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AMERICAN  
THYROID  
ASSOCIATION

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FOUNDED 1923

**75<sup>th</sup> Annual Meeting of the  
American Thyroid Association**

September 16-21, 2003

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

**President**

Peter A. Singer

**President-Elect**

Clark T. Sawin

**Secretary**

Paul W. Ladenson

**Treasurer**

David S. Cooper

*2003 ATA Program and Meet-the-Professor Syllabus published by:*

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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



**75th Annual Meeting of the American Thyroid Association  
The Breakers Hotel  
Palm Beach, Florida  
September 16-21, 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. Laurberg<sup>1</sup>, S.B. Nøhr<sup>2</sup>, K.M. Pedersen<sup>1</sup>, E. Fuglsang<sup>3</sup>  
Departments of <sup>1</sup>Endocrinology and Medicine and <sup>2</sup>Gynecology and Obstetrics, Aalborg Hospital, Aalborg, Denmark; and <sup>3</sup>Ringkoebing 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 TR $\alpha$  or TR $\beta$  Gene**  
P.J. O’Shea<sup>1</sup>, H. Suzuki<sup>2</sup>, C.B. Harvey<sup>1</sup>, S.-Y. Cheng<sup>2</sup>, G.R. Williams<sup>1</sup>  
<sup>1</sup>Molecular Endocrinology Group, Division of Medicine and MRC Clinical Sciences Centre, Hammersmith Hospital, Imperial College London, UK; <sup>2</sup>Gene Regulation Section, Laboratory of Molecular Biology, National Cancer Institute, NIH, Bethesda, MD, USA



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. Friesema<sup>1</sup>, A. Grueters<sup>2</sup>, A. Halestrap<sup>3</sup>, M. Reeser<sup>4</sup>, T. Visser<sup>1</sup>  
<sup>1</sup>Internal Medicine, Erasmus MC, Rotterdam, The Netherlands; <sup>2</sup>Paediatric Endocrinology, Charite Children's Hospital, Berlin, Germany; <sup>3</sup>Biochemistry, University of Bristol, United Kingdom; and <sup>4</sup>Paediatrics, 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. Golger<sup>1,3</sup>, T. Freedman<sup>2</sup>, K. Gulenchyn<sup>3</sup>, J. Freeman<sup>2</sup>, P. Walfish<sup>2</sup>, J. Young<sup>1</sup>  
<sup>1</sup>St. Joseph's Hospital, Hamilton, Ontario; <sup>2</sup>Mount Sinai Hospital, Toronto, Ontario; and <sup>3</sup>McMaster 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. Menconi<sup>1</sup>, M. Marinò<sup>1</sup>, R. Rocchi<sup>1</sup>, E. Morabito<sup>1</sup>, B. Mazzi<sup>1</sup>, M.A. Altea<sup>1</sup>, P. Lepri<sup>2</sup>, M.P. Bartolome<sup>2</sup>, A. Pinchera<sup>1</sup>, C. Marcocci<sup>1</sup>  
Departments of <sup>1</sup>Endocrinology and <sup>2</sup>Neuroscience, University of Pisa, Pisa, Italy



Wednesday, September 17, 2003

Program Number 16 Thyroid Hormone Metabolism Wednesday Basic Oral 2:45 pm  
**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

**Wednesday – Thursday Ponce de Leon Ballroom**  
**Poster Sessions Posters 19 – 86**

Program Number 19 Autoimmunity Wednesday/Thursday Poster Sessions  
**Familial Clustering of Autoimmune Thyroiditis and Diabetes: Further Genetic Dissection**  
L.J. Levin<sup>1</sup>, Y. Ban<sup>1</sup>, D.A. Greenberg<sup>2</sup>, E.S. Concepcion<sup>1</sup>, T.F. Davies<sup>1</sup>, Y. Tomer<sup>1</sup>  
<sup>1</sup>Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine,  
Mount Sinai School of Medicine, New York, New York; and <sup>2</sup>Division of Statistical  
Genetics, Columbia University, New York, New York, USA

Program Number 20 Autoimmunity Wednesday/Thursday Poster Sessions  
**Microarray Analysis of CD4+ Lymphocytes in Graves' Disease**  
C.E. Jennings<sup>1</sup>, C.J. Owen<sup>1</sup>, K. Robertson<sup>2</sup>, D. Roy<sup>2</sup>, A. Wipat<sup>1</sup>, S.H.S. Pearce<sup>1</sup>  
<sup>1</sup>Institute of Human Genetics, University of Newcastle, Newcastle upon Tyne, England;  
and <sup>2</sup>Scottish Centre for Genomic Technology and Informatics, University of  
Edinburgh, Scotland, United Kingdom

Program Number 21 Autoimmunity Wednesday/Thursday Poster Sessions  
**Expression of Thyroid Transcription Factor-1 (TTF-1) in Orbital Adipose Tissues and Derivative Cell Cultures from Patients with Graves' Ophthalmopathy**  
K. Bhattacharyya<sup>1</sup>, S. Kumar<sup>2</sup>, M.J. Coenen<sup>1</sup>, R.S. Bahn<sup>1</sup>  
Divisions of <sup>1</sup>Endocrinology, Metabolism and Nutrition, and <sup>2</sup>Pediatric Endocrinology,  
Mayo Clinic, Rochester, Minnesota, USA

Program Number 22 Autoimmunity Wednesday/Thursday Poster Sessions  
**Thyroid Antibodies in Autoimmune Thyroid Disease: Follow-up Therapy**  
E.E. Lechuga<sup>1</sup>, J. Dominguez<sup>2</sup>  
<sup>1</sup>Endocrine Department, Hospital Angeles del Pedregal, Mexico City, Mexico; and  
<sup>2</sup>Internal Medicine Department, Hospital General, Centro Médico "La Raza,"  
Mexico City, Mexico

Program Number 23 Autoimmunity Wednesday/Thursday Poster Sessions  
**Lack of Correlation between Thyroid Autoimmunity and Previous Fetal Loss**  
L. Sieiro<sup>1,2</sup>, E. Micmacher<sup>1,2</sup>, A. Buescu<sup>1</sup>, C. Coeli<sup>1</sup>, S. Mamede<sup>2</sup>, D. Galvão<sup>2</sup>, L. Nazar<sup>2</sup>,  
L. Seixas<sup>2</sup>, M. Vaisman<sup>1</sup>  
<sup>1</sup>Serviços de Endocrinologia da UFRJ, HUCFF, Rio de Janeiro, Brazil; and <sup>2</sup>Clínica  
Médica e Pré-Natal do HGNI, UNIG, Nova Iguaçu, Brazil

Program Number 24 Autoimmunity Wednesday/Thursday Poster Sessions  
**The Contribution of Echography in the Diagnostic Definition of Autoimmune Thyroiditis and the Role of Cellular-mediated Immunity**  
P. De Remigis, F. Ruscitti, L. Vianale  
Thyroid and Endocrine Unit, General Hospital, Chieti, Italy

**Wednesday, September 17, 2003**

Program Number 25      Autoimmunity      Wednesday/Thursday      Poster Sessions  
**Adiponectin Levels in the Serum of Patients with Thyroid-associated Ophthalmopathy (TAO)**  
M. Plicht<sup>1</sup>, C. Lenzner<sup>2</sup>, S. Müller<sup>2</sup>, A. Eckstein<sup>1</sup>, J. Esser<sup>1</sup>, N.G. Morgenthaler<sup>2,3</sup>  
<sup>1</sup>Department of Ophthalmology, University of Essen, Essen, Germany; <sup>2</sup>Bioassays  
GmbH, Biotechnology Center Hennigsdorf/Berlin, Germany; and <sup>3</sup>BRAHMS AG,  
Research, Biotechnology Centre Hennigsdorf/Berlin, Germany

Program Number 26      Autoimmunity      Wednesday/Thursday      Poster Sessions  
**Development of Graves' Disease under Adequate Immunosuppression in a Cardiac Transplant Patient**  
P. Tebben, V. Fatourech  
Division of Endocrinology, Diabetes, Metabolism, and Nutrition, Mayo Clinic,  
Rochester, Minnesota, USA

Program Number 27      Cancer      Wednesday/Thursday      Poster Sessions  
**Boron Neutron Capture Therapy (BNCT) for Undifferentiated Thyroid Carcinoma (UTC)**  
M.A. Dagrosa<sup>1</sup>, M. Viaggi<sup>1</sup>, J. Longhino<sup>2</sup>, O. Calzetta<sup>2</sup>, M. Edreira<sup>1</sup>, R.L. Cabrini<sup>1</sup>, G.J.  
Juvenal<sup>1</sup>, M.A. Pisarev<sup>1,3</sup>  
Departments of <sup>1</sup>Radiobiology and <sup>2</sup>Nuclear Reactors, University of Buenos Aires  
School of Medicine; and <sup>3</sup>National Atomic Energy Commission and Department of  
Biochemistry, University of Buenos Aires School of Medicine, Buenos Aires,  
Argentina

