Thyroid Health and the Environment

Friday, March 24, 2006
Washington, DC
Hamilton Crowne Plaza
at 14th and K Streets, NW

Jointly sponsored by Boston University School of Medicine and the American Thyroid Association

ATA Spring Meeting held in cooperation with the American Association of Clinical Endocrinologists (AACE)
This symposium will focus on the effects of the environment on the thyroid, especially those factors that might adversely affect thyroid function. There will be introductory lectures concerning the physiology and pathophysiology of the thyroid and the biochemical and molecular events within the thyroid that can be affected by environmental chemicals and radiation. The major impact of iodine nutrition on the thyroid will be carefully reviewed, especially the current situation in the United States as well as the growing concern about mild-to-moderate iodine deficiency in women during their reproductive age and during pregnancy and the post-partum period, with emphasis on iodine nutrition in the nursing infant. There will be an in-depth discussion of environmental agents that could inhibit the concentration of iodine by the thyroid and the effects of environmental perchlorate on thyroid function in pregnant women, nursing mothers, children, and adults in the United States and South America. The effect of thiocyanate, a byproduct of smoking, on the concentration of iodine by the thyroid and by the breast into breast milk, will also be discussed, as will the environmental contaminants — nitrates and PCBs — on thyroid function. The radiation exposure of children and young adults in the Chernobyl area following the nuclear accident in 1986 will be discussed in-depth as well as the effect of radiation on gene mutations and the development of thyroid cancer and the role of radiation in the induction of autoimmune thyroid disease. Key areas for study and research will be discussed as a conclusion to the conference.

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

MEETING REGISTRATION
Space is limited—Register early!

REGISTER ONLINE at the secure ATA web site www.thyroid.org.

FAX your completed form with credit card payment (no checks or money orders) to 678-341-3081. If you FAX, DO NOT MAIL, you risk duplicate charges.

MAIL your completed registration form with payment to: ATA Registration, c/o QMS, 6840 Meadowridge Court, Alpharetta, GA 30005. Phone 678-341-3056, 678-341-3081

ADA: To request reasonable accommodations for a disability, please notify admin@thyroid.org, in writing, at least two weeks prior to the conference.
**Goals**

1. To bring to the attention of various health care workers and professionals, as well as the general public, the potential adverse effects of environmental agents on thyroid function.
2. Provide to the attendees a balanced and appropriate evaluation of these environmental factors.

**Course Objectives**

Following this program, the participant should be able to:

- Determine and differentiate the mechanisms of various environmental agents on thyroid function.
- Evaluate and distinguish the various environmental effects on thyroid function in a balanced and careful approach.
- Recognize and interpret the recommendations by various national and state agencies on the regulation of the potential environmental factors affecting thyroid health.
- Relate and report to their colleagues and the public a critique and summary of the effects of the environment on thyroid function.

**Support**

This program is being supported in part by unrestricted educational grants from Genzyme, Inc. and Abbott Laboratories.

**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.

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**Target Audience**

Professionals and citizens interested in the impact of the environment on the thyroid, including pediatric, adult, and reproductive endocrinologists; perinatologists and neonatologists; epidemiologists and public health professionals, especially those interested in the impact of the environment on the health of the American population; basic and clinical scientists primarily interested in the assessment of environmental contaminants; federal, state, and local organizations involved with setting environmental standards; and citizens concerned about the effects of the environment on the health of the American population.

**HOTEL RESERVATIONS**

**Group rate cut-off date Friday, March 3rd**

REGISTER ONLINE at the secure ATA web site www.thyroid.org.

PHONE 877-227-6963

Make your reservation at the Hamilton Crowne Plaza in Washington, DC. Indicate that you are with ATA/Thyroid and the Environment to receive the group rate.

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 ATA meeting to receive the special room rate of $159 per night, single or double, plus tax. (See information on back.)
**FACULTY**

Benjamin Blount, PhD  
Lead Research Chemist, National Center for Environmental Health; Centers for Disease Control and Prevention

Gregory A. Brent, MD  
Professor of Medicine and Physiology, VA Greater Los Angeles Healthcare System/UCLA  
Secretary, American Thyroid Association

David S. Cooper, MD  
Director, Division of Endocrinology, Sinai Hospital of Baltimore  
Professor of Medicine, Johns Hopkins University School of Medicine  
President Elect, American Thyroid Association

Hossein Gharib, MD, MACP, MACE  
Professor of Medicine, Mayo Clinic College of Medicine  
Past President, American Association of Clinical Endocrinologists

