75th Annual Meeting of the American Thyroid Association

September 16-21, 2003

The Breakers Hotel
One South County Road
Palm Beach, Florida 33480

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President-Elect
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Paul W. Ladenson

Treasurer
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2003 ATA Program and Meet-the-Professor Syllabus published by:
American Thyroid Association
6066 Leesburg Pike, Suite 650
Falls Church, VA 22041
Scientific Program

Wednesday, September 17, 2003
Thursday, September 18, 2003
Friday, September 19, 2003
Saturday, September 20, 2003
Sunday, September 21, 2003
Wednesday, September 17, 2003

6:00 – 7:45 am Venetian Ballroom
**Current Issues in Thyroid Function Testing**
Moderator: Leonard Wartofsky
Benefits and Pitfalls of Free Hormone Measurements Kenneth D. Burman
Utility of Antithyroid Antibody Measurements Carole A. Spencer
TSH Reference Range Redefined: What Should We Do? Stephanie L. Lee
“Early Riser” CME Symposium and breakfast supported by an unrestricted educational grant from Abbott Laboratories

8:00 – 8:15 am Venetian Ballroom
**Welcome and Introductions**
Peter A. Singer ATA President
Paul W. Ladenson ATA Secretary
Rebecca S. Bahn ATA Program Chair, Scientific
Bryan R. Haugen ATA Program Chair, Clinical

8:15 – 9:00 am Venetian Ballroom
**Keynote Clinical Address**

**Historical Perspectives and Current Understanding of Mild Thyroid Failure**
David S. Cooper, MD
Director, Division of Endocrinology
Sinai Hospital of Baltimore
Professor of Medicine
Johns Hopkins University School of Medicine
Baltimore, MD
Supported by an educational grant from Abbott Laboratories

9:00 – 10:00 am Venetian Ballroom
**Plenary Session – Translational**
Oral Abstract Presentations
Chairs: Rebecca S. Bahn and Bryan R. Haugen

Program Number 1 Iodine Uptake and Metabolism Wednesday Oral Clinical Plenary 9:00 am
**Iodine Nutrition in Breast-fed Infants Is Impaired by Maternal Smoking**
P. Laurberg¹, S.B. Nøhr², K.M. Pedersen¹, E. Fuglsang³
Departments of ¹Endocrinology and Medicine and ²Gynecology and Obstetrics, Aalborg Hospital, Aalborg, Denmark; and ³Ringkoebing Hospital, Aalborg, Denmark

Program Number 2 Thyroid and Development Wednesday Oral Basic Plenary 9:15 am
**Contrasting Skeletal Phenotypes in Mice with an Identical Mutation Targeted to either the TRα or TRβ Gene**
P.J. O’Shea¹, H. Suzuki², C.B. Harvey¹, S.-Y. Cheng², G.R. Williams¹
¹Molecular Endocrinology Group, Division of Medicine and MRC Clinical Sciences Centre, Hammersmith Hospital, Imperial College London, UK; ²Gene Regulation Section, Laboratory of Molecular Biology, National Cancer Institute, NIH, Bethesda, MD, USA
**Wednesday, September 17, 2003**

**Program Number 3** Thyroid Diseases

**Wednesday Oral Clinical Plenary 9:30 am**

**Double-blind Placebo-controlled Trial of Octreotide LAR in Thyroid-associated Orbitopathy (TAO): Clinical Outcomes**

P. Kendall-Taylor¹, A.J. Dickinson², B. Vaidya¹, M. Miller², A. Coulthard², P. Perros¹, E. Baister³, C. Andrews³, L. Hesse⁴, J. Heverhagen⁴, A.E. Heufelder⁴

¹University of Newcastle upon Tyne; ²RVI Newcastle upon Tyne; ³Novartis Pharmaceuticals, United Kingdom; and ⁴University of Marburg, Marburg, Germany

**Program Number 4** Autoimmunity

**Wednesday Oral Basic Plenary 9:45 am**

**TSH Receptor Knockout Mice, in Contrast to Expectation, Do Not Respond to Immunization as if the TSH Receptor Were a Foreign Antigen**

P. Pichurin¹, R. Marians², O. Pichurina¹, C.-R. Chen¹, T.F. Davies², B. Rapoport¹, S.M. McLachlan¹

¹Autoimmune Disease Unit, Cedars-Sinai Research Institute & UCLA, Los Angeles, California; and ²Division of Endocrinology, Diabetes and Bone Disease, Mount Sinai Medical School of Medicine, New York, New York

**10:00 – 10:30 am**

**Mediterranean Ballroom**

**Refreshment Break in the Exhibit Hall**

**10:30 am**

**Venetian Ballroom**

**Translational Symposium**

**Medullary Thyroid Cancer**

Chair: Nicholas Sarlis

Pathogenesis, genetic testing: Robert Gagel

Surgical approaches, approaches to patient with elevated calcitonin: Jeffrey Moley

Advanced therapy for metastatic disease: Martin Schlumberger

**12:00 noon – 1:30 pm**

**Meet the Professor Luncheon Workshops**

Advance purchase required; admission by ticket only

*Experts and specialists in thyroid disease and pathophysiology will present their research and findings in an interactive luncheon workshop.*

**Magnolia Room**

**PET imaging in thyroid cancer**

Steven Larson

**Gulfstream Room**

**Thyroiditis**

Gilbert Daniels

*Supported by an unrestricted educational grant from Abbott Laboratories*

**Gulfstream Room**

**Clinical applications of thyroid hormone analogues**

Irwin Klein
Wednesday, September 17, 2003

Gulfstream Room
**Gene therapy in thyroid cancer**
Christine Spitzweg

Flagler Boardroom
**Thyroid disorders in animals**
Charles Capen

Gulfstream Room
**New tools in Biomedical research - RNA inhibition**
Stefan Grebe

Gold Room
**Strategies for detecting and managing residual/recurrent thyroid cancer**
Michael Tuttle and Paul Walfish
*Supported by an unrestricted educational grant from Abbott Laboratories*

1:30 – 3:00 pm Simultaneous Sessions

Venetian Ballroom
**Clinical Oral Abstracts**
Chairs: Charles Emerson and Kenneth Hupart

Program Number 5 Thyroid and Development Wednesday Clinical Oral 1:30 pm
**Mutations in a Thyroid Hormone Transporter in Patients with Severe Psychomotor Retardation and High Serum T3 Levels**
E. Friesema¹, A. Grueters², A. Halestrap³, M. Reeser⁴, T. Visser¹
¹Internal Medicine, Erasmus MC, Rotterdam, The Netherlands; ²Paediatric Endocrinology, Charite Children’s Hospital, Berlin, Germany; ³Biochemistry, University of Bristol, United Kingdom; and ⁴Paediatrics, Juliana Children’s Hospital, The Hague, NL

Program Number 6 Thyroid Diseases Wednesday Clinical Oral 1:45 pm
**Association of Novel Single-nucleotide Polymorphisms in the Dihydropyridine Sensitive L-type Alpha-3 Calcium Channel (CACNL1α3) and Thyrotoxic Periodic Paralysis (TPP)**
A.W.C. Kung, K.S. Lau, G.C.Y. Fong, V.N.Y. Chan
Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong, China

Program Number 7 Thyroid Imaging Wednesday Clinical Oral 2:00 pm
**Efficacy of 18F-Fluorodeoxyglucose Positron Emission Tomography for Diagnosis and Long-term Monitoring of Patients with Well-differentiated Thyroid Carcinoma**
A. Golger¹,², T. Freedman², K. Gulenchyn¹, J. Freeman², P. Walfish², J. Young¹
¹St. Joseph’s Hospital, Hamilton, Ontario; ²Mount Sinai Hospital, Toronto, Ontario; and ³McMaster University, Hamilton, Ontario, Canada

Program Number 8 Thyroid Diseases Wednesday Clinical Oral 2:15 pm
**Effects of Total Thyroid Ablation (TTA) on the Short-term Outcome of Graves’ Ophthalmopathy (GO) in Patients Treated with Glucocorticoids (GC): Preliminary Results of a Randomized Clinical Trial**
F. Menconi¹, M. Marinò¹, R. Rocchi¹, E. Morabito¹, B. Mazzi¹, M.A. Altea¹, P. Lepri², M.P. Bartolome², A. Pinchera¹, C. Marcocci¹
Departments of ¹Endocrinology and ²Neuroscience, University of Pisa, Pisa, Italy
Wednesday, September 17, 2003

Program Number 9  Thyroid Diseases  Wednesday  Clinical Oral  2:30 pm
Voluntary Reporting of Serious Adverse Reactions to Thionamide Compounds in the United Kingdom, 1963-2003
S.H.S. Pearce
School of Clinical Medical Sciences, University of Newcastle, Newcastle upon Tyne, England, United Kingdom

Program Number 10  Thyroid Hormone Action  Wednesday  Clinical Oral  2:45 pm
Thyroid Status and Lipids in the Framingham Offspring Study
E.N. Pearce¹, J. Massaro², L.E. Braverman¹, C.T. Sawin³, P.W. Wilson¹
¹Section of Endocrinology, Diabetes, and Nutrition, Boston Medical Center, Boston, Massachusetts; ²Department of Biostatistics, Boston University School of Public Health, Boston, MA; ³Medical Inspector, Veterans Health Administration, Washington, DC

1:30 – 3:00 pm  Simultaneous Sessions
Ponce de Leon Ballroom
Basic Oral Abstracts
Chairs: Valerie Galton and Donald St. Germain

Program Number 11  Thyroid Hormone Action  Wednesday  Basic Oral  1:30 pm
Alternative mRNA Processing Regulates Expression of Human Thyroid Hormone Receptor β1 Protein
G.R. Williams, S. Frankton, C.B. Harvey, L.J. Gleason, A. Fadel
Molecular Endocrinology Group, Imperial College London, MRC Clinical Sciences Centre, Hammersmith Hospital, London, England, United Kingdom

Program Number 12  Thyroid Hormone Action  Wednesday  Basic Oral  1:45 pm
GATA2 Is Essential to Mediate the Negative Regulation of TSH Alpha Subunit Gene by T3 and T3 Receptor
S. Sasaki, K. Nakano, A. Matsushita, Y. Kashiwabara, K. Nagayama, K. Nishiyama, H. Misawa, H. Nakamura
Second Division, Department of Internal Medicine, Hamamatsu University School of Medicine, Hamamatsu, Japan

Program Number 13  Thyroid Hormone Action  Wednesday  Basic Oral  2:00 pm
Plasma Membrane Thyroid Hormone Transporters Facilitate Transcriptional Regulation by Thyroid Hormone Receptors
Y.-B. Shi¹, J.W.A. Ritchie², Y. Hayashi³, F.E. Baird², R.W. Muchekehu², G.R. Christie², P.M. Taylor²
¹LGRD, NICHD/NIH, Bethesda, Maryland, USA; ²Division of Molecular Physiology, School of Life Sciences, University of Dundee, Dundee, Scotland, United Kingdom; and ³Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan

Program Number 14  Thyroid Hormone Metabolism  Wednesday  Basic Oral  2:15 pm
The Leptin Signaling Pathway Targets the Thyrotropin-releasing Hormone (TRH) Promoter In Vivo
F. Guo, K. Bakal, A.N. Hollenberg
Thyroid Unit–Division of Endocrinology, Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, Massachusetts, USA

Program Number 15  Thyroid Hormone Action  Wednesday  Basic Oral  2:30 pm
FHL2: A New Interaction Partner for Thyroid Hormone Receptor β2
M.E. Domingue, G. Hamann, M.F. Langlois
Department of Medicine, Division of Endocrinology, University of Sherbrooke, Sherbrooke, Quebec, Canada

