



National Institute of
General Medical Sciences

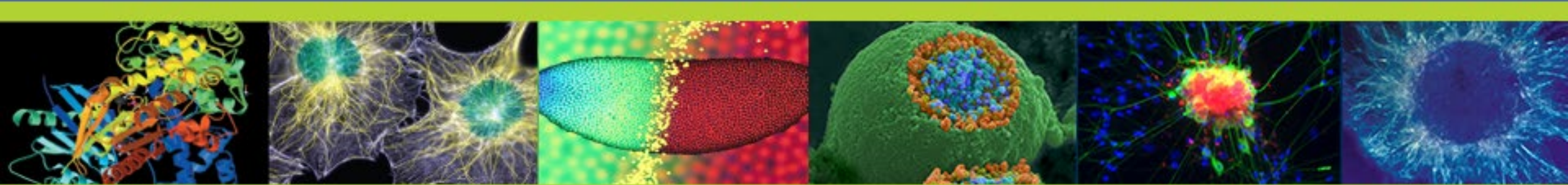


Overview of NIGMS Diversity Programs

Alison Gammie

Director Training, Workforce Development and Diversity

April 26, 2021

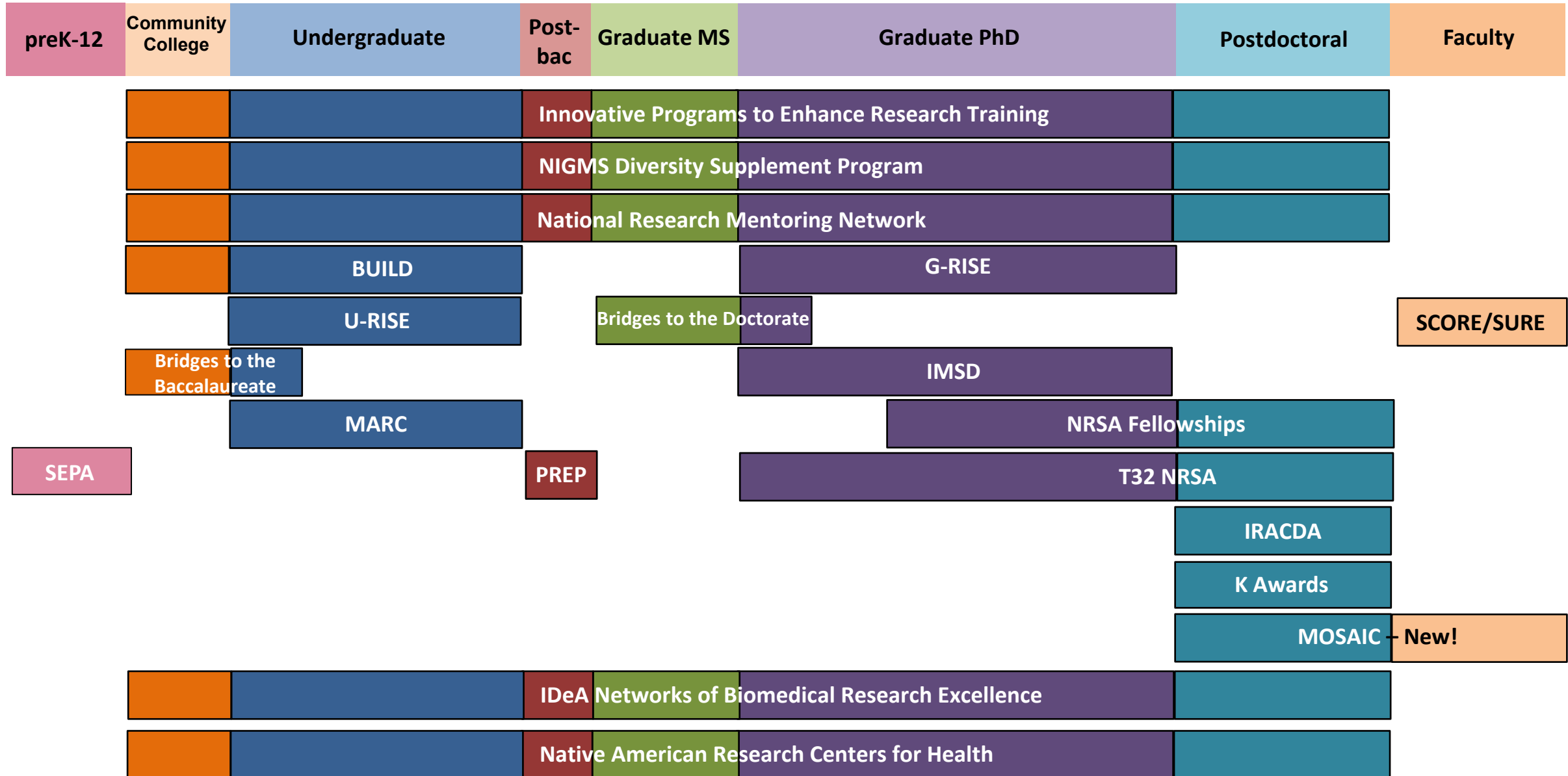


**NIGMS Administers ~1,900 Training, Workforce Development,
Diversity and Capacity Building Awards at ~400 institutions
~\$900 million per year**

