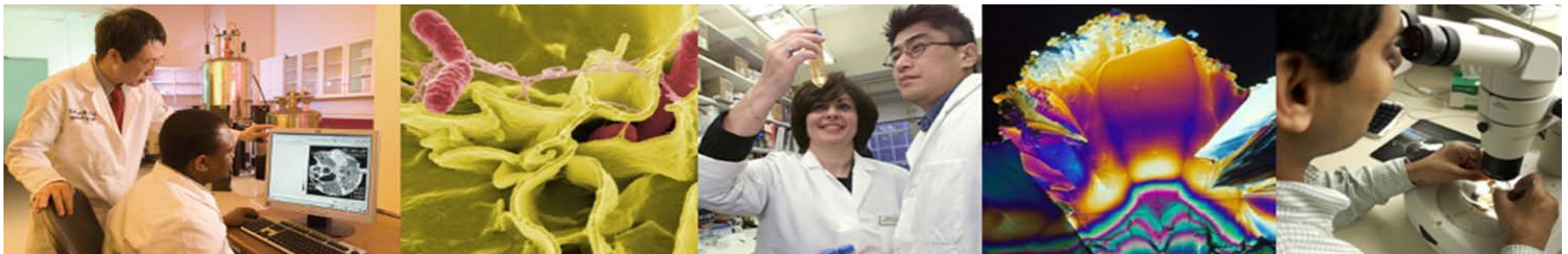# Working Group on Diversity—UPDATE

Hannah A. Valantine, MD, MRCP

Chief Officer for Scientific Workforce Diversity

National Institutes of Health

Advisory Committee to the Director—December 11, 2014

Working Group on Diversity Update
Presentation Outline

1. The *Enhancing the Diversity of the NIH-Funded Workforce* program:

   - Launch and Implementation Phase Management

2. Efforts to enhance diversity within the NIH Intramural Research Program (IRP)

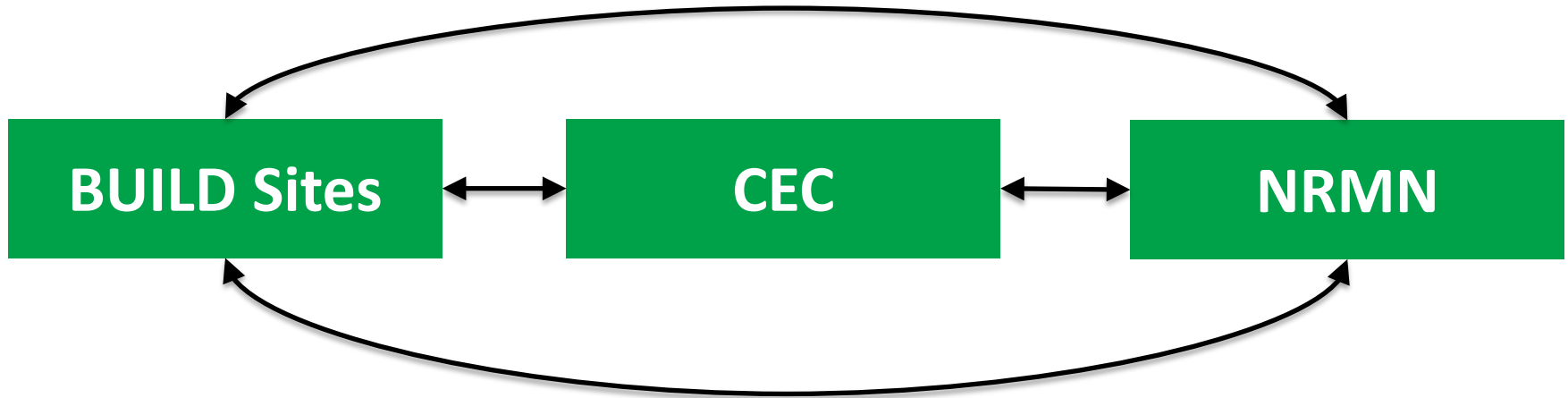3. National Strategy to Enhance Scientific Workforce Diversity

Enhancing the Diversity of the NIH-Funded Workforce

NOVEL. INNOVATIVE. TRANSFORMATIVE.

