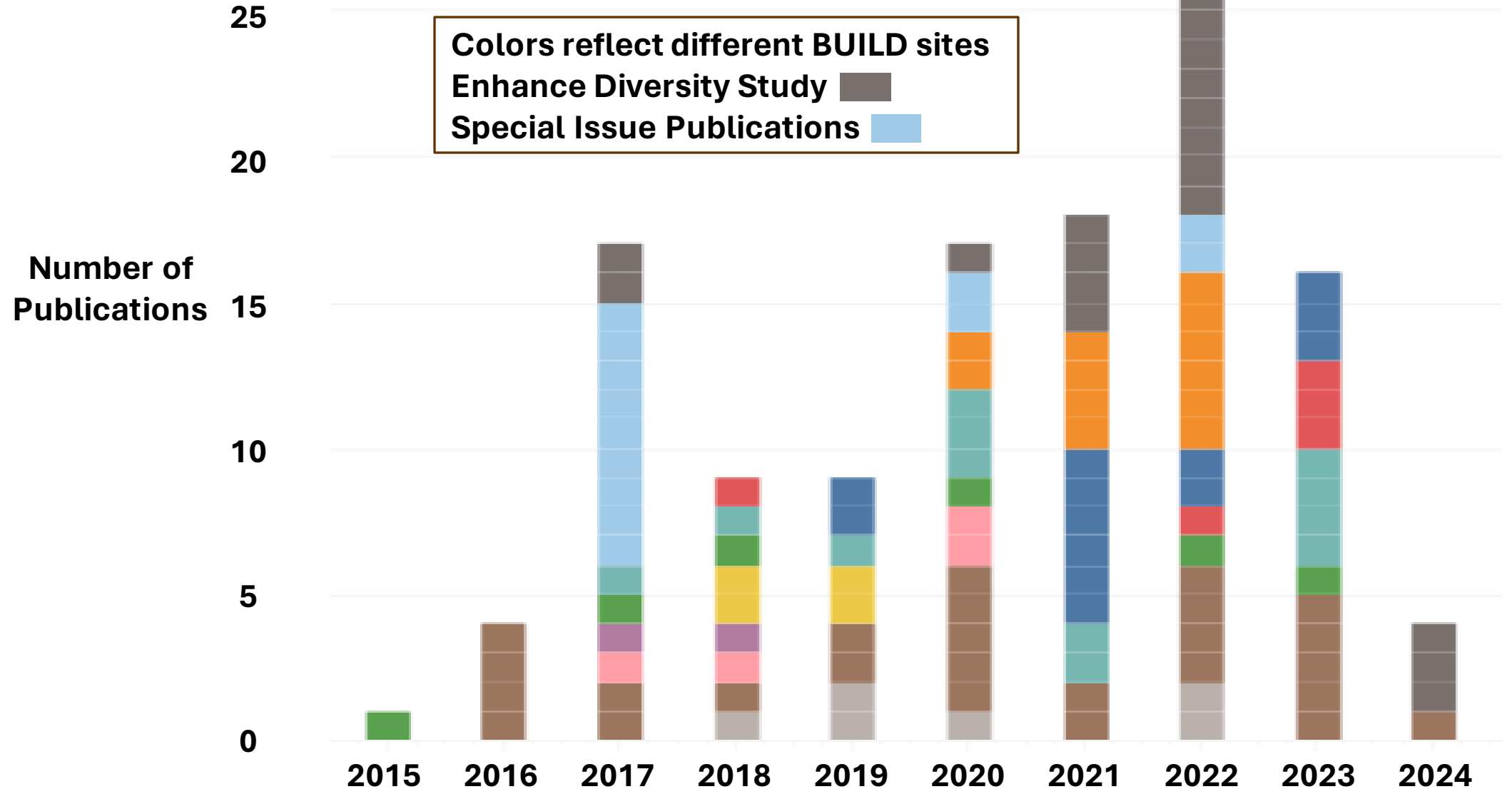
BUILD Sites and Partners - Broad Range of Institutions



**Building Infrastructure Leading to Diversity (BUILD)
Phase I data**

BUILD and Enhance Diversity Study

Interventions Publications



Logic Model Example: *Student*

Independent Variables

Gender, Race,
Ethnicity
Disability Status
Socio-economic
Status
Institutional Factors
Test Scores
Major
Grades

Activities or Interventions

Financial Support
Academic Advising
Research Training
Novel Curricula
Mentoring
Cohort Building
Career Development
Family Engagement

