Training Needs in Genomics Panel
An Overview of NCHPEG

House of Lords Inquiry on Genomic Medicine

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NCHPEG
National Coalition
for Health Professional
Education in Genetics

What NCHPEG Does

Mission: To promote health professional education and access to information about advances in human genetics to improve the health care of the nation.

- Provide a central educational resource for all health professionals
- Develop tools to educate health professionals and incorporate genetics into practice

History and Structure

- **Founded in 1996 by AMA, ANA, and NHGRI**
- **501(c)(3) non-profit, incorporated in Maryland in 2001**
- **Governance provided by a 15-person elected board of directors**
- **Located in the Baltimore area**
- **Supported by public and private sector**

Eclectic Membership

83 dues-paying members:

- Commercial entities
- Professional societies, government agencies, foundations/granting agencies, educational/academic institutions, medical/health-care institutions
- Consumer groups
- Individuals
- Patrons
- Benefactors

More Structure

- Staff = 5
  - 1 Executive Director
  - 2 Project Directors
  - 1 Administrative Assistant
  - 1 Intern
- Working groups
  - Content & Instruction
  - Family History
  - Membership & Diversity

Educational Development Process

- Person-intensive, iterative process
  - advisory and writing committees come to consensus, develop the conceptual framework, and outline major content areas
  - formative evaluation with multiple rounds of review and revision
  - maximizes input from content experts and end-users

Educational Content

- Four principles: our content must be
  - 1) scientifically accurate,
  - 2) clinically relevant,
  - 3) educationally effective, and
  - 4) not significantly duplicative of other efforts.
- Products
  - Web-based
  - Print
  - Face-to-face instruction
  - Video
  - Simulated patient encounters
  - Point-of-care/decision support tools

Educational Resources

- General guidance, e.g.,
  - Core competencies in genetics
  - Core principles in genetics
  - Framework for genetics and common disease
- Resources on specific topics, e.g.,
  - Genetics, race, and health care
  - Genetics and psychiatric disorders
  - Genetics and common disease
  - Discipline-specific programs