Pipeline. Mentoring. Evaluation.

The Diversity Program Consortium

3 Highly-Integrated Initiatives

| BUILD Sites | CEC | NRMN |

COSWD

Oversight, Management and Accountability

Implementation of a Major ACD WG Recommendation: NIH Transformative Diversity Initiative
Pipeline, Mentoring, Evaluation

Awards made October 2014

BUILD: 10 sites

NRMN

CEC

**Total funding: $31.3 M/yr (5 yrs)**

BUILD

- California State University Long Beach
- California State University Northridge
- Morgan State University
- Portland State University
- San Francisco State University
- University of Alaska Fairbanks
- University of Detroit Mercy
- University of Maryland Baltimore County
- University of Texas El Paso
- Xavier University of Louisiana

NRMN

- Boston College
  - Morehouse SM; U. Min.; U. North Texas; U. Wisconsin

CEC

- University of California Los Angeles

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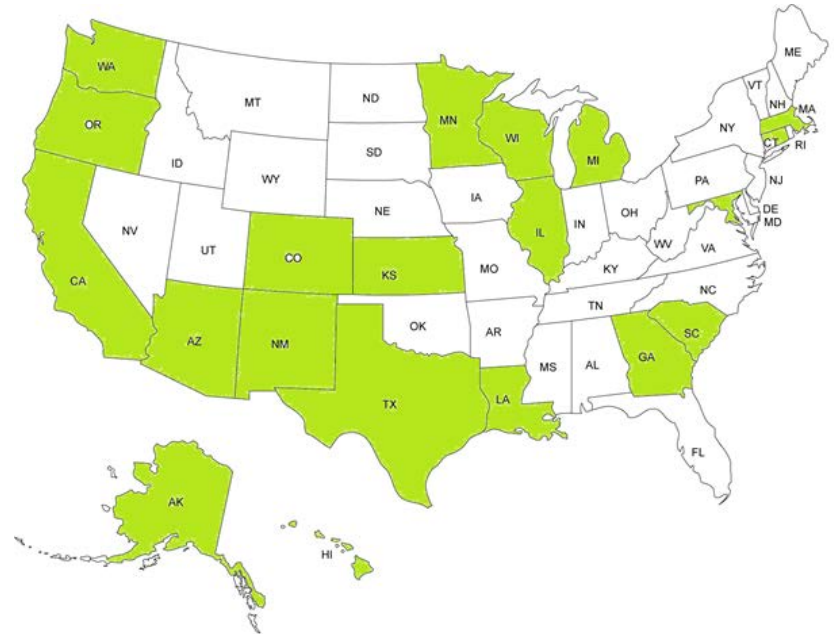
Enhancing the Diversity of the NIH-Funded Workforce Overarching Goal:

Merge social science with biomedical research training to ***develop and test new approaches to training and mentoring on a large scale***

- **Building Infrastructure Leading to Diversity (BUILD)**

INFRASTRUCTURE **FUNDING** **BROADENING PARTICIPATION**

- **National Research Mentoring Network (NRMN)**

MENTORING **NETWORKING**

- **Coordination and Evaluation Center (CEC)**

ACCOUNTABILITY

Program Initiatives

- **Building Infrastructure Leading to Diversity (BUILD)**:
  - Experimental training awards: how to attract & retain students from diverse backgrounds into biomedical research workforce

- **National Research Mentoring Network (NRMN)**:
  - Nationwide network of mentors from variety of disciplines:
    - Define best practices for mentoring at all career stages
    - Training for mentors
    - Networking & professional development for mentees

- **Coordination and Evaluation Center (CEC)**:
  - Rigorously evaluate BUILD and NRMN programs to determine **WHAT WORKS AND FOR WHOM**
  - Dissemination of successful training and mentoring strategies

Awardees will work together as a consortium in partnership with the NIH

"How is this different from other NIH-funded diversity programs?"

