



National Human Genome Research Institute
Advancing human health through genomics research

NHGRI Genomics Education Resources

NHGRI Short Course in Genomics: Nurse, Physician Assistant and Faculty Track
<https://www.genome.gov/shortcourse/healthprofessionals/>

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Genomic Healthcare Branch

Division of Policy, Communications and Education, NHGRI

NHGRI



National Human Genome Research Institute
Advancing human health through genomics research

Health Professionals:
Genomic Healthcare
Branch (GHB)

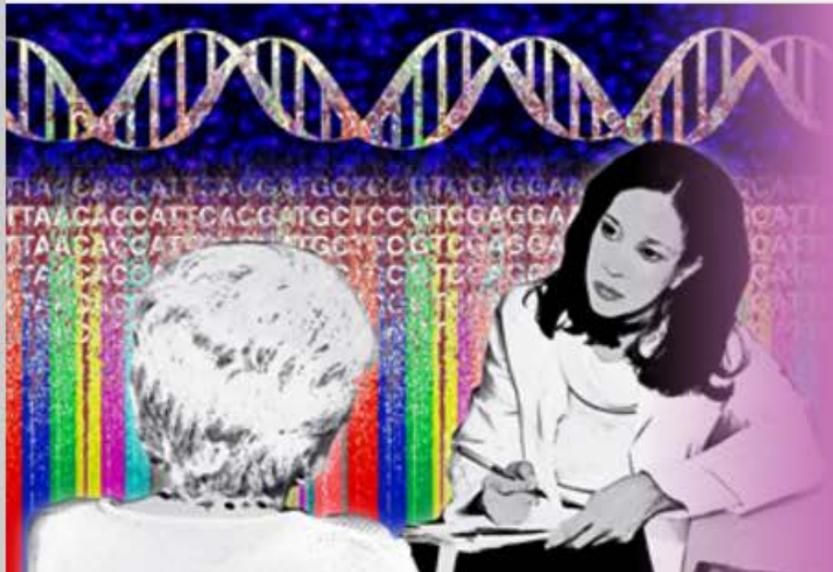
Public: Education
and Community
Involvement Branch
(ECIB)

Genomic Healthcare Branch: Education Resources



Health

Information about genetics and genomics, rare diseases, patient care and more



For Patients and the Public

Community Engagement and Community Health

Family History

Genetics & Genomics Science & Research

Genetic & Rare Diseases Information Center

Genomic Medicine and Health Care

Online Health and Support Resources

Specific Genetic Disorders

For Health Care Providers

Competency & Curricular Resources

Genetics 101

Genomic Medicine and Health Care

Inter-Society Coordinating Committee (ISCC)

New Horizons and Research

Patient Management

Policy and Ethics Issues

Genomic Healthcare Branch: Education Resources

The screenshot displays the website for the National Human Genome Research Institute (NHGRI). The header includes the NIH logo, the text "National Human Genome Research Institute" with the tagline "Advancing human health through genomics research", and a search bar labeled "SEARCH GENOME.GOV". A navigation menu contains links for "Research Funding", "Research at NHGRI", "Health" (highlighted), "Education", "Issues in Genetics", "Newsroom", "Careers & Training", "About", and "Español". Social media icons for email, Facebook, Twitter, and YouTube are also present.

The breadcrumb trail reads: Home > Health > Genomic Medicine for Health Care Providers > Competency and Curricular Resources.

The left sidebar, titled "Genomic Medicine for Health Care Providers", lists several resources under the "Competency and Curricular Resources" section:

- Genetics 101 for Health Professionals
- Genetics and Genomics and Patient Management
- Genomics in Medicine Lectures
- Inter-Society Coordinating Committee
- New Horizons and Research Activities
- Policy & Ethics Issues
- Quick Links for Patient Care
- The NIH Family Health History Tool Conference, 2016
- Webinars for Health Insurers and Payers: Understanding Genetic Testing

The main content area is titled "Competency and Curricular Resources" and lists the following links:

- [Competencies for All Healthcare Professionals](#)
- [Nursing Competencies](#)
- [Physician Competencies](#)
- [Physician Assistant Competencies](#)
- [Curricular Resources](#)