Program Number 28      Cancer      Wednesday/Thursday      Poster Sessions  
**Sodium Iodide Symporter (NIS) Gene Expression Is a Potential Prognostic Indicator for Thyroid Cancer and Is Inhibited by Pituitary Tumor Transforming Gene (PTTG)**  
K. Boelaert, L.A. Tannahill, M.C. Eggo, N.J. Gittoes, J.C. Watkinson, M.C. Sheppard,  
J.A. Franklyn, C.J. McCabe  
Division of Medical Sciences, University of Birmingham, Queen Elizabeth Hospital,  
Birmingham, England, United Kingdom

Program Number 29      Cancer      Wednesday/Thursday      Poster Sessions  
**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. Baker<sup>1</sup>, C. Spitzweg<sup>2</sup>, E.R. Bergert<sup>1</sup>, J.C. Morris<sup>1</sup>  
<sup>1</sup>Mayo Clinic Department of Endocrinology, Rochester, Minnesota, USA; and <sup>2</sup>Ludwig-  
Maximilians University Department of Internal Medicine II, Munich, Germany

Program Number 30      Cancer      Wednesday/Thursday      Poster Sessions  
**Adenovirus-mediated Targeted Expression of the Sodium Iodide Symporter (NIS) with Use of the MUC1 Promoter**  
R.M. Dwyer<sup>1</sup>, E.R. Bergert<sup>1</sup>, M.K. O'Connor<sup>2</sup> and J.C. Morris<sup>1</sup>  
Departments of <sup>1</sup>Endocrinology and <sup>2</sup>Nuclear Medicine, Mayo Clinic, Rochester,  
Minnesota, USA

Program Number 31      Cancer      Wednesday/Thursday      Poster Sessions  
**Spindle Assembly Checkpoint Genes, hBUB1, hBUBR1, and hMAD2, are More Highly Expressed in Anaplastic Thyroid Carcinomas than in Differentiated Thyroid Carcinomas**  
N. Wada<sup>1</sup>, A. Yoshida<sup>2</sup>, Y. Miyagi<sup>2</sup>, T. Yamamoto<sup>2</sup>, S. Hirakawa<sup>3</sup>, K. Inui<sup>1</sup>, Y.  
Takanashi<sup>3</sup>  
<sup>1</sup>Department of General Surgery, Yokohama City University, <sup>2</sup>Kanagawa Cancer  
Center, and <sup>3</sup>First 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. Cappelli<sup>1</sup>, M. Braga<sup>2</sup>, D. Cumetti<sup>1</sup>, M. Castellano<sup>1</sup>, B. Agosti<sup>1</sup>, E. Gandossi<sup>1</sup>, A.  
Tironi<sup>3</sup>, E. Agabiti Rosei<sup>1</sup>

<sup>1</sup>Chair of Internal Medicine, Section of Endocrinology, University of Brescia, <sup>2</sup>II  
Division of General Surgery, Spedali Civili of Brescia, and <sup>3</sup>II 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**

F.L. Khanim, J.L. Parmley, K. Boelaert, C.J. McCabe, N.J.L. Gittoes, J.A. Franklyn  
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. Fatemi<sup>1</sup>, R. Guttler<sup>2</sup>, J. LoPresti<sup>2</sup>, P. Singer<sup>2</sup>, J. Nicoloff<sup>2</sup>, L. Bergoglio<sup>2</sup>, C. Spencer<sup>2</sup>  
<sup>1</sup>Southern California Permanente Medical Group, Panorama City, California; and  
<sup>2</sup>University 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. Furlan<sup>1</sup>, Y.C. Bedard<sup>2</sup>, I.B. Rosen<sup>1</sup>  
Departments of <sup>1</sup>Surgery and <sup>2</sup>Pathology 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. Camargo<sup>1</sup>, A. Longatto Filho<sup>2</sup>, C.T. Kanamura<sup>2</sup>, S. Nonogaki<sup>2</sup>, V.A.F. Alves<sup>2</sup>,  
H. Bisi<sup>1</sup>, N.M.A. Abelin<sup>1</sup>  
<sup>1</sup>Departments of Medicine (Endocrinology) and Pathology, São Paulo University  
School of Medicine, São Paulo; and <sup>2</sup>Instituto Adolfo Lutz, São Paulo, Brazil

Program Number 39            Cancer                            Wednesday/Thursday    Poster Sessions  
**Post-surgical Thyroid Remnant Ablation with <sup>131</sup>I 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. Gupta<sup>1</sup>, A. Agarwal<sup>2</sup>, S.K. Mishra<sup>2</sup>, A. Sachan<sup>1</sup>, G. Agarwal<sup>2</sup>, E. Bhatia<sup>1</sup>, M.M. Godbole<sup>1</sup>

Departments of <sup>1</sup>Medical Endocrinology and <sup>2</sup>Surgical 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. Suyama<sup>1</sup>, Y. Noguchi<sup>1</sup>, M. Fuse<sup>1</sup>, T. Yoshida<sup>1</sup>, T. Shibata<sup>1</sup>, Y. Otsuka<sup>1</sup>, S. Yoshida<sup>2</sup>, T. Ban<sup>2</sup>, I. Tatsuno<sup>1</sup>, Y. Saito<sup>1</sup>

<sup>1</sup>Department of Clinical Cell Biology, Chiba University Graduate School of Medicine, and <sup>2</sup>Chiba 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. Brandão<sup>1</sup>, B.G. Cavalheiro<sup>1</sup>, J.S. Brandão Neto<sup>1</sup>, R. Turcano<sup>1</sup>, A.R. Ferraz<sup>1</sup>, J.C. Furlan<sup>1,2</sup>

<sup>1</sup>Department of Surgery, Division of Head and Neck Surgery, Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil; and <sup>2</sup>Department 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. Xu<sup>1</sup>, K. Taki<sup>2</sup>, M. Capezzone<sup>1</sup>, J. M. Hershman<sup>1</sup>

<sup>1</sup>Endocrinology Research Lab, West Los Angeles VA Medical Center, University of California-Los Angeles School of Medicine, Los Angeles, California, USA; and <sup>2</sup>3rd 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

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

**Regulatory Mechanism of the Sodium/Iodide Symporter (NIS) by Excessive Iodide**

Y.J. Park<sup>1,4</sup>, T.Y. Kim<sup>1,3</sup>, H.S. Lee<sup>3</sup>, J.E. Kim<sup>5</sup>, W.B. Kim<sup>6</sup>, D.J. Park<sup>1,3</sup>, J. Chung<sup>2</sup>, B.Y. Cho<sup>1,3</sup>

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

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**

Y. Imanishi, I. Endoh, K. Nozaki, S. Nakaji, T. Shinagawa, D. Itoh, A. Suzuki, M. Kondoh, Y. Kurihara, Y. Nakajima

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

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. Fuse<sup>1</sup>, N. Saito<sup>2</sup>, T. Tsuchiya<sup>2</sup>, Y. Shishiba<sup>2</sup>, M. Irie<sup>3</sup>

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

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

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. Chan<sup>1</sup>, M.H. Andrews<sup>2</sup>, R. Lingas<sup>2</sup>, C.J. McCabe<sup>1</sup>, J.A. Franklyn<sup>1</sup>, M.D. Kilby<sup>1</sup>, S.G. Matthews<sup>2</sup>

<sup>1</sup>University of Birmingham, Birmingham, England, United Kingdom; and <sup>2</sup>University of Toronto, Toronto, Ontario, Canada

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. Rubio<sup>1</sup>, F. Festa<sup>2</sup>, M. Knobel<sup>1</sup>, C.R. Nogueira<sup>3</sup>, M.C. Sogayar<sup>2</sup>, G. Medeiros-Neto<sup>1</sup>

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

Program Number 52 Thyroid and Development Wednesday/Thursday Poster Sessions

**A Dominant Negative Thyroid Hormone Receptor (TR) $\beta$ 1 Mutant Enhances N-Tera-2 (NT2) Cell Proliferation**

S.Y. Chan<sup>1</sup>, C.J. McCabe<sup>2</sup>, J.A. Franklyn<sup>2</sup>, M.D. Kilby<sup>1</sup>

<sup>1</sup>Division of Reproductive and Child Health and <sup>2</sup>Division 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<sup>-/-</sup> Mice**

