

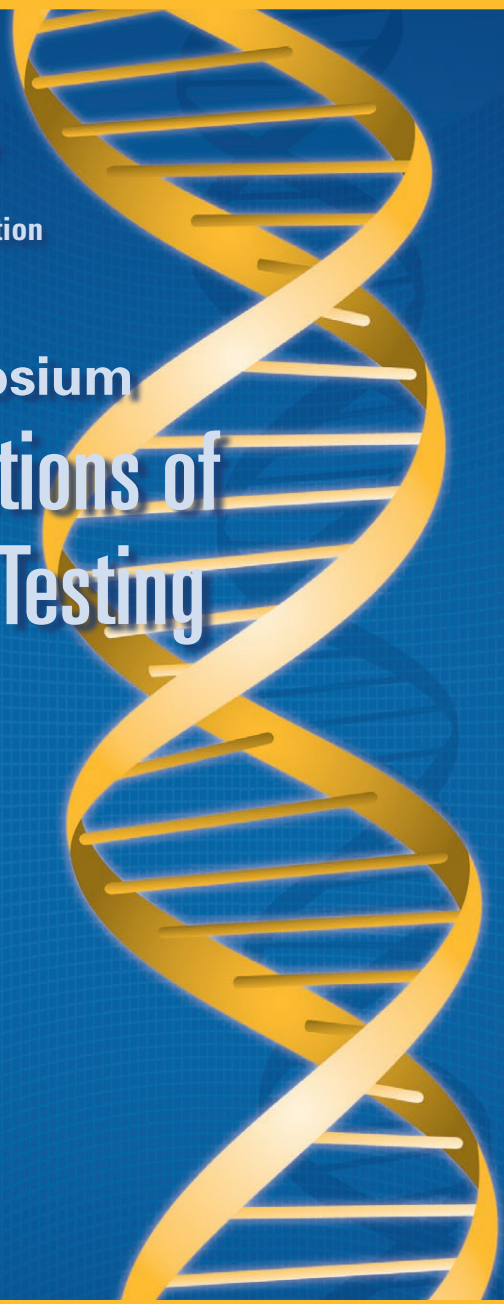


David Geffen  
School of Medicine

The UCLA Clinical Genomics Center  
and the  
Office of Continuing Medical Education

present

4th Annual Symposium  
**Clinical Applications of  
Genome-Wide Testing**



Friday, February 5, 2016  
NRB Auditorium  
UCLA Campus  
Los Angeles, California

**CME** OFFICE OF  
CONTINUING  
MEDICAL  
EDUCATION

DAVID GEFFEN SCHOOL OF MEDICINE at **UCLA**

# Clinical Applications of Genome-Wide Testing

## Course Description

The UCLA Clinical Genomics Center's 4th Annual Symposium will provide important information about the appropriate clinical application of whole genome technologies including whole exome sequencing, chromosomal microarray analysis and sequencing of circulating cell free fetal DNA. A distinguished roster of speakers will discuss how these technologies are used to identify mutations in particular Mendelian disorders and for prenatal screening. Experts in a variety of disorders will highlight examples of improved patient outcomes using these definitive diagnostic approaches. The event will include a discussion of the highly complex ethical considerations associated with this extraordinary diagnostic opportunity and its impact and a mock case evaluation by the Exome Sequencing Genomic Data Board.

## Goals and Objectives

At the conclusion of this course, participants should be able to:

- Discuss appropriate application of genome-wide analysis within clinical practice
- Identify the clinical situations in which whole exome sequencing provides the most appropriate approach to genetic testing
- Recognize strengths and limits of exome sequencing
- Understand the clinical application of new technologies in the perinatal setting
- Develop a better understanding of the complex ethical considerations and reporting challenges presented by these genome-wide technologies
- Recognize the complex psychosocial issues faced by individuals undergoing whole exome sequencing and the importance of genetic counseling

## Target Audience

This course is targeted to adult and pediatric specialists in cardiology, neurology, oncology, ophthalmology, psychiatry, and neonatology; general and fetal medicine obstetricians; clinical and molecular geneticists; genetics counselors; molecular pathologists; clinical laboratory scientists; and pathologists, clinicians, fellows and residents with an interest in genomic medicine.

