NIH Scientific Workforce Diversity Seminar Series

Identifying Resource Needs for Cohort Recruitment and Professional Development

Thursday, February 24, 2022
Building and Sustaining a Learning Community of Native Scholars

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Academic Persistence

Program Examples

- **Native Investigator Development Program**
  - Funded 1997-2022 by 6 NIH Institutes and Centers, primarily through NIA Resource Centers for Minority Aging Research
  - Co-directed Dedra S. Buchwald, Washington State University and Spero M. Manson, University of Colorado Anschutz Medical Campus

- **Grantwriting Uncovered: Maximizing Strategies, Help, Opportunity, Experience Program (GUMSHOE)**
  - Grant Coaching Program, National Research Mentoring Network (Phase 1, 2014-2019); Center for Pacific Innovations, Knowledge, and Opportunities (PIKO), University of Hawaii (2021-2026; NIGMS)


Program Components

- 4 group meetings annually
- Focused didactic sessions
  - Statistical techniques and procedures
  - Writing for scientific audiences
  - Proposal preparation
  - Research ethics and institutional reviews
  - Time management
  - Fiscal and personnel administration
Program Components

- **Intensive, bi-weekly mentoring interaction**
  - Primary substantive mentor
  - Secondary mentor
  - Statistical mentor
  - Science-writing mentor

- **Peer-to-peer support**

- **Secondary analyses of relevant data sets**

- **Primary data collection studies**
Investigators
Native Investigator Development Program Outcomes

- 56 American Indian/Alaska Native MDs/PhDs/DrPH/JD in 12 cohorts
- 37 tribes and 20 disciplines
- 91% retained over 2-year training cycle
- 24 tenured at research universities
- >$210 million in NIH and other major agency grants
- Principal Investigator or Co-Principal Investigator on >100 *funded* grants; 65 from federal agencies
- R01, K career awards, Diversity Supplements, foundation, state, regional, Indian Health Service
- 550+ peer-reviewed publications
- 2012 to 2021 31 (80%) trainees awarded ≥ 1 grants
Program Personnel
GUMSHOE Outcomes

- 101 MDs/PhDs/DrPHs over 6 cohorts
- 92% were under-represented/rural early-stage investigators
- 14 American Indians/Alaska Natives
- 72% submitted research grants
- 40% of grants submitted were funded
- Incorporated into numerous NIH Center Pilot Study Programs
Keys to Success

Critical mentor characteristics

- NIH R01-funded
- Native scientists and committed non-Native as role models
- Well-published
- Experienced in mentoring
- Connected to, familiar with potential sponsors
- In positions of leadership
- Value diversity
Critical trainee characteristics

- Promote self-reflection, perspective-taking, and constructive criticism
- Ensure adequate scientific preparation in concrete, personally relevant terms
- Emphasize writing skills and maximize learning opportunities
Critical program features

- Provide clarity and extensive structure regarding expectations linked to short- and long-term goals
- Stress deadlines, accountability, and inter-locked nature of effort
- Underscore efficiencies and time management
- Maximize group collaboration and co-teaching as well as co-learning
Critical program features

- Demystify grantsmanship process and teach how to compete successfully
- Help to restructure threatening or discouraging circumstances as challenges and opportunities
- Recognize, address tensions among personal, professional, and social goals
Keys to Success

Critical program features

- Prepare for realities of community-based partnerships
- Offer strategies for outreach and dissemination of findings
- Communicate value of collaborating with other institutions
- Encourage advocacy through translation of findings into policy
Keys to Success

Critical values

- Being mentored is a life-long process
- Mentoring others is an obligation, a privilege, and a reward
- Recognizing that, for most of us, our trainees are our only lasting scholarly legacy
Teamwork
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