NIGMS Awards at Minority Serving Institutions

MSI type	Award Count	Total NIGMS
AAPI	162	\$ 68,090,921.00
AIAN	152	\$ 72,744,997.00
CDC AI	9	\$ 7,288,272.00
CDC AI, TCU	1	\$ 197,426.00
HBCU	63	\$ 26,685,349.00
HSI	121	\$ 44,514,821.00
HSI, AAPI	89	\$ 29,178,296.00
HSI, AIAN	12	\$ 5,516,783.00
PBI	2	\$ 514,773.00
TCU	2	\$ 1,428,872.00

NIGMS Programs



Programs that span the pathway



preK-12	Community College	Undergraduate	Post-bac	Graduate MS	Graduate PhD	Postdoctoral	Faculty
---------	-------------------	---------------	----------	-------------	--------------	--------------	---------

Research Supplements to Promote Diversity in Health-Related Research PA-20-222

Supplements to support individuals who will contribute to the diversity of the biomedical research workforce

Research Supplements to Promote Re-Entry into Biomedical Research Careers PA-18-592

Supplements to support individuals with high potential to re-enter an active research career after an interruption for family responsibilities or other qualifying circumstances

~\$12.8 million in FY20



Common Fund Diversity Program Consortium

Welcome to the National Research Mentoring Network

Step 1: Select your career stage

UNDERGRADUATE STUDENTS
Find your path into a research career



GRADUATE STUDENTS & PHD CANDIDATES
Expand your resources & professional networks



POSTDOC RESEARCHERS & JUNIOR FACULTY
Identify opportunities to advance your career



SENIOR FACULTY
Delve into mentorship & professional development resources



PROFESSIONAL RESEARCHERS
Search our mentorship & professional development resources



ACADEMIC ADMINISTRATORS
Build capacity for mentorship programming



Step 2: Select a card below to unlock your scientific potential



CONNECT

with a mentor in
MyMentor



DISCOVER

new connections and
expand your network
through MyNRMN



EXPLORE

what's happening in
the scientific community



MAXIMIZE

your potential by
leveraging our resources

Research on Interventions to Enhance Persistence in Biomedical Research

- **National Research Mentoring Network: The Science of Mentoring, Networking, and Navigating Career Transition Points (U01)**
- **Research to Understand and Inform Interventions that Promote the Research Careers of Individuals in the Biomedical Sciences (R01)**

Increase the evidence base for effective, high-impact, scalable interventions, and to improve our understanding of the factors contributing to success, including the social and behavioral factors involved in the advancement of individuals pursuing independent academic biomedical research careers.



MARCH 18, 2021

Funding Opportunities: Addressing Structural Racism and Discrimination

BY DR. ALISON GAMMIE AND DR. KENNETH GIBBS

0 comments

We want to make you aware of two funding opportunities to investigate and address structural racism and discrimination in the biomedical research enterprise. This is a follow-up to our [previous post](#) about NIGMS' support for [UNITE](#), the trans-NIH initiative to address structural racism and promote diversity, equity, and inclusion in biomedical research.



Contact:
Sydella Blatch

PAR-19-295

Science of Science Policy Approach to Analyzing and Innovating the Biomedical Research Enterprise (SCISIPBIO) (R01)



National Institute of
General Medical Sciences

Supports research to provide scientific analyses of important aspects of the biomedical research enterprise and efforts to foster a diverse, innovative, productive, and efficient scientific workforce, from which future scientific leaders will emerge.

[NSF 19-547](#)
[NIH NOT-19-011](#)

Contact: Kenny Gibbs

MARCH 18, 2021

Funding Opportunities: Addressing Structural Racism and Discrimination

BY DR. ALISON GAMMIE AND DR. KENNETH GIBBS

0 comments

We want to make you aware of two funding opportunities to investigate and address structural racism and discrimination in the biomedical research enterprise. This is a follow-up to our [previous post](#) about NIGMS' support for [UNITE](#), the trans-NIH initiative to address structural racism and promote diversity, equity, and inclusion in biomedical research.



Educator-Initiated Innovations

- **Training Modules PAR-20-296 (R25) for Creating Safe, Inclusive, and Supportive Research Environments (NOT-GM-20-047)**
 - Applications due: June 18, 2021
- **Administrative supplements to NIGMS training grants - topics**
 - Rigor & Reproducibility
 - Career Development
 - Skills Development – technical, operational, professional
 - ***Safe and Inclusive Research Environments***
 - Laboratory, Chemical, and Physical Safety in the Research Environment
 - Undergraduate Curriculum Development
 - Evaluation
 - ***Mentoring***
 - ***Wellness and Resiliency***

Coming soon – NOSI on
structural racism and
discrimination

NIGMS Innovative Programs to Enhance Research Training (IPERT – R25)

Skills, mentoring, outreach – broad national reach, innovation, and sustainability



Wisconsin Center for Education Research
SCHOOL OF EDUCATION | UNIVERSITY OF WISCONSIN-MADISON



[Directory](#) | [MyWCER](#)

[ABOUT US](#) [RESEARCH](#) [PUBLICATIONS](#) [GRADUATE OPPORTUNITIES](#) [RESOURCES](#) [EVENTS](#) [NEWS](#)

ENHANCED BY Google




Breaking the Bias Cycle for Future Scientists: A Workshop to Learn, Experience and Change

Breaking the Bias Cycle for Future Scientists: A Workshop to Learn, Experience and Change

This overarching goal is to train the mentors of students about the concepts of implicit or unconscious bias, the effects of these biases on underrepresented minority students in training, and the strategies and means to mitigate bias within labs, departments, and institutions.

