



# HARVARD MEDICAL SCHOOL

## DEPARTMENT OF CONTINUING EDUCATION

### HUMAN TERATOGENS

### Environmental Factors Which Cause Birth Defects

### APRIL 25-27, 2010

*offered by the*  
**MASSACHUSETTS GENERAL HOSPITAL, DEPARTMENT OF PEDIATRICS**  
*at the*  
**RICHARD B. SIMCHES RESEARCH CENTER**  
**MASSACHUSETTS GENERAL HOSPITAL**  
*under the direction of*  
**Lewis B. Holmes, MD and Associates**  
*Guest Speakers*

**Kenneth Lyons Jones, MD**  
 University of California, San Diego

**John C. Carey, MD, MPH**  
 University of Utah

**Jane Adams, PhD**  
 University of Massachusetts

**Allen A. Mitchell, MD**  
 Boston University

There is now widespread concern about teratogenic effects of drugs, chemicals, radiation exposure and infectious agents. The objectives of this course are to:

- **survey all aspects of human teratogens, including mechanisms of action, epidemiological studies, and in particular, practical approaches for evaluating the exposed fetus and for counseling prospective parents**
- **review current controversies concerning the role of putative teratogens**

Faculty includes clinicians, epidemiologists, basic scientists, obstetricians, and pediatricians with first hand experience.

**Attendance Limited**

**Program on Reverse Side**

Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Harvard Medical School designates this educational activity for a maximum of **22** AMA PRA Category 1 Credit(s)<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The Massachusetts Association for Registered Nurses, Inc. (MARN) — approval pending. National Society of Genetic Counselors (NSGC) — approval pending.

Educational credits for Genetic Counselors through the American Board of Genetic Counseling (ABMG) is pending.

**REGISTRATION INFORMATION:**

**Tuition Fee — \$575 (USD). Reduced Fee for Residents/Fellows in Training** (with letter of verification from Department Chair) and **Allied Health Professionals — \$325 (USD)**. All foreign payments must be made by a draft on a United States Bank or by Visa or MasterCard. If paying by check, make it payable to *Harvard Medical School* and mail with the completed registration form to: **Harvard Medical School — Department of Continuing Education, P.O. Box 825, Boston, MA 02117-0825**. If paying by credit card, please register online at [www.cme.hms.harvard.edu/courses/humanteratogens](http://www.cme.hms.harvard.edu/courses/humanteratogens). **Telephone or mail-in registration with credit card payment is not accepted.** Inquiries should be directed to the above address, made by phone: (617) 384-8600, Monday–Friday, 10 am to 4 pm (EST), or by e-mail: [hms-cme@hms.harvard.edu](mailto:hms-cme@hms.harvard.edu). Upon receipt of registration a confirmation letter will be mailed to the address listed on the form. Please note: **Program changes/substitutions may be made without notice.**

**ONLINE INFORMATION:**

To register or view course information online, visit our home page: [www.cme.hms.harvard.edu/courses/humanteratogens](http://www.cme.hms.harvard.edu/courses/humanteratogens). **To ensure proper registration, please add the first three characters of the source code found at the bottom of this registration form.**

**REFUND POLICY:**

A handling fee of \$60 is deducted for cancellation. Refund requests must be received by mail or fax one week prior to the course. No refunds will be made thereafter.

**COURSE LOCATION:**

All sessions will be held at the **Simches Research Center**, Charles River Plaza, 185 Cambridge St., Boston, MA 02114.

**ACCOMMODATIONS:**

**Hotel rooms in Boston are limited. You are urged to make your reservations early.** A limited number of rooms has been reserved at the **Holiday Inn at Beacon Hill**, 5 Blossom Street, Boston (617) 742-7630 until **March 25, 2010**. Please specify that you are enrolled in this course to receive a reduced room rate. A map of Boston listing local hotels will be sent to you with your confirmation of enrollment. For additional housing assistance, call Boston Reservations at (617) 332-4199.

**TRAVEL:**

Please do not make non-refundable airline reservations until your enrollment in the course has been confirmed. You can make your airline reservation by calling the HMS Travel Desk toll free 1(877)4-HARVMD (1-877-442-7863) Monday – Friday 9 a.m. to 8 p.m. (EST). From outside the U.S., Canada and Virgin Islands, please call (617) 559-3764.

