

Fourth Joint LWPES/ESPE Meeting

1993 Final Program

FRIDAY, JUNE 4, 1993

MORNING

8:15 **Opening Ceremony**

Fairmont Grand Ballroom

Melvin M. Grumbach, Chairman,
Organizing Committee
Jo Anne Brasel, President, LWPES
Ieuan A. Hughes, President, ESPE

PLENARY SESSION, I

Fairmont Grand Ballroom

- 8:30 1. **Lawson Wilkins Lecture:**
*Diabetes Mellitus, Type I — Islet Cell
Destruction and Growth Studied in
Transgenic Animal Models*
Nora Sarvetnick
Department of Neuropharmacology
Scripps Research Institute,
LaJolla, CA

9:30 **BREAK**

CONCURRENT SYMPOSIA, I

10:00-11:30 A.M.

**SESSION A: Prenatal Diagnosis and
Treatment of CAH**

Fairmont Grand Ballroom

- 10:00 7. *Molecular Pathology of 21-Hydroxylase
Deficiency*
Tom Strachan
Division of Human Genetics
University of Newcastle upon Tyne, UK
- 10:20 8. *Prenatal Diagnosis of Congenital Adrenal
Hyperplasia Due to 21-Hydroxylase
Deficiency*
Yves Morel
I.N.S.E.R.M.
Hopital Debrousse,
Lyon, France
- 10:40 **Prenatal Treatment Round Table Discussion**
Chair: Walter L. Miller
Discussants: Drs. Dorr, Forest, Morel,
Pang, Speiser, and Strachan

9. *Hormonal Monitoring and Side Effects of
Prenatal Dexamethasone Treatment for 21-
Hydroxylase Deficiency Congenital Adrenal
Hyperplasia*
Songya Pang
Department of Pediatrics
University of Illinois College of Medicine,
Chicago, IL

10. *Prenatal Treatment of Congenital Adrenal
Hyperplasia Due to 21-Hydroxylase
Deficiency: European Experience in 223
Pregnancies at Risk*
M. G. Forest
I.N.S.E.R.M., Hopital Debrousse, Lyon,
France
and
H. G. Dorr
Klinik fur Kinder und Jugendliche,
University Erlangen-Nurnberg,
Erlangen, Germany

11. *Prenatal Treatment of Congenital Adrenal
Hyperplasia*
P. Speiser
Department of Pediatrics
The New York Hospital
Cornell Medical Center,
New York, NY

**SESSION B: IDDM — Pharmacologic and
Transplant Approaches to Therapy**

Mark Hopkins Peacock Court

- 10:00 12. *Design and Use of Cellular Implants for
Treatment of Diabetes (IDDM)*
David Scharp
Department of Surgery
Washington University,
St. Louis, MO

- 10:30 13. *Antigen Directed Therapies to Prevent Insulin Dependent Diabetes*
Noel K. Maclaren
Department of Pathology and
Laboratory Medicine
University of Florida,
Gainesville, FL
- 11:00 14. *Role of Glucose in Diabetic Complications*
Anthony Cerami
The Picower Institute for Medical Research
Manhasset, NY

11:30 **LUNCH/POSTERS/EXHIBITS**

AFTERNOON

POSTER SYMPOSIUM

12:00 - 1:15 P.M.