John P. Gibbs, MD  
Kerr-McGee Corporation

Jerrold Heindel, PhD  
Scientific Program Administrator, National Institute of Environmental Health Sciences; Division of Extramural Research and Training Cellular, Organ and Systems Pathobiology Branch

Joseph G. Hollowell, Jr., MD, MPH  
Clinical Professor of Pediatrics, University of Kansas

Peter Laurberg, MD  
Professor Endocrinology and Medicine, Department of Endocrinology, Aalborg Hospital, Aarhus University Hospital

Ernest L. Mazzaferrri, MD  
Professor of Medicine, University of Florida, Division of Endocrinology  
President, American Thyroid Association

Yuri Nikiforov, MD, PhD  
Associate Professor of Pathology and Medicine, University of Cincinnati

Elizabeth Pearce, MD  
Assistant Professor of Medicine, Boston University Medical Center

Aldo A. Pinchera, MD  
Professor and Chairman, University of Pisa, Dipartimento Di Endocrinologia

Zofia Radikova, MD, PhD  
Institute of Experimental Endocrinology, Slovak Academy of Sciences

Elaine Ron, PhD  
Senior Investigator, Radiation Epidemiology Branch, National Cancer Institute, NIH

Michael D. Shelby, PhD  
National Institute of Environmental Health Sciences

Michael Zimmermann, MD  
Senior Scientist, Swiss Federal Institute of Technology Zurich, Laboratory for Human Nutrition

**PROGRAM COMMITTEE**

Gregory A. Brent, MD  
UCLA School of Medicine

Ruth M. Belin, MD  
Johns Hopkins University

Hossein Gharib, MD  
Mayo Clinic

John P. Gibbs, MD  
Kerr-McGee Corporation

Jerrold Heindel, PhD  
National Institute of Environmental Health Sciences

Joseph G. Hollowell, Jr., MD, MPH  
University of Kansas

Elizabeth Pearce, MD  
Boston University Medical Center

Elaine Ron, PhD  
NCI NIH - Radiation Epidemiology

Michael D. Shelby, PhD  
National Institute of Environmental Health Sciences

**ATA STAFF**

Barbara “Bobbi” Smith, CAE  
Executive Director

Theresa Ronk  
Director of Finance & Member Services
This schedule is subject to change.

**MORNING**

7:15  Registration and Continental Breakfast

**Introduction**

Moderator: Lewis E. Braverman

8:00  Welcome and Introduction — Statement of Goals
   Ernest L. Mazzaferrri, ATA President and Hossein Gharib, AACE Past President

8:15  Regulation of Thyroid Function
   David S. Cooper

8:35  Environmental Chemicals Impacting the Thyroid: Targets and Consequences
   R. Thomas Zoeller

**Iodine and Thyroid Physiology**

Moderator: Joseph Hollowell

9:00  National Trends in Iodine Nutrition: Is Everyone Getting Enough?
   Elizabeth Pearce

9:20  Adverse Effects of Mild-to-Moderate Iodine Deficiency During Pregnancy and Childhood
   Michael Zimmermann

9:40  Panel Discussion & Questions

10:00 Refreshment Break

**Human Exposure to Perchlorate**

Moderator: Elizabeth Pearce

10:20  Biomonitoring Methods for Assessing Exposure to NIS-inhibitors
   Benjamin Blount

10:40  Environmental Perchlorate Exposure during Pregnancy — Effects on Mother and Fetus
   John Gibbs

11:10 Clinical Studies of Exposure to Perchlorate in the United States
   Lewis Braverman

11:35 Panel Discussion & Questions

12:00 Break and Buffet Lunch

12:20 Luncheon Program:
   Invited Policy Maker/VIP

**AFTERNOON**

**Environmental Agents and Thyroid Health**

Moderator: Jerrold Heindel

1:00  Tobacco Smoke and the Thyroid in Susceptible Populations
   Peter Laurberg

1:30  Nitrates and PCBs: Combined Effects on Thyroid Function
   Zofia Radikova

2:00  Panel Discussion & Questions

2:30 Refreshment Break

**Effects of Radiation on the Thyroid**

Moderator: Michael D. Shelby

2:45  Radiation Induced Gene Mutations and the Development of Thyroid Cancer
   Yuri Nikiforov

3:15  Radiation Exposure and Thyroid Cancer: Epidemiological Studies
   Elaine Ron

3:35  Role of Radiation in Autoimmune Thyroid Disease
   Aldo Pinchera

4:00  Questions and Discussion

**Future Directions**

Moderator: R. Thomas Zoeller

4:25  Thyroid and the Environment—Key Areas for Study and Research
   Gregory A. Brent

4:45  Summary and Recommendations

5:00  Complete and Return the Evaluation and CME Credit Report Forms

REGISTER ONLINE at the secure ATA web site www.thyroid.org.
LOCATION
Hamilton Crowne Plaza
1001 14th Street, NW
(14th and K Streets, NW)
Washington, DC 20005
Hotel Fax: 202-682-9525

Emergency Calls: During the day of this meeting only, March 24th, direct emergency calls to the hotel operator at 202-682-0111.

