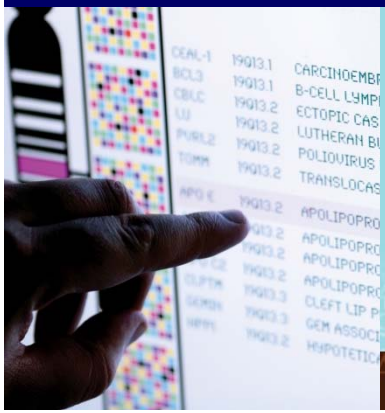
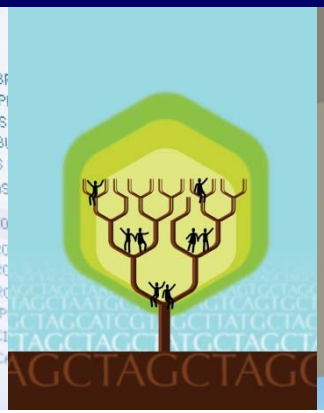
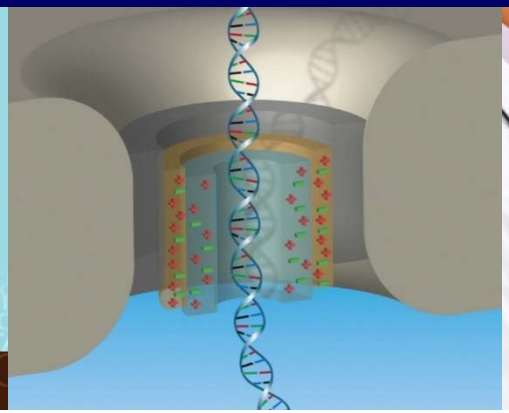
DIRECTOR'S REPORT

National Advisory Council for Human Genome Research

September 2016

Eric Green, M.D., Ph.D.
Director, NHGRI

Director's Report-Related Documents: September 2016

Director's Report

Director's Report

No.	Relevant Documents
1	Genomics and Health Disparities Lecture Series
2	New Director, National Institute of Mental Health
3	New Director, National Institute of Child Health and Human Development
4	New Director, Office of AIDS Research
5	New Editor, *Science*
6	Final NIH Policy on Use of Single IRB

genome.gov/DirectorsReport

Document #

Open Session Presentations

- Seizing Unprecedented Opportunities: NHLBI Trans-Omics in Precision Medicine (TOPMed)

  Gary Gibbons

- Opportunities for Synergy between the NHGRI Genome Sequencing Program and TOPMed

  Adam Felsenfeld

Open Session Presentations

- Genomic Medicine Working Group

  Teri Manolio

- Genomic Medicine IX Meeting

  Carol Bult

Open Session Presentations

- U.S. Precision Medicine Initiative

  Eric Dishman

- 23 (Pairs) plus 1 Lessons Learned

  Jeff Schloss

Director's Report Outline

I. General NHGRI Updates

II. General NIH Updates

III. General Genomics Updates

IV. NHGRI Extramural Research Program

V. NIH Common Fund/Trans-NIH

VI. NHGRI Division of Policy, Communications, and Education

VII. NHGRI Intramural Research Program

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Genomics and Health Disparities Lecture Series

Sarah Tishkoff, Ph.D.

November 15, 2016

David and Lyn Silfen University Professor
Departments of Genetics and Biology
University of Pennsylvania

Herman Taylor, Jr., M.D., M.P.H.

March 9, 2017

Director, Cardiovascular Research Institute
Professor of Medicine
Morehouse School of Medicine

Mark Cullen, M.D.

June 8, 2017

Director, Stanford Center for Population Health Sciences
Professor of Medicine
Stanford School of Medicine

Document 1

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New Director,
National Institute of Mental Health

NIH
National Institute of Mental Health

Joshua Gordon, M.D., Ph.D.

Document 2

New Director, National Institute of Child Health and Human Development

NIH *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

Diana Bianchi, M.D.

Document 3

New Director, Office of AIDS Research

National Institutes of Health

Maureen Goodenow, Ph.D.

Document 4

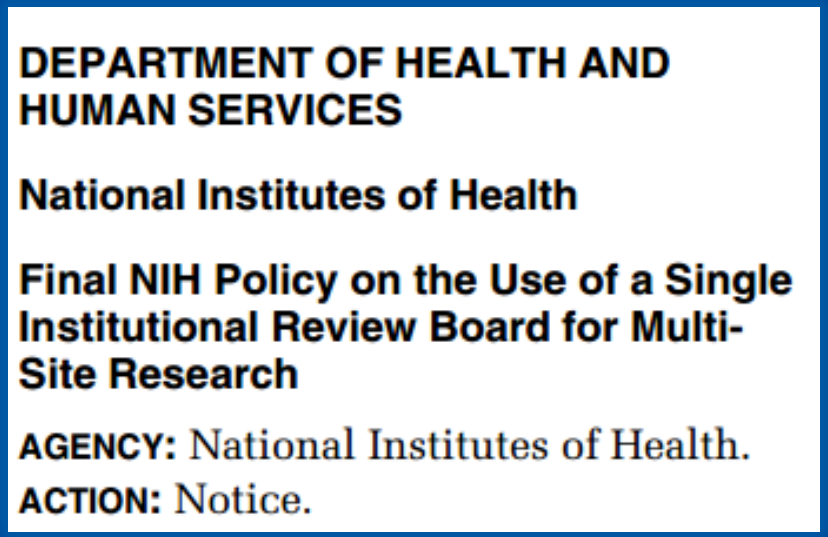
New Editor, *Science*

Jeremy Berg, Ph.D.

Science
AAAS

Document 5

Final NIH Policy on Use of a Single IRB



DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Final NIH Policy on the Use of a Single Institutional Review Board for Multi-Site Research

AGENCY: National Institutes of Health.

ACTION: Notice.

- Released on June 21, 2016
- All multi-site research funded by NIH must use a single IRB for ethical review
- Intended to promote efficiency while maintaining human subjects protections

