

Genetics and Genomics in Medical Practice

A CME event for health care professionals | Friday, August 23, 2013



The UAB Department of Genetics is dedicated to the generation of new knowledge about genetics and genomics, translation of that knowledge to clinical practice, and integration of genetics into all aspects of medical care. It comprises an interdisciplinary group of faculty focused on education, research, and clinical services. For more information about the department, visit www.uab.edu/genetics.

Accreditation Statement

Up to 6.5 AMA PRA Category 1 Credits™ for physicians • Up to 6.5 AMA/CRE Category 1 Credits available to nurses in Alabama * Up to 6.5 Category 2 CEU Credits available to genetic counselors

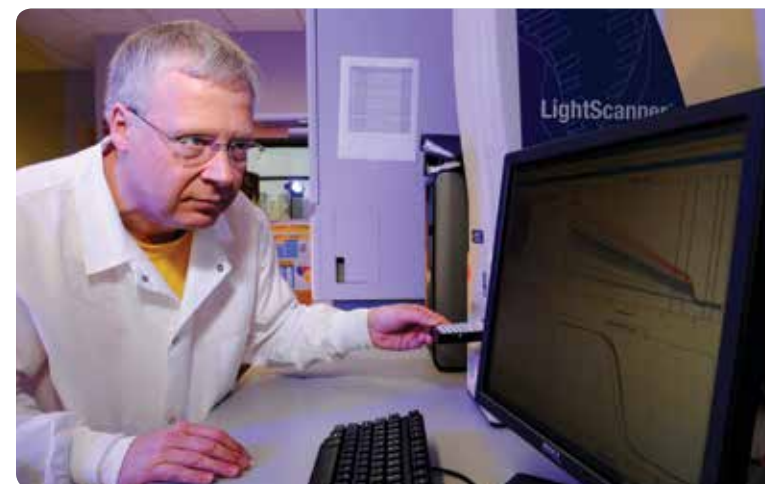
The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of Alabama School of Medicine designates this live activity for a maximum of 6.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Other CME credit: The boards of nursing in many states, including Alabama, recognize Category I continuing medical education courses as acceptable activities for the renewal of license to practice nursing. This course is also eligible for Category 2 CEU Credits for genetic counselors.

UAB is an Equal Opportunity/Affirmative Action Institution.

Register online at uab.edu/medicine/geneticsCME

For more information, please call (205) 934-7299, or e-mail cbhurst@uab.edu.



Genetics and Genomics in Medical Practice

Friday, August 23, 2013
8:00 a.m.–5:00 p.m.

UAB Alumni House
1301 10th Avenue South
Birmingham, AL 35294-4555

A CME event for health care professionals

Sponsors

UAB Department of Genetics
UAB Center for Clinical and Translational Science
University of Alabama School of Medicine Division of CME

AGENDA

8:00–8:30 a.m.	Continental Breakfast and Check-in
8:30–8:35 a.m.	Introduction and Overview • <i>Dr. Bruce Korf</i>
8:35–9:15 a.m.	Genetics and Genomics Across the Lifespan (Objectives 1, 2) • <i>Dr. Bruce Korf</i>
9:20–10:00 a.m.	Clinical Genomics in the Time of Whole-Genome Sequencing (Objectives 3, 4, 5, 6) • <i>Dr. Nathaniel Robin</i>
10:05–10:20 a.m.	Break
10:20–11:00 a.m.	The Less and More of Genomics in Perinatal Medicine (Objectives 7, 8, 9) • <i>Dr. Joseph Biggio</i>
11:05–11:45 a.m.	Genetic Counseling in the 21st Century (Objectives 10, 11) • <i>Christina Hurst</i>
11:45 a.m.–1:15 p.m.	Lunch and Clinical Case Discussions – Breakout Sessions (Objective 12) Prenatal: <i>Drs. Joseph Biggio and Amelia Sutton</i> • Pediatric: <i>Drs. Nathaniel Robin and Austin Hamm</i> • Adult/Cancer: <i>Drs. Bruce Korf, David F. Rodriguez, and Kitiwan Ronjneuangnit</i>
1:20–2:00 p.m.	Pharmacogenetics: From Bench to Bedside and Beyond (Objectives 13, 14) • <i>Dr. Nita Limdi</i>
2:05–2:45 p.m.	Predictive Testing: How Genetic Counseling and Testing Are Changing Oncology Management (Objectives 15, 16) • <i>Katie Farmer</i>
2:45–3:00 p.m.	Break
3:00–3:40 p.m.	Newborn Screening for Metabolic Disease in Alabama: What are we doing, and what do we do about it? (Objectives 17, 18, 19) • <i>Dr. S. Lane Rutledge</i>
3:45–4:25 p.m.	The Future of Genetics and Genomics in Medicine: Treatment of Genetic Disease (Objectives 20, 21) • <i>Dr. Bruce Korf</i>
4:30–5:00 p.m.	Questions and Wrap-up

