

Research Summit
& Spring Symposium
of the American Thyroid Association



RESEARCH SUMMIT

*Thyroid Hormone in
Pregnancy and Development*

&

SPRING SYMPOSIUM

*Thyroid Dysfunction and
Pregnancy: Miscarriage,
Preterm Delivery
and Decreased IQ*



AMERICAN
THYROID
ASSOCIATION
FOUNDED 1923

April 16–17, 2009
The Madison,
A Loews Hotel
Washington, DC

**BOSTON
UNIVERSITY**

www.thyroid.org

ATA SPRING SYMPOSIUM

Thyroid Dysfunction and Pregnancy: Miscarriage, Preterm Delivery and Decreased IQ

BRIEF DESCRIPTION OF ACTIVITY

Evidence is accumulating that maternal thyroid dysfunction has an untoward impact on fetal and childhood development. New studies suggest an association between thyroid autoimmunity and obstetric outcomes such as miscarriage and premature birth. New, largely unimplemented, guidelines recommend that U.S. women should be receiving iodine-containing prenatal supplements to ensure adequate thyroid function during pregnancy and lactation. 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. The goal of this evidence-based meeting will provide important new information to health care practitioners.

TARGET AUDIENCE

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

EDUCATIONAL DESIGN

The ATA provides outstanding leadership in thyroidology by promoting excellence and innovation in clinical care, research, education and public advocacy. The Spring Symposium features interactive sessions and innovative talks on cutting-edge topics. The symposium offers state-of-the-art information and unparalleled networking opportunities. Upon completion of this conference, participants should be able to:

1. Describe the important changes in thyroid function that occur during pregnancy.
2. Understand the implications of maternal hypothyroidism and hyperthyroidism on fetal outcome.

3. Know factors to consider in the treatment of hypothyroidism and hyperthyroidism during pregnancy and the postpartum.
4. Understand the importance of adequate iodine nutrition in pregnant and lactating women.
5. Recognize the associations between thyroid autoimmunity and adverse obstetric outcomes such as pregnancy loss, prematurity, and postpartum thyroiditis.

CME STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Boston University School of Medicine and the American Thyroid Association. Boston University School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Boston University School of Medicine designates the ATA Spring Symposium for a maximum of 7.25 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

CME AND ATTENDANCE VERIFICATION CERTIFICATES

Certificates awarding *AMA PRA Category 1 Credit™* or certificates documenting attendance will be distributed to participants when an individual departs the conference. To obtain a CME certificate, physicians must submit a completed evaluation questionnaire and a CME Verification Form.

Upon request, a record of attendance (certificate) will be provided onsite to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

Photographing, audiotaping, and videotaping are prohibited.

EVALUATION

A course evaluation form will provide participants with the opportunity to comment on the value of the program content to their practice decisions, performance improvement activities, or possible impact on patient health status. Participants will also have the opportunity to comment on any perceived commercial bias in the presentations as well as to identify future educational topics.

REGISTER ONLINE

at the secure ATA website **www.thyroid.org**

SPRING SYMPOSIUM Agenda

FRIDAY, APRIL 17, 2009

8:15 am – 8:30 am

Welcome and Introductions

ATA President: Kenneth D. Burman
Program Chairs: Elizabeth N. Pearce
and Alex Stagnaro-Green

8:30 am – 8:40 am

Audience Response Questions (do not show results)

8:40 am – 9:05 am

Thyroid Function and Physiology in Normal Pregnancy

Daniel Glinoyer

9:05 am – 9:30 am

Iodine in Pregnancy Needs, Impact and Controversy

Elizabeth N. Pearce

9:30 am – 9:55 am

Hypothyroidism in Pregnancy Diagnosis and Treatment of Hypothyroidism in Pregnancy