Genibnormalities of the Growth Hormone Axis

Stanford Court India Suite

171. *Exclusion of the GHRH Gene as a Candidate for Most Cases of Familial Isolated Growth Hormone Deficiency*
L. A. Perez-Jurado, J. D. Cogan, J. A. Phillips, III, and U. Francke
137. *Detection of Heterogeneous Growth Hormone (GH) Gene Splicing by DNA Analysis of Dried Blood Spots From GH Deficient Subjects.*
S. Miller-Davis, J. Cogan, J. A. Phillips, III, R. D. G. Milner, A. Al-Ashwal, and N. A. Sakati
340. *Spectrum of Growth Hormone Receptor Mutations and Associated Haplotypes in Laron Syndrome*
S. Amselem, F. Dastot, P. Duquesnoy, M-L. Sobrier, S. Vallex, B. Duriez, and M. Goossens
339. *Molecular Analysis of Two Families with Laron Syndrome and Positive Growth Hormone Binding Protein*
P. Duquesnoy, M-L. Sobrier, C. R. Buchanan, B. Duriez, H. G. Maheshwari, M. O. Savage, M-C. Postel-Vinnay, M. Norman, A. M. Cotterill, M. A. Preece, M. Goossens, and S. Amselem
191. *A New Type of Inherited Growth Hormone Deficiency: A Compound Heterozygote of a 6.7 KB Deletion, Including the GH-1 Gene, and Two Base Deletion in the Third Exon of the GH-1 Gene*
Y. Igarashi, T. Kamijo, M. Ogawa, Y. Nishi, N. Iwatani, H. Kono, T. Masumura, and J. Koga
221. *Molecular Analysis of a Large Bedouin Kindred with IGHD Type IB*
E. Leiberman, R. Carmi, Y. Limoni, H. Abdul Latif, M.R. Brown, and J.S. Parks

CONCURRENT ORAL PRESENTATIONS

1:30 - 3:00 p.m.

SESSION A: Growth, Growth Factors, Growth Hormone, I

Fairmont Grand Ballroom

- 1:30 297. *Spontaneous Growth and Final Height in SGA Infants*
J. Karlberg and K. Albertsson-Wikland
- 1:45 385. *Insulin-Like Growth Factors (IGFs) Stimulate VLA-4 Integrin Gene Expression in Differentiating Mouse Skeletal Muscle Cells*
S. M. Rosenthal and D. Hsiao
- 2:00 322. *Increased Chromosome Fragility in Lymphocytes of Short Normal Children Treated with Recombinant Human Growth Hormone*
G. L. Spadoni, B. Tedeschi, M. L. Sanna, P. Vernole, D. Caporossi, S. Cianfarani, B. Nicoletti, B. Boscherini
- 2:15 270. *Radioimmunologic Determination of GHBP in Sera of Children with Short Stature*
J. Kratzsch, W. F. Blum, T. Selisko, and E. Keller
- 2:30 189. *Advantages of the Computer-Aided Image Analysis System for Estimating TW Skeletal Maturity: Increased Reliability and a Continuous Scale*
J. M. Tanner, R. D. Gibbons, and R. D. Bock
- 2:45 359. *Low Proconvertin (Factor VII) and Impaired Blood Clotting Due to Growth Hormone Deficiency in the Rat*
L. S. G. Savendahl, K. G. Engstrom, and K. Grankvist

SESSION B: Neuroendocrine/Pituitary

Mark Hopkins Peacock Court

- 1:30 154. *Characterization of the Molecular Defect in the Vasopressin-Neurophysin II Gene in a Family with Autosomal Dominant Neurohypophyseal Diabetes Insipidus*
D. R. Repaske and J. E. Browning
- 1:45 184. *N-Methyl-D-Aspartate (NMDA) Stimulates LHRH Release via the NMDA Receptor in an LHRH Neuronal Cell Line (GT1-1)*
P. Mahachoklertwattana, J. Sanchez, M. M. Grumbach, S. L. Kaplan, and S. M. Rosenthal
- 2:00 153. *Inhibition of GnRH Secretion by IGF-1 Degradation into a Sub-Product Antagonist at NMDA Receptors: An Effect Developing After the Onset of Puberty*
J. P. Bourguignon, A. Gerard, M. L. Alvarez Gonzalez, and P. Franchimont
- 2:15 148. *PIT-1 Gene Expression in the Anterior Pituitary is Modulated by Changes in Circulating Levels of Testosterone*
J. Argente, S. Gonzalez-Parra, J. A. Chowen, and L.M. Garcia-Segura
- 2:30 144. *Sexual Dimorphism of Galanin Gene Expression in Growth Hormone-Releasing Hormone Neurons of the Rat During Development*
H. A. Deleamarre-van de Waal, K. A. Burton, E. B. Kabigting, D. K. Clifton, and R. A. Steiner