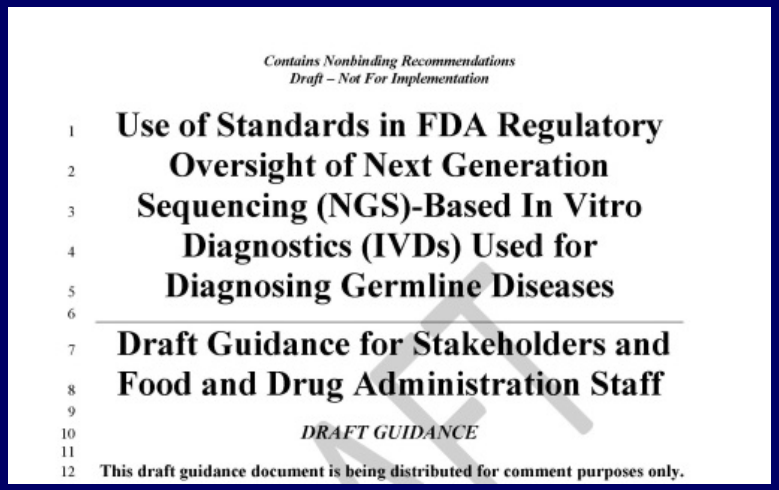
Document 6

SBIR/STTR Reauthorization

SBIR · STTR
America's Seed Fund™
POWERED BY SBA

Document 7

New FDA Draft Guidances on Next-Generation Sequencing (NGS) Tests



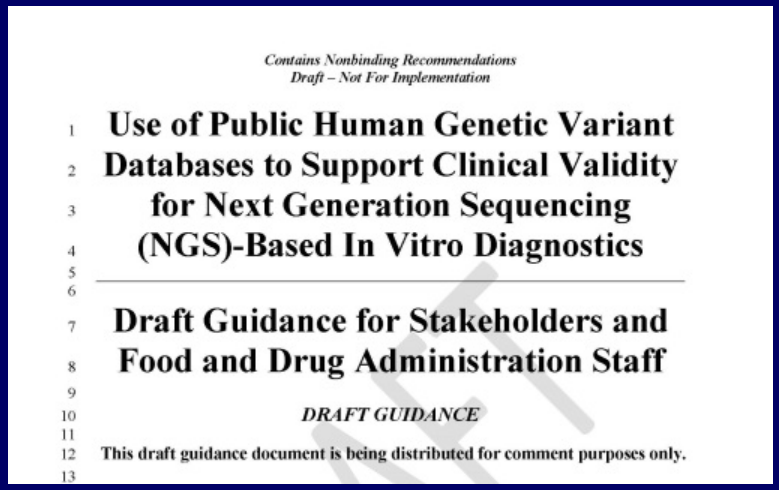
Contains Nonbinding Recommendations
Draft – Not For Implementation

Use of Standards in FDA Regulatory Oversight of Next Generation Sequencing (NGS)-Based In Vitro Diagnostics (IVDs) Used for Diagnosing Germline Diseases

Draft Guidance for Stakeholders and Food and Drug Administration Staff

DRAFT GUIDANCE

This draft guidance document is being distributed for comment purposes only.



Contains Nonbinding Recommendations
Draft – Not For Implementation

Use of Public Human Genetic Variant Databases to Support Clinical Validity for Next Generation Sequencing (NGS)-Based In Vitro Diagnostics

Draft Guidance for Stakeholders and Food and Drug Administration Staff

DRAFT GUIDANCE

This draft guidance document is being distributed for comment purposes only.

- Analytical validity standards for NGS tests used to detect germline diseases
- Use of public genomic variant databases to support clinical validity of NGS tests
- Public comment period closes October 6, 2016

Document 8

New EEOC Rules: GINA and Workplace Wellness Programs

- GINA: Incentives for employees' spouses' health information
- ADA: Incentives for employees' health information

Document 9

‘Cures’ Legislation Update

- Proposes funding increases for NIH
- Congressional movement hoped for in September

Document 10

NIH Appropriations and Budget

	FY2016 Enacted	FY2017 President Obama Request
NIH	$32.3 B	$33.1 B
NHGRI	$513.2 M	$513.2 M

Document 11

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Mardis & Wilson Heading to Nationwide Children's Hospital

Elaine Mardis, Ph.D.
Rick Wilson, Ph.D.

NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.℠

Document 12

Global Alliance for Genomics and Health Perspective in *Science*

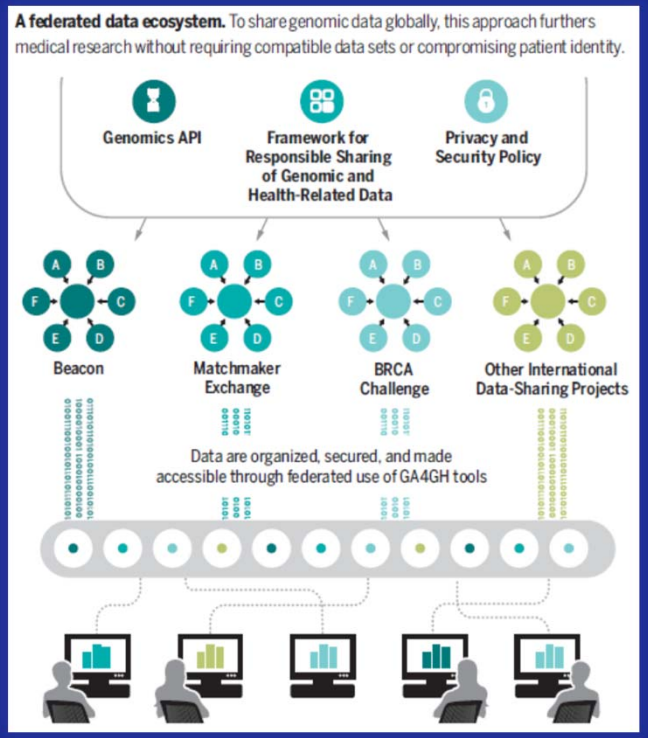
GENOMICS

A federated ecosystem for sharing genomic, clinical data

Silos of genome data collection are being transformed into seamlessly connected, independent systems

The Global Alliance for Genomics and Health*

Early data-sharing efforts have led to improved variant interpretation and development of treatments for rare diseases and some cancer types (*1*–*3*). However, such benefits will only be available to the general population if repositories, a federated system will allow legal data control to remain within the originating jurisdiction (see the figure). International consortia such as the International Cancer Genome Consortium (ICGC) have already adopted federated databases because the model allows local databases to maintain autonomy (*5*).



Global Alliance for Genomics & Health

Collaborate. Innovate. Accelerate.

Document 13

Genomes In The News…

Document 14

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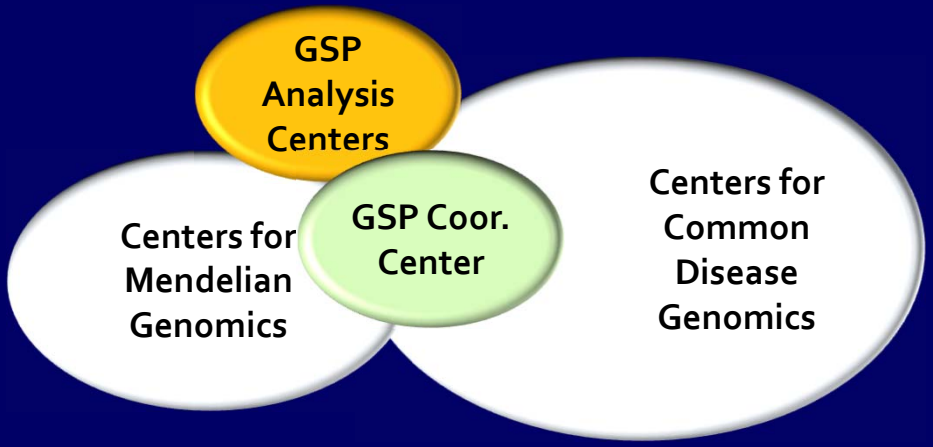
Genome Sequencing Program



New Addition: Analysis Centers

Harvard School of Public Health Broad Institute Brigham and Women's Hospital		Xihong Lin Benjamin Neale Shamil Sunyaev
Stanford University University of California San Francisco Mount Sinai		Carlos Bustamante Esteban Burchard Eimear Kenny
Vanderbilt University		Bingshan Li Nancy Cox

~$11M total over 4 years

Document 15

Genome Sequencing Program

High-Quality Genome Sequences

University of California Santa Cruz		Richard (Ed) Green
Washington University University of Washington		Richard Wilson Evan Eichler