70
Presence and the Regulatory Mechanism of Type 2 Deiodinase in Rat Aorta
S. Yasuzawa-Amano, N. Toyoda, A. Maeda, T. Iwasaka, M. Nishikawa
Kansai Medical University, Osaka, Japan
Adiponectin Levels in the Serum of Patients with Thyroid-associated Ophthalmopathy (TAO)
M. Plicht¹, C. Lenzner², S. Müller², A. Eckstein¹, J. Esser¹, N.G. Morgenthaler²³
¹Department of Ophthalmology, University of Essen, Essen, Germany; ²Bioassays GmbH, Biotechnology Center Hennigsdorf/Berlin, Germany; and ³BRAHMS AG, Research, Biotechnology Centre Hennigsdorf/Berlin, Germany

Development of Graves’ Disease under Adequate Immunosuppression in a Cardiac Transplant Patient
P. Tebben, V. Fatourechi
Division of Endocrinology, Diabetes, Metabolism, and Nutrition, Mayo Clinic, Rochester, Minnesota, USA

Boron Neutron Capture Therapy (BNCT) for Undifferentiated Thyroid Carcinoma (UTC)
M.A. Dagrosa¹, M. Viaggi¹, J. Longhino², O. Calzetta², M. Edreira¹, R.L. Cabrini¹, G.J. Juvenal¹, M.A. Pisarev¹³
Departments of ¹Radiobiology and ²Nuclear Reactors, University of Buenos Aires School of Medicine; and ³National Atomic Energy Commission and Department of Biochemistry, University of Buenos Aires School of Medicine, Buenos Aires, Argentina

Sodium Iodide Symporter (NIS) Gene Expression Is a Potential Prognostic Indicator for Thyroid Cancer and Is Inhibited by Pituitary Tumor Transforming Gene (PTTG)
Division of Medical Sciences, University of Birmingham, Queen Elizabeth Hospital, Birmingham, England, United Kingdom

In Vitro Induction of Radioiodine Uptake in Medullary Thyroid Cancer Cells following CEA and Calcitonin Promoter-driven Expression of the Sodium-Iodide Symporter
C.H. Baker¹, C. Spitzweg², E.R. Bergert¹, J.C. Morris¹
¹Mayo Clinic Department of Endocrinology, Rochester, Minnesota, USA; and ²Ludwig-Maximilians University Department of Internal Medicine II, Munich, Germany

Adenovirus-mediated Targeted Expression of the Sodium Iodide Symporter (NIS) with Use of the MUC1 Promoter
R.M. Dwyer¹, E.R. Bergert¹, M.K. O’Connor² and J.C. Morris¹
Departments of ¹Endocrinology and ²Nuclear Medicine, Mayo Clinic, Rochester, Minnesota, USA

Spindle Assembly Checkpoint Genes, hBUB1, hBUBR1, and hMAD2, are More Highly Expressed in Anaplastic Thyroid Carcinomas than in Differentiated Thyroid Carcinomas
N. Wada¹, A. Yoshida², Y. Miyagi³, T. Yamamoto², S. Hirakawa³, K. Inui¹, Y. Takanashi³
¹Department of General Surgery, Yokohama City University, ²Kanagawa Cancer Center, and ³First Department of Surgery, Yokohama City University, Yokohama, Japan
Program Number 32 Cancer Wednesday/Thursday Poster Sessions

**Risk of Malignancy and Aggressiveness of Non-palpable Thyroid Nodules in a Mild Iodine Deficiency Area**

C. Cappelli¹, M. Braga², D. Cumetti¹, M. Castellano¹, B. Agosti¹, E. Gandossi¹, A. Tironi², E. Agabiti Rosei¹

¹Chair of Internal Medicine, Section of Endocrinology, University of Brescia, ²II Division of General Surgery, Spedali Civili di Brescia, and ³II Pathological Anatomy, University of Brescia, Brescia, Italy

Program Number 33 Cancer Wednesday/Thursday Poster Sessions

**Imbalance between Separase and Securin Levels in Thyroid and Other Malignancies**


Division of Medical Sciences, Clinical Research Block, The University of Birmingham, Birmingham, England, United Kingdom

Program Number 35 Cancer Wednesday/Thursday Poster Sessions

**Enhancement of Adenoviral Infection in Thyroid Tumors**

D.K. Marsee, S.M. Jhiang

Department of Physiology and Cell Biology, Ohio State University, Columbus, Ohio

Program Number 36 Cancer Wednesday/Thursday Poster Sessions

**TgAb-Negative Differentiated Thyroid Cancer (DTC) Patients with Lymphocytic Thyroiditis (LT) Detected at Thyroidectomy (Tx) Have a Lower Risk of Recurrence (R) during Long-term Follow-up (F/U)**

S. Fatemi¹, R. Guttler², J. LoPresti², P. Singer², J. Nicoloff², L. Bergoglio², C. Spencer²

¹Southern California Permanente Medical Group, Panorama City, California; and ²University of Southern California, Keck School of Medicine, Los Angeles, California, USA

Program Number 37 Cancer Wednesday/Thursday Poster Sessions

**Sensitivity of Fine-Needle Aspiration Biopsy (FNAB) and Frozen Section (FS) in Management of Thyroid Cancer: A Comparative Study of the 1970s, 1980s, and 1990s**

J.C. Furlan¹, Y.C. Bedard², I.B. Rosen¹

Departments of ¹Surgery and ²Pathology and Laboratory Medicine, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada

Program Number 38 Cancer Wednesday/Thursday Poster Sessions

**Expression of Epidermal Growth Factor Receptor (EGFR) and a Cell Cycle-related Nuclear Antigen Ki-67 in Thyroid Neoplastic and Non-neoplastic Lesions, Determined by Immunostaining**

R.Y.A. Camargo¹, A. Longatto Filho², C.T. Kanamura², S. Nonogaki³, V.A.F. Alves², H. Bisi¹, N.M.A. Abelin¹

¹Departments of Medicine (Endocrinology) and Pathology, São Paulo University School of Medicine, São Paulo; and ²Instituto Adolfo Lutz, São Paulo, Brazil

Program Number 39 Cancer Wednesday/Thursday Poster Sessions

**Post-surgical Thyroid Remnant Ablation with ¹³¹I Therapy in Patients with Differentiated Thyroid Cancer (DTC): The Role of Diagnostic Tracer Dose**

M. Capezzone, F. Lippi

Department of Endocrinology and Metabolism, University of Pisa, Pisa, Italy
Wednesday, September 17, 2003

Program Number 40  Cancer  Wednesday/Thursday  Poster Sessions

**Papillary Thyroid Carcinoma: Aggressive Management Is Needed in Endemic Iodine-deficient Area**

S.K. Gupta¹, A. Agarwal², S.K. Mishra³, A. Sachan¹, G. Agarwal², E. Bhatia¹, M.M. Godbole¹

Departments of ¹Medical Endocrinology and ²Surgical Endocrinology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India

Program Number 41  Cancer  Wednesday/Thursday  Poster Sessions

**Retrospective Study of 114 Thyroid Papillary Adenocarcinoma Cases Diagnosed during Follow-up Observation**

K. Suyama¹, Y. Noguchi¹, M. Fuse¹, T. Yoshida¹, T. Shibata¹, Y. Otsuka¹, S. Yoshida², T. Ban², I. Tatsuno¹, Y. Saito¹

¹Department of Clinical Cell Biology, Chiba University Graduate School of Medicine, and ²Chiba Cancer Society, Chiba, Japan

Program Number 42  Cancer  Wednesday/Thursday  Poster Sessions

**Performance of the “AMES” Scoring System in 175 Well-differentiated Thyroid Carcinomas: A Hospital-based Study in Brazil**

L.G. Brandão¹, B.G. Cavalheiro¹, J.S. Brandão Neto¹, R. Turcano¹, A.R. Ferraz¹, J.C. Furlan¹,²

¹Department of Surgery, Division of Head and Neck Surgery, Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil; and ²Department of Surgery, Mount Sinai Hospital, University of Toronto, Toronto, Canada

Program Number 43  Cancer  Wednesday/Thursday  Poster Sessions

**A Case of Recombinant TSH for the Treatment of Papillary Thyroid Cancer in a Patient with End Stage Renal Disease**

A. Jawa, M. Pendergrass

Tulane University Health Science Center, Section of Endocrinology, Diabetes and Metabolism, New Orleans, Louisiana, USA

Program Number 44  Iodine Uptake and Metabolism  Wednesday/Thursday  Poster Sessions

**Identification and Characterization of Human Factor S Protein, a Potential Regulator of Sodium/Iodide Symporter Gene Expression**

J. Xu¹, K. Taki², M. Capezzone¹, J. M. Hershman¹

¹Endocrinology Research Lab, West Los Angeles VA Medical Center, University of California-Los Angeles School of Medicine, Los Angeles, California, USA; and ²3rd Department of Internal Medicine, University of Yamanashi, Yamanashi, Japan

Program Number 45  Iodine Uptake and Metabolism  Wednesday/Thursday  Poster Sessions

**Short-term Effects on Thyroid Function of High Doses of Iodine in Euthyroid Patients**

W. Gartner, M. Weissel

Vienna University Clinic of Internal Medicine III and Ludwig Boltzmann Institute for Nuclear Medicine, Vienna, Austria
Wednesday, September 17, 2003

Program Number 46  Iodine Uptake and Metabolism  Wednesday/Thursday  Poster Sessions

**Regulatory Mechanism of the Sodium/Iodide Symporter (NIS) by Excessive Iodide**
Y.J. Park1,4, T.Y. Kim1,3, H.S. Lee3, J.E. Kim5, W.B. Kim6, D.J. Park3,3, J. Chung2, B.Y. Cho1,3

1Department of Internal Medicine and 2Nuclear Medicine, Seoul National University College of Medicine, Seoul, Korea; 3Department of Internal Medicine, Clinical Research Institute, Seoul National University Hospital, Seoul, Korea; 4Department of Internal Medicine and 5Pathology, Seoul Municipal Boramae Hospital, Seoul, Korea; 6Department of Internal Medicine, Asan Medical Center, University of Ulsan, College of Medicine, Ulsan, Korea

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Program Number 47  Iodine Uptake and Metabolism  Wednesday/Thursday  Poster Sessions

**Evaluation of Thyroid Iodine in Thyroid Nodules and Thyroids with Diffuse Thyroid Disease by CT**

St. Marianna University, Kawasaki, Kanagawa-ken, Japan

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Program Number 48  Iodine Uptake and Metabolism  Wednesday/Thursday  Poster Sessions

**Study on Thyroid Volume and Urinary Iodine Excretion in Japanese Schoolchildren: Reference Values in an Iodine-sufficient Area**
Y. Fuse1, N. Saito2, T. Tsuchiya2, Y. Shishiba2, M. Irie3

1Neonatology, Toho University School of Medicine, 2Mishuku Hospital, and 3Japan Branch of ICCIDD, Tokyo, Japan

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Program Number 49  Iodine Uptake and Metabolism  Wednesday/Thursday  Poster Sessions

**Iodine Metabolic Pathways in the Mammary Glands**
B.A. Eskin

Drexel University College of Medicine, Philadelphia, Pennsylvania, USA

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Program Number 50  Thyroid and Development  Wednesday/Thursday  Poster Sessions

**Maternal Nutrient Deprivation Results in Sex-specific Changes in Thyroid Hormone Receptor and Deiodinase Expression in the Fetal Guinea Pig Brain**
S.Y. Chan1, M.H. Andrews2, R. Lingas2, C.J. McCabe1, J.A. Franklyn1, M.D. Kilby1, S.G. Matthews2.

