

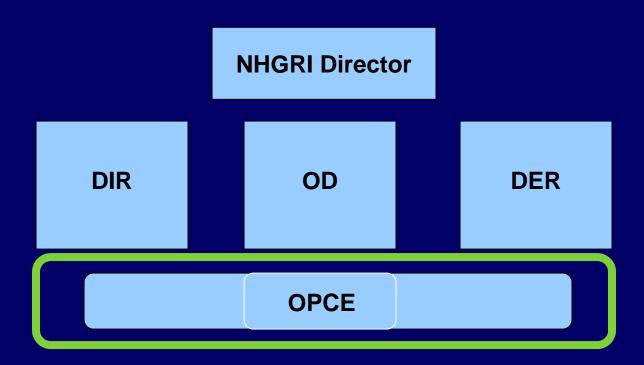
Update from the Office of Policy, Communications & Education

Who, What, and Why ...

Laura Lyman Rodriguez, Ph.D.

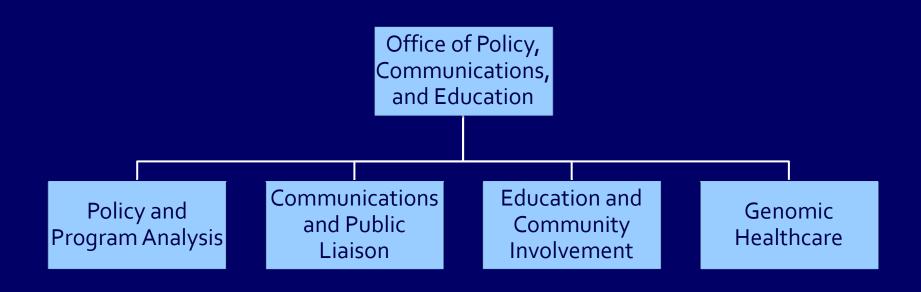
National Advisory Council for Human Genome Research
September 12, 2011

NHGRI and OPCE

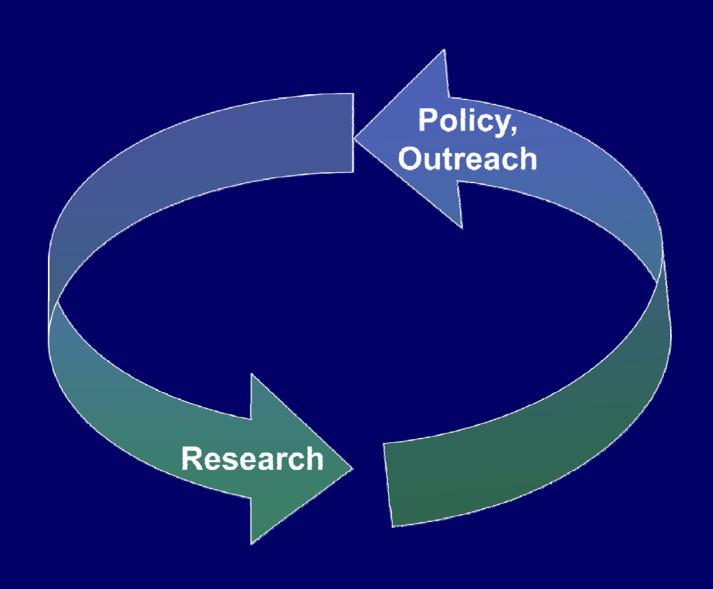


OPCE Overview

Mission: To promote the integration and utilization of genomic knowledge to advance human health and society.



Aim: Iterative Dialog and Process



Who We Are

Immediate Office



Laura Rodriguez



Rosann Wise



Alice Bailey



Nicole Moore

Policy and Program Analysis Branch (PPAB)



Derek Scholes Branch Chief



Jonathan Gitlin



Sanja Basaric



Tracey Crawford

Genomic Healthcare Branch (GHB)







Jean Jenkins

Education and Community Involvement Branch (ECIB)



Vence Bonham Branch Chief



Carla Easter



Jeffre Witherly



Linda Turner

Communications and Public Liaison Branch (CPLB)



Larry Thompson Branch Chief



Jeannine Mjoseth
Deputy Chief



Ray MacDougall



Geoff Spencer



Omar McCrimmon



Maggie Bartlett



Jane Ades



Judy Wyatt



David Smith



Alan Klemm



Mukul Nerukar



Mabel Bialecki



Alvaro Encinas

What We Do: OPCE Function(s)



Who are OPCE's Audiences?