NIGMS supported diversity-focused meetings – not curated



Fostering Diversity in Biostatistics
March 22, 2020

10:30 am - 6:30 pm
JW Marriott Nashville
201 8th Avenue South
Nashville, TN 37203



The Leadership Alliance

National Symposium Online Registration



UNDERSTANDING
INTERVENTIONS

Visualizing a Better Future in STEM



ABRCMS 2020
THE VIRTUAL EXPERIENCE
November 9-13, 2020



2019 SACNAS
National Diversity in STEM Conference

Honolulu, Hawai'i  Oct. 31 - Nov. 2

Capacity Building

Programs that span the pathway



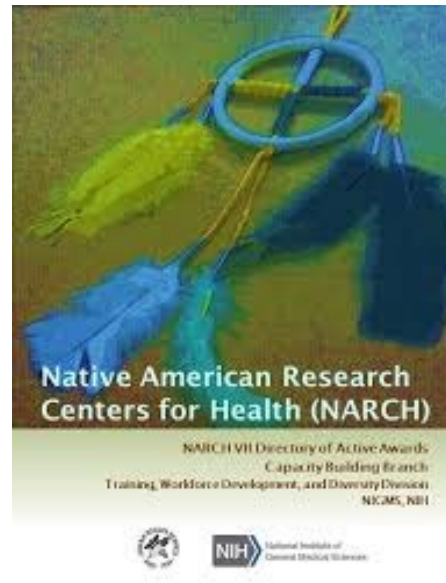


Native American Research Centers for Health (NARCH) – PAR-20-125

The NARCH program supports opportunities for conducting research and career enrichment to meet health needs prioritized by American Indian/Alaska Native (AI/AN) tribes or tribally based organizations.

NARCH grant applications are submitted by and awarded to the tribe or tribal organization.

16 total awards; \$9,351,415 total awarded dollars



TWD 2021



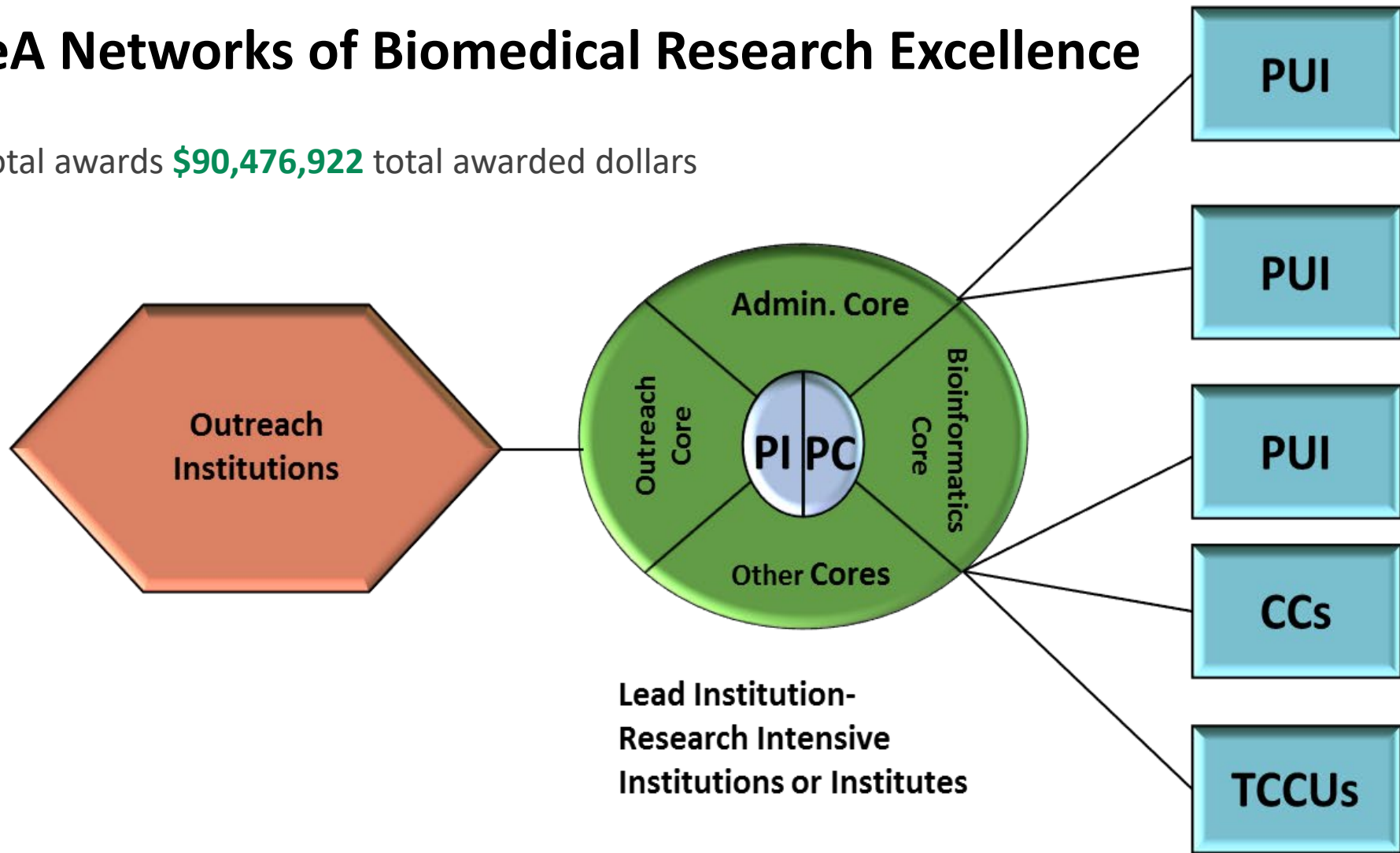
Sheila Caldwell



IDeA Networks of Biomedical Research Excellence

NIGMS

37 total awards \$90,476,922 total awarded dollars



Lead Institution-
Research Intensive
Institutions or Institutes

PI = Principal Investigator
PC = Program Coordinator

PUI = Primarily Undergraduate Institution
CCs = Community Colleges
TCCUs = Tribally Controlled Colleges and
Universities