P. Reed Larsen

10:00 am – 10:20 am

Hyperthyroidism in Pregnancy

Susan Mandel

10:20 am – 10:40 am

Questions and Answers

Session Moderator: Offie Soldin

10:40 am – 10:55 am

Break

10:55 am – 11:10 am

Thyroid Dysfunction, Autoimmunity, and Preterm Delivery

Scott Sullivan

11:10 am – 11:35 am

Thyroid Dysfunction, Autoimmunity and Pregnancy Loss

Alex Stagnaro-Green

11:35 am – 12:00 pm

Postpartum Thyroiditis

Robert Smallridge

12:00 pm – 12:20 pm

Questions and Answers

Session Moderator: Jorge Mestman

12:20 pm – 1:20 pm

Lunch

(Meet the Professors—
faculty sit at different tables—
open seating, open discussion)

1:20 pm – 1:45 pm

Immunity, Thyroid and Pregnancy: Basic Science for the Clinician

Anthony P. Weetman

1:45 pm – 2:10 pm

Impact of Maternal and Fetal Hypothyroidism on Child IQ and Other Development (Including Timing During Gestation)

James Haddow

2:10 pm – 2:35 pm

Neonatal Thyroidology

Rosalind Brown

2:35 pm – 3:00 pm

Questions and Answers

Session Moderator: William
Grobman

3:00 pm – 3:15 pm

Break

3:15 pm – 3:45 pm

Ongoing Clinical Trials

CATS (John Lazarus)

NIH (Catherine Spong)

Roberto Negro Study (to be
presented by Alex Stagnaro-Green)

3:45 pm – 4:45 pm

Universal Screening Debate

Discussants: Gregory Brent
and Daniel Glinoyer

Moderator: Kenneth Burman

4:45 pm – 5:00 pm

Audience Response System (Review Data)

5:00 pm – 5:15 pm

Summary and Wrap-up

Program Chairs: Elizabeth N. Pearce
and Alex Stagnaro-Green

5:15 pm

Adjourn

(This schedule is subject to change.)

SPRING SYMPOSIUM Faculty

PROGRAM CHAIRS

Elizabeth N. Pearce, MD, Co-Chair*

CME Course Director

Assistant Professor of Medicine
Boston University School of Medicine

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

Senior Associate Dean for Academic Affairs
Touro University College of Medicine

FACULTY

Gregory A. Brent, MD*

Research Summit Liaison
Chief, Division of Endocrinology and Diabetes
VA Greater Los Angeles Healthcare System/
UCLA

Rosalind S. Brown, MD, CM*

Director, Clinical Trials Research,
Endocrine Division, Children's Hospital

Kenneth D. Burman, MD*

Chief, Endocrine Section, Department of
Medicine; Washington Hospital Center

Daniel Glinoe, MD, PhD

Chief, Thyroid Investigation Clinic
Department of Internal Medicine
University Hospital St. Pierre, Belgium

William Grobman, MD, MBA

Associate Professor, Maternal-Fetal Medicine
Department of Obstetrics and Gynecology
Feinberg School of Medicine
Northwestern University

James E. Haddow, MD

Co-Director, Division of Medical Screening
and Special Testing, Women and Infants Hospital
Research Professor, Department of Pathology,
The Warren Alpert Medical School
at Brown University

P. Reed Larsen, MD

Chief, Endocrinology Division
Harvard Institutes of Medicine
Brigham & Women's Hospital

John H. Lazarus, MA, MD, FRCP, FACE

Professor; Centre for Endocrine & Diabetes
Sciences, Cardiff University School
of Medicine, United Kingdom

Susan J. Mandel, MD*

Professor of Medicine
Associate Chief, Department of Diabetes and
Metabolism, Division of Endocrinology
University of Pennsylvania School of Medicine

Jorge H. Mestman, MD*

Professor of Clinical Medicine and OB/GYN
Keck School of Medicine,
University of Southern California

Robert C. Smallridge, MD

Chair, Endocrinology Division
Mayo Clinic Jacksonville

Offie Porat Soldin, PhD, MBA*

Associate Professor of Medicine, Oncology
and Physiology,
Lombardi Comprehensive Cancer Center
Georgetown University Medical Center

Catherine Y. Spong, MD

Chief, Pregnancy and Perinatology Branch
National Institute of Child Health and Human
Development, NIH