Critical Features of the Consortium

- **Consortium-wide "hallmarks of success"**
  - Intermediate measures of successful progression toward a biomedical research career
  - Academic and **psychosocial (stereotype threat; belonging; unconscious bias; science identity)**
  - Adjust specific plans to work toward consortium
  - New ways of training and mentoring
- **Evaluation**
  - Evaluation in real time; multiple metrics to assess impact
  - CEC works with sites to develop tailored assessment plans
- **Dissemination**
  - Lessons learned will be broadly shared

NRMN Innovation — http://nrmnet.net/

- **Diverse leadership** across race, ethnicity, gender, geography
  - Mentoring, networking, mentor training, professional development

- **Regional hubs** (5) – building capacity
  - Partnership (majority, HBCUs, HSIs, and TCUs), BUILD recipients, societies
  - Via a proven online web portal

- **URM postdocs and junior faculty** – focus on grantsmanship
  - Proven track record in mentoring trainees to successfully prepare fundable NIH grants

- "**Train-the-trainer**" – large-scale implementation of mentoring
  - Include cultural responsiveness and competency

National Research Mentoring Network (NRMN)
Mentoring to Diversify the Biomedical Workforce

Home   Join NRMN   About NRMN

NRMNet Mentoring and Networking

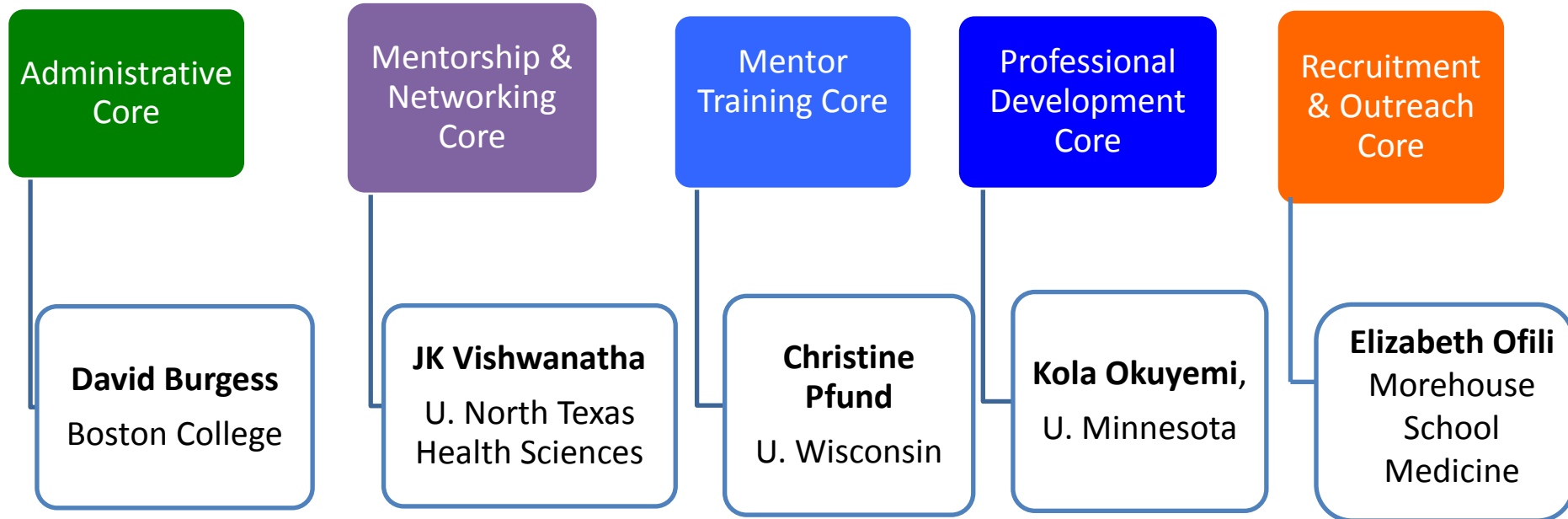Mentor Training

Professional Development

NRMN
The Core Structure

Administrative Core	Mentorship & Networking Core	Mentor Training Core	Professional Development Core	Recruitment & Outreach Core
David Burgess Boston College	**JK Vishwanatha** U. North Texas Health Sciences	**Christine Pfund** U. Wisconsin	**Kola Okuyemi**, U. Minnesota	**Elizabeth Ofili** Morehouse School Medicine