Krishan Arora



DIVERSITY PROGRAM CONSORTIUM

Supported by the National Institutes of Health

The long-term impact of the Diversity Program Consortium will be in the broad dissemination of evidence-based effective training and mentoring strategies

~\$50 M annually



The DPC: A Highly Integrated National Consortium



Coordination and Evaluation Center

Building Infrastructure Leading to Diversity



REBUILDDetroit



10 DIVERSE SITES

National Research Mentoring Network



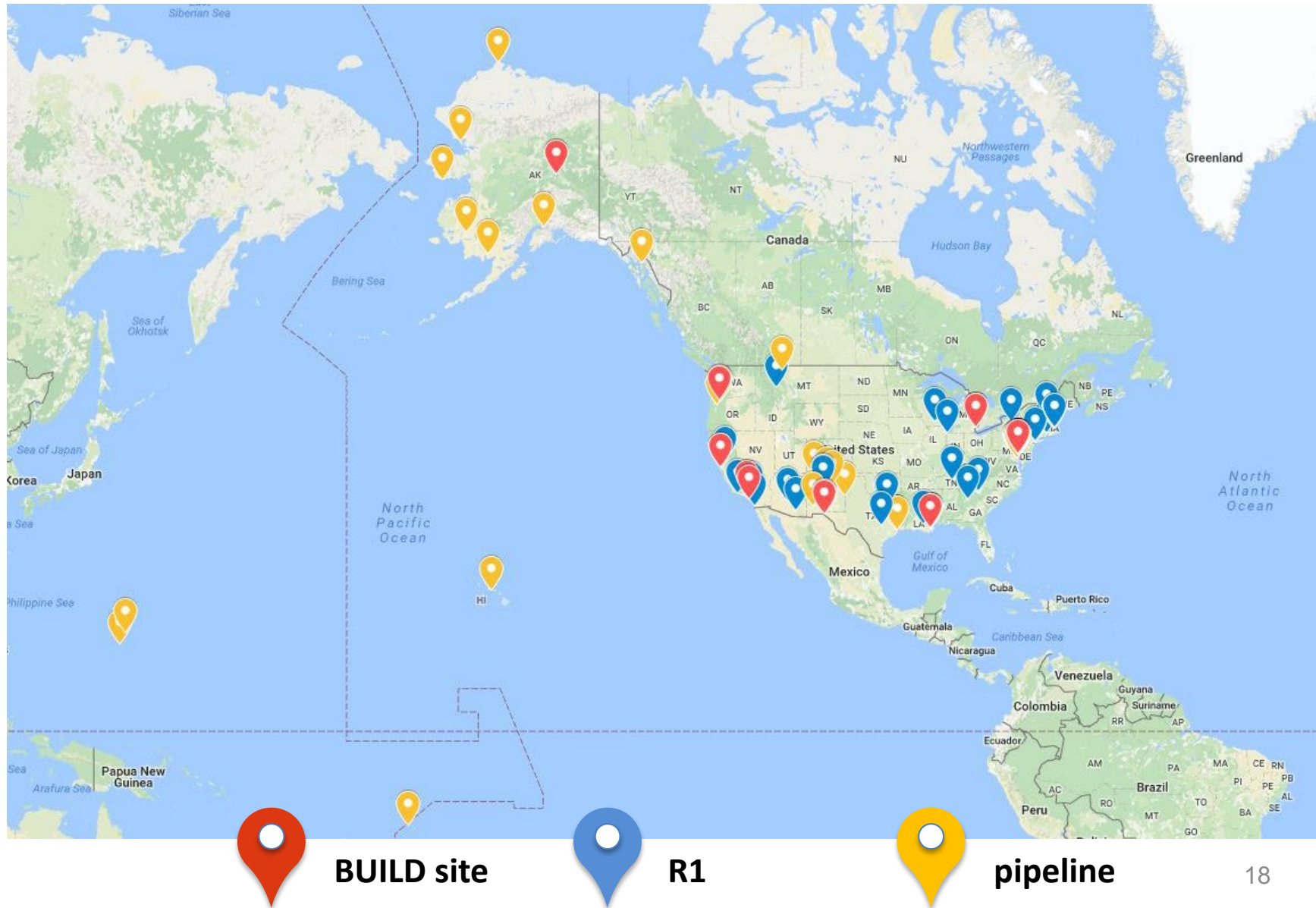
Coordination Center

Resource Center

**Research on mentoring
and networking
interventions**

**myNRMN
Guided Virtual Mentoring
Portal for Resources**

National Impact: BUILD Network Connects Over 100 Institutions



PreK-12 and Undergraduate Programs



Undergrad trainees from our BUILD, MARC, and RISE programs share their summer [#researchtraining](https://bit.ly/2xZOgaL) bit.ly/2xZOgaL



TWD 2021

SEPA

SCIENCE EDUCATION
PARTNERSHIP AWARD
SUPPORTED BY THE NATIONAL INSTITUTES OF HEALTH

Funding Opportunity Announcements:

PAR-20-239

PAR-20-244

PAR-20-153

126 total awards \$35,850,403 total awarded dollars

SEPA Projects ▾

Resources ▾

Publications

News ▾

Community ▾

Evaluation

Virtual NIH SciEd 2020

NOVEMBER 9 - 12, 2020, ONLINE VIA ZOOM



NIH SciEd 2020: A virtual mini-conference

Interactive partnerships between biomedical/clinical researchers and pre-kindergarten to grade 12 teachers, schools, and other interested organizations.