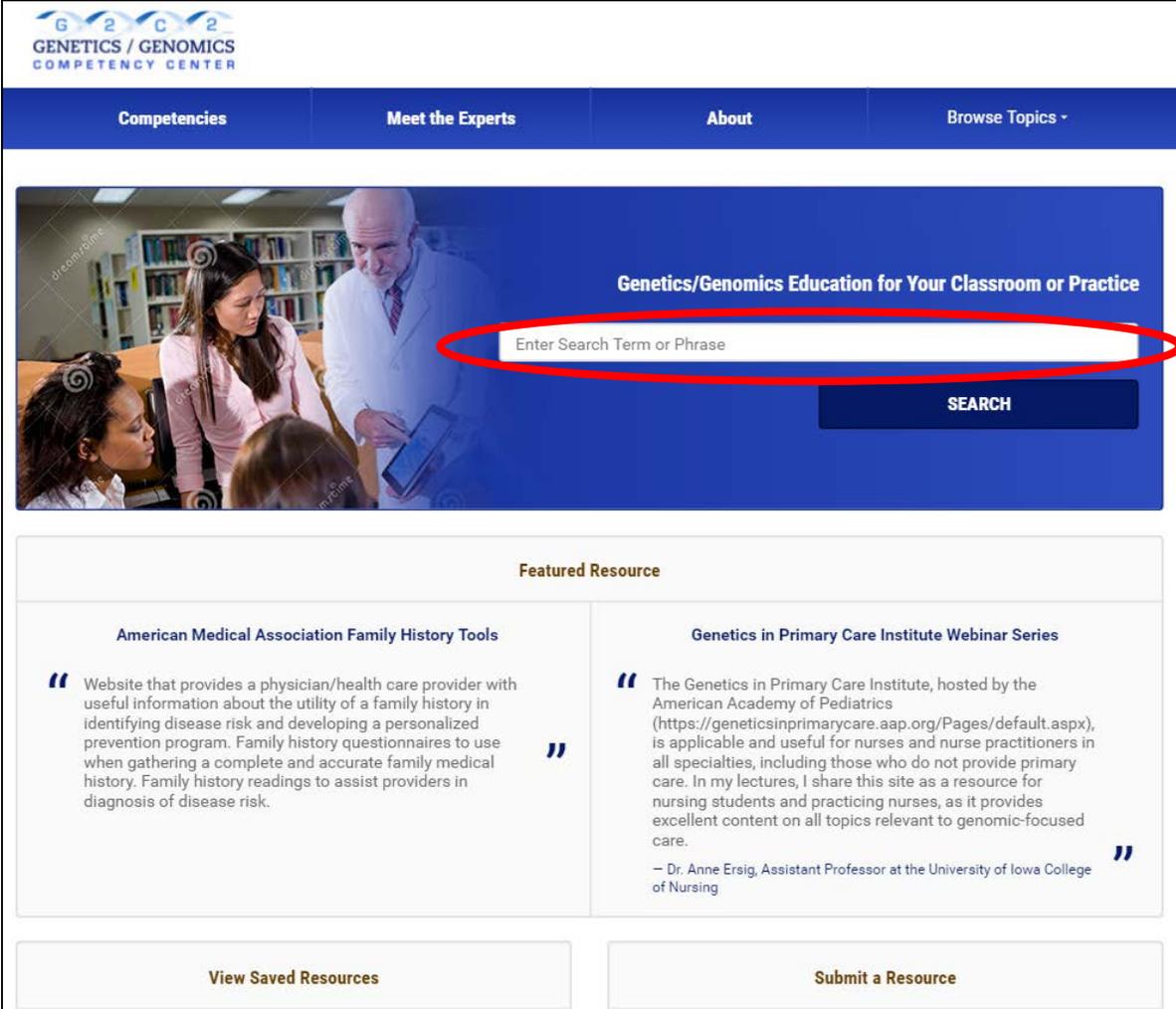
Below these links is a section titled "Important Off-Site Curricular Resources" containing two items:

- [Genetics/Genomics Competency Center \(G2C2\)](#) [g-2-c-2.org]
- [Global Genetics and Genomics Community \(G3C\)](#) [g-3-c.org]

The first item, "Genetics/Genomics Competency Center (G2C2)", is circled in red. The text below this section states: "Practicing healthcare providers and healthcare students will increasingly use genetic and genomic knowledge information to meet the needs of their patients. To meet this growing need all healthcare professionals including nurses, physicians, and physician assistants are creating essential competencies, practice guidelines, and curricular resources in genetics and genomics for each of their professions. Genetic and genomic competencies, guidelines, curricular and CME resources, as well as National Human Genome Research training opportunities for healthcare professionals are provided in this section."