Short to Medium-Term Outcomes

Research Experiences

Enhanced
Science Identity

Pursuit of Biomedical Science
Disciplines

Scientific Presentations

Sense of Belonging

Satisfaction with Mentorship

Intent to Pursue Biomedical
Research Career

Medium to Long-Term Outcomes

Completion of Undergraduate
Degree in Biomedical Science

Authorship of Scientific
Manuscripts

Application & Acceptance to
Graduate Programs

Research Fellowships &
Scholarships

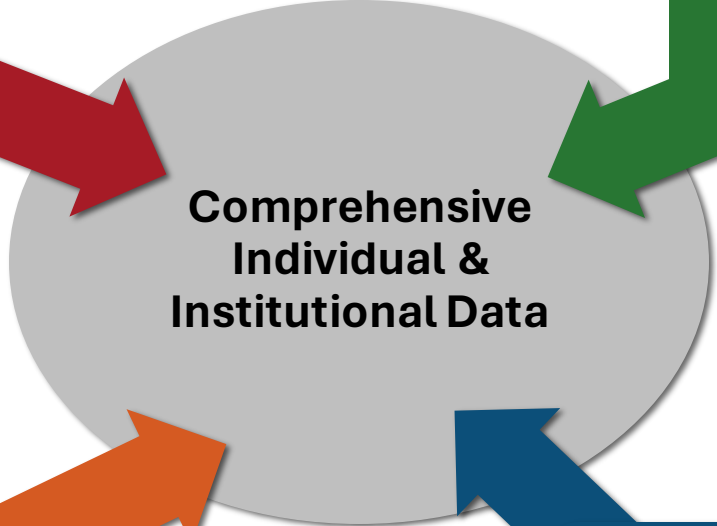


Enhance Diversity Data Sources: BUILD



Surveys 2+
Student ~37,600
Faculty ~3000

Tracker "Exposure" Data
Activities ~575
Rosters ~4,000
Participants ~30,000



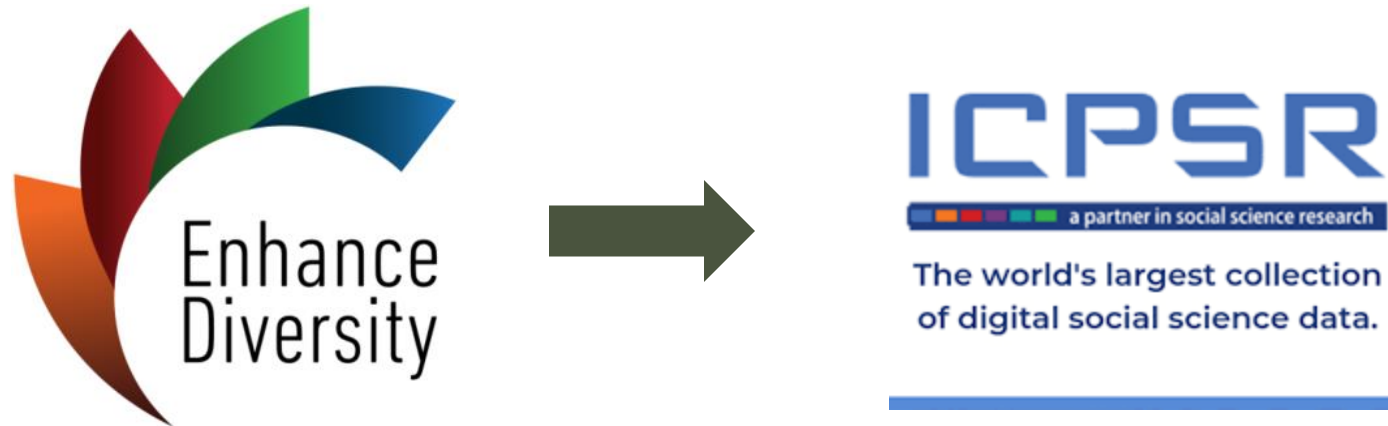
Institutional (IR) & Clearing House (CH) Records
Student IR ~35,700
Student CH ~35,400

Integrated Case Studies
Focus Groups (Students, Faculty)
Interviews (Leaders)
Institutional Records