1University of Birmingham, Birmingham, England, United Kingdom; and 2University of Toronto, Toronto, Ontario, Canada

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Program Number 51  Thyroid and Development  Wednesday/Thursday  Poster Sessions

**Identification of Differentially Expressed Genes in Lingual Thyroid Gland by Representational Differential Analysis**
I.G.S. Rubio1, F. Festa2, M. Knobel1, C.R. Nogueira3, M.C. Sogayar2, G. Medeiros-Neto1

1Thyroid Unit, Division of Endocrinology, University of São Paulo Medical School, 2Instituto de Química, Universidade de São Paulo, and 3UNESP Medical School, Botucatu São Paulo, São Paulo, Brazil

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Program Number 52  Thyroid and Development  Wednesday/Thursday  Poster Sessions

**A Dominant Negative Thyroid Hormone Receptor (TR)β1 Mutant Enhances N-Tera-2 (NT2) Cell Proliferation**
S.Y. Chan1, C.J. McCabe2, J.A. Franklyn2, M.D. Kilby1

1Division of Reproductive and Child Health and 2Division of Medical Sciences, University of Birmingham, Birmingham, England, United Kingdom
Wednesday, September 17, 2003

Program Number 54  Thyroid and Development  Wednesday/Thursday Poster Sessions

Chromatin Structure Regulation of the Thyroperoxidase Gene Promoter during Thyroid Cell Differentiation
I. Cuesta, P. Santisteban
Unidad de Endocrinología Molecular, Instituto de Investigaciones Biomédicas, CSIC,
Madrid, Spain

Program Number 55  Thyroid and Development  Wednesday/Thursday Poster Sessions

Granule Cell (GC) Apoptosis Is Markedly Increased in the Molecular Layer of the Developing Cerebellum of TRα1−/− Mice
A.P. Farwell1, J.M. Cortez2, J.L. Leonard2.
Departments of 1Medicine and Physiology, University of Massachusetts Medical
School, Worcester, Massachusetts, USA

Program Number 56  Thyroid Diseases  Wednesday/Thursday Poster Sessions

Thyrotoxic Periodic Paralysis Is Associated with a Mutation in the Sodium Channel Gene SCN4A
I. Braziuniene, K. Markarian, A. Lane
State University of New York, Stony Brook, New York, USA

Program Number 57  Thyroid Diseases  Wednesday/Thursday Poster Sessions

Microheterogeneity of DRB1*03 Is Associated with the Development of Graves’ Disease
J.M. Heward1, Y. Ban2, H. Foxall1, D.A. Greenberg3, T.F. Davies3, J.A. Franklyn1, Y.
Tomer2, S.C.L. Gough3
1Division of Medical Sciences, University of Birmingham, Birmingham, England,
United Kingdom; 2Mount Sinai School of Medicine and 3Columbia University, New
York, New York, USA; and 4Birmingham Heartlands Hospital, Birmingham,
England, United Kingdom

Program Number 59  Thyroid Diseases  Wednesday/Thursday Poster Sessions

The Primary DNA Variant of the CTLA-4 Gene Causing Graves’ Disease Is Not Associated with Individual Phenotypes
J.E. Collins1, J.M. Heward1, H. Cordell2, J.A. Franklyn1, S.C.L. Gough3
1Division of Medical Sciences, University of Birmingham, Birmingham, England;
2Diabetes and Inflammation Laboratory, University of Cambridge, Cambridge; and 3Birmingham Heartlands Hospital, Birmingham, England, United Kingdom

Program Number 60  Thyroid Diseases  Wednesday/Thursday Poster Sessions

Is There an Effect of L-T4 Therapy on the Course of Subclinical Hypothyroidism (SH)?
I. Gazeroglu, J.M. McKenzie, M. Zakarija
Department of Medicine, University of Miami School of Medicine, Miami, Florida

Program Number 61  Thyroid Diseases  Wednesday/Thursday Poster Sessions

The R450H Mutation of the Thyrotropin Receptor Gene Is Common in Japanese Patients with Resistance to Thyrotropin
K. Onigata1, S. Hattori1, S. Yamada1, T. Kowase1, Y. Takano1, A. Morikawa1, S. Nishiyama2, H. Mizuno3
1Gunma University, Maebashi, Japan; 2Kumamoto University, Kumamoto, Japan; and
3Nagoya City University, Nagoya, Japan
Acute Hepatitis (AH) of Unknown Origin after High-dose Intravenous Glucocorticoid (IVCG) Pulse Therapy for Graves’ Ophthalmopathy (GO)

E. Morabito1, M. Marinò1, M.A. Altea1, R. Rocchi1, F. Menconi1, B. Mazzi1, M. Brunetto2, A. Pinchera1, C. Marcocci1

Departments of 1Endocrinology and 2Liver Disease, University of Pisa, Hospital of Pisa, Italy

Sequential Fine-Needle Aspiration Biopsy in the Management of Thyroid Nodular Disease: A Cost-effectiveness Analysis

J.C. Furlan1, Y.C. Bedard2, I.B. Rosen1

Departments of 1Surgery and 2Pathology and Laboratory Medicine, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada

Rehabilitation of Facial Disfigurement in Thyroid-related Orbitopathy: Analysis of Eyelid Contour after Bony Decompression

E. Chang1, 2, C. Bernardino2, P. Rubin2

1Doheny Eye Institute, Keck School of Medicine of the University of Southern California, Los Angeles, California; and 2Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, Massachusetts, USA

Liver Enzyme Abnormalities and Anemia in Subacute Granulomatous Thyroiditis

B. Moayedoddin, V. Fatourechi

Division of Endocrinology, Metabolism and Nutrition, Mayo Clinic, Rochester, Minnesota, USA

Neuropsychological (NP) Characteristics of Children with Atypical Hypothyroidism Suggest a Common Profile of Attention and Math Deficits

J. Rovet, D. Daneman, C. Huang

The Hospital for Sick Children, Toronto, Ontario, Canada

Surgical Treatment for Childhood Graves’ Disease

K. Sugino, T. Mimura, M. Nagahama, N. Fukunari, K. Ito

Ito Hospital, Tokyo, Japan

Maternal Propylthiouracil to Prevent Fetal Hyperthyroidism

J. Ginsberg, T. McNab, E. Raff

Department of Medicine, University of Alberta, Edmonton, Alberta, Canada

Recombinant Thyrotropin to Minimize the Risk of Deterioration in Ophthalmopathy in a Patient with Papillary Thyroid Cancer

A. Sturrock1, M. Stearns1, K. Pigott1, W. Wiersinga2, M. Vanderpump1

1Royal Free Hospital, London, England, United Kingdom; and 2University of Amsterdam, Amsterdam, The Netherlands
Effects of Thyroid Hormones on Cerebral Motor Cortex of Adult Rats
F. Battaglia1, A. Quartarone2, O. Arancio1, F. Trimarchi1, P. Girlanda3, S. Benvenega3.  
1Dementia Research Unit, NKI/NYU School of Medicine, New York, New York, USA;  
and 2Neurologia 2 and 3Endocrinologia, University of Messina, Messina, Italy

The Pro-angiogenic Action of Thyroid Hormone Is Fibroblast Growth Factor-dependent and Is Initiated at the Cell Surface
F.B. Davis1, S. Mousa2, S. Mohamed2, H.-Y. Lin3, P.J. Davis1,3,4  
1Ordway Research Institute, 2Albany College of Pharmacy, 3Stratton VA Medical Center, and 4New York State Department of Health, Albany, New York, USA

T4-Regulated Actin Polymerization Is Restored by Replacement of TRα1, but Not Full-length (FL) TRα1, in TRα1-/- Astrocytes
A.P. Farwell1, J.L. Leonard2  
Departments of 1Medicine and 2Physiology, University of Massachusetts Medical School, Worcester, Massachusetts, USA

Yeast Gene Activation Assays Detect Differences in Coactivator and Corepressor Functional Properties among Artificial and Natural Mutants Causing Resistance to Thyroid Hormone
1University of Toronto & Mount Sinai Hospital, Toronto, Ontario, Canada; 2University of Western Ontario & London Regional Cancer Center, London, Ontario, Canada; and 3University of California-San Francisco, San Francisco, California, USA

Transactivation Domain-1 (AF-1) of the Human Thyroid Hormone Receptor (h-TR) Is Essential for T3 and T3/GRIP1 but Not Human Adenovirus 5 Early Region 1A (E1A)-dependent Gene Activation
Y.-F. Yang1, M. Shuen2, P. Webb3, J.D. Baxter3, J.M. Mymyrk2, P.G. Walfish1  
1University of Toronto & Mount Sinai Hospital, Toronto, Ontario, Canada; 2University of Western Ontario & London Regional Cancer Center, London, Ontario, Canada; and 3University of California-San Francisco, San Francisco, California, USA

Expression of Growth Regulators in Thyrotropic Tumors Responsive and Nonresponsive to Thyroid Hormone
Division of Endocrinology, Metabolism and Diabetes, Department of Medicine, University of Colorado Health Sciences Center, Denver, Colorado, USA

Thyroid Hormone Stimulates Gene and Protein Expression of Proliferation-associated Keratin 6a
J.D. Safer, T.M. Crawford, M.F. Holick  
Section of Endocrinology, Department of Medicine, Boston University School of Medicine, Boston, Massachusetts, USA
Program Number 78 Thyroid Hormone Action Wednesday/Thursday Poster Sessions

The Effects of Thyroid Hormone on Cytokines-induced Proliferation and Invasion in Human Trophoblast Cells

K.J. Barber1, F.L. Khanim1, C.J. McCabe1, J.N. Bulmer2, G. St.J. Whitley3, J.A. Franklyn1, M.D. Kilby1

1University of Birmingham, Birmingham, England; 2School of Pathological Science, University of Newcastle, Newcastle, England; and 3Department of Biochemistry, St. George’s Medical School, England, United Kingdom

Program Number 79 Thyroid Hormone Action Wednesday/Thursday Poster Sessions

Hamster Pancreas TRH Gene Expression by Real Time Quantitative PCR (RT-PCR) Analysis Is Stimulated by Dexamethasone and Inhibited by T3

J.N. Flanagan1, L. Cai1, J.T. Deeney2, B.E. Corkey2, G.L. Peterfreund1, S.L. Lee1

1Section of Endocrinology, Diabetes and Nutrition, Boston University School of Medicine, Boston Medical Center, and 2Obesity Research Center, Boston University School of Medicine, Boston, Massachusetts, USA

Program Number 80 Thyroid Hormone Action Wednesday/Thursday Poster Sessions

Levothyroxine Suppressive Therapy for Solitary Thyroid Nodules

A. Uzunkoy

Department of Surgery, Harran University School of Medicine, Sanliurfa, Turkey

Program Number 81 Thyroid Imaging Wednesday/Thursday Poster Sessions

Clinical Evaluation of Color-Doppler Imaging for the Differential Diagnosis of Thyroid Follicular Lesions

N. Fukunari, K. Tanaka, M. Nagahama, K. Sugino, K. Ito

Ito Hospital, Tokyo, Japan

Program Number 82 Thyroid Imaging Wednesday/Thursday Poster Sessions

Thyroid Incidentalomas on FDG PET Scans: An Institutional Review

M. Skugor, B. Bybel

The Cleveland Clinic Foundation, Cleveland, Ohio, USA

Program Number 83 Thyroid Imaging Wednesday/Thursday Poster Sessions

Thyroid Volume in Schoolchildren in a Sufficient-iodine-intake Area


University of São Paulo Medical School, São Paulo, Brazil

Program Number 84 Thyroid Imaging Wednesday/Thursday Poster Sessions

A Survey on the Utilization of Thyroid Ultrasound in the Clinical Endocrinology Training Programs

F. Zangeneh, H. Gharib

Division of Endocrinology, Metabolism, Nutrition and Internal Medicine, Mayo Clinic and Mayo Graduate School of Medicine, Rochester, Minnesota, USA

Program Number 85 Thyroid Imaging Wednesday/Thursday Poster Sessions

Prevalence of Malignant Thyroid Disease in a Relatively-low-iodine-intake Area after a Higher Iodine Intake

E.K. Tomimori, R.Y.A. Camargo, G.A. Medeiros-Neto

Thyroid Unit, São Paulo University School of Medicine, São Paulo, Brazil
Wednesday, September 17, 2003

Program Number 86 Thyroid Imaging Wednesday/Thursday Poster Sessions

Ultrasound (US)-guided Aspiration Biopsy of Thyroid: Importance in Clinical Practice
E. Kadakovska¹, A. Platkajis²
¹Center of Tuberculosis and Lung Diseases of Latvia and ²Sate Hospital “Gailezers,”
Riga, Latvia

3:00 – 4:30 pm Ponce de Leon Ballroom
Annual Business Meeting of the American Thyroid Association

Members Only

3:00 – 3:30 pm Mediterranean Ballroom
View Exhibits and Refreshment Break

6:30 – 10:00 pm Social Event
Ragtops Museum and Reception

Buses depart at 6:30 pm from Main Lobby Entrance
Thursday, September 18, 2003

6:00 – 7:45 am
Venetian Ballroom
**Thyroid Cancer Therapy and Monitoring: Current and Future Approaches**
Moderator: Jacob Robbins
The Utility of Guidelines in the Management of Patients with Differentiated Thyroid Carcinoma
Steven I. Sherman
PET Imaging in Differentiated Thyroid Cancer: Where does it fit and how do we use it?
Richard T. Kloos
rhTSH-stimulated Radioiodine Therapy: Lessons from a Single-Center Experience
Richard Robbins
“Early Riser” CME Symposium and breakfast supported by an unrestricted educational grant from Genzyme Corporation

8:00 – 8:40 am
Venetian Ballroom
**Sidney H. Ingbar Distinguished Lectureship**
This award recognizes outstanding academic achievements in thyroidology, in keeping with the innovation and vision that epitomized Dr. Ingbar’s brilliant investigative career. The award is conferred upon an established investigator who has made major contributions to thyroid-related research over many years. The award is supported in part by an unrestricted educational grant from Abbott Laboratories.