Educational Objectives

- At the conclusion of this course, the learner will be able to:
- Describe indications for genetic testing in children and adults
 - Recognize limitations in interpretation of genetic traits
 - Explain how a geneticist conducts a dysmorphicologic exam
 - Recognize the significance of minor findings
 - Differentiate the different types of genetic testing and how genetic testing supplements a genetics evaluation
 - Consider how whole-genome sequencing may fundamentally alter the clinical genetics evaluation
 - Explain the current state of screening for genetic disease during pregnancy
 - Recognize how technologies that evaluate cell-free fetal DNA in the maternal circulation can be utilized to screen for fetal genetic disease and chromosomal abnormalities
 - Identify the benefits and potential drawbacks to utilization of microarray in prenatal diagnosis
 - Understand how genetic counselors work as part of the health-care team
 - Appreciate the evolving role of genetic counselors in the era of whole-genome sequencing, direct-to-consumer testing, and interpretation of common disease
 - Discuss indications for genetic testing through discussion of case studies
 - Describe current practice in medication prescription and monitoring
 - Describe and define basic pharmacogenomics nomenclature and principles
 - Differentiate between sporadic, familial, and hereditary cancers
 - Recognize the role of genetic testing in predicting and preventing cancer development
 - Understand the screening process for inherited disorders of metabolism in Alabama
 - Differentiate critical versus routine abnormal results
 - Obtain the tools to counsel a patient about abnormal metabolic results
 - Describe how genome sequencing will be used in clinical practice
 - Explain how genetic and genomic tests can guide treatment

FACULTY



Bruce Korf, M.D., Ph.D.
Wayne H. and Sara Crews Finley Chair in Medical Genetics
Director, Heflin Center for Genomic Sciences



Nathaniel Robin, M.D.
Professor, Department of Genetics



Joseph R. Biggio, Jr., M.D.
Professor, Department of Obstetrics and Gynecology
Director, Division of Maternal-Fetal Medicine
Medical Director, Obstetric Services
Director, Center for Women’s Reproductive Health



Christina Hurst, M.S., CGC
Assistant Program Director and Assistant Professor
UAB Genetic Counseling Program



Nita Limdi, M.S.P.H., Pharm.D., Ph.D.,
Associate Professor of Neurology and Epidemiology



Katie Farmer, M.S., CGC
Genetic Counselor



S. Lane Rutledge, M.D.
Professor, Department of Genetics
Medical Director, UAB Biochemical Laboratory
Advisor, State Newborn Screening Program

Amelia L. Sutton, M.D., Resident
Austin Hamm, M.D., Resident
David F. Rodriguez, M.D., Resident
Kitiwan Ronjneuangnit, M.D., Resident

Conference Registration

Name _____

Address _____

City _____

State _____ ZIP _____

Phone _____

E-mail _____

Registration Fee

\$100 for each attendee who registers before August 1
\$125 for each attendee who registers after July 31

Please make check payable to
UAB Department of Genetics

Please mail this form with payment to
UAB Dept. of Genetics – CME
Kaul 230
1720 2nd Ave. S.
Birmingham, AL 35294

Or register online at
uab.edu/medicine/geneticsCME

For more information,
please call (205) 934-7299, or e-mail cbhurst@uab.edu.