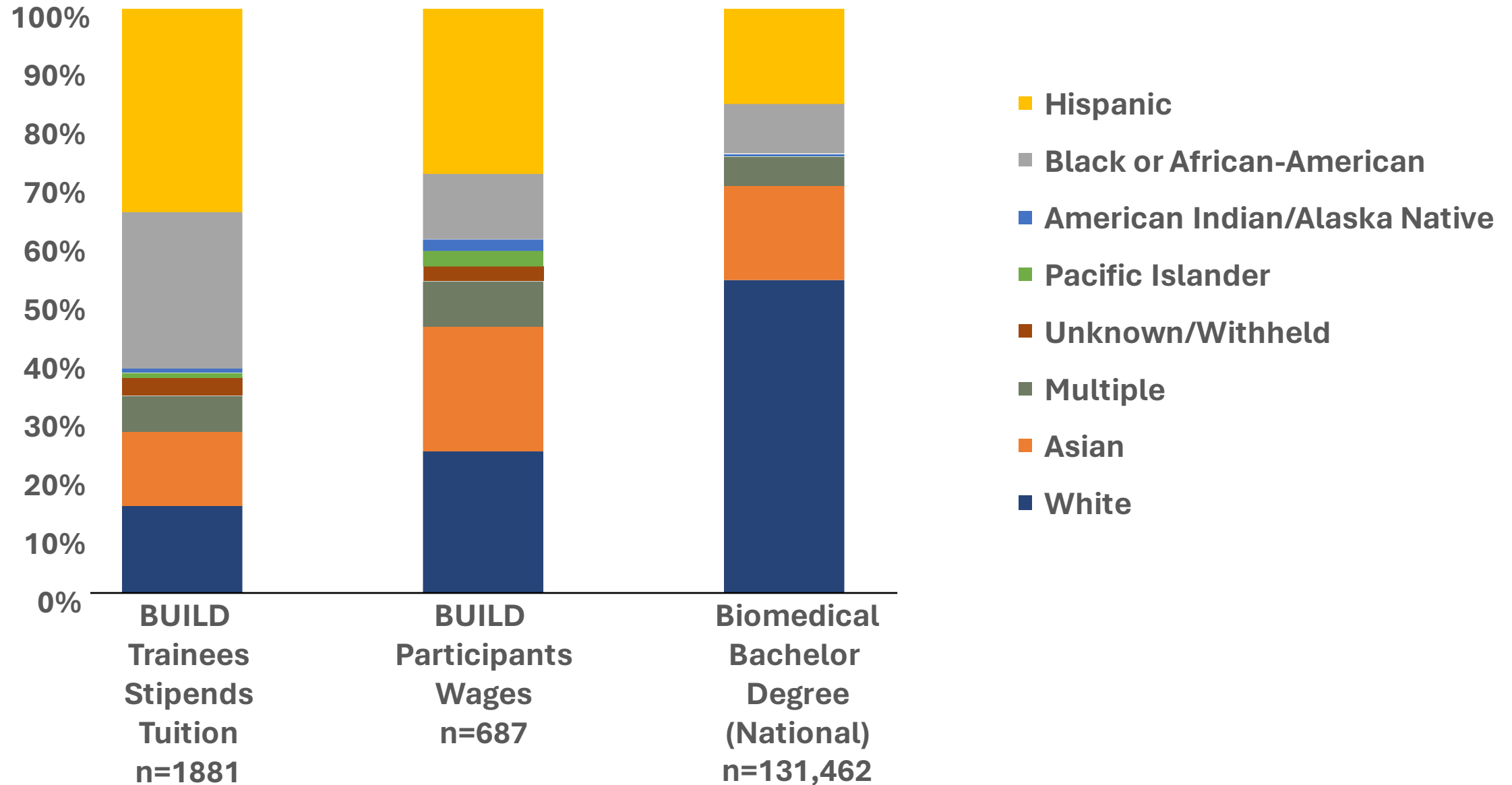


Enhance Diversity Study - Highlights

- Longitudinal data tracking student and faculty careers
- Detailed information on participation in activities
- Broad groups of students and faculty participants
- Large comparison group – data allows for matching (for example, propensity scores)
- Outcomes on *Hallmarks of Success* – psychosocial, educational, and career focused – **95 publications**
- Sustainability: depositing data Inter-University Consortium for Political & Social Research (ICPSR) for use by broader research community



