

## **IMPACT OF MATERNAL THYROID STATUS ON PREGNANCY AND FETAL AND CHILDHOOD DEVELOPMENT**

*Friday, April 2, 2004*  
Holiday Inn Old Town Select  
Alexandria, Virginia

Sponsored by  
[Johns Hopkins University School of Medicine](#)  
A symposium of the  
[American Thyroid Association](#)  
and the  
[American Association of Clinical Endocrinologists](#)

### **American Thyroid Association (ATA)**

The ATA provides outstanding leadership in thyroidology by promoting excellence and innovation in clinical care, research, education, and public advocacy.

The American Thyroid Association national headquarters is at  
6066 Leesburg Pike, Suite 650  
Falls Church, VA 22041  
Phone (703) 998-8890 / Fax (703) 998-8893  
E-mail: [admin@thyroid.org](mailto:admin@thyroid.org)  
Website: [www.thyroid.org](http://www.thyroid.org)

### **American Association of Clinical Endocrinologists (AACE)**

The American Association of Clinical Endocrinologists is a professional medical organization devoted to the enhancement of the practice of clinical endocrinology.

The American Association of Clinical Endocrinologists national headquarters is at  
1000 Riverside Avenue, Suite 205  
Jacksonville, FL 32204  
Phone (904) 353-7878 / Fax (904) 353-8185  
E-mail: [info@aace.com](mailto:info@aace.com)  
Website: [www.aace.com](http://www.aace.com)

## COURSE DESCRIPTION

### Target Audience

Health care professionals caring for women of reproductive age or during pregnancy, particularly those women with known thyroid disorders; healthcare professionals caring for infants born to women with thyroid disorders. This includes primary care physicians (obstetrician-gynecologists, family medicine, and internists), sub-specialists (pediatric, adult, and reproductive endocrinologists, perinatologists, neonatologists and genetic counselors), specialists in human development (medical psychologists), epidemiologists and public health policy makers, and advocacy groups for maternal and child health.

### Course Description

Evidence is accumulating that maternal thyroid dysfunction has an untoward impact on fetal and childhood development. Maternal hypothyroidism is estimated to be 100 times more common than congenital hypothyroidism. There is a need for clinicians caring for women of reproductive age and during pregnancy to know which patients are at risk for thyroid dysfunction, and to know how to diagnose and manage thyroid disorders during pregnancy. This symposium will review normal thyroid function in healthy women and changes during pregnancy, discuss the prevalence and etiology of thyroid dysfunction during pregnancy, and review evidence of its adverse effect on pregnancy outcome and fetal and childhood development. This will include a discussion of the potential role of environmental toxins on thyroid function. The diagnosis and management of thyroid disorders during pregnancy will be reviewed, including a focus on whether at-risk patients can be identified and the potential benefits of population screening.

## OBJECTIVES

Following this program, the participant should be able to:

- Describe the important changes in thyroid function that occur during pregnancy.
- List the most common causes of maternal hypothyroidism.
- Select appropriate thyroid diagnostic tests during pregnancy and interpret their results.
- Know factors to consider in the treatment of hypothyroidism and hyperthyroidism during pregnancy.
- Understand the implications of maternal hypothyroidism and hyperthyroidism on fetal outcome.

## FEES

**REGISTRATION CUT-OFF DATE:** March 30, 2004

Please note: Payment must accompany your [registration](#). Registrations received after 5 p.m. EST on March 30th will be subject to a \$50 late fee. Only on-site registrations will be accepted after this date.

### FEES:

Physicians	\$225
Residents*/Fellows*/Allied Health Professionals	\$75
<i>*with verification of status</i>	

The registration fee includes instructional materials and refreshment breaks. Foreign payments must be made by credit card or with a U.S. Dollar World Money Order.

An enrollment confirmation will be sent to each registrant. If you do not receive a confirmation by March 26, 2004, please call (410) 955-3169 to confirm that you are registered. A certificate of attendance will be mailed by May 14th.

*Cancellation policy:* If you must cancel, notify the Office of Continuing Medical Education by phone, (410) 955-2959, or fax, (410) 955-0807. An administrative fee of \$50 will be retained on all refunds, which will be processed only after written notice is received. Cancellations received after March 26th are non-refundable. The Johns Hopkins University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the Johns Hopkins University will refund only the registration fee and is not responsible for other related travel expenses.