G2C2 Homepage: <http://g-2-c-2.org/>
(Redesign expected Sept 2016, development website: <https://g2c2.drivingcreative.com/>)

- Based on discipline-specific competencies
- Supported by Editorial Board of Experts
- Regular submissions and reviews of resources



The screenshot shows the G2C2 homepage with a blue header containing the logo and navigation links: Competencies, Meet the Experts, About, and Browse Topics. Below the header is a large blue banner with the text "Genetics/Genomics Education for Your Classroom or Practice" and a search bar labeled "Enter Search Term or Phrase" with a "SEARCH" button. The search bar is highlighted with a red circle. Below the banner is a "Featured Resource" section with two columns. The left column is titled "American Medical Association Family History Tools" and contains a quote: "Website that provides a physician/health care provider with useful information about the utility of a family history in identifying disease risk and developing a personalized prevention program. Family history questionnaires to use when gathering a complete and accurate family medical history. Family history readings to assist providers in diagnosis of disease risk." The right column is titled "Genetics in Primary Care Institute Webinar Series" and contains a quote: "The Genetics in Primary Care Institute, hosted by the American Academy of Pediatrics (https://geneticsinprimarycare.aap.org/Pages/default.aspx), is applicable and useful for nurses and nurse practitioners in all specialties, including those who do not provide primary care. In my lectures, I share this site as a resource for nursing students and practicing nurses, as it provides excellent content on all topics relevant to genomic-focused care." Below the quotes are two buttons: "View Saved Resources" and "Submit a Resource".

Centralized
box for
term/phrase
search

Dropdown Menu with QuickLinks to Disciplines, Topics, Society pages

The image shows a screenshot of the Genetics / Genomics Competency Center website. The header features the logo 'G2C2 GENETICS / GENOMICS COMPETENCY CENTER'. Below the header is a navigation bar with four main sections: 'Competencies', 'Meet the Experts', 'About', and 'Browse Topics'. The 'Browse Topics' section is expanded into a dropdown menu. This menu is divided into three sections: 'Disciplines' (with a red arrow pointing to it), 'Topics' (with a red arrow pointing to it), and 'Society' (with a red arrow pointing to it). The 'Disciplines' section lists: Nurse, Physician Assistant, Pharmacist, Genetic Counselor, and Physician. The 'Topics' section lists: Clinical Genetics, Ethical, Legal And Social Implications, Family History, General Genomics, Genetic Conditions, Genetic Counseling, Genetic/Genomic Testing, Pharmacogenomics, Risk Assessment, and Other. The 'Society' section lists: American Board of Pediatrics. Below the navigation bar is a search bar with the text 'Enter Search'. The main content area is divided into two columns. The left column has a 'Featured' section with the title 'American Medical Association Family History Tools' and a quote: 'Website that provides a physician/health care provider with useful information about the utility of a family history in identifying disease risk and developing a personalized prevention program. Family history questionnaires to use when gathering a complete and accurate family medical'. The right column has a section titled 'Genetics in Primary Care Institute Webinar Series' with a quote: 'The Genetics in Primary Care Institute, hosted by the American Academy of Pediatrics (https://geneticsinprimarycare.aap.org/Pages/default.aspx), is applicable and useful for nurses and nurse practitioners in all specialties, including those who do not provide primary'.

Revised Search Results page with multiple filter options in left column

Search Results

There are **478** results that match your search.