A.P. Farwell<sup>1</sup>, J.M. Cortez<sup>2</sup>, J.L. Leonard<sup>2</sup>.  
Departments of <sup>1</sup>Medicine 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. Heward<sup>1</sup>, Y. Ban<sup>2</sup>, H. Foxall<sup>1</sup>, D.A. Greenberg<sup>3</sup>, T.F. Davies<sup>2</sup>, J.A. Franklyn<sup>1</sup>, Y.  
Tomer<sup>2</sup>, S.C.L. Gough<sup>4</sup>

<sup>1</sup>Division of Medical Sciences, University of Birmingham, Birmingham, England,  
United Kingdom; <sup>2</sup>Mount Sinai School of Medicine and <sup>3</sup>Columbia University, New  
York, New York, USA; and <sup>4</sup>Birmingham 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. Collins<sup>1</sup>, J.M. Heward<sup>1</sup>, H. Cordell<sup>2</sup>, J.A. Franklyn<sup>1</sup>, S.C.L. Gough<sup>3</sup>  
<sup>1</sup>Division of Medical Sciences, University of Birmingham, Birmingham; <sup>2</sup>Diabetes and  
Inflammation Laboratory, University of Cambridge, Cambridge; and <sup>3</sup>Birmingham  
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. Onigata<sup>1</sup>, S. Hattori<sup>1</sup>, S. Yamada<sup>1</sup>, T. Kowase<sup>1</sup>, Y. Takano<sup>1</sup>, A. Morikawa<sup>1</sup>, S. Nishiyama<sup>2</sup>, H. Mizuno<sup>3</sup>  
<sup>1</sup>Gunma University, Maebashi, Japan; <sup>2</sup>Kumamoto University, Kumamoto, Japan; and  
<sup>3</sup>Nagoya City University, Nagoya, Japan

Program Number 62      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Acute Hepatitis (AH) of Unknown Origin after High-dose Intravenous Glucocorticoid (IVCG) Pulse Therapy for Graves' Ophthalmopathy (GO)**

E. Morabito<sup>1</sup>, M. Marinò<sup>1</sup>, M.A. Altea<sup>1</sup>, R. Rocchi<sup>1</sup>, F. Menconi<sup>1</sup>, B. Mazzi<sup>1</sup>, M. Brunetto<sup>2</sup>, A. Pinchera<sup>1</sup>, C. Marcocci<sup>1</sup>

Departments of <sup>1</sup>Endocrinology and <sup>2</sup>Liver Disease, University of Pisa, Hospital of Pisa, Italy

Program Number 63      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Sequential Fine-Needle Aspiration Biopsy in the Management of Thyroid Nodular Disease: A Cost-effectiveness Analysis**

J.C. Furlan<sup>1</sup>, Y.C. Bedard<sup>2</sup>, I.B. Rosen<sup>1</sup>

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

Program Number 64      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Rehabilitation of Facial Disfigurement in Thyroid-related Orbitopathy: Analysis of Eyelid Contour after Bony Decompression**

E. Chang<sup>1,2</sup>, C. Bernardino<sup>2</sup>, P. Rubin<sup>2</sup>

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

Program Number 65      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Liver Enzyme Abnormalities and Anemia in Subacute Granulomatous Thyroiditis**

B. Moayedoddin, V. Fatourech

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

Program Number 66      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**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

Program Number 67      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Surgical Treatment for Childhood Graves' Disease**

K. Sugino, T. Mimura, M. Nagahama, N. Fukunari, K. Ito  
Ito Hospital, Tokyo, Japan

Program Number 68      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Maternal Propylthiouracil to Prevent Fetal Hyperthyroidism**

J. Ginsberg, T. McNab, E. Raff

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

Program Number 69      Thyroid Diseases      Wednesday/Thursday      Poster Sessions  
**Recombinant Thyrotropin to Minimize the Risk of Deterioration in Ophthalmopathy in a Patient with Papillary Thyroid Cancer**

A. Sturrock<sup>1</sup>, M. Stearns<sup>1</sup>, K. Pigott<sup>1</sup>, W. Wiersinga<sup>2</sup>, M. Vanderpump<sup>1</sup>

<sup>1</sup>Royal Free Hospital, London, England, United Kingdom; and <sup>2</sup>University of Amsterdam, Amsterdam, The Netherlands

**Wednesday, September 17, 2003**

Program Number 71      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**Effects of Thyroid Hormones on Cerebral Motor Cortex of Adult Rats**

F. Battaglia<sup>1</sup>, A. Quartarone<sup>2</sup>, O. Arancio<sup>1</sup>, F. Trimarchi<sup>3</sup>, P. Girlanda<sup>2</sup>, S. Benvenaga<sup>3</sup>.

<sup>1</sup>Dementia Research Unit, NKI/NYU School of Medicine, New York, New York, USA;  
and <sup>2</sup>Neurologia 2 and <sup>3</sup>Endocrinologia, University of Messina, Messina, Italy

Program Number 72      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**The Pro-angiogenic Action of Thyroid Hormone Is Fibroblast Growth Factor-dependent and Is Initiated at the Cell Surface**

F.B. Davis<sup>1</sup>, S. Mousa<sup>2</sup>, S. Mohamed<sup>2</sup>, H.-Y. Lin<sup>3</sup>, P.J. Davis<sup>1,3,4</sup>

<sup>1</sup>Ordway Research Institute, <sup>2</sup>Albany College of Pharmacy, <sup>3</sup>Stratton VA Medical Center, and <sup>4</sup>New York State Department of Health, Albany, New York, USA

Program Number 73      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**T4-Regulated Actin Polymerization Is Restored by Replacement of TR $\Delta\alpha$ 1, but Not Full-length (FL) TR $\alpha$ 1, in TR $\alpha$ 1<sup>-/-</sup> Astrocytes**

A.P. Farwell<sup>1</sup>, J.L. Leonard<sup>2</sup>

Departments of <sup>1</sup>Medicine and <sup>2</sup>Physiology, University of Massachusetts Medical School, Worcester, Massachusetts, USA

Program Number 74      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**Yeast Gene Activation Assays Detect Differences in Coactivator and Corepressor Functional Properties among Artificial and Natural Mutants Causing Resistance to Thyroid Hormone**

Y.-F. Yang<sup>1</sup>, M. Shuen<sup>2</sup>, W. Liu<sup>2</sup>, P. Webb<sup>3</sup>, J.D. Baxter<sup>3</sup>, J.S. Mymyrk<sup>2</sup>, P.G. Walfish<sup>1</sup>

<sup>1</sup>University of Toronto & Mount Sinai Hospital, Toronto, Ontario, Canada; <sup>2</sup>University of Western Ontario & London Regional Cancer Center, London, Ontario, Canada; and <sup>3</sup>University of California-San Francisco, San Francisco, California, USA

Program Number 75      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**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. Yang<sup>1</sup>, M. Shuen<sup>2</sup>, P. Webb<sup>3</sup>, J.D. Baxter<sup>3</sup>, J.M. Mymyrk<sup>2</sup>, P.G. Walfish<sup>1</sup>

<sup>1</sup>University of Toronto & Mount Sinai Hospital, Toronto, Ontario, Canada; <sup>2</sup>University of Western Ontario & London Regional Cancer Center, London, Ontario, Canada; and <sup>3</sup>University of California-San Francisco, San Francisco, California, USA

Program Number 76      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**Expression of Growth Regulators in Thyrotropic Tumors Responsive and Nonresponsive to Thyroid Hormone**

V.D. Sarapura, W.M. Wood, W.W. Woodmansee, J.M. Kerr, D.J. Haakinson, J.M. Dowding, D.F. Gordon, E.C. Ridgway

Division of Endocrinology, Metabolism and Diabetes, Department of Medicine, University of Colorado Health Sciences Center, Denver, Colorado, USA

Program Number 77      Thyroid Hormone Action      Wednesday/Thursday      Poster Sessions

**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

Wednesday, September 17, 2003

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. Barber<sup>1</sup>, F.L. Khanim<sup>1</sup>, C.J. McCabe<sup>1</sup>, J.N. Bulmer<sup>2</sup>, G. St.J. Whitley<sup>3</sup>, J.A. Franklyn<sup>1</sup>, M.D. Kilby<sup>1</sup>

<sup>1</sup>University of Birmingham, Birmingham, England; <sup>2</sup>School of Pathological Science, University of Newcastle, Newcastle, England; and <sup>3</sup>Department 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. Flanagan<sup>1</sup>, L. Cai<sup>1</sup>, J.T. Deeney<sup>2</sup>, B.E. Corkey<sup>2</sup>, G.L. Peterfreund<sup>1</sup>, S.L. Lee<sup>1</sup>

<sup>1</sup>Section of Endocrinology, Diabetes and Nutrition, Boston University School of Medicine, Boston Medical Center, and <sup>2</sup>Obesity 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**

G.C. Duarte, R.Y.A. Camargo, E.K. Tomimori, G. Medeiros-Neto  
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. Kadakovska<sup>1</sup>, A. Platkajis<sup>2</sup>