Hotel Reservations: Group Rate of $159/night. Cut off date for group rate is Friday, March 3, 2006.

Telephone: 877-227-6963. Make your reservation at the Hamilton Crowne Plaza in Washington, DC. Indicate that you are with ATA/Thyroid and the Environment to receive the group rate.

TRAVEL INFORMATION
The closest airport is Reagan National Airport (DCA). METRO rail is available at the airport to the McPherson Square Metro (2 blocks to hotel) or Farragut North (4 blocks to hotel). The hotel is approximately a 15-minute cab ride from Reagan National Airport. From Dulles Airport the cab ride will be approximately 45 minutes and from BWI approximately 45 minutes.

POLICY ON FACULTY AND DISCLOSURE
It is the policy of the Boston 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.

AMERICANS WITH DISABILITIES ACT (ADA)
The ATA fully complies with the legal requirements of the ADA and the rules and regulations thereof.

FEES (All Fees are in US Dollars)
Pre-Registration Cut Off Date: March 21, 2006

- Physicians/Scientists/
  Government and Public
  Health Officials ................ $275
- Residents*/Fellows*/Allied
  Health Professionals ........... $125

*with verification of status

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

Refund Policy: Refund requests must be submitted in writing. Requests submitted by fax or e-mail before March 15, 2006 will receive a registration refund less a 50% processing fee. No refunds will be made if submitted after March 15, 2006. Refunds will be processed 30 days after the meeting.

Fax number: 703-998-8893
E-mail: admin@thyroid.org

FOR FURTHER INFORMATION
Confirmation of Registration: 678-341-3056
Fax Registration: 678-341-3081
CME Certificates (post-meeting) 617-638-4605 or www.bu.edu/cme
Other Course Information: 703-998-8890
admin@thyroid.org

The ATA national headquarters is at 6066 Leesburg Pike, Suite 550, Falls Church, VA 22041.
The AACE national headquarters is at 1000 Riverside Ave.; Suite 205, Jacksonville, FL 32204.
REGISTER ONLINE at the secure ATA web site www.thyroid.org or by mail or fax using this form. All requested information must be provided to process registration.

First name | Last name
---|---

Nickname for badge
Professional degree(s) (please circle one): Title

Organization

Address

City | State/Province | Zip code + 4
---|---|---

If outside the U.S., country/city

Phone | Fax
---|---

E-mail address

Special Needs. (Dietary, accessibility, etc.)

**Registration Fees**
(Please circle applicable fees.)

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<thead>
<tr>
<th>Description</th>
<th>Discounted (received by March 15)</th>
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<tr>
<td>(D) Physician/Scientist</td>
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<tr>
<td>(G) Government/Public Health Official</td>
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*With verification of status. Please fax a letter from your program director to 703-998-8893 or by e-mail to admin@thyroid.org.

1. I require a CME certificate for my attendance at this meeting. [ ] Yes [ ] No

   If pre-registered you can complete the evaluation and CME form and receive your CME certificate as you depart the meeting.

2. I consider myself primarily (please list one): _____
   a. Clinician
   b. Educator
   c. Scientist
   d. Other: ______________

3. My work is best described as (please list one): _____
   a. Adult endocrinology
   b. Basic science
   c. Pediatric endocrinology
   d. Internal medicine
   e. Family Medicine
   f. Other: ______________

4. My place of work is (please list one): _____
   a. Academic
   b. Private practice
   c. Administration
   d. Hospital
   e. Government/military
   f. Corporate/industry
   g. Managed care

5. What do you hope to learn by attending this course? ______________

**Payment Information:**

[ ] Check or Money Order (payable to the American Thyroid Association in U.S. dollars drawn on a U.S. bank) Amount enclosed: __________________

Credit Card: [ ] MasterCard  [ ] VISA  [ ] American Express

Card number  Expiration date (month/year)

Print cardholder's name

Signature  Date

In case of emergency, please contact:

Name

Daytime Phone  Evening Phone

Cell Phone

Please keep a copy of this form.
Thyroid Health and the Environment
THREATS AND EFFECTS

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