The New Hork Fimes









Audiences = Potential Partners



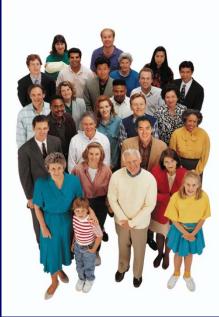












Plus ... Fellow Parts of the Administration





U.S. Food and Drug Administration

















(SACGHS)





Policy and Program Analysis



Derek Scholes



Jonathan Gitlin



Sanja Basaric



Tracey Crawford









FY2012 Appropriations Update

FY2012 President's Request:

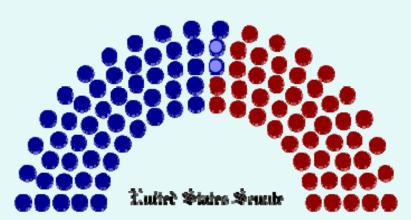
NIH - \$32 B (+2.4%) NHGRI - \$525 M (+1.7%)



- House: Passed 6 of 12, 3 out of committee, and 3 (including Labor/HHS) pending
- Senate: Passed 1 of 12, 3 out of committee, and 8 pending
- Continuing Resolution likely

Understanding through Relationships

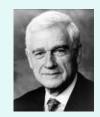


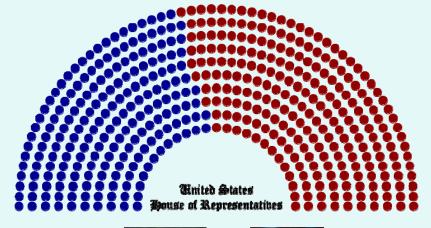








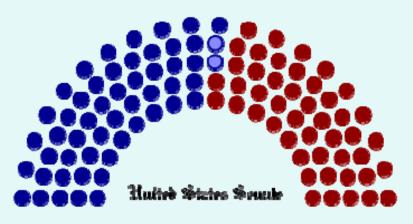


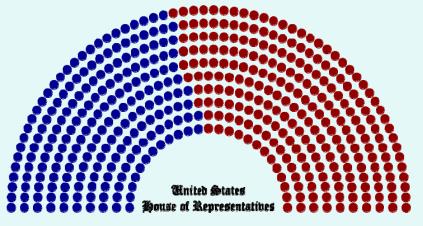






Building Relationships





Appropriations









Authorizing





Appropriations









Authorizing





Others with a Special Interest

Maryland Delegation



Barbara Mikulski (D)



Ben Cardin (D)



Chris Van Hollen (D)

Members with Expressed Interest





Anna Eshoo CA (D)



Xavier Becerra CA (D)



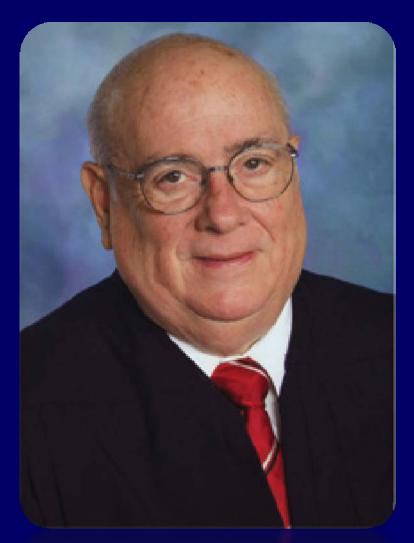
Richard Burr NC (R)



Brian Bilbray CA (R)

