

73rd Annual Meeting of the American Thyroid Association
Omni Shoreham Hotel
Washington, DC
November 7-10, 2001

Wednesday, November 7, 2001

1:00 pm Regency Ballroom
Welcome and Introductions
William W. Chin ATA President
Paul W. Ladenson ATA Secretary
Wolfgang H. Dillmann ATA Program Chair, Scientific
Michael M. Kaplan ATA Program Chair, Clinical

1:15 - 2:00 pm Regency Ballroom
Keynote Clinical Address
Treatment of Hypothyroidism: What Is Optimal?
Anthony D. Toft, M.D.
Royal Infirmary of Edinburgh, Edinburgh, Scotland
Supported by an educational grant from Abbott Laboratories

2:00 - 3:00 pm Regency Ballroom
Plenary Session – Topic Highlights
Oral Abstract Presentations
Chairs: Wolfgang H. Dillmann and Gregory A. Brent

249 2:00 pm Clinical
RE-DEFINING THE MODERN STANDARD FOR OPEN THYROIDECTOMY
J.H. Yim, S.E. Carty
University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA

Program Number 1 has been withdrawn

2 2:15 pm Cell Biology
TSH SERVES AS A NEGATIVE REGULATOR OF OSTEOBLAST AND OSTEOCLAST DEVELOPMENT AND FUNCTION AS DEMONSTRATED IN THE TSH RECEPTOR KNOCK-OUT MOUSE
R.C. Marians¹, E. Abe¹, X.B. Wu¹, H.C. Blair², M. Zaidi¹, T.F. Davies¹
¹Division of Endocrinology, Diabetes, and Bone Diseases, Mount Sinai Medical Center, New York, New York, and ²Department of Pathology, University of Pittsburgh, Pennsylvania, USA

3 2:30 pm Thyroid and the Brain
VISUAL PROCESSING DEFICITS ASSOCIATED WITH PERINATAL AND NEONATAL THYROID HORMONE DEFICIENCIES
J. Rovet, G. Mirabella, C. Westall, A. Perronn, K. Perlman
Hospital for Sick Children, Toronto, Ontario, Canada

Wednesday, November 7, 2001
Afternoon Session and Poster Plus – Regency Ballroom

4 2:45 pm Thyroid Hormone Metabolism

**COCHLEAR DEFECTS AND DEAFNESS IN MICE LACKING TYPE II
SELENODEIODINASE**

D. Forrest¹, L. Ng¹, M. Kelley², M.J. Schneider³, D.L. St. Germain³, V.A. Galton³

¹Department of Human Genetics, Mount Sinai School of Medicine, New York, New York;

²National Institute of Deafness and Other Communication Disorders, National Institutes of Health, Rockville, Maryland; and ³Departments of Medicine and Physiology, Dartmouth Medical College, Lebanon, New Hampshire, USA

3:00 - 4:00 pm Ambassador and Regency Ballrooms
Exhibits, Poster Review, and Coffee Break

Regency Ballroom

Review of Posters:

Program Numbers 5 to 40 (Poster Plus)

Program Numbers 41 to 100

Investigators available to discuss their posters

Poster Plus (Program Numbers 5 to 40):

These posters will be displayed from Wednesday at 3:00 pm through Friday at 1:00 pm

5 Autoimmunity

**ESTABLISHMENT OF A NOVEL MURINE MODEL OF GRAVES'
HYPERTHYROIDISM WITH INTRAMUSCULAR INJECTION OF ADENOVIRUS
EXPRESSING THYROTROPIN RECEPTOR**

Y. Nagayama, M. Furuyama-Kita, T. Ando, K. Eguchi, M. Niwa

Departments of Pharmacology 1 and Internal Medicine 1, Nagasaki University School of Medicine, Nagasaki, Japan

6 Autoimmunity

**CTLA-4 AT-REPEAT POLYMORPHISM REDUCES THE INHIBITORY FUNCTION
OF
CTLA-4 IN GRAVES' DISEASE**

M. Takara, T. Kouki, L.J. DeGroot

Thyroid Study Unit, Section of Endocrinology, Department of Medicine, University of Chicago, Chicago, Illinois, USA

Program Number 7 has been withdrawn

8 Autoimmunity

**LACK OF ASSOCIATION BETWEEN THE VITAMIN D RECEPTOR GENE
POLYMORPHISMS AND GRAVES' DISEASE IN THE UK**

R. Nithiyanthan, J.M. Heward, A. Allahabadia, J.A. Franklyn, S.C.L. Gough

Division of Medical Sciences, Department of Medicine, University of Birmingham, Birmingham Heartlands, and Queen Elizabeth Hospital, Birmingham, United Kingdom

Poster Plus (Program Numbers 5 to 40) – Regency Ballroom
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9 Autoimmunity

INTERFERON- γ PRODUCTION IS AN ANTIGEN-SPECIFIC MARKER OF T CELL SENSITIZATION IN TSHR-DNA VACCINATED MICE BUT ITS ABSENCE DOES NOT ENHANCE ANTIBODY LEVELS

P.N. Pichurin, O.A. Pichurina, G.D. Chazenbalk, B. Rapoport, S.M. McLachlan
Autoimmune Disease Unit, Cedars-Sinai Research Institute and UCLA School of Medicine, Los Angeles, California, USA

10 Autoimmunity

THE MHC CLASS II REGION, CTLA-4 GENE AND OPHTHALMOPATHY IN GRAVES' DISEASE

A. Allahabadia, J. Heward, R. Nithiyannathan, S. Gibson, T. Reuser, P. Dodson, J. Franklyn, S. Gough
Division of Medical Sciences, University of Birmingham, Birmingham, United Kingdom

11 Cancer

EFFECTIVE AND NON-TOXIC GENETIC IMMUNOTHERAPY FOR METASTATIC MEDULLARY THYROID CARCINOMA USING ADENOVIRUS-MEDIATED TUMOR-SPECIFIC EXPRESSION OF INTERLEUKIN-12

M. Yamazaki, R. Zhang, L.J. DeGroot
Thyroid Study Unit, Section of Endocrinology, Department of Medicine, University of Chicago, Chicago, Illinois, USA

12 Cancer

DISTINCTIVE EXPRESSION OF STAT3 IN PAPILLARY THYROID CARCINOMA AND A SUBSET OF FOLLICULAR ADENOMAS

M. Trovato, M. Grosso, E. Vitarelli, R.M. Ruggeri, S. Alesci, F. Trimarchi, G. Barresi, S. Benvenga
Dip. di Patologia Umana & Sezione di Endocrinologia, Dip. Clinico Sperimentale di Medicina e Farmacologia, University of Messina, Messina, Italy

Program Number 13 will be displayed as a regular poster in the #50 slot

50 Cancer

TPO MEDIATES RADIOIODINE ORGANIFICATION WITH AND WITHOUT NIS EXPRESSION IN TRANSFECTED CANCER CELL LINES

A. Wenzel, G. Upadhyay, U. Loos
Department of Internal Medicine I, University of Ulm, and iZKF, Ulm, Germany

14 Cancer

GAIN OF 1q IS UNIQUE TO THE TALL CELL VARIANT OF PAPILLARY THYROID CANCER

V. Wreesmann, R. Ghossein, R. Tuttle, A. Shaha, R. Robbins, J. Shah, P. Rao, B. Singh
Laboratory of Epithelial Cancer Biology, Head and Neck Service, and Endocrinology Service, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

Poster Plus (Program Numbers 5 to 40) – Regency Ballroom
These posters will be displayed from Wednesday at 3:00 pm through Friday at 1:00 pm

15 Cancer
RETINOIC ACID-INDUCED STIMULATION OF SODIUM IODIDE SYMPORTER EXPRESSION AND CYTOTOXICITY OF RADIOIODINE IN PROSTATE CANCER CELLS STABLY EXPRESSING THE SODIUM IODIDE SYMPORTER UNDER THE CONTROL OF THE PROSTATE-SPECIFIC ANTIGEN PROMOTER
C. Spitzweg¹, E.R. Bergert², C.Y.F. Young³, D.J. Tindall³, J.C. Morris²
¹Klinikum Grosshadern, Medizinische Klinik II, Ludwig-Maximilians-University, Munich, Germany, and Departments of ²Endocrinology and ³Urology, Mayo Clinic, Rochester, Minnesota, USA

16 Cancer
THYROID HURTHLE CELL ADENOMAS CONTAIN A DELETION MUTATION IN COX1
E.-M. Abdo, U. Marti, P. Imesch, U. Bürgi, H. Gerber, H.-J. Peter
Research Division, General Internal Medicine, University, Bern, Switzerland

17 Cell Biology
FEEDBACK REGULATION OF ER CHAPERONES AND THYROGLOBULIN TRAFFICKING BY SECRETED THYROGLOBULIN IN CULTURED THYROCYTES
K. Kim, W. Abplanalp, S. Menon, B. Li, P. Kim
Division of Endocrinology, University of Cincinnati, Ohio, USA

18 Cell Biology
INHIBITORY INFLUENCE OF THE 3'-UNTRANSLATED REGION OF THE NIS-RNA ON THE EXPRESSION OF THE NIS GENE
T.L. Schmitt, C.R. Espinoza, U. Loos
Department of Internal Medicine I, University Clinic of Ulm, Germany

19 Cell Biology
2-METHOXYESTRADIOL (2-ME) INDUCES APOPTOSIS IN ANAPLASTIC THYROID CARCINOMA CELLS
P. Roswall¹, S. Bu², M. Landstrom², N-E. Heldin¹
¹Department of Genetics and Pathology, Rudbeck Laboratory, Uppsala University Hospital, and ²Ludwig Institute for Cancer Research, Uppsala, Sweden

20 Cell Biology
GENES REGULATED BY TSH AND IODIDE IN CULTURED HUMAN THYROID FOLLICLES: ANALYSIS BY CDNA MICROARRAY
K. Yamazaki¹, E. Yamada¹, Y. Kanaji¹, K. Sato², K. Takano², T. Obara²
¹Thyroid Disease Institute, Kanaji Hospital, Kita-ku, Tokyo, and ²Institute of Clinical Endocrinology, Tokyo Women's Medical University, Shinjuku-ku, Tokyo, Japan

21 Cell Biology
A SPECTRUM OF DEFECTIVE FOLDING AND EXPORT OF CYSTEINE MUTANTS AND NON-CYSTEINE MUTANTS OF THYROGLOBULIN CAUSING CONGENITAL GOITER
B. Li, S. Menon, S. Hossain, W. Abplanalp, P. Kim
Division of Endocrinology, University of Cincinnati, Ohio, USA

Poster Plus (Program Numbers 5 to 40) – Regency Ballroom
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- 22 Cell Biology
REGULATORY MECHANISMS OF STAT-3 (Y705) PHOSPHORYLATION BY TSH IN FRTL-5 CELLS
Y.J. Park, E.S. Park, T.Y. Kim, D.J. Park, W.B. Kim, M. Shong, B.Y. Cho
Department of Internal Medicine, Seoul National University College of Medicine, Seoul, Korea
- 24 Clinical
MYOSIN HEAVY CHAIN ISOFORM COMPOSITION OF SKELETAL MUSCLE IN HYPERTHYROID PATIENTS AND CHANGES IN THEIR RATIOS FOLLOWING TREATMENT
M. Brennan, J. Schimke, K. Nair
Division of Endocrinology and Metabolism, Mayo Clinic, Rochester, Minnesota, USA
- 25 Clinical
THE ACUTE EFFECT OF CALCIUM CARBONATE ON THE ABSORPTION OF LEVOTHYROXINE
N. Singh, S. Weisler, J.M. Hershman
Division of Endocrinology and Metabolism, Veterans Affairs Greater Los Angeles Healthcare System, UCLA School of Medicine, Los Angeles, California, USA
- 26 Clinical
EXPRESSION AND FUNCTIONS OF SOMATOSTATIN RECEPTORS IN ORBITAL FIBROBLASTS FROM PATIENTS WITH GRAVES' OPHTHALMOPATHY
O. Isozaki, T. Tsushima, Y. Nozoe, K. Kato, M. Nishimaki, M. Miyakawa, K. Takano, Y. Inoue
Department of Medicine, Tokyo Women's Medical University, and Eye Division, Olympia Medical Clinic, Tokyo, Japan
- 27 Clinical
UNEXPECTED CONTRIBUTIONS BY VARIOUS FORMS OF T4 TO MEASUREMENTS OBTAINED WITH HORMONE ANALOG FREE T4 ASSAYS
R.B. Wilcox, R. Wang, D.T. Asher, J.C. Nelson
Loma Linda University, School of Medicine, Loma Linda, California, and Quest Diagnostics' Nichols Institute, San Juan Capistrano, California, USA
- 28 Clinical
DOES CORTICOSTEROID THERAPY MODIFY THE LONG-TERM OUTCOME OF SUBACUTE THYROIDITIS?
G. Fatourechi, J. Aniszewski, S. Jacobsen, V. Fatourechi
Mayo Clinic, Division of Endocrinology, Rochester, Minnesota, USA
- 30 Thyroid and the Brain
A TRANSGENIC MOUSE EXPRESSING A MUTANT (beta) THYROID HORMONE RECEPTOR SHOWS DELAY IN CEREBELLAR DEVELOPMENT
C. Cayrou, J. Martel, D. Grouselle, J. Puymirat
Human Genetics Laboratory, CHUL Research Centre, Sainte-Foy, Quebec, Canada

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31 Thyroid and the Brain
ABNORMAL GROWTH OF CORTICOSPINAL AXONS INTO THE LUMBAR SPINAL CORDS OF HYT/HYT MICE WITH HYPOTHYROIDISM

J.-Y. Hsu¹, S.A. Stein^{2,3}, X.M. Xu¹

¹Anatomy and Neurobiology, Saint Louis University School of Medicine, St. Louis, Missouri;

²Child Neurology, Pediatric Research and Neurogenetics, Eastern Maine Medical Center,

Bangor, Maine; and ³Neurology and Neurobiology, Children's Hospital, Orange, California, USA

32 Thyroid and the Brain
TRIIODOTHYRONINE ACTS DIRECTLY ON BRAIN MITOCHONDRIA TO INDUCE RELEASE OF CYTOCHROME C INDEPENDENT OF MITOCHONDRIAL PERMEABILITY TRANSITION

R. Singh, G. Upadhayay, A. Kapoor, M.M. Godbole

S.G. Postgraduate Institute of Medical Sciences, Lucknow, India

33 Thyroid Hormone Action
DETECTION OF DEIODINASE IN HUMAN THYROID AND SKELETAL MUSCLE TISSUES USING SERA OF GUINEA PIGS IMMUNIZED AGAINST PEPTIDE CORRESPONDING TO HUMAN TYPE 2 5'-DEIODINASE

I. Molnar¹, Z. Szombathy², I. Kovacs², J. Szentmiklosi³

¹III Department of Internal Medicine and ²Department of Pathology, Kenez County and