<sup>1</sup>Center of Tuberculosis and Lung Diseases of Latvia and <sup>2</sup>Sate 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**

**75th Annual Meeting of the American Thyroid Association  
The Breakers Hotel  
Palm Beach, Florida  
September 16-21, 2003**

**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. Saravanan<sup>1</sup>, D.J. Simmons<sup>1</sup>, R. Greenwood<sup>2</sup>, T.J. Peters<sup>3</sup>, C.M. Dayan<sup>1</sup>  
<sup>1</sup>University Research Centre for Neuroendocrinology and <sup>2</sup>Research & Development Support Unit, Bristol Royal Infirmary, Bristol, England; and <sup>3</sup>Division of Primary Health Care, University of Bristol, Bristol, England, United Kingdom

## Thursday, September 18, 2003

Program Number 88      Iodine Uptake and Metabolism      Thursday      Clinical Oral      9:00 am  
**How Effective Are Different Countermeasures after Accidental Incorporation of Radioactive Iodine?**  
M. Luster, M. Schneider-Ludorff, G. Goulko, M. Lassmann, H. Haenscheid, C. Reiners  
Department of Nuclear Medicine, University of Wuerzburg, Wuerzburg, Germany

Program Number 89      Autoimmunity      Thursday      Clinical Oral      9:15 am  
**High Prevalence of Autoimmune Thyroiditis in Patients with Polycystic Ovary Syndrome**  
O.E. Janssen<sup>1</sup>, N. Mehlmauer<sup>2</sup>, S. Hahn<sup>1</sup>, A.H.Oeffner<sup>3</sup>, R. Gartner<sup>2</sup>  
<sup>1</sup>Department of Medicine, University of Essen, Essen; <sup>2</sup>Department of Medicine,  
Hospital Schwabing, Munich; and <sup>3</sup>Department of Medicine, Ludwig Maximilians  
University, Munich, Germany

Program Number 90      Thyroid Hormone Action      Thursday      Clinical Oral      9:30 am  
**Amiodarone Inhibits the 3,5,3'-Triiodothyronine-dependent Increase of Na<sup>+</sup>/K<sup>+</sup>ATPase Activity and Concentration in Human Atrial Myocardial Tissue**  
F. Forini<sup>1</sup>, S. Balzan<sup>1</sup>, G. Nicolini<sup>1</sup>, B. Murzi<sup>2</sup>, G. Iervasi<sup>1</sup>  
<sup>1</sup>CNR Institute of Clinical Physiology, Pisa, Italy; and <sup>2</sup>Pediatric Hospital, Division of  
Cardio-surgery, CNR Massa, Italy

Program Number 91      Thyroid Hormone Metabolism      Thursday      Clinical Oral      9:45 am  
**Time of Onset and Magnitude of Increase in Levothyroxine Requirements during Pregnancy in Women with Hypothyroidism**  
E.K. Alexander<sup>1</sup>, E. Marqusee<sup>1</sup>, J. Lawrence<sup>3</sup>, P. Jarolim<sup>2</sup>, G.A. Fischer<sup>2</sup>, P.R. Larsen<sup>1</sup>  
<sup>1</sup>Division of Endocrinology, Department of Medicine, and <sup>2</sup>Department of Pathology,  
Brigham and Women's Hospital and Harvard Medical School, Boston,  
Massachusetts; <sup>3</sup>Endocrine Associates, Valdosta, Georgia

8:45 – 10:00 am      Simultaneous Sessions

Ponce de Leon Ballroom

**Basic Oral Abstracts**

Chairs: Antonio Bianco and Christine Spitzweg

Program Number 92      Cancer      Thursday      Basic Oral      8:45 am  
**Molecular Signature of Thyroid Follicular Tumors Presenting the PAX8-PPAR $\gamma$ 1 Gene Rearrangement**  
L. Lacroix, H. Ripoché, V. Lazar, B. Caillou, P. Dessen, M. Schlumberger, J.-M. Bidart  
Institut Gustave Roussy, Villejuif, France

Program Number 93      Cancer      Thursday      Basic Oral      9:00 am  
**Pituitary Tumor Transforming Gene (PTTG) Binding Factor (PBF) in Thyroid Cancer**  
A.L. Stratford, K. Boelaert, F.L. Khanim, D.S. Kim, J.A. Franklyn, C.J. McCabe  
Division of Medical Sciences, University of Birmingham, Queen Elizabeth Hospital,  
Birmingham, England, United Kingdom

Program Number 94      Cancer      Thursday      Basic Oral      9:15 am  
**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

Thursday, September 18, 2003

Program Number 95      Cancer                      Thursday                      Basic Oral                      9:30 am  
**The Follicular Thyroid Carcinoma-associated PAX8/PPAR- $\gamma$  Fusion Gene Is a Transforming Oncogene: The NIH-3T3 Cell Focus Assay**

X.-Y. Wang, B. Allard, J.G. Powell, I.D. Hay, N.L. Eberhardt, S.K.G. Grebe, B. McIver  
Division of Endocrinology, Mayo Clinic and Foundation, Rochester, Minnesota, USA

Program Number 96      Cancer                      Thursday                      Basic Oral                      9:45 am  
**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  
PPAR $\gamma$  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. Kinlaw<sup>1</sup>, R. Maue<sup>2</sup>, R. Harris<sup>3</sup>, W. Noll<sup>4</sup>

Departments of <sup>1</sup>Medicine, <sup>2</sup>Biochemistry and Physiology, <sup>3</sup>Radiology, and <sup>4</sup>Pathology,  
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'Connell<sup>1</sup>, R. A'Hearn<sup>2</sup>, C. Harmer<sup>2</sup>

<sup>1</sup>Department of Clinical Oncology, Guy's & St Thomas' Cancer Centre, London, England; and <sup>2</sup>Thyroid 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**

R. Robbins, R. Reibke, W. Drucker, R. Tuttle, Q. Wan, R. Grewal, M. Gonen, H. Strauss, S. Larson

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. Furlan<sup>1</sup>, Y.C. Bedard<sup>2</sup>, I.B. Rosen<sup>1</sup>

Departments of <sup>1</sup>Surgery and <sup>2</sup>Pathology 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**

W. Langsteger, M. Heinisch, E. Rechberger, P.J. Panholzer, M. Wenger, P. Sadik, U. Salomon

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. Robbins<sup>1</sup>, S. Larson<sup>2</sup>, K. Pentlow<sup>2</sup>, R. Tuttle<sup>1</sup>

<sup>1</sup>Endocrine Service and <sup>2</sup>Nuclear 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

Thursday, September 18, 2003

Program Number 103      Autoimmunity      Thursday      Basic Oral      1:30 pm  
**Low-dose Immunization with Adenovirus Expressing the TSH Receptor Alpha Subunit Deviates the Antibody Response toward That of Autoantibodies in Graves' Disease**  
C.-R. Chen, P. Pichurin, G.D. Chazenbalk, H. Aliesky, S.M. McLachlan, B. Rapoport  
Autoimmune Disease Unit, Cedars-Sinai Research Institute and University of  
California-Los Angeles, Los Angeles, California, USA

Program Number 104      Autoimmunity      Thursday      Basic Oral      1:45 pm  
**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

Program Number 105      Autoimmunity      Thursday      Basic Oral      2:00 pm  
**Promiscuous Thymic and Splenic 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

Program Number 106      Autoimmunity      Thursday      Basic Oral      2:15 pm  
**Preparation and Characterization of Transgenic Mice Expressing MHC Class II Molecules on Thyroid Cells**  
Y.-S. Li<sup>1</sup>, N. Kanamoto<sup>1</sup>, Y. Hataya<sup>1</sup>, K. Moriyama<sup>1</sup>, K. Nakao<sup>1</sup>, T. Akamizu<sup>1,2</sup>  
<sup>1</sup>Department of Medicine and Clinical Science and <sup>2</sup>Translational Research Center,  
Kyoto University School of Medicine, Kyoto, Japan

Program Number 107      Autoimmunity      Thursday      Basic Oral      2:30 pm  
**Dendritic Cell-bound Anti-CTLA-4 Antibody Engages CTLA-4 and Induces Thyroglobulin-specific T-Cell Tolerance**  
C. Vasu<sup>1</sup>, B.S. Prabhakar<sup>2</sup>, M.J. Holterman<sup>1</sup>  
Departments of <sup>1</sup>Surgery and <sup>2</sup>Microbiology & Immunology, University of Illinois at  
Chicago, Chicago, Illinois, USA