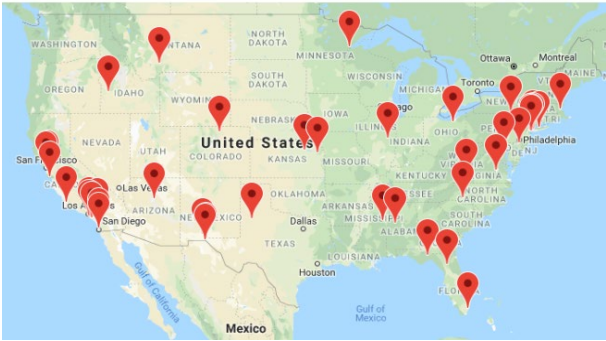
Provides opportunities for students from underserved communities to consider careers in basic or clinical research.



Tony Beck

Bridges to the Baccalaureate

Contacts: Shakira Nelson and Laurie Stepanek



- Emphasizes the development of a diverse pool of undergraduates that bridge from two-year to four-year institutions, and subsequently earn their baccalaureate degree in the biomedical sciences
- Encourages a strong partnership that offers a well-integrated set of activities both pre-and post-bridging (e.g., research prior to and after bridging and articulation agreements to reduce the time-to-degree)





Maximizing Access to Research Careers MARC (T34) Undergraduate Research-Training Initiative for Student Enhancement (U-RISE)

Undergraduate

Postbac

Graduate MS

Graduate PhD

Postdoctoral

MARC

≥ \$7.5 million research project grants (RPG)

U-RISE

< \$7.5 million research project grants (RPG)

- Goal is to develop a diverse pool of undergraduates who complete their baccalaureate degree, and transition into and complete biomedical, research-focused higher degree programs (e.g., Ph.D. or M.D./Ph.D.).
- Support for 1-3 years



MARC
Sydella Blatch



MARC
Patrick Brown



U-RISE
Edgardo Falcón-
Morales



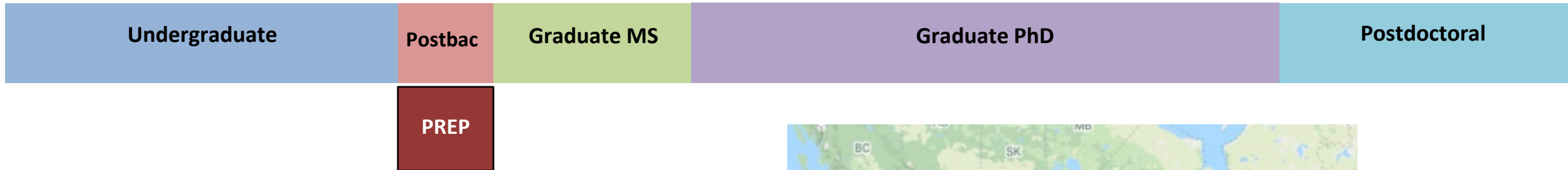
U-RISE
Kenny Gibbs



Postbaccalaureate Research Education Program (PREP) (R25)

Contact: Anissa Brown and Laurie Stepanek

To increase the number of baccalaureates from underrepresented groups who go on to Ph.D. degree programs. Grants are made to domestic, private and public universities or research institutions with strong Ph.D. degree programs in the biomedical sciences.



- 70-75% of participants go on to a Ph.D. program



Programs for Master's and Predoctoral Trainees

Graduate M.S.

Graduate Ph.D.





Bridges to the Doctorate - Partnerships

Contact: Sydella Blatch



Undergraduate

Postbac

Graduate M.S.

Graduate Ph.D.

Postdoctoral

BRIDGES to DOC
(B2D)

Research Intensive Partner

- Encourage a strong partnership that offers a well-integrated set of activities both pre-and post-bridging
- Reduce the time to Ph.D. degree (e.g., with effective skill-building activities and course credit articulation agreements)
- Enhance the research efforts of the faculty at the master's degree granting institution through inter-institutional efforts



Graduate Diversity Training Programs

- Emphasize the development of a diverse pool of scientists earning a Ph.D., who have the skills to successfully transition into careers in the biomedical research workforce.
- Support for 2-3 years (typically early years)

Undergraduate

Postbac

Graduate M.S.

Graduate Ph.D.

Postdoctoral

IMSD

≥ \$7.5 M RPG

G-RISE

< \$7.5 M RPG



Sydella Blatch
G-RISE



Patrick Brown
IMSD



Shakira Nelson
IMSD

Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity); Patrick Brown and Laurie Stepanek

Individualized, mentored research training from outstanding faculty sponsors while conducting well-defined research projects in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers.



