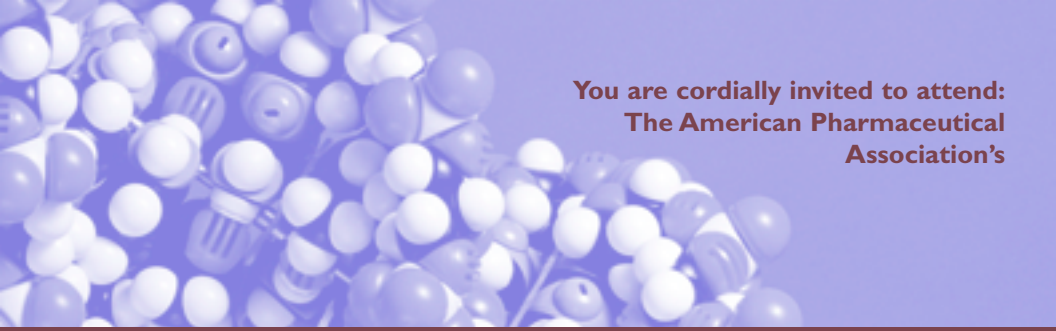


You are cordially invited to attend:
The American Pharmaceutical Association's

Pharmacogenomics Educational Sessions

March 17–19, 2001

Moscone Center,
San Francisco, California

To be conducted at APhA2001, the American Pharmaceutical Association 148th Annual Meeting & Exposition

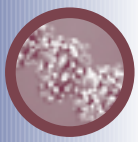
As we enter the 21st century, pharmacogenomics is revolutionizing drug discovery and development. These three educational sessions will update you on the anticipated impact for pharmacists and patients, including the clinical, legal, and social implications of expanding genetic knowledge.

Pharmacogenomics: Overview and Impact on Drug Development

Saturday, March 17, 2001. 8:00 a.m. to 11:00 a.m.
Moscone Center, Room 303
ACPE #202-000-01-007-L04 · 0.3 CEU

Kathleen Giacomini, PhD, *University of California San Francisco School of Pharmacy*
Ira Herskowitz, PhD, *University of California San Francisco School of Medicine*
M.J. Finley Austin, PhD, *Hoffmann-LaRoche*

Program Description: Pharmacogenomics is revolutionizing the discovery and development of pharmaceuticals. Pharmacogenomic research is uncovering interindividual differences in pharmacokinetics and pharmacodynamics that can result in a lack of therapeutic efficacy in some individuals and dangerous adverse events in others. This session will discuss genomic discoveries driving research and development, as well as the new business strategies that may arise.



Pharmacogenomics: Changing the Landscape of Medical Practice

Sunday, March 18, 2001. 2:00 p.m. to 5:00 p.m.
Moscone Center, Room 303
ACPE #202-000-01-042-L04 · 0.3 CEU

David Flockhart, MD, PhD, *Georgetown University*
Julie Johnson, PharmD, *University of Florida College of Pharmacy*
William Allen, JD, *University of Florida*

Program Description: The unraveling of the genetic code holds the promise of a paradigm shift in the diagnosis and treatment of disease. In the future, simple genetic tests may be performed while patients

wait in their physician's offices. The possible advantages of such procedures include rapid, accurate diagnosis and the use of drugs and treatment regimens that maximize outcomes while minimizing adverse effects. However, the potential for the misuse of such genetic profiles is great. This session will discuss the clinical, legal, and social ramifications of the expanding knowledge of the human genome.

Current Clinical Applications in Pharmaceogonomics

Monday, March 19, 2001. 8:00 a.m. to 11:00 a.m.
Moscone Center, Room 302
ACPE #202-000-01-057-L04 · 0.3 CEU

Gary Yee, PharmD, *University of Nebraska Medical Center College of Pharmacy*
Howard McLeod, PharmD, *Washington University Medical Center*
Daren Knoell, PharmD, *The Ohio State University*

Program Description: A patient recovering from surgery complains of unrelieved pain despite ever-increasing doses of codeine. Does this patient suffer from addiction, or does this patient lack the enzyme that converts codeine into its active form? Genetic testing can answer this and many other questions today. This session will discuss currently available methods that use knowledge of genetic variations to diagnose disease and tailor pharmacologic treatments, and introduce you to the first of the commercially available drug products whose creation was driven by discoveries from the Human Genome Project.

APhA

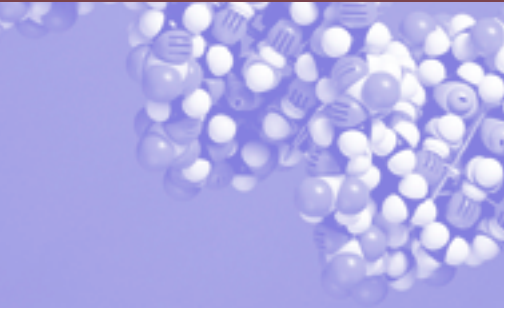
The American Pharmaceutical Association is approved by the American Council on Pharmaceutical Education as a provider of continuing education.

To obtain credit, attendees must attend the sessions and complete a Continuing Education Attendance Form. Statements of credit will be issued in 4 to 6 weeks.

American Pharmaceutical Association
2215 Constitution Avenue, NW
Washington, DC 20037-2985

Please plan to attend:

PHARMACOGENOMICS EDUCATIONAL SESSIONS



APhA

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