BUILD Student and General Population Demographics





Examples of Institutional Changes in Offerings and Policies

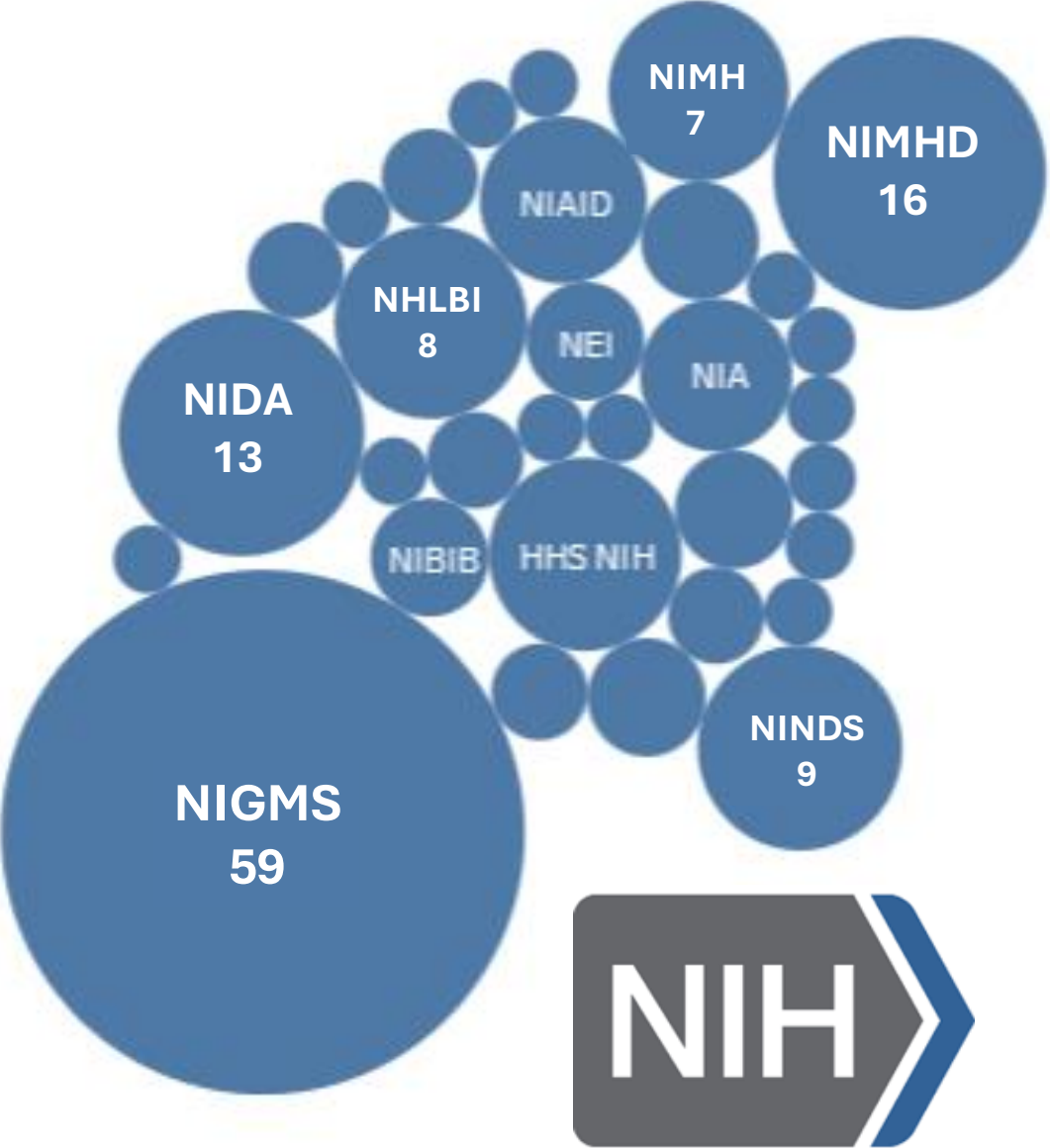
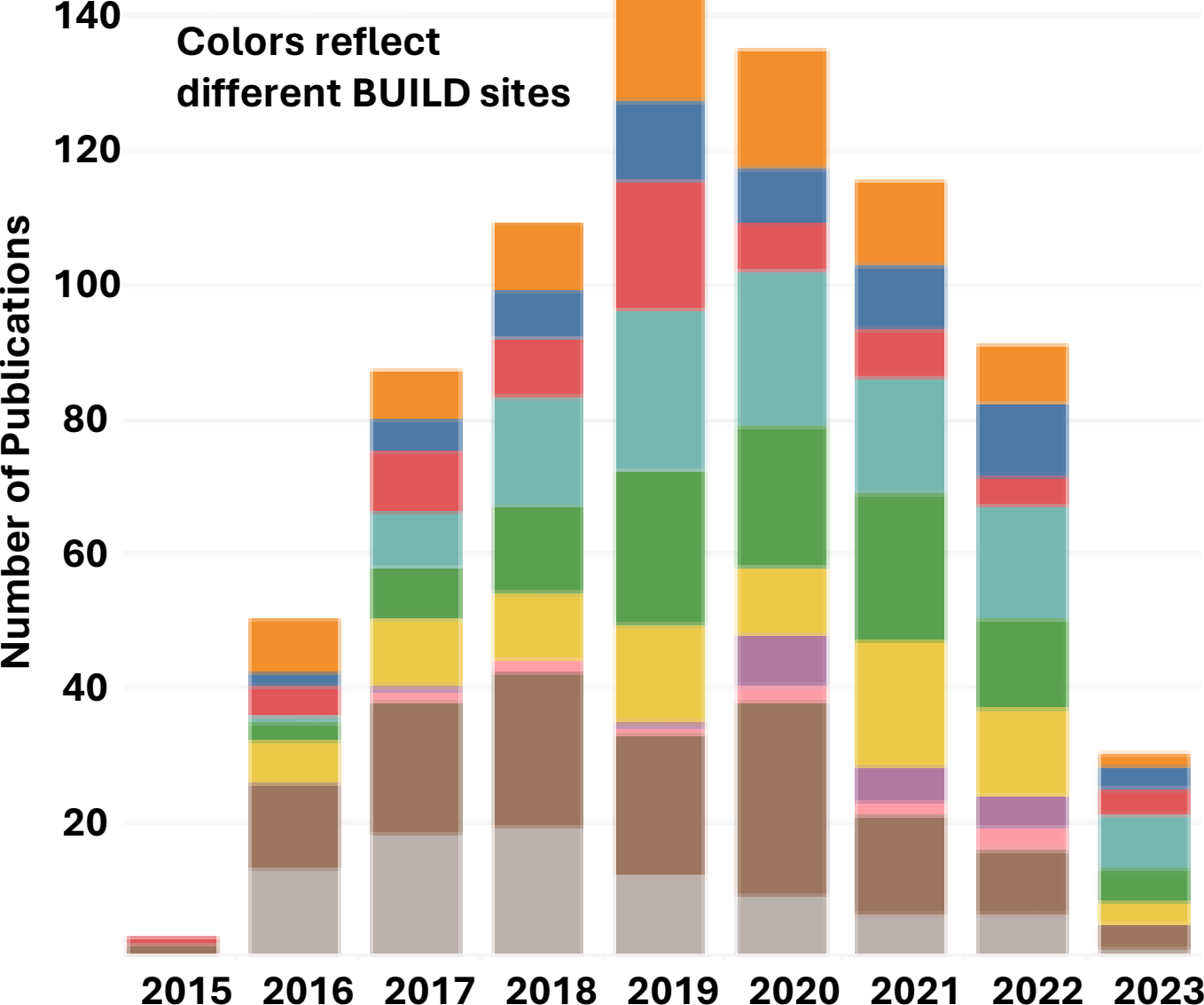
- Culturally relevant training for engaging diverse populations
- Comprehensive advising and oversight of student success
- Innovative courses embedded in the curriculum
- Supportive learning communities
- Alterations and renovations to stimulate learning and research
- Financial support for student and faculty research
- Training and mentoring rewarded in tenure and promotion decisions