STEM BUILD@UMBC

- Building upon successes
  - UMBC "**collateral synergies**" strategy aims to harness general student success from the success of specialized programs.
- Investment in "active learning" to increase the efficiency of learning
- Target: students with an interest in pursuing STEM but at risk of attrition

Biomedical Learning and Student Training (**BLaST**)

- Program aims to enhance integration of rural locations via University of Alaska Fairbanks and their partners

- Focus on academic enrichment activities and skill development workshops

- Participants include Alaska Natives, academically disadvantaged, low-income, and first-generation college students
  - All prevalent in **rural Alaskan populations**

BUILD@CSUN

California State University
Northridge

- Redesign of research training and mentoring informed by **Critical Race Theory.** Elements include:
  - Emphasizing experiential knowledge
  - Challenging dominant ideologies
  - Commitment to social justice
- Ultimately, CSUN will create a new Health and Health Disparities Research Center
  - Focus on culturally competent mentorship
  - Methods developed will be a model for other research training programs

COSWD Near-Term Goals

COSWD Near-term Strategic Goals

Build a diverse trans-NIH scientific workforce that is a model for capturing the most talented into biomedical research

NIH Intramural Program

1. Establish the NIH Intramural Research Program (IRP) "Hub" for Innovation in Scientific Workforce Diversity: transition stage in the career path

2. Create climates of inclusion and sense of belonging for the scientific workforce (using social science)*

3. Assemble an interdisciplinary and diverse team to define and execute a robust research agenda for discovery and implementation science of diversity.

Expand Diversity in the IRP ACTION AREAS

- Recruitment and retention
  - **Targeted searches** for identifying candidates
- Leadership and professional development for postdocs and early tenure track PIs
  - **Pilot programs**
  - **Diversity in trainee programs**
- Enhance the NIH climate of inclusion and belonging
  - **Intervention for unconscious bias**
- Building partnerships with diverse institutions
- Leveraging new disciplines (e.g., data science) as **opportunities to attract** next generation researchers

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NIH Intramural Investigator Workforce

GENDER	October 1, 2014
Females	**82 (38%)**
Males	133 (62%)
TOTAL	215

RACE/ETHNICITY	October 1, 2014
African American, Hispanic, and Native American	**14 (6.5%)**
Asian/Pacific Islander	69 (32.1%)
White	132 (61.4%)
TOTAL	215

Diversifying Candidate Pools

- ICs report barriers: lack of diverse candidate pools ranked at top of the list

- Limitations:

  - Where to outreach

  - Knowledge about targeted recruiting

  - Awareness of psychosocial issues faced by candidates

  - Knowledge of the application process

COSWD Systematic Approach

Partner with ICs

Identify candidate searches

Collect criteria

Rank

Discipline

Provide demographic data

National

Top 20 Institutions

Conduct manual searches

Assemble portfolio

Outreach by committee chair

Evaluate outcomes of search results
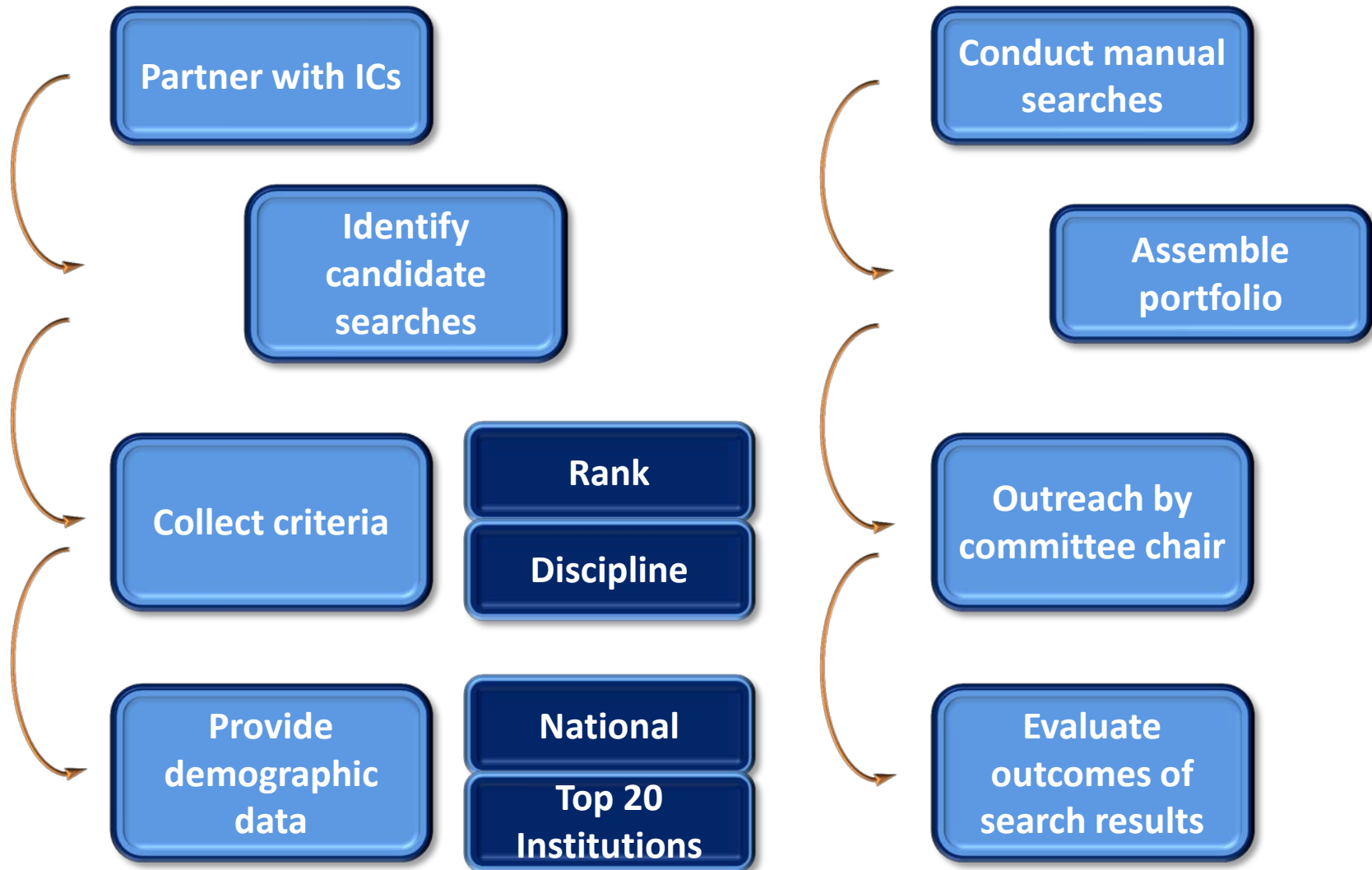
Search Pilots to Date