#### ACCREDITATION

### ACCREDITATION STATEMENT

The Johns Hopkins University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

### CREDIT DESIGNATION STATEMENT

The Johns Hopkins University School of Medicine designates this educational activity for a maximum of 7.5 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

#### **American Academy of Family Physicians (AAFP)**

This activity has been reviewed and is acceptable for up to 6.5 prescribed credits by the American Academy of Family Physicians.

#### **Psychologists**

The Johns Hopkins University School of Medicine is authorized by the State Board of Examiners of Psychologists as a provider of continuing education. Johns Hopkins University School of Medicine maintains responsibility for this program. A certificate for 7.5 CEUs will be awarded upon completion of this activity.

#### **Americans with Disabilities Act**

The Johns Hopkins University School of Medicine fully complies with the legal requirements of the ADA and the rules and regulations thereof. Please notify us if you have any special needs.

## CO-CHAIRS

**Stephen H. LaFranchi, MD**

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**Robert C. Smallridge, MD, FACE**

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Mayo Medical School  
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## GUEST SPEAKERS

**Brian M. Casey, MD**

Associate Professor of Obstetrics and Gynecology  
University of Texas SW at Dallas  
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**P. Reed Larsen, MD**

Professor of Medicine  
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Gillette Professor of Obstetrics and Gynecology  
University of Texas Southwestern Medical Center at Dallas  
Chief of Obstetrics, Parkland Health and Hospital System

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Instituto de Investigaciones Biomedicas "Alberto Sols"  
Madrid, Spain

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Senior Scientist  
The Hospital for Sick Children Research Institute  
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**Carole A. Spencer, PhD, FACB**  
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University of Southern California  
Director, USC Endocrine Services Laboratory  
University of Southern California  
Los Angeles, California

## **PLANNING COMMITTEE**

**Gregory A. Brent, MD**  
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David Geffen School of Medicine at UCLA  
Chief, Endocrinology and Diabetes  
Division VA  
Greater Los Angeles Healthcare System  
Los Angeles, California

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Endocrine Division  
Children's Hospital  
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**Thomas P. Foley, Jr., MD**  
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Children's Hospital of Pittsburgh  
Pittsburgh, Pennsylvania

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Mayo Clinic College of Medicine  
Immediate Past President, American Association of Clinical Endocrinologists  
Rochester, Minnesota

**Daniel Glinde, MD, PhD**  
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**Joseph G. Hollowell, Jr., MD, MPH**  
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Director, National Toxicology Program Center for the Evaluation of Risks to Human Reproduction  
National Institute of Environmental Health Sciences  
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**Catherine Y. Spong, MD**

Chief, Pregnancy and Perinatology Branch  
National Institute of Child Health & Human Development  
National Institutes of Health  
Bethesda, Maryland

**Alex S. Stagnaro-Green, MD**

Professor of Medicine  
Associate Dean for Curriculum and Faculty Development  
UMDNJ-New Jersey Medical School  
Newark, New Jersey

**R. Thomas Zoeller, PhD**

Professor of Biology  
University of Massachusetts  
Amherst, Massachusetts

## **Policy On Faculty And Provider Disclosure**

It is the policy of the Johns Hopkins University School of Medicine that the faculty and provider disclose real or apparent conflicts of interest relating to the topics of this educational activity, and also disclose discussions of unlabeled/unapproved uses of drugs or devices during their presentation(s). Detailed disclosure will be made in the course handout materials.

### **MEETING LOCATION**

Holiday Inn Old Town Select

480 King Street

Old Town Alexandria, Virginia 22314

800-368-5047

703-549-6080

FAX: 703-684-6508

Hotel Reservation Cut-Off Date: Date: March 2, 2004  
Check-in time: 3:00 pm; Check-out time: 12:00 Noon

A block of rooms has been reserved for the convenience of our attendees. For reservations, call the hotel directly and be sure to specify that you are attending the American Thyroid Association meeting to receive the special room rate of \$179 per night, single or double, plus tax. The Old Town Holiday Inn Select offers complimentary shuttle service to and from Reagan National Airport between the hours of 7:00 am and 10:00 pm. Courtesy phones are located at each baggage terminal.