Program Number 108      Autoimmunity      Thursday      Basic Oral      2:45 pm  
**Determination of Thyroid Peroxidase (TPO) T Cell Epitopes in Mice That Develop TPO Antibodies Resembling Human Autoantibodies after TPO-DNA Vaccination**  
J. Guo<sup>1</sup>, P.N. Pichurin<sup>1</sup>, J.C. Morris<sup>2</sup>, B. Rapoport<sup>1</sup>, S.M. McLachlan<sup>1</sup>  
<sup>1</sup>Autoimmune Disease Unit, Cedars-Sinai Research Center and University of  
California-Los Angeles, Los Angeles, California; and <sup>2</sup>Division 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 <b>Clinical: Utility of Ultrasonography in Thyroid Disease</b> Chair: Victor J. Bernet Evaluation of thyroid nodules and US-guided biopsy Uses of preoperative and intraoperative ultrasound for thyroid cancer monitoring US-guided ethanol injection in selected patients with recurrent/persistent thyroid cancer	Susan J. Mandel  I. Ross McDougall  Ian D. Hay
3:30 – 5:00 pm	Simultaneous Symposia  Ponce de Leon Ballroom <b>Basic: Thyroid and Deafness</b> Chair: John T. Dunn Iodine deficiency and hearing loss Pendred syndrome TR KO mouse models	Steve Boyages Lorraine Everett Douglas Forrest
5:00 – 5:30 pm	Venetian Ballroom <b>Historical Vignette</b>  <b>Thyroid Hormone Therapy Over the Past Hundred Years</b> Clark T. Sawin	
5:30 – 7:00 pm	Venetian Ballroom <b>Thyroidology on the Internet: The Good, The Bad, and The Ugly</b> Moderator: Paul W. Ladenson What's Out There in Thyroid Cyberspace?: A Survey of Thyroid-related Websites What Thyroid Patients Seek and Find on the Internet Internet Resources for Thyroid Research	Paul W. Ladenson Matthew I. Kim 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.*

**75th Annual Meeting of the American Thyroid Association  
The Breakers Hotel  
Palm Beach, Florida  
September 16-21, 2003**

**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**  
K. Wagner, R.Arciaga, K.Chen, A. Siperstein, M. Milas, S.S.K. Reddy, M.K. Gupta  
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)**  
R.M. Tuttle, R.R. Qualey, C. Divgi, S. Larson, R.R. Robbins  
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. Zakavi<sup>1</sup>, Z. Mousavi<sup>1</sup>, H. Rezaei Deluie<sup>1</sup>, M. Mehrabi<sup>1</sup>, J. Farahati<sup>2</sup>  
<sup>1</sup>Clinic for Endocrinology and Nuclear Medicine, University of Mashad, Iran; and  
<sup>2</sup>Clinic 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. Brierley<sup>1,2</sup>, R. Tsang<sup>1,2</sup>, T. Panzarella<sup>3</sup>, N. Bana<sup>1</sup>  
<sup>1</sup>Department of Radiation Oncology, Princess Margaret Hospital, <sup>2</sup>Department of Radiation Oncology, University of Toronto, <sup>3</sup>Department 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

Friday, September 19, 2003

Program Number 114      Thyroid Hormone Metabolism      Friday      Basic Oral      11:15 am  
**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

Program Number 115      Thyroid and Development      Friday      Basic Oral      11:30 am  
**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

Program Number 116      Cancer      Friday      Basic Oral      11:45 am  
**Molecular Profiling Distinguishes Papillary Carcinoma from Benign Thyroid Nodules**

D. Finley<sup>1</sup>, B. Lee<sup>2</sup>, B. Zhu<sup>1</sup>, T. Fahey III<sup>1</sup>

<sup>1</sup>Department of Surgery, Weill Cornell Medical College, New York, New York; and

<sup>2</sup>Department of Surgery, Lenox Hill Hospital, New York, New York, USA

**Friday – Saturday      Ponce de Leon Ballroom**  
**Poster Sessions      Posters 117 - 184**

Program Number 117      Autoimmunity      Friday/Saturday      Poster Sessions  
**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

Program Number 118      Autoimmunity      Friday/Saturday      Poster Sessions  
**Autoantibodies in Graves' Disease and a Hamster Thyroid Stimulating Monoclonal Antibody Differ in Their Recognition of the Free TSH Receptor  $\alpha$  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

Program Number 119      Autoimmunity      Friday/Saturday      Poster Sessions  
**Autoimmune Thyroid Disease within the Scope of Polyglandular Autoimmunity**

M. Dittmar, G.J. Kahaly

Department of Medicine I, Gutenberg University, Mainz, Germany

**Friday, September 19, 2003**

Program Number 120      Autoimmunity      Friday/Saturday      Poster Sessions

**Is Familial Graves' Disease (GD) the Same as Sporadic GD?**

Y. Ban<sup>1</sup>, D.A. Greenberg<sup>2</sup>, E.S. Concepcion<sup>1</sup>, R.B. Villanueva<sup>1</sup>, T.F. Davies<sup>1</sup>, Y. Tomer<sup>1</sup>

<sup>1</sup>Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine, Mount Sinai School of Medicine, New York, New York; and <sup>2</sup>Division of Statistical Genetics, Columbia University, New York, New York, USA

Program Number 121      Autoimmunity      Friday/Saturday      Poster Sessions

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

M.-L. Hartoft-Nielsen, A. Kaas, T. Bock, M. Skau, A.K. Rasmussen, U. Feldt-Rasmussen, K. Buschard.

Bartholin Institutttet and Department of Endocrinology, Rigshospitalet, Copenhagen, Denmark

Program Number 122      Autoimmunity      Friday/Saturday      Poster Sessions

**Absence of Effect of Octreotide-LAR on T-Cell Subsets in Patients with Active Thyroid-associated Orbitopathy**

B. Vaidya<sup>1</sup>, B. Shenton<sup>2</sup>, S. Stamp<sup>2</sup>, M. Miller<sup>1</sup>, A.J. Dickinson<sup>3</sup>, P. Perros<sup>1</sup>, E. Baister<sup>4</sup>, C. Andrews<sup>4</sup>, P. Kendall-Taylor<sup>1</sup>

Departments of <sup>1</sup>Endocrinology, <sup>2</sup>Surgery, and <sup>3</sup>Ophthalmology, Newcastle University, Newcastle upon Tyne; and <sup>4</sup>Novartis Pharmaceutical Corporation, United Kingdom

Program Number 124      Autoimmunity      Friday/Saturday      Poster Sessions

**Amino Acid Sequence Homologies between *Borrelia burgdoferii* Proteins and Human Thyroid Autoantigens**

F. Guarneri<sup>1</sup>, M. Vaccaro<sup>1</sup>, C. Guarneri<sup>1</sup>, F. Trimarchi<sup>2</sup>, S. Benvenga<sup>2</sup>

<sup>1</sup>Institute of Dermatology and <sup>2</sup>Sez. di Endocrinologia del Dip. Clinico Sperimentale di Medicina e Farmacologia, University of Messina, Messina, Italy

Program Number 125      Autoimmunity      Friday/Saturday      Poster Sessions

**Autoimmune Thyroiditis and Thyroid Carcinoma in Childhood**

A. Kurtev

Clinic of Pediatric Endocrinology, University Pediatric Hospital, Sofia, Bulgaria

Program Number 126      Autoimmunity      Friday/Saturday      Poster Sessions

**High Prevalence of Thyroid Autoimmunity in Patients with *Pemphigus Vulgaris***

D. Moncet, R.R. Glorio, F. Pitoia, F. Rodriguez Costa, A.G. Diaz, H. Cabrera, H. Niepomniszcze

Endocrinology and Dermatology Divisions, Hospital de Clinicas, University of Buenos Aires, Buenos Aires, Argentina

Program Number 127      Cancer      Friday/Saturday      Poster Sessions

**Radioiodine Therapy of Medullary Thyroid Cancer following Calcitonin Promoter-driven Expression of the Sodium Iodide Symporter**

N. Cengic<sup>1</sup>, C. Baker<sup>2</sup>, I. Scholz<sup>1</sup>, E. Bergert<sup>2</sup>, B. Göke<sup>1</sup>, J. Morris<sup>2</sup>, C. Spitzweg<sup>1</sup>

<sup>1</sup>Department of Internal Medicine II, Ludwig-Maximilians-University, Munich, Germany; and <sup>2</sup>Department 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<sup>1,2</sup>, M. Saji<sup>1</sup>, V. Savchenko<sup>2</sup>, A. Larin<sup>2</sup>, K.D. Burman<sup>1</sup>, M.D. Ringel<sup>1</sup>.