~$8M total over 4 years

Cell; 2015;164:550-63. doi: 10.1016/j.cell.2015.12.028

Cancer Cell; 2016;29:723-36. doi: 10.1016/j.ccell.2016.04.002

Nat Genet; 2016;48:607-16. doi: 10.1038/ng.3564. Epub 2016.05.9

npj Breast Cancer 2; 2016; pii: 16007 doi:10.1038/npjbcancer.2016.7

npj | Breast Cancer

www.nature.com/npjbcancer

ARTICLE OPEN

DNA defects, epigenetics, and gene expression in cancer-adjacent breast: a study from The Cancer Genome Atlas

Melissa A Troester[1,2,3], Katherine A Hoadley[1,4], Monica D'Arcy[1,2], Andrew D Cherniack[5], Chip Stewart[5], Daniel C Koboldt[6], A Gordon Robertson[7], Swapna Mahurkar[8], Hui Shen[9], Matthew D Wilkerson[1,4], Rupninder Sandhu[1], Nicole B Johnson[10], Kimberly H Allison[11], Andrew H Beck[12], Christina Yau[13], Jay Bowen[14], Margi Sheth[15], E Shelley Hwang[16], Charles M Perou[1,3,4], Peter W Laird[9], Li Ding[6,17] and Christopher C Benz[13]

Recurrence rates after breast-conserving therapy may depend on genomic characteristics of cancer-adjacent, benign-appearing tissue. Studies have not evaluated recurrence in association with multiple genomic characteristics of cancer-adjacent breast tissue. To estimate the prevalence of DNA defects and RNA expression subtypes in cancer-adjacent, benign-appearing breast tissue at least 2 cm from the tumor margin, cancer-adjacent, pathologically well-characterized, benign-appearing breast tissue specimens from The Cancer Genome Atlas project were analyzed for DNA sequence, copy-number variation, DNA methylation, messenger RNA (mRNA) sequence, and mRNA/microRNA expression. Additional samples were also analyzed by at least one of these genomic data types and associations between genomic characteristics of normal tissue and overall survival were assessed. Approximately 40% of cancer-adjacent, benign-appearing tissues harbored genomic defects in DNA copy number, sequence, methylation, or in RNA sequence, although these defects did not significantly predict 10-year overall survival. Two mRNA/microRNA expression phenotypes were observed, including an active mRNA subtype that was identified in 40% of samples. Controlling for tumor characteristics and the presence of genomic defects, this active subtype was associated with significantly worse 10-year survival among estrogen receptor (ER)-positive cases. This multi-platform analysis of breast cancer-adjacent samples produced genomic findings consistent with current surgical margin guidelines, and provides evidence that extratumoral RNA expression patterns in cancer-adjacent tissue predict overall survival among patients with ER-positive disease.

npj Breast Cancer (2016) **2,** 16007; doi:10.1038/npjbcancer.2016.7; published online 4 May 2016

Document 16

NIH NATIONAL CANCER INSTITUTE
Genomic Data Commons

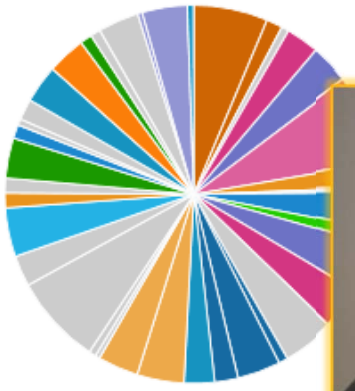
CCG Web Site | Contact Us | Launch Data Portal | GDC Apps

Search this website

About the GDC | About the Data | Access Data | Submit Data | For Developers | Support | News

The Next Generation Cancer Knowledge Network

Case Distribution by Disease Type



The NCI's Genomic Data Commons (GDC) provides the cancer research community with a unified data repository that enables data sharing across cancer genomic studies in

Access Data

The **GDC Data Portal** provides a platform for efficiently querying and downloading high quality and complete data. The GDC also provides a **GDC Data Transfer Tool** and a **GDC API** for programmatic access.

ssing Data

ols
sion including the
on Portal, a
bmitting clinical,
all volumes of
ll as the **GDC Data**

Document 16

Technology Development Program

- **Novel Nucleic Acid Sequencing Technology Development**
  - RFA-HG-15-031 (to 33; R01, R21, and R43/44)
  - Upcoming due date: June 15, 2017
- **Novel Genome Technology Development**
  - PAR-16-14 (to 17; R01, R21, R43/44, and R44)
  - Upcoming due dates: October 31, 2016 and 2017

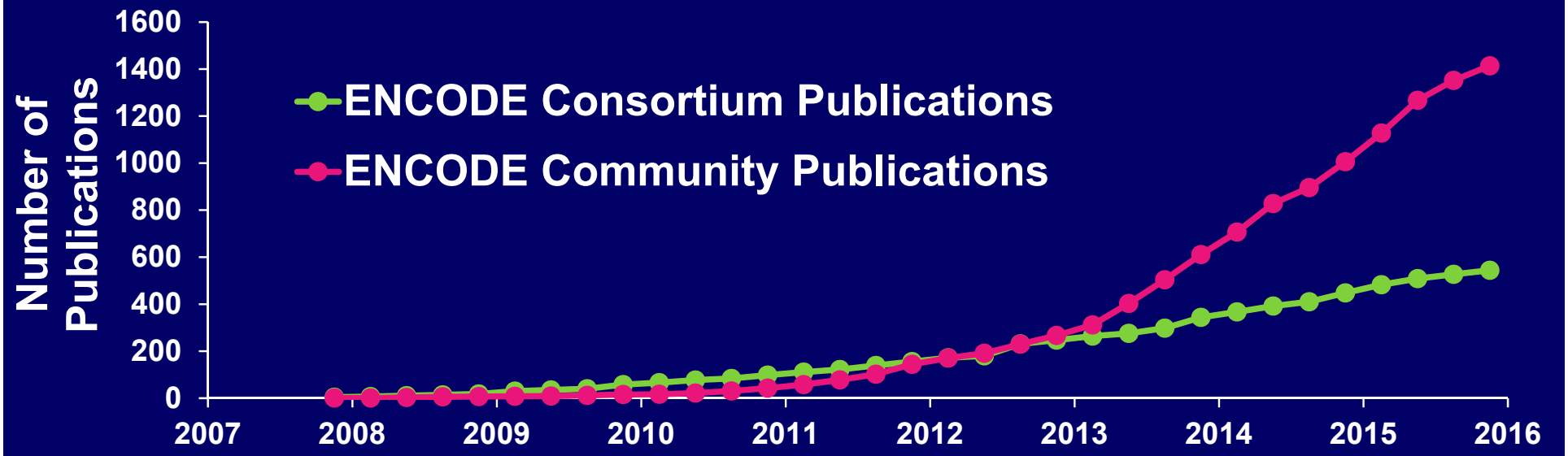
Encyclopedia of DNA Elements (ENCODE)

- **ENCODE Outreach**

  ENCODE 2016: Research Applications and Users Meeting
  June 8-10: Palo Alto, CA

  Tutorials at 2016 ASHG Meeting
  October 18, 21: Vancouver, BC

- **Publications Using ENCODE Data**



Document 18

Encyclopedia of DNA Elements (ENCODE)