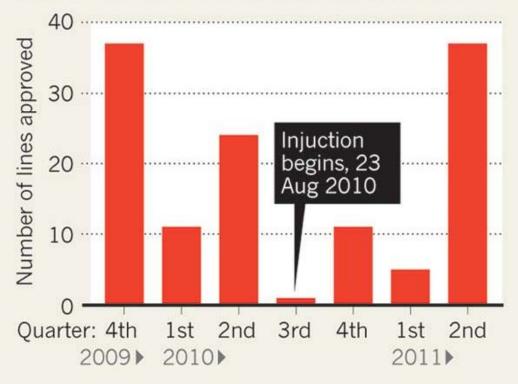


Courts give NIH hESC funding the all-clear



BOUNCING BACK

The NIH has approved 42 stem-cell lines this year, ending a lull that followed the 2010 injunction.



Judge Royce Lamberth

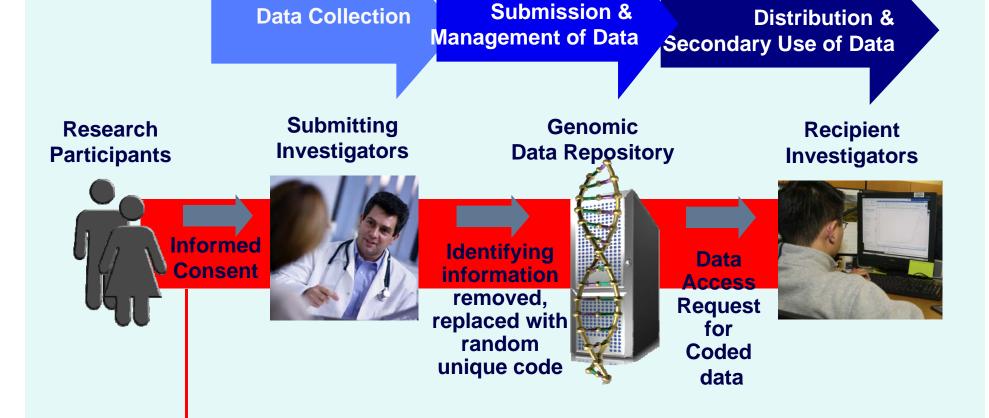
Appeals Court Rules on Myriad Gene Patents



Neal Katyal, ex-Acting Solicitor General

- Isolated DNA is patent-eligible
- cDNA is patent-eligible
- Methods claim to associate genotype to phenotype invalid as written

Genomic Data Sharing Policies



Data Use Limitations

Updating the Common Rule

- Genetic samples considered inherently identifiable – risk classified as "informational"
- Data security protections, calibrated to level of identifiability
- Written consent required for all uses of existing research samples (short forms, broad consent OK; only applies prospectively)

Advanced Notice of Proposed Rule Making (ANPRM)

Read more about the July 22, 2011 ANPRM for changes under consideration to the Common Rule.

These changes, the most extensive since the Department of Health, Education, and Welfare published proposed rules for the protection of human subjects involved in research on <u>August 14, 1979</u>, are <u>available for public comment until September 26, 2011</u>.



Genomic Healthcare







Jean Jenkins

- Mission to improve the ability of all providers to apply advances in genomics & improve outcomes in patient care.
- Small but nimble: have made enormous use of partnerships and broad information dissemination









NEJM Genomic Medicine Series

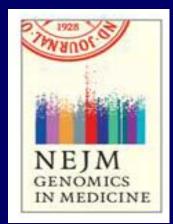
REVIEW ARTICLE

GENOMIC MEDICINE

W. Gregory Feero, M.D., Ph.D., and Alan E. Guttmacher, M.D., Editors

Genomics and the Eye

Val C. Sheffield, M.D., Ph.D., and Edwin M. Stone, M.D., Ph.D.



REVIEW ARTICLE

GENOMIC MEDICINE

W. Gregory Feero, M.D., Ph.D., and Alan E. Guttmacher, M.D., Editors

Microbial Genomics and Infectious Diseases

David A. Relman, M.D.