Example of Faculty Finding

BUILD training and research opportunities increases research productivity.

BUILD Pilot Research Project Publications and Subsequent NIH Funding

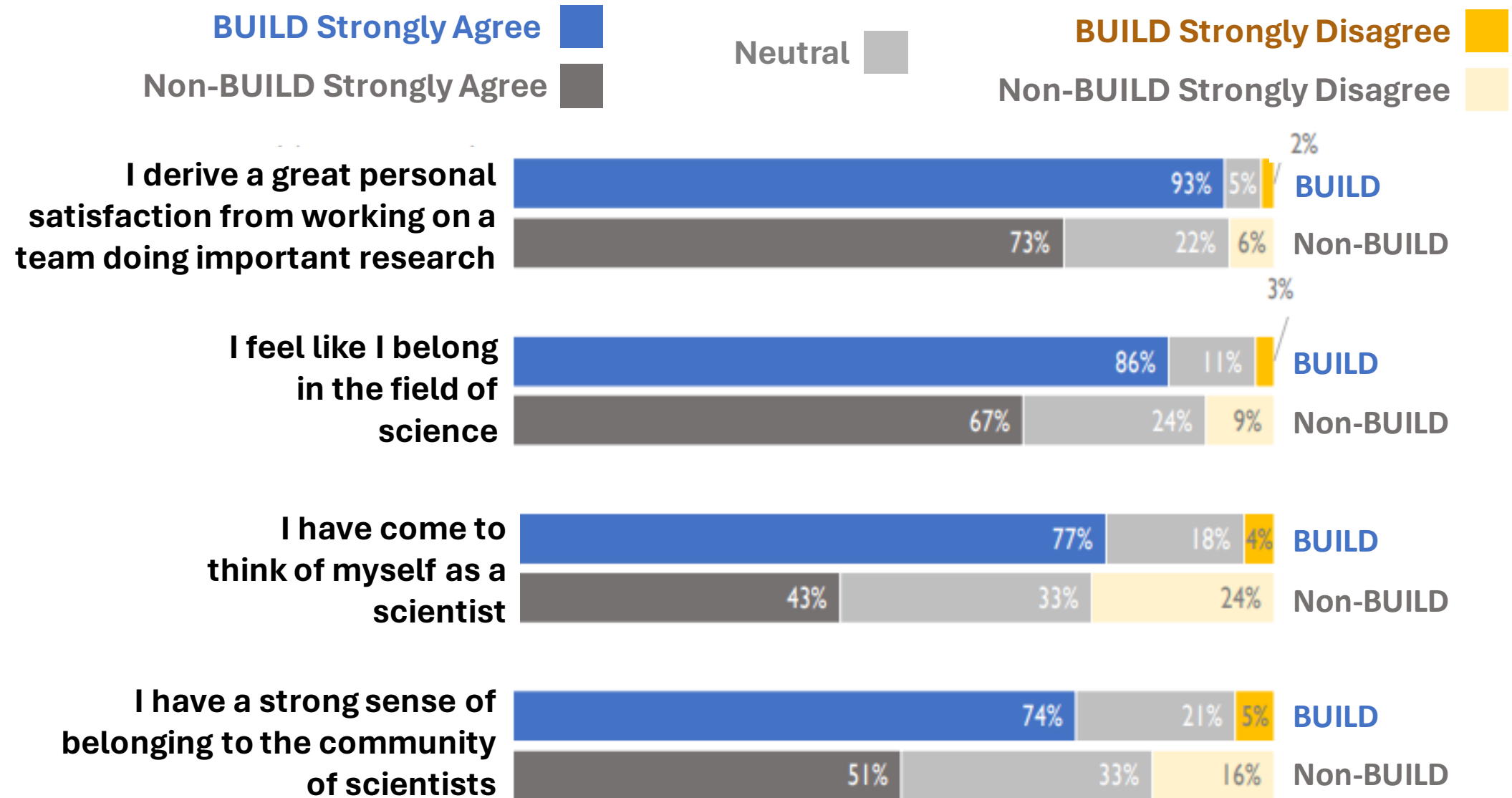




Examples of Student Findings

- BUILD increases exposure to research experiences and mentorship
- Participation in BUILD enhances
 - science identity
 - research self-efficacy
 - intentions to pursue biomedical research careers
 - first-year persistence in science majors