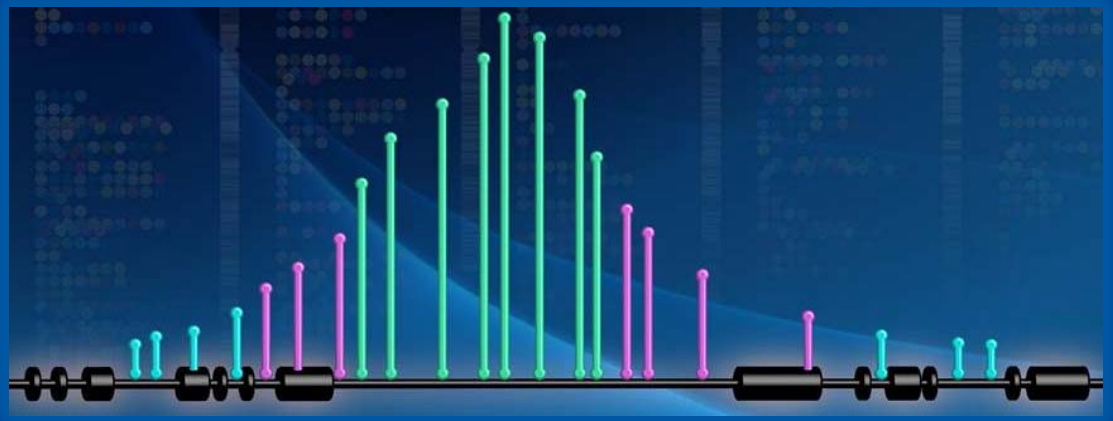
- **Applications received and reviewed for these FOAs:**
  - Expanding the Encyclopedia of DNA Elements (ENCODE) in the Human and Mouse (RFA-HG-16-002)
  - Characterizing the Functional Elements in the Encyclopedia of DNA Elements (ENCODE) Catalog (RFA-HG-16-003)
  - Computational Analysis of the Encyclopedia of DNA Elements (ENCODE) Data (RFA-HG-16-004)
  - ENCODE Data Coordination Center (RFA-HG-16-005)
  - ENCODE Data Analysis Center (RFA-HG-16-006)
- **Key Dates:**

Scientific Merit Review	Summer 2016
Advisory Council Review	September 2016
Anticipated Start Date	February 2017

Document 18

Non-Coding Variants (NoVa) Program

- Develop computational approaches to implicate non-coding genomic variants with phenotypes and test predictions using experimental data
- 5 new awards (1 by NCI), joining 6 existing ones
- Autoimmune disorders, cancer, schizophrenia, arthritis, heart disease, and chemotherapy response



eMERGE network

ELECTRONIC MEDICAL RECORDS AND GENOMICS

- 70,599 total views
- 12,379 articles downloaded

eMERGE eBook: Description of the Network's contribution to genomics

Document 20

ClinGen: Sharing Data. Building Knowledge. Improving Care.

Official journal of the American College of Medical Genetics and Genomics **ORIGINAL RESEARCH ARTICLE** Genetics inMedicine

Open

A standardized, evidence-based protocol to assess clinical actionability of genetic disorders associated with genomic variation

Jessica Ezzell Hunter, MS, PhD[1], Stephanie A. Irving, MHS[1], Leslie G. Biesecker, MD[2], Adam Buchanan, MS, MPH[3], Brian Jensen, MD[4], Kristy Lee, MS[5], Christa Lese Martin, PhD[6], Laura Milko, PhD[5], Kristin Muessig, MS[1], Annie D. Niehaus, BA[7], Julianne O'Daniel, MS[5], Margaret A. Piper, PhD, MPH[1], Erin M. Ramos, MPH, PhD[7], Sheri D. Schully, PhD[8], Alan F. Scott, PhD[9], Anne Slavotinek, MBBS, PhD[10], Nara Sobreira, MD, PhD[9], Natasha Strande, PhD[5], Meredith Weaver, ScM, PhD[11], Elizabeth M. Webber, MS[1], Marc S. Williams, MD[3], Jonathan S. Berg, MD, PhD[5], James P. Evans, MD, PhD[5], Katrina A.B. Goddard, PhD[1]; on behalf of the ClinGen Resource

PRECISION MEDICINE INITIATIVE®
COHORT PROGRAM

Curating the Clinical Genome

WELLCOME GENOME CAMPUS | ADVANCED COURSES AND SCIENTIFIC CONFERENCES

ASHG2016
VANCOUVER • OCTOBER 18-22, 2016
SHARING DISCOVERIES. SHAPING OUR FUTURE.

Document 21

Clinical Sequencing Exploratory Research Program

- Enrolled 4,954 adults and 1,261 children
- 289 publications, 18 working group publications

Document 22

Implementing Genomics In Practice (IGNITE) Network

Unifying the Evaluation and Implementation of Genomic Medicine

- Create a process for providing information on clinical utility of genomic results
- Consider coverage for time spent communicating genomic results
- Consider coverage for periodic re-analysis of genome sequence data
- Ensure genome sequence data follow the patient between insurers

Document 23

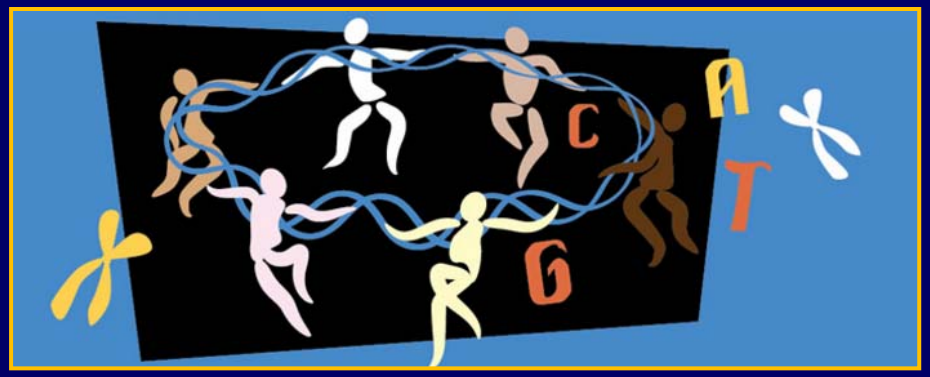
Implementing Genomics In Practice (IGNITE) Network

IGNITE & Beyond: The Future of Genomic Medicine Implementation

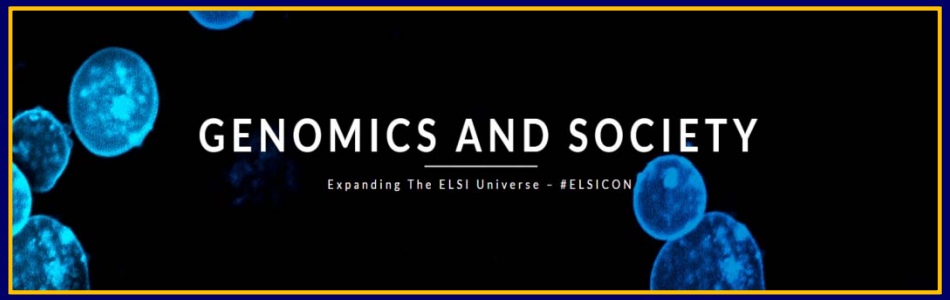
- Follow-up single-site studies with larger-scale studies
- Collaborate with community centers to increase access in underrepresented and lower socioeconomic populations
- Partner with stakeholders throughout study design, conduct, and interpretation phases