Teaching Hospital, and ³Institute of Pharmacology, Medical University, Debrecen, Hungary

34 Thyroid Hormone Action
INCREASED UNCOUPLING PROTEIN SYNTHESIS IN BROWN FAT FROM HYPOTHYROID RATS ACCLIMATED TO COLD

A.A. Zaninovich, M. Raices, I. Rebagliati, C. Ricci, K. Hagmüller

Hospital de Clínicas and INGEBI, CONICET, Buenos Aires, Argentina

35 Thyroid Hormone Metabolism
IDENTIFICATION AND PARTIAL CHARACTERIZATION OF D3AS, A GENE TRANSCRIBED ANTISENSE FROM THE MAMMALIAN TYPE 3 DEIODINASE (DIO 3) GENE LOCUS

A. Hernandez, M.E. Martinez, W. Croteau, D.L. St. Germain

Dartmouth Medical School, Lebanon, New Hampshire, USA

36 Thyroid Hormone Metabolism
LOCALIZATION OF IODOTHYRONINE DEIODINASES TYPES I AND III IN CHICKEN CEREBELLUM

Verhoelst CHJ¹, Vandenborne K¹, Severi T¹, Zandieh Doulabi B², Bakker O², Kühn ER¹, Darras VM¹

¹Laboratory of Comparative Endocrinology, Zoological Institute, K.U. Leuven, Belgium, and

²Laboratory of Endocrinology, AMC, Amsterdam, The Netherlands

37 Thyroid Hormone Metabolism
BODY COMPOSITION IN RELATION TO TOTAL BODY POTASSIUM AND BONE MINERAL DENSITY IN HYPERTHYROIDISM

M. Dittmar, H. Reber, G.J. Kahaly

Departments of Biology/Anthropology, Nuclear Medicine, and Endocrinology/Metabolism,

Gutenberg University, Mainz, Germany

Program Numbers 38, 39, and 40 have been withdrawn

Wednesday, November 7, 2001
Review of Posters 41 to 100 – Regency Ballroom

3:00 - 4:00 pm Ambassador and Regency Ballrooms
Exhibits, Poster Review, and Coffee Break

Regency Ballroom
Review of Posters:
Poster Plus (Program Numbers 5 to 40)
Program Numbers 41 to 100
Investigators available to discuss their posters

Program Numbers 41 to 100:

41 Autoimmunity
THE MECHANISM OF THYROGLOBULIN-INDUCED LYMPHOCYTIC THYROIDITIS MAY BE DIFFERENT FROM THAT OF IODIDE-INDUCED THYROIDITIS IN NONOBESE DIABETIC MICE LACKING INTERFERON REGULATORY FACTOR-1
Z. Jin, K. Mori, S. Hoshikawa, K. Fujimori, S. Ito, K. Yoshida
Division of Nephrology, Endocrinology and Vascular Medicine, Tohoku University School of Medicine, Sendai, Miyagi, Japan

Program Number 42 will be displayed on Thursday, November 8 after Program Number 165

43 Autoimmunity
POLYMORPHISM OF THE CTLA-4 GENE IS ASSOCIATED WITH AUTOIMMUNE HYPOTHYROIDISM IN THE UK
J. Heward, R. Nithyanathan, A. Allahabadia, J.A. Franklyn, S. Gough
Department of Medicine, University of Birmingham, Queen Elizabeth Hospital, Edgbaston, Birmingham, United Kingdom

44 Autoimmunity
ESTABLISH GRAVES' ANIMAL MODEL WITH GENETIC IMMUNOLOGY METHOD
H. Liu, Y. Ding, Y. Wu, Z. Mi, J. Chen, M. Luo
Shanghai Institute of Endocrinology, Shanghai, China

Program Number 45 will be displayed on Thursday, November 8 after Program Number 165

46 Autoimmunity
THYROID PEROXIDASE ANTIBODIES: THEIR RELATION TO THYROGLOBULIN ANTIBODIES IN DIFFERENTIATED THYROID CANCER
C. Guillén, A. Gauna, G. Sartorio
División Endocrinología, Hospital J. M. Ramos Mejía, Buenos Aires, Argentina

Wednesday, November 7, 2001
Review of Posters 41 to 100 – Regency Ballroom

47 Autoimmunity
THE INFLUENCE OF IODINE PHYSIOLOGICAL DOSAGE ON ANTITHYROID IMMUNITY OF THE CHILDREN WITH ENDEMIC GOITER
O. Malievsky, D. Nurmukhametova
Bashkir State Medical University, Ufa, Russia

48 Autoimmunity
INTERFERON-ALPHA INDUCED PARATHYROID DYSFUNCTION
L.W. Greene, G. Tan
New York University Medical Center, New York, New York, USA

49 Cancer
ULTRASOUND-GUIDED PERCUTANEOUS ETHANOL ABLATION OF NECK NODAL METASTASES IN PATIENTS WITH PAPILLARY THYROID CARCINOMA DEFINITELY TREATED WITH SURGERY AND RADIOIODINE
I. Hay, W. Charboneau, B. McIver, B. Lewis, G. Thompson, C. Grant, C. Reading, J. Goellner
Mayo Clinic, Rochester, Minnesota, USA

Program Number 50 will be displayed as a Poster Plus in the #13 slot

13 Cancer
EXPRESSION OF THE RET/PTC1 ONCOGENE INHIBITS PROLIFERATION AND INDUCES APOPTOSIS OF POORLY DIFFERENTIATED HUMAN THYROID CANCER CELLS
E. Puxeddu, S. Nanni, S. Moretti, F. Moretti, A. Farsetti, M. Martinelli, A. Sacchi, F. Santeusano, A. Pontecorvi
Department of Internal Medicine, University of Perugia; Laboratory of Molecular Oncogenesis, Regina Elena Cancer Institute, Rome; Institute of Neurobiology and Molecular Medicine, CNR, Rome; and Institute of Medical Pathology, Catholic University, Rome, Italy

51 Cancer
STABLE EXPRESSION OF RET/PTC3 IN FRTL-5 THYROID CELLS ENHANCES BASAL AND INSULIN STIMULATED ACTIVATION OF AKT/PKB
E. Miyagi, M. Saji, K.D. Burman, D. Singer, M.D. Ringel
MedStar Research Institute/Washington Hospital Center, Washington, DC, and National Cancer Institute, National Institutes of Health, Bethesda, Maryland, USA

Program Number 52 has been withdrawn

53 Cancer
METASTASES FROM HURTHLE CELL THYROID CANCER ARE FAR MORE AVID FOR FLUORODEOXYGLUCOSE THAN FOR RADIOIODINE
S. Sarkar, P. Pugliese, C. Palestro
Long Island Jewish Medical Center, New Hyde Park, New York, USA

54 Cancer

PPAR-(GAMMA) IS OVER-EXPRESSED IN TYPICAL FOLLICULAR THYROID CARCINOMA, BUT NOT IN THE HURTHLE-CELL VARIANT

M. Sahin, J.G. Powell, X.-L. Wang, T.G. Kroll, S.K.G. Grebe, J.R. Goellner, I.D. Hay, N.L. Eberhardt, B. McIver
Division of Endocrinology, and Department of Surgical Pathology, Mayo Clinic and Foundation, Rochester, Minnesota; Department of Pathology, Brigham and Women's Hospital, Boston, Massachusetts, USA; and Department of Pathology, Wellington School of Medicine, Wellington, New Zealand

55 Cancer

PRODUCTION OF A NOVEL PEPTIDE GHRELIN BY A HUMAN MEDULLARY THYROID CARCINOMA CELL LINE

N. Kanamoto, T. Akamizu, H. Hosoda, Y. Hataya, M. Saijo, K. Moriyama, M. Kojima, K. Kangawa, K. Nakao
Department of Medicine and Clinical Science, Kyoto University Graduate School of Medicine, Kyoto, Japan

56 Cancer

HURTHLE CELL CARCINOMA METASTASES FREQUENTLY CONCENTRATE RADIOACTIVE IODINE

M. Movshovich, A. Stojadinovic, B. Singh, A. Shaha, R. Ghossein, R. Robbins, R.M. Tuttle
Memorial Sloan-Kettering Cancer Center, New York, New York, USA

57 Cancer

HER2NEU EXPRESSION IN THYROID TUMORS

N. Perrier¹, R. Rich², M. Wong³, P. Ituarte³, O.H. Clark³
Departments of ¹General Surgery and ²Anesthesia, Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina, and ³Department of Surgery, University of California San Francisco, San Francisco, California, USA

58 Cancer

ISOLATED NECK RECURRENCE OFTEN HERALDS DISEASE PROGRESSION IN OLDER PATIENTS WITH PAPILLARY THYROID CARCINOMA

R. Sharaf, R. Robbins, B. Singh, R. Ghossein, L. Hann, H. Felderman, R.M. Tuttle
Endocrinology and Head and Neck Surgery Services, Departments of Medicine, Surgery, Pathology, and Radiology, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

Program Number 59 has been withdrawn

60 Cancer

UNIQUE GENE EXPRESSION PATTERNS IN FOLLICULAR-CELL DERIVED THYROID CARCINOMA

X.-L. Wang, S.K.G. Grebe, I.D. Hay, G.B. Thompson, M.A. Trujillo, J.R. Goellner, N.L. Eberhardt, B. McIver
Division of Endocrinology, Department of Surgery, and Department of Surgical Pathology, Mayo Clinic, Rochester, Minnesota, USA; and Department of Pathology, Wellington School of Medicine, Wellington, New Zealand

Wednesday, November 7, 2001
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61 Cancer
PRIMARY THYROID LYMPHOMAS: A 36-YEAR THYROID CANCER SERIES

J. Furlan, I. Rosen
Department of Surgery, University of Toronto, Ontario, Canada

62 Cancer
**RECOMBINANT HUMAN TSH STIMULATION OF CIRCULATING
THYROGLOBULIN MRNA LEVELS IN THE DETECTION OF EARLY STAGE
THYROID CARCINOMA**

X.W. Chen¹, M. Saji¹, P. Balducci-Silano¹, N. Hayre¹, R.M. Tuttle², J. Anderson³, C. Spencer⁴,
K.D. Burman¹, M.D. Ringel¹

¹MedStar Research Institute/Washington Hospital Center, Washington, DC; ²Department of
Medicine, Memorial Sloan-Kettering Cancer Center, New York, New York; ³Department of
Clinical Investigation, Walter Reed Army Medical Center, Washington, DC; ⁴Department of
Medicine, Keck School of Medicine, University of Southern California, Los Angeles, California,
USA

63 Cancer
**MORBIDITY FOLLOWING CENTRAL COMPARTMENT REOPERATION FOR
RECURRENT OR PERSISTENT THYROID CANCER**

M. Kim, S. Mandel, Z. Baloch, V. Livolsi, J. Langer, L. DiDonato, S. Fish, R. Weber
Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania, USA

64 Cancer
**PERFORMANCE OF FINE NEEDLE ASPIRATION BIOPSY AND FROZEN SECTION
IN WELL-DIFFERENTIATED THYROID CANCER**

J. Furlan, I. Rosen
Department of Surgery, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada

65 Cancer
**NUMERICAL CHROMOSOMAL AMPLIFICATIONS IN HURTHLE CELL
CARCINOMA OF THE THYROID BY COMPARATIVE GENOMIC HYBRIDIZATION**

N. Wada, D. Miura, Q-Y. Duh, O.H. Clark
Department of Surgery, Mount Zion Medical Center, University of California San Francisco, San
Francisco, California, USA

66 Cancer
**PAPILLARY THYROID CARCINOMAS HARBORING RET/PTC3
REARRANGEMENTS TEN TO TWELVE YEARS AFTER THE CHERNOBYL
ACCIDENT ORIGINATE PREDOMINANTLY FROM THE GOMEL REGION**

J. Figge, A. Pisarchik, G. Ermak, N. Kartel
Institute of Genetics and Cytology, Minsk, Belarus

67 Cancer
**PRIMARY TYPE I THYROPLASTY DURING SURGICAL MANAGEMENT OF
PATIENTS WITH DIFFERENTIATED OR MEDULLARY THYROID CANCERS**

G. Clayman, J. Lewin
University of Texas M.D. Anderson Cancer Center, Houston, Texas, USA

68 Cancer

CHROMOSOMAL ABNORMALITIES IN THYROID LYMPHOMA

S. Fukata¹, F. Matsuzuka¹, M. Taniwaki², A. Miyauchi¹, K. Kuma¹, M. Sugawara³

¹Kuma Hospital, Kobe, Japan; ²Kyoto Prefectural University of Medicine, Kyoto, Japan; ³West Los Angeles VA Medical Center and UCLA School of Medicine, West Los Angeles, California, USA

69 Cancer

THYROID MICROCARCINOMA: FINE-NEEDLE ASPIRATION DIAGNOSIS AND HISTOLOGIC FOLLOW-UP

G.C.H. Yang, V.A. LiVolsi, Z.W. Baloch

Departments of Pathology, New York University Medical Center, New York, New York, and University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, USA

70 Cancer

LOW RADIATION HYPERSENSITIVITY TO THYROID CANCER

M. Woodcock¹, Y. Shi², M. Zou², M.J. Joiner¹, N.R. Farid³

¹Grey Laboratory Cancer Research Trust, Mount Vernon Hospital, Northwood, Middlesex, United Kingdom; ²King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia; and ³Osancor Biotech Inc., Watford, Herts, United Kingdom

71 Cancer

SIMILAR RECURRENCE RATES IN PATIENTS WITH DIFFERENTIATED THYROID CANCER TREATED WITH LOBECTOMY VERSUS EXTENSIVE SURGERY: EXPERIENCE IN A COMMUNITY HOSPITAL

R. Sievert¹, S. Aytug¹, R. Amani-Yazdi², S. Pollack³, L.E. Shapiro¹, F.A. Ross⁴

¹Division of Endocrinology and Metabolism, Winthrop-University Hospital, SUNY School of Medicine at Stony Brook, Mineola, New York; ²Division of Endocrinology and Metabolism, University of North Carolina School of Medicine, Chapel Hill, North Carolina; ³Department of Decision Sciences, St. John's University, Jamaica, New York; ⁴Department of Medicine, Mount Sinai School of Medicine, Elmhurst Hospital, Elmhurst, New York, USA

72 Cell Biology

TIE-2 AND ANGIOPOIETIN-1 EXPRESSION IN HUMAN THYROID TUMORS

N. Mitsutake, H. Namba, K. Ishigaki, H. Ayabe, S. Yamashita

Nagasaki University School of Medicine, Nagasaki, Japan

73 Cell Biology

REGULATION OF THE THYROID NA⁺/I⁻ CO-TRANSPORTER BY THYROTROPIN AND IODINE IN VIVO

A.C.F. Ferreira, L.P. Lima, L.C. Cardoso, F.F. Turlão, R. Paulo, D. Rosenthal, D.P. Carvalho