**HUMAN TERATOGENS CLASS #302665**

**April 25-27, 2010**  
 Print Name Clearly  
 All Fields Required

**Tuition Fee: \$575 (USD)**  
**Allied Health Professionals: \$325 (USD)**  
**Genetics/Maternal Fetal Medicine Residents/Fellows\*: \$200 (USD)**

Full Name \_\_\_\_\_ Degree \_\_\_\_\_  
Last First Middle Initial

Mailing Address \_\_\_\_\_  
Street City State Zip Code

Daytime Phone ( \_\_\_\_\_ ) \_\_\_\_\_ Fax Number ( \_\_\_\_\_ ) \_\_\_\_\_

E-Mail Address \_\_\_\_\_  
 Please check if you wish to be **excluded** from receiving e-mail notices of future Harvard Medical School — Department of Continuing Education programs

Professional School Attended \_\_\_\_\_ Year of Graduation \_\_\_\_\_

Profession \_\_\_\_\_

Principal Specialty (Physicians Only) \_\_\_\_\_ Board Certified: Yes  No

Organization Affiliation \_\_\_\_\_

\*A letter of verification from the Department Chair must accompany the registration form for a reduced fee.

**Form of Payment** (please check one):  
 **Check is enclosed:** Please make your check payable to *Harvard Medical School* and mail it with this registration form to:  
**Harvard Medical School, Department of Continuing Education, P.O. Box 825, Boston, MA 02117-0825**  
 Registrations paid by credit card must be made online at [www.cme.hms.harvard.edu/courses/humanteratogens](http://www.cme.hms.harvard.edu/courses/humanteratogens).

**PROGRAM**  
**POSTGRADUATE COURSE: HUMAN TERATOGENS**  
**RICHARD B. SIMCHES RESEARCH CENTER**  
**MASSACHUSETTS GENERAL HOSPITAL**

**SUNDAY, APRIL 25, 2010**  
**GENERAL PRINCIPLES**

**Moderator: Lewis B. Holmes, MD**

Morning  
7:00- 8:00 Registration — Simches Research Center — 3rd Floor  
8:00- 9:00 Principles of Embryology . . . . . *Drucilla Roberts, MD*  
9:00-10:00 Principles of Epidemiology . . . . .  
. . . . . *Sonia Hernandez-Diaz, MD, PhD*  
10:00-10:20 *Break*  
10:20-11:20 Principles of Teratology . . . . . *Lewis B. Holmes, MD*  
11:20-12:20 OTIS: Progress Report . . . . . *Kenneth Lyons Jones, MD*  
12:20- 1:30 *Lunch*

**SPECIAL LECTURE**

1:30- 2:30 Case Reports — A Challenge for  
the Editor . . . . . *John C. Carey, MD, MPH*

**MATERNAL EXPOSURES**

**Moderator: Lewis B. Holmes, MD**

Afternoon  
2:30- 3:20 Obesity . . . . . *Sonja A. Rasmussen, MD, MS*  
3:20- 4:10 Pregnancy After Cancer Treatments . . . . . *John J. Mulvihill, MD*  
4:10- 4:30 *Break*  
4:30- 5:30 “New” Intrauterine  
Infections . . . . . *Sonja A. Rasmussen, MD, MS*

**MONDAY, APRIL 26, 2010**

**Moderator: Louise E. Wilkins-Haug, MD, PhD**

**MATERNAL EXPOSURES**

Morning  
8:00- 9:00 Assisted Reproductive  
Technology . . . . . *Louise E. Wilkins-Haug, MD, PhD*  
9:00- 9:50 Phthalates . . . . . *Russ B. Hauser, MD, Sc.D*  
9:50-10:10 *Break*  
10:10-11:00 Pesticides . . . . . *Robin M. Whyatt, DrPH*  
11:00-12:00 Fetal Effects of Trade Center  
Destruction (9/11/01) . . . . . *Philip J. Landrigan, MD, MSc*  
12:00- 1:00 *Lunch*  
Afternoon  
1:00- 2:00 Radiation Exposure —  
Chernobyl Accident . . . . . *Timothy A. Mousseau, PhD*

**MONDAY, APRIL 26, 2010 (continued)**  
**Moderator: Lewis B. Holmes, MD**

**MATERNAL ADDICTIONS**

Afternoon  
2:00- 3:00 Cigarette Smoking . . . . . *Elyse R. Park, PhD, MPH*  
3:00- 3:30 *Break*  
3:30- 4:30 Alcohol . . . . . *Kenneth Lyons Jones, MD*  
4:30- 5:30 Cocaine . . . . . *Deborah A. Frank, MD*