- Seven ICs; Stadtman
  - 140 potential candidates identified
- Positions have ranged from postdoctoral fellow to IC Deputy Director
- Currently evaluating outcomes
- Next steps: Build search instrument
  - Automate/operationalize search process
    - National roster
    - Interface with social media sites
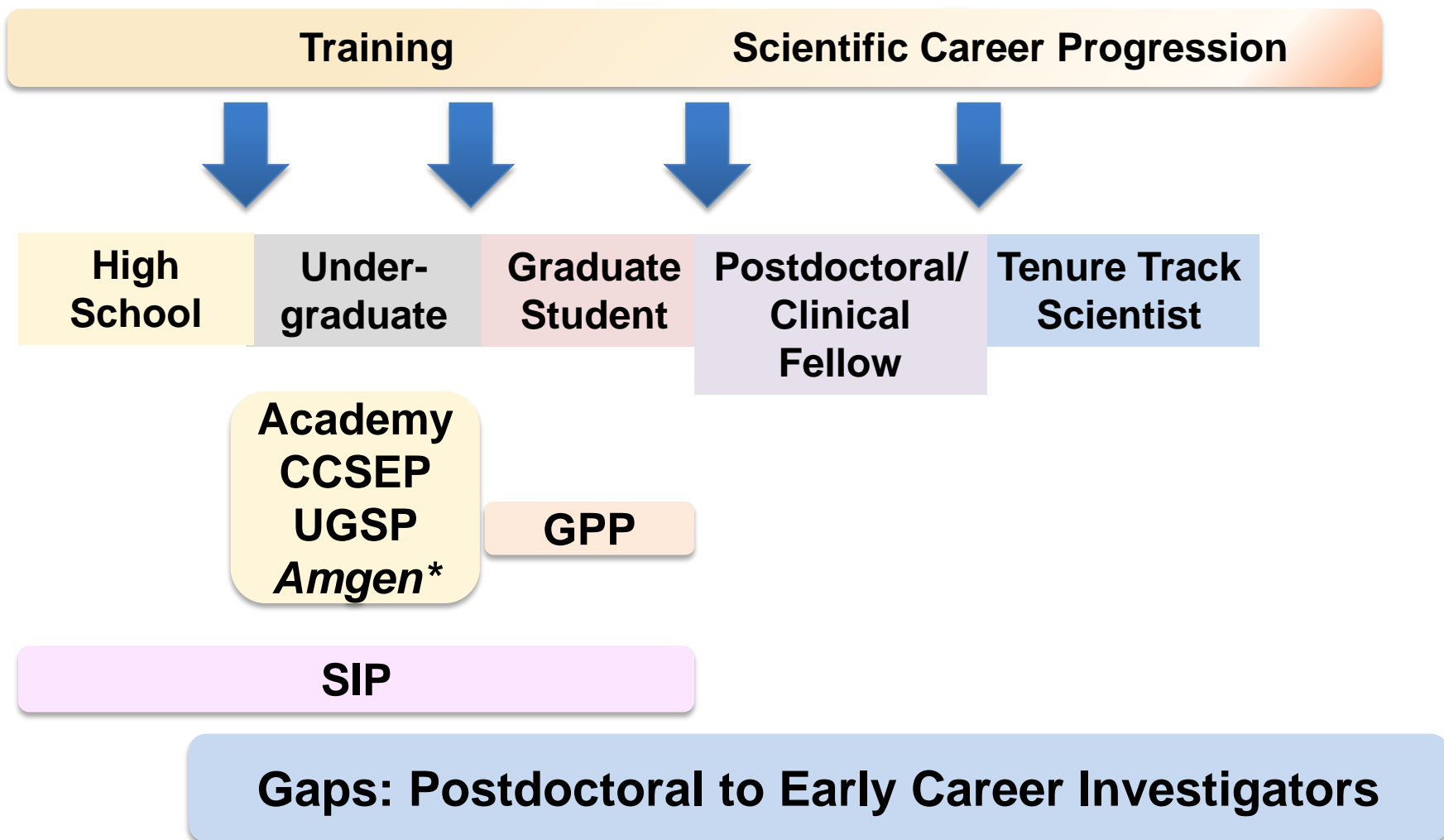 - Collaboration with data science

Expand Diversity in the IRP
ACTION AREAS

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Current NIH – OITE Program to Increase Diversity

Training		Scientific Career Progression		

High School	Under-graduate	Graduate Student	Postdoctoral/ Clinical Fellow	Tenure Track Scientist

Academy CCSEP UGSP *Amgen*

GPP

SIP

Gaps: Postdoctoral to Early Career Investigators

*D*iversifying *and* *A*ccelerating *R*esearch *E*xcellence (DARE)

Modeled after the successful Stanford's DARE Program

- Develop skills for career advancement
- Forum for developing lab management skills
- Build skills for those aspiring to non-bench careers
  - Intern with an expert at NIH (or externally)
- Training on strategies to support one another
  - Peer-mentoring; peer-coaching; small group mentoring
- Design and implement evaluative component to track and measure outcomes over time

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Who is a "Scientist"?