## COURSE FACULTY

### Course Chair

**Wayne W. Grody, MD, PhD, FACMG, FCAP**

Professor of Pathology and Laboratory Medicine, Pediatrics, and Human Genetics\*

Director, UCLA Molecular Diagnostics Laboratories

Director, Clinical Genomics Center

### Course Co-Chair

**Fabiola Quintero-Rivera, MD, FACMG**

Associate Professor\*

Department of Pathology and Laboratory Medicine

Associate Director, Clinical and Molecular Cytogenetics Laboratory

UCLA Clinical Genomics Center

UCLA Health System

### Guest Faculty

**Kym Boycott, PhD, MD, FRCPC, FCCMG**

Clinical Geneticist, Children's Hospital of Eastern Ontario

Senior Scientist, Children's Hospital of Eastern Ontario Research Institute

Professor, Department of Pediatrics, University of Ottawa

Ottawa, Canada

**Kristin Herman, MD**

Associate Clinical Diplomat

Assistant Clinical Professor

University of California at

Davis Medical Center

Sacramento, California

**Lauren J. Isley, MS, LCGC**

Genetic Counselor

California Cryobank

Los Angeles, California

**Joseph Shieh, MD, PhD**

Assistant Professor, Division of Medical Genetics, Department of Pediatrics

Co-Director, Personalized Genomics Clinic

Director, NF/Ras Genetics Clinic

Program Director, UCSF Medical Genetics Training Program

UCSF Benioff Children's Hospital

Institute for Human Genetics

University of California San Francisco

San Francisco, California

**Anne Slavotinek, MBBS, PhD**

Professor of Clinical Pediatrics

Director, Personalized Genomics Clinic

University of California,

San Francisco

San Francisco, California

### UCLA Faculty

**Josh Deignan, PhD, FACMG**

Assistant Professor\*

Associate Director, UCLA Molecular

Diagnostics Laboratories

Department of Pathology and Laboratory

Medicine

**Naghmeh Dorrani, MS, LCGC**

Certified Genetics Counselor\*

UCLA Genetics

**Hane Lee, PhD**

Assistant Adjunct Professor\*

Pathology and Laboratory Medicine

**Stanley Nelson, MD**

Professor of Human Genetics\*

Professor of Pathology and Laboratory

Medicine\*

Co-Director, Center for Duchenne

Muscular Dystrophy

Co-Director, Clinical Genomics Center

**Samuel P. Strom, PhD**

Assistant Clinical Professor\*

Department of Pathology and Laboratory

Medicine

**Stefan Timmermans, PhD**

Professor

Department of Sociology, UCLA

**Eric Vilain, MD, PhD**

Professor\*

Departments of Pediatrics, Urology,

Human Genetics

Chair, Medical Genetics Clinic

Director, Center for Gender-Based Biology

\*David Geffen School of Medicine at UCLA

## PROGRAM SCHEDULE

- 8:15      **Registration/Continental Breakfast**
- 9:00      **Welcome**  
*Kelsey C. Martin, MD, PhD*
- 9:10      **Overview of Clinical Exome Sequencing**  
*Stanley Nelson, MD*
- 9:35      **Genomics to Augment Neonatal and Perinatal Care**  
*Joseph Shieh, MD, PhD*
- 10:00     **Whole Exome from the Perspective of a Clinical Geneticist:  
The Good, the Bad, and the Ugly**  
*Kristin Herman, MD*
- 10:25     **Questions and Answers**
- 10:35     **Break**
- 11:05     **Clinical Exome Sequencing – Challenges for a Lifetime**  
*Anne Slavotinek, MBBS, PhD*
- 11:30     **Uncertainty and Causality in Clinical Exome Sequencing**  
*Stefan Timmermans, PhD*
- 11:55     **Questions and Answers**
- 12:05     **Lunch**
- 1:30      **Keynote Speaker**  
**Canada's Path Forward for Rare Diseases: Discovery to Translation**  
*Kym M. Boycott, MD, PhD, FRCPC, FCCMG*
- 2:15      **Questions and Answers**
- 2:30      **Challenges of Interpreting the Variants of Unknown Clinical Significance  
for Patients**  
*Naghmeh Dorrani, MS, LCGC*
- 2:55      **Next-Generation Sequencing for Noninvasive Prenatal Testing:  
Historical Context and Clinical Implications**  
*Wayne W. Grody, MD, PhD, FACMG, FCAP*
- 3:20      **Questions and Answers**
- 3:30      **Break**
- 4:00      **Experiences with Genome-Wide Testing on Individuals Conceived via  
Gamete Donation**  
*Lauren J. Isley, MS, LCGC*
- 4:25      **The Interpretative Process and Data Reporting: A Mock Case Discussion**  
*Hane Lee, PhD, Samuel P. Strom, PhD, Josh Deignan, PhD, FACMG,  
Naghmeh Dorrani, MS, LCGC, Eric Vilain, MD, PhD*
- 5:15      **Closing Remarks**  
*Wayne W. Grody, MD, PhD, FACMG, FCAP*
- 5:25      **Adjourn**

## GENERAL INFORMATION

**Fee** \$125

**Genetic Counselors, CLS** \$75

**Fellows/Residents/Students** \$35

### Refunds

Cancellations must be received in writing by Friday, January 8, 2016 and will be subject to a \$50 processing fee. No refunds will be granted after that date. If, for any reason, the course must be cancelled, discontinued, or rescheduled by the Office of Continuing Medical Education, a full refund will be provided.

### Enrollment

#### *By Mail*

Use the form attached. Mail to the UCLA Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Clinical Applications of Genome-Wide Testing, 10920 Wilshire Blvd., Ste. 1060, Los Angeles, CA 90024-6512

#### *Online*

Go to [www.cme.ucla.edu/courses](http://www.cme.ucla.edu/courses), click on 4th Annual Symposium Clinical Applications of Genome-Wide Testing, and click on the registration button. You may use your MasterCard, VISA, American Express or Discover card to register online.