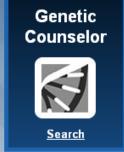
Building Resources



Home My Resources Help About the Project Survey

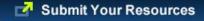


Search Educator Resources:









What you can do on this site:

- Search for genetics/genomics resources to use in your classroom
 Find websites, download PDFs, locate courses-enhance your class content with genetic/genomic resources for <u>Nurses</u>, <u>Physician Assistants</u>, and <u>Genetic Counselors</u>.
- Review the Competency Guidelines and Curriculum Map
 Need to match your classroom genomics teaching to competencies? View the guidelines and the curriculum map to find the right resources to download.
- Share resources, activities, and assessments to be included on this site
 Do you have activities, resources or assessments you would like to share? Submit websites,

The Genetics/Genomics

Competency Center for

Education provides links to
curricular materials and
resources for educators of
Genetic Counselors, Nurses,

Upcoming Meeting: Pharmacist Education in the Era of Genomic Medicine

November 30 –December 1, 2011

14 professional organizations invited



JAMA 2011 Medical Education Issue

I COMMENTARY

9/7/2011



The Journal of the American Medical Association

Genomics Education for Health Care Professionals in the 21st Century

W. Gregory Feero, MD, PhD

Eric D. Green, MD, PhD

far-reaching advances in understanding the molecular basis of human health and disease. The vision for the future of genomics research developed by the National Human Genome Research Institute suggests more discoveries are likely to occur over the next few decades.¹ These insights have helped reveal remarkable and unexpected complexities of human biology; how-

90% lacked confidence in their clinician's ability to understand and use genomic information.⁷

Past efforts to enhance the genomics literacy of health care professionals have often taken the form of a push of information from the genomics community to other professional groups. The underlying assumption of these efforts has been that spontaneous interest in additional genomics education would follow. The push approach has met with reasonable success in the nursing and physician assistant communities. For example, the nursing profession has internally developed genomics education competencies, which have now been broadly adopted across 50 organizations.⁸

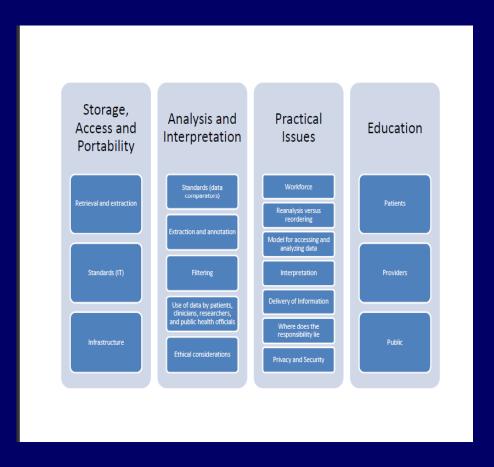
IOM Genomics Roundtable

Integrating Large-Scale Genomic Information into Clinical Practice: A Workshop July 19-20, 2011

5 Sessions:

- Workforce
- Analysis
- Interpretation
- Delivery of Information
- Ethical, legal and social issues

Standing room only!!!



Education & Community Involvement



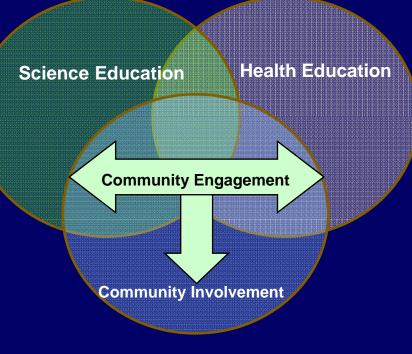
Linda Turner



Jeffre Witherly



Carla Easter





Vence Bonham

Genomic Opportunities for Studying Sickle Cell Disease: December 8-9, 2011

- Sponsored by several NIH Institutes (NHGRI, NHLBI, NICHD, NIDDK, NIMHD, NINDS)
- External Co-Chairs:
 Michael DeBaun, M.D., M.P.H.
 Vanderbilt University
 School of Medicine
 Richard Gibbs, Ph.D.
 Baylor College of Medicine
 Julie Makani, Ph.D.
 Muhimbili University