You searched for: Search Again

Display results per page « 1 2 3 4 5 »

Resource Title	Format	CME	Cost
Genetic Testing: Genomic Tests and Family History by Levels of Evidence	Website	No	Free
Gene Tests	Website	No	Free
Genomics for Child Neurology: Results Interpretation and Application Toolkit: Interpreting Genetic Tests Tool	Other	No	Free
NSGC Online Education: Why Choose Just One Gene? Large Panel Tests for Genetic Conditions	Course	Yes	Paid
American Board of Pediatrics	Society	-	-
ACCE Model Process for Evaluating Genetic Tests	Website	No	Free
Genetic Tests and Their Evaluation: Can We Answer the Key Questions?	Article	No	Free
Gene Tests	Website	No	Free
A public health approach to pharmacogenomics and gene-based diagnostic tests	Website	No	Free
Gene Tests	Website	No	Free

Filter Options

Click on the selections below to narrow your search further

[Clear All](#)

Disciplines

- Genetic Counselor (180)
- Nurse (92)
- Pharmacist (67)
- Physician (79)
- Physician Assistant (177)

CME/CE Availability

- All
- Yes (36)
- No (442)

Cost

- All
- Paid (114)
- Free (364)

Formats

- Article (30)
- Book (87)
- Course (57)
- Guideline (45)
- Other (65)

Revised Resource Details page showing competencies from multiple disciplines, also quick access to competency publications

Go Back to Previous Page Resource

[Launch Resource](#)

[Save Resource](#)

[Rate Resource](#)

Gene Tests

Website with links to expert-authored peer-reviewed disease descriptions, an international directory of genetic testing laboratories, an international directory of genetics and prenatal diagnosis clinics, and educational Materials including an illustrated glossary, information on genetic services, PowerPoint® presentations and annotated internet resources.

Format	Website
CME Available	No
Topics / Sub-Topics	Accessing Information And Resources, Basic Genetic Concepts, Family History
Cost	free
Note	Website with downloadable educational material

Genomic Competencies

Experts from the disciplines listed below have tagged this resource as fulfilling genomic competencies.

Physician Assistant

- + Advise patients about relevant screening programs as appropriate
- + Interpersonal and Communication Skills
- + Manage patients who screened positive for genetic conditions, using accepted guidelines
- + Medical Knowledge
- + Patient Care

[Physician Assistant Map](#) [Genomic Competency Reference](#)

Nurse

- + Demonstrate assessment of patient concerns or understanding about information received from specialty genetic services (i.e., on-line genetic testing results).
- + Identification

[Nurse Map](#) [Genomic Competency Reference](#)

Revised access to resources through competency map (double page symbol);
resources available at all levels of the competency hierarchy

**GENETICS / GENOMICS
COMPETENCY CENTER**

Competencies Meet the Experts About Browse Topics ▾

Competency Map

Genetic Counselor ☐ = Resources Popup

- ➔ I: GENETICS EXPERTISE AND ANALYSIS ☐
 - ➊ 1: Demonstrate and utilize a depth and breadth of understanding and knowledge of genetics and genomics core concepts and principles. ☐
 - ➋ 2: Integrate knowledge of psychosocial aspects of conditions with a genetic component to promote client well-being. ☐
 - ➌ 3: Construct relevant, targeted and comprehensive personal and family histories and pedigrees. ☐
 - ➍ 4: Identify, assess, facilitate, and integrate genetic testing options in genetic counseling practice. ☐
 - ➎ 5: Assess individuals' and their relatives' probability of conditions with a genetic component or carrier status based on their pedigree, test result(s), and other pertinent information. ☐
 - ➏ 6: Demonstrate the skills necessary to successfully manage a genetic counseling case. ☐
 - ➐ 7: Critically assess genetic/genomic, medical and social science literature and information. ☐☐
- ➔ II: INTERPERSONAL, PSYCHOSOCIAL AND COUNSELING SKILLS ☐
- ➔ III: EDUCATION ☐
- ➔ IV: PROFESSIONAL DEVELOPMENT & PRACTICE ☐

**GENETICS / GENOMICS
COMPETENCY CENTER**

Competencies Browse Topics ▾

Genetic Counselor

☐ = Resources Popup

Resources for Critically assess genetic/genomic, medical and social science literature and information.

