Training Mechanisms

- Institutional Training Grants (T32)
- Diversity Action Plan (R25)
- Course Development (R25)
- Career Awards (K01, K08, K99, K43)
- Fellowships (F30, F31, F32)
- Diversity supplements
Genomic Medicine T32 Guidelines

- Trainee level: Pre and Post-docs
- MD, PhD or equivalent
- Up to 10 trainee slots per year
- Two tracks:
  1) Focus on basic research
  2) Focus on clinical research (not clinical care of patients)
- Flexible didactic curriculum, seminars, supervised research/training
- Team science approach
- Joint mentorship
- ELSI training is an essential component
- PA-18-403 and NOT-HG-20-003
R25: NHGRI Diversity Action Plan

- Expose URM students to genomics
- Pursue a career biomedical sciences
- Educational activities
- Skills development for grad school
- Institution must have a strong genomics research program
- Limited to: undergrads, post-bacc, and graduate students

- PAR-19-380
R25: Genomic Research Education Courses

- Supports:
  - Short-term advanced level courses (2 weeks or less)
  - Long-term skills development courses (>2 weeks but <1 year)
- Provide innovative, state-of-the-art, evidence-based education related to NHGRI mission
- Target career level: doctoral and beyond
- Format: in-person, online, or combo of both
- Syllabi, handouts, and videos MUST be made available and easily accessible to the public electronically
- Must be open to students and investigators nation-wide; cannot be used to develop an institution’s course curriculum
- Budget: Short-term course ($75K DC/yr) and long-term course ($150K DC/yr)
- Up to 5 years of support can be requested

- PAR-19-185
Protected Research Time

- Clinical Investigator Development Award (K08)
  *Focus on genomic medicine

- Research Scientist Development Award (K01)
  *Focus on genome science & ELSI

- Pathway to Independence Award (K99/R00)

- Emerging Global Leaders Award (K43)
  *Research scientists from LMIC countries
Fellowships

- MD/PhD or other Dual Degree (F30)
- Pre-doctoral (F31)
- Post-doctoral (F32)
- Senior Fellows (F33)
Promoting Workforce Diversity

- Eligible NHGRI awardees can apply
- Administrative supplements; Two years of support
- Recruit & support students, post-docs, and eligible investigators
- Underrepresented minorities
- Individuals with disabilities
- Individuals from disadvantaged backgrounds
- Research experience must be an integral part of funded parent award
- Potential to contribute significantly to career development of candidate
- NOT-HG-19-010
NHGRI Training Task Force

- **Charge**
  - Evaluate the Institute’s current extramural training efforts
  - Identify potential growth areas

- **Operation**
  - Formed in June 2019 and met by teleconference
  - Presentation at NHGRI Advisory Council Meeting, February 10, 2020
    - View presentation on GenomeTV at genome.gov
NHGRI Training Task Force

- Input
  - NHGRI’s current portfolio
  - Training-related info from strategic planning meetings
  - Feedback from ~30 colleagues who work in the academic extramural research and industry environments to a set of questions that we posed to them
  - Closed session discussion at Sep 2019 NHGRI Advisory Council meeting
An increase of 2-3% to a total of ~ 6% of the extramural budget over the next 5-10 years would put NHGRI near the median of other ICs.

$6-$8M (1.5-2%) increase over 5 years

Re-evaluation and eventual increase of another $2-$4M (0.5-1%) within 10 years
Task Force Recommendations

- Increase funding for T32, F, and K grants and URM initiatives
- Doubling of F-awards (currently <$500K/year)
- 50% increase in DAPs and K-awards
- 17% increase in T32s

- ~$5.5M total increase
Task Force Recommendations

Develop/expand training of Laboratory Genetics and Genomics and other fellows, genetic counselors, nurses, and other groups in genomics and ELSI research methodology.

Develop/expand efforts in data science and bioinformatics researchers, particularly among women and under-represented minority populations.

- ~ $1M pilot programs
Task Force Recommendations

Develop and disseminate modular training materials & genomics curricula for various career levels

• ~ $1M pilot programs
Task Force Recommendations

NHGRI should set ambitious goals and milestones both with regard to the number and size of awards, but also to increasing representation of women and under-represented minority populations.
Program Contacts

- R25 Course: PAR-19-185
  - Tina Gatlin (gatlincl@mail.nih.gov)

  - Tina Gatlin (gatlincl@mail.nih.gov)

- T32 Institutional Training Grants: PA-18-403
  - Luis Cubano (luis.Cubano@nih.gov)

- K08 Mentored Scientist Career Award: PA-18-373
  - Heather Colley (junkinsh@mail.nih.gov)
Questions?

www.genome.gov
Search: Research Training