Advancing Genomic Medicine Research Concept Clearance

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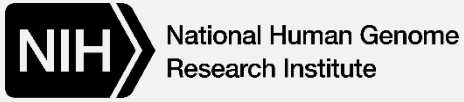

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Background

- Support from previous Councils to grow targeted research projects outside of large consortia
- Recommendations from the Strategic Planning Workshop on Genomics in Medicine & Health:
    1. Create systems to integrate genomics into everyday clinical and public health practice
    2. Improve processes for routine, high-value clinical genomic testing
    3. Build knowledgebases for predictive genomic medicine in diverse populations
    4. Develop and evaluate genomic prevention and therapeutic strategies in diverse populations
    5. Ensure that genomic health information has maximum utility for all members of the public
    6. Train healthcare providers to integrate genomics into the clinical workflow

Proposal

Stimulate innovation and advance understanding of when, where and how best to implement the use of genomic information and technologies in clinical care in all persons irrespective of ancestral origins or sociodemographic status.

Scope & Objectives

- This funding opportunity builds upon the Investigator-Initiated Genomic Medicine Research PARs (PAR-18-735 and PAR-18-736)
- Projects will be broadly applicable to genomic medicine
- RFA mechanism
  - Yearly grantee meeting to enhance communication and disseminate findings to accelerate genomic medicine research progress

(continued)

Scope & Objectives

- Investigators new to the field of genomic medicine will be encouraged to apply, including those from a variety of disciplines
- Studies encompassing diversity are encouraged
  - Racial or ethnic minority populations
  - Underserved populations
  - Populations who experience poorer medical outcomes
  - Studies that take place outside major academic research settings

Examples of Research Studies

- **Implementing genomic medicine**

  Example: Understanding clinical barriers and bottlenecks in implementation of genomic medicine and pharmacogenomics across broad settings, especially diffusion and sustainability in diverse clinical settings

- **Facilitating analysis of clinical genomic data**

  Example: Integration of genomic data from various sources, with other data types such as environmental data, family history, transcriptomics, epigenomics, functional data, or model organism data and assess genomic data's contribution to and improvements of predictive value, clinical validity or clinical utility

- **Improving clinical access to genomic data**

  Example: Portable genomic data that uses standards for genomic information and allows for iterative use (e.g., integration with EHR apps)

Mechanism & Budget

	FY21	FY22	FY23	FY24	FY25
R01	3.7	7.4	11.1	14.8	18.5
R21	1.2	2.4	2.4	2.4	2.4
Total	4.9	9.8	13.5	17.2	19.7
Total Costs, Dollar in Millions					

R01 (Research Project) up to $600K DC/year, project period of up to 5 years. Total 4 R01s.

R21 (Exploratory/Developmental Research) up to $200K DC/year, project period up to 2 years. Total 4 R21s.

Alternating receipt dates starting May 2020

Possible sign-on with other ICs

NIH NHGRI


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