<sup>1</sup>MedStar Research Institute/ Washington Hospital Center, Washington, DC, USA; and

<sup>2</sup>Center for Endocrine Surgery, Kiev, Ukraine

Program Number 129      Cancer      Friday/Saturday      Poster Sessions

**Selenium Inhibits Thyroid Cancer Cell Growth**

B. Lee<sup>1</sup>, D. Finley<sup>2</sup>, A. Ahmad<sup>1</sup>, B. Zhu<sup>2</sup>, T. Fahey III<sup>2</sup>

<sup>1</sup>Department of Surgery, Lenox Hill Hospital, New York, New York; and <sup>2</sup>Department 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. Prasad<sup>1</sup>, Y. Huang<sup>2</sup>, N.S. Pellegata<sup>2</sup>, A. de la Chapelle<sup>2</sup>, R.T. Kloos<sup>3</sup>

<sup>1</sup>Department of Pathology, <sup>2</sup>Human Cancer Genetics Program, The Comprehensive Cancer Center, and <sup>3</sup>Division 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. Gartner<sup>1</sup>, L. Wagner<sup>1</sup>, G. Wolf<sup>2</sup>, T. Daneva<sup>1</sup>, H. Eidherr<sup>3</sup>, R. Moriggl<sup>4</sup>, M. Weissel<sup>1</sup>

<sup>1</sup>Vienna University Clinic of Internal Medicine III, <sup>2</sup>University of Graz, Department for Surgery, <sup>3</sup>Vienna University Clinic of Nuclear Medicine, and <sup>4</sup>Institute 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. Tanaka<sup>1,2</sup>, N. Fukunari<sup>1</sup>, M. Nagahama<sup>1</sup>, K. Sugino<sup>1</sup>, K. Ito<sup>1</sup>, K. Shimizu<sup>2</sup>

<sup>1</sup>Ito Hospital and <sup>2</sup>Nippon 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. Uruno<sup>1</sup>, A. Miyauchi<sup>1</sup>, K. Shimizu<sup>2</sup>, C. Tomoda<sup>1</sup>, Y. Takamura<sup>1</sup>, Y. Ito<sup>1</sup>, A. Miya<sup>1</sup>, K. Kobayashi<sup>1</sup>, F. Matsuzuka<sup>1</sup>, K. Kuma<sup>1</sup>

<sup>1</sup>Kuma Hospital, Kobe, Japan; and <sup>2</sup>Department 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

**Friday, September 19, 2003**

Program Number 136      Cancer      Friday/Saturday      Poster Sessions  
**Quantitative Analysis of Glucose Transporter mRNA Expression in Thyroid Cancer by Real-Time PCR**  
K. Matsuzu<sup>1</sup>, F. Segade<sup>2</sup>, D. Bowden<sup>1,2</sup>, N. Perrier<sup>3</sup>  
Departments of <sup>1</sup>Biochemistry, <sup>2</sup>Internal Medicine, and <sup>3</sup>Surgery, Wake Forest  
University School of Medicine, Winston-Salem, North Carolina, USA

Program Number 137      Cancer      Friday/Saturday      Poster Sessions  
**Diagnosis of Microfollicular Architecture on Thyroid Fine Needle Aspiration Biopsy and Frozen Section: Does It Help in the Diagnosis of Thyroid Follicular Lesions?**  
L. Haveran<sup>1</sup>, A. Ciampa<sup>2</sup>, N. Patwardhan<sup>1</sup>, M. Safran<sup>3</sup>, A. Fischer<sup>2</sup>, B. Xu<sup>2</sup>, A. Khan<sup>2</sup>  
Departments of <sup>1</sup>Surgery, <sup>2</sup>Pathology, and <sup>3</sup>Medicine, University of Massachusetts  
Medical Center, Worcester, Massachusetts, USA

Program Number 138      Cancer      Friday/Saturday      Poster Sessions  
**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

Program Number 139      Cancer      Friday/Saturday      Poster Sessions  
**Influence of Histological Subtypes on Performance of Fine-Needle Aspiration Biopsy and Frozen Section in the Management of Papillary Thyroid Carcinoma**  
J.C. Furlan<sup>1</sup>, Y.C. Bedard<sup>2</sup>, I.B. Rosen<sup>1</sup>  
Departments of <sup>1</sup>Surgery and <sup>2</sup>Pathology and Laboratory Medicine, Mount Sinai  
Hospital, University of Toronto, Toronto, Ontario, Canada

Program Number 140      Cancer      Friday/Saturday      Poster Sessions  
**<sup>99m</sup>Tc-Depreotide Scintigraphy and <sup>18</sup>F-Fluorodeoxyglucose (FDG) PET for the Localization of Persistent Metastatic Papillary Thyroid Carcinoma: A Case Report**  
R. Langley<sup>1</sup>, R. Bridwell<sup>2</sup>, J. Montilla<sup>2</sup>, C. Shriver<sup>3</sup>, V. Bernet<sup>1</sup>  
Departments of <sup>1</sup>Medicine, <sup>2</sup>Radiology, and <sup>3</sup>Surgery, Walter Reed Army Medical  
Center, Washington, DC, USA

Program Number 141      Cancer      Friday/Saturday      Poster Sessions  
**Microcarcinoma of Thyroid Gland: How Should It Be Treated?**  
J.C. Furlan<sup>1</sup>, Y.C. Bedard<sup>2</sup>, I.B. Rosen<sup>1</sup>  
Departments of <sup>1</sup>Surgery and <sup>2</sup>Pathology and Laboratory Medicine, Mount Sinai  
Hospital, University of Toronto, Toronto, Ontario, Canada

Program Number 142      Cancer      Friday/Saturday      Poster Sessions  
**Occult Sporadic Medullary Thyroid Carcinoma Presenting with Neck Lymphadenopathy**  
R.A. Hijazi<sup>1</sup>, M.A. Habra<sup>1</sup>, M.K. Picolos<sup>2</sup>, R.V. Sellin<sup>3</sup>  
<sup>1</sup>Baylor College of Medicine, Houston, Texas; <sup>2</sup>University of Texas-Houston Medical  
School, Houston, Texas; and <sup>3</sup>University of Texas MD Anderson Cancer Center,  
Houston, Texas, USA

Program Number 143      Cell Biology      Friday/Saturday      Poster Sessions  
**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

**PI3K 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 Miguel<sup>1</sup>, J. Sanders<sup>2</sup>, J. Jeffreys<sup>2</sup>, H. Depraetere<sup>2</sup>, M. Evans<sup>2</sup>, T. Richards<sup>2</sup>, T. Blundell<sup>1</sup>, B. Rees Smith<sup>2</sup>, J. Furmaniak<sup>2</sup>

<sup>1</sup>Department of Biochemistry, University of Cambridge, Cambridge, England; and

<sup>2</sup>FIRS 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. Park<sup>1</sup>, Y.J. Park<sup>1</sup>, T.Y. Kim<sup>1</sup>, B.Y. Cho<sup>1</sup>, S.G. Rhee<sup>2</sup>

<sup>1</sup>Department of Internal Medicine, College of Medicine, Seoul National University, Seoul, Korea; and <sup>2</sup>Laboratory 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. Bae<sup>1</sup>, P. Jongsamak<sup>1,3</sup>, S. Menon<sup>1,2</sup>, W. Abplanalp<sup>1</sup>, B. Panijpan<sup>3</sup>, P.S. Kim<sup>1,2</sup>

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

Program Number 148      Cell Biology      Friday/Saturday      Poster Sessions

**Expression of TGF $\beta$ /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

**Friday, September 19, 2003**

Program Number 151      Cell Biology      Friday/Saturday      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<sup>1,3</sup>, S. Menon<sup>1,2</sup>, W. Abplanalp<sup>1</sup>, B. Panijpan<sup>3</sup>, P.S. Kim<sup>1,2</sup>

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

Program Number 152      Thyroid Diseases      Friday/Saturday      Poster Sessions  
**Allele Frequency Assessment of Known TNF- $\alpha$  Polymorphisms and Their Association with Graves' Disease in a UK Caucasian Population**

M.J. Simmonds<sup>1</sup>, J.M. Heward<sup>1</sup>, R. Nithiyananthan<sup>2</sup>, J.A. Franklyn<sup>1</sup>, S.C.L. Gough<sup>1,2</sup>

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

Program Number 153      Thyroid Diseases      Friday/Saturday      Poster Sessions  
**Association of a Rare Thyroglobulin Gene Microsatellite Variant with Autoimmune Thyroid Disease in the UK**

J.E. Collins<sup>1</sup>, J.M. Heward<sup>1</sup>, J.A. Franklyn<sup>1</sup>, S.C.L. Gough<sup>2</sup>

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

Program Number 154      Thyroid Diseases      Friday/Saturday      Poster Sessions  
**Further Studies on the Mechanism by Which Nicotinamide Increases Thyroid Radiosensitivity**

M. Agote Robertson<sup>1</sup>, A. Gamba<sup>1</sup>, M. Carreras<sup>3</sup>, P. Finochietto<sup>3</sup>, J.J. Poderoso<sup>3</sup>, G.J. Juvenal<sup>1</sup>, M.A. Pisarev<sup>1,2</sup>