Instituto de Biofísica Carlos Chagas Filho, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

Program Number 74 has been withdrawn

Wednesday, November 7, 2001
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75 Cell Biology

THE ANCIENT EVOLUTIONARY ORIGIN OF THE THYROTROPIN RECEPTOR C-FLANKING “ADD ON” SEQUENCES

V. Kaczur¹, I.A. Racz², N.R. Farid¹

¹Osancor Bionformatics Ltd, Watford, Herts, United Kingdom, and ²Department of Evolutionary Zoology, University of Debrecen, Debrecen, Hungary

76 Cell Biology

GENETIC FACTORS IN SPORADIC NON-TOXIC GOITER: LACK OF ASSOCIATION WITH IMMUNE RESPONSE GENES

A. Allahabadia, J. Heward, R. Nithiyanthan, S. Gibson, J.A. Franklyn, S. Gough

Division of Medical Sciences, University of Birmingham, Birmingham, United Kingdom

77 Clinical

SYSTEMATIC STUDIES OF FREE T4 METHODOLOGIES USING CLINICALLY RELEVANT MODELS OF T4 VARIABILITY

J.C. Nelson, R. Wang, R.B. Wilcox

Loma Linda University School of Medicine, Loma Linda, California, and Quest Diagnostics' Nichols Institute, San Juan Capistrano, California, USA

78 Clinical

MEASUREMENT OF FREE T4 (FT4) LEVELS IN PRETERM (PT) INFANTS RECEIVING HEPARIN-SUPPLEMENTED PARENTERAL NUTRITION (HSPN): COMPARISON BETWEEN EQUILIBRIUM DIALYSIS (ED) AND A TWO-STEP RIA (2-RIA) METHOD

J.S. Dallas¹, D.V. Dallas¹, P.H. Frost², C. Cochran¹, P. Clements¹

¹University of Texas Medical Branch, Galveston, Texas, and ²University of California, San Francisco, California, USA

79 Clinical

DIAGNOSIS AND TREATMENT OF GRAVES' PATIENTS WITH UNDETECTABLE TSH RECEPTOR ANTIBODIES (TRAB) DETERMINED BY PORCINE THYROCYTES: COMPARISON WITH TRAB AND THYROID HORMONE-RELEASING ACTIVITY DETERMINED BY HUMAN THYROCYTES

K. Sato, K. Yamazaki, E. Yamada, Y. Kanaji, E. Odagiri, K. Jibiki, A. Komori, K. Takano

Department of Medicine, Institute of Clinical Endocrinology, Tokyo Women's Medical University, Shinjuku-ku, Tokyo, Japan

80 Clinical

THYROTOXICOSIS FACTITIA CAUSED BY DIET PILLS

H. Ohye, S. Fukata, M. Kanoh, S. Kubota, A. Miyauchi, K. Kuma

Kuma Hospital, Kobe, Japan

81 Clinical

EVALUATING VARIATIONS OF BIOLOGICAL INDICATORS ON SUBJECTS USING ORAL IODIZED OIL FOR THE TREATMENT AND PREVENTION OF ENDEMIC GOITER IN VIETNAM

H. Uoc¹, T. Nguyen¹, Q. Luong¹, P. Singer²

¹Endocrine Hospital, Hanoi, Republic of Vietnam, and ²University of Southern California School of Medicine, Los Angeles, California, USA

82 Clinical

THREE YEARS EXPERIENCE WITH THE DANISH HYPER- AND HYPOTHYROIDISM REGISTER

I. Bülow Pedersen¹, P. Laurberg¹, N. Knudsen², T. Jørgensen³, H. Perrild², L. Ovesen⁴

¹Department of Endocrinology and Medicine, Aalborg Hospital; ²Medical Clinic 1, Bispebjerg Hospital; ³Centre of Preventive Medicine, Glostrup Hospital; and ⁴Danish Veterinary and Food Administration, Denmark

83 Clinical

PREDICTIVE VALUES OF PRETREATMENT TSH RECEPTOR ANTIBODIES IN PREDICTION FOR CLINICAL COURSES OF GRAVES' DISEASE TREATED WITH METHIMAZOLE

T.Y. Kim, Y.J. Park, H.K. Chung, D.J. Park, W.B. Kim, B.Y. Cho

Department of Internal Medicine, Seoul National University College of Medicine, Seoul, Korea

84 Clinical

PERCUTANEOUS ETHANOL INJECTION (PEI) TREATMENT FOR GRAVES' DISEASE: THREE-YEAR FOLLOW-UP STUDY

T. Yokozawa, A. Miyauchi, K. Kuma, S. Fukata, F. Matsuzuka, H. Ohye, T. Yokozawa

Kuma Hospital, Kobe, Japan

85 Clinical

THYROID SIZE IS INCREASED DESPITE SUFFICIENT IODINE INTAKE AND GOOD NUTRITION. CAN THIS BE DUE TO THE EFFECT OF GOITROGENS OR JUST A RESIDUAL EFFECT OF IDD FOR A PROLONGED PERIOD?

S. Brahmabhatt, R. Brahmabhatt, C. Eastman, S. Boyages

Fremantle Hospital, Fremantle, Australia

86 Clinical

TRIIODOTHYRONINE (T3) SUPPLEMENTATION CAN HELP PATIENTS WITH HYPOTHALAMIC OBESITY TO LOSE WEIGHT

R. Sellin, M. Klein

University of Texas M.D. Anderson Cancer Center, Houston, Texas, USA

87 Clinical

RELATIONSHIP OF GESTATIONAL AGE WITH THE NEONATAL URINARY IODINE EXCRETION AND THE THYROID VOLUME

I. Molnar¹, L. Csathy², G. Szasz³

¹III Department of Internal Medicine, ²Department of Pediatrics, and ³Department of Radiology, Kenezy County and Teaching Hospital, Debrecen, Hungary

88 Clinical

INFLUENCING HEALTH CARE POLICIES WITH PUBLIC THYROID AWARENESS CAMPAIGNS IN BRAZIL: ITS IMPACT FOR THE POPULATION AND FOR THYROIDOLOGISTS

V. Guimaraes, G. Medeiros-Neto, H. Graf, M. Sucupira, L. Naves, M. Sampaio, R. Maciel, J. Romaldini

Brazilian Society of Endocrinology and Metabolism (SBEM), Brazil

Wednesday, November 7, 2001
Review of Posters 41 to 100 – Regency Ballroom

89 Clinical
INDICATORS FOR THE ASSESSMENT OF IODINE DEFICIENCY DISORDERS IN BASHKORTOSTAN

O. Malievsky
Bashkir State Medical University, Ufa, Russia

90 Clinical
PATHOMORPHOSIS OF DIFFUSE NONTOKIC GOITER AMONG CHILDREN UNDER SALT IODIZATION PROGRAMME

O. Malievsky, D. Nurmukhametova
Bashkir State Medical University, Ufa, Russia

91 Clinical
IS HYPOTHERMIA USEFUL FOR SURGERY OF UNCONTROLLED SEVERE GRAVES' HYPERTHYROIDISM?

H. Kurihara, J. Sasaki, S. Tanimura
Kurihara Thyroid Clinic, Morioka, Iwate, Japan

92 Thyroid Hormone Action
THE EFFECT OF TRIIODOTHYRONINE ON GROWTH PARAMETERS AND CELL CYCLE REGULATORS IN THYROID HORMONE RESPONSIVE AND NONRESPONSIVE THYROTROPIC TUMORS

W.W. Woodmansee, V.D. Sarapura, D.J. Haakinson, J.M. Dowding, A.R. Gordon, D.F. Gordon, W.M. Wood, E.C. Ridgway
University of Colorado Health Sciences Center, Denver, Colorado, USA

93 Thyroid Hormone Action
COMPARATIVE EFFECTS OF THE THYROID HORMONE-BETA1 SELECTIVE AGONIST GC-1 or 3,5,3'-triiodo-L-THYRONINE (T3) ON CHOLESTEROL, METABOLIC RATE AND HEART RATE IN RATS

G. Grover¹, L. Sparano¹, P. Sleph¹, S. Adolfsen¹, M. Smith¹, T. Scanlan², J. Baxter²
¹Bristol-Myers Squibb, Pennington, New Jersey, and ²University of California San Francisco, San Francisco, California, USA

94 Thyroid Hormone Action
A NOVEL ASSAY TO MEASURE THYROID HORMONE-MEDIATED CARDIAC SPECIFIC GENE TRANSCRIPTION

S. Danzi, K. Ojamaa, I. Klein
North Shore-Long Island Jewish Research Institute/New York University School of Medicine, Manhasset, New York, USA

Program Number 95 has been withdrawn

96 Thyroid Hormone Action
NEUROPEPTIDE Y SUPPRESSED TRIIODOTHYRONINE-INDUCED RISE IN MITOCHONDRIAL RESPIRATION IN BROWN FAT OF HYPOTHYROID RATS

I. Rebagliati, C. Ricci, A.A. Zaninovich, C. Tang
University of Hong Kong and the University of Buenos Aires, Argentina

Wednesday, November 7, 2001
Review of Posters 41 to 100 – Regency Ballroom

Program Number 97 has been withdrawn

98 Thyroid Hormone Metabolism
**CENTRAL, ORGAN-LEVEL AND CELLULAR THYROID HORMONE REGULATION
DYNAMICS: NORMAL AND “DYNAMIC DISEASE” BEHAVIOR, INCLUDING
OSCILLATIONS AND CHAOS**

J.J. DiStefano III, A. Chen
Biocybernetics Laboratory, University of California Los Angeles, Los Angeles, California, USA

99 Thyroid Hormone Metabolism
**LEVOTHYROXINE THERAPY AND SERUM FREE THYROXINE AND FREE
TRIIODOTHYRONINE CONCENTRATIONS**

K.A. Woeber
Division of Endocrinology, University of California San Francisco, San Francisco, California,
USA

100 Thyroid Hormone Metabolism
A STUDY OF ENDEMIC GOITER IN THE RUSSIAN NORTH-EAST

A. Gorbachev
International Scientific Center «Arktika», Russian Academy of Sciences, Magadan, Russia

136 Cancer
**ACCURACY OF FINE NEEDLE ASPIRATION BIOPSY IN NODULAR THYROID
DISEASES**

J. Furlan, I. Rosen
Department of Surgery, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada

203 Cancer
**SURGICAL MANAGEMENT FOR SUSPICIOUS CYTOLOGY OF NON-PAPILLARY
THYROID NODULE BY FINE NEEDLE ASPIRATION BIOPSY**

I.B. Rosen, J.C. Furlan
Department of Surgery, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada

Wednesday, November 7, 2001
Afternoon Session and Evening

4:00 - 5:00 pm Regency Ballroom

The Arthur Bauman Clinical Symposium

ATA established the fund for this Symposium in celebration and memory of the professional accomplishments and personal qualities 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.

T3 and IQ: From Brain Development to Care of the Pregnant Patient

Chair: Kenneth D. Burman

Thyroid Hormone and Brain Development Grant W. Anderson

Pregnancy and Thyroid Status Gregory A. Brent

Maternal Thyroid Deficiency and Cognitive
Function of the Child Robert Z. Klein

Supported by an educational grant from Abbott Laboratories

5:00 - 6:15 pm **Meet the Professor Workshop Suppers**

Advance purchase required; admission by ticket only

Diplomat Room

Subclinical Hyperthyroidism

Douglas Ross

Supported by an educational grant from Abbott Laboratories

Cabinet Room

Cytokines and Their Influence on Thyroid Function

James R. Baker, Jr.

Forum Room

Extra-Nuclear Mechanism of Thyroid Hormone Action

Paul J. Davis

Council Room

Treatment of Low T3 in NTI: Pros and Cons

Leslie J. DeGroot and Inder J. Chopra

Directors' Room

A Program for I-131 Dosimetric Treatment of Cancer Patients

Stephanie L. Lee

6:30 - 8:00 pm *Palladian Room and Terrace*

Welcome Reception

[this page is intentionally left blank so that Thursday's program can begin on an even-numbered page. this page is not to be printed. it's included just as a reminder that a blank page goes here]

Special Program
Thursday, November 8, 2001

6:00 - Palladian Room

7:45 am **Sunrise “Early Riser” Seminar: Case Challenges
and Clinical Conundrums**

Chair: Peter A. Singer

Faculty: Lewis E. Braverman

E. Chester Ridgway

Leonard Wartofsky

Sponsored by The Endocrine Society

*Supported by an unrestricted educational grant
from Abbott Laboratories*

73rd Annual Meeting of the American Thyroid Association
Omni Shoreham Hotel
Washington, DC
November 7-10, 2001

Thursday, November 8, 2001

8:00 - 9:30 am Regency Ballroom
Plenary Session – Topic Highlights
Oral Abstract Presentations
Chairs: James R. Baker, Jr. and John C. Morris, III

101 8:00 am Cancer
RADIOIODIDE THERAPY IN hNIS TRANSFECTED HUMAN FOLLICULAR THYROID CARCINOMA
J.W.A. Smit, J.P. Schroder-van der Elst, M. Karperien, J.A. Romijn, D. van der Heide
Department of Endocrinology, Leiden University Medical Center, Leiden, The Netherlands

102 8:15 am Cancer
GENE THERAPY USING THE THYMIDINE KINASE-GANCYCLOVIR (TK/GCV) SYSTEM AND MOUSE INTERLEUKIN 12 IN A HUMAN THYROID TUMOR MODEL
R. Zhang¹, F.H. Straus², L.J. DeGroot¹
¹Thyroid Study Unit/MC 3090, Department of Medicine, and ²Department of Pathology, University of Chicago, Chicago, Illinois, USA

103 8:30 am Autoimmunity
GENE EXPRESSION PROFILING OF GRAVES' OPHTHALMOPATHY AND GRAVES' DISEASE TISSUES USING DNA ARRAY ANALYSIS: PRELIMINARY RESULTS
C.M. Dutton, R.S. Bahn
Division of Endocrinology, Metabolism and Nutrition, Mayo Clinic/Foundation, Rochester, Minnesota, USA

104 8:45 am Autoimmunity
NEUTRALIZATION OF AUTOANTIBODIES USING A TSH RECEPTOR A SUBUNIT 'MODULE': EVIDENCE FOR GREATER EPITOPIC HETEROGENEITY IN BLOCKING THAN IN STIMULATING AUTOANTIBODIES
L. Schwarz-Lauer, G.D. Chazenbalk, S.M. McLachlan, Y. Ochi, Y. Nagayama, B. Rapoport
Autoimmune Disease Unit, Cedars-Sinai Research Institute, Los Angeles, California, USA; Research Institute for Production Development, Kyoto, Japan; and Department of Pharmacology, University of Nagasaki School of Medicine, Nagasaki, Japan