Scott A Sullivan, MD, MSCR*

Assistant Professor; Maternal Fetal Medicine
Residency Program Director;
Department of Obstetrics and Gynecology
Medical University of South Carolina

Anthony P. Weetman, MD, PhD

Dean, School of Medicine
The Medical School, United Kingdom

ADDITIONAL PROGRAM COMMITTEE MEMBERS

Erik K. Alexander, MD

Associate Physician, Department of Medicine
and Director of Medical Student Education
Brigham & Women's Hospital

Coleen A. Boyle, PhD

CDC Liaison; Director, Division of Birth
Defects and Developmental Disabilities
National Center on Birth Defects
and Developmental Disabilities
Centers for Disease Control
and Prevention

Joann Rovet, PhD

Professor Pediatrics and Psychology
The Hospital For Sick Children

ATA STAFF

Barbara "Bobbi" Smith, CAE

Executive Director

Adonia Calhoun Coates, CMP

Director of Meetings and
Program Services

Jared Hoke

Manager, Membership
and Communications

*denotes faculty who are also program
committee members.

ATA 2009 RESEARCH SUMMIT

Thyroid Hormone in Pregnancy and Development

(Held in conjunction with the one-day American Thyroid Association Spring Symposium)

STEERING COMMITTEE

Gregory Brent (UCLA)
Douglas Forrest (NIH-NIDDK)
Yun-Bo Shi (NIH-NICHD)

Thursday, April 16, 2009
9:30 am – 5:00 pm

The Madison Hotel, 1177 15th Street, NW, Washington, DC

OVERVIEW

Thyroid hormone is essential for normal development. Both excess and deficient maternal thyroid hormone levels can alter normal developmental pathways resulting in permanent defects in brain, sensory development, growth, and bone development. There are many potential sites of regulation of thyroid hormone action including: ligand activation and inactivation by thyroid hormone metabolizing enzymes in tissues, selective thyroid hormone transport into different cell types, thyroid hormone receptor isoform-selectivity, thyroid hormone receptor interaction with co-factors, regulation of iodine transport, and placental transport of iodine and thyroid hormone. Environmental toxicant exposure during pregnancy have been recognized that can interfere with thyroid hormone regulation at many of these sites. Key and emerging research focused on the mechanisms of thyroid hormone action in development and maternal-fetal interactions will be discussed. Special emphasis will be given to the role of thyroid hormone and maternal thyroid status on brain and sensory development. Rodent models of development will be emphasized, although discussion of amphibian models and application to human studies will be included.

AUDIENCE

Scientists and trainees in the fields of endocrinology, developmental biology, cell biology, toxicology, environmental health, neuroscience, and physiology. Correlations to human physiology and disease will be of interest to clinicians in endocrinology, obstetrics and gynecology, pediatrics, and occupational health.

RESEARCH SUMMIT Agenda and Faculty

THURSDAY, APRIL 16

9:30 am – 10:00 am

Keynote: Basic Mechanisms of Thyroid Hormone Production, Action, and Regulation in Development: Interaction Between Mother and Fetus

Donald St Germain

10:00 am – 12:00 pm

Thyroid Hormone Action in Development

Pharmacological and Transgenic Analysis of Thyroid Hormone Control of Development in a Vertebrate Model System

J. David Furlow

Embryonic Stem Cell Differentiation as a Model of Thyroid Hormone Action in Early Development

Gregory Brent

Regulation of Developmental Rate and Timing by Thyroid Hormone Receptor Cofactors

Yun-Bo Shi

Thyroid Hormone and Bone Development

Graham Williams

12:00 pm – 1:00 pm

Lunch: Trainee Poster Session

1:00 pm – 2:15 pm

Thyroid Hormone Effects on Brain and Sensory Development

Role of Thyroid Hormone Transporters in Neural Development

Samuel Refetoff

Thyroid Hormone Actions in Early Brain Development

Juan Bernal

Thyroid Hormone Regulation of Sensory Development

Douglas Forrest

2:15 pm – 3:30 pm

Clinical Correlates to Basic Research: Human Studies of Maternal-Fetal Interactions