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

Program Number 155      Thyroid Diseases      Friday/Saturday      Poster Sessions  
**Residual Goiter in the Post-iodization Phase: Iodine Status, Thiocyanate Exposure, Thyroid Functions, and Autoimmunity in Indian Children**

R.K. Marwaha<sup>1</sup>, N. Tandon<sup>2</sup>, N. Gupta<sup>2</sup>, A.K. Karak<sup>2</sup>, K. Verma<sup>2</sup>, N. Kochupillai<sup>2</sup>

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

Program Number 156      Thyroid Diseases      Friday/Saturday      Poster Sessions  
**Rapid Preoperative Preparation for Severe Hyperthyroid Graves' Disease**

C. Panzer<sup>1</sup>, R. Beazley<sup>2</sup>, L. Braverman<sup>1</sup>

<sup>1</sup>Section of Endocrinology and <sup>2</sup>Department of Surgery, Boston Medical Center, Boston, Massachusetts, USA

Friday, September 19, 2003

Program Number 157      Thyroid Diseases      Friday/Saturday      Poster Sessions

**Lack of Association of the Vitamin D Receptor Gene with Graves' Disease in the UK**

J.E. Collins<sup>1</sup>, J.M. Heward<sup>1</sup>, R. Nithiyananthan<sup>1,2</sup>, S. Nezhentsev<sup>3</sup>, J.A. Franklyn<sup>1</sup>,  
S.C.L. Gough<sup>2</sup>

<sup>1</sup>Division of Medical Sciences, University of Birmingham, Birmingham, England;

<sup>2</sup>Birmingham Heartlands Hospital, Birmingham, England; and <sup>3</sup>Diabetes and  
Inflammation Laboratory, University of Cambridge, Cambridge, England, United  
Kingdom

Program Number 158      Thyroid Diseases      Friday/Saturday      Poster Sessions

**A C/T Polymorphism in the 5'-untranslated Region of the CD40 Gene Is Associated with Graves' Disease in Koreans**

T.Y. Kim<sup>1,2</sup>, Y.J. Park<sup>1,3</sup>, J.Y. Song<sup>2</sup>, K.S. Park<sup>1,2</sup>, D.J. Park<sup>1,2</sup>, B.Y. Cho<sup>1,2</sup>

<sup>1</sup>Department of Internal Medicine, Seoul National University College of Medicine, Seoul, Korea; <sup>2</sup>Department of  
Internal Medicine, Clinical Research Institute, Seoul National University Hospital, Seoul, Korea; <sup>3</sup>Department of  
Internal Medicine Seoul Municipal Boramae Hospital, Seoul, Korea

Program Number 159      Thyroid Diseases      Friday/Saturday      Poster Sessions

**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

Program Number 160      Thyroid Diseases      Friday/Saturday      Poster Sessions

**Recurrence after Surgical Treatment of Graves' Disease and Autonomous Thyroid Adenoma**

Z. Petrovski

Department of Nuclear Medicine, Medical Center, Bitola, Republic of Macedonia

Program Number 161      Thyroid Diseases      Friday/Saturday      Poster Sessions

**The Characteristics of Colloid: Malignant versus Benign Entities in Thyroid Fine Needle Aspirations (FNAs)**

M. Williams<sup>1</sup>, E. Mazzaferri<sup>2</sup>, N. Massoll<sup>1,2</sup>

Departments of <sup>1</sup>Pathology and <sup>2</sup>Endocrinology, University of Florida, Gainesville,  
Florida, USA

Program Number 162      Thyroid Diseases      Friday/Saturday      Poster Sessions

**Atrial Fibrillation Is Associated with Higher Frequency of Mild Thyroid Failure (Serum TSH 5.1–10 mIU/L)**

V. Fatourech<sup>1</sup>, J. Smith<sup>2</sup>, P. Schryver<sup>2</sup>, G. Klee<sup>3</sup>

<sup>1</sup>Division of Endocrinology, Diabetes and Nutrition, <sup>2</sup>Division of Health Care Policy  
and Research, and <sup>3</sup>Department of Laboratory Medicine and Pathology, Mayo  
Clinic, Rochester Minnesota, USA

Program Number 163      Thyroid Diseases      Friday/Saturday      Poster Sessions

**Hypomagnesemia after Total Thyroidectomy: A Prospective Study**

S.K. Gupta<sup>1</sup>, A. Agarwal<sup>2</sup>, S.K. Mishra<sup>2</sup>, M.M. Godbole<sup>1</sup>

Departments of <sup>1</sup>Medical Endocrinology and <sup>2</sup>Surgical 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 Middlesworth<sup>1</sup>, D.R. Shanklin<sup>2</sup>

Departments of <sup>1</sup>Physiology and <sup>2</sup>Pathology, 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**

C. García-G., M.C. Jeziorski, C. Valverde-R., A. Orozco

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. Gereben<sup>1</sup>, J. Pachucki<sup>2</sup>, A. Kollár<sup>3</sup>, Z.S. Liposits<sup>1</sup>, C.S. Fekete<sup>1</sup>

<sup>1</sup>Institute of Experimental Medicine, Hungarian Academy of Sciences, Budapest, Hungary; <sup>2</sup>Dept. of Endocrinology, Medical University of Warsaw, Warsaw, Poland; <sup>3</sup>Dept. 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. Kester<sup>1</sup>, A. Hernandez<sup>2</sup>, G. Kuiper<sup>1</sup>, D. St. Germain<sup>2</sup>, T. Visser<sup>1</sup>

<sup>1</sup>Department of Internal Medicine, Erasmus Medical Center, Rotterdam, The Netherlands; and <sup>2</sup>Departments 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 Immunohistochemical Expression of Hepatocyte Growth Factor (HGF) in Hashimoto's Thyroiditis**

R. M. Ruggeri<sup>1</sup>, S. Sciacchitano<sup>2,3</sup>, A. Vitale<sup>2</sup>, P. Cardelli<sup>2</sup>, E. Vitarelli<sup>4</sup>, G. Barresi<sup>4</sup>, F. Trimarchi<sup>1</sup>, S. Benvenga<sup>1</sup>, M. Trovato<sup>4</sup>

<sup>1</sup>Università di Messina, Dip. Clinico-Sperimentale di Medicina e Farmacologia, Messina, Italy; <sup>2</sup>Università La Sapienza, II Facoltà di Medicina e Chirurgia, Osp.S.Andrea, Roma, Italy; <sup>3</sup>Centro di Ricerca Ospedale S.Pietro Fatebenefratelli, AfaR, Roma, Italy; <sup>4</sup>Università 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?**  
K. Seidenberger, A.K.M. Bezerra, G.C. Duarte, E.K. Tomimori, G. Medeiros-Neto,  
R.Y.A. Camargo  
<sup>1</sup>Thyroid 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<sup>1</sup>, C.O. Mesa<sup>1</sup>, C.C. Albino<sup>2</sup>  
<sup>1</sup>SEMPR, Endocrine Unit, University of Parana, Curitiba, Brazil; and <sup>2</sup>IDEM,  
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<sup>1</sup>, A. Tironi<sup>2</sup>, G. Pelizzari<sup>1</sup>, D. Cumetti<sup>1</sup>, M. Castellano<sup>1</sup>, B. Agosti<sup>1</sup>, M.L.  
Morassi<sup>2</sup>, E. Gandossi<sup>1</sup>, E. Agabiti Rosei<sup>1</sup>.  
<sup>1</sup>Internal Medicine, Section of Endocrinology, and <sup>2</sup>II 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<sup>1</sup>, A. De Las Morenas<sup>2</sup>, V. Tangpricha<sup>1</sup>, S. Lee<sup>1</sup>, J.D. Safer<sup>1</sup>  
<sup>1</sup>Section of Endocrinology, Diabetes, and Nutrition, Department of Medicine, and  
<sup>2</sup>Department 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<sup>1</sup>, C.O.Mesa<sup>1</sup>, C.C.Albino<sup>2</sup>  
<sup>1</sup>SEMPR, Endocrine Unit, Federal University of Parana, Curitiba, Brazil; and <sup>2</sup>IDEM,  
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<sup>1</sup>, M.B. Zimmermann<sup>2</sup>, S.Y. Hess<sup>2</sup>, X. He<sup>1</sup>, S. Pino<sup>1</sup>, L.E. Braverman<sup>1</sup>  
<sup>1</sup>Section of Endocrinology, Diabetes, and Nutrition, Boston Medical Center and Boston  
University School of Medicine, Boston, Massachusetts, USA; and <sup>2</sup>Laboratory 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. Noguchi<sup>1</sup>, I. Tatsuno<sup>1</sup>, T. Ban<sup>2</sup>, K. Suyama<sup>1</sup>, M. Fuse<sup>1</sup>, Y. Saito<sup>1</sup>

<sup>1</sup>Department of Clinical Cell Biology Chiba University Graduate School of Medicine, Chiba, Japan; and <sup>2</sup>Chiba 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. Uzunkoy<sup>1</sup>, I. Ozardali<sup>2</sup>

Departments of <sup>1</sup>Surgery and <sup>2</sup>Pathology, 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. Brahmhatt<sup>1</sup>, S. Brahmhatt<sup>2</sup>, C. Eastman<sup>2</sup>, S. Boyages<sup>2</sup>

<sup>1</sup>Pendlebury Clinic, Cardiff, Australia; and <sup>2</sup>Western 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**

E. Lima-Costa, T. Pimenta, P. Sa-Couto, J. Capela, M. Cardoso, F. Valente, L. Matos-

Lima, M. Cardoso-Oliveira

Hospital de S. Joao - 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

**Friday, September 19, 2003**

*Flagler Boardroom*

**Update on Chernobyl 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. Coelho<sup>1</sup>, R. Corbo<sup>2</sup>, M.M.D. Breitenbach<sup>4</sup>, J. Carvalho<sup>4</sup>, A. Buescu<sup>1</sup>, D.P.