Science Identity: Build and non-BUILD Students in Biomedical Majors



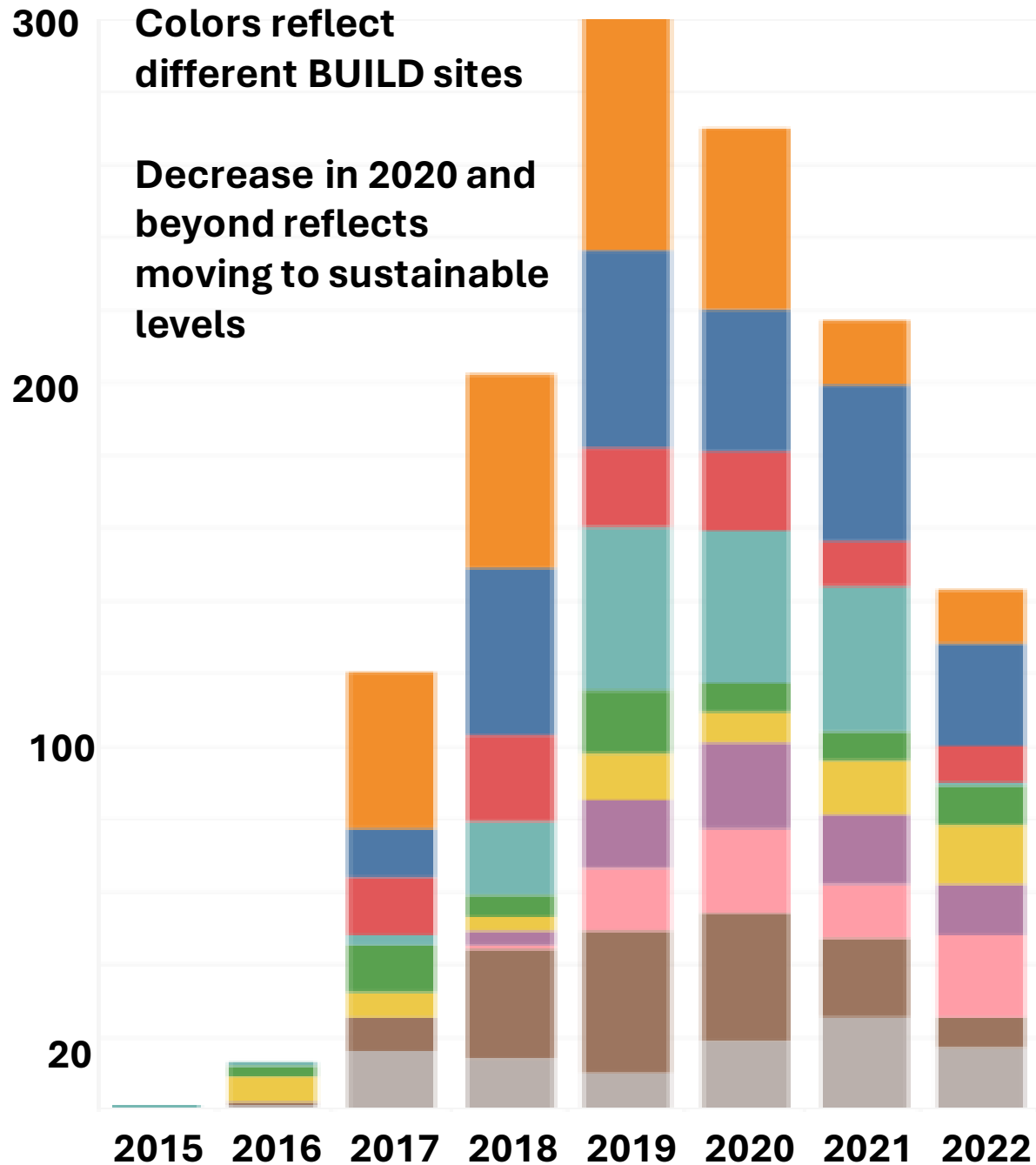
n=352-352 BUILD

n= 1861-1958 non-BUILD

Differences for all “Strongly Agree” are significant, $p < 0.001$

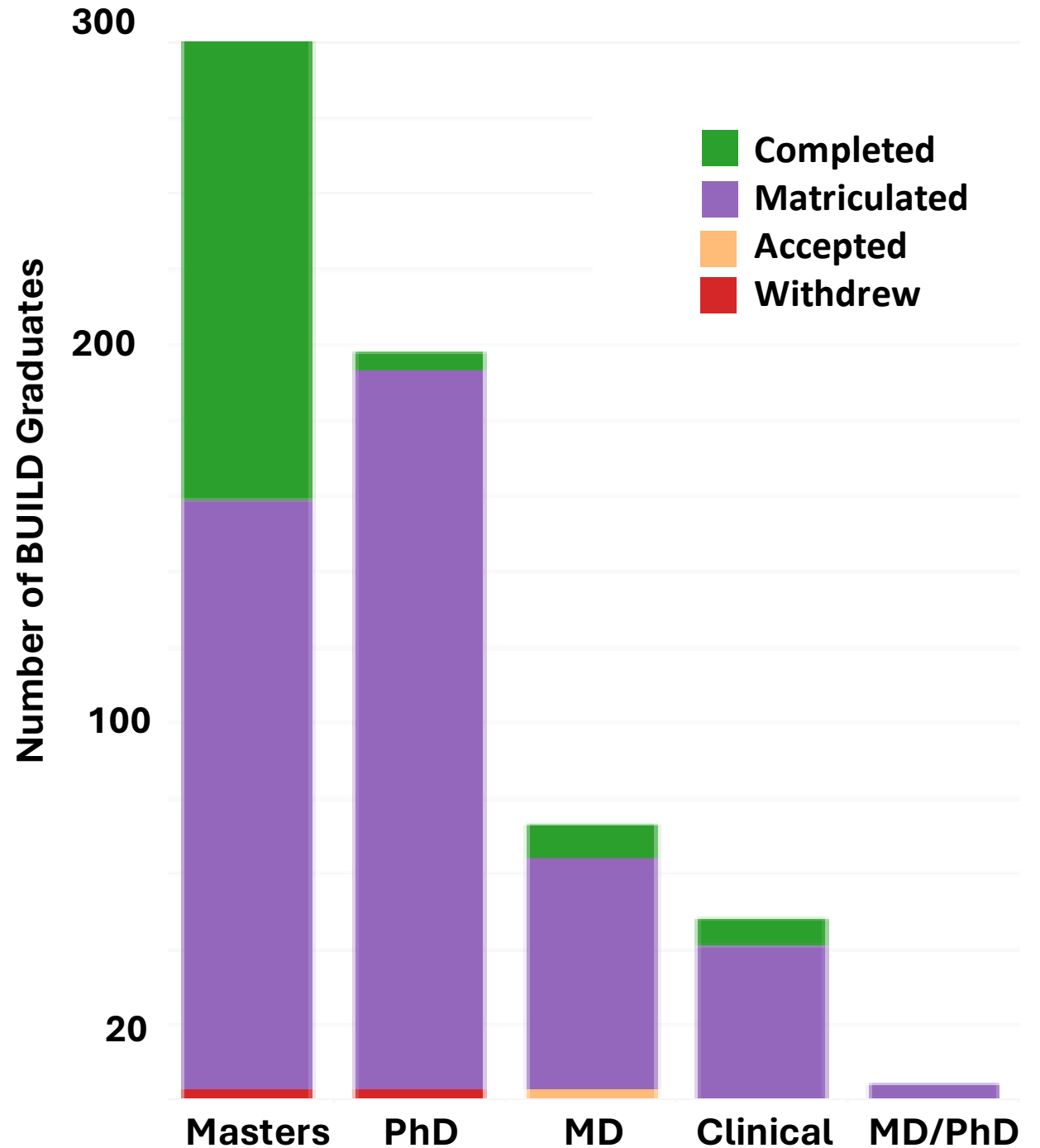
BUILD Student Graduates

- **93%** graduated or still in training
- 6 Year Graduation rate for BUILD Institutions: **29 –57%**



BUILD Graduates Seeking Higher Degrees

- 47% of BUILD graduates are currently seeking higher degrees



Celebrate #FaceOfScienceFriday on Instagram

@joyonnagamble



