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Concept Clearance: **Genome Research Experiences to Atttract Talented Undergraduates into the Genomics Field to Promote Diversity (*GREAT Program*)**

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National Human Genome
Research Institute

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The **Forefront**
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Championing a Diverse Genomics Workforce

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- September 2020 Council
 - F99/K00 predoc to postdoc transition award
 - K18 short-term career enhancement award
- February 2021 Council
 - GREAT program
 - Grants for New Investigators to Promote Diversity
- May 2021 Council and beyond
 - Anticipating future concepts

Outline

- Goal
- Background and rationale
- Concept scope and objectives
- Relationship to on-going activities
- Council discussion



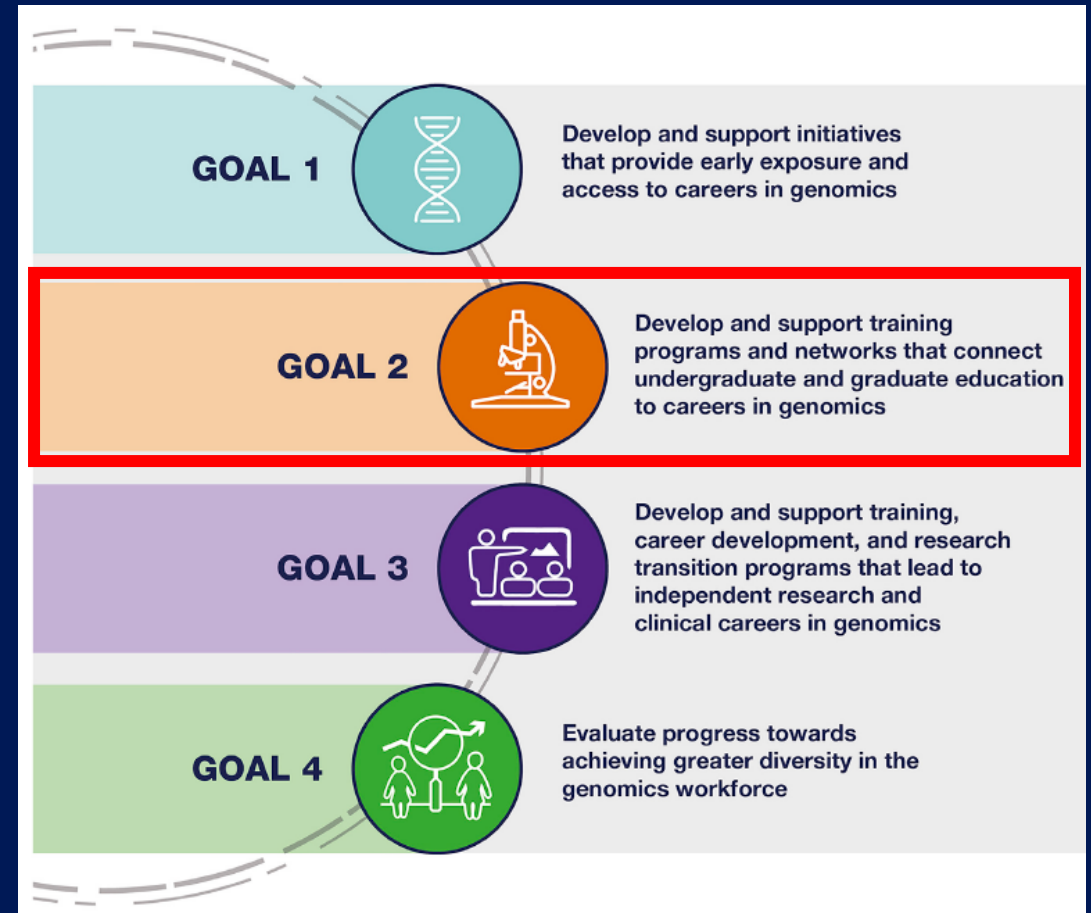
GREAT Program - Goal

- To encourage undergraduate students from underrepresented backgrounds at diversity-serving institutions, to pursue further training and careers in genomics research that are within NHGRI mission areas, by providing them research educational activities via institutional partnerships.

Background

Building a Diverse Genomics Workforce: An NHGRI Action Agenda

- genome.gov/workforcediversity
- Addresses Sub-Goal 2.2:
*“Ensure that undergraduate **diversity-serving institutions** are aware of and tightly connected to this network”*



Underrepresented groups

- Racial/ethnic, disabilities, disadvantaged, women
- Racial/ethnic groups:
 - 34% of US Population
 - 10% in genetics/genomics graduate programs (NSF)
 - 14% of NHGRI T32 graduate student trainees

 *strengthen undergraduate to graduate school pathway*

Scope and Objectives

- Research educational support to undergraduates enrolled at institutions with historical mission to educate underrepresented students (diversity-serving institution)
- *Institutional partnership* to implement collaborative approaches to genomics research education
 - Partnership must include:
 - Applicant Institution is a diversity-serving institution
 - Partnership Institution(s) - research-intensive institution with suitable research base in genomics for graduate-level training.



Why partnership model?