105 9:00 am Autoimmunity
NEW STUDIES ON THE PRESENCE AND THE DISTRIBUTION OF THYROGLOBULIN (Tg) IN ORBITAL TISSUES (OT) FROM PATIENTS WITH THYROID-ASSOCIATED OPHTHALMOPATHY (TAO)
S. Lisi, M. Marino, B. Mazzi, C. Di Cosmo, S. Sellari-Franceschini, A. Pinchera, L. Chiovato
Department of Endocrinology, University of Pisa, Pisa, Italy

Thursday, November 8, 2001

Morning Session and Review of Posters 107 to 165 – Regency Ballroom

106 9:15 am Autoimmunity

**THE CLUSTERING OF AUTOIMMUNE THYROID DISEASE IN THE TYPE 1
DIABETES WARREN REPOSITORY**

K. Tait, J. Berman, J. Carr-Smith, J. Todd, S. Bain, A. Barnett, S. Gough

Division of Medical Sciences, Birmingham Heartlands Hospital, University of Birmingham,
Birmingham, UK

9:30 - 10:00 am Ambassador and Regency Ballrooms

Exhibits, Poster Review, and Coffee Break

Regency Ballroom

Review of Posters:

Program Numbers 5 to 40 (Poster Plus)

Program Numbers 107 to 165

Investigators available to discuss their posters

Program Numbers 107 to 165:

107 Autoimmunity

**ORBITAL CONNECTIVE TISSUE EXPANSION IS NOT A MAJOR CONTRIBUTOR
TO PROPTOSIS: VOLUMETRIC MRI IN ENDOCRINE OPHTHALMOPATHY**

Z. Szucs-Farkas¹, J. Toth¹, L. Galuska², L. Tron³, E. Balazs⁴, E.V. Nagy⁵

Departments of ¹Radiology, ²Nuclear Medicine, ³PET, ⁴Ophthalmology, and ⁵Medicine, Medical
and Health Science Center, University of Debrecen, Debrecen, Hungary

108 Autoimmunity

**VALUE OF RECOVERY DETERMINATION FOR THYROGLOBULIN
MEASUREMENT IN SERA FROM PATIENTS WITH GRAVES' DISEASE**

C. Massart, D. Maugendre

Service d' Hormonologie, CHU Pontchaillou, Rennes, France

109 Autoimmunity

**THE FREQUENCY OF POSITIVE TGABS AND NEGATIVE TPOABS IS HIGH IN
AUTOIMMUNE THYROIDITIS ASSOCIATED WITH THYROID NODULES**

P. De Remigis, F. Ruscitti, L.Vianale

Thyroid and Endocrine Unit, General Hospital, Chieti, Italy

110 Autoimmunity

**CLINICAL VALUE OF THYROGLOBULIN AND ANTI-TPO ANTIBODY
MEASUREMENTS ASSOCIATED WITH BINDING TSH RECEPTOR ANTIBODY
DETERMINATION IN PATIENTS WITH GRAVES' DISEASE**

D. Maugendre, C. Massart

Unité d'Endocrinologie, CHU de Rennes, France

- 111 Autoimmunity
INTERACTIONS OF HLA-DRB4 AND CTLA-4 GENES INFLUENCE THYROID FUNCTION IN HASHIMOTO'S THYROIDITIS IN JAPANESE
T. Yanagawa, M. Terauchi, N. Ishikawa, K. Ito, T. Fukazawa, H. Maruyama, T. Saruta
Department of Medicine, Keio University, and Nerima General Hospital, Tokyo, Japan
- 112 Autoimmunity
ASSOCIATION OF GRAVES' DISEASE WITH INTERLEUKIN-1 RECEPTOR ANTAGONIST GENE AMONG CHINESE
H. Liu, Y. Ding, Y. Wu, Z. Mi, J. Chen, M. Luo
Shanghai Institute of Endocrinology, Shanghai, China
- 113 Autoimmunity
SUCCESSFUL USE OF RALOXIFEN IN THE TREATMENT OF RIEDEL'S THYROIDITIS
H. Niepomniscze, A. Safenraiter, A. Diaz, A. Pignatta, O.D. Bruno
Division of Endocrinology, Hospital de Clinicas, University of Buenos Aires, Buenos Aires, Argentina
- 115 Cancer
I-124/PET FOR THE DETECTION AND DOSIMETRY OF RESIDUAL DIFFERENTIATED THYROID CARCINOMA
A. Sheikh, K. Pentlow, R.M. Tuttle, R. Finn, H. Yeung, R. Robbins, S. Larson
Memorial Sloan-Kettering Cancer Center, New York, New York, USA
- 116 Cancer
USE OF MECHANICAL DISSOCIATION DEVICE AND THYROGLOBULIN LABELING IN THE FLOW CYTOMETRIC DNA MEASUREMENT OF FRESH, FROZEN THYROID SAMPLES
F. Gyory, J. Kappelmayer, E.V. Nagy, S. Szakall, E. Mezosi, F. Juhasz, J. Math, G. Balazs, G. Lukacs
Departments of Surgery, Medicine, and Pathology, and Institute of Psychology, University of Debrecen, Hungary
- 117 Cancer
ADENOVIRUS-MEDIATED TRANSFER OF THE TTF-1 GENE RESTORES DIFFERENTIATION OF HUMAN THYROID CARCINOMA
F. Furuya, H. Shimura, H. Suzuki, A. Miyazaki, T. Endo, K. Haraguchi, T. Onaya
Third Department of Internal Medicine, Yamanashi Medical University, Tamaho Yamanashi, Japan
- 118 Cancer
APPLICATION OF THE CRE-LOXP SYSTEM TO ENHANCE THYROID-TARGETED EXPRESSION OF SODIUM/IODIDE SYMPORTER
X. Lin, E. Mazzaferri, S. Jhiang
Department of Physiology, Ohio State University, Columbus, Ohio, USA

Thursday, November 8, 2001
Review of Posters 107 to 165 – Regency Ballroom

119 Cancer
ADENOVIRUS-MEDIATED TTF-1 GENE TRANSFER INDUCES CELL DEATH IN THYROID CANCER CELLS AND INHIBITS TUMOR GROWTH IN NUDE MICE
H. Suzuki, H. Shimura, F. Furuya, A. Miyazaki, K. Haraguchi, T. Endo, T. Onaya
Third Department of Internal Medicine, Yamanashi Medical University, Yamanashi, Japan

120 Cancer
THYROID CANCER POST-CHERNOBYL: AN OPPORTUNITY FOR INTERNATIONAL COLLABORATION
G.A. Thomas, E.D. Williams
TCRG, University of Cambridge, Strangeways Research Laboratory, Cambridge, United Kingdom

121 Cancer
GENOMIC ANALYSIS OF GENE AMPLIFICATION IN POST-CHERNOBYL PAPILLARY THYROID CARCINOMA
R. Kimmel¹, R.M. Tuttle², C. Cheng¹, D. Nguyen¹, S. Lee¹, L-P. Zhao¹, S. Davis¹, P. Neiman¹
¹Fred Hutchinson Cancer Research Center, Seattle, Washington; ²Endocrinology Service, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

122 Cancer
INHIBITION OF CANCER CELL GROWTH IN THYROID CANCER CELL LINES BY TROGLITAZONE, THE PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR-GAMMA AGONIST
J. Park, M. Wong, Q. Duh, O.H. Clark
Department of Surgery, University of California San Francisco/Mount Zion Medical Center, San Francisco, California, USA

123 Cancer
DIFFERENTIATED THYROID CARCINOMA TREATED WITH RADIOIODINE: SERIAL EVALUATION OF SERUM TG AND QUANTITATIVE RT-PCR OF CIRCULATING TG mRNA
I.G.S. Rubio, R. Romão, A. Gryga, M.S. Cardia, C. Buchpiguel, M. Knobel, G. Medeiros-Neto
Division of Endocrinology and Department of Radiology, University of São Paulo Medical School, São Paulo, SP, Brazil

124 Cancer
ASSESSING THE EFFECTS OF THYROID HORMONE SUPPRESSION THERAPY (THST) ON ADVERSE CLINICAL OUTCOMES IN THYROID CANCER (THYRCA): A QUANTITATIVE RESEARCH SYNTHESIS
N. McGriff, G. Csako, L. Guthrie, L. Gourgiotis, F. Pucino, N.J. Sarlis
Pharmacy Department, Clinical Center, and Clinical Pathology, Clinical Center, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, Maryland, USA

125 Cancer

PROGNOSTIC SCORING SYSTEM IN PATIENTS WITH FOLLICULAR THYROID CANCER

A. D'Avanzo, P.H.G. Ituarte, P. Treseler, E. Kebebew, J. Wu, N. Perrier, A.E. Siperstein, Q.Y. Duh, O.H. Clark

Departments of Surgery and Pathology, Mount Zion Medical Center/University of California San Francisco, San Francisco, California, USA

126 Cancer

FOLLICULAR CARCINOMA AS AN ENTIRE AUTONOMOUS FUNCTIONING THYROID NODULE (AFTN), PRESENTING AN ile 620 ACTIVATING MUTATION OF THE THYROTROPIN RECEPTOR AND A cys 12 MUTATION OF THE Ki-RAS

H. Niepomniszcze, H. Suarez, A. Pignatta, K. Danilowicz, M. Manavela, B. Elsner, O.D. Bruno
Divisions of Endocrinology and Pathology, Hospital de Clinicas-UBA, Buenos Aires, Argentina, and Laboratoire de Genetique Moleculaire (UPR 42), Institut de Recherches sur le Cancer (IFC 01), CNRS, Villejuif Cedex, France

127 Cancer

PREDICTING THE SERUM THYROGLOBULIN LEVEL ATTRIBUTABLE TO THE POSTOPERATIVE THYROID TISSUE REMNANT

M. Morocco, R. Kloos, H. Nagaraja

Internal Medicine and Radiology; Divisions of Endocrinology, Diabetes and Metabolism and Nuclear Medicine; and Department of Statistics, Ohio State University, Columbus, Ohio, USA

128 Cancer

THERAPEUTIC USE OF RECOMBINANT TSH IN 12 PATIENTS WITH DIFFERENTIATED THYROID CARCINOMA

H. Graf, M.S. Marone, C. Almeida

Federal University of Parana, Parana, Brazil

129 Cancer

SUSCEPTIBILITY OF THYROID CANCER CELLS TO UCN-01-INDUCED APOPTOSIS CORRELATES WITH Bcl-2 PROTEIN LEVEL

S.H. Wang, E. Phelps, S. Utsugi, J.R. Baker, Jr.

Department of Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan, USA

130 Cancer

SERUM THYROGLOBULIN IN SUBJECTS WITH THYROID CANCER, DIFFUSE AND NODULAR GOITER, AND LOW URINE IODINE CONTENT: EXPERIENCE FROM THE UKRAINE-USA CHERNOBYL THYROID DISEASE COHORT STUDY (CTDCS)

M. Tronko¹, O. Bolshova¹, O. Epshtein¹, V. Kravchenko¹, Z. Lysova¹, O. Lyutkevych¹, V. Oliynyk¹, O. Rakov¹, I. Savosko¹, G. Terekhova¹, A.B. Brill², D. Fink³, E. Greenebaum³, I. Masnyk⁴, R.J. McConnell³, J. Robbins⁵

¹Research Institute of Endocrinology and Metabolism, Kyiv, Ukraine; ²Vanderbilt University, Nashville, Tennessee; ³Columbia University, New York, New York; and ⁴National Cancer Institute and ⁵National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Rockville, Maryland, USA

Thursday, November 8, 2001
Review of Posters 107 to 165 – Regency Ballroom

131 Cancer
EXPRESSION OF H-RAS AND K-RAS PROTOONCOGENES IN NODULAR GOITER

L. Golbert, A.L. Maia
Division of Endocrinology, Hospital de Clínicas de Porto Alegre, UFRGS, Brazil

132 Cancer
WHEN FINE-NEEDLE ASPIRATION IS NOT ENOUGH: THE ROLE OF CLINICAL DIAGNOSIS IN THYROID CARCINOMA

M. Yeh, O. Demircan, P. Ituarte, O.H. Clark
Department of Surgery, University of California San Francisco/Mt. Zion Medical Center, San Francisco, California, USA

133 Cancer
DIFFICULTIES IN THE DIAGNOSIS OF MEDULLARY THYROID CARCINOMA: REPORT OF 3 CASES

R. Camargo, E. Tomimori, E. Sakane, V. Alves, G. Medeiros-Neto
Thyroid Unit, Endocrine Division, Sao Paulo University School of Medicine, Sao Paulo, Brazil

134 Cancer
CAN WE RELY ON PATHOLOGIC PARAMETERS TO DEFINE CONSERVATIVE TREATMENT OF PAPILLARY THYROID CARCINOMA?

M. Paessler, F. Kreisel, V.A. LiVolsi, L.A. Akslen, Z.W. Baloch
Departments of Pathology, University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, USA, and The Gade Institute, Haukeland Hospital, University of Bergen, Norway

135 Cancer
ASSESSMENT OF SERUM THYROGLOBULIN LEVELS BEFORE SURGERY IN BENIGN AND MALIGNANT THYROID NODULES: ITS POTENTIAL ROLE FOR DIFFERENTIAL DIAGNOSIS

J. Souza, A. Bezerra, K. Seidenberger, H. Cavaliere, M. Cardia, R. Camargo, E. Tomimori, G. Medeiros-Neto
Sao Paulo University School of Medicine, Sao Paulo, Brazil

Program Number 136 will be displayed on Wednesday, November 7 after Program Number 100

138 Cell Biology
THYROID HORMONE AND OLEIC ACID REGULATE UCP3 GENE EXPRESSION IN SKELETAL MUSCLE DERIVED CELL LINES SUBMITTED TO CALCINURIN INHIBITION

M. Christoffolette¹, A. Moriscot²
¹Department of Physiology and Biophysics, and ²Department of Histology and Embryology, ICB, University of São Paulo, Brazil

139 Cell Biology

IMPACT OF C-TERMINAL MUTATIONS ON THE SECRETION OF THYROXINE-BINDING GLOBULIN

L.C. Moeller, A. Fingerhut, S.D. Knuedeler, A.H. Oeffner, K. Mann, O.E. Janssen
Department of Endocrinology, Center of Internal Medicine, University of Essen, Essen, Germany

140 Cell Biology

CLONING OF THE MOUSE SODIUM IODIDE SYMPORTER

L. Pinke, D. Dean, E. Bergert, C. Spitzweg, C. Dutton-Gibbs, J. Morris
Department of Endocrinology, Mayo Clinic, Rochester, Minnesota, USA

141 Clinical

A SURVEY ON THE ETIOLOGY OF RESISTANCE TO THYROID HORMONE

K. Dennis, J. Pohlenz, A. Dimutrescu, P. Sadow, M. Darin, R. Szmulewitz, R.E. Weiss, S. Refetoff
Departments of Medicine and Pediatrics, University of Chicago, Chicago, Illinois, USA