- [A Guide to Genetic Counseling, 2nd Edition. Chapter 6: Patient Education](#)
- [A Guide to Genetic Counseling, 2nd Edition. Chapter 4: Thinking It All Through: Case Preparation and Management](#)
- [Genetic Testing: Genomic Tests and Family History by Levels of Evidence](#)
- [Genomics for Child Neurology: Genomic Evaluation & Testing Decisions Curriculum: Genomic Evaluation Testing Decisions](#)
- [Genomics for Child Neurology: Genomic Evaluation & Testing Decisions Toolkit: Differential Diagnosis](#)
- [Genomics for Child Neurology: Results Interpretation and Application Toolkit: Interpreting Genetic Tests Tool](#)
- [Genomics Translation: Evaluation of Genomics Applications in Practice and Prevention \(EGAPP\)](#)
- [MedGen](#)
- [NSGC Webinar: PubMed and Beyond: Make Your Searches Count, then Count your Citations and Factor in their impact](#)
- [NSGC Webinar: Save Yourself Some Time: Utilizing NCBI's Resources for Phenotype \(MedGen\), Tests \(GTR\) and Variation \(ClinVar\)](#)
- [TBL: Genetic Testing and Personalized Medicine](#)
- [ACMG Genetics Academy](#)
- [CDC Public Health Genomics Knowledge Base](#)
- [American Society of Clinical Oncology Policy Statement Update: Genetic and Genomic Testing for Cancer Susceptibility](#)
- [Basic Concepts and Potential Applications of Genetics and Genomics for Cardiovascular and Stroke Clinicians: A Scientific Statement From the American Heart Association](#)

Close

Society pages (expected October 2016): Provide both **internal** links to that Society's G2C2 mapped resources as well as **external** links to genomic educational resources the Society provides, and are regularly being updated at the Society's website

G 2 C 2
GENETICS / GENOMICS
COMPETENCY CENTER

Competencies Meet the Experts About Browse Topics ▾

◀ Go Back to Previous Page ▶ Society

 **American Board of Pediatrics**
egergergdfdfgergererg
For more educational resources and information from ABP, visit their website:
<https://www.abp.org/>

ABP Educational Resources Mapped to G2C2 Genomic Competencies

Resource Title	Format	CME	Cost
Internal link 1	Website	No	Free
Internal link 2	Website	No	Free

ABP External Resources

Resource Title
External link 1

NHGRI



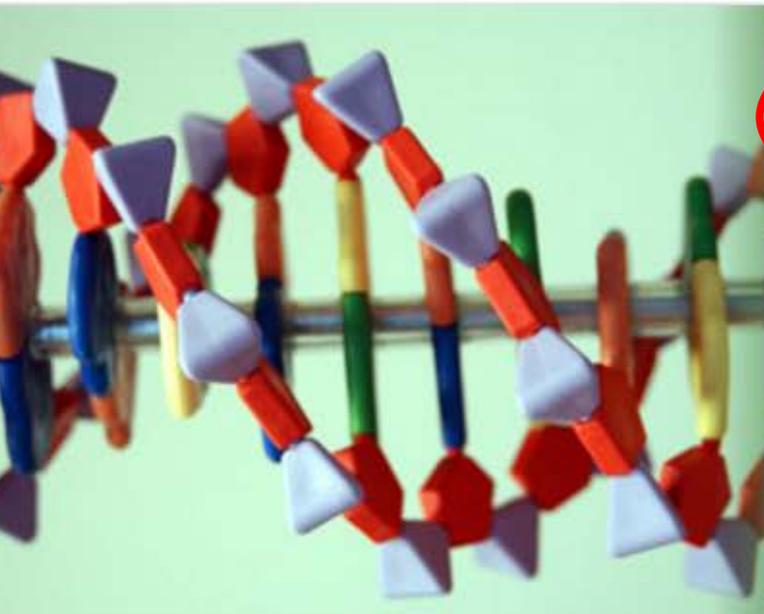
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Health
Professionals:
Genomic Healthcare
Branch (GHB)

Public: Education
and Community
Involvement Branch
(ECIB)

Education

Educational materials about genetics and genomics



Smithsonian NHGRI Genome Exhibition



All About The Human Genome Project



Talking Glossary of Genetic Terms
Genetic terms, illustrations



Genomic Careers
Find out about careers in genomics and genetics



National DNA Day
April 25, 2016



Genetic Education Resources for Teachers



Online Genetic Education Resources
Links to other sites



Fact Sheets
DNA, cloning, genomics and more



Education Resources
Online Education Kit: Understanding the Human Genome Project

“Unlocking Life’s Code” Traveling Genomics Education Museum Exhibit

GENOME UNLOCKING LIFE'S CODE

EXPLORE ABOUT LEARN TRAVELING EXHIBIT MEDIA CONNECTIONS

Your GENOME & YOU

YOUR GENOME & YOU: A NEW INFOGRAPHIC

How does knowing about genetics and genomics help you understand your health?

LEARN MORE

NOW OPEN AT THE NATURAL HISTORY MUSEUM OF UTAH <https://nhmu.utah.edu/genome>

EXPLORE ABOUT NEW & NOTEWORTHY

<https://unlockinglifescode.org/>

Talking Glossary of Genetic Terms

[Home](#) > [Education](#) > Talking Glossary

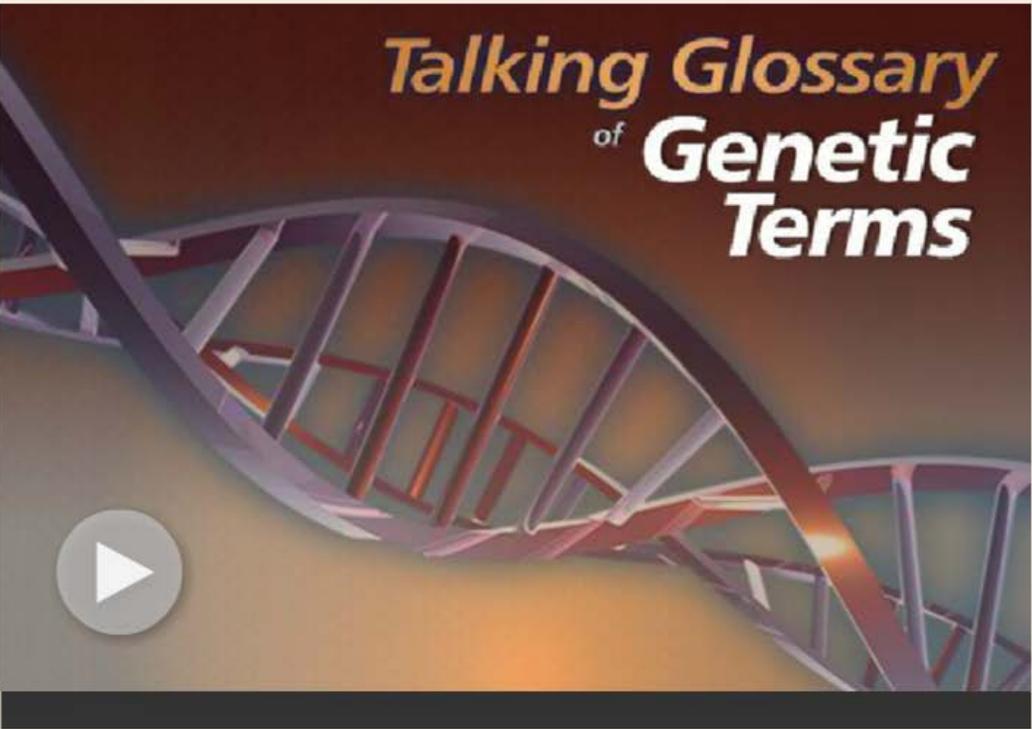
[Glossary Home](#) | [Text Version](#)

Search the Glossary

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

- ACGT
- Acquired Immunodeficiency Syn
- Adenine
- Allele
- Amino Acids
- Ancestry-informative Markers
- Animal Model
- Antibody
- Anticodon
- Antisense
- Apoptosis
- Autism
- Autosomal Dominant
- Autosome

Click here to 



Talking Glossary of Genetic Terms

Welcome to the Talking Glossary of Genetic Terms
The Human Genome Defined by Professionals at the National Human Genome Research Institute

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