**Thyroid Hormone Receptor Mutants: Molecular Actions and Roles in Disease**
Sheue-yann Cheng, PhD
Chief, Gene Regulation Section
Laboratory of Molecular Biology
Center for Cancer Research
National Cancer Institute
National Institutes of Health
Bethesda, Maryland

8:45 – 10:00 am
Simultaneous Sessions
Venetian Ballroom
**Clinical Oral Abstracts**
Chairs: S. Thomas Bigos and Jeffrey R. Garber

Program Number 87: Thyroid Hormone Action Thursday Clinical Oral 8:45 am

**Weston Area T4/T3 (Thyroid Hormone Replacement) Study: Psychological Effects of Combined T4/T3 Therapy**
P. Saravanan¹, D.J. Simmons¹, R. Greenwood², T.J. Peters³, C.M. Dayan¹
¹University Research Centre for Neuroendocrinology and ²Research & Development Support Unit, Bristol Royal Infirmary, Bristol, England; and ³Division of Primary Health Care, University of Bristol, Bristol, England, United Kingdom
How Effective Are Different Countermeasures after Accidental Incorporation of Radioactive Iodine?
Department of Nuclear Medicine, University of Wuerzburg, Wuerzburg, Germany

High Prevalence of Autoimmune Thyroiditis in Patients with Polycystic Ovary Syndrome
O.E. Janssen1, N. Mehlmauer2, S. Hahn1, A.H.Oeffner3, R. Gartner2
1Department of Medicine, University of Essen, Essen; 2Department of Medicine, Hospital Schwabing, Munich; and 3Department of Medicine, Ludwig Maximilians University, Munich, Germany

Amiodarone Inhibits the 3,5,3'-Triiodothyronine-dependent Increase of Na+/K+ATPase Activity and Concentration in Human Atrial Myocardial Tissue
F. Forini1, S. Balzan1, G. Nicolini1, B. Murzi2, G. Iervasi1
1CNR Institute of Clinical Physiology, Pisa, Italy; and 2Pediatric Hospital, Division of Cardio-surgery, CNR Massa, Italy

Time of Onset and Magnitude of Increase in Levothyroxine Requirements during Pregnancy in Women with Hypothyroidism
E.K. Alexander1, E. Marqusee1, J. Lawrence2, P. Jarolim2, G.A. Fischer2, P.R. Larsen1
1Division of Endocrinology, Department of Medicine, and 2Department of Pathology, Brigham and Women’s Hospital and Harvard Medical School, Boston, Massachusetts; 3Endocrine Associates, Valdosta, Georgia

Molecular Signature of Thyroid Follicular Tumors Presenting the PAX8-PPARγ1 Gene Rearrangement
L. Lacroix, H. Ripoche, V. Lazar, B. Caillou, P. Dessen, M. Schlumberger, J.-M. Bidart
Institut Gustave Roussy, Villejuif, France

Pituitary Tumor Transforming Gene (PTTG) Binding Factor (PBF) in Thyroid Cancer
Division of Medical Sciences, University of Birmingham, Queen Elizabeth Hospital, Birmingham, England, United Kingdom

RET/PTC Induces EGF Receptor Expression and Formation of RET/PTC-EGFR Heterodimers in Thyroid PCCL3 Cells
M. Croyle, J.A. Knauf, J.A. Fagin
Division of Endocrinology and Metabolism, University of Cincinnati College of Medicine, Cincinnati, Ohio, USA
The Follicular Thyroid Carcinoma-associated PAX8/PPAR-γ Fusion Gene Is a Transforming Oncogene: The NIH-3T3 Cell Focus Assay
Division of Endocrinology, Mayo Clinic and Foundation, Rochester, Minnesota, USA

Prevalence, Quantitation, and Biological Significance of RET/PTC Rearrangements in Papillary Thyroid Carcinoma: Comparative Analysis by FISH, Southern Blot, and Various Sensitivity RT-PCR Assays
R. Ciampi, Z. Zhu, M. Gandhi, Y.E. Nikiforov
Department of Pathology, University of Cincinnati, Cincinnati, Ohio, USA

9:30 am – 4:00 pm Mediterranean Ballroom
Exhibit Hall open

10:00 – 10:30 am Mediterranean Ballroom
Refreshment Break in the Exhibit Hall

10:30 – 12:00 noon Simultaneous Symposia
Venetian Ballroom
Clinical: Effects of Thyroid Hormone on Skeletal and Cardiac Muscle
Chair: Virginia D. Sarapura
Effect of abnormal thyroid function on muscle strength Michael D. Brennan
TR isoforms in skeletal muscle Jayne A. Franklyn
Thyroid hormone and cardiac function Wolfgang Dillmann

10:30 – 12:00 noon Simultaneous Symposia
Ponce de Leon Ballroom
Basic: Molecular Pathways in Thyroid Carcinogenesis
Chair: Kenneth D. Burman
PPARgamma rearrangement in thyroid cancer Bryan McIver
RET/PTC, ras, and raf pathway in thyroid carcinogenesis Yuri Nikiforov
AKT signaling in thyroid carcinogenesis Matthew Ringel

Noon – 1:30 pm Ponce de Leon Ballroom
Poster Review and Lunch
Review of Posters
Posters 19-86
Investigators available to discuss their posters

1:30 – 3:00 pm Simultaneous Sessions
Venetian Ballroom
Clinical Oral Abstracts
Chairs: Quan-yang Duh and Martin I. Surks
Thursday, September 18, 2003

Program Number 97 Cancer Thursday Clinical Oral 1:30 pm
A Unique Mutation in the RET Proto-oncogene Produces an Unusual MEN2a Phenotype: Clinical, Genetic, and Biochemical Characterization
W. Kinlaw¹, R. Maue², R. Harris³, W. Noll⁴
Departments of ¹Medicine, ²Biochemistry and Physiology, ³Radiology, and ⁴Pathology, Dartmouth Medical School, Lebanon, New Hampshire, USA

Program Number 98 Cancer Thursday Clinical Oral 1:45 pm
Predicting Survival for Differentiated Thyroid Carcinoma Based on an 8-Factor Prognostic Score
Seraphim
M. O’Connell¹, R. A’Hearn², C. Harmer²
¹Department of Clinical Oncology, Guy’s & St Thomas’ Cancer Centre, London, England; and ²Thyroid Unit, The Royal Marsden Hospital, Surrey, England, United Kingdom

Program Number 99 Cancer Thursday Clinical Oral 2:00 pm
Real-time Prognosis in Metastatic Thyroid Cancer Based on FDG-PET Scanning
Memorial Sloan-Kettering Cancer Center, New York, New York, USA

Program Number 100 Cancer Thursday Clinical Oral 2:15 pm
Vascular Invasion as Prognostic Indicator in Papillary and Follicular Thyroid Carcinomas
J.C. Furlan¹, Y.C. Bedard², I.B. Rosen¹
Departments of ¹Surgery and ²Pathology and Laboratory Medicine, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada

Program Number 101 Cancer Thursday Clinical Oral 2:30 pm
Comparison of 18 F DOPA PET versus 18 FDG PET in the Follow-up of MTC Patients: First Results
PET Center Linz, Department of Nuclear Medicine & Endocrinology, St. Vincent’s Hospital, Linz, Austria

Program Number 102 Cancer Thursday Clinical Oral 2:45 pm
Treatment of Thyroid Cancer Metastases with 131-I following Thyroid Hormone Withdrawal or Recombinant Human TSH
R. Robbins¹, S. Larson², K. Pentlow², R. Tuttle¹
¹Endocrine Service and ²Nuclear Medicine Service, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

1:30 – 3:00 pm Simultaneous Sessions
Ponce de Leon Ballroom
Basic Oral Abstracts
Chairs: James R. Baker, Jr. and Yi-chi M. Kong
Low-dose Immunization with Adenovirus Expressing the TSH Receptor Alpha Subunit Deviates the Antibody Response toward That of Autoantibodies in Graves’ Disease
Autoimmune Disease Unit, Cedars-Sinai Research Institute and University of California-Los Angeles, Los Angeles, California, USA

Roles of TNF-related Apoptosis-inducing Ligand in Experimental Autoimmune Thyroiditis
S. Wang, Z. Cao, J. Wolf, J. Baker, Jr.
Center for Biologic Nanotechnology, University of Michigan Medical Center, Ann Arbor, Michigan, USA

Promiscuous Thymic and Spleenic Expression of Thyroid Peroxidase and Predisposition to Autoimmune Thyroiditis in Mouse Model
H.P. Ng, J.P. Banga, A.W.C. Kung
Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong, China

Preparation and Characterization of Transgenic Mice Expressing MHC Class II Molecules on Thyroid Cells
Y.-S. Li1, N. Kanamoto1, Y. Hataya1, K. Moriyama1, K. Nakao1, T. Akamizu1,2
1Department of Medicine and Clinical Science and 2Translational Research Center, Kyoto University School of Medicine, Kyoto, Japan

Dendritic Cell-bound Anti-CTLA-4 Antibody Engages CTLA-4 and Induces Thyroglobulin-specific T-Cell Tolerance
C. Vasu1, B.S. Prabhakar2, M.J. Holterman1
Departments of 1Surgery and 2Microbiology & Immunology, University of Illinois at Chicago, Chicago, Illinois, USA

Determination of Thyroid Peroxidase (TPO) T Cell Epitopes in Mice That Develop TPO Antibodies Resembling Human Autoantibodies after TPO-DNA Vaccination
J. Guo1, P.N. Pichurin1, J.C. Morris2, B. Rapoport1, S.M. McLachlan1
1Autoimmune Disease Unit, Cedars-Sinai Research Center and University of California-Los Angeles, Los Angeles, California; and 2Division of Endocrinology and Metabolism, Department of Medicine, Mayo Clinic, Rochester, Minnesota

3:00 – 3:30 pm Mediterranean Ballroom
Refreshment Break in the Exhibit Hall
Thursday, September 18, 2003

3:30 – 5:00 pm Simultaneous Symposia

Venetian Ballroom

Clinical: Utility of Ultrasonography in Thyroid Disease
Chair: Victor J. Bernet
Evaluation of thyroid nodules and US-guided biopsy        Susan J. Mandel
Uses of preoperative and intraoperative ultrasound for thyroid cancer monitoring   I. Ross McDougall
US-guided ethanol injection in selected patients with recurrent/persistent thyroid cancer   Ian D. Hay

3:30 – 5:00 pm Simultaneous Symposia

Ponce de Leon Ballroom

Basic: Thyroid and Deafness
Chair: John T. Dunn
Iodine deficiency and hearing loss        Steve Boyages
Pendred syndrome                   Lorraine Everett
TR KO mouse models            Douglas Forrest