Draw-A-Scientist Test: Percent of Students
Who Drew A Male Scientist
(N=1504)

Barman, CR. (1999). *J. Science Teacher Education, 10*(1), 43-54
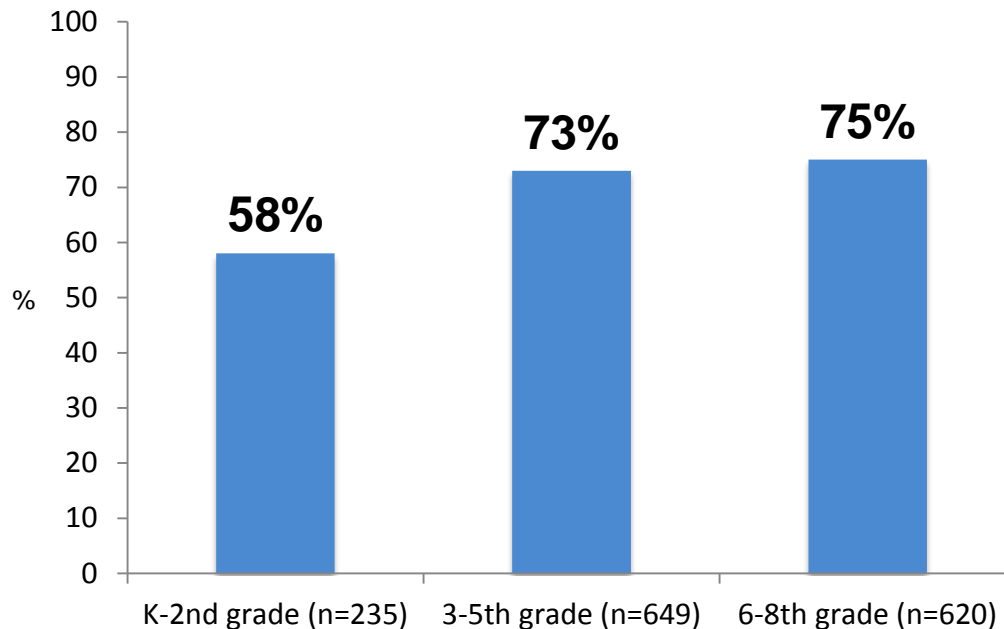
Developing a National Strategy to Enhance Scientific Workforce Diversity