- 2:45 150. *Neonatal Testosterone Modulates the Number and Responsivity of Growth Hormone-Releasing Hormone (GHRH) Neurons*
J. A. Chowen, S. Gonzalez-Parra,
L. M. Garcia-Segura, and J. Argente

SESSION C: Fetal, Neonatal, Pregnancy

Stanford Court Ballroom

- 1:30 405. *Pregnancy Lactogens in the Rat Conceptus: Circulating Levels, Distribution of Binding, and Expression of Receptor mRNA*
M. S. Freemark, K. Kirk, K. Pihoker, P. Driscoll,
and M. Robertson
- 1:45 408. *Anti-Mullerian Hormone in Early Human Development*
N. Josso, I. Lamarre, and J.Y. Picard
- 2:00 413. *Protein Kinase C Isotype Expression During Early Pituitary Development*
L. Cuttler, M. Axline, and A.P. Fields

SESSION C(cont'd): Calcium/Phosphorus, Bone

- 2:15 470. *Nephrocalcinosis (NC) Due to Hyperparathyroidism in X-Linked Hypophosphatemic Rickets (XLHR) — Results of a Retrospective Study in 155 Children and Adolescents*
K. Mohnike, K. Knye, M. Cagnoli, K. Kruse,
E. Schoenau, and the German Phosphate-Diabetes
Study Group
- 2:30 473. *VGR-1/BMP-6 Induces Osteogenic Differentiation in Mesenchymal Cells*
S. E. Gitelman, M. Kirk, A. J. Kahn, and
R. Derynck
- 2:45 467. *Ultrasound Velocity in the Os Calcis, Thumb, and Patella During Childhood as Indicator of Bone Density*
E. Schoenau, A. Rademacher, K. Klein, and
D. Michalk

CONCURRENT SYMPOSIA, II

3:00-4:30 P.M.

SESSION A: Insulin-Like Growth Factors

Fairmont Grand Ballroom

- 3:00 15. *In Vivo Metabolic Actions of IGF-1*
Jurgen Zapf
Department of Medicine
University Hospital,
Zurich, Switzerland

Round Table Discussion: IGF-1 Treatment of Growth Hormone Insensitivity

- 3:30 16. *Changes in Body and Bone Composition in Adolescent Growth Hormone Receptor Deficient (GHRD) Patients Receiving rhIGF-1 and a GnRH Analog*
Jaime Guevara-Aguirre
IEMIR
Quito, Ecuador

- 3:40 17. *Therapeutic Response to Recombinant IGF-1 in Thirty-Two Patients with Growth Hormone Insensitivity*
M. O. Savage
St. Bartholomew's Hospital,
London, UK

- 3:50 18. *One Year Treatment with IGF-1 of Children with Laron Syndrome*
Zvi Laron
Children's Medical Center of Israel
Petah Tikva, Israel

- 4:00 *Effects of Prolonged IGF-1 Treatment in Children with Growth Hormone Insensitivity Syndrome (GHIS)*
Louis Underwood
Division of Pediatric Endocrinology
University of North Carolina,
Chapel Hill, NC

4:10 - 4:30 **Discussion**

SESSION B: Neuroendocrinology of Reproduction

Stanford Court Ballroom

- 3:00 19. *Regulation of GnRH Release from GnRH Neuronal Cell Lines*
Richard I. Weiner
Reproductive Endocrinology Center
University of California,
San Francisco, CA

- 3:30 20. *Kallmann Syndrome: A Defect in Neuronal Target Recognition*
Andrea Ballabio
Institute for Molecular Genetics Baylor
College of Medicine,
Houston, TX