Maintaining Thyroid Hormone Sufficiency in Pregnancy:

Thyroid Supply to Mother and Fetus

Erik Alexander

Increasing Precision of Thyroid Function Testing in Pregnancy

Offie P. Soldin

Designing Studies to Assess the Impact of Thyroid Status on Pregnancy

John Lazarus

3:30 pm – 3:40 pm Break

3:40 pm – 5:00 pm

Environmental Toxicants in Pregnancy and Fetal Development

Influence of Thyroid Hormone Action Disrupters on Brain Development

J. Thomas Zoeller

Models of Thyroid Toxicants and Brain Development

Kevin Crofton

Impact of Iodine Transport Inhibitors on Development

Nancy Carrasco

5:00 pm – 6:00 pm

CLOSED Roundtable Discussion: Priorities in Research on Thyroid Hormone in Pregnancy and Development
(Speakers, ATA Officers and Staff, NIH Program Staff)

RESEARCH SUMMIT FACULTY

Erik Alexander, Brigham and Women's Hospital, Harvard Medical School

Juan Bernal, Universidad Autonoma de Madrid

Gregory Brent, David Geffen School of Medicine at UCLA

Nancy Carrasco, Albert Einstein College of Medicine of Yeshiva University

Kevin Crofton, Environmental Protection Agency

Douglas Forrest, National Institutes of Health, NIDDK

J. David Furlow, University of California, Davis

John Lazarus, University Hospital of Wales, Cardiff University

Samuel Refetoff, University of Chicago

Yun-Bo Shi, National Institutes of Health, NICHD

Offie P. Soldin, Department of Medicine, Georgetown University

Donald St Germain, Dartmouth University School of Medicine

Graham Williams, Hammersmith Hospital

J. Thomas Zoeller, University of Massachusetts, Amherst

Location and General Information

LOCATION AND GENERAL INFORMATION

The Madison, A Loews Hotel
1177 15th Street, NW
Washington, DC 20005

HOTEL RESERVATIONS

Group rate of \$229 per night, plus tax. Cut-off date for group rate is Monday, March 23, 2009.

TELEPHONE

Call (202) 862-1600 or toll free at (800) 424-8577 to make your reservation. Indicate that you are with the American Thyroid Association.

AMERICANS WITH DISABILITIES ACT (ADA)

The ATA fully complies with the legal requirements of the ADA and the rules and regulations thereof.

REFUND POLICY

Refund requests must be submitted in writing. Requests submitted by fax or e-mail before March 23, 2009 will receive a registration refund less a 50% processing fee. No refunds will be made if submitted after March 23, 2009. Refunds will be processed 30 days after the meeting. Fax number: 703-998-8893. E-mail: thyroid@thyroid.org

FEES (All fees are in U.S. Dollars.)

DEADLINES:	EARLY BIRD (by 2/22/09)	DISCOUNTED (by 3/22/09)	FULL FEE (after 3/22/09)
------------	----------------------------	----------------------------	-----------------------------

ATA RESEARCH SUMMIT (4/16/2009)

ATA Members	\$250	\$275	\$300
Non-Members	\$300	\$350	\$400
Press*	\$0	\$0	\$0
Residents/Fellows*	\$50	\$75	\$100

(* With verification of status)

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

ATA SPRING SYMPOSIUM (4/17/2009)

ATA Members	\$400	\$425	\$450
Non-members	\$575	\$625	\$675
Press*	\$0	\$0	\$0
Residents/Fellows*	\$75	\$100	\$125

(* With verification of status)

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

MEETING REGISTRATION

Space is limited — Register early!

REGISTER ONLINE at the secure ATA website 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 Meadowright Court, Alpharetta, GA 30005. Phone: 678-341-3056.