#### TRAVEL INFORMATION

Call United Airlines at (800) 521-4041 for discounted rates and refer to Meeting ID Number 549TJ. The closest airport is Reagan National Airport (DCA). The airport is 15 minutes from the hotel. B Washington Dulles International Airport (IAD) is 45 minutes from the hotel and Baltimore-Washington International Airport (BWI) is 1-1/4 hours away.

## DIRECTIONS

The Holiday Inn Select is 2 miles north of I-195 (Capital Beltway). Exit on Route 1 North. Turn right (east) on Franklin Street. Proceed 5 blocks to Pitt Street. Turn left. Follow it to the hotel (corner of Pitt and King Streets).

Additional information on travel arrangements will be forwarded with your course confirmation notice. To receive this information more quickly, you may call (410) 955-2959 to have this information faxed to you. Please specify that you are interested in information pertaining to the Maternal/Fetal Thyroid Health course. For further travel information and tips, [click here](#).

#### PROGRAM

### Friday, April 2, 2004

Morning

7:15 - 8:00 Registration and Continental Breakfast

8:00 - 8:15 **Welcome and Introduction**  
Stephen H. LaFranchi, MD  
Robert C. Smallridge, MD, FACE

### **Maternal/Fetal Thyroid Physiology** **Moderator: Hossein Gharib, MD, FACE**

8:15 - 8:40 **Thyroid Function in Healthy Women and Changes during Pregnancy**  
Daniel Glinoyer, MD, PhD

8:40 - 9:05 **The Fetus: Evidence for the Role of Maternal Thyroid Hormone in the First Half of Pregnancy and Fetal Thyroid Function in the Second Half of Pregnancy**  
Gabiella Morreale de Escobar

9:05 - 9:30 **Selection of Thyroid Diagnostic Tests and their Interpretation during Pregnancy**  
Carole A. Spencer, PhD, FACB

9:30 - 10:00 **Panel Discussion/Q&A**

10:00 - 10:20 Refreshment Break

## **Maternal Thyroid Disorders**

**Moderator: Catherine Y. Spong, MD**

10:20 - 10:45 **Prevalence and Etiology of Thyroid Dysfunction**  
Kenneth J. Leveno, MD

10:45 - 11:10 **Management of Maternal Hypothyroidism during Pregnancy**  
P. Reed Larsen, MD

11:10 - 11:35 **Management of Maternal Hyperthyroidism during Pregnancy**  
Jorge H. Mestman, MD

11:35 - 12:00 **Panel Discussion/Q&A**

12:00 - 1:00 **Luncheon Program**  
Invited Speaker

Afternoon

## **Impact on Fetus and Offspring**

**Moderator: Thomas P. Foley Jr., MD**

1:00 - 1:30 **Assessing the Evidence that Maternal Hypothyroidism has an Untoward Impact on Pregnancy Outcome**  
Brian M. Casey, MD

1:30 - 2:10 **Investigations of Neurodevelopmental Outcome in Infants and Children Born to Women with Thyroid Dysfunction**  
John H. Lazarus, MA, MD, FRCP, FACE

2:10 - 2:40 **Panel Discussion/Q&A**  
Joanne Rovet, PhD  
Rosalind S. Brown, MD, CM

2:40 - 3:00 Refreshment Break

## **Environmental Influences**

**Moderator: Michael D. Shelby, PhD**

3:00 - 3:25 **Environmental Toxins: Evidence from Animal Models that Environmental Agents Influence both Maternal and Fetal Thyroid Function**  
R. Thomas Zoeller, PhD

3:25 - 3:50 **Determining the Benefits and Costs of Identifying Reproductive Age Women At-Risk for Thyroid Disorders**  
Paul W. Ladenson, MD

## **Post-partum**

**Moderator: Robert C. Smallridge, MD, FACE**

3:50 - 4:15 **Post-partum Thyroiditis**  
Alex S. Stagnaro-Green, MD

4:15 - 4:25 **Q&A**

## Summary

4:25 - 4:45

### **Summary and Recommendations for Thyroid Screening in Pregnancy: Is There a Consensus Yet?**

Gregory A. Brent, MD

4:45

Complete and Return the Evaluation and Credit Report Forms.

The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.

This schedule is subject to change.