

National Advisory Council for Human Genome Research
September 19, 2022
Concept Clearance for PAR

Genomic Community Resources U24

Purpose:

To facilitate genomic research and the dissemination of its products, NHGRI supports both new and existing genomic resources of demonstrated broad value to the research community. Awards under this FOA will support the development and distribution of genomic resources that will be valuable for both basic and clinical genomics research. Such resources include, but are not limited to:

- Genomic informatics resources, such as biomedical ontologies and analysis toolsets.
- Comprehensive identification and collections of genomic features, such as functional genomic elements and genetic assay results.
- Resources to support genomic community building efforts, such as GA4GH and ClinGen.
- Sample repositories for genomic studies, such as Coriell.

Relationship to Ongoing Activities:

NHGRI is also a participating IC on two trans-NIH PARs in support of data resources released in 2020 under the guidance of the [NIH Strategic Plan for Data Science](#):

- Biomedical Data Repository (U24 - Clinical Trials Not Allowed): [PAR-20-089](#)
- Biomedical Knowledgebase (U24 - Clinical Trials Not Allowed): [PAR-20-097](#)

NHGRI has been directing both new and renewal applications for data repositories and knowledgebases to these PARs. Such projects have been identified with an asterisk in the table in Appendix 1. Only when the work proposed is out of scope for the trans-NIH PARs has NHGRI been directing applications to the NHGRI Genomic Community Resources PAR.

New or renewal/modified initiative:

This is a renewal. No significant changes are being proposed from the current PAR.

- 2020-2023: [PAR-20-100](#) (U24)

Previous PAR releases:

- 2017-2020: [PAR-17-273](#) (U24)
- 2014-2017: [PAR-14-191](#) (U41)
- 2011-2014: [PAR-11-095](#) (U41)
- Pre-2011, supported under P41 activity code

Mechanism of Support: [U24](#)

Appendix 1: FY20-22 Awards under the FOA

PAR-20-100, PAR-17-273, PAR14-191, PAR-11-095

This table only shows NHGRI funding.

Awards with an asterisk after the grant number have renewed under the trans-NIH PARs for data resources. This table only shows their funding under the NHGRI Genomic Community Resources PARs.

Grant	PI	Title	2020	2021	2022
HG000330	Bult, Carol	Mouse Genome Database (MGD): A Core Knowledge Resource for Functional Characterization of the Human Genome	\$3,658,940	\$3,415,011	\$2,927,152
HG000739	Perrimon, Norbert	FLYBASE: A DROSOPHILA GENOMIC AND GENETIC DATABASE	\$3,335,768	\$3,039,925	\$2,605,650
HG001315	Cherry, Joe	Genomic Resource for the Yeast Saccharomyces	\$1,984,127	\$1,851,854	\$1,587,302
HG002223	Sternberg, Paul	WormBase: a core data resource for C. elegans and other nematodes	\$2,200,324	\$2,053,636	\$1,763,499
HG002273 *	Thomas, Paul	Gene Ontology Consortium	\$2,668,358	\$2,283,252	
HG002371	Haeussler, Maximilian	The UCSC Genome Browser	\$3,552,762	\$3,571,987	\$3,783,662
HG002659	Westerfield, Monte	ZFIN: The Zebrafish Model Organism Database	\$2,640,000	\$2,464,000	\$2,112,000
HG003345	Birney, Ewan	The Nomenclature of Human and Vertebrate Genes	\$550,000	\$498,829	\$511,319
HG003751 *	Stein, Lincoln	Reactome: An Open Knowledgebase of Human Pathways	\$1,932,440	\$1,354,555	
HG004059	Irizarry, Rafael	Bioconductor: An Open-Source, Open-Development Computing Resource for Genomics	\$1,341,918	\$1,335,931	\$1,324,035
HG006620	Nekrutenko, Anton	Democratization of Data Analysis in Life Sciences Through Galaxy	\$1,740,000	\$1,910,000	\$1,865,350
HG006627	Hamosh, Ada	Online Mendelian Inheritance in Man (OMIM)	\$1,935,000	\$1,935,000	\$1,935,000
HG006673	Gygi, Steven	Systematic Exploration of the Human Interactome IV	\$727,150	\$727,150	\$761,225
HG006834	Rehm, Heidi	Broad-Geisinger Clinical Genome Resource	\$3,560,703	\$4,424,870	\$4,286,570
HG007050 *	Hamilton, Carol	Genomic Resource Grant for the PhenX Toolkit - expansion and sustainability	\$1,250,000		
HG007234	Flicek, Paul	GENCODE: comprehensive reference genome annotation for human and mouse	\$2,226,969	\$2,973,167	\$2,921,672
HG007346	Brenner, Steven	Center for Critical Assessment of Genome Interpretation	\$478,516	\$437,000	\$438,062
HG007355	Waterston, Robert	Creating Comprehensive Maps of Worm and Fly Transcription Factor Binding Sites	\$2,382,034	\$2,382,034	
HG007497	Lee, Charles	Identifying and Characterizing the Full Spectrum of Haplotype-resolved Structural Variation in Human Genomes	\$2,695,991	\$2,695,991	\$2,695,990
HG007822 *	Bateman, Alex	UniProt: A Protein Sequence and Function Resource for Biomedical Science	\$3,000,000		
HG007823	Parkinson, Helen	Establishing the GWAS Catalog as a resource for large-scale association studies	\$818,640	\$818,640	
HG008735 *	Schriml, Lynn	The Disease Ontology Project: mechanistic profiles of human disease for biomedical and clinical research	\$656,314	\$655,372	
HG008736	Scheinfeldt, Laura	NHGRI Sample Repository for Human Genetic Research	\$850,000	\$949,735	\$942,886
HG009293	Cherry, Joe	RegulomeDB: A Resource for the Human Regulome	\$697,414	\$674,483	\$660,473
HG009494	Ardlie, Kristin	A portal and integrative collaborative analysis platform for GTEx	\$820,326	\$604,315	
HG009649	Plon, Sharon	Baylor College of Medicine/Stanford University Clinical Genome Resource (CLINGEN)	\$2,943,376	\$4,705,276	\$4,748,399
HG009650	Berg, Jonathan	The Clinical Genome Resource – Advancing genomic medicine through biocuration and expert assessment of genes and variants at scale	\$3,214,945	\$4,665,990	\$4,679,938
HG009889	Graveley, Brenton	A comprehensive binding and functional map of human RNA-binding proteins	\$2,269,711	\$2,269,711	\$1,400,000
HG010100	McMillan, Leonard	Genomic Resources for the Collaborative Cross	\$346,600	\$348,247	\$340,526