“

STEM is for everyone. I became a neuroscientist because I want to @enhancescience by saving lives and helping people improve their mental health. Even though a lot of neuroscientists do not look like me in academia, I know that I #belongthere...

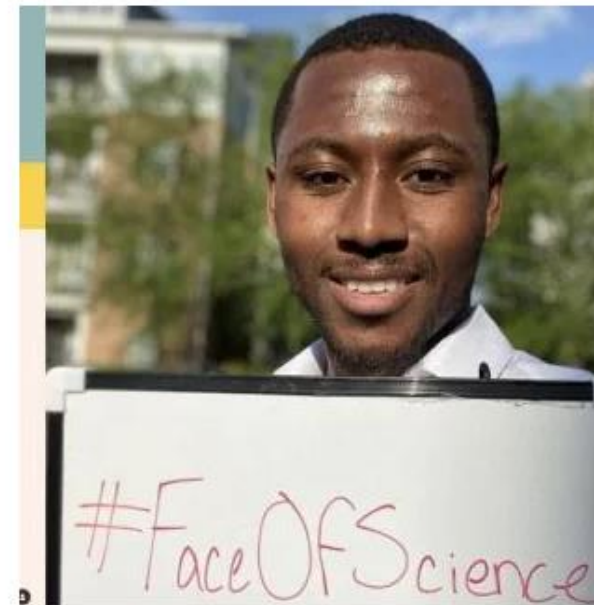
@r3b3k4hhhh



“

"Curiosity drives my quest for knowledge. It gives me the willpower to challenge ideas and dare to explore uncharted territory in research. I am constantly left in awe by all there is to learn and the potential for amazing new discoveries..."