REGISTRATION FORM

Deadline for receipt of discounted registration is March 22, 2009

American Thyroid Association (ATA)

2009 RESEARCH SUMMIT: Thyroid Hormone in Pregnancy and Development & SPRING SYMPOSIUM: Thyroid Dysfunction and Pregnancy: Miscarriage, Preterm Delivery and Decreased IQ

April 16–17, 2009 • The Madison, A Loews Hotel, Washington, DC

All requested information must be provided to process registration. All Fees are in U.S. Dollars.

First name _____

Last name _____

Nickname for badge _____

Professional degree(s) (please list one): _____
a. MD b. PhD c. MD, PhD d. RN e. DO f. Other: _____

Title _____

Organization _____

Address 1 (Please clarify: Home Office Other) _____

Address 2 _____

City State/Province Zip code + 4 _____

Country If outside the U.S., country/city code: _____

Phone Fax _____

E-mail Address _____

Special Needs. (Dietary, accessibility, etc.) _____

1. **I require a CME certificate for my attendance at the ATA Spring Symposium, 4/17/2009.** Yes No

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. Endocrinology b. Nuclear Medicine c. Surgery
d. Internal medicine e. Family Medicine f. Oncology
g. 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 h. Other _____

5. **In case of emergency, please contact:**

Name _____

Daytime Phone Evening Phone _____

6. ATA Photo Release

From time to time we use photographs of conference participants in our promotional materials and journals. By virtue of your attendance at this meeting, ATA reserves the right to use your likeness in such materials.

Please keep a copy of this form.

7. Registration FEES (please circle applicable fees)

ATA RESEARCH SUMMIT (4/16/2009)

	EARLY BIRD (BY 2/22/09)	DISCOUNTED (BY 3/22/09)	FULL FEE (AFTER 3/22/09)
(RSM) ATA MEMBERS	\$250	\$275	\$300
(RSN) NON-MEMBERS	\$300	\$350	\$400
(RSP) PRESS	\$0	\$0	\$0
(RSF) FACULTY/SPEAKER	\$0	\$0	\$0
(RSA) RESIDENTS/FELLOWS*	\$50	\$75	\$100

The Research Summit Registration fee includes instructional materials, lunch and refreshment breaks. No CME credits are being offered for the Summit.

ATA SPRING SYMPOSIUM (4/17/2009)

	EARLY BIRD (BY 2/22/09)	DISCOUNTED (BY 3/22/09)	FULL FEE (AFTER 3/22/09)
(SSM) ATA MEMBERS	\$400	\$425	\$450
(SSN) NON-MEMBERS	\$575	\$625	\$675
(SSP) PRESS*	\$0	\$0	\$0
(SSF) FACULTY/SPEAKER	\$0	\$0	\$0
(SSA) RESIDENTS/FELLOWS*	\$75	\$100	\$125

The Spring Symposium Registration fee includes instructional materials, continental breakfast, lunch and refreshment breaks. A maximum of 7.25 AMA PRA Category I Credits™ are available for the Symposium.

*With Verification of status. Please fax a letter from your program director to 703-998-8893 or by e-mail to thyroid@thyroid.org.

8. TOTAL FEES (sum fees above) Registration TOTAL \$ _____

9. Submission and Payment — Checks and money orders for registration payable to the American Thyroid Association in U.S. dollars drawn on a U.S. bank.

MasterCard VISA American Express

Card number _____

Expiration date (month/year) _____

Print cardholder's name _____

Signature _____

REGISTER at the secure ATA website 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 Meadowright Court, Alpharetta, GA 30005. Phone: 678-341-3056.

REFUND POLICY: Refund requests must be submitted in writing. Requests submitted by fax or e-mail before March 22, 2009 will receive a registration refund less a 50% processing fee. No refunds will be made if submitted after March 22, 2009. Refunds will be processed 30 days after the meeting. E-mail: thyroid@thyroid.org

HOTEL RESERVATIONS

Group rate cut-off date: Monday, March 23, 2009.

A block of rooms has been reserved for the convenience of our attendees. Please call The Madison Hotel directly at (202) 862-1600 or toll free at (800) 424-8577 to make your reservation. Indicate that you are attending the American Thyroid Association meeting to receive the group rate (\$229 per night, single or double, plus tax).