#### *By Phone*

Use your American Express, MasterCard, VISA or Discover card.  
Call (310) 794-2620

#### *By FAX*

Send the completed enrollment form with credit card information and authorizing signature.  
Fax (310) 794-2624

### Program Location

NRB Auditorium  
Neuroscience Research Building  
635 Charles E. Young Drive South  
Los Angeles, CA 90095

### Directions and Parking

From the 405 freeway, exit on Wilshire Blvd. East. Proceed on Wilshire Blvd. to Westwood Blvd. and make a left. Proceed north on Westwood Blvd., turn right on Charles E. Young Drive South and continue ½ a block. Turn left into Lot 9. There will be an attendant selling permits from 7:30 am-9:30 am. If you arrive outside of this time frame please report to the parking kiosk on Westwood Plaza to pay for your parking permit.

Parking is \$12.

### Accreditation

The Office of Continuing Medical Education, David Geffen School of Medicine at UCLA is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Office of Continuing Medical Education, David Geffen School of Medicine at UCLA designates this live activity for a maximum of 6 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### Disclosure Statement

The FDA has issued a concept paper which classifies commercial support of scientific and educational programs as promotional unless it can be affirmed that the program is “truly independent” and free of commercial influence. In addition to independence, the FDA requires that nonpromotional, commercially supported education be objective, balanced, and scientifically rigorous. The policy further states that all potential conflicts of interest of the CME staff and faculty be fully disclosed to the program’s participants. In addition, Accreditation Council for Continuing Medical Education policy now mandates that the provider adequately manages all identified potential conflicts of interest prior to the program. We at UCLA fully endorse the letter and spirit of these concepts.

### Additional Credits

**Genetic Counselor CEUs:** This event has been submitted to the National Society of Genetic Counselors (NSGC) for approval of Category 1 CEUs. The American Board of Genetic Counseling (ABGC) accepts CEUs approved by NSGC for purposes of recertification. Approval for the requested CEUs and Contact Hours is currently pending.

This course is approved for 5 CEU for CLS/MLT/CPT.

### Additional Information

If you have any questions, please contact the UCLA Office of Continuing Medical Education at 310-794-2620.

Please visit our website for other UCLA CME course offerings: [www.cme.ucla.edu](http://www.cme.ucla.edu)

***Early registration is recommended, as space is limited.***

## REGISTRATION

Mail Application for Enrollment (Please Print)

Winter 2016

Course Title and Number	Registration Fee
Clinical Applications of Genome-Wide Testing M156-29	\$125.00
Genetic Counselors, CLS	\$75.00
Fellows/Residents/Students	\$35.00

\_\_\_\_\_  
Last four digits of your Social Security Number

\_\_\_\_\_  
Name (First/Middle/Last) Degree  Male  Female

\_\_\_\_\_  
Preferred Mailing Address

\_\_\_\_\_  
City/State/ZIP ( )  
Area Code Daytime Phone

\_\_\_\_\_  
Specialty ( )  
Area Code Fax

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**▶ E-mail** PLEASE PRINT

Check enclosed payable to: **The Regents of the University of California**

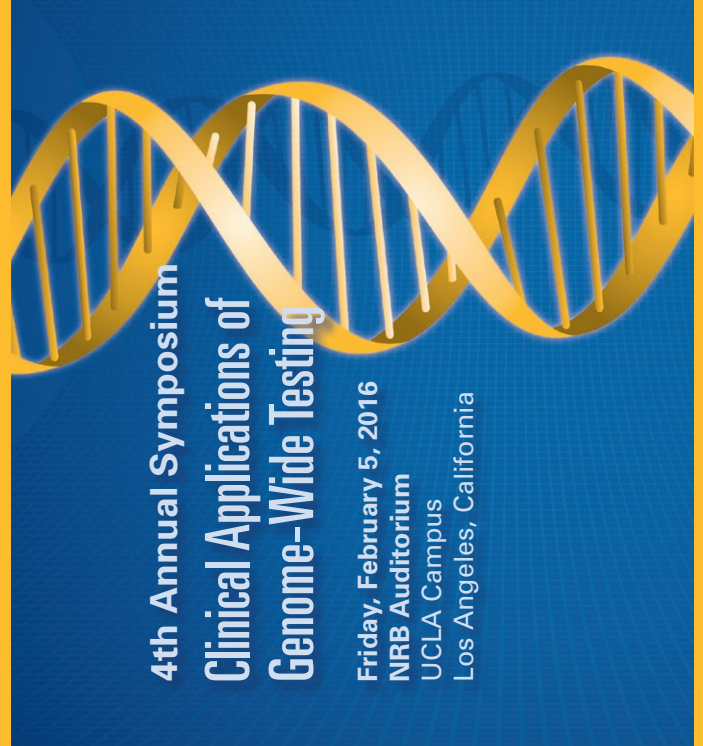
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Authorizing Signature Expiration (Mo/Yr)

**Mail to: Office of Continuing Medical Education, David Geffen School of Medicine at UCLA,  
Clinical Applications of Genome-Wide Testing, 10920 Wilshire Blvd., Suite 1060, Los Angeles,  
CA 90024-6512.**

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of  
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