Planning for Beyond BUILD, NRMN, CEC

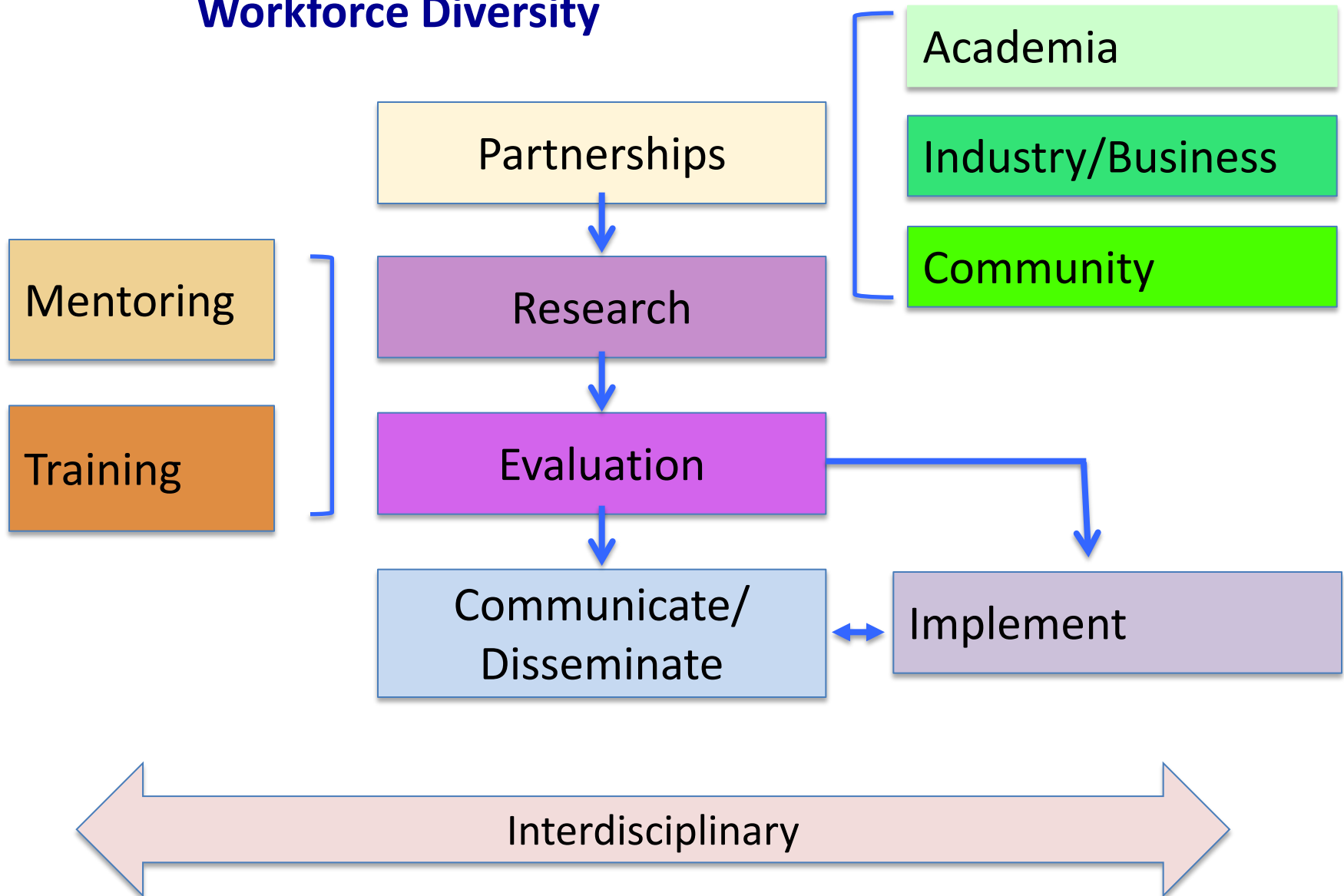# NIH Program Catalyzing Innovation in Scientific Workforce Diversity

National Comprehensive Plan – Hubs of Innovation

Strategy: Create networks and strong infrastructure that support career development pathways enabling scientist, including those from underrepresented groups, to transition seamlessly across research career paths.

Essential Components:

- Strategic Partnerships: with Research Intensive Institutions, with Organizations (focused on education/training)
- Intervention Discovery Science of Diversity
- Implementation and Scaling
- Tracking and Evaluation
- Organizational Commitment

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NIH National Hubs of Innovation in Scientific Workforce Diversity

Academia

Industry/Business

Community

Partnerships

Mentoring

Research

Training

Evaluation

Communicate/Disseminate

Implement

Interdisciplinary

Program Deliverables

- *National network* to support career transitions

- Evidence-based literature to *eliminate/reduce barriers* at key career transition points

- *Individual access to the network* in support of career development success

- *Organizational infrastructure* to support career development and transitions

- *Tools and resources* to catalyze and sustain career transition success

Feedback from Academic Community
Webinars Nov. 12 and 18
Drs. Collins, Tabak, Valantine

- Evaluation

- Partnerships – strategy

- Mentoring – scope; content; methods

- Current Programs as Models

- Promote Participation: diversity at all career levels

- Resources: Existing and new tools

- Diversity of Partners