Document 23

Ethical, Legal, and Social Implications (ELSI) Research Program



- Sample applications and summary statements available on the ELSI website
- 4th ELSI Congress – June 5-7, 2017



Document 24

Genomics and Society Working Group

- In-person meeting in June
  - ELSI research issues related to precision medicine
  - Effectiveness of embedded ELSI research
  - Boundary between ELSI research and health services research
- Update at February Council meeting

Document 25

New Centers of Excellence in ELSI Research (CEERs) Awards

- ELSI for Precision Medicine and Infectious Disease (Johns Hopkins)
- Genetic Privacy and Identity in Community Settings (Vanderbilt University)
- Utah Center of Excellence in ELSI Research (University of Utah)
- Center on American Indian and Alaska Native Genomic Research (University of Oklahoma)

Document 26

Computational Genomics and Data Science Program

Reorganization of the Model Organism Databases

- **New organizational model:**

  GO Consortium, MGD, SGD, ZFIN, WormBase, FlyBase

- **Meetings in May 2015 and May 2016**
- **Supplement request submitted in July 2016 to establish the Alliance of Genome Resources**

Document 27

Training and Career Development

- **New T32s – Genomic Medicine**

  University of Utah – Lynn Jorde

  Vanderbilt University – Josh Denny

  University of Alabama/HudsonAlpha – Bruce Korf and Greg Barsh

- **New T32 – ELSI**

  Stanford University – Mildred Cho

Training and Career Development

- **2017 NHGRI Research Training and Career Development Meeting**
  - April 12-14, 2017 in St. Louis
- **Re-issued Diversity Action Plan announcement**
  - PAR-16-345 published in June 2016
  - No longer limited competition
  - Expand into genomic medicine and ELSI research

Document 28

International Genomics Education Meeting

- Genomics training for healthcare providers
- USA, Australia, Canada, England, and Wales
- Certificate and master's programs
- Coordinated resources including point-of-care

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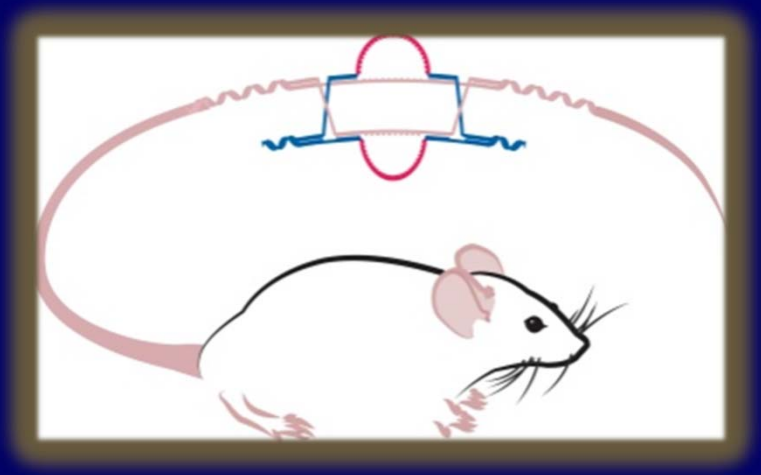
Knockout Mouse Phenotyping Project (KOMP2)



IMPC
International Mouse Phenotyping Consortium

- Entering second 5-year phase of NIH Common Fund support
- Awards issued in August
- Annual Meeting – Oct. 12-14, 2016
- Characterization of embryo lethal strains (*Nature*, in press)

Human Heredity and Health in Africa (H3Africa)

- 9th Consortium Meeting in October (Mauritius)
  - Opening by Mauritius President Ameenah Gurib
  - Ethics workshop – provision of research findings
  - Science workshop – HIV co-morbidities

Document 30

Human Heredity and Health in Africa (H3Africa)

- Seven RFAs for second phase (2016-2021)

Administrative Coordinating Center (U24)

Research Projects (U01)

Collaborative Centers (U54)

ELSI Research Program (U01)

ELSI Collaborative Centers (U54)

Informatics Network (U24)

Global Health Bioinformatics Training (UR2)

- Applications due November 15, 2016

Document 30

Undiagnosed Diseases Network (UDN)

Publications from the UDN

A recurrent p.Arg92Trp variant in steroidogenic factor-1 (NR5A1) can act as a molecular switch in human sex development
7/4/2016
Human Molecular Genetics

The NIH Undiagnosed Diseases Program and Network: Applications to modern medicine
4/2016
Molecular Genetics and Metabolism

The Undiagnosed Diseases Network of the National Institutes of Health: A National Extension
11/3/2015
JAMA

Participant Pages

- Participant Page 001
- Participant Page 002
- Participant Page 003
- Participant Page 004

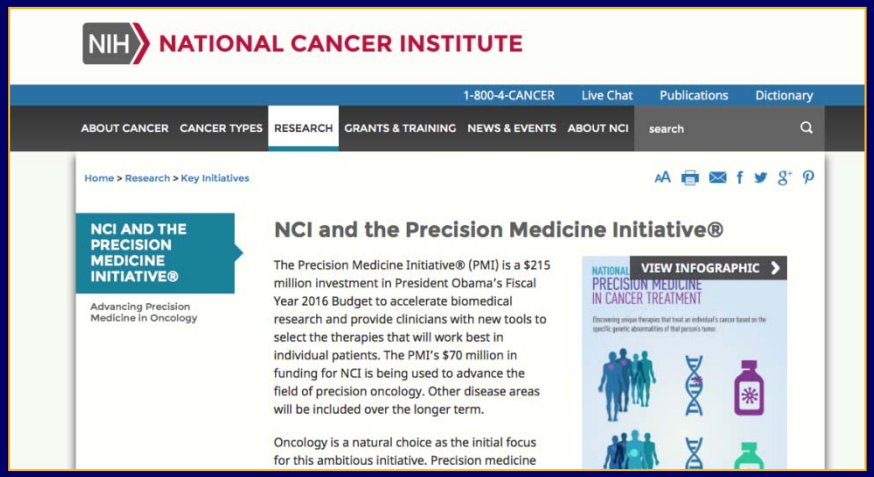
Genes of Interest

- ARHGEF17 Gene
- CACNA1A Gene
- DUOX2 Gene
- NACC1 Gene
- TBX2 Gene
- ZBTB24 Gene

795 applications
281 acceptances

Document 31

Precision Medicine Initiative (PMI)



Document 32

Precision Medicine Initiative (PMI)

PMI Cohort Program Awards Announced

NEWS RELEASES

Wednesday, July 6, 2016

NIH awards $55 million to build million-person precision medicine study

Launch expected later this year

Francis S. Collins @NIHDirector · Jul 6

Great Op Ed by @POTUS in @BostonGlobe on giant steps forward on #PrecisionMedicine Initiative at #NIH & beyond:

The more we understand about individual differences, the better able we will be to effectively prevent and treat illness.

--- Francis S. Collins, M.D. Ph.D., NIH Director

[Precision medicine is..] one of the greatest opportunities we've ever seen for new medical breakthroughs, but it only works if we collect enough information first."