NIGMS Biomedical Graduate Training

While preserving the best elements, NIGMS would like to catalyze changes in biomedical graduate training to keep pace with the rapid evolution of biomedical research

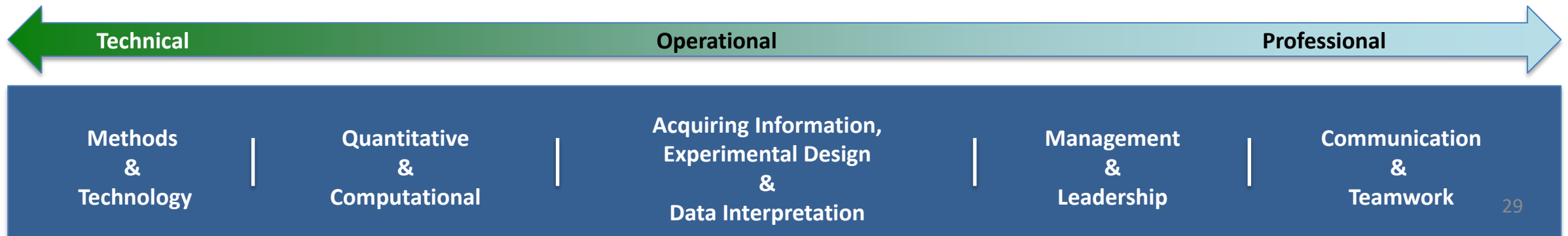
NIGMS FOA PAR-20-203; PAR 21-036 (MSTP)



- Programs in 12 broad areas of basic biomedical sciences
- Medical Scientist Training (MSTP)
- NIGMS FOA language is now in the parent T32 FOA (e.g., diversity and institutional commitment)

Major Themes in NIGMS Training Programs – Score Driving

- **Trainee skills development** – use evidence-informed approaches to provide technical, operational and professional skills
- **Specific Aims** - obtainable and measurable training objectives
- **Rigor & transparency, responsible & safe conduct** of research throughout the training experience
- **Commitment to diversity & inclusion** at all levels
- **Promote a culture of safety**, including safe and inclusive research training environments
- **Mentor training and oversight** throughout the trainees' time in the program
- **Career preparedness** – provide knowledge of and skills to transition into the range of careers in the biomedical research workforce
- **Strong institutional support** for research training
- **Evaluation and responsiveness to data** - the collection and dissemination of data on the success/failure of educational aims



Institutional Support Letter (10-page maximum). Signed by President, Provost, Dean – DEI areas:

- Fostering and rewarding excellence in training (e.g., through institutional policies such as tenure and promotion);
- Supporting the remediation or removal of Participating Faculty from the program who are poorly performing mentors;
- Promoting diversity and inclusion at all levels of the research training environment (trainees, staff, faculty, and leadership);
- Ensuring a positive, supportive and inclusive research and training environment for individuals from all backgrounds;
- Ensuring that proper policies, procedures, and oversight are in place to prevent discriminatory harassment and other discriminatory practices and to appropriately respond to allegations of such discriminatory practices, including providing any required notifications to NIH (e.g., requesting a change of PD/PI status; see [NOT-OD-19-056](#));
- Providing trainees access to student support services, such as healthcare, counseling services, and housing;
- Ensuring that trainees will continue to be supported when they transition from the training grant to other sources of support

Programs for Postdoctoral Fellows, Early Career, and Faculty





Institutional Research and Academic Career Development Award (IRACDA) (K12)

Contacts: Edgardo Falcón-Morales, Desirée Salazar

IRACDA supports postdoctoral training to prepare for independent research and teaching careers in academia, and strengthens and modernize science educational offerings at partner institutions

Undergraduate

Postbac

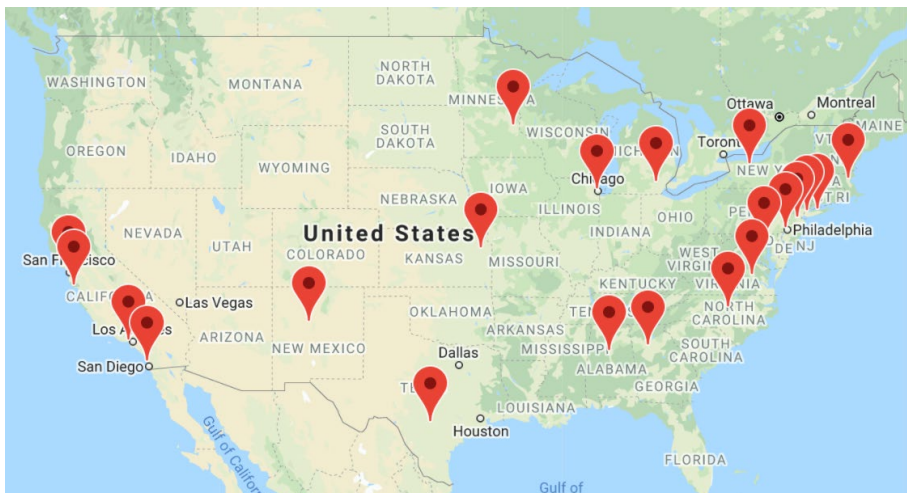
Graduate MS

Graduate PhD

Postdoctoral

Teaching
Intensive
Partner

IRACDA



Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC)

Postdoctoral Career Transition Award to Promote Diversity (K99/R00) – [PAR-19-343](#)
Institutionally Focused Research Education Cooperative Agreement to Promote Diversity (UE5) – [PAR-19-342](#)

