Genetics/Genomics Competency Center for Education (G2C2)

Physician Resources, ISCC
Education Product Working Group
April 23, 2014
Goal of G2C2 (http://www.g-2-c-2.org)

- Health professional educators identified a need for a centralized web resource to:
  - facilitate communication, development, and dissemination of educational resources
  - demonstrate different approaches to achieving genomic competency
  - share resources across disciplines

- Target of audience: educators AND practicing clinicians
Free Resource! Discipline-specific genetic/genomic competencies

What you can do on this site:

- Search by Discipline for Genetics/Genomics Resources to Use in Your Classroom
  - Find websites, download PDFs, locate courses — enhance your class content with peer reviewed genetic/genomic resources. Search resources within these disciplines: Genetic Counselors, Nurses, Physician Assistants.

- View My Resources Found on This Site
  - As you find educator resources for your discipline(s) during a site visit, you can mark and collect them in My Resources. There you can access your marked resources and send them to yourself or others via email.

- Submit Resources to be Included on This Site
  - Do you have activities, resources or assessments you would like to share? Submit Resources including websites and PDFs to include in the curricular materials.

- Review the Competency Guidelines and Curriculum Map
  - Need to match your classroom genomics teaching to competencies? View the Curriculum Map to find the right resources to download.

www.G-2-C-2.org/

A web-based repository of peer reviewed genetic/genomic curricular materials
Physician
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Review the Competency Guidelines and Curriculum Map
Need to match your classroom genomics teaching to competencies? View the Curriculum Map to find the right resources to download.
Thanks to the ISCC Members

- Physician Society members and others who submitted resources for review
- Education Product Working Group: Robert Roberts & Jean Jenkins (Co-chairs) & Alice Bailey
- Reviewers-Ann Grupe, Katrina Gwinn, Katie Johansen Taber, Christina Lockwood, Nonniekaye Shelburne, Kristin Weitzel
- D’Vinci Interactive Staff – Sally Reidy
- http://g-2-c-2.org/i_play_one_on_tv.php
Data of Interest

- Items received from 12 organizations
- Items selected for review 82 - 70 items uploaded

Types
- Annual Meeting Info
- Articles
- Books
- Curriculum guidelines
- Fact sheets

- Policy documents
- Resource guides
- Videos
- Websites
- Webinars
Physician
Find professionally curated resources, classroom materials, and real-world examples every Physician should know.

1 Select a Curricular Area below

- Learning Activities & Resources
  Exercises designed to develop professional ability and resources that facilitate competency.

- Competencies & Core Knowledge
  A high level educational goal for learners. Specific areas of knowledge learners need to achieve a competency.

- Performance Indicators
  A measurable knowledge, skill or ability of a professional that demonstrates competency.

- Assessments
  Exercises designed to measure the outcome of a Learning Activity.

2 Enter Search Term(s)

[Search]

or Select a Topic:

Associated Topics

- All Topics
- Competency
- DNA
- Economics
- Family History
- Genetic Counseling
- Genetic Screening
- Pediatrics
- Pedigree
- Pharmacogenetics/Pharmacogenomics
- Referrals
- Reimbursement
- Screening

[Search Topic]
Physician

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Results for

“all topics”

Curricular Area: Learning Activities & Resources

American College of Obstetricians and Gynecologists Committee Opinion: Ethical Issues in Genetic Testing
ABSTRACT: Genetic testing is poised to play an increasing role in the practice of obstetrics and gynecology. To assure patients of the highest quality of care, physicians should become familiar with the currently availab...

American College of Obstetricians and Gynecologists Committee Opinion: Personalized Genomic Testing for Disease Risk
ABSTRACT: Advances in genetic technologies have led to the identification of hundreds of single nucleotide polymorphisms that are associated with a variety of complex diseases, including cancer, diabetes, cardiovascular ...

American College of Obstetricians and Gynecologists WEBTREATS: Genetics, Genomics, and the Human Genome Project
This list, prepared by the College Resource Center Librarians from other sources, is provided for information only.

American Society of Clinical Oncology: e-Learning Course: Cancer Genetics Review
Questions help to identify the practical considerations for using genetic testing in oncology, as well as the molecular basis of hereditary susceptibility to cancer.
American Society of Clinical Oncology: e-Learning Course: Cancer Genetics Review

Resource Links

Resource 1

Angela G. Arnold, MS, CGC
Angela Bradbury, MD
Susan Domchek, MD
Noah Kauff, MD
Henry Lynch, MD

Questions help to identify the practical considerations for using genetic testing in oncology, as well as the molecular basis of hereditary susceptibility to cancer.

Goals & Learning Objectives

Learning Objectives: Identify the practical considerations for using genetic testing in oncology, describe the molecular basis of hereditary susceptibility to cancer, and enhance awareness regarding the various methods used to identify mutations in genes associated with cancer.

Resource Evaluation

ISCC Education Working Group
## Resource Details

<table>
<thead>
<tr>
<th>Suggested Audience</th>
<th>Target Audience</th>
<th>Format</th>
<th>Note</th>
<th>CME Available</th>
<th>Cost</th>
<th>Members Only</th>
<th>Activity Type</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians, nurse practitioners, and physician assistants.</td>
<td>Specialist (oncology)</td>
<td>Online Course</td>
<td>Yes</td>
<td></td>
<td>$34</td>
<td>No</td>
<td>Self Study Web Learning Module</td>
<td>Cancer Genetics Genetic Testing</td>
</tr>
</tbody>
</table>
Cancer Genetics Review

This self-assessment is for all oncology professionals, nurse practitioners, and physician assistants that need to assess their knowledge in the area of cancer genetics. These questions help to identify the practical considerations for using genetic testing in oncology, as well as the molecular basis of hereditary susceptibility to cancer for the Med/Hem Oncology Certification, ABIM recertification, and MOC recertification.

Learning Objectives:

- Identify the practical considerations for using genetic testing in oncology.
- Describe the molecular basis of hereditary susceptibility to cancer.
- Enhance awareness regarding the various methods used to identify mutations in genes associated with cancer.

CME credit is available for this course.

ACGME Competencies addressed: Medical Knowledge; Practice-based Learning & Improvement

Create an ASCO Guest ID.
Discussion Items

- Articles have two resource links (i.e., pubmed abstract; article)-do we need/want both?
- Some resources include video link and link to general registration page (i.e., AACC resources)
- Multiple webinars-diverse competencies-blank
- Items like Coursera opportunities
- Identification of topics for searching
- Listing of all ISCC organizations with links to home page?
More Resources!!

Recommendations of the American Academy of Ophthalmology Task Force on Genetic Testing

Edwin M. Stone, M.D., Ph.D. (Chair), Anthony J. Aldave, M.D., Arlene V. Drack, M.D., Mathew W. MacCumber, M.D., Ph.D., Val C. Sheffield, M.D., Ph.D., Elias Traboulsi, M.D., Richard G. Weleber, M.D.

Preamble

Genetic testing can make a very positive impact on individuals and families affected with inherited eye disease in a number of ways. When properly performed, interpreted, and acted upon, genetic tests can improve the accuracy of diagnoses and prognoses, can improve the accuracy of genetic counseling, can reduce the risk of disease occurrence or recurrence in families at risk, and can facilitate the development and delivery of mechanism–specific care.
Resource Rating

Rating

- ★
- ★★
- ★★★
- ★★★★
- ★★★★★
- ★★★★★★

Title

Details

Post Review
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Competency Guidelines and Curriculum Map

Select a Discipline to view the associated Curriculum Map:

- Genetic Counselor
- Nurse
- Physician Assistant
- Pharmacist

View the Competencies Guidelines for these disciplines:

- Genetic Counselors
- Nurses – (Competencies to which resources are currently mapped)
- Nurses – Essential Genetic and Genomic Competencies for Nurses with Graduate Degrees (document provided for your information–resources not yet mapped to these competencies)
- Physician Assistants
- Pharmacists
Competency Resource Gaps

- Most resources identified teach to Competency #2 Genomic testing
- Least number of resources identified to teach to Competency #5 Microbial genomic information
- Individual main competency sub-items will need to be the focus of new education resources. For example:
  - Family History & Professionalism: respect privacy of patient and family members in assembling and documenting family history
  - Genomic testing & Patient care: discuss the possibility of incidental findings and how they will be handled
ISCC Members Next Steps

- Make any suggested changes to resources
- Approve moving forward with the launch of G2C2 Physician Resources and Competencies
- When approved, determine the launch date
- Create marketing plans—Need to know it exists!
  - Formal announcement from NHGRI
  - Customize announcement to organizations
  - Include announcement in member newsletters, email blast, social media, publications, presentations
  - Link from organization’s websites to G2C2
  - Develop resource materials for use by ISCC members
Meet the Editorial Board

Patricia Brennan, PhD, MS, RN

Dr. Patricia Brennan is an Assistant Professor at Samuel Merritt University in Oakland, California. She received her bachelor's degrees from Emory University (psychology, 1981) and (nursing, 1983), and both her master's degree (critical care/trauma/education, 1993) and PhD in nursing (health policy, 2008) from the University of California, San Francisco.

Sandra Daack-Hirsch PhD, RN

Dr. Sandra Daack-Hirsch is an Assistant Professor in the University of Iowa College of Nursing. Her BSN, MSN and PhD are from the University of Iowa College of Nursing. Dr. Daack-Hirsch focused her master's study on genetic counseling and care of children and families. She completed her PhD in the Parent Child & Family Area of study with an emphasis in public health and genetics.

Ed Michaud, Ph.D.

Dr. Ed Michaud is a Professor and the Director of Genetic Sciences for the School of Physician Assistant Studies at South College in Knoxville, Tennessee. He received his B.S. from the University of Central Florida (1979), his M.S. from Texas A&M University (1984), and his Ph.D. from the University of Tennessee (1990).
Editorial Board Responsibilities

- Assure quality of site
  - Plan for keeping resources up to date-solicit more!
    - *Other discipline resources on G2C2 usefulness?
  - Periodic review of all discipline specific resources
  - Recommend new materials to fill gaps

- Evaluation plan
  - 2013 reviewed the overall G2C2 site and made recommendations for change
  - Reviewed contractor proposals for suggested changes
  - Assess quarterly analytics review
Site Enhancements in Process

- Developing a new model for searching & filtering resources
- Market research to determine ways to reach out to the targeted audiences for use of G2C2
- Determine value for other healthcare professions
- Re-design and implement a more dynamic Home page
Search for Genetics & Genomics Resources to Use in Your Classroom or in Your Practice
Find websites, books, articles and more – enhance your class content with peer-reviewed resources.

What you can do on this site...

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Review Competency Map & Guidelines
Match your classroom genetics/genomics teaching to competencies.

OR SEARCH BY TOPIC
- Basic Genetic Concepts
- Communication Skills
- Critical Thinking Skills
- Ethical, Legal and Social Implications
- Family History
- Genetics & Disease
- Genomic Testing
- Genomic-Based Therapeutics
- Identification
- Interpersonal & Communication Skills
- Interpersonal, Counseling, & Psychosocial Assessment Skills
- Medical Knowledge
- Microbial Genomic Information
- Nursing Assessment
- Patient Care
- Pharmacogenetics/Pharmacogenomics
- Practice-Based Learning & Improvement
- Professional Ethics and Values
- Professional Responsibilities
- Professionalism
- Provision of Education, Care and Support
- Referral Activities
- Somatic Genomics
- Systems Based Practice
Sustainability of G2C2 & Physician Resources

- Working Group Member opportunities and responsibilities
- Soliciting new resources for review and/or development
- Reviewing newly submitted resources
- Maintenance of resource accuracy and access (i.e., review every 12-18 months)
- G2C2 Editorial Board membership
ISCC Working Group Next Steps

• Design and implement an evaluation plan to assess site usability & make modifications based on the evaluation
• Explore models for interprofessional genomics competency
  • Generalist and specialist
  • Competency clearinghouse
  • Individual discipline or core set
• Work collaboratively with other NHGRI funded groups (i.e., IGNITE)
Questions/Comments

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- 301-547-1897