- 4:00 21. *Spatio-Temporal Patterns of Hormone and Hormone Transcription Factor Gene Expression During the Development and Mature Function of the Neuroendocrine System*
Larry W. Swanson
Department of Biological Sciences
University of Southern California,
Los Angeles, CA

SESSION C: Abnormalities of Steroidogenesis and Metabolism

Mark Hopkins Peacock Court

- 3:00 22. *Molecular Basis of Congenital Adrenal Hyperplasia Due to 3beta-Hydroxysteroid Dehydrogenase Deficiency*
Jacques Simard
MRC Group in Molecular Endocrinology
CHUL Research Center,
Quebec, Canada

- 3:30 23. *11beta-Hydroxylase and Hypertension*
P. C. White
Cornell University
Medical College,
New York, NY
- 4:00 24. *Steroid 5alpha-Reductase Type 2 Deficiency*
David W. Russell
Department of Molecular Genetics
University of Texas Southwestern Medical
Center,
Dallas, TX

4:30 **BREAK**

PLENARY SESSION, II

Fairmont Grand Ballroom

- 5:00 2. *PIT-1 and Its Naturally Occurring Genetic Mutations: Answers and Questions about the Molecular Biology of Pituitary Development and Disease*
Holly A. Ingraham
Department of Obstetrics, Gynecology and Reproductive Sciences
University of California,
San Francisco, CA

6:00 **ADJOURN**

SATURDAY, JUNE 5, 1993

MORNING

PLENARY SESSION, III

Fairmont Grand Ballroom

- 8:30 3. *G Proteins in Transmembrane Signaling*
Henry R. Bourne
Departments of Pharmacology and Medicine
University of California, San Francisco, CA

9:30 **BREAK**

CONCURRENT SYMPOSIA, III

10:00-11:30 A.M.

SESSION A: Transmembrane Signaling Diseases

Mark Hopkins Peacock Court

- 10:00 25. *The McCune Albright Syndrome: A Genetically Determined Signal Transduction Disorder*
Allen M. Spiegel
NIDDK/NIH,
Bethesda, MD
- 10:30 26. *Growth Hormone Insensitivity Syndrome*
Uta Francke
Howard Hughes Medical Institute and Departments of Genetics and Pediatrics,
Stanford University,
Stanford, CA

- 11:00 27. *Molecular Genetics of Early-Onset Non-Insulin Dependent (Type 2) Diabetes Mellitus*
Graeme I. Bell
Howard Hughes Medical Institute
The University of Chicago,
Chicago, IL

SESSION B: FETAL AND PLACENTAL ENDOCRINOLOGY

Stanford Court Ballroom

- 10:00 28. *The Role of Insulin-Like Growth Factors in Normal and Abnormal Fetal Growth*
Peter D. Gluckman
Research Centre for Developmental Medicine and Biology University of Auckland, Auckland,
New Zealand
- 10:30 29. *Placental Growth Hormone and Related Proteins*
Nancy E. Cooke
Departments of Medicine and Genetics
The University of Pennsylvania,
Philadelphia, PA
- 11:00 30. *Placental Epidermal Growth Factor Receptors: From Physiology to Pathology*
Daniele Evain-Brion
Physiopathology of Development Laboratory
C.N.R.S.-E.N.S.,
Paris, France

SESSION C: IDDM — Etiology, Genetics, and Environmental Factors

Fairmont Grand Ballroom

- 10:00 31. *Immunogenetics of Type 1 Diabetes Mellitus*
Massimo Trucco
Department of Pediatrics
University of Pittsburgh,
Pittsburgh, PA
- 10:30 32. *Population Screening for Risk of IDDM*
Edwin A. M. Gale
Department of Diabetes and Metabolism
St. Bartholomew's Hospital,
London, UK
- 11:00 33. *Incidence Variation and Etiology of Type 1 Diabetes*
Claire Levy-Marchal
Hopital Robert Debre,
Paris, France

11:30 **LUNCH/POSTERS/EXHIBITS**

AFTERNOON

POSTER SYMPOSIUM

12:00 - 1:15 P.M.