--- Barak Obama, President of the United States

The Boston Globe

OPINION | BARACK OBAMA

Medicine's next step

JUSTIN SULLIVAN/GETTY IMAGES/FILE

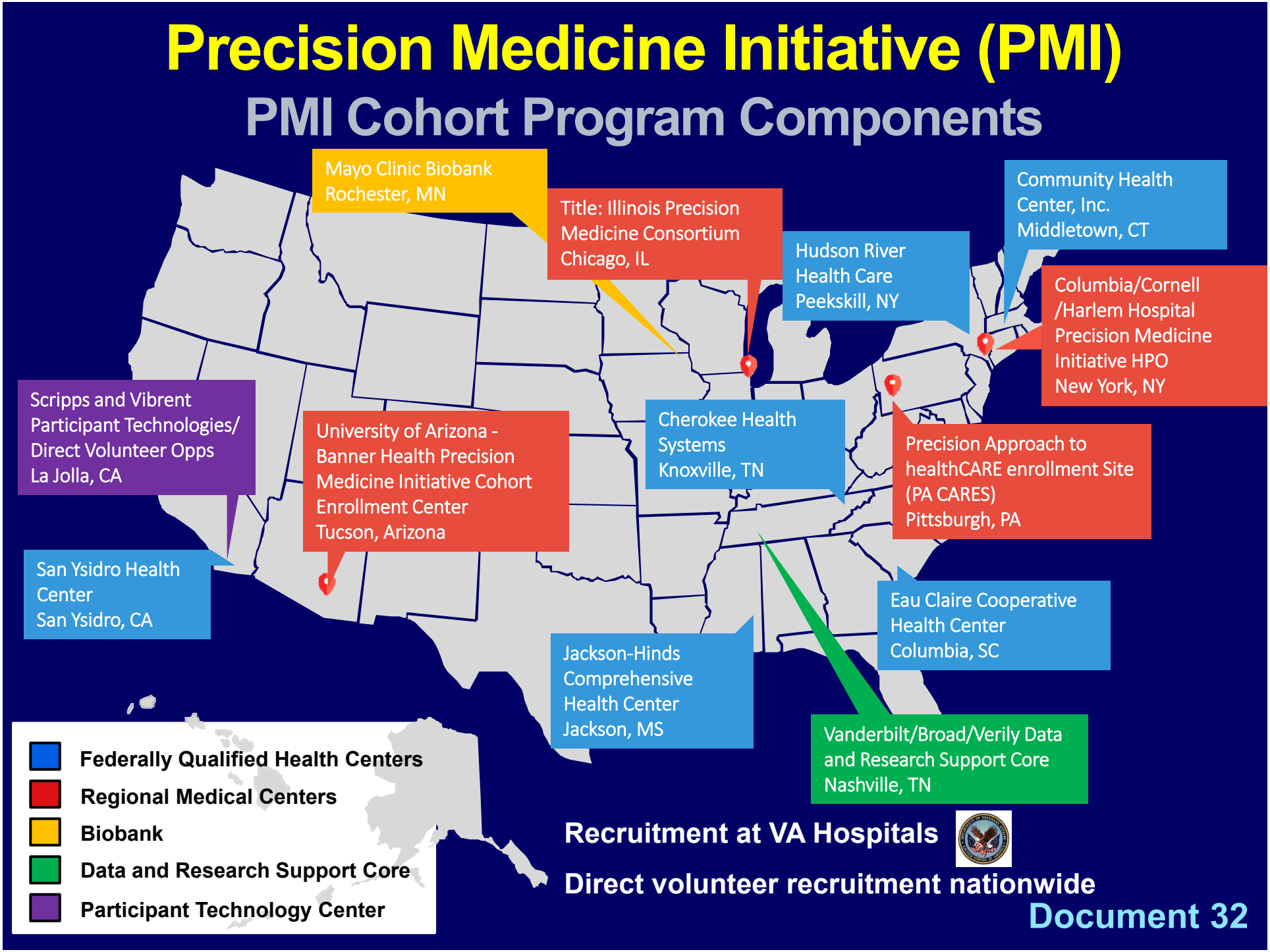
A breast cancer patient received a trial medication treatment in San Francisco in 2005.

By Barack Obama | JULY 07, 2016

Document 32

Precision Medicine Initiative (PMI)

PMI Cohort Program Components



Recruitment at VA Hospitals

Direct volunteer recruitment nationwide

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New ASHG-NHGRI Fellows

Christa Wagner, Ph.D.

Genetics and Public Policy Fellow

Teresa Ramirez, Ph.D.

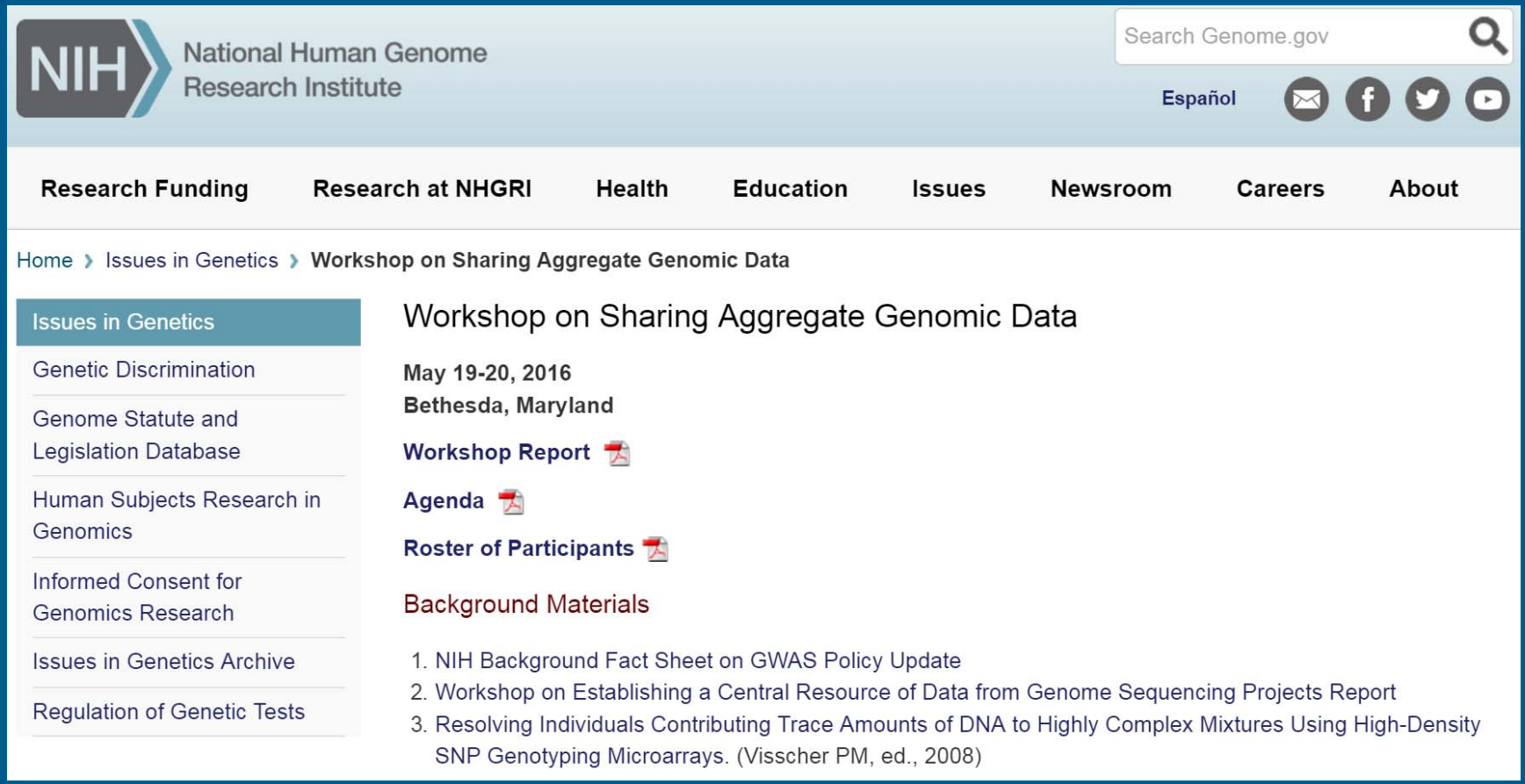
Genetics and Education Fellow

NHGRI IDE and Genomics Workshop

- Meeting report and video available on genome.gov
- White paper offering points for investigators to consider now being drafted

