

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Program Number 1 has been withdrawn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. Nithyananthan, 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- α 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. Nithiyanthan, 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

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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

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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. Upadhyay, 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

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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. Nithiyanthan, 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
Review of Posters 41 to 100 – Regency Ballroom

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⁺/T⁻ 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
Review of Posters 41 to 100 – Regency Ballroom

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. Nithiyananthan, 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**

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**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

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**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

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THREE YEARS EXPERIENCE WITH THE DANISH HYPER- AND HYPOTHYROIDISM REGISTER

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

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TRIODOTHYRONINE (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

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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

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INDICATORS FOR THE ASSESSMENT OF IODINE DEFICIENCY DISORDERS IN BASHKORTOSTAN

O. Malievsky
Bashkir State Medical University, Ufa, Russia

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PATHOMORPHOSIS OF DIFFUSE NONTOKSIC GOITER AMONG CHILDREN UNDER SALT IODIZATION PROGRAMME

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

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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

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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

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**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

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**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

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**ACCURACY OF FINE NEEDLE ASPIRATION BIOPSY IN NODULAR THYROID
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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