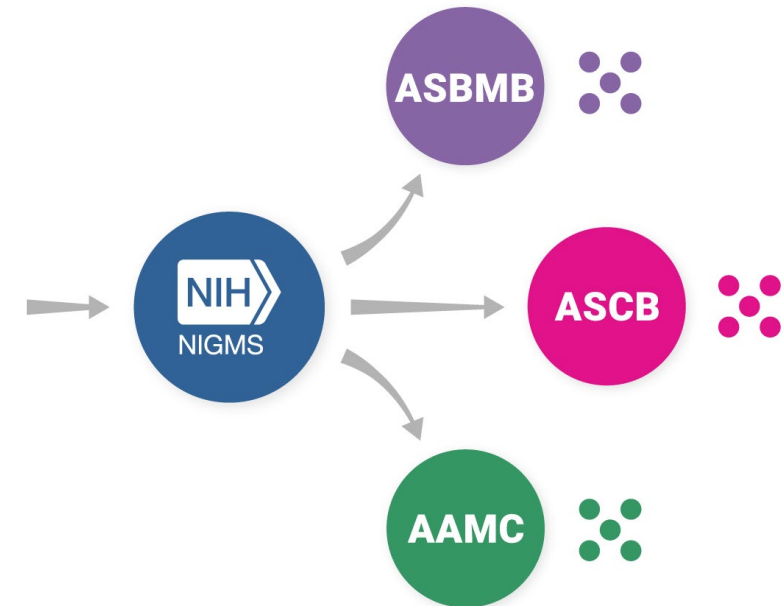
Awards to scientific societies (UE5) and time to stand up the program



MOSAIC K99/R00 Applicants Compete



MOSAIC K99/R00 Scholars Participate in Cohorts Organized by UE5



MOSAIC is a trans-NIH Initiative

NIGMS – lead

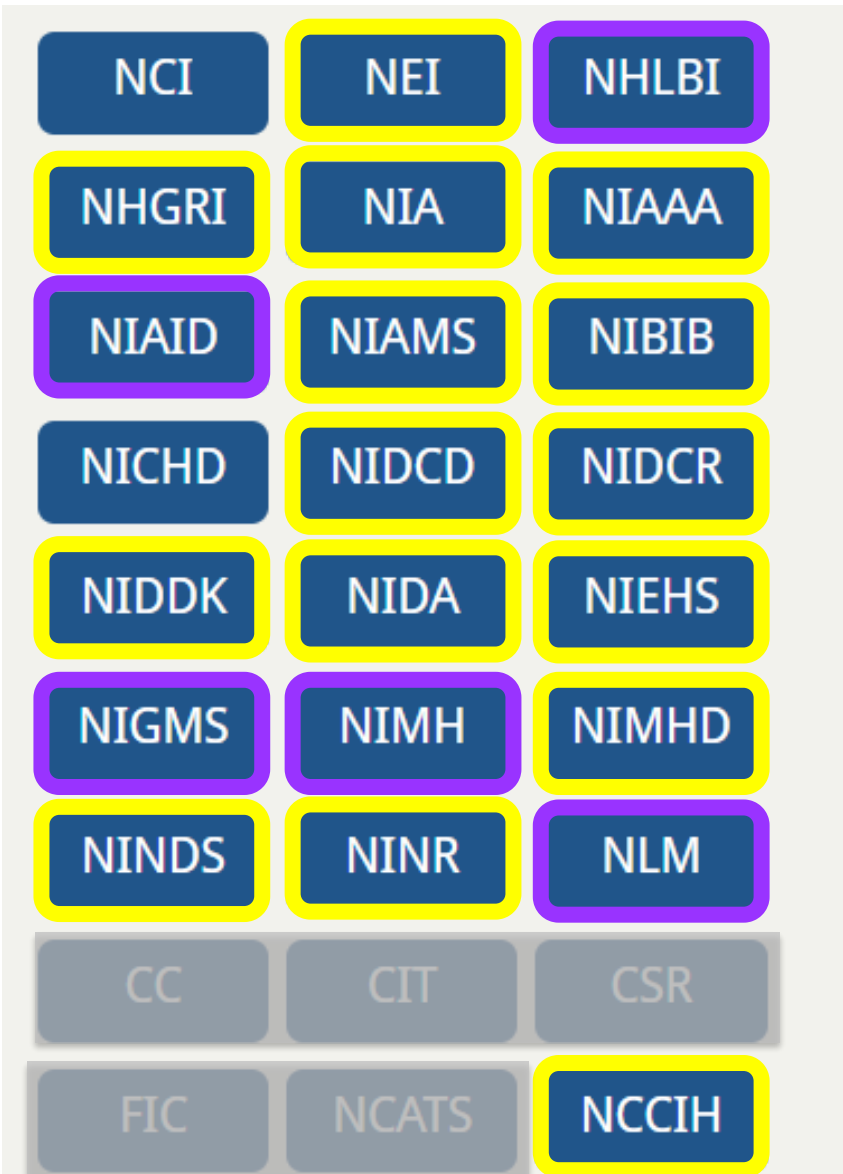
MOSAIC K99/R00: NIBIB, NINR, NIMHD, NHGRI, NIA, NIDA, NIAAA, NIEHS, NIDCD, NIDCR, NINDS, NIDDK, NEI, NIAMS