@albertthemascientist



“

"My name is Albert Campbell and I love being a scientist because I am able to have a positive effect on the world by creating novel compounds that can benefit mankind..."

Sustainability: *NIH UNITE*

U - Understanding stakeholder experiences through listening and learning

N - New research on health disparities, minority health, and health equities

I - Improving the NIH culture and structure for equity, inclusion, and excellence

T - Transparency, communication, and accountability with our internal and external stakeholders

E - Extramural research ecosystem: changing policy, culture, and structure to promote workforce diversity

- Research With Activities Related to Diversity (ReWARD) (PAR-23-122)
- Instrumentation Grant Program for Resource-Limited Institutions (PAR-23-138)
- Strengthening Research Opportunities for NIH Grants (STRONG) (PAR-23-144)
- Assessment of Climate at Institutions (ACT) Award (PAR-24-038)
- Biomedical Research Environment and Sponsored Programs Administration Development (BRE SPAD)
- Changes to the NIH parent training grants to include mentoring

Sustainability Through NIH: *Training & Resources*

Student

Student Programs (R25, T34)

Faculty

SuRE R16, R15, ReWARD R01

Institution

SuRE U24, FIRST, BRE SPAD, STRONG, Equipment S10

DPC Resources
(evaluation, mentoring)

Innovative Programs to Enhance Research
Training (IPERT R25)

Sustainability Through NIH: *Research*

Student, Faculty or Institutional
Interventions

Research on Interventions (R01/R35)

Workforce Data Analysis

Science of Science Policy (R01/R35)

Dissemination Through NIH

**All DPC Awards – outreach to
engage the broader
community**

**Innovative Programs to Enhance
Research Training (IPERT R25)**

**All DPC Awards – keep sharing
and inspiring**

National Meetings (R13)

NIH Team 2015-Present

Leadership

- Marie Bernard (OD, Co-Chair)
- Hannah Valantine (OD, Co-Chair)
- Jon Lorsch (NIGMS, Co-Chair)
- Gary Gibbons (NHLBI)
- Eliseo Perez-Stable (NIMHD)
- Allison Scott (NIGMS)
- Alison Gammie (NIGMS)

Grants Management

- Kaneisha Akinpelumi (NIGMS)
- Robert Altieri (NIGMS)
- Adam Barnhart (NIGMS)
- Ilene Glassman (NIGMS)
- Jennifer Lynch (NIGMS)
- Michael Mace (NIGMS)
- Connie Murphy (NIGMS)
- Susan South (NIGMS)

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- Emerald Nguyen (NIGMS)
- Sabrina Epou (NIGMS)
- Andrew Miklos (NIGMS)
- Egette Indelele (NIGMS)

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- Anna Han (NIGMS)
- Anna Han (OD)
- Anne Gershenson (NIGMS)
- Behrouz Davani (NIGMS)
- Darren Sledjeski (NIGMS)
- David Banks (NINR)
- Dawn Morales (ORMHR)
- Della White (NIGMS)
- Desirée Salazar (NIGMS)
- Diane Adger-Johnson (NIAID)
- Edgardo Falcón-Morales (NIGMS)
- Erica Spotts (OD)
- James Hyde (NIDDK)
- Jamie Mihoko Doyle (NCATS)
- Janetta Lun (OD)
- Jessica Faupel-Badger (NCATS)
- Kadir Aslan (NIGMS)
- Kalynda Gonzales Stokes (NIGMS)
- Kathy Etz (NIDA)
- Kenneth Gibbs (NIGMS)
- Lameese Akacem (NIGMS)
- Laurie Stepanek (NIGMS)
- Luis Cubano (NIGMS)
- Marie Harton (NIGMS)
- Mariela Shirley (NIAAA)
- Mercedes Rubio (NIGMS)
- Michael Sesma (NIGMS)
- Nelson Aguila (NCI)
- Pamela Thornton (NIGMS)
- Patrick Brown (NIGMS)
- Rada Dagher (NIMHD)
- Richard Okita (NIGMS)
- Robert Rivers (NIDDK)
- Sharon Smith (NHLBI)
- Shiva Singh (NIGMS)
- Sydella Blatch (NIGMS)

Common Fund Leadership

- Betsy Wilder (OSC)
- Cheryl Boyce (OSC)
- Tony Casco (OSC)

Questions

[HTTPS://WWW.NIGMS.NIH.GOV/TRAINING/DPC](https://www.nigms.nih.gov/training/dpc)