- NIH should support creative partnerships between research-intensive institutions and under-resourced diversity-serving institutions
 - *NIH ACD 2012 report on Diversity in the Biomedical Workforce*
- “Level the playing field” – *NIH Office of Scientific Workforce Diversity*
- “Talent is evenly distributed, opportunity is not”
 - *National Education Equity Lab*
- Unequal access to education, resources, experiences
- “Attention in the form of guidance and resources must go to where the students are concentrated, which will lead them to and through graduate genomics training programs.”
 - *2021 NHGRI Diversity Action Agenda*

Scope and Objectives

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- 2-year genomics research education program
 - Part-time academic year & full-time summer research experiences
 - primarily at research-intensive institution
 - Other educational activities (courses, bootcamps, seminars, lab meetings, career development, etc.)
 - at both institutions
- Undergraduates who have completed 2 academic years
- Outstanding mentoring plan
- Monitoring and evaluation plans for both the students and mentors
 - assessment that program and its environments are effective, inclusive, safe and supportive

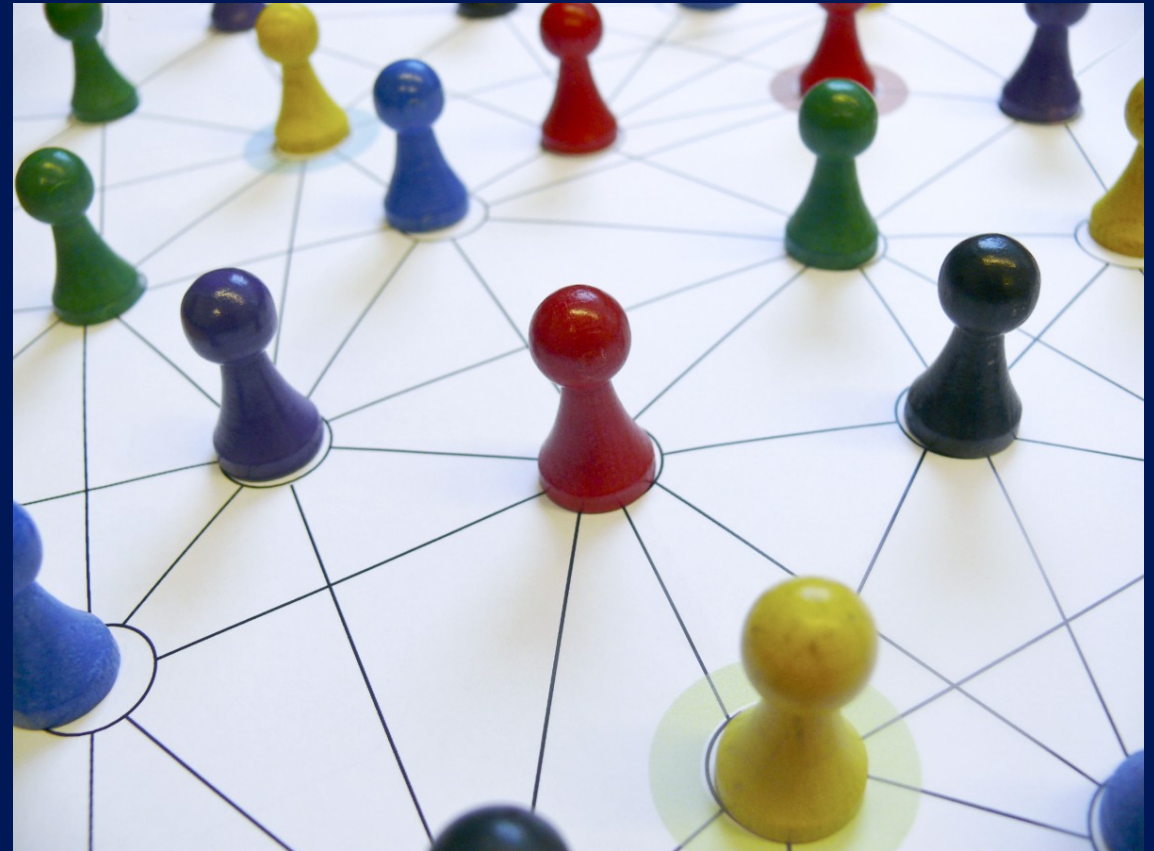
Measurable Student Outcomes

- Students matriculating through the program
- Admission to graduate programs
- Engaged in research-related profession
- Presentations, publications and awards

long-term tracking

Relationship to Ongoing Activities

- Modelled after other NIH R25 undergraduate programs to enhance diversity
 - BP-ENDURE
 - BD2K
 - NIEHS UP
- NHGRI Diversity Action Plan (DAP) R25 Program
- NHGRI-T32 collaborations encouraged



Mechanism of Support

- RFA
- Applications limited to \$350K direct cost/yr
- R25, 8% indirect cost
- ~3 new awards/yr for 3 years
- Project period limited to 5 years
- Total projected investment for 9 awards is ~\$17M

Council Discussion

- Thoughts on partnership model?
- Thoughts on 2-year educational program?
- Thoughts on size and scope of program?
- Other points to consider?

