Genetics and Genomics in Medical Practice
A CME event for health care professionals | Friday, August 23, 2013

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 credits: The boards of nursing in many states, including Alabama, recognize Category 1 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.

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

Register online at uab.edu/medicine/geneticsCME
For more information, please call (205) 934-7299, or e-mail cbhurst@uab.edu.
AGENDA

8:00–8:30 a.m.  Continental Breakfast and Check-in
8:30–8:35 a.m.  Introduction and Overview • Dr. Bruce Korf
8:35–9:15 a.m.  Genetics and Genomics Across the Lifespan (Objectives 1, 2) • Dr. Bruce Korf
9:20–10:00 a.m.  Clinical Genomics in the Time of Whole-Genome Sequencing (Objectives 3, 4, 5, 6) • Dr. Nathaniel Robin
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) • Dr. Joseph Biggio
11:05–11:45 a.m.  Genetic Counseling in the 21st Century (Objectives 10, 11) • Christina Hurst
11:45 a.m.–1:15 p.m.  Lunch and Clinical Case Discussions — Breakout Sessions (Objective 12)  Prenatal: Drs. Joseph Biggio and Amelia Sutton • Pediatric: Drs. Nathaniel Robin and Austin Hamm • Adult/Cancer: Drs. Bruce Korf, David F. Rodriguez, and Kittawan Ronjneuangnit
1:20–2:00 p.m.  Pharmacogenetics: From Bench to Bedside and Beyond (Objectives 13, 14) • Dr. Nita Limdi
2:05–2:45 p.m.  Predictive Testing: How Changing Genomic Disease Management (Objectives 15, 16) • Katie Farmer
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) • Dr. S. Lane Rutledge
3:45–4:25 p.m.  The Future of Genetics and Genomics in Medicine: Treatment of Genetic Disease (Objectives 20, 21) • Dr. Bruce Korf
4:30–5:00 p.m.  Questions and Wrap-up

Educational Objectives

At the conclusion of this course, the learner will be able to:
1. Describe indications for genetic testing in children and adults
2. Recognize limitations in interpretation of genetic traits
3. Explain how a geneticist conducts a dysmorphologic exam
4. Recognize the significance of minor findings
5. Differentiate the different types of genetic testing and how genetic testing supplements a genetics evaluation
6. Consider how whole-genome sequencing may fundamentally alter the clinical genetics evaluation
7. Explain the current state of screening for genetic disease during pregnancy
8. 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
9. Identify the benefits and potential drawbacks to utilization of microarray in prenatal diagnosis
10. Understand how genetic counselors work as part of the health-care team
11. Appreciate the evolving role of genetic counselors in the era of whole-genome sequencing, direct-to-consumer testing, and interpretation of common disease
12. Discuss indications for genetic testing through discussion of case studies
13. Describe current practice in medication prescription and monitoring
14. Describe and define basic pharmacogenomics nomenclature and principles
15. Differentiate between sporadic, familial, and hereditary cancers
16. Recognize the role of genetic testing in predicting and preventing cancer development
17. Understand the screening process for inherited disorders of metabolism in Alabama
18. Differentiate critical versus routine abnormal results
19. Obtain the tools to counsel a patient about abnormal metabolic results
20. Describe how genome sequencing will be used in clinical practice
21. Explain how genetic and genomic tests can guide treatment

FACULTY

Bruce Korf, M.D., Ph.D.
Wayne H. and Sara Crews Fintley 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
Kittawan 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.