Carvalho<sup>3</sup>, M. Vaisman<sup>1</sup>

Serviços de <sup>1</sup>Endocrinologia and <sup>2</sup>Medicina Nuclear do HUCFF, <sup>3</sup>Laboratório de Fisiologia Endócrina, IBCCF, UFRJ, and <sup>4</sup>Instituto 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. Powell<sup>1</sup>, I. Hay<sup>1</sup>, M. Morgan<sup>2</sup>, B. Mullan<sup>3</sup>, G. Wiseman<sup>3</sup>, R. Smallridge<sup>2</sup>, V.

Fatourechi<sup>1</sup>

<sup>1</sup>Division of Endocrinology, Mayo Clinic, Rochester, Minnesota; <sup>2</sup>Division of Endocrinology, Mayo Clinic, Jacksonville, Florida; and <sup>3</sup>Department of Nuclear Medicine, Mayo Clinic, Rochester, Minnesota, USA

Saturday, September 20, 2003

Program Number 187      Cancer      Saturday      Clinical Oral      2:00 pm

**Pharmacokinetics of rhTSH in Children with Thyroid Cancer**

S. Iorcansky<sup>1</sup>, V. Herzovich<sup>1</sup>, R.R. Qualey<sup>2</sup>, R.M. Tuttle<sup>2</sup>

<sup>1</sup>Pediatric Endocrinology, Buenos Aires, Argentina; and <sup>2</sup>Endocrinology, 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**

I.G.S. Rubio, M. Knobel, S.C. Neves, M.S. Monteiro, G. Medeiros-Neto

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-PPAR $\gamma$ 1 Rearrangements in Both Follicular Thyroid Carcinomas and Adenomas**

C.C.D. Nakabashi<sup>1</sup>, J.M. Cerutti<sup>1</sup>, G.S. Guimarães<sup>1</sup>, P. Michaluart, Jr.<sup>2</sup>, L.S. Ward<sup>3</sup>, R.M.B. Maciel<sup>1</sup>

<sup>1</sup>Laboratory of Molecular Endocrinology, Federal University of São Paulo, <sup>2</sup>Division of Head and Neck Surgery, University of São Paulo, São Paulo, Brazil; and

<sup>3</sup>Laboratory 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-Pikielny<sup>1</sup>, J. Shepshelovich<sup>2</sup>, P.M. Yen<sup>3</sup>, K. Hirshberg<sup>2</sup>

<sup>1</sup>Department of Internal Medicine B, Souraski Medical Center, Tel-Aviv, Israel;

<sup>2</sup>Department of Pathology, Sackler School of Medicine, Tel-Aviv University, Israel;

and <sup>3</sup>Clinical Endocrinology Branch, NIDDK, NIH, Bethesda, Maryland, USA

Program Number 192      Cell Biology      Saturday      Basic Oral      1:45 pm

**IL-1 $\beta$  and TNF $\alpha$  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. Mezosi<sup>1</sup>, S. Wang<sup>1</sup>, P. Gauger<sup>2</sup>, N. Thompson<sup>2</sup>, J. Baker, Jr.<sup>1</sup>

<sup>1</sup>Center for Biologic Nanotechnology and <sup>2</sup>Surgery, 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 Transcytosis of Low Hormonogenic Thyroglobulin: A Novel Control Mechanism for Hormone Release**

S. Lisi<sup>1</sup>, A. Pinchera<sup>1</sup>, R.T. McCluskey<sup>2</sup>, C. Marcocci<sup>1</sup>, P. Vitti<sup>1</sup>, F. Menconi<sup>1</sup>, L. Grasso<sup>1</sup>, F. Luchetti<sup>1</sup>, A.B. Collins<sup>2</sup>, M. Marinò<sup>1</sup>

<sup>1</sup>Department of Endocrinology, University of Pisa, Italy; and <sup>2</sup>Department 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 Miguel<sup>1</sup>, J. Sanders<sup>2</sup>, J. Jeffreys<sup>2</sup>, H. Depraetere<sup>2</sup>, T. Blundell<sup>1</sup>, B. Rees Smith<sup>2</sup>, J. Furmaniak<sup>2</sup>

<sup>1</sup>Department of Biochemistry, University of Cambridge, Cambridge, England; and <sup>2</sup>FIRS Laboratories, Cardiff, Wales, United Kingdom

Program Number 195      Cell Biology      Saturday      Basic Oral      2:30 pm  
**RXR-selective Retinoids (Rexinoids) Suppress TSH $\beta$  mRNA and Promoter Activity in the T $\alpha$ T1 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

Standard approach: surgery or LT4 suppression

New standard approach? radioiodine/rhTSH

Stephanie Lee

Hossein Gharib

Dyde Huysmans

Saturday, September 20, 2003

3:30 – 5:00 pm

Simultaneous Symposia

Ponce de Leon Ballroom

**Basic: Role of thyroglobulin in thyroid disease**

Chair: Aldo Pinchera

Defective thyroglobulin synthesis

Thyroglobulin antibodies in health and disease

Defective thyroglobulin transport

Geraldo Medeiros-Neto

Sandra McLachlan

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



**75th Annual Meeting of the American Thyroid Association  
The Breakers Hotel  
Palm Beach, Florida  
September 16-21, 2003**

**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. Sanders<sup>1</sup>, M. Evans<sup>1</sup>, L.D.K.E. Premawardhana<sup>2</sup>, H. Depraetere<sup>1</sup>, J. Jeffreys<sup>1</sup>, T.  
Richards<sup>1</sup>, A. Kiddie<sup>1</sup>, K. Brereton<sup>1</sup>, J. Furmaniak<sup>1</sup>, B. Rees Smith<sup>1</sup>  
<sup>1</sup>FIRS Laboratories, Cardiff, Wales; and <sup>2</sup>Department 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. Kumar<sup>1</sup>, M. Coenen<sup>2</sup>, R. Bahn<sup>2</sup>  
<sup>1</sup>Division of Pediatric Endocrinology and <sup>2</sup>Division of Endocrinology, Metabolism and  
Nutrition, Mayo Clinic, Rochester, Minnesota, USA

**Sunday, September 21, 2003**

Program Number 201      Autoimmunity      Sunday      Translational Oral      9:45 am

**TSH Receptor Antibodies (TSHR-AB) Help to Predict Severity and Outcome of Thyroid-associated Ophthalmopathy (TAO)**

A.K. Eckstein<sup>1</sup>, M. Plicht<sup>1</sup>, C. Lenzner<sup>5</sup>, H. Lax<sup>3</sup>, B. Quadbeck<sup>2</sup>, O.E Janssen<sup>2</sup>, K. Mann<sup>2</sup>, J. Esser<sup>1</sup>, N.G. Morgenthaler<sup>4,5</sup>

Departments of <sup>1</sup>Ophthalmology and <sup>2</sup>Endocrinology, <sup>3</sup>Institute for Medical Informatics, Biometry and Epidemiology, Essen University, Essen, Germany; <sup>4</sup>BRAHMS AG, Research Department and <sup>5</sup>Bioassays 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?

Potential applications of immune therapies to thyroid disease

Potential immunotherapy for medullary thyroid carcinoma by dendritic cell vaccination

Wilmar Wiersinga  
Yuji Nagayama

Matthias Schott

Noon      *75<sup>th</sup> Annual Meeting Ends*

12:30 – 3:30 pm      *Gulfstream Room*

*International Coordinating Committee Meeting and Lunch*

*LATS, AOTA, ETA, ATA*