142 Clinical

LOW GOITRE PREVALENCE AMONG USERS OF ORAL CONTRACEPTIVES IN A LARGE POPULATION SAMPLE

N. Knudsen, I. Bulow, P. Laurberg, H. Perrild, L. Ovesen, T. Jorgensen
Medical Clinic I, Bispebjerg University Hospital, Copenhagen, Denmark

143 Clinical

INTRAOPERATIVE ULTRASOUND AS AN ADJUNCT TO PALPATION IN NECK EXPLORATION FOR METASTATIC THYROID CANCER: A PRELIMINARY REPORT

C. Vakili¹, K. Vakili²

¹University of Massachusetts Medical Center, Worcester, Massachusetts, and Heywood Hospital, Gardner, Massachusetts, and ²Boston University School of Medicine, Boston, Massachusetts, USA

Program Number 144 has been withdrawn

145 Clinical

DETERMINATION OF THE TIME REQUIRED FOR RECOVERY OF THE THYROID RADIOIODINE UPTAKE (RIU) FROM COMPETITIVE INHIBITION BY LARGE DOSES OF PERCHLORATE

M.A. Greer, S.E. Greer
Division of Endocrinology, Department of Medicine, Oregon Health Sciences University, Portland, Oregon, USA

Thursday, November 8, 2001
Review of Posters 107 to 165 – Regency Ballroom

Program Number 146 has been withdrawn

147 Clinical
**PAINFUL HASHIMOTO'S THYROIDITIS AS AN INDICATION FOR
THYROIDECTOMY**

Y. Kon, L.J. DeGroot
Thyroid Study Unit, University of Chicago, Chicago, Illinois, USA

148 Clinical
**DISCORDANCE OF MEDIAN URINE IODINE VALUES WITH THYROID VOLUMES
OF PRIMARY SCHOOL CHILDREN IN AUSTRALIA: IMPLICATIONS FOR THE
MONITORING OF IODINE STATUS IN DEVELOPED ECONOMIES**

K. Guttikonda, C. Travers, P. Lewis, S. Boyages
Department of Diabetes and Endocrinology, Westmead Hospital, Westmead, NSW, and Central
Coast Area Public Health Unit, Gosford, NSW, Australia

149 Clinical
**CTLA-4 GENE POLYMORPHISM DOES NOT CONFER SUSCEPTIBILITY TO
THYROID-ASSOCIATED OPHTHALMOPATHY IN JAPANESE**

Y. Hiromatsu, T. Fukutani, S. Murayama, H. Kaku, I. Miyake, Z. Makita
Department of Endocrinology and Metabolism, Kurume University School of Medicine, Japan

150 Clinical
**THE USE OF A RAPID AUTOMATED PARATHYROID HORMONE (PTH)
IMMUNOASSAY FOR INTRAOPERATIVE PTH MEASUREMENTS ON ELECSYS
2010**

S. Saw, R. Khoo, B. Saw, W.K. Cheah, T.C. Aw
Department of Laboratory Medicine, National University Hospital, Singapore

151 Clinical
**THYROID GLAND VOLUME, IODINE EXCRETION AND TYPE OF FEEDING IN
NEWBORNS**

I. Molnar¹, L. Csathy², G. Szasz³, J. Math⁴
¹Department of Pediatrics, ²Department of Radiology, and ³III Department of Internal Medicine,
Kenézy County and Teaching Hospital, and ⁴Institute of Psychology, University of Debrecen,
Debrecen, Hungary

152 Clinical
IODINE DEFICIENCY DISEASE IN THE DOMINICAN REPUBLIC

M. Chaudhari, T. Malasanos, A. Selman-Almonte, L. Pagan, S. Pino, M. Previti, L.E. Braverman,
A. Rosenbloom
Department of Pediatrics, University of Florida College of Medicine, Gainesville, Florida, and
Boston Medical Center, Boston, Massachusetts, USA

- 153 Clinical
EVALUATING THE DOSE SELECTION PROCESS FOR RADIOACTIVE IODINE TREATMENT IN PATIENTS WITH HYPERTHYROIDISM
H. Baskin, L. Gordon
Medical University of South Carolina, Charleston, South Carolina, USA
- 154 Clinical
EVOLUTION OF THE THYROID FUNCTION POST RADIOIODINE-131 IN PATIENTS WITH GRAVES' HYPERTHYROIDISM
L. Luna, C. Zea, E. Aliaga, A. Vicharra, D. Huapaya
Service of Endocrinology and Nuclear Medicine, National Hospital Guillermo Almenara Irigoyen, Lima, Peru
- 155 Clinical
MONONEUROPATHY IN THYROTOXICOSIS
S. Mukherjee, P.J. Weston
Department of Diabetes and Endocrinology, Royal Liverpool University Hospital, Liverpool, United Kingdom
- 157 Thyroid Hormone Action
THYROID HORMONE DOWN REGULATES ADENOVIRUS 5 E1A AND SWI/SNF DEPENDENT GENE ACTIVATION IN YEAST BY THE HUMAN THYROID HORMONE RECEPTOR
X. Meng, Y. Yang, X. Cao, J. Mymryk, P. Walfish
Samuel Lunenfeld Research Institute of Mount Sinai Hospital and Department of Medicine, University of Toronto Medical School, Toronto, Ontario, Canada
- 158 Thyroid Hormone Action
IMPACT OF OVERT HYPERTHYROIDISM ON LEFT VENTRICULAR CHAMBER FUNCTION AND MYOCARDIAL MECHANICS IN HUMANS
B. Biondi, E.A. Palmieri, S. Fazio, M. Pulcrano, F. Affuso, V. Palmieri, G. Lombardi
University Federico II School of Medicine, Naples, Italy
- 159 Thyroid Hormone Action
TRIIDOTHYRONINE REGULATES THE TRANSCRIPTION OF KERATIN GENES IN A PATTERN ASSOCIATED WITH EPIDERMAL PROLIFERATION
J.D. Safer, L.M. Fraser, M. Hoa, S. Ray, M.F. Holick
Section of Endocrinology, Diabetes and Nutrition, Department of Medicine, Boston University School of Medicine, Boston, Massachusetts, USA
- 160 Thyroid Hormone Action
DIFFERENTIAL ABUNDANCE OF ENDOGENOUS THYROID HORMONE RECEPTOR ISOFORMS MEDIATES VARIABLE PHENOTYPIC EXPRESSION IN RESISTANCE TO THYROID HORMONE (RTH)
M. Kaneshige, Y. Kamiya, S.-y. Cheng
National Cancer Institute, National Institutes of Health, Bethesda, Maryland, USA

Thursday, November 8, 2001
Review of Posters 107 to 165 – Regency Ballroom

161 Thyroid Hormone Action
**SEQUENTIAL ULTRASTRUCTURAL MODIFICATIONS IN THE HEART OF
HYPERTHYROID RATS**

P. Ferreira, C. L'Abatte, P. Abrahamsohn, E. Kimura, A. Moriscot
Department of Histology and Embryology ICB, USP, São Paulo, Brazil

162 Thyroid Hormone Metabolism
**PARTIAL DEFICIENCY OF THYROXINE-BINDING GLOBULIN DUE TO A
MUTATION IN THE SIGNAL PEPTIDE**

S.D. Knuedeler, S. Reutrakul, C. Greenlee, A. Fingerhut, S. Refetoff, O.E. Janssen
Department of Endocrinology, Center of Internal Medicine, University of Essen, Germany;
Departments of Medicine and Pediatrics, University of Chicago, Chicago, Illinois, and
Allentown, Pennsylvania, USA

163 Thyroid Hormone Metabolism
**5'DEIODINASE TYPE I (D1) IN THE BREAST CANCER CELL LINE MCF-7 IS
STIMULATED BY RETINOIC ACIDS (ALL TRANS AND 9 CIS) BUT NOT BY
TRIIODOTHYRONINE AND ISOPROTERENOL**

P. Garcia-Solis, E. Gallardo de la O, C. Aceves
Centro de Neurobiologia, UNAM, Queretaro, Mexico

164 Thyroid Hormone Metabolism
**SPECIFICITIES OF HUMAN HYDROXYSTEROID SULFOTRANSFERASE 2B1a
(SULT2B1a) AND MUTANT SULT2B1a ENZYMES FOR THYROID HORMONES AND
DEHYDROEPIANDROSTERONE (DHEA)**

X-Y. Li^{1,3}, D. Clemens^{1,2}, R. Anderson^{1,3}
¹VA and ²University of Nebraska Medical Centers, and ³Creighton University School of
Medicine, Omaha, Nebraska, USA

165 Thyroid Hormone Metabolism
**STUDY ON THE THYROID STATUS IN RATS DURING THE MONTH FOLLOWING
SINGLE EXTERNAL GAMMA-IRRADIATION**

Z. Niatsetskaya, L. Nadolnik
Laboratory of Endocrine Glands Biochemistry of the Institute of Biochemistry, National
Academy of Sciences, Grodno, Belarus

42 Autoimmunity
**THE THYROGLOBULIN GENE IS A MAJOR GENE FOR AUTOIMMUNE THYROID
DISEASE**

Y. Tomer, D.A. Greenberg, E.S. Concepcion, T.F. Davies
Division of Endocrinology and Metabolism, Department of Medicine, and Department of
Psychiatry, Mount Sinai School of Medicine, New York, New York, USA

45 Autoimmunity
**EXPRESSION OF FULLY FUNCTIONAL RECOMBINANT HUMAN CTLA4 AND ITS
INHIBITORY EFFECT ON INTRINSIC IL-2: ROLE OF A SIGNAL PEPTIDE
POLYMORPHISM**

Y. Xu, P.N. Graves, Y. Tomer, T.F. Davies
Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine, Mount Sinai
School of Medicine, New York, New York, USA

Thursday, November 8, 2001
Morning Session

10:00 - 11:30 am Simultaneous Symposia

Regency Ballroom

Clinical: Thyroid Grand Rounds

Chair: Anthony S. Jennings

Speakers: E. Chester Ridgway

Gregory A. Brent

Douglas Ross

David S. Cooper

Supported by an educational grant from Abbott Laboratories

Palladian Room

Basic: Autoimmunity and the Thyroid

Chair: Terry J. Smith

Models of Graves' Disease

Bellur S. Prabhakar

TSH Receptor as an Autoantigen

Basil Rapoport

Thyroid Cell Apoptosis and Autoimmunity

James R. Baker, Jr.

Panel Discussion

11:30 am -
12:30 pm

Meet the Professor Luncheons

Advance purchase required; admission by ticket only

Calvert Room

Breast Cancer and Thyroid Disease

Peter P. Smyth

Diplomat Room

Gene Expression Profiling and DNA Micro Array

Paul M. Yen

Executive Room

Cardiovascular Effects of Thyroid Hormone

Irwin L. Klein

Supported by an educational grant from Abbott Laboratories

Thursday, November 8, 2001
Morning and Afternoon Sessions

11:30 am Senate Room
**12th International Thyroid Congress
International Coordinating Committee
Delegates' Lunch Meeting**
Asia Oceania Thyroid Association
Latin American Thyroid Society
European Thyroid Association
American Thyroid Association

12:45 - 2:15 pm Simultaneous Symposia

Regency Ballroom
Clinical: Thyroid Cancer
Chair: Steven I. Sherman

PET Scanning	R. Michael Tuttle
rhTSH for Use in I-131 Therapy	Paul W. Ladenson
Management of Advanced/Aggressive Thyroid Cancer	Matthew D. Ringel

Supported by Genzyme, Inc.

Palladian Room
Basic: T3 Receptor Isoform Specific Effects
Chair: Wolfgang H. Dillmann

Structure of T3 Receptor alpha and T3 Receptor beta	John D. Baxter
T3R alpha Predominant Effects	Wolfgang H. Dillmann
T3R beta Predominant Effects	Douglas Forrest
T3R beta2 Effects in Pituitary	Fredric E. Wondisford

Panel Discussion

2:15 - 3:15 pm Regency Ballroom
Van Meter Award Lecture – To Be Announced
*Established in 1930, the Van Meter is awarded to an investigator
younger than age 41 for outstanding contributions to research on the
thyroid gland or related subjects.*
*Supported by an educational grant from Quest Diagnostics' Nichols
Institute*

Thursday, November 8, 2001
Afternoon Session

3:15 - 3:45 pm Ambassador and Regency Ballrooms
Exhibits, Poster Review, and Coffee Break

Regency Ballroom
Review of Posters:
Program Numbers 5 to 40 (Poster Plus)
Program Numbers 107 to 165
Investigators available to discuss their posters

3:45 - 4:45 pm Regency Ballroom
Short Call Abstract Presentations
Chairs: William W. Chin and Michael M. Kaplan
*A forum presenting the latest in thyroid-related research
(abstracts are in program insert)*

Short Call Abstract 1 3:45 pm Thyroid Hormone Metabolism
**TYPE 2 IODOTHYRONINE DEIODINASE IS ESSENTIAL FOR ADAPTIVE
THERMOGENESIS IN BROWN ADIPOSE TISSUE**
A.C. Bianco¹, L.A. Jesus¹, S.D. Carvalho¹, M.O. Ribeiro¹, M. Schneider², S.-W. Kim¹, J.W.
Harney¹, P.R. Larsen¹
¹Thyroid Division, Brigham and Women's Hospital, Boston, Massachusetts, and ²Department of
Physiology, Dartmouth Medical School, Lebanon, New Hampshire, USA

Short Call Abstract 2 4:00 pm Cancer
**BOTH NEAR-TOTAL/TOTAL THYROIDECTOMY (NTT) AND THYROID HORMONE
SUPPRESSION THERAPY (THST) IMPROVE SURVIVAL OF PATIENTS WITH
PAPILLARY THYROID CARCINOMA**
J. Jonklaas, N. Sarlis, D. Litofsky, D. Cooper, K. Ain, S. Bigos, J. Brierley, B. Haugen, P. Kim,
P. Ladenson, P. Marks, J. Robbins, D. Ross, M. Skarulis, H. Maxon, S. Sherman
National Thyroid Cancer Treatment Cooperative Study Group, Houston, Texas, USA

Short Call Abstract 3 4:15 pm Cancer
**SPOT 14 PROMOTES LIPID SYNTHESIS, GROWTH, AND ANTIAPOPTOSIS IN
BREAST CANCER AND MAMMARY EPITHELIAL CELLS**
O. Kulinetz, C. McGraw, J. Kung, J. Moncur, W. Kinlaw
Department of Medicine, Division of Endocrinology, Dartmouth Medical School, Hanover, New
Hampshire, USA

Short Call Abstract 4 4:30 pm Cancer
**OVEREXPRESSION OF A METASTASIS INHIBITING RECEPTOR (METASTIN
RECEPTOR) IN PAPILLARY, BUT NOT FOLLICULAR, THYROID CARCINOMA**
M.D. Ringel¹, V. Bernet², H. Burch², F. Schuppert³, K.D. Burman¹, M. Saji¹
¹Washington Hospital Center and MedStar Research Institute, Washington, DC; ²Walter Reed
Army Medical Center, Washington, DC, USA; and ³Hospital Bad Oeyenhausen, Oeyenhausen,
Federal Republic of Germany