Working with Communities



BRIGHAM & WOMEN'S HOSPITAL FAMILY HISTORY PROJECT



INITIATIVE DU CHIRURGIEN GÉNÉRAL SUR L'HISTOIRE DE LA FAMILLE

Pour Creer Un Portrait de Sante de Famille En Liga Visitez:

www.hhs.gov/familyhistory/



INICJATYWA NACZELNEGO LEKARZ/ STANÓW ZJEDNOCZONYCII W SPRAWI HISTORII ZDROWIA RODZINY

Brigham and Winner's Hospital Family History Desjoct



LA HERENCIA GENETICA: EL HISTORIAL DE SALUD FAMILIAR



Working Together to Achieve Wellness Through Research







National Congress of American Indians

Education Outreach





Spanish Language Talking Glossary

Inicio Giosario | Versión de texto

Glosario Términos Genéticos

English Version

Buscar en el Glosario

ABGDEFGHIKLM NOPORSTUVWXYZ

Cáncer

Cáncer de Prostata

Carcinógeno

Cariotipo

Cariotipo Espectral (SKY)

Cartografía genética

Célula

Célula madre

Células somáticas

Centimorgan

Centríolo

Centrómero

Centrosoma

Ciclo Celular

Citogenética

Citogenetista

Citoplasma

Citosina

Clonación

Clonación posicional

Código genético

Codominancia Codón

Codón de parada

Columna vertebral de fosfato

Congénito

Consejo genético

Cóntigo (Contig)

Cromátida

Cromatina

Cromosoma

Cromosoma artificial bacteriano (Cromosoma artificial de levadura

Cromosoma sexual

Cromosoma X

Cromosoma Y

Cromosoma

→ Pronunciación

Un cromosoma es un paquete ordenado de ADN que se encuentra en el núcleo de la célula. Los diferentes organismos tienen diferentes números de cromosomas. Los humanos tenemos 23 pares de cromosomas - 22 pares autosómicos, y un par de cromosomas sexuales, X e Y. Cada progenitor contribuye con un cromosoma de su par de autosomas y uno del par sexual, de manera que la descendencia obtenga la mitad de sus cromosomas de su madre y la mitad de su

H) Escuchar Dr. Eric D. Green define

Animación Perfil Ilustración



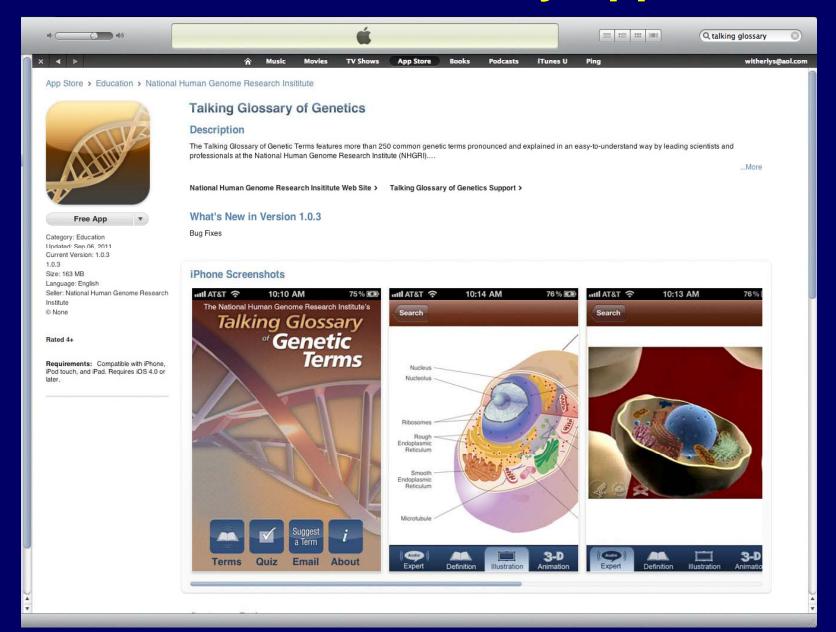
Dr. Eric D. Green

Director Científico del Instituto Nacional para la Investigación del Genoma Humano (NHGRI); Jefe e Investigador Principal de la División de Tecnología del Genoma, Jefe de la Sección de Secuenciación y Mapeo Físico (NISC) y Director de la Seccion

