Working Group on Diversity—UPDATE

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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.

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
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)**
- **National Research Mentoring Network (NRMN)**
- **Coordination and Evaluation Center (CEC)**
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
NRMN
The Core Structure

Administrative Core
David Burgess
Boston College

Mentorship & Networking Core
JK Vishwanatha
U. North Texas Health Sciences

Mentor Training Core
Christine Pfund
U. Wisconsin

Professional Development Core
Kola Okuyemi, U. Minnesota

Recruitment & Outreach Core
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
• 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

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<tr>
<th></th>
<th>October 1, 2014</th>
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<tbody>
<tr>
<td><strong>Females</strong></td>
<td>82 (38%)</td>
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<tr>
<td><strong>Males</strong></td>
<td>133 (62%)</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>215</td>
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### RACE/ETHNICITY

<table>
<thead>
<tr>
<th>RACE/ETHNICITY</th>
<th>October 1, 2014</th>
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</thead>
<tbody>
<tr>
<td><strong>African American, Hispanic, and Native American</strong></td>
<td>14 (6.5%)</td>
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<tr>
<td><strong>Asian/Pacific Islander</strong></td>
<td>69 (32.1%)</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>132 (61.4%)</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>215</td>
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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
- Provide demographic data
- Rank
- Discipline
- 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
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Current NIH – OITE Program
to Increase Diversity

Training

Scientific Career Progression

High School
Undergraduate
Graduate Student
Postdoctoral/ Clinical Fellow
Tenure Track Scientist

Academy
CCSEP
UGSP
Amgen*

GPP

SIP

Gaps: Postdoctoral to Early Career Investigators
Diversifying and Accelerating Research Excellence (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 evaluitive component to track and measure outcomes over time
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Who is a “Scientist”? 


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
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