5:00 – 5:30 pm Venetian Ballroom

Historical Vignette

Thyroid Hormone Therapy Over the Past Hundred Years
Clark T. Sawin

5:30 – 7:00 pm Venetian Ballroom

Thyroidology on the Internet: The Good, The Bad, and The Ugly
Moderator: Paul W. Ladenson
What’s Out There in Thyroid Cyberspace?: A Survey of Thyroid-related Websites   Paul W. Ladenson
What Thyroid Patients Seek and Find on the Internet    Matthew I. Kim
Internet Resources for Thyroid Research  Matthew D. Ringel

CME Symposium and Wine & Cheese Reception supported by an unrestricted educational grant from Monarch Pharmaceuticals and Jones Pharma, Wholly Owned Subsidiaries of King Pharmaceuticals, Inc.
Friday, September 19, 2003

6:00 – 7:45 am  
**Venetian Ballroom**  
**Issues in Precise Thyroxine Therapy**  
Moderator: Peter A. Singer  
Optimal TSH Targets for Various Thyroid Disorders: What are they and how do we achieve them? Douglas Ross  
Drugs and Medical Conditions Altering T4 Dosimetry Cary N. Mariash  
Different T4 Formulations: Does It Matter? James Hennessey  
“Early Riser” Symposium and Breakfast supported by an unrestricted educational grant from Abbott Laboratories

8:00 – 8:45 am  
**Venetian Ballroom**  
**Van Meter Award Lecture – To Be Announced**  
Established in 1930, the Van Meter is awarded to an investigator younger than age 45 for outstanding contributions to research on the thyroid gland or related subjects. Supported by an educational grant from Quest Diagnostics Incorporated

9:00 – 10:30 am  
**Simultaneous Symposia**  
**Venetian Ballroom**  
**Clinical Grand Rounds: Unusual LT4 requirements (malabsorption, testing for malabsorption, LT4 antibodies)**  
Moderator: E. Chester Ridgway  
Steven I. Sherman  
Elaine M. Kaptein  
George Kahaly  
Supported in part by an unrestricted educational grant from Abbott Laboratories

9:00 – 10:30 am  
**Simultaneous Symposia**  
**Ponce de Leon Ballroom**  
**Basic: Thyrocyte Development**  
Chair: Nancy Carrasco  
Role of TSHr in thyrocyte development Reigh Yi Lin  
Role of TSHr signaling in thyroid gland differentiation Roberto DiLauro  
Genetic regulation of thyroid development Peter Kopp

9:30 – 1:30 pm  
**Mediterranean Ballroom**  
**Exhibit Hall open**
Friday, September 19, 2003

10:30 – 11:00 am Mediterranean Ballroom
Refreshment Break in the Exhibit Hall

11:00 am – Noon Simultaneous Sessions

Venetian Ballroom
Clinical Oral Abstracts
Chairs: Vahab Fatourechi and Susan J. Mandel

Program Number 109 Cancer Friday Clinical Oral 11:00 am
Detection of TSH Receptor mRNA Transcripts in Peripheral Blood: A Marker for Preoperative Detection of Thyroid Cancer
The Cleveland Clinic Foundation, Cleveland, Ohio, USA

Program Number 110 Cancer Friday Clinical Oral 11:15 am
A Simplified Regimen for rhTSH-assisted RAI Remnant Ablation (RRA)
Memorial Sloan Kettering Cancer Center, New York, New York, USA

Program Number 111 Cancer Friday Clinical Oral 11:30 am
Inverse Association between Age at Radiation and the Size of Thyroid-incidentaloma in Cases with History of Radiotherapy for Tinea Capitis
S. R. Zakavi¹, Z. Mousavi¹, H. Rezaei Deluie¹, M. Mehrabi¹, J. Farahati²
¹Clinic for Endocrinology and Nuclear Medicine, University of Mashad, Iran; and
²Clinic for Nuclear Medicine, Bethesda Essen, Germany

Program Number 112 Cancer Friday Clinical Oral 11:45 am
Differentiated Thyroid Cancer: Analysis of Prognostic Factors and Effect of Treatment from a Single Institution on Patients Treated in a Forty-year Period
J. Brierley¹,², R. Tsang¹,², T. Panzarella¹, N. Bana¹
¹Department of Radiation Oncology, Princess Margaret Hospital, ²Department of Radiation Oncology, University of Toronto, ³Department of Biostatistics, Princess Margaret Hospital, Toronto, Ontario, Canada

11:00 am – Noon Simultaneous Sessions

Ponce de Leon Ballroom
Basic Oral Abstracts
Chairs: Rosalind Brown and Peter Kopp

Program Number 113 Thyroid Hormone Action Friday Basic Oral 11:00 am
RanBPM: A New Coactivator for Thyroid Hormone Receptors
M. B. Poirier, L. Laflamme, M. F. Langlois
Department of Medicine, Division of Endocrinology, University of Sherbrooke, Sherbrooke, Quebec, Canada
Type 2 Deiodinase (D2) Is Not Essential for All Thyroid Hormone-dependent Developmental Processes in the Mouse Central Nervous System (CNS)

V. Galton, E. Wood, D. St. Germain
Departments of Physiology and Medicine, Dartmouth Medical School, Lebanon, New Hampshire, USA

Thyroid Hormone Modulates Heparan Sulphate Proteoglycan Expression in the Growth Plate

J.H.D. Bassett, R. Swinhoe, G.R. Williams
Molecular Endocrinology Group, MRC Clinical Sciences Centre, Imperial College, Hammersmith Hospital, London, England, United Kingdom

Molecular Profiling Distinguishes Papillary Carcinoma from Benign Thyroid Nodules

D. Finley1, B. Lee2, B. Zhu1, T. Fahey III1
1Department of Surgery, Weill Cornell Medical College, New York, New York; and
2Department of Surgery, Lenox Hill Hospital, New York, New York, USA

By-stander Activation in Autoimmune Thyroiditis: Studies on Experimental Autoimmune Thyroiditis (EAT) in the Green Fluorescent Mouse

N. Arata, T. Ando, T.F. Davies
Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine, Mount Sinai School of Medicine, New York, New York, USA

Autoantibodies in Graves’ Disease and a Hamster Thyroid Stimulating Monoclonal Antibody Differ in Their Recognition of the Free TSH Receptor α Subunit

G.D. Chazenbalk, F. Latrofa, S.M. McLachlan, B. Rapoport
Autoimmune Disease Unit, Cedars-Sinai Research Institute and University of California-Los Angeles, Los Angeles, California, USA

Autoimmune Thyroid Disease within the Scope of Polyglandular Autoimmunity

M. Dittmar, G.J. Kahaly
Department of Medicine I, Gutenberg University, Mainz, Germany
Is Familial Graves’ Disease (GD) the Same as Sporadic GD?
Y. Ban¹, D.A. Greenberg², E.S. Concepcion¹, R.B. Villanueva¹, T.F. Davies¹, Y. Tomer¹
¹Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine, Mount Sinai School of Medicine, New York, New York; and ²Division of Statistical Genetics, Columbia University, New York, New York, USA.

Tri-iodo-thyronine (T3) Reduces the Incidence of Diabetes and Increases the Relative Beta-cell Mass in Rats

Absence of Effect of Octreotide-LAR on T-Cell Subsets in Patients with Active Thyroid-associated Orbitopathy
B. Vaidya¹, B. Shenton², S. Stamp², M. Miller¹, A.J. Dickinson³, P. Perros¹, E. Baister⁴, C. Andrews⁴, P. Kendall-Taylor¹.
Departments of ¹Endocrinology, ²Surgery, and ³Ophthalmology, Newcastle University, Newcastle upon Tyne; and ⁴Novartis Pharmaceutical Corporation, United Kingdom.

Amino Acid Sequence Homologies between Borrelia burgdoferii Proteins and Human Thyroid Autoantigens
F. Guarneri¹, M. Vaccaro¹, C. Guarneri¹, F. Trimarchi², S. Benvenga².
¹Institute of Dermatology and ²Sez. di Endocrinologia del Dip. Clinico Sperimentale di Medicina e Farmacologia, University of Messina, Messina, Italy.

Autoimmune Thyroiditis and Thyroid Carcinoma in Childhood
A. Kurtev.
Clinic of Pediatric Endocrinology, University Pediatric Hospital, Sofia, Bulgaria.

High Prevalence of Thyroid Autoimmunity in Patients with Pemphigus Vulgaris
Endocrinology and Dermatology Divisions, Hospital de Clinicas, University of Buenos Aires, Buenos Aires, Argentina.

Radioiodine Therapy of Medullary Thyroid Cancer following Calcitonin Promoter-driven Expression of the Sodium Iodide Symporter
N. Cengic¹, C. Baker², I. Scholz², E. Bergert², B. Göke¹, J. Morris², C. Spitzweg¹.
¹Department of Internal Medicine II, Ludwig-Maximilians-University, Munich, Germany; and ²Department of Endocrinology, Mayo Clinic, Rochester, Minnesota, USA.
Program Number 128 Cancer Friday/Saturday Poster Sessions

Nuclear Phosphorylated AKT1 Is a Critical Regulator of Thyroid Cancer Cell Invasion

V. Vasko 1,2, M. Saji1, V. Savchenko2, A. Larin2, K.D. Burman1, M.D. Ringel1.
1MedStar Research Institute/ Washington Hospital Center, Washington, DC, USA; and
2Center for Endocrine Surgery, Kiev, Ukraine

Program Number 129 Cancer Friday/Saturday Poster Sessions

Selenium Inhibits Thyroid Cancer Cell Growth

B. Lee1, D. Finley2, A. Ahmad1, B. Zhu2, T. Fahey III2
1Department of Surgery, Lenox Hill Hospital, New York, New York; and 2Department
of Surgery, Weill Cornell Medical College, New York, New York, USA

Program Number 130 Cancer Friday/Saturday Poster Sessions

Focal Expression of Molecular Markers of Papillary Thyroid Carcinoma in Hashimoto’s Thyroiditis Suggests Early Transformation

M.L. Prasad1, Y. Huang2, N.S. Pellegata2, A. de la Chapelle2, R.T. Kloos3
1Department of Pathology, 2Human Cancer Genetics Program, The Comprehensive
Cancer Center, and 3Division of Endocrinology and Nuclear Medicine, Department
of Internal Medicine, Ohio State University, Columbus, Ohio, USA

Program Number 131 Cancer Friday/Saturday Poster Sessions

Comparative Analysis of Protein Expression Pattern in Anaplastic Thyroid Cancer and Benign Goiter

W. Gartner1, L. Wagner1, G. Wolf2, T. Daneva1, H. Eiherr2, R. Moriggl4, M. Weissel1
1Vienna University Clinic of Internal Medicine III, 2University of Graz, Department for
Surgery, 3Vienna University Clinic of Nuclear Medicine, and 4Institute of Molecular
Pathology, Vienna, Austria

Program Number 132 Cancer Friday/Saturday Poster Sessions

Long-term Effect of TSH Suppression Therapy on Papillary Carcinoma with Distant Metastasis

K. Tanaka1,2, N. Fukunari1, M. Nagahama1, K. Sugino1, K. Ito1, K. Shimizu2
1Ito Hospital and 2Nippon Medical University, Surgery II, Tokyo, Japan

Program Number 133 Cancer Friday/Saturday Poster Sessions

Distinct Patterns of Mitochondrial Changes Associated with Apoptosis Induced by a Farnesyltransferase Inhibitor and a Microtubule Inhibitor in Different Cancer Cells

S.-C.J. Yeung, H. Huang, L. Sun
Department of General Internal Medicine, Ambulatory Treatment and Emergency Care
& Department of Endocrine Neoplasia and Hormonal Disorders, University of Texas
M. D. Anderson Cancer Center, Houston, Texas, USA

Program Number 134 Cancer Friday/Saturday Poster Sessions

Usefulness of Thyroglobulin Measurement in Fine-Needle Aspiration Biopsy Specimens to Diagnose Cervical Lymph Node Metastasis in Patients with Papillary Thyroid Cancer