La investigación del Dr. Green se centra en tres áreas principales: En primer lugar. la secuenciación y la comparación de regiones específicas del ADN de una gran variedad de especies con la finalidad de desentrañar la complejidad de la función del genoma; en segundo lugar, el desarrollo de herramientas de investigación y tecnologías innovadoras para la realización de análisis del genoma; y en tercer lugar, la identificación y caracterización de los genes asociados con enfermedades humanas. En sus múltiples funciones como director científico del NHGRI, jefe de la División de Tecnología del Genoma, y director del Centro de Secuenciación (NISC) Intramural del NIH, Dr. Green tiene interes fundamental en mapear, secuenciar e interpretar los genomas de los vertebrados.

Haga clic agui Ponga a prueba 1 CONOCIMIENTO

Genetics Glossary App



2011 NHGRI Summer Workshop in Genomics



- 2011 Genomics Short Course held July 24-29
- 33 participants from the US, Puerto Rico and the US Virgin Islands

Genetics Instruction Lacking Current Concepts in Most States

CBE—Life Sciences Education Vol. 10, 318–327, Fall 2011

Article

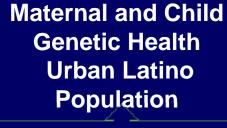
A Comprehensive Analysis of High School Genetics Standards: Are States Keeping Pace with Modern Genetics?

M.J. Dougherty,* C. Pleasants,† L. Solow,‡ A. Wong,* and H. Zhang*

*American Society of Human Genetics, Bethesda, MD 20814; [†]Hampden-Sydney College, Hampden-Sydney, VA 23943; [‡]Wesleyan University, Middletown, CT 06459

- 7 states determined to have 'adequate' standards
- Most states have adequate coverage of between only 3 and 10 of 19 core genetic concepts

Genomic Literacy Workshop



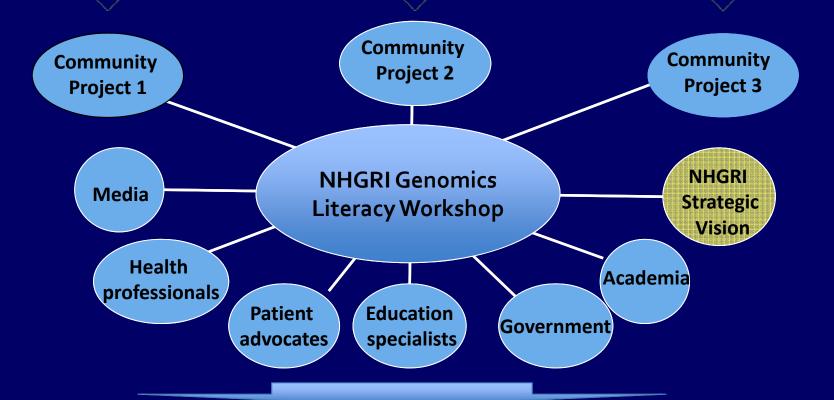
Genetic and Genomic Literacy in Rural Population

Genomic Science, Education and Literacy K-12 Population

Community Conversation 1

Community Conversation 2

Community Conversation 3



"What Does It Mean to be Genomically Literate?"

Communications & Public Liaison



Larry Thompson



Jeannine Mjoseth



Geoff Spencer



Omar McCrimmon



Maggie Bartlett



Jane Ades



Alvaro Encinas



Judy Wyatt



David Smith



Alan Klemm



Mukul Nerukar



Mabel Bialecki





The Washington Post



Provides the Public Face of the Institute



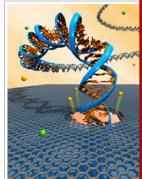


The first phase of eMERGE, genetic information can be cataracts, high-density lipo

> to kev known Guyer, Extrami Mullikin,

selected

NHGRI funds developme NIH-supported work to bo



DNA double-helix illustration. Image Robert Johnson, University of Pennsy

humans and other mammals tha genome using "next-generation



On Other Sites:

Genetic variants in novel pathways influence blood pressure and cardiovascular disease risk Nature, Sept. 11, 2011

National Heart Lung and Blood Institute www.nhlbi.nih.gov

National Human Genome Research Institute www.genome.gov

International genome consortium discovers new genes that control blood pressure

NIH institutes participate in global study that finds new genetic risk factors for cardiovascular disease



Bethesda, Md., Sun., Sept. 11, 2011 - In one of the largest genomics studies ever, an international research consortium that includes the National Institutes of Health has identified 29 genetic variations across 28 regions of the human genome that influence blood pressure. This unprecedented effort brought together more than 230 researchers across six continents and scanned the genomes of over 200,000 people. The results appear in the Sept. 11 edition of Nature.

It is fitting that a global research group came together to provide new insight into a condition that affects over 1 billion people worldwide," said Susan B. Shurin, M.D., acting director of the NIH's National, Heart, Lung, and Blood Institute (NHLBI), which was part of the international consortium behind the study. "This is one of the most important studies of the genetics of blood pressure to date and a significant step toward finding better therapies for it."



Leaping Lizard

information

Genome Advance

NHGRI Genome Advance of the Month

Protecting the food supply and human health with genomics

Keywords: what's this?

May 2011

Transforming clinical care with whole genome sequencing

denome sequencina

Large scale senome

Keywords: what's this? ?

June 2011

Proteus: Discovering the tiniest disease-causing flaws — and improving sequencing technologies

By Jonathan Gitlin, Ph.D. Science Policy Analyst



Proteus, a sea-god from Greek mythology, could change his shape to improve his fortunes. People suffering the syndrome that bears his name are not so lucky and the cause of their plight has been as mysterious as the disease can be debilitating. It's a strange genetic disorder that's never inherited; each individual appears to have a new mutation. Moreover, the genetic defect is only found in some of the patient's cells while other tissues are genetically normal and healthy, a condition geneticists call a mosaicism.

NHGRI's Genome Advance of the Month selection, however, provides the answer — and it's a shocker: Proteus syndrome is caused by a spontaneous change in a single base pair among the three billion base pairs in the human genome that occurs in a single cell of a developing embryo. The severity of the disease — which varies dramatically between sufferers — depends on when during embryonic development the mutation occurs and in which cell.

Expanding Capacity to Market & Disseminate NHGRI News



Optimizing Our Use of Today's Tools

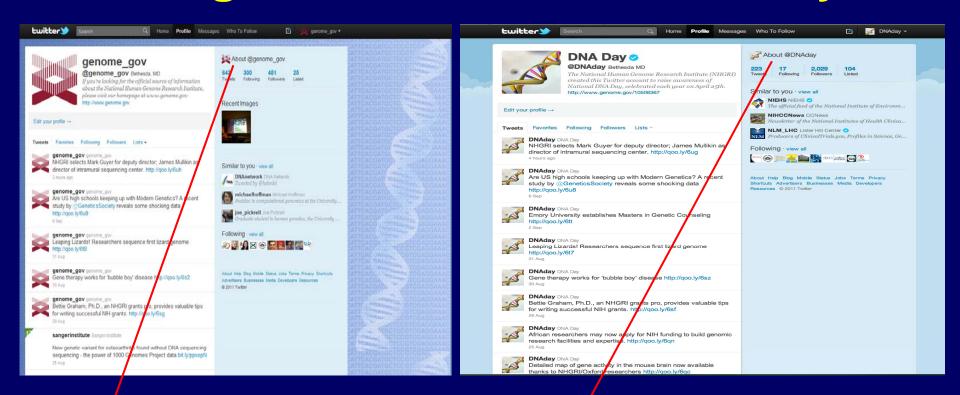


Building a Social Media Presence





Reaching Our Audiences Where They Are







Goal: Iterative Dialog and Process



Thank You!!

Immediate Office



Laura Rodriguez



Rosann Wise



Alice Bailey



Nicole Moore

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