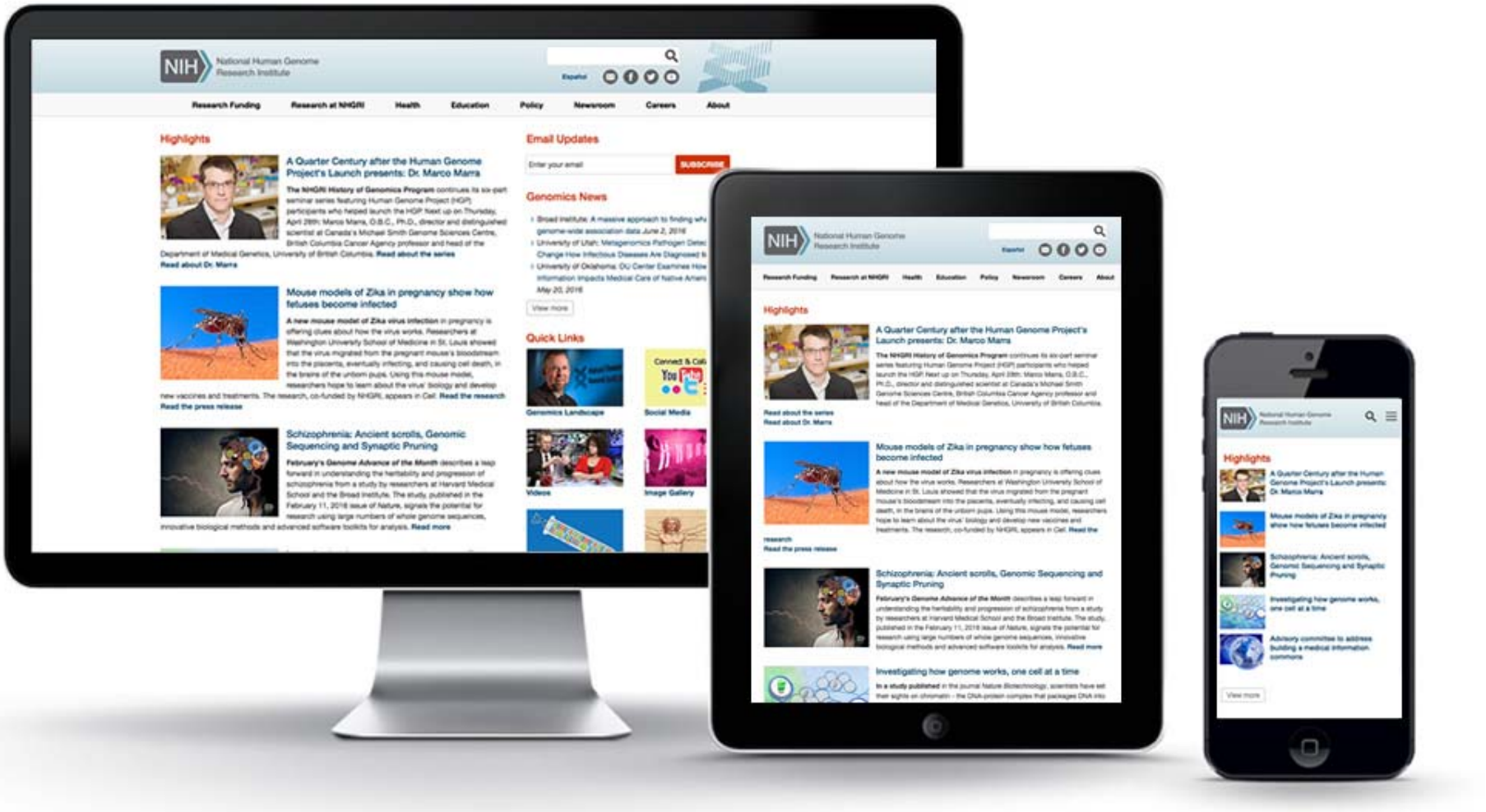
Document 34

Workshop on Sharing Aggregate Genomic Data

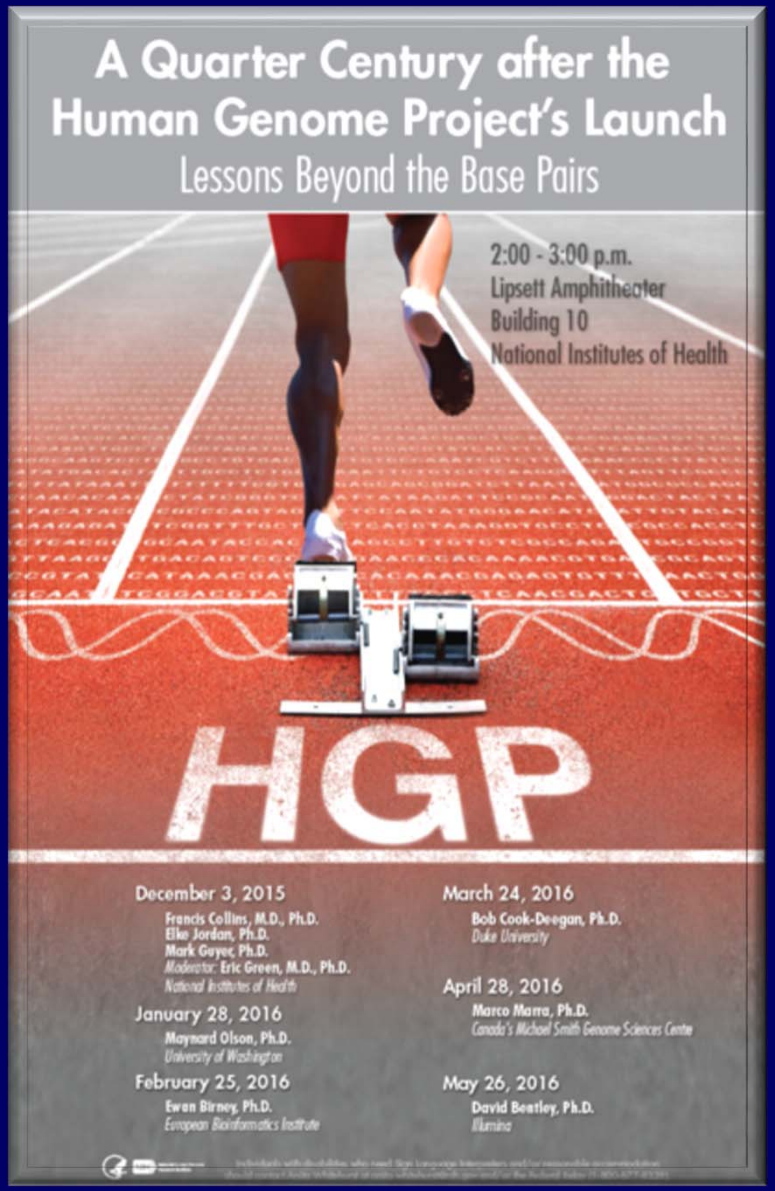


Document 35

Mobile Friendly Genome.gov



History of Genomics Program Lecture Series



David Bentley, D.Phil.