K99/R00 + UE5: NIGMS, NHLBI, NLM, NIMH, NCCIH, NIAID

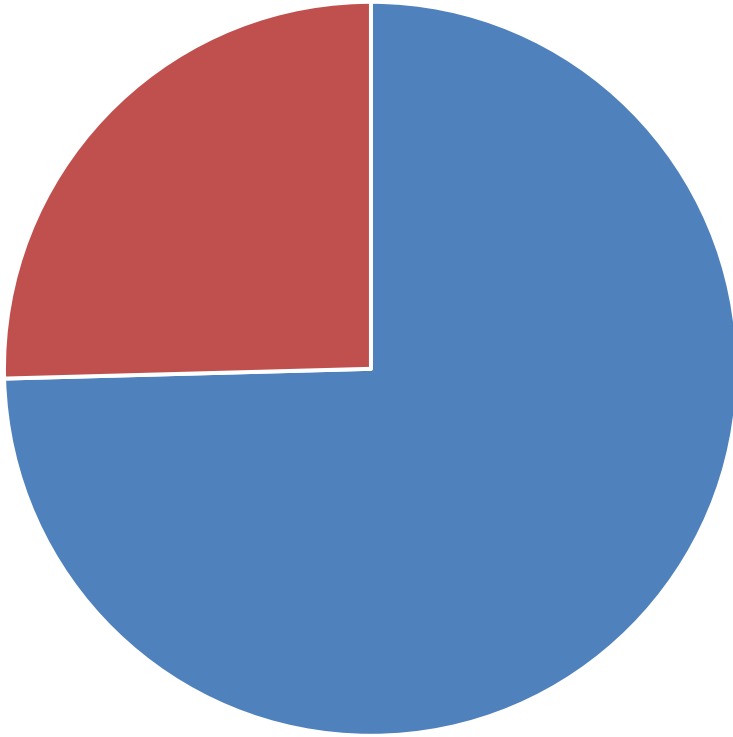
To accommodate the breadth of science, planning to add:

- MOSAIC K99/R00 Clinical Trials Allowed
- MOSAIC K99/R00 Basic Experimental Studies with Humans (BESH)

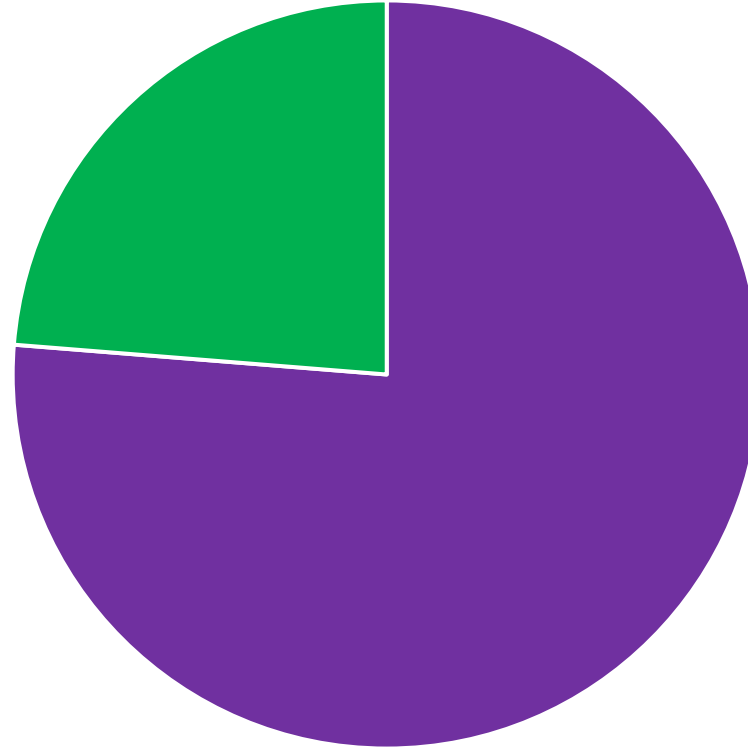
Institutes that support K99/R00 clinical trials or BESH awards can sign on.



MOSAIC K99 Applicant Demographics (Self-ID)



Women (n=44; 75%)
Men (n=15; 25%)



URM (n=45; 76%)
WR (n=14; 24%)

Workforce – Faculty Research

Faculty at *institutions* with students from underrepresented groups or backgrounds



~\$41 million

Support for Research Excellence (SuRE)

APRIL 1, 2021

New SuRE R16 Program Funding Announcements and Upcoming Webinar

BY DR. IRINA KRASNOVA AND DR. MICHELE MCGUIRL

2 comments

- Established faculty ([PAR-21-169](#))
- First time awardees ([PAR-21-173](#))

In 2017, NIGMS made diversity at all levels, including the faculty level, part of the scored review criteria

Study Sections are taking this seriously.



Preceptors/Mentors (Participating Faculty)

When building a training team, programs should include faculty who are committed to training, mentoring, and providing inclusive, safe and supportive research environments. Programs are encouraged to build a diverse team of preceptors/mentors that includes, for example, faculty from underrepresented groups (see [Notice of NIH's Interest in Diversity](#)) and at different career stages (i.e., early-career as well as established faculty).

Preceptors/Mentors (Participating faculty)

Describe how the program has or will assemble a diverse team of participating faculty (e.g., individuals from underrepresented backgrounds ([see Notice of NIH's Interest in Diversity](#)) and at different career stages) to provide potential role models within the training program and to enhance the excellence of the training environment.



National Institute of
General Medical Sciences



Questions? Comments?