Thursday, November 8, 2001
Afternoon Session and Evening

4:45 - 6:15 pm Simultaneous Symposia

Diplomat Room

Clinical: Developments in Nuclear Medicine

Moderator: Howard J. Dworkin

Treatment of Large Toxic and Non-toxic Goiters with I-131	John E. Freitas
Octreotide Scanning in Graves' Disease	George J. Kahaly
Altered Response to I-131 After Antithyroid Drug Treatment of Hyperthyroidism	Henry B. Burch

Palladian Room

**Basic: Deiodinases and Thyroid Hormone Metabolism:
Advances and Controversies**

Moderator: P. Reed Larsen

Thyroid Hormone Deiodinases as Selenocysteine Proteins	Marla J. Berry
Regulation of Deiodinase II	Antonio C. Bianco
Animal Models of DII Null Mutation	Donald L. St. Germain

Panel Discussion

6:45 - 9:30 pm *Blue Room*
Abbott Night of Appreciation
Admission by name badge

[this page is intentionally left blank so that Friday's program can begin on an even-numbered page. this page is not to be printed. it's included just as a reminder that a blank page goes here]

Special Program
Friday, November 9, 2001

6:00 - Palladian Room

7:45 am **Frontiers in the Clinical Applications of Recombinant TSH**
Moderator: Paul W. Ladenson

rTSH-Stimulated Thyroglobulin Testing

Leonard Wartofsky

rTSH-Stimulated Radioiodine Ablation
of Thyroid Remnants

Richard J. Robbins

rTSH-Stimulated Radioiodine Therapy
for Nodular Goiter

Geraldo Medeiros-Neto

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Hospital for the Albert Einstein College of Medicine
Credit issued by Albert Einstein College of Medicine
Supported by an unrestricted educational grant from
Genzyme, Inc.*

73rd Annual Meeting of the American Thyroid Association
Omni Shoreham Hotel
Washington, DC
November 7-10, 2001

Friday, November 9, 2001

8:00 - 9:00 am Regency 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. Supported by an educational grant from Abbott Laboratories

Metabolizing Thyroid Hormone: Where, When, and Why?

Valerie Anne Galton, Ph.D.
Professor of Physiology
Dartmouth Medical School
Lebanon, New Hampshire

9:00 - 10:00 am Simultaneous Symposia

Regency Ballroom

Clinical: Outpatient Thyroid Surgery – Pros and Cons

Moderator: Quan-Yang Duh

Speakers: Paul LoGerfo
Robert Udelsman
Geoffrey B. Thompson

Palladian Room

Basic: Thyroid Cancer and Gene Rearrangement

Moderator: Bryan R. Haugen

PAX8–PPAR γ 1 Fusion and Thyroid Cancer Todd G. Kroll

Medullary Cancer and RET Gene Robert F. Gagel

Supported by Genzyme, Inc.

Friday, November 9, 2001
Review of Posters 180 to 238 – Regency Ballroom

10:00 - 10:30 am Ambassador and Regency Ballrooms
Exhibits, Poster Review, and Coffee Break

Regency Ballroom
Review of Posters
Program Numbers 5 to 40 (Poster Plus)
Program Numbers 180 to 238
Investigators available to discuss their posters

Program Numbers 180 to 238:

180 Autoimmunity
**HUMAN TSHR IMMUNIZATION INITIATES GRAVES' DISEASE IN CHINESE
HAMSTERS**
T. Ando, M. Imaizumi, A. Pritsker, T. Davies
Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine, Mount Sinai
School of Medicine, New York, New York, USA

181 Autoimmunity
**AUTOIMMUNE THYROID DISEASE AND URINARY IODINE EXCRETION IN THE
OLD ORDER AMISH**
E.M. Allen, K.D. Silver, W.-C. Hsueh, E. Streeten, T. Pollin, P.W. Ladenson, B.D. Mitchell,
A.R. Shuldiner
University of Maryland Medical System and Johns Hopkins Hospital, Baltimore, Maryland, USA

182 Autoimmunity
**MORE ON THE ROLE OF HLA GENES IN THE SUSCEPTIBILITY TO
AUTOIMMUNE THYROID DISEASE IN 102 FAMILIES**
Y. Ban, Y. Tomer, E.S. Concepcion, D.A. Greenberg, T.F. Davies
Division of Endocrinology, Diabetes, and Bone Diseases, Department of Medicine and
Department of Psychiatry, Mount Sinai School of Medicine, New York, New York, USA

Program Number 183 has been withdrawn

184 Autoimmunity
ETHNIC VARIATION IN AUTOIMMUNE THYROID DISEASE IN SRI LANKA
J. Lazarus, K. Premawardhana, A. Parkes, H. Adams, P. Smyth, K. Medagoba, H. de Silva
Department of Medicine, University of Wales College of Medicine, Cardiff, Wales, United
Kingdom

185 Autoimmunity

AUTOIMMUNE THYROIDITIS AND THYROID CARCINOMA IN CHILDHOOD

A. Kurtev

University Pediatric Hospital, Sofia, Bulgaria

186 Autoimmunity

PAINFUL HASHIMOTO THYROIDITIS (HT) UNRESPONSIVE TO ANTI-INFLAMMATORY AGENTS: CASE REPORTS DOCUMENTING THE EFFECTIVENESS OF SURGERY

L. Gourgiotis¹, N. Al-Zubaidi², D.A. Papanicolaou², L. Guthrie¹, M.C. Skarulis¹, M.J. Merino³, H.R. Alexander³, S.K. Libutti³, N.J. Sarlis¹

¹National Institute of Diabetes and Digestive and Kidney Diseases, ²National Institute of Child Health and Human Development, and ³National Cancer Institute, National Institutes of Health, Bethesda, Maryland, USA

187 Cancer

IMMUNOHISTOCHEMICAL EXPRESSION OF RETINOID X RECEPTOR (RXR) ISOFORMS IN HUMAN THYROID TUMORS

Y. Takiyama, N. Miyokawa, A. Sugawara, S. Kato, K. Ito, K. Sato, M. Katagiri

Second Department of Pathology, Asahikawa Medical College, Hokkaido, Japan

188 Cancer

SODIUM IODIDE SYMPORTER (NIS) AND IODIDE IN THYROIDAL AND EXTRATHYROIDAL TISSUES

R. Dwyer, D. Smith, A. Hill, E. McDermott, N. O'Higgins, P. Smyth

University College Dublin and St. Vincent's University Hospital, Dublin, Ireland

189 Cancer

THE BENZOQUINONE ANSAMYCIN GELDANAMYCIN INDUCES CYTOTOXICITY AND INHIBITS TUMOR INVASION BY EPIDERMAL GROWTH FACTOR IN HUMAN THYROID CANCER CELL LINES

J. Park, M. Yeh, M. Wong, Q. Duh, O.H. Clark

Department of Surgery, University of California San Francisco/Mount Zion Medical Center, San Francisco, California, USA

190 Cancer

SODIUM IODIDE SYMPORTER MEDIATED TUMOR IMAGING AND RADIOIODINE THERAPY IN RATS BEARING INTRACEREBRAL GLIOMA

D. Shen, J. Cho, W. Yang, B. Williams, G. Hinkle, R. Pozderac, R. Kloos, R. Barth, S. Jhiang

Departments of Physiology and Cell Biology, Pathology, Radiology, and Internal Medicine, Ohio State University, Columbus, Ohio, USA

191 Cancer

A RETROSPECTIVE COMPARISON OF THYROID REMNANT ABLATION RATES FOLLOWING HYPOTHYROID PREPARATION OR rhTSH PREPARATION IN PATIENTS WITH DIFFERENTIATED THYROID CARCINOMA

R. Robbins, S. Larson, A. Shaha, A. Dimich, M. Fleisher, R. Ghossein, R.M. Tuttle

Endocrinology, Nuclear Medicine, Head and Neck Surgery, Clinical Chemistry, and Pathology Services, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

Friday, November 9, 2001
Review of Posters 180 to 238 – Regency Ballroom

192 Cancer
**INTER-INSTITUTIONAL REVIEW OF THYROID FNA: IMPACT ON CLINICAL
MANAGEMENT OF THYROID NODULES**

Z. Baloch, S. Heerden, P.K. Gupta, V.A. LiVolsi, S.J. Mandel, R. Weber, D. Fraker
University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, USA

193 Cancer
**THREE WEEK THYROXINE WITHDRAWAL-THYROGLOBULIN STIMULATION
TEST TO DETECT RESIDUAL/RECURRENT DIFFERENTIATED THYROID
CARCINOMA**

A. Golger, T.R. Fridman, N. Beasley, S. Eski, I. Witterick, I. Rosen, J. Freeman, P. Walfish
Departments of Otolaryngology, Surgery, and Medicine, Mount Sinai Hospital and the University
of Toronto School of Medicine, Toronto, Ontario, Canada

194 Cancer
**TSH-STIMULATED SERUM THYROGLOBULIN IN THE 1-10 NG/ML RANGE
SUGGESTS A LOW LONG-TERM RECURRENCE RISK FOR PAPILLARY THYROID
CANCER (PTC)**

S. Fatemi¹, J. Nicoloff², J. LoPresti², C. Spencer²
¹Southern California Permanente Medical Group and ²Keck School of Medicine, University of
Southern California, Los Angeles, California, USA

Program Number 195 has been withdrawn

196 Cancer
**THE BELARUS-USA CHERNOBYL THYROID DISEASE COHORT STUDY (CTDCS):
CORRELATION OF URINE IODINE CONCENTRATION WITH SERUM
THYROGLOBULIN (TG) AND THYROID CANCER, NODULES, AND ULTRASOUND
(US) VOLUME**

V. Ostapenko¹, O. Polyanskaya¹, S. Petrenko¹, L. Danilova¹, V. Drozd¹, E. Buglova¹, N.
Lesnikova¹, V. Rzhetski¹, D. Perevoznikov¹, A. Tjuricov¹, V. Stezhko¹, A.B. Brill², D. Fink², E.
Greenebaum², I. Masnyk³, R.J. McConnell², J. Robbins⁴
¹Clinical Research Institute of Radiation Medicine and Endocrinology, Ministry of Health,
Minsk, Belarus; ²Columbia University, New York, New York; and ³National Cancer Institute
and ⁴National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of
Health, Rockville, Maryland, USA

197 Cancer
**REGIONAL NECK FAILURE AFTER COMPREHENSIVE NODE DISSECTION FOR
PAPILLARY THYROID CANCER IS UNIFORMLY FATAL**

J.F. Pingpank, A.R. Sasson, A.P. Hanlon, T. LeVoyer, C. Freidman, J.A. Ridge
Head and Neck Surgery Section, Department of Surgical Oncology, and the Departments of
Radiation Oncology and Biostatistics, Fox Chase Cancer Center, Philadelphia, Pennsylvania,
USA

198 Cancer

ACTIVATION OF Wnt SIGNALING IN DIFFERENTIATED HUMAN THYROID CANCERS

K. Ishigaki, H. Namba, M. Nakashima, T. Nakayama, N. Mitsutake, S. Maeda, T. Kanematsu, S. Yamashita

Nagasaki University School of Medicine, Nagasaki, Japan

199 Cancer

EPIDEMIOLOGICAL STUDY ON THE INCIDENCE OF THYROID DISEASES IN CHILDREN AROUND CHERNOBYL BORN BEFORE AND AFTER THE ACCIDENT

S. Yamashita, Y. Shibata, N. Takamura, K. Ashizawa, H. Namba, S. Nagataki, G. Panasyuk, V. Masyakin, V. Vorobei

Atomic Bomb Disease Institute, Nagasaki University School of Medicine, Nagasaki, Japan

200 Cancer

THE USE OF CYTOKERATIN 19 mRNA EXPRESSION AS A MARKER FOR CIRCULATING TUMOR CELLS IN THYROID CANCER

R.M. Tuttle, S. Bhattacharya, R. Robbins, M. Ringel, R. Ghossein

Memorial Sloan-Kettering Cancer Center, New York, New York, USA

201 Cancer

FREQUENCY OF PROTOONCOGENE RET MUTATIONS IN MULTIPLE ENDOCRINE NEOPLASIA TYPE 2 (MEN 2) SYNDROMES

M. Puñales-Khaled, H. Graf, J. Gross, A.L. Maia

Division of Endocrinology, Hospital de Clinicas de Porto Alegre, UFRGS, Porto Alegre, Brazil

202 Cancer

PAPILLARY THYROID CARCINOMA OCCURS AS A FEATURE OF COWDEN DISEASE

N. Bhala, J. Aniszewski, I.D. Hay, J.R. Goellner, C.E. Dvorak, H. Abu-Lebdeh, N.L. Eberhardt, B. McIver

Division of Endocrinology, Mayo Clinic and Foundation, Rochester, Minnesota, USA

Program Number 203 will be displayed on Wednesday, November 7 after Program Number 100

204 Cancer

IS BAG-1 A USEFUL MOLECULAR MARKER IN THE DIFFERENTIATION OF THYROID CANCER FROM BENIGN THYROID NODULES?