T. Uruno1, A. Miyauchi1, K. Shimizu2, C. Tomoda1, Y. Takamura1, Y. Ito1, A. Miya1,
K. Kobayashi1, F. Matsuzuka1, K. Kuma1
1Kuma Hospital, Kobe, Japan; and 2Department of Surgery II, Nippon Medical School,
Tokyo, Japan

Program Number 135 Cancer Friday/Saturday Poster Sessions

Probasin Promoter (ARR2PB)-driven, Prostate-specific Expression of h-NIS for Targeted Radioiodine Therapy of Prostate Cancer

H. Kakinuma, E. Bergert, J. Morris
Department of Endocrinology, Mayo Clinic, Rochester, Minnesota, USA
Quantitative Analysis of Glucose Transporter mRNA Expression in Thyroid Cancer by Real-Time PCR
K. Matsuzu1, F. Segade2, D. Bowden1,2, N. Perrier3
Departments of 1Biochemistry, 2Internal Medicine, and 3Surgery, Wake Forest
University School of Medicine, Winston-Salem, North Carolina, USA

Diagnosis of Microfollicular Architecture on Thyroid Fine Needle Aspiration Biopsy and Frozen Section: Does It Help in the Diagnosis of Thyroid Follicular Lesions?
L. Haveran1, A. Ciampa2, N. Patwardhan1, M. Safran1, A. Fischer2, B. Xu2, A. Khan2
Departments of 1Surgery, 2Pathology, and 3Medicine, University of Massachusetts
Medical Center, Worcester, Massachusetts, USA

Comparison of Diagnostic Performance of Three Thyroglobulin Assays in the Monitoring of Differentiated Thyroid Carcinoma
M. Sadouk, W. Schneider, A. Boucher, C. de Montigny, J.-M. Boutin
Biochemistry Department, Montreal University Hospital Center (CHUM), Montreal,
Quebec, Canada

Influence of Histological Subtypes on Performance of Fine-Needle Aspiration Biopsy and Frozen Section in the Management of Papillary Thyroid Carcinoma
J.C. Furlan1, Y.C. Bedard2, I.B. Rosen1
Departments of 1Surgery and 2Pathology and Laboratory Medicine, Mount Sinai
Hospital, University of Toronto, Toronto, Ontario, Canada

99mTc-Deproteotide Scintigraphy and 18F-Fluorodeoxyglucose (FDG) PET for the Localization of Persistent Metastatic Papillary Thyroid Carcinoma: A Case Report
R. Langley1, R. Bridwell2, J. Montilla2, C. Shriver3, V. Bernet1
Departments of 1Medicine, 2Radiology, and 3Surgery, Walter Reed Army Medical
Center, Washington, DC, USA

Microcarcinoma of Thyroid Gland: How Should It Be Treated?
J.C. Furlan1, Y.C. Bedard2, I.B. Rosen1
Departments of 1Surgery and 2Pathology and Laboratory Medicine, Mount Sinai
Hospital, University of Toronto, Toronto, Ontario, Canada

Occult Sporadic Medullary Thyroid Carcinoma Presenting with Neck Lymphadenopathy
R.A. Hijazi1, M.A. Habra1, M.K. Picolos2, R.V. Sellin3
1Baylor College of Medicine, Houston, Texas; 2University of Texas-Houston Medical School, Houston, Texas; and 3University of Texas MD Anderson Cancer Center, Houston, Texas, USA

Novel Chaperone Actions of Oxido-reductases in the Intracellular Processing of Normal and rdw-Mutant Thyroglobulin
S. Menon, W. Abplanalp, P.S. Kim
Division of Endocrinology and Program in Cell and Molecular Biology, University of Cincinnati, Cincinnati, Ohio, USA
Program Number 144  Cell Biology  Friday/Saturday  Poster Sessions
P13K Pathway Mediates Thyroglobulin-stimulated Thyrocyte Growth and Proliferation That Are Associated with Significant Changes in Modulators of G2-M Phase
W. Abplanalp, K.O. Kim, P.S. Kim
Division of Endocrinology and Program in Cell and Molecular Biology, University of Cincinnati, Cincinnati, Ohio, USA

Program Number 145  Cell Biology  Friday/Saturday  Poster Sessions
Comparative Modeling of the TSH Receptor-TSH Complex
R. Nunez Miguel1, J. Sanders2, J. Jeffreys2, H. Depraetere2, M. Evans2, T. Richards2, T. Blundell1, B. Rees Smith2, J. Furmaniak2
1Department of Biochemistry, University of Cambridge, Cambridge, England; and 2FIRS Laboratories, Cardiff, Wales, United Kingdom

Program Number 146  Cell Biology  Friday/Saturday  Poster Sessions
Purification of Tyrosine-phosphorylated 120 kDa-protein from FRTL-5 Cells
D.J. Park1, Y.J. Park1, T.Y. Kim1, B.Y. Cho1, S.G. Rhee2
1Department of Internal Medicine, College of Medicine, Seoul National University, Seoul, Korea; and 2Laboratory of Cell Signaling, NHLBI, National Institutes of Health, Bethesda, Maryland, USA

Program Number 147  Cell Biology  Friday/Saturday  Poster Sessions
Structural Determinants of Thyroglobulin Folding and Intracellular Processing: N-linked Glycosylation Sites, Salt Bridges, Disulfide Bonds, and Domain Truncations
J.H. Bae1, P. Jongsamak1,3, S. Menon1,2, W. Abplanalp1, B. Panijpan3, P.S. Kim1,2
1Division of Endocrinology and 2Program in Cell and Molecular Biology, University of Cincinnati, Cincinnati, Ohio, USA; and 3Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok, Thailand

Program Number 148  Cell Biology  Friday/Saturday  Poster Sessions
Expression of TGFβ/Activin Signaling Mediators, Smads 2/3, Smad4, and Smad7, in Thyroid Tumors
S.E. Matsuo, K.N. Ebina, L. Martins, E.T. Kimura
Department of Histology & Embryology, Institute of Biomedical Sciences, University of São Paulo, São Paulo, Brazil

Program Number 149  Cell Biology  Friday/Saturday  Poster Sessions
The Adult Spot 14 Null Mouse Exhibits Compensatory Increases in De Novo Lipogenesis
G.T. Mucha, G.W. Anderson, C.N. Mariash
Division of Endocrinology, Department of Medicine, University of Minnesota, Minneapolis, Minnesota, USA

Program Number 150  Cell Biology  Friday/Saturday  Poster Sessions
The TSH Receptor (TSHR) Resides in Lipid Rafts
R. Latif, T. Ando, S. Daniel, T.F. Davies
Division of Endocrinology, Diabetes and Bone Diseases, Mount Sinai School of Medicine, New York, New York, USA
Program Number 151: Cell Biology Poster Sessions

Protein Disulfide Isomerase Acts as a Major Molecular Chaperone in the Intracellular Retention of Mutant Thyroglobulin Causing Human Congenital Hypothyroid Goiter

P. Jongsamak, S. Menon, W. Abplanalp, B. Panijpan, P.S. Kim

1Division of Endocrinology and 2Program in Cell and Molecular Biology, University of Cincinnati, Cincinnati, Ohio, USA; and 3Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok, Thailand

Program Number 152: Thyroid Diseases Poster Sessions

Allele Frequency Assessment of Known TNF-α Polymorphisms and Their Association with Graves’ Disease in a UK Caucasian Population

M.J. Simmonds, J.M. Heward, R. Nithiyananthan, J.A. Franklyn, S.C.L. Gough

1Division of Medical Sciences, University of Birmingham, Queen Elizabeth Hospital, Birmingham, England; and 2Birmingham Heartlands Hospital, Bordesley Green East, Birmingham, England, United Kingdom

Program Number 153: Thyroid Diseases Poster Sessions

Association of a Rare Thyroglobulin Gene Microsatellite Variant with Autoimmune Thyroid Disease in the UK


1Division of Medical Sciences, University of Birmingham, Queen Elizabeth Hospital, Birmingham, England; and 2Division of Medical Sciences, University of Birmingham, Heartlands Hospital, Birmingham, England, United Kingdom

Program Number 154: Thyroid Diseases Poster Sessions

Further Studies on the Mechanism by Which Nicotinamide Increases Thyroid Radiosensitivity

M. Agote Robertson, A. Gamba, M. Carreras, P. Finochietto, J.J. Poderoso, G.J. Juvenal

1Department of Radiobiology, National Atomic Energy Commission; 2Department of Biochemistry and 3Laboratory of Oxygen Metabolism, University of Buenos Aires School of Medicine, Buenos Aires, Argentina

Program Number 155: Thyroid Diseases Poster Sessions

Residual Goiter in the Post-Iodization Phase: Iodine Status, Thiocyanate Exposure, Thyroid Functions, and Autoimmunity in Indian Children


1Institute of Nuclear Medicine & Allied Sciences, New Delhi, India; and 2All India Institute of Medical Sciences, New Delhi, India

Program Number 156: Thyroid Diseases Poster Sessions

Rapid Preoperative Preparation for Severe Hyperthyroid Graves’ Disease

C. Panzer, R. Beazley, L. Braverman

1Section of Endocrinology and 2Department of Surgery, Boston Medical Center, Boston, Massachusetts, USA
Lack of Association of the Vitamin D Receptor Gene with Graves’ Disease in the UK
J.E. Collins¹, J.M. Heward¹, R. Nithiyananthan¹,², S. Nezhentsev³, J.A. Franklyn¹, S.C.L. Gough²
¹Division of Medical Sciences, University of Birmingham, Birmingham, England; ²Birmingham Heartlands Hospital, Birmingham, England; and ³Diabetes and Inflammation Laboratory, University of Cambridge, Cambridge, England, United Kingdom

A C/T Polymorphism in the 5'-untranslated Region of the CD40 Gene Is Associated with Graves’ Disease in Koreans
T.Y. Kim¹,², Y.J. Park¹,³, J.Y. Song², K.S. Park¹,², D.J. Park¹,², B.Y. Cho¹,²
¹Department of Internal Medicine, Seoul National University College of Medicine, Seoul, Korea; ²Department of Internal Medicine, Clinical Research Institute, Seoul National University Hospital, Seoul, Korea; ³Department of Internal Medicine Seoul Municipal Boramae Hospital, Seoul, Korea

A Comparison of Two Competitive Binding Assays for Porcine TSH-Receptor Antibodies (TRAb and CT-TRAb) in Graves’ Disease and Other Thyroid Disorders
N. Lima, M.S. Cardia, M. Knobel, G. Medeiros-Neto
Thyroid Unit, Endocrine Division, University of São Paulo Medical School, São Paulo, Brazil

Recurrence after Surgical Treatment of Graves’ Disease and Autonomous Thyroid Adenoma
Z. Petrovski
Department of Nuclear Medicine, Medical Center, Bitola, Republic of Macedonia

The Characteristics of Colloid: Malignant versus Benign Entities in Thyroid Fine Needle Aspirations (FNAs)
M. Williams¹, E. Mazzaferri², N. Massoll¹,²
Departments of ¹Pathology and ²Endocrinology, University of Florida, Gainesville, Florida, USA

Atrial Fibrillation Is Associated with Higher Frequency of Mild Thyroid Failure (Serum TSH 5.1–10 mIU/L)
V. Fatourechi¹, J. Smith², P. Schryver², G. Klee³
¹Division of Endocrinology, Diabetes and Nutrition, ²Division of Health Care Policy and Research, and ³Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester Minnesota, USA

Hypomagnesemia after Total Thyroidectomy: A Prospective Study
S.K. Gupta¹, A. Agarwal², S.K. Mishra², M.M. Godbole¹
Departments of ¹Medical Endocrinology and ²Surgical Endocrinology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India
Friday, September 19, 2003

Program Number 164 Thyroid Diseases Friday/Saturday Poster Sessions
Natural Deposition of Radium in Thyroid Glands
L. Van Middlesworth1, D.R. Shanklin2
Departments of 1Physiology and 2Pathology, University of Tennessee Health Science Center, Memphis, Tennessee, USA