Grant	PI	Title	2020	2021	2022
HG010135	Caudle, Kelly	Clinical Pharmacogenetics Implementation Consortium (CPIC)	\$754,358	\$934,797	\$980,928
HG010136	Smit, Arian	Dfam: sustainable growth, curation support, and improved quality for mobile element annotation	\$607,378	\$626,468	\$600,717
HG010615	Klein, Teri	PharmGKB: pharmacogenomics discovery and implementation	\$1,000,000	\$1,000,000	\$1,000,000
HG010856	Khavari, Paul	Atlas of Regulatory Variants in Diseases (ARVID)	\$650,695	\$657,314	\$662,526
HG010859	Sternberg, Paul	Alliance Central: A platform for sustainable development of next generation genome knowledgebases	\$4,621,999	\$4,622,000	\$4,621,840
HG010860	Haendel, Melissa	A phenomics-first resource for interpretation of variants	\$2,042,061	\$2,207,511	\$1,993,084
HG010862	Ritchie, Marylyn	Pharmacogenomics Clinical Annotation Tool (PharmCAT)	\$560,000	\$560,000	\$560,000
HG011025	Rehm, Heidi	The Global Alliance for Genomics and Health: Setting the Standards for Genomics and Health-Related Data Sharing		\$336,915	\$338,468
HG011449	Robinson, Peter	The Human Phenotype Ontology: Accelerating Computational Integration of Clinical Data for Genomics		\$776,417	\$738,592
HG011450	Rehm, Heidi	The Genome Aggregation Database (gnomAD)		\$2,187,000	\$2,309,000
HG011451	Vidal, Marc	Generating a full-length reference transcriptome for human protein-coding genes			\$681,834
HG011453	Flannick, Jason	The Association to Function Knowledge Portal: a genomic data resource for translating GWAS associations to biological effects		\$710,735	\$684,283
HG011851	Deustachio, Peter	Reactome and the Gene Ontology: Digital pathway convergence for core data resources		\$859,168	\$683,597
HG011853	Paten, Benedict	Dockstore: The Community Platform for Reproducible Biomedical Workflows and Applications		\$1,093,173	\$908,392
HG012107	Ideker, Trey	CYTOSCAPE: AN ECOSYSTEM FOR NETWORK GENOMICS			\$1,543,069
HG012184	Sobreira, Nara	GeneMatcher, VariantMatcher and PhenoDB, implementation of new features and connections			\$574,994
HG012343	Weng, Zhiping	A Comprehensive Genomic Community Resource of Transcriptional Regulation			\$833,468
Total			\$66,714,817	\$71,617,459	\$64,005,502

*Fiscal Year 2022 numbers are not final.