**TUESDAY, APRIL 27, 2010**

**DRUGS**

**Moderator: Allen Mitchell, MD**

Morning  
8:00- 8:50 Methotrexate . . . . . *John C. Carey, MD*  
8:50- 9:40 Chemotherapy in Pregnancy . . . . . *John J. Mulvihill, MD*  
9:40-10:10 *Break*  
10:10-11:00 SSRI . . . . . *Allen A. Mitchell, MD*  
11:00-11:50 Topical Retin-A . . . . . *Kenneth Lyons Jones, MD*  
11:50- 1:15 *Lunch*

**DRUGS: Effects on Intelligence  
from Exposure in Pregnancy**

**Moderator: Lewis B. Holmes, MD**

Afternoon  
1:15- 2:05 Accutane . . . . . *Jane Adams, PhD*  
2:05- 2:55 Valproic Acid . . . . . *Jennifer Anne Gavin, PhD*  
2:55- 3:15 *Break*  
3:15- 4:05 Phenytoin, Phenobarbital and  
Carbamazepine . . . . . *Jane Adams, PhD*

**PREGNANCY REGISTRIES**

4:05- 4:55 Pregnancy Registries . . . . . *Lewis B. Holmes, MD*

Please note: Program changes/substitutes may be made without notice.

**FACULTY**

- Jane Adams, PhD**, Professor of Psychology, University of Massachusetts, Boston.
- John C. Carey, MD, MPH**, Professor and Vice Chair, Department of Pediatrics, University Utah School of Medicine, Salt Lake City, Utah.
- Deborah A. Frank, MD**, Director, Grow Clinic for Children, Boston Medical Center; Professor of Pediatrics, Boston University School of Medicine.
- Jennifer Anne Gavin, PhD**, Postdoctoral Fellow in Cardiovascular and Critical Care Programs, Department of Psychiatry, Children’s Hospital, Boston.
- Russ B. Hauser, MD, ScD, MPH**, Professor of Obstetrics, Gynecology and Reproductive Biology, Vincent Memorial Obstetrics and Gynecology, Massachusetts General Hospital, Boston; Professor of Environmental and Occupational Epidemiology, Department of Environmental Health, Harvard School of Public Health.
- Sonia Hernandez-Diaz, MD, DrPH**, Associate Professor of Epidemiology and Director of the Pharmacoepidemiology Program at the Harvard School of Public Health, Boston, MA.
- Lewis B. Holmes, MD**, Chief, Genetics Unit, MassGeneral Hospital for Children, Boston; Professor of Pediatrics, Harvard Medical School.
- Philip J. Landrigan, MD, MSc**, Ethel H. Wise Professor and Chairman, Department of Preventive Medicine; Professor of Pediatrics; Director, Children’s Environmental Health Center, Mount Sinai School of Medicine, New York, NY.
- Kenneth Lyons Jones, MD**, Chief, Division of Dysmorphology/Teratology; Professor of Pediatrics, University of California San Diego School of Medicine, La Jolla, CA.
- Allen A. Mitchell, MD**, Director, Slone Epidemiology Center, Boston; Professor of Epidemiology and Pediatrics, Boston University Schools of Public Health and Medicine.
- Timothy A. Mousseau, PhD**, Associate Dean for Research and Graduate Education, Professor of Biological Sciences, Arts and Sciences, University of South Carolina, Columbia.
- John J. Mulvihill, MD**, Children’s Medical Research Institute; Kimberly V. Talley Chair in Genetics, Professor of Pediatrics, University of Oklahoma Health Sciences Center, Oklahoma City.
- Elyse R. Park, PhD, MPH**, Clinical Associate in Psychology, Institute of Health Policy, Massachusetts General Hospital, Boston; Assistant Professor of Psychiatry, Harvard Medical School.
- Sonja A. Rasmussen, MD, MS**, Senior Scientist, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention, Atlanta, GA.
- Drucilla J. Roberts, MD**, Associate Pathologist, Department of Pathology, Massachusetts General Hospital, Boston; Associate Professor of Pathology, Harvard Medical School.
- Robin M. Whyatt, DrPH**, Associate Professor of Clinical Environmental Health Sciences, Department of Environmental Health Sciences at the Joseph Mailman School of Public Health, Columbia University; Deputy Director of the Columbia Center for Children’s Environmental Health, New York, NY.
- Louise E. Wilkins-Haug, MD, PhD**, Director, Maternal Fetal Medicine, Brigham and Women’s Hospital, Boston; Associate Professor, Obstetrics, Gynecology and Reproductive Biology, Harvard Medical School.