Diabetes Mellitus/Fuel Metabolism

Mark Hopkins Room of the Dons

404. *Glucose Entry into the Fetal Hepatocyte (FH) Requires Non-Insulin Dependent GLUT-1 and GLUT-2*
O. Zheng, L. Levitsky, D. Rhoads, and K. Mink
445. *Elevated Anti-Bovine Serum Albumin (BSA) Antibodies Predict Development of Type 1 Diabetes in Siblings of Diabetic Children*
J. Karjalainen, M. Knip, H.-K. Akerblom, H.-M. Dosch, and the Study Group of Childhood Diabetes in Finland
431. *Anti-Retrovirus Antibodies in Insulin-Dependent Diabetic Children at Diagnosis and During 1-2.6 Years Follow-up*
R. Lorini, L. Cortona, A. Scaramuzza, G. Achilli, E. Cattaneo, P. Ferrante, and F. Severi
424. *Beta-Cell Destruction in Insulin-Dependent Diabetes Mellitus — A Stepwise Series of Events*
B. G. Cuartero, D. Hougaard, F. Pociot, J. Argente, L. I. Larsson, and J. Nerup
418. *Nicotinamide and Interleukin-1 (IL-1) Effects on Human Pancreatic Islet Function*
U. Zumsteg, M. Brendel, R. Alejandro, and J. Nerup
417. *Identification of a Marker to Enrich Populations of Endocrine Cell Precursors from the Human Fetal Pancreas*
A. Hayek, G.M. Beattie, M.I. Mally, T. Otonkoski, J.S. O'Brien, and F. Levine

CONCURRENT ORAL PRESENTATIONS

1:30 - 3:00 p.m.

SESSION A: Growth, Growth Factors, Growth Hormone, II

Fairmont Grand Ballroom

- 1:30 203. *A Role for IGF-1 and Its Binding Proteins in Neuronal Rescue Following Asphyxial Injury*
P. D. Gluckman, J. Guan, E. Bilharz, E. Sirimanne, O. Miller, and C. Williams
- 1:45 294. *Interleukin-1 Differentially Stimulates Insulin-Like Growth Factor Binding Protein 3 Release from Human Articular Chondrocytes*
R. C. Olney, M. Mohtai, D. M. Wilson, and R. L. Smith
- 2:00 411. *Lack of 150kDa Ternary Complex Formation in Serum From the Human Fetus In Utero: Increased Bioavailability of Circulating IGF-1*
P. Bang, R. G. Rosenfeld, M. Stangenberg, and M. Westgren
- 2:15 235. *Is Immunoreactive IGFBP-3 in the Urine an Indicator of Growth Hormone Deficiency (GHD)?*
S. E. Gargosky, K. F. Wilson, H. Anhalt, M. MacGillivray, and R. G. Rosenfeld
- 2:30 292. *Insulin-Like Growth Factor Binding Proteins from Primary Cultures of Rat Ovarian Theca-Interstitial (ROTI) Cells: Regulation by LH and IGF-1*
J. F. Cara and J. Fan
- 2:45 237. *Characterization and Regulation of IGFBP-4 in Cultured Mouse Leydig Cells (TM-3)*
T. Hasegawa, P. Cohen, P. J. Fielder, Y. Hasegawa, and R. G. Rosenfeld

SESSION B: Steroids, Adrenals, Gonads, I

Mark Hopkins Peacock Court

- 1:30 72. *Identification of Adrenoleukodystrophy Gene and Future Therapy*
P. Aubourg, J. Mosser, A. M. Douar, C. Sarde, J. L. Chaussain, and J. L. Mandel
- 1:45 121. *