Document 37

Genome: Unlocking Life's Code Exhibition

Travel Schedule

2016

May 21-September 5
Natural History Museum of Utah
Salt Lake City, UT

September 30-January 1
Exploration Place
Wichita, KS

2017

January 28-May 29
Peoria Riverfront Museum
Peoria, IL

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Smithsonian's Pulse on Modern Medicine

The Pulse on Modern Medicine

Insights from NIH Experts

Our new series, presented in collaboration with the National Institutes of Health, reveals what is currently "hot" in biomedical research—and what it all means for our health and medicine.

From the Human Genome Project to Precision Medicine

A Journey to Advance Human Health

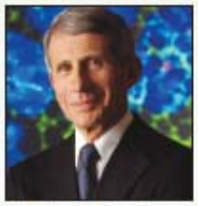
ALL PHOTOS: NATIONAL INSTITUTES OF HEALTH

Eric Green

Since the launch of the Human Genome Project in 1990, spectacular achievements in genomics have fueled the study of human biology and disease. Revolutionary new technologies have been used to explain the complex workings of our genomes and to unravel the genomic bases of disease. There have also been advances in electronic health records, data science, and technologies for capturing a person's environmental, physiological, and lifestyle information—providing more powerful ways to decipher the underpinnings of health and disease.

Tonight, **Eric Green,** director, National Human Genome Research Institute (NHGRI), explores the new era of genomic medicine and also discusses a major new research endeavor, the U.S. Precision Medicine Initiative, which aims to establish new approaches for disease treatment and prevention. Learn about these exciting developments and their relevance to our health today and in the future.

William Gahl



Anthony Fauci

Gary Gibbons

Julie Segre

An introductory talk by **Larry Brody,** director of the Division of Genomics and Society and senior investigator in the Medical Genomics and Metabolic Genetics Branch, NHGRI, from 6:45–7:30 p.m., provides appropriate background information on genetics and genomics. Refreshments will be offered during a 15-minute break between the presentations.

Opening session: Eric Green, director, National Human Genome Research Institute; Tues., Sept. 6, 6:45–8:45 p.m.; location indicated on ticket; CODE 1B0-171; Members $30; Nonmembers $45

Upcoming sessions: William Gahl, clinical director, National Human Genome Research Institute and director, NIH Undiagnosed Diseases Program; Thurs., Oct. 13, CODE 1B0-172; Anthony Fauci, director, National Institute of Allergy and Infectious Diseases; Thurs., Nov. 17, CODE 1B0-173; Julie Segre, head, Microbial Genomics Section and chief, Translational and Functional Genomics Branch, NHGRI; Thurs., Dec. 8, CODE 1B0-174; Gary Gibbons, director, National Heart, Lung, and Blood Institute; Jan. 24, CODE 1B0-175; Members $30; Nonmembers $45

Full Series: 5 sessions; Tues., Sept. 6; Thurs., Oct. 13; Thurs., Nov. 17; Thurs., Dec. 8; Tues., Jan. 24, 6:45–8:45 p.m.; Ripley Center; CODE 1B0-176; Members $130; Nonmembers $200

Partnership for Community Outreach and Engagement in Genomics

NHGRI

Partnership for Community Outreach & Engagement in Genomics

Local Community Outreach Programs

NHGRI 2016 Short Course in Genomics

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Short Course in Genomics: Nurse, Physician Assistant, and Faculty Track

- Enhance genomics education of health professionals to aid integration of genomics into practice
- Nurse and physician assistant educator participants
- Genomics primer, competencies, resources, curriculum strategies, and integration into clinical practice
- Website and 'Community of Practice' listserv

National Human Genome Research Institute
Short Course in Genomics
Nurse, Physician Assistant and Faculty Track

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Webinars for Health Insurers and Payers: Understanding Genetic Testing

- Webinar series for medical staff in insurance industry
- Goal: Prepare insurers to understand genetic testing strategies, interpretation, outcomes, and patient care
- Live monthly audiences consisted of ~70 participants
- Recorded webinars available for continuing education

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Family Health History Tool Meeting

- 14 tool developers/vendors (4 NHGRI-funded)
- Data standards, EHR integration, and clinical decision support

Director's Report Outline

I. General NHGRI Updates

II. General NIH Updates

III. General Genomics Updates

IV. NHGRI Extramural Research Program

V. NIH Common Fund/Trans-NIH

VI. NHGRI Division of Policy, Communications, and Education

VII. NHGRI Intramural Research Program

NHGRI Intramural Research Highlights

The NEW ENGLAND JOURNAL of MEDICINE

Will Precision Medicine Move Us Beyond Race?

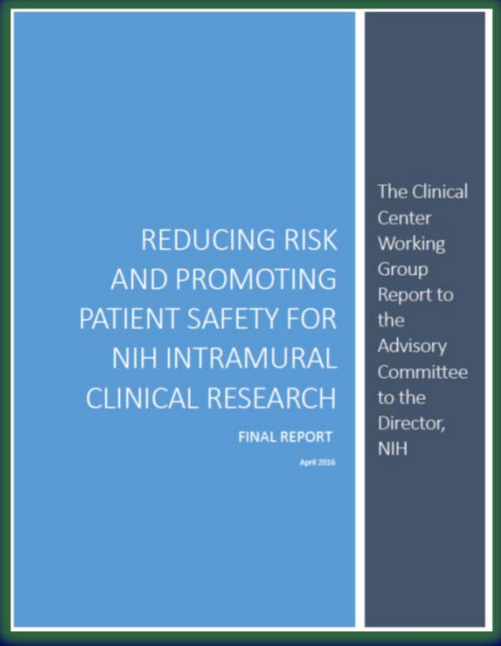
nature

The Genetic Architecture of Type 2 Diabetes

JNeurosci
THE JOURNAL OF NEUROSCIENCE

A New Glucocerebrosidase Chaperone Reduces α-Synuclein and Glycolipid Levels in iPSC-Derived Dopaminergic Neurons from Patients with Gaucher Disease and Parkinsonism

Changes at the NIH Clinical Center



Themes of 'Red Team' Recommendations:

- **Culture of safety and quality**
- **Leadership for care, oversight, and compliance**
- **Sterile processing procedures and facilities**

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Enhancing Accountability & Consistency

- Clinical Center Research Hospital Board held first meeting in July
- Clinical Practice Committee to review standards for patient care and further enhance patient safety and quality
- Town meetings and focus groups to engage Institute and Clinical Center communities on next steps

NIH Clinical Center Leadership Updates

Recruiting a Clinical Center CEO

John Gallin, M.D.
Associate Director for Clinical Research

Andy Griffith, M.D., Ph.D.
Acting Director, Office of Research Support and Compliance

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To receive *The Genomics Landscape*, go to list.nih.gov

Search for NHGRILANDSCAPE

Past issues can be accessed at: genome.gov/27527308

National Human Genome Research Institute

Advancing human health through genomics research

Special Thanks!


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through genomics research