Program Number 165 Thyroid Hormone Metabolism Friday/Saturday Poster Sessions
Tandem LC/MS/MS Analysis of Thyroid Hormones in Human Serum
N. Soukhova, N. Janicic-Kahric, J. Jonklaas, S.J. Soldin, O.P. Soldin
Bioanalytical Core Laboratory and Endocrinology, General Clinical Research Center, Georgetown University Medical Center, Washington, DC, USA

Program Number 166 Thyroid Hormone Metabolism Friday/Saturday Poster Sessions
Effects of Iodothyronines on the Hepatic Outer Ring Deiodinating Pathway in Killifish
Instituto de Neurobiología, Universidad Nacional Autónoma de México, Campus UNAM-UAQ-Juriquilla, Querétaro, México

Program Number 167 Thyroid Hormone Metabolism Friday/Saturday Poster Sessions
Expression of Type 2 Deiodinase in the Developing Chicken Brain
B. Gereben1, J. Pachucki2, A. Kollár3, Z.S. Liposits1, C.S. Fekete1
1Institute of Experimental Medicine, Hungarian Academy of Sciences, Budapest, Hungary; 2Dept. of Endocrinology, Medical University of Warsaw, Warsaw, Poland; 3Dept. of Medical Biochemistry, Semmelweis University of Medicine, Budapest, Hungary

Program Number 168 Thyroid Hormone Metabolism Friday/Saturday Poster Sessions
Comparison of the Acute Effects of Dexamethasone on Iodothyronine Deiodinases in Fetal and Postnatal Rats
V.M. Darras, S. Van der Geyten
Laboratory of Comparative Endocrinology, K.U. Leuven, Leuven, Belgium

Program Number 169 Thyroid Hormone Metabolism Friday/Saturday Poster Sessions
Human Type III Deiodinase Expression and Promoter Analysis in Different Cell Lines
M. Kester1, A. Hernandez2, G. Kuiper1, D. St. Germain2, T. Visser1
1Department of Internal Medicine, Erasmus Medical Center, Rotterdam, The Netherlands; and 2Departments of Medicine and Physiology, Dartmouth Medical School, Lebanon, New Hampshire, USA

Program Number 170 Thyroid Hormone Metabolism Friday/Saturday Poster Sessions
Thyrotoxicosis from Metastatic Lung Cancer: A Case Report
A. Sadhu, P. Cohan, D. Martinez
University of California-Los Angeles School of Medicine, Los Angeles, California

Program Number 171 Thyroid Nodules and Goiter Friday/Saturday Poster Sessions
Serum Levels and Immunochemical Expression of Hepatocyte Growth Factor (HGF) in Hashimoto’s Thyroiditis
R. M. Ruggeri1, S. Sciachitano2,3, A. Vitale2, P. Cardelli2, E. Vitarelli4, G. Barresi4, F. Trimarchi1, S. Benvenega1, M. Trovato1
1Università di Messina, Dip. Clinico-Sperimentale di Medicina e Farmacologia, Messina, Italy; 2Università La Sapienza, II Facoltà di Medicina e Chirurgia, Osp.S.Andrea, Roma, Italy; 3Centro di Ricerca Ospedale S.Pietro Fatebenefratelli, AfaR, Roma, Italy; 4Università di Messina, Dip. di Patologia Umana, Messina, Italy.
Program Number 172  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Prevalence and Determinants of Goiter at Ultrasound in 853 Healthy Adults in German PAPILLON Study
J. Farahati, K. Christ, W. Oing, C. Beiser, S. Kittel, D. Kleditz
Clinic for Nuclear Medicine and Radiation Oncology, Bethesda Essen, Essen, Germany

Program Number 173  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Could the Number and Size of Thyroid Nodules Be Considered Predictors of Malignancy?
1Thyroid Unit – Endocrine Division, University of São Paulo Medical School, São Paulo, Brazil

Program Number 174  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Radioactive Iodine (131I) in Multinodular Goiter (MNG) Treatment with the Aid of Recombinant Human TSH (rhTSH, ThyrogenR)
H. Graf, C.O. Mesa, C.C. Albino
1SEMPR, Endocrine Unit, University of Parana, Curitiba, Brazil; and 2IDEM, Endocrine and Diabetes Institute, Maringa, Brazil

Program Number 175  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Fine-Needle Aspiration Biopsy (FNAB) of Thyroid Nodules with Intranodular Vascular Pattern (Pattern III): Different Techniques
C. Cappelli, A. Tironi, G. Pelizzari, D. Cumetti, M. Castellano, B. Agosti, M.L. Morassi, E. Gandossi, E. Agabiti Rosei
1Internal Medicine, Section of Endocrinology, and 2II Pathological Anatomy, University of Brescia, Brescia, Italy

Program Number 176  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Bedside-prepared FNAB Slides Are Diagnostic More Often Than Those Made Subsequent to Storage in Preservative Solution
S. Pena, A. De Las Morenas, V. Tangpricha, S. Lee, J.D. Safer
1Section of Endocrinology, Diabetes, and Nutrition, Department of Medicine, and 2Department of Anatomic Pathology, Boston University School of Medicine, Boston, Massachusetts, USA

Program Number 177  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Cardiovascular Safety of rhTSH Administration in Patients with Multinodular Goiter (MNG) Submitted to Ambulatory 131I Treatment Doses
H. Graf, C.O. Mesa, C.C. Albino
1SEMPR, Endocrine Unit, Federal University of Parana, Curitiba, Brazil; and 2IDEM, Diabetes and Endocrine Institute, Maringa, Brazil

Program Number 178  Thyroid Nodules and Goiter  Friday/Saturday Poster Sessions
Dietary Iodine Sufficiency in a Sample of US Schoolchildren
E.N. Pearce, M.B. Zimmermann, S.Y. Hess, X. He, S. Pino, L.E. Braverman
1Section of Endocrinology, Diabetes, and Nutrition, Boston Medical Center and Boston University School of Medicine, Boston, Massachusetts, USA; and 2Laboratory for Human Nutrition, Swiss Federal Institute of Technology, Zurich, Switzerland
**Friday, September 19, 2003**

**Program Number 179** Thyroid Nodules and Goiter Friday/Saturday Poster Sessions

**Evaluation of Multinodular Goiter’s Thyroid Function**
Y. Noguchi¹, I. Tatsuno¹, T. Ban², K. Suyama¹, M. Fuse¹, Y. Saito¹
¹Department of Clinical Cell Biology, Chiba University Graduate School of Medicine, Chiba, Japan; and ²Chiba Cancer Society, Chiba, Japan

**Program Number 180** Thyroid Nodules and Goiter Friday/Saturday Poster Sessions

**The Role of Ultrasound-guided Fine-Needle Aspiration Biopsy in the Evaluation of Thyroid Nodules**
A. Uzunkoy³, I. Ozardal²
Departments of ¹Surgery and ²Pathology, School of Medicine, Harran University, Sanliurfa, Turkey

**Program Number 181** Thyroid Nodules and Goiter Friday/Saturday Poster Sessions

**Risk of Cancer in Thyroid Nodules with Calcification Detected by Ultrasound**
A. Bezerra, K. Seidenberger, G. Duarte, R. Camargo, E. Tomimori, G. Medeiros-Neto
Thyroid Unit of University of São Paulo Medical School, São Paulo, Brazil

**Program Number 182** Thyroid Nodules and Goiter Friday/Saturday Poster Sessions

**Goiter in Iodine-replete but Malnourished and Iron-deficient Population of India: Truth or Myth?**
R. Brahmbhatt¹, S. Brahmbhatt³, C. Eastman², S. Boyages²
¹Pendlebury Clinic, Cardiff, Australia; and ²Western Sydney Area Health Services, Westmead, Australia

**Program Number 183** Thyroid Nodules and Goiter Friday/Saturday Poster Sessions

**Thyroid Nodular Disease. Preoperative Unrecognized Malignancy: Role-play in Surgical Management**
Hospital de S. João - Oporto Medical School, Oporto, Portugal

**Program Number 184** Thyroid Nodules and Goiter Friday/Saturday Poster Sessions

**Toxic Multinodular Goiter with Extracardiac Extension**
R.A. Hijazi, M.A. Habra, M.D. Sharma
Baylor College of Medicine, Houston, Texas, USA

12:00 noon – 1:30 pm **Meet the Professor Luncheon Workshops**
Advance purchase required; admission by ticket only

*Experts and specialists in thyroid disease and pathophysiology will present their research and findings in an interactive luncheon workshop.*

**Magnolia Room**

**Therapeutic approaches to patients with advanced thyroid cancer**
Kenneth Ain

*Supported in part by an unrestricted educational grant from Abbott Laboratories*

**Gulfstream Room**

**Nongenomic actions of thyroid hormone**
Faith and Pepper Davis
Flagler Boardroom

Update on Chornobyl and KI prophylaxis
Lewis E. Braverman

Supported in part by an unrestricted educational grant from Abbott Laboratories

Gulfstream Room

Cytologic analysis of follicular lesions
Yolanda Oertel

Gulfstream Room

New tools in biomedical research: Tissue arrays
Wilma Lingle

Gulfstream Room

Mouse models of TR mutations
Bjorn Vennstrom

Gold Room

Biomarkers in thyroid neoplasia
Norman Eberhardt

Supported by the University of Southern California Thyroid Group Endowment

1:30 pm

Exhibit Hall Closes

Free Afternoon and Evening for Meeting Attendees
75th Annual Meeting of the American Thyroid Association
The Breakers Hotel
Palm Beach, Florida
September 16-21, 2003

Saturday, September 20, 2003

6:00 – 7:45 am Venetian Ballroom
Current Concepts in the Management of Subclinical Thyroid Disease
Moderator: Irwin L. Klein
Cardiovascular effects of subclinical hypothyroidism and response to treatment Bernadette Biondi
Subclinical Thyroid Disease and Cholesterol Metabolism William Kinlaw
Subclinical Hyperthyroidism and Cardiovascular Mortality Jayne A. Franklyn

“Early Riser” CME Symposium and breakfast supported by an unrestricted educational grant from Monarch Pharmaceuticals and Jones Pharma, Wholly Owned Subsidiaries of King Pharmaceuticals, Inc.

8:00 – 8:45 am Venetian Ballroom
Paul Starr Award Lecture
This annual Award recognizes an outstanding contributor to clinical thyroidology. The Paul Starr Award is supported by the generosity of ATA member Boris Catz, MD, and in part by an unrestricted educational grant from Monarch Pharmaceuticals and Jones Pharma, Wholly Owned Subsidiaries of King Pharmaceuticals, Inc.