Y. Vaishnav, J. Anderson, C. Adair, B. Reinhardt, M. Saji, K. Burman, H. Burch, M. Ringel, V. Bernet

Endocrinology Service, Division of Clinical Investigation, and Pathology Service, Walter Reed Army Medical Center, and Endocrinology Service, Washington Hospital Center, Washington, DC, USA

Friday, November 9, 2001
Review of Posters 180 to 238 – Regency Ballroom

205 Cancer
TUBULIN-BINDING AND ANTI-PROLIFERATIVE ACTIVITY OF THYROID HORMONE ANALOGUES
M. Sandhagen, K. Mellström, P. Brandt, N. Garg, M. Rahimi-Ghadim, J. Malm
Karo Bio AB, Novum, Huddinge, Sweden

206 Cancer
HYPERCALCEMIA AND LEUKOCYTOSIS SECONDARY TO METASTATIC THYROID CANCER
Y. Ousman, M. Ringel, K. Burman
Division of Endocrinology, Washington Hospital Center, Washington, DC, USA

Program Number 207 has been withdrawn

208 Cancer
UNFAVORABLE COURSE OF ONE CASE OF PAPILLARY THYROID MICROCARCINOMA
R. Antonelli, P. Daniele, M. Terlini
Division of Endocrinology, S. Eugenio Hospital, Rome, Italy

209 Cell Biology
CELL CYCLE ARREST OF ANAPLASTIC THYROID CARCINOMA CELLS INDUCED BY BMP-7
A. Franzén, N-E. Heldin
Department of Genetics and Pathology, Rudbeck Laboratory, Uppsala University Hospital, Uppsala, Sweden

210 Cell Biology
PROTEASOME ACTIVITY IN VARIOUS THYROID DISEASES AND REGULATION OF TRAIL-MEDIATED APOPTOSIS
H. Yamazaki¹, E. Mezosi¹, P.G. Gauger², N.W. Thompson², J.R. Baker, Jr.^{1,3}
Departments of ¹Internal Medicine and ²Surgery, and ³Center for Biologic Nanotechnology, University of Michigan Medical Center, Ann Arbor, Michigan, USA

211 Cell Biology
GLYCOSAMINOGLYCANS IN THE THYROID
C. Antunes¹, E. Steffens¹, A. Viktor², G.J. Kahaly¹
Departments of ¹Endocrinology and Metabolism and ²Medical Statistics, Gutenberg University Hospital, Mainz, Germany

212 Cell Biology
PPAR-(GAMMA) ANTAGONIST: POSSIBLE THERAPY FOR THYROID EYE DISEASE?
K.J. Starkey, J.S. Davies, M. Evans, M. Ludgate
Department of Medicine (Endocrinology), UWCM, Cardiff, United Kingdom

213 Cell Biology

THE PROTEIN KINASE C PATHWAY INHIBITS IODIDE UPTAKE VIA Na+K+ATPase IN CALF THYROID CELLS

L.V. Bocanera, L. Krawiec, G. Nocetti, G.J. Juvenal, D. Silberschmidt, M.A. Pisarev
Nuclear Biochemistry Division, Department of Radiobiology, CNEA, and Department of Biochemistry, University of Buenos Aires School of Medicine, Buenos Aires, Argentina

214 Clinical

LONG-TERM FOLLOW-UP OF BENIGN NODULAR THYROID PATHOLOGY BY REPEAT FINE NEEDLE ASPIRATION

A. Orlandi, A. Puscar, E. Capriata, E. Marx, H. Fideleff
Endocrinology Unit, Pathology Division, Hospital Alvarez, Buenos Aires, Argentina

Program Number 215 has been withdrawn

216 Clinical

COMPARISON OF THE PERIPHERAL EFFECTS OF SUPPRESSIVE TSH SECRETION DOSES OF 3,5,3'-TRIIODOTHYROACETIC ACID AND LEVOTHYROXINE

G. Brenta, M. Schnitman, O. Fretes, M. Gurfinkel, S. Damilano, M.A. Pisarev
Department of Endocrinology and Metabolism, Hospital Francés de Buenos Aires, Argentina

217 Clinical

EFFECTS OF CHRONIC IODINE EXCESS IN PEACE CORPS VOLUNTEERS

E.N. Pearce¹, A.R. Gerber², D.B. Gootnick², L.K. Khan³, R. Li³, S. Pino¹, L.E. Braverman¹
¹Boston Medical Center, Boston University School of Medicine, Boston, Massachusetts; ²Peace Corps Office of Medical Services, Washington, DC; and ³CDC-NCCDPHP, Atlanta, Georgia, USA

218 Clinical

MOLECULAR CHARACTERISATION OF CONGENITAL HYPOTHYROIDISM

N. Jordan^{1,2}, J. Gregory³, S. Keeling⁴, C. Evans², M. Ludgate¹
Departments of ¹Medicine, ²Medical Biochemistry, ³Child Health, and ⁴Medical Genetics, UWCM, Cardiff, Wales, United Kingdom

219 Clinical

RESISTANCE TO THYROID HORMONE DOES NOT ABROGATE THE TRANSIENT THYROTOXICOSIS ASSOCIATED WITH GESTATION

J. Anselmo, T. Kay, K. Dennis, R. Szmulewitz, S. Refetoff, R. Weiss
Hospital Divino Espirito Santo, Ponta Delgada, Azores, Portugal, and Department of Medicine, University of Chicago, Chicago, Illinois, USA

Friday, November 9, 2001
Review of Posters 180 to 238 – Regency Ballroom

- 220 Clinical
THE EFFECT OF THEOPHYLLINE ON RADIOIODINE UPTAKE BY THE HUMAN THYROID
R. Zemans, P.W. Ladenson
Division of Endocrinology and Metabolism, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA
- 221 Clinical
RESISTANCE TO THYROID HORMONE (RTH) IN A PATIENT WITH NORMAL THYROID HORMONE (TH) RECEPTORS ALPHA AND BETA
S. Parikh, S. Ando, A. Schneider, M.C. Skarulis, N.J. Sarlis, P.M. Yen
Clinical Endocrinology Branch, National Institute of Diabetes and Digestive and Kidney Diseases, and National Institute on Child Health and Human Development, National Institutes of Health, Bethesda, Maryland, USA
- 222 Clinical
THYROID AUTOIMMUNE DISEASE IN HEPATITIS C AND B INFECTED PATIENTS
L. Figueroa¹, E. Jimenez¹, A. Montilla¹, L. Deibis²
¹Endocrinology and Metabolism Service, Caracas University Hospital, and ²Immunology Institute, Universidad Central de Venezuela, Venezuela
- 223 Clinical
THYROID SIZE DETERMINATION BY TRADITIONAL PALPATION METHOD POINTS TO "NO GOITER" ENDEMIC WHEREAS ULTRASONOGRAPHY CONSISTENTLY IDENTIFIES GOITER IN WELL-NOURISHED IODINE REplete ADULTS: POSSIBLE ROLE OF FLAVONOIDS
S. Brahmabhatt, R. Brahmabhatt, C. Eastman, S. Boyages
Department of Diabetes and Endocrinology and Institute of Clinical Pathology and Medical Research, Westmead Hospital, Westmead, NSW 2145, Australia
- 224 Clinical
PREDICTABILITY OF BODY CELL MASS BY BIOIMPEDANCE IN THYROTOXICOSIS: COMPARISON WITH WHOLE-BODY K40 COUNTING
M. Dittmar¹, H. Reber², G.J. Kahaly³
Departments of ¹Biology/Anthropology, ²Nuclear Medicine, and ³Endocrinology/Metabolism, Gutenberg University, Mainz, Germany
- 225 Clinical
INTERLEUKIN-6 AND THYROID HORMONE IN THE PEDIATRIC CARDIAC SURGERY PATIENT
C.K. McMahon, V.A. Parnell, I. Klein, K. Ojamaa
North Shore University Hospital/New York University School of Medicine, Manhasset, New York, USA
- 226 Clinical
THYROID FINDINGS IN ASYMPTOMATIC ADULTS IN VENEZUELA: A CLINICAL, LABORATORY, AND ULTRASONOGRAPHIC STUDY
L. Figueroa, R.M. Baldonado, C.A. Palermo
Endocrinology and Metabolism Service, Caracas University Hospital, Universidad Central de Venezuela, Venezuela

227 Clinical

TWO SIBLINGS WITH SUBACUTE THYROIDITIS

H. Fukazawa, H. Kurihara, J. Sasaki, K. Tanimura
Morioka National Hospital, Morioka, Japan

228 Clinical

A PARATHYROID CYST IN THE THYROID GLAND

H. Kurihara, S. Tanimura, J. Sasaki
Kurihara Thyroid Clinic, Morioka, Iwate, Japan

229 Thyroid Hormone Action

OXIDATION OF LDL IN OVERT AND SUBCLINICAL HYPOTHYROIDISM

L.H. Duntas, E. Mantzou, M. Kalarritou, D.A. Koutras
Evgenidion Hospital, University of Athens, Athens, Greece

230 Thyroid Hormone Action

**GLOBAL ANALYSIS OF THYROID HORMONE-RESPONSIVE GENES IN RAT
PITUITARY GC CELLS BY THE SERIAL ANALYSIS OF GENE EXPRESSION**

S.W. Kim, S.J. Kim, P.R. Larsen
Thyroid Division, Brigham and Women's Hospital, Harvard Medical School, Boston,
Massachusetts, USA

231 Thyroid Hormone Action

**COMPARATIVE EFFECTS OF THE SELECTIVE THYROID HORMONE RECEPTOR
(TR-BETA1) AGONIST KB-000,141 (KB) ON CHOLESTEROL, METABOLIC RATE
AND HEART RATE IN RATS**

G. Grover¹, J. Baxter², L. Ye³, L-Y. Lin³, J. Malm³, L-G. Bladh³, P. Sleph¹, R. George¹,
K. Mellstrom³

¹Bristol-Myers Squibb, Pennington, New Jersey; ²University of California San Francisco, San
Francisco, California, USA; and ³Karo BIO AG, Sweden

232 Thyroid Hormone Action

INFLUENCE OF THYROID HORMONES ON NEURONAL DIFFERENTIATION

D. Laverdure Dupont, D. Bellabarba
Endocrine Division and Department of Physiology, Medical School, University of Sherbrooke,
Sherbrooke, Quebec, Canada

233 Thyroid Hormone Action

**CRYSTAL STRUCTURE ANALYSIS OF TETRAIODOTHYROACETIC ACID (T4Ac)
BOUND TO HUMAN AND RAT TRANSTHYRETIN**

V. Cody, J.R. Luft, W. Pangborn, A. Wojtczak, T. Muziol
Hauptman-Woodward Medical Research, Buffalo, New York, USA, and N. Copernicus
University, Torun, Poland

Program Number 234 has been withdrawn

Friday, November 9, 2001
Review of Posters 180 to 238 – Regency Ballroom

235 Thyroid Hormone Metabolism
TELEOST LIVER EXPRESSES DEIODINASE TYPE 1 mRNA
A. Orozco, P. Villalobos, C. Valverde
Centro de Neurobiología, UNAM, Campus UNAM-UAQ-Juriquilla, Querétaro, México

Program Number 236 has been withdrawn

237 Thyroid Hormone Metabolism
**ACTIVITY AND RESPONSE TO SERUM OF THE MOUSE AND HUMAN TYPE 3
DEIODINASE GENE (DIO3) PROMOTERS**
A. Hernandez, D.L. St. Germain
Dartmouth Medical School, Lebanon, New Hampshire, USA

238 Thyroid Hormone Metabolism
**DEXAMETHASONE INHIBITS GROWTH FACTOR-INDUCED TYPE 3 DEIODINASE
(D3) ACTIVITY AND mRNA EXPRESSION IN A CULTURED CELL LINE DERIVED
FROM RAT NEONATAL BROWN FAT VASCULAR-STROMAL (BVS-1) CELLS**
A. Hernandez, D.L. St. Germain
Dartmouth Medical School, Lebanon, New Hampshire, USA

Friday, November 9, 2001
Morning Session

10:30 - 11:30 am Regency Ballroom

Plenary Session – Topic Highlights

Oral Abstract Presentations

Chair: Frances E. Carr

166 10:30 am Thyroid Hormone Action

SERINE 142 OF THE NUCLEAR THYROID HORMONE RECEPTOR (BETA)1 IS A MITOGEN-ACTIVATED PROTEIN KINASE TARGET IN CV-1 CELLS TREATED WITH L-THYROXINE

H.-Y. Lin, F.B. Davis, B.L. West, P.J. Davis

Clinical Research Institute, Albany Medical College, Wadsworth Center, New York State Department of Health, and Stratton VA Medical Center, Albany, NY; and Department of Biochemistry, University of California at San Francisco, San Francisco, California, USA

167 10:45 am Thyroid Hormone Action

THYROID FUNCTION IN MICE DEFICIENT IN THYROID HORMONE RECEPTOR α OR β IN COMBINATION WITH SRC-1: EVIDENCE FOR ISOTYPE SPECIFICITY

P. Sadow¹, O. Chassande², J. Xu³, E. Koo¹, J. Samarut³, B. O'Malley³, S. Refetoff¹, R. Weiss¹

¹Department of Medicine, University of Chicago, Chicago, Illinois, USA; ²Ecole Normale Supérieure, Lyon, France; and ³Baylor College of Medicine, Houston, Texas, USA

Program Number 168 has been withdrawn

Program Number 169 will be presented at 3:30 pm today as part of the session on "Thyroid Hormone Metabolism and Action"

170 11:00 am TRH-TSH

CELL SURFACE-ANCHORED EXTRACELLULAR DOMAIN OF THE TSH RECEPTOR MODULATES EXPRESSION AS WELL AS BASAL AND TSH-DEPENDENT ACTIVATION

V. Fremont, K.P.T. Tong, B.D. Weintraub, M.W. Szkudlinski

University of Maryland, Baltimore, Maryland, and Trophogen, Inc., Rockville, Maryland, USA

171 11:15 am TRH-TSH

STIMULATORY AND INHIBITORY EFFECTS OF TTF-2 ON GLYCOPROTEIN HORMONE (ALPHA)-SUBUNIT PROMOTER ACTIVITY IN PITUITARY AND NON-PITUITARY CELL LINES

V. Sarapura, D. Haakinson

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

Friday, November 9, 2001
Morning and Afternoon Sessions

11:45 am - Ambassador and Regency Ballrooms
12:45 pm **Lunch, Exhibits, and Poster Review**
(12:30 Dessert in the Regency Ballroom and Palladian Room)
Lunch supported by Abbott Laboratories
Program Numbers 5 to 40 (Poster Plus)
Program Numbers 180 to 238
Investigators available to discuss their posters

12:45 - 2:00 pm Simultaneous Symposia

Regency Ballroom

**Clinical: Clinical Research in Thyroidology:
Journal Editors' Perspectives**

Moderator: Michael M. Kaplan

Panelists: Terry F. Davies
Delbert A. Fisher
Jerome M. Hershman
Robert D. Utiger

Supported by an educational grant from Abbott Laboratories

Palladian Room

Basic: Protein Trafficking in the Thyrocyte

Chair: Leonard D. Kohn

Lipoprotein Receptors (Megalin) and
Thyroglobulin Uptake

Michel Marino

Thyroglobulin Trafficking in the Thyrocyte

Paul S. Kim

Thyroglobulin Signaling: Role of the ASGPR
in Thyroid and Nonthyroid Tissues

Leonard D. Kohn

2:00 - 3:00 pm Palladian Room

Paul Starr Award Lecture

This annual Award recognizes an outstanding contributor to clinical thyroidology. The Award is supported in part by generous contributions from Boris Catz, M.D., and from Monarch Pharmaceuticals.

Graves' Ophthalmopathy: A Personal Odyssey

Colum A. Gorman, M.B., B.Ch., Ph.D.

