



Genomic Education Initiatives of the Genomic Healthcare Branch, NHGRI

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Genomic Healthcare Branch

Abstract:

The Genomic Healthcare Branch (GHB) of the Division of Policy, Communications and Education at NHGRI supports genomics literacy among practitioners through several initiatives. The "Genetics/Genomics Competency Center" (G2C2, <http://genomicseducation.net/>) is a multi-disciplinary website repository of genomics education resources for classroom or self-learning. The G2C2 Editorial Board consists of genomics education experts including pharmacists, nurses, physicians, genetic counselors, and physician assistants. The Editorial Board reviews, approves, and maps all accepted resources to published genomic competencies. GHB also supports the creation of new educational content, such as the "Global Genetics and Genomics Community" (G3C, <http://genomicscases.net/>) which includes case studies that explore pharmacogenomics and other genetics/genomics scenarios. GHB facilitates the "Inter-Society Coordinating Committee for Practitioner Education" (ISCC, <https://www.genome.gov/iscc/>) which brings together genomics educators from health professional organizations, including the American College of Clinical Pharmacy and the American Pharmacists Association. GHB offers a three to four-day genomics course each summer. Courses in the past have targeted nurses and physician assistants, plus the faculty who educate practitioners in these disciplines. GHB provides information and resources through the health section of the NHGRI website (<https://www.genome.gov/health/>), facilitates communications between the genomics practitioner community and NHGRI funding and research divisions, and guides policy discussions and reviews related to integration of genomics into practice.



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Genomic Healthcare Branch

<https://www.genome.gov/GHB>

Chief: Dr. Bob Wildin, medical geneticist; Staff: Donna Messersmith, PhD, Ashley Lewis, MPH, and Faye Brown

MISSION: Promote the effective integration of genomic discoveries into healthcare

- Inform research needs in application and implementation research at the NHGRI and beyond
- Promote the development and evaluation of tools that enable healthcare providers to take more effective advantage of advances in genomics

- Promote genetics literacy among the full spectrum of healthcare providers and their patients
- Serve as a liaison between the healthcare community and the NHGRI on emerging genomic technologies in reshaping healthcare

Genomic Education Resources

Genetics/Genomics Competency Center (G2C2)



<http://genomicseducation.net>

- Repository of high quality genomics educational resources
- Discipline-specific collections; Pharmacist collection: 81 resources
- Resources vetted and mapped to published genomic competencies by Editorial Board of genomic educators

Roederer MW, Kuo GM, Kisor DF, Fye RF, Hoffman JM, Jenkins J, Weitzel KW. (2017) Pharmacogenomics competencies in pharmacy practice: A blueprint for change. J Am Pharm Assoc (2003). 2017 Jan - Feb;57(1):120-125.

The Global Genetics and Genomics Community (G3C)



<http://genomicscases.net>

- Bilingual collection of unfolding video-based case studies
- For use with students and practicing healthcare providers
- Cases include:
 - Consideration of codeine use after tonsillectomy for pain management with mother of two siblings
 - Patient who experienced moderate chest pain and nosebleed a few days after stopping use of clopidogrel

NHGRI Website: Health section



<http://genome.gov/health>

- Mobile-friendly trusted resource
- Targets multiple audiences
 - Consumer
 - Health Professionals
- Extensive links to internal and external resources

Courses

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



<https://www.genome.gov/shortcourse/healthprofessionals/>

- Learn best practices from leaders in genomics education for health professionals.
- Participate in interactive sessions with attendees and presenters.
- Review existing curricula for ways to incorporate genetics/genomic content.
- Explore successful models in which genomics/genetics have been integrated into practice.

Webinars for Health Insurers and Payers: Understanding Genetic Testing



<https://www.genome.gov/insurersgenetictesting>

- Educational webinar series for insurer staff to facilitate the implementation of genomic medicine.
- Example: "Navigating the Regulatory and Compliance Environment in Clinical Laboratory Testing", Victoria Pratt, Ph.D., Director, Pharmacogenomics laboratory, Indiana University School of Medicine.

Collaborations

Inter-Society Coordinating Committee for Practitioner Education in Genomics (ISCC)



<https://www.genome.gov/iscc/>

- Facilitates interactions among healthcare professional societies and related organizations to enhance and promote the understanding of practitioners in applying genomic medicine to cost-effective decision making and clinical care.
- Members include:
 - American College of Clinical Pharmacy
 - American Pharmacists Association