TSH: Reverse Translation of Human Assays to Molecular Physiology

E. Chester Ridgway, MD
President, The Endocrine Society
Fredric C. Hamilton Professor of Medicine
Senior Associate Dean for Academic Affairs
University of Colorado School of Medicine
Head, Division of Endocrinology, Metabolism and Diabetes
University of Colorado Health Sciences Center
Denver, Colorado

8:45 – 10:00 am Venetian Ballroom
Short Call Abstract Presentations
Chairs: Gregory A. Brent and Leonard Wartofsky
A forum presenting the latest in thyroid-related research

10:00 – 10:30 am Mediterranean Ballroom
Refreshment Break in the Courtyard
Saturday, September 20, 2003

10:30 am – 12 noon Simultaneous Symposia

Venetian Ballroom
Clinical: Surgical Approaches to Papillary Thyroid Cancer
Chair: Richard T. Kloos
The role of hemithyroidectomy in papillary thyroid cancer Robert McIntyre
Argument for standard thyroidectomy with no preoperative imaging Quan-yang Duh
Argument for preoperative US and directed compartment dissection Clive Grant

Ponce de Leon Ballroom
Basic: Autoantibody Interactions with the Thyrotropin Receptor
Chair: John C. Morris
Insights gained from stimulatory antibodies Terry F. Davies
Role of TSH receptor structure in induction of autoantibodies Basil Rapoport
Autoantibody diversity in autoimmune thyroid disease Bellur Prabhakar

Noon – 1:30 pm Ponce de Leon Ballroom
Poster Review and Lunch
Review of Posters
Posters 117-184
Investigators available to discuss their posters

1:30 – 3:00 pm Simultaneous Sessions

Venetian Ballroom
Clinical Oral Abstracts
Chairs: Yolanda Oertel and Lawrence Wood

Program Number 185 Cancer Saturday Clinical Oral 1:30 pm
Retinoic Acid (RA) Receptor Beta Expression as a Possible Predictive Factor of Response to Redifferentiation Therapy in Patients with Metastatic Thyroid Carcinoma
S.M. Coelho1, R. Corbo2, M.M.D. Breitenbach3, J. Carvalho4, A. Buescu1, D.P. Carvalho1, M. Vaisman1
Serviços de 1Endocrinologia and 2Medicina Nuclear do HUCFF, 3Laboratório de Fisiologia Endócrina, IBCCF, UFRJ, and 4Instituto de Biologia Roberto Alcantara Gomes, UERJ, Rio de Janeiro, Brasil

Program Number 186 Cancer Saturday Clinical Oral 1:45 pm
A Serum Thyroglobulin (Tg) Level <0.5 ng/mL during Thyroxine Suppressive Therapy (TST) Is Rarely Misleading in Patients with TNM Stages I or II Follicular Cell-derived Thyroid Carcinoma (FCDC)
J. Powell1, I. Hay1, M. Morgan2, B. Mullan3, G. Wiseman3, R. Smallridge2, V. Fatourechi1
1Division of Endocrinology, Mayo Clinic, Rochester, Minnesota; 2Division of Endocrinology, Mayo Clinic, Jacksonville, Florida; and 3Department of Nuclear Medicine, Mayo Clinic, Rochester, Minnesota, USA
Program Number 187  
Cancer  
Saturday  
Clinical Oral  
2:00 pm  
Pharmacokinetics of rhTSH in Children with Thyroid Cancer  
S. Iorcansky¹, V. Herzovich¹, R.R. Qualey², R.M. Tuttle²  
¹Pediatric Endocrinology, Buenos Aires, Argentina; and ²Endocrinology, Memorial Sloan Kettering Cancer Center, New York, New York, USA

Program Number 188  
Thyroid Diseases  
Saturday  
Clinical Oral  
2:15 pm  
Prevalence and Outcome of Atrial Fibrillation in Hyperthyroidism  
F. Osman, J. Daykin, M.C. Sheppard, M.D. Gammage, J.A. Franklyn  
Division of Medical Sciences, University of Birmingham, Birmingham, England, United Kingdom

Program Number 189  
Thyroid Diseases  
Saturday  
Clinical Oral  
2:30 pm  
New Mutations in THOX2 Gene in Patients with Partial Iodide Organification Defect  
Thyroid Unit (LIM-25), Endocrine Division, University of São Paulo Medical School, São Paulo, Brazil

Program Number 190  
Cancer  
Saturday  
Clinical Oral  
2:45 pm  
Detection of the PAX8-PPARγ1 Rearrangements in Both Follicular Thyroid Carcinomas and Adenomas  
C.C.D. Nakabashi¹, J.M. Cerutti¹, G.S. Guimarães¹, P. Michaluart, Jr.², L.S. Ward³, R.M.B. Maciel¹  
¹Laboratory of Molecular Endocrinology, Federal University of São Paulo, ²Division of Head and Neck Surgery, University of São Paulo, São Paulo, Brazil; and ³Laboratory of Molecular Endocrinology of Cancer, University of Campinas, Campinas, Brazil

1:30 – 3:00 pm  
Simultaneous Sessions  
Ponce de Leon Ballroom  
**Basic Oral Abstracts**  
Chairs: Faith Davis and Cary Mariash

Program Number 191  
Cell Biology  
Saturday  
Basic Oral  
1:30 pm  
Plasma Membrane Targeting and Endoplasmic Reticulum Processing of Wild-type and Mutant Pendrins  
P. Rotman-Pikielny¹, J. Shepshelovich², P.M. Yen³, K. Hirshberg²  
¹Department of Internal Medicine B, Souraski Medical Center, Tel-Aviv, Israel; ²Department of Pathology, Sackler School of Medicine, Tel-Aviv University, Israel; and ³Clinical Endocrinology Branch, NIDDK, NIH, Bethesda, Maryland, USA

Program Number 192  
Cell Biology  
Saturday  
Basic Oral  
1:45 pm  
IL-1β and TNFα Sensitizes Human Thyroid Epithelial Cells to TRAIL-induced Apoptosis through Increased Procaspase-7 and Bid and the Down-regulation of p44/42 MAPK Activity  
E. Mezosi¹, S. Wang¹, P. Gauger², N. Thompson², J. Baker, Jr.¹  
¹Center for Biologic Nanotechnology and ²Surgery, University of Michigan Medical Center, Ann Arbor, Michigan, USA
Saturday, September 20, 2003

Program Number 193   Cell Biology   Saturday   Basic Oral   2:00 pm
Preferential Transectosis of Low Hormonogenic Thyroglobulin: A Novel Control Mechanism for Hormone Release
S. Lisi1, A. Pinchera1, R.T. McCluskey2, C. Marcocci1, P. Vitti1, F. Menconi1, L. Grasso1, F. Luchetti1, A.B. Collins2, M. Marinò1
1Department of Endocrinology, University of Pisa, Italy; and 2Department of Pathology, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA

Program Number 194   Cell Biology   Saturday   Basic Oral   2:15 pm
Structural Homology of the Cleavage Domain of the TSHR and Tissue Inhibitor of Metalloproteinases-2
R. Nunez Miguel1, J. Sanders2, J. Jeoffreys2, H. Depraetere2, T. Blundell1, B. Rees Smith2, J. Furmaniak2
1Department of Biochemistry, University of Cambridge, Cambridge, England; and 2FIRS Laboratories, Cardiff, Wales, United Kingdom

Program Number 195   Cell Biology   Saturday   Basic Oral   2:30 pm
RXR-selective Retinoids (Rexinoids) Suppress TSHβ mRNA and Promoter Activity in the TaT1 Thyrotrope Cell Line
V. Sharma, W.R. Hays, C.A. Kramer, B.R. Haugen
Department of Medicine, University of Colorado Health Sciences Center, Denver, Colorado, USA

Program Number 196   Cell Biology   Saturday   Basic Oral   2:45 pm
Disruption of Cell-type-specific Methylation at the Maspin Gene Promoter Is Frequently Involved in Undifferentiated Thyroid Cancers
S. Ogasawara, C. Maesawa, M. Yamamoto, Y. Akiyama, K. Wada, K. Fujisawa, Y. Noda, Y. Tomisawa, S. Endo, K. Saito
Iwate Medical University School of Medicine, Morioka, Japan

3:00 – 3:30 pm   Mediterranean Ballroom
Refreshment Break in the Courtyard

3:30 – 5:00 pm   Simultaneous Symposia

The Arthur Bauman Clinical Symposium

Supported by the Arthur Bauman Endowment Fund, this symposium honors the memory of Dr. Arthur Bauman, a master clinician and clinical investigator. The Symposium presents advances in clinical investigation in thyroidology, and promotes participation by younger members of the Association.

Multinodular Goiter
Chair: Whitney Woodmansee
Epidemiology and pathogenesis      Stephanie Lee
Standard approach: surgery or LT4 suppression      Hossein Gharib
New standard approach? radioiodine/rhTSH      Dyde Huysmans
3:30 – 5:00 pm Simultaneous Symposia
Ponce de Leon Ballroom
**Basic: Role of thyroglobulin in thyroid disease**
Chair: Aldo Pinchera
Defective thyroglobulin synthesis Geraldo Medeiros-Neto
Thyroglobulin antibodies in health and disease Sandra McLachlan
Defective thyroglobulin transport Paul S. Kim

7:30 to 11:00 pm Mediterranean Ballroom and Venetian Ballroom
**ATA Annual Reception and Banquet**
Advance purchase required; admission by ticket only

Presentation of ATA Distinguished Service Award
This Award recognizes an ATA member who has made important and continuing contributions to the Association.
Awardee for 2003: Paul J. Davis, MD

Presentation of ATA Physiology Medal
This Award recognizes outstanding research contributions to the understanding of thyroid physiology or the pathophysiology of thyroid disease. The significance of these contributions will be evidenced by their major impact on subsequent research or clinical practice related to thyroid disorders.
Awardee for 2003: Lewis E. Braverman, MD
Sunday, September 21, 2003

8:00 – 8:45 am  Ponce de Leon Ballroom
**Abbott State of the Art Lecture**
Mark Duncan, PhD
**Promises and Pitfalls of Proteomics**
University of Colorado
Denver, Colorado
*Supported by an unrestricted educational grant from Abbott Laboratories*

8:45 – 10:00 am  Ponce de Leon Ballroom
**Plenary Session – Translational**
Oral Abstract Presentations
Chairs: Leonard Kohn and Yaron Tomer

Program Number 197  Autoimmunity  Sunday  Translational Oral  8:45 am
**Characterization of TSH Receptor Autoantibodies Affinity-enriched to Near Purity from the Serum of Graves’ Patients**
F. Latrofa, G.D. Chazenbalk, P. Pichurin, C.-R. Chen, S.M. McLachlan, B. Rapoport
Autoimmune Disease Unit, Cedars-Sinai Research Institute and University of California-Los Angeles, Los Angeles, California, USA

Program Number 198  Autoimmunity  Sunday  Translational Oral  9:00 am
**First Identification of Three Binding Sites for Monoclonal Antibodies to the Native TSH Receptor**
T. Ando, R. Latif, T.F. Davies
Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine, Mount Sinai School of Medicine, New York, New York, USA

Program Number 199  Autoimmunity  Sunday  Translational Oral  9:15 am
**Thyroid Stimulating Monoclonal Antibodies—of Man and of Mouse**
J. Sanders1, M. Evans1, L.D.K.E. Premawardhana2, H. Depraetere1, J. Jeffreys1, T. Richards1, A. Kiddie1, K. Breteron1, J. Furmaniak1, B. Rees Smith1
1FIRS Laboratories, Cardiff, Wales; and 2Department of Adult Medicine, Caerphilly District Miners’ Hospital, Caerphilly, Wales, United Kingdom

Program Number 200  Autoimmunity  Sunday  Translational Oral  9:30 am
**Potential Role for Inhibition of Wnt Signaling by Secreted Frizzled Protein-1 in the Pathogenesis of Graves’ Ophthalmopathy**
S. Kumar1, M. Coenen2, R. Bahn2
1Division of Pediatric Endocrinology and 2Division of Endocrinology, Metabolism and Nutrition, Mayo Clinic, Rochester, Minnesota, USA
TSH Receptor Antibodies (TSHR-AB) Help to Predict Severity and Outcome of Thyroid-associated Ophthalmopathy (TAO)

A.K. Eckstein¹, M. Plicht¹, C. Lenzner⁵, H. Lax³, B. Quadbeck², O.E Janssen², K. Mann², J. Esser¹, N.G. Morgenthaler⁴,⁵

Departments of ¹Ophthalmology and ²Endocrinology, ³Institute for Medical Informatics, Biometry and Epidemiology, Essen University, Essen, Germany; ⁴BRAHMS AG, Research Department and ⁵Bioassays GmbH, Hennigsdorf/Berlin, Germany

10:00 am – 10:30 am  Ponce de Leon Foyer
Refreshment Break

10:30 am - Noon  Ponce de Leon Ballroom
Translational Symposium

**Novel immune therapies for thyroid diseases**

Chair: Sandra McLachlan
What can thyroidologists learn from rheumatologists regarding treatment of autoimmune diseases?  Wilmar Wiersinga
Potential applications of immune therapies to thyroid disease  Yuji Nagayama
Potential immunotherapy for medullary thyroid carcinoma by dendritic cell vaccination  Matthias Schott

Noon  75th Annual Meeting Ends

12:30 – 3:30 pm  Gulfstream Room

*International Coordinating Committee Meeting and Lunch*

*LATS, AOTA, ETA, ATA*