Professor of Medicine, Mayo Foundation

Interim Chair, Department of Health Sciences Research

Mayo Clinic, Rochester, Minnesota

Friday, November 9, 2001
Afternoon Session

3:00 - 3:15 pm Paldadian Room
Coffee Break

3:15 - 4:00 pm Simultaneous Sessions

Regency Ballroom
Thyroid and the Brain
Oral Abstract Presentations
Chairs: Alan P. Farwell and William B. Kinlaw III

172 3:15 pm Thyroid and the Brain
BRAIN GLUCOSE UTILIZATION IN MICE WITH A TARGETED MUTATION IN THE THYROID HORMONE α OR β RECEPTOR GENE
Y. Itoh¹, T. Esaki¹, M. Kaneshige², H. Suzuki², L. Sokoloff¹, S.-y. Cheng², J. Nunez¹
¹Laboratory of Cerebral Metabolism, National Institute of Mental Health, and ²Laboratory of Molecular Biology, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, USA

173 3:30 pm Thyroid and the Brain
THYROID HORMONE REGULATES THE ACCUMULATION OF OLIGODENDROCYTES IN THE DEVELOPING RAT BRAIN
M.M. Seibel, S.A. Jones, C.N. Mariash, G.W. Anderson
University of Minnesota, Minneapolis, Minnesota, USA

174 3:45 pm Thyroid and the Brain
SELECTIVE MEMORY DISTURBANCES IN CHILDREN WITH CONGENITAL HYPOTHYROIDISM SIGNIFY THAT THYROID HORMONE IS NECESSARY FOR HUMAN HIPPOCAMPAL FORMATION
J. Rovet, D. Jewell, S. Hepworth
University of Toronto and Hospital for Sick Children, Toronto, Ontario, Canada

Program Number 175 has been withdrawn

Friday, November 9, 2001
Afternoon Session

3:15 - 4:00 pm Simultaneous Sessions

Palladian Room

Thyroid Hormone Metabolism and Action

Oral Abstract Presentations

Chairs: Donald L. St. Germain and Rebecca S. Bahn

176 3:15 pm Thyroid Hormone Metabolism

DIFFERENTIAL REGULATION OF TYPE 1 AND TYPE 3 DEIODINASE ACTIVITY IN VENTRICULAR TISSUE DURING PATHOLOGICAL HYPERTROPHY

A. Schiel, W. Simonides, C. van Hardeveld, F. Wassen, G. Kuiper, T. Visser, B. Zandieh-Doulabi, O. Bakker, W. Wiersinga

Institute for Cardiovascular Research, Vrije Universiteit Medical Center, Amsterdam; Department of Internal Medicine III, Erasmus University, Rotterdam; and Department of Endocrinology, Amsterdam Medical Center, Amsterdam, The Netherlands

Program Numbers 177 and 178 have been withdrawn

169 3:30 pm Thyroid Hormone Action

LACK OF SRC-1 INCREASES RESISTANCE TO THYROID HORMONE IN MICE WITH A TARGETED MUTATION IN THE THYROID HORMONE RECEPTOR β GENE

Y. Kamiya¹, M. Kaneshige¹, J. Xu², M. Willingham³, B. O'Malley², S-y. Cheng¹

¹Laboratory of Molecular Biology, National Cancer Institute, Bethesda, Maryland; ²Department of Cell Biology, Baylor College of Medicine, Houston, Texas; and ³Department of Pathology, Wake Forest University School of Medicine, Winston-Salem, North Carolina, USA

179 3:45 pm Thyroid Hormone Metabolism

FUNCTIONAL CHARACTERIZATION OF PENDRIN AND TWO NATURALLY OCCURRING MUTANTS: EVIDENCE FOR PENDRIN-MEDIATED IODIDE EFFLUX

M.P. Gillam, O.K. Arseven, J. Rutishauser, C.W. Stephan, P. Kopp

Division of Endocrinology, Metabolism, and Molecular Medicine, Northwestern University, Chicago, Illinois

Friday, November 9, 2001
Afternoon Session and Evening

4:00 - 4:45 pm Palladian Room
**National Academy of Clinical Biochemistry International
Thyroid Guidelines Development Workshop:
Implications for Clinical Practice**
Carole A. Spencer
Supported by an educational grant from Abbott Laboratories

4:45 - 6:45 pm Palladian Room
American Thyroid Association Annual Business Meeting
ATA Members Only

7:30 - 8:15 pm *Birdcage*
ATA Annual Reception

8:15 - 11:00 pm *Empire Ballroom*
ATA Annual Banquet
Advance purchase required; admission by ticket only
Music by Joe DiStefano

Historical Vignette
**Medullary Carcinoma of the Thyroid and Calcitonin:
A Brief History**
Clark T. Sawin

Special Program
Saturday, November 10, 2001

6:00 - Palladian Room
7:45 am **Sunrise “Early Riser” Seminar:**
Hot Topics in Thyroidology
Chair: E. Chester Ridgway

Improving Outcomes in Thyroid Cancer
with TSH-Suppressive Therapy Steven I. Sherman

Does Subclinical Hypothyroidism
Really Increase the Risk of
Cardiovascular Disease? Leonard Wartofsky

Improving the Utility of Fine Needle
Aspiration Biopsy for the Diagnosis
of Thyroid Tumors Bryan R. Haugen

Sponsored by The Endocrine Society
Supported by an unrestricted educational grant from Abbott
Laboratories

**73rd Annual Meeting of the American Thyroid Association
Omni Shoreham Hotel
Washington, DC
November 7-10, 2001**

Saturday, November 10, 2001

8:00 - 9:00 am Simultaneous Sessions

Palladian Room

Clinical: Cancer

Oral Abstract Presentations

Chairs: Ian D. Hay and Quan-Yang Duh

251 8:00 am Cancer

SERUM VASCULAR ENDOTHELIAL GROWTH FACTOR LEVELS ARE ELEVATED IN METASTATIC DIFFERENTIATED THYROID CANCER BUT NOT INCREASED BY TSH STIMULATION

R.M. Tuttle, M. Fleisher, G.L. Francis, R.J. Robbins

Endocrinology Service, Department of Medicine, Clinical Chemistry Service, Department of Clinical Laboratories, Memorial Sloan-Kettering Cancer Center, New York, New York, and Endocrinology Service, Department of Pediatrics, Walter Reed Army Medical Center, Washington, DC, USA

252 8:15 am Cancer

IS THE SERUM THYROGLOBULIN RESPONSE TO rhTSH SUFFICIENT BY ITSELF TO MONITOR FOR RESIDUAL DIFFERENTIATED THYROID CARCINOMA?

R.J. Robbins, M. Fleisher, S.M. Larson, R.M. Tuttle

Endocrinology, Nuclear Medicine, and Clinical Chemistry Services, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

253 8:30 am Cancer

UTILITY OF ULTRASONOGRAPHY IN POST-SURGICAL MANAGEMENT OF PATIENTS WITH THYROID CARCINOMA

P. Arora, M. Blum

Division of Endocrinology, New York University Medical Center, New York, New York, USA

254 8:45 am Cancer

LACK OF IMPACT OF RADIOIODINE THERAPY IN THYROGLOBULIN-POSITIVE DIAGNOSTIC SCAN-NEGATIVE PATIENTS WITH FOLLICULAR CELL-DERIVED THYROID CANCER

V. Fatourech, I. Hay, H. Javedan, G. Wiseman, B. Mullan, C. Gorman

Division of Endocrinology and Metabolism and Division of Nuclear Medicine, Mayo Clinic, Rochester, Minnesota, USA

Saturday, November 10, 2001
Morning Session

8:00 - 9:00 am Simultaneous Sessions

Diplomat Ballroom

**Basic: Thyroid Hormone Action, Thyroid and the Brain,
and Cell Biology**

Oral Abstract Presentations

Chair: Paul M. Yen

255 8:00 am Thyroid Hormone Action

**THE EFFECTS OF T3 AND TRIAC ON HYPERTENSIVE CARDIOMYOPATHY IN
DAHL RATS**

P. Cettour¹, J.F. Aubert², P. Trigo Trindade¹, F. Pernin¹, R. Lerch¹, T. Visser³, H.R. Brunner², F. Rohner-Jeanrenaud¹, A. Burger¹

¹University of Geneva, Hôpital Cantonal Universitaire, Geneva, Switzerland; ²Division of Hypertension, CHUV, Lausanne, Switzerland; and ³Department of Internal Medicine, Erasmus University Medical Center, Rotterdam, The Netherlands

Program Number 256 has been withdrawn

242 8:15 am Cell Biology

**EXAMINING THE TARGETING OF cog-MUTANT THYROGLOBULIN:
ENDOPLASMIC RETICULUM RETENTION AND ASSOCIATED DEGRADATION**

Y. Park, P. Arvan

Division of Endocrinology, Albert Einstein College of Medicine, Bronx, New York, USA

257 8:30 am Thyroid and the Brain

**TESTING THE "ENDOCRINE DISRUPTOR" HYPOTHESIS FOR CHILDHOOD
NEUROBEHAVIORAL DISORDERS**

S.H. Lamm, O.P. Soldin, J.S. Lamm, S. Mosee, S.H. Lai

Consultants in Epidemiology and Occupational Health, Inc., Howard University School of Medicine, Washington, DC, and Johns Hopkins School of Hygiene and Public Health, Baltimore, Maryland, USA

Program Number 258 has been withdrawn

244 8:45 am Cell Biology

**MOLECULAR ANALYSIS AND STRUCTURE/FUNCTION IMPLICATIONS OF TWO
CONGENITAL NIS MUTATIONS (G93R and G395R)**

O. Dohán, M. Paroder, V. Gavrielides, C. Ginter, M. Amzel, N. Carrasco

Albert Einstein College of Medicine, Bronx, New York, USA

Saturday, November 10, 2001
Morning Session

9:00 - 10:00 am Palladian Room

**Abbott Laboratories State of the Art Lecture
Using Genomics to Understand Hormone Action**

Paul Meltzer, M.D., Ph.D.

Head, Section of Molecular Genetics, Cancer Genetics Branch
National Human Genome Research Institute, National Institutes of
Health, Bethesda, MD

Supported by an educational grant from Abbott Laboratories

10:00 - 10:15 am Palladian Room

Coffee Break

10:15 - 11:15 am Simultaneous Sessions

Palladian Room

Clinical Advances

Oral Abstract Presentations

Chairs: Kenneth D. Burman and Kenneth H. Hupart

245 10:15 am Clinical

**ADMINISTRATION OF A SINGLE DOSE OF RECOMBINANT HUMAN
THYROTROPIN ENHANCES THE EFFICACY OF THE RADIOIODINE (RAI)
TREATMENT OF MULTINODULAR GOITER (MNG)**

M. Silva, I. Rubi3, C. Buchpiguel, R. Rom3o, S. Cardia, R. Camargo, E. Tomimori, E. Gebrin,
G. Medeiros-Neto

Division of Endocrinology and Department of Radiology, University of S3o Paulo Medical
School, S3o Paulo, SP, Brazil

246 10:30 am Clinical

**LONG-TERM SAFETY OF ORBITAL RADIOTHERAPY FOR GRAVES'
OPHTHALMOPATHY**

C. Marcocci, L. Bartalena, G. Barbesino, R. Rocchi, M. Nardi, S. Mazzeo, F. Cartei, B. Mazzi, F.
Menconi, A. Pinchera

Departments of Endocrinology and Metabolism, Neurosciences, and Oncology, University of
Pisa, Pisa, and Department of Clinical and Biological Sciences, University of Insubria, Varese,
Italy

Program Number 247 has been withdrawn

248 10:45 am Clinical

**EXPERIENCE WITH ULTRASOUND-GUIDED FINE-NEEDLE ASPIRATION BIOPSY
IN THE EVALUATION OF THYROID**

F. Fierro-Renoy, R. Fierro-Benitez, R. Guerrero

Endocrinology Section, Hospital Metropolitano, Quito, Ecuador

Saturday, November 10, 2001
Morning Session

Program Number 249 is now an oral abstract presentation taking the place of Program Number 1

250 11:00 am Clinical
DERMOPATHY OF GRAVES' DISEASE (PRETIBIAL MYXEDEMA): LONG TERM OUTCOME
K. Schwartz, V. Fatourechi, D. Ahmed, G. Pond
Division of Endocrinology, Department of Dermatology and Section of Biostatistics, Mayo Clinic, Rochester, Minnesota, USA

10:15 - 11:15 am Simultaneous Sessions

Diplomat Room
Basic: Cell Biology
Oral Abstract Presentations
Chair: Terry J. Smith

239 10:15 am Cell Biology
THE ROLE OF GRP94 IN THE PROCESSING OF THYROGLOBULIN MOLECULES BY FLUORESCENCE RESONANCE ENERGY TRANSFER SPECTRO-MICROSCOPY
S. Menon, J. Kim, W. Abplanalp, B. Li, P. Kim
Division of Endocrinology, University of Cincinnati, Cincinnati, Ohio, USA

240 10:30 am Cell Biology
THERE IS AN INTRINSIC ULTRADIAN HORMONAL SECRETORY RHYTHM IN GH4C1 CELLS, WHICH IS REGULATED BY A POST-GOLGI MECHANISM INDEPENDENT OF TRANSLATION
M.A. Greer, S.E. Greer
Division of Endocrinology, Department of Medicine, Oregon Health Sciences University, Portland, Oregon

241 10:45 am Cell Biology
ABERRANT APOPTOSIS IN THYROID CELLS FROM NODULAR GOITERS
E. Mezosi¹, J.D. Bretz¹, H. Yamazaki¹, S.H. Wang¹, P.G. Gauger², N.W. Thompson², J.R. Baker, Jr.^{1,3}
Departments of ¹Medicine and ²Surgery, and ³Center for Biologic Nanotechnology, University of Michigan Medical Center, Ann Arbor, Michigan, USA

Program Number 242 is being presented at 8:15 as part of the Basic Science session

243 11:00 am Cell Biology
PRODUCTION OF POLYCLONAL ANTIBODY TO HUMAN TTF2 SUITABLE FOR IMMUNOCYTOCHEMISTRY
M.J. Sequeira^{1,2}, F. Al-Khafaji¹, M.D. Lewis¹, M. Wheeler², B. Jasani³, M. Ludgate¹
Departments of ¹Medicine/Endocrinology, ²Surgery, and ³Pathology, UWCM, Cardiff, Wales, UK

Program Number 244 is being presented at 8:45 as part of the Basic Science session

Saturday, November 10, 2001
Morning Session

11:15 -12:45 pm Simultaneous Symposia

Palladian Room

Clinical: Thyroid Ultrasound

Moderator: Manfred Blum

The Use of Ultrasound in Nodular Thyroid Disease	Susan J. Mandel
Use of Ultrasound to Detect and Ablate Involved Nodes After Surgery	Carl C. Reading
ATA and ETA Survey: Nontoxic Multinodular Goiter	Paul W. Ladenson

Diplomat Ballroom

Basic: Iodine Transport

Moderator: Sheue-yann Cheng

Pendrin and Its Role in Thyrocytes, Inner Ear, and Kidney	Peter A. Kopp
The Thyroidal Iodide Transporter as Potential Therapeutic Support for Prostate Cancer	John C. Morris, III
Sodium Iodide Symporter (NIS): Structure/Function Relations and Pathophysiological Relevance	Nancy Carrasco

12:45 pm *73rd Annual Meeting Ends*

*Attendees may pick up their Continuing Medical Education certificate
outside the Palladian Room as they leave the Meeting*