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NHGRI Genomic Data Science Working Group (GDSWG)

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National Human Genome
Research Institute

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What is the NHGRI Genomic Data Science Working Group?

- A Subcommittee of the [National Advisory Council for Human Genome Research](#)
- Formed in Spring 2017
- Meetings are approximately every two months and held virtually

Working Group Functions

- Advises NHGRI on plans related to genomic data science outside of Council meetings
- Provides input to NHGRI Director and other Institute leaders about trans-NIH issues related to data science
- Addresses broad challenges including data management, analysis, computing and data science policy, as they relate to all areas of genomics, from basic science to genomic medicine

Current GDSWG Members

Updated February 2023

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Mark Craven, Ph.D.*
University of Wisconsin-Madison



Anshul Kundaje, Ph.D.
Stanford University
2023 GDSWG Co-Chair



Tim Reddy, Ph.D.*
Duke University



Barbara Engelhardt, Ph.D.
Stanford University



Christina Leslie, Ph.D.
Memorial Sloan-Kettering
Cancer Institute



Marylyn Ritchie, Ph.D.
University of Pennsylvania



Gail Jarvik, M.D., Ph.D.*
University of Washington



Shannon McWeeney, Ph.D.
Oregon Health & Sciences
University
2023 GDSWG Co-Chair



Rahul Satija, Ph.D.
New York University



Eimear Kenny, Ph.D.
Icahn School of Medicine at
Mount Sinai



Casey Overby Taylor, Ph.D.
Johns Hopkins University



Paul Sternberg, Ph.D.
California Institute of
Technology

Workgroup Topics in 2022: NHGRI Focused

- NHGRI AnVIL Program Updates and Renewal
- NHGRI's implementation of new NIH Data Management and Sharing Policy effective on January 25, 2023
- Introduction to the new NHGRI [Office of Genomic Data Science](#)

AnVIL Program

- Future Directions of the NHGRI AnVIL Workshop held virtually on October 19th, 2021
- Workgroup discussed AnVIL program renewal and timeline
- Added a component to support the clinical research community

NIH DMS Policy at NHGRI

- NHGRI's implementation of the new NIH Data Management and Sharing Policy effective on January 25, 2023
- NHGRI solicited feedback on how GDSWG members and institutions are preparing for the policy

NHGRI Office of Genomic Data Science

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- Established in early 2022
- Mission:
 - Support genomic data science activities across NHGRI
 - Serve as coordinating hub for NHGRI involvement in trans-NIH data science efforts
 - Provide guidance for NHGRI's implementation of NIH data sharing policies

Workgroup Topics in 2022: Trans-NIH

- Collaborations between NIH Office of Data Science Strategy and NHGRI
- NIH transition to the cloud and the evolving capabilities supported by the NIH STRIDES Initiative
- Genomics Programs in Africa

NHGRI and NIH Office of Data Science Strategy

- Update on the NIH ODSS efforts focused on catalyzing data sharing in research and collaborations between ODSS and NHGRI.
- Topics included:
 - NIH STRIDES initiative
 - NIH Cloud Platforms Interoperability efforts
 - Streamlining controlled data access
 - Opportunities to support data repositories
 - NIH AIM-AHEAD program
 - National Service Scholar Program

NIH STRIDES

- Presentation on the NIH transition to the cloud and the evolving capabilities supported by the the NIH STRIDES Initiative
- Topics included:
 - Evolving ecosystem of platforms and capabilities supported by STRIDES
 - Advantages and challenges related to the use of the cloud

NIH H3Africa and Data Science in Africa Initiatives

- H3Africa aimed to develop a sustainable and collaborative African genomics research enterprise
- The DS-I Africa initiative aims to harness data science technologies to develop solutions to Africa's most pressing public health problems

Upcoming Working Group Discussion Topics

- Overview of the NHGRI data and informatics resources portfolio
- Phenotypic data collection and sharing across NHGRI programs
- Analysis, tool dissemination, and training
- Implementation of the NIH Data Management and Sharing policy
- Data science training Program at NHGRI

Questions?

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