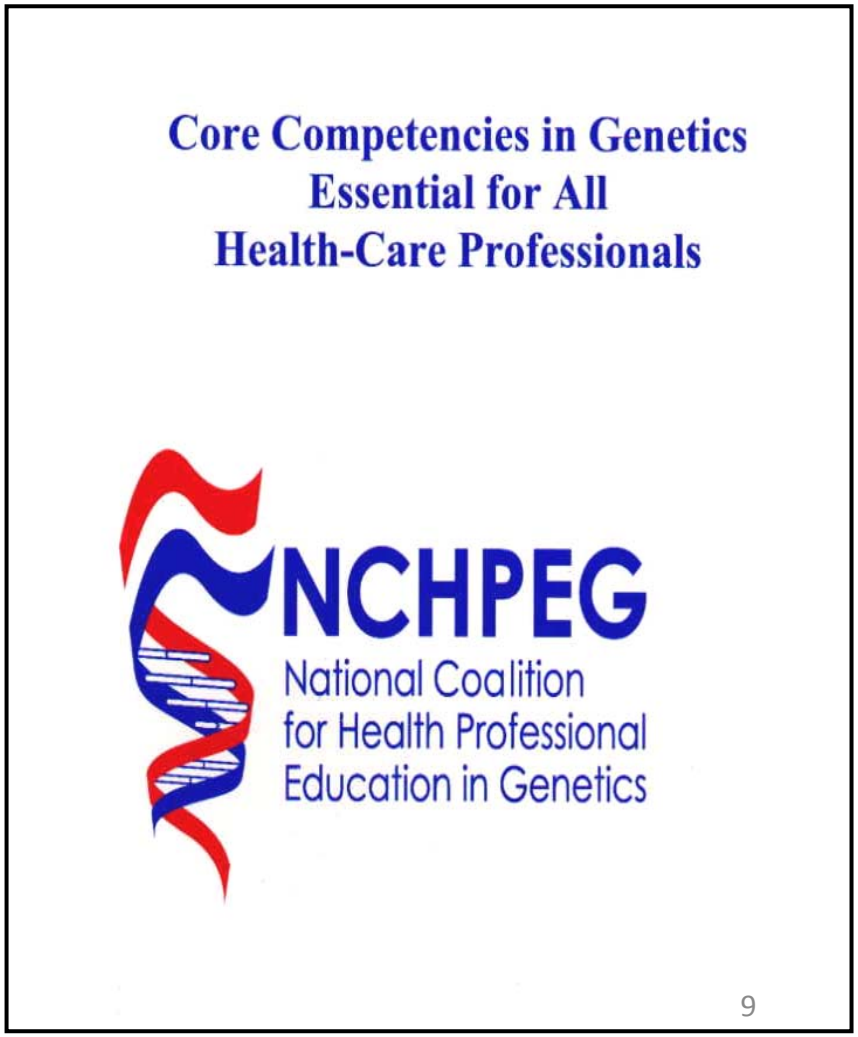
Core Competencies

What do health-care providers need to know and do?

- Knowledge
- Skills
- Attitudes

- Core principles of genetics

www.nchpeg.org

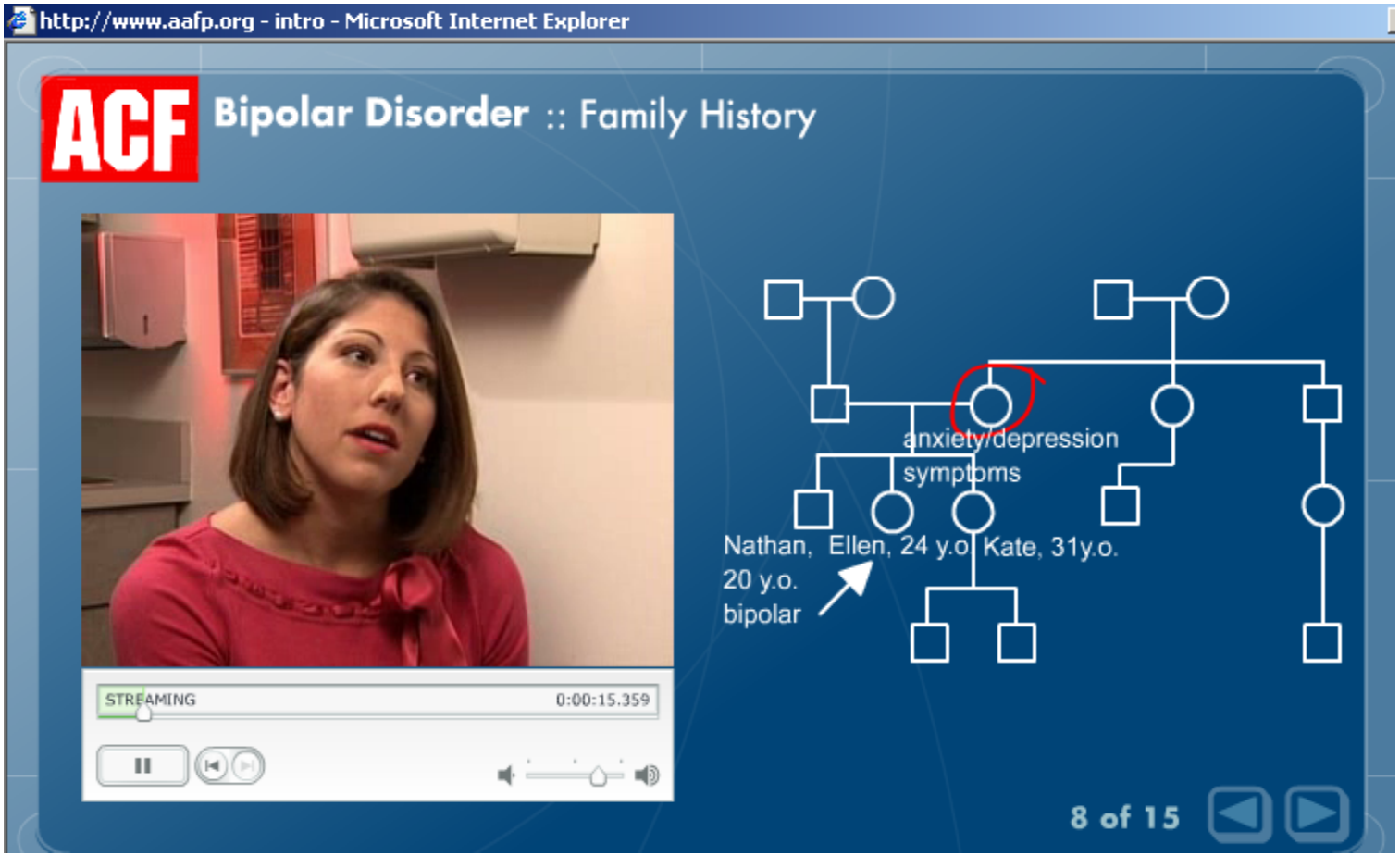


Specific Audiences

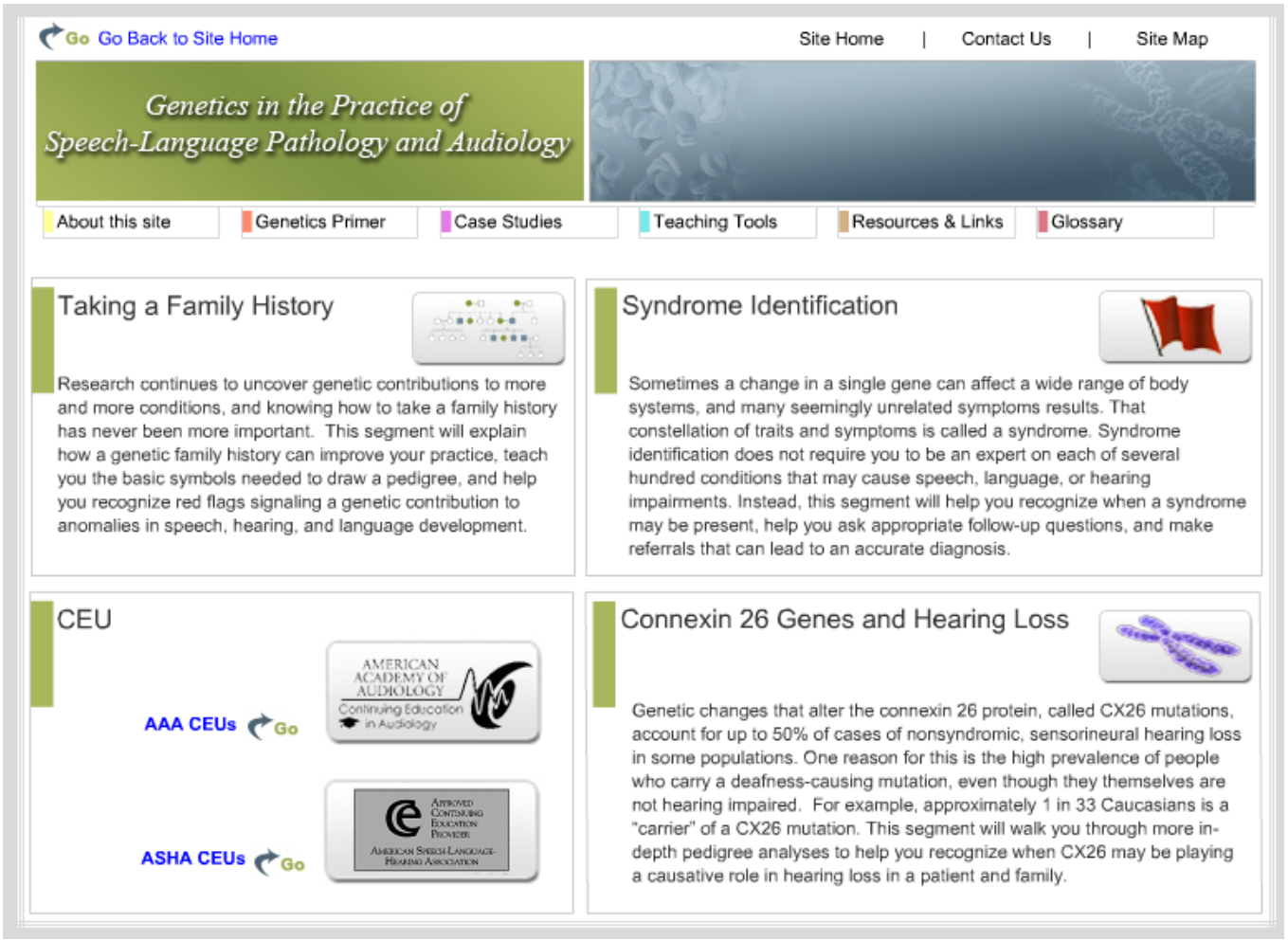
- Nurses
- Dentists and dental hygienists
- Family physicians
- Speech-language pathologists and audiologists
- Physician assistants
- Dietitians (Fall 2008)

Target Audiences: Dietitians

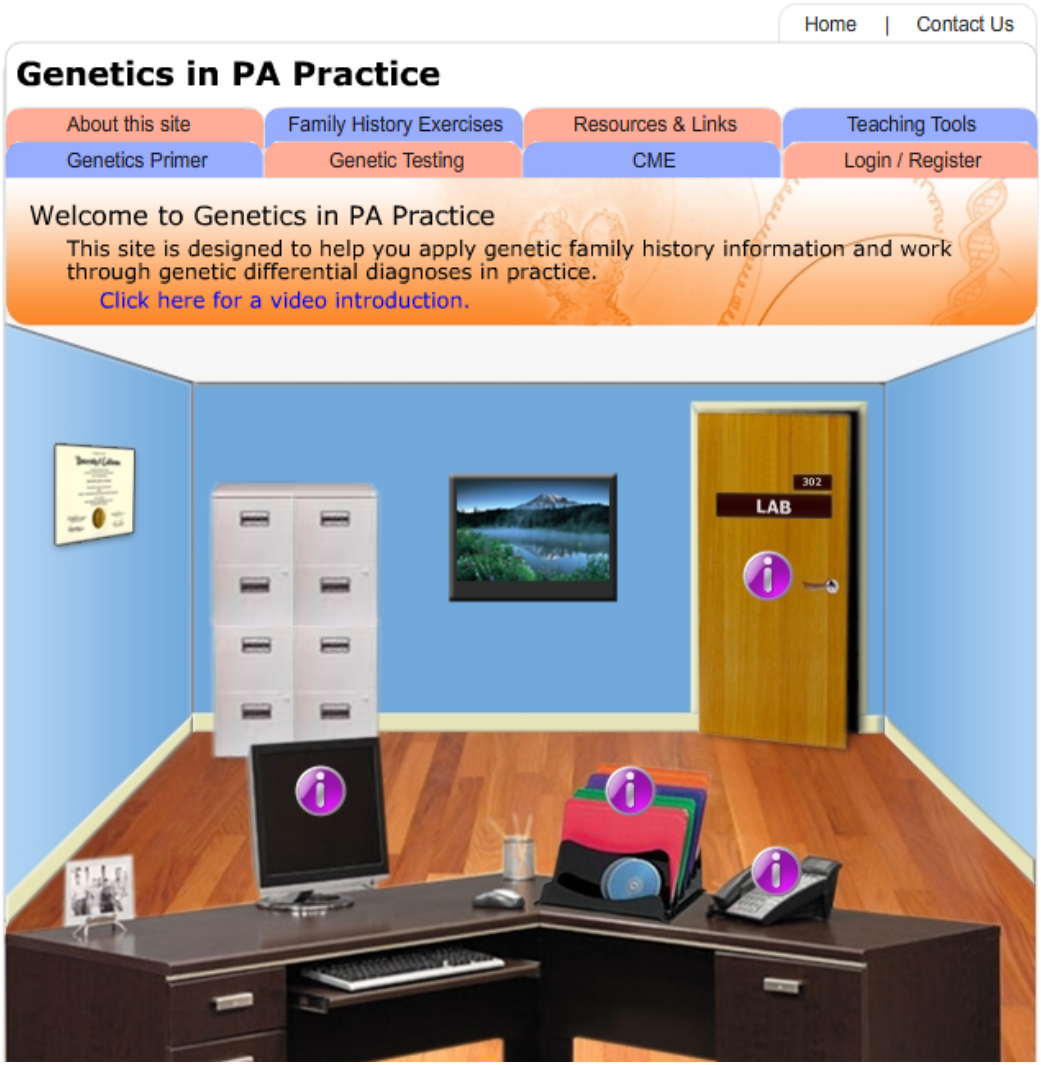
Target Audiences: Family Practice



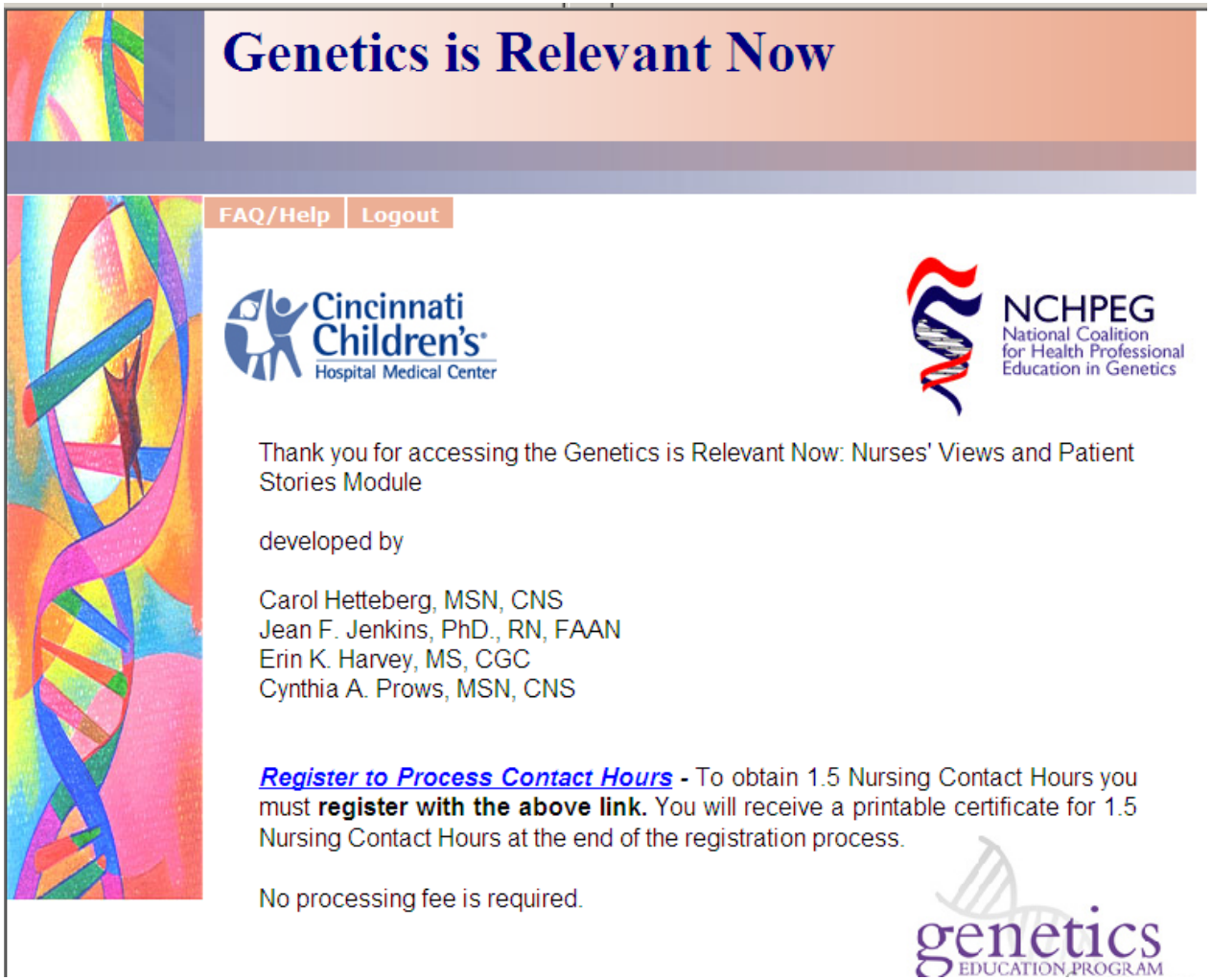
Target Audiences: Speech-Language Pathology and Audiology



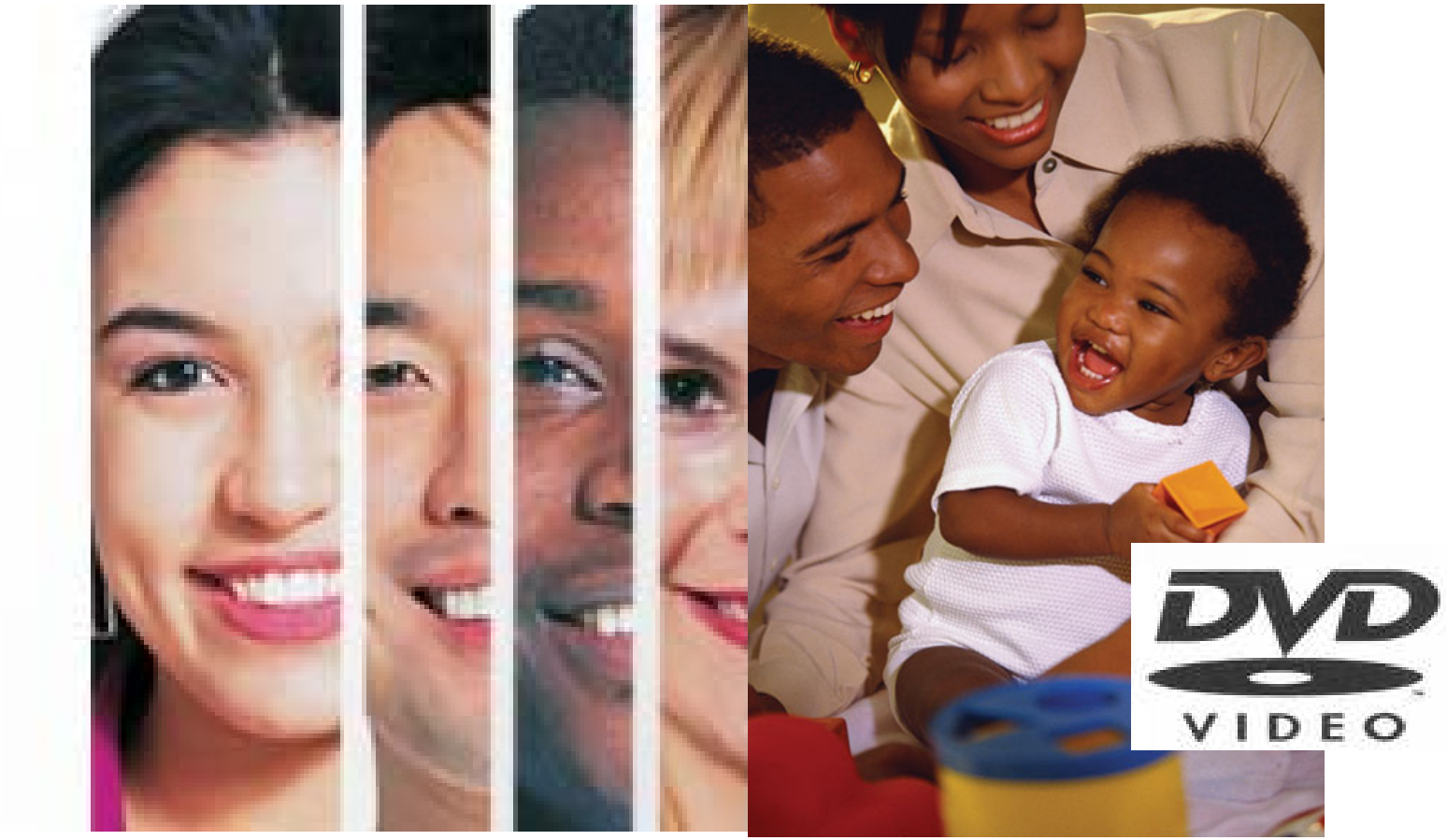
Target Audiences: Physician Assistants



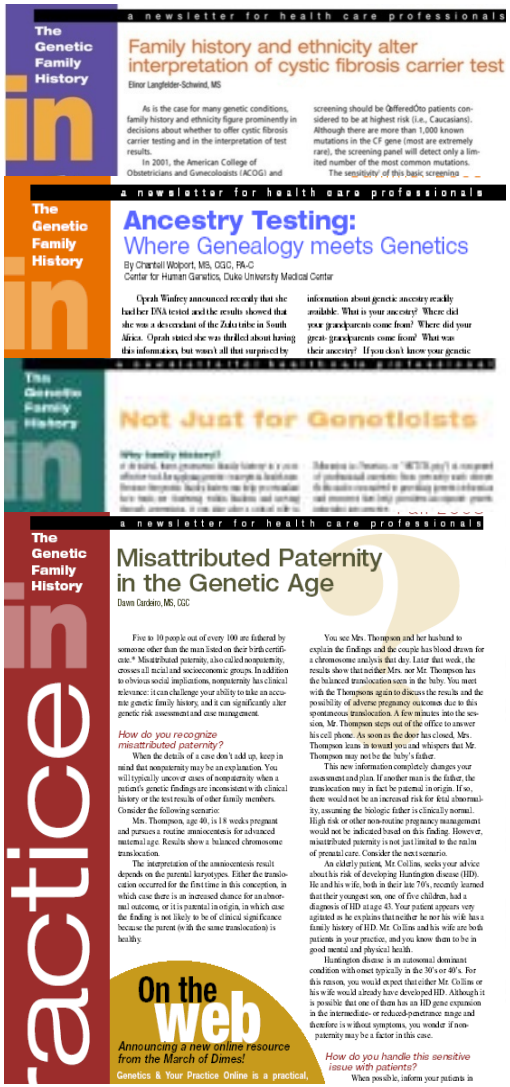
Target Audiences: Nurses



Target Subject: Genetics, Race, and Healthcare

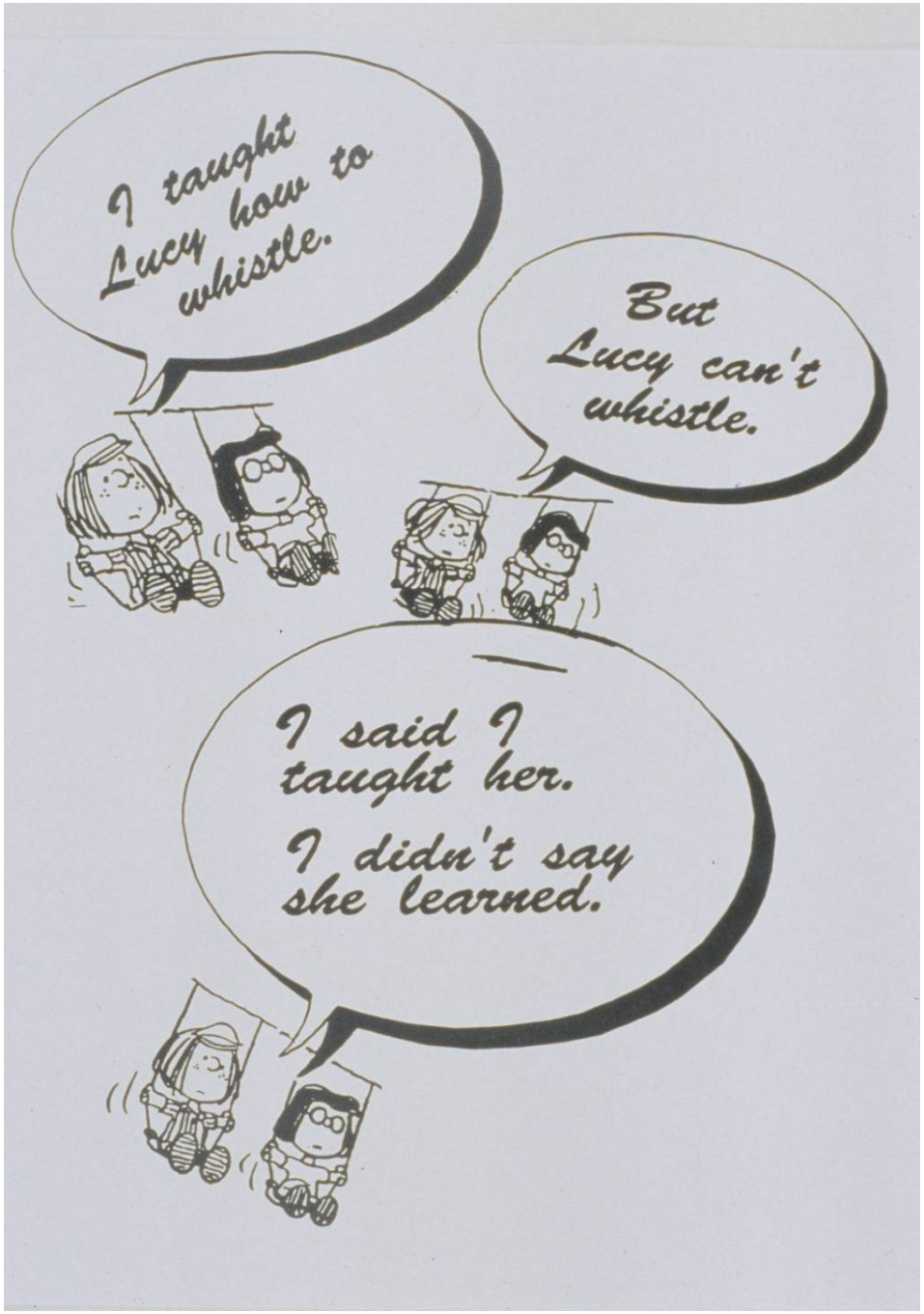


Newsletters



Purpose: Introduce genetics issues from different perspectives

Audience: Health professionals without formal genetics training


I taught Lucy how to whistle.
But Lucy can't whistle.
I said I taught her.
I didn't say she learned.

Barriers to Genetics Education for Health Professionals

- Crowded curriculum
- Misconceptions about genetics
- Lack of knowledgeable faculty
- Disconnect between basic sciences and clinical experiences during training
- Failure to integrate genetics across the curriculum
- Inadequate representation of genetics on certifying exams

Guttmacher AE, Porteus ME, McInerney JD. 2007. Nature Reviews Genetics 8:151-157.

Some Barriers to the Integration of Genetics into Primary Care

- Dearth of genetics professionals
- Lack of knowledge about genetics among primary-care providers
- Lack of confidence
- Inadequate family histories (time is an issue)
- Lack of practice and referral guidelines

Suther, S. and Goodson, P. Barriers to the provision of genetic services by primary care physicians: A systematic review of the literature. Genetics in Medicine 5(2): 70-76, 2003.

Challenges

- Which clinical behaviors and attitudes do we want to change, and can we?
- Which content is appropriate for whom?
- What is the appropriate level of detail?
- What is the appropriate scope?
- How do we define and measure success?

Some Programs in Planning

- Genetics and colorectal cancer for VHA providers
- GeneFacts – point-of-care electronic decision support for PCPs
- Genomic applications related to breast cancer for the U.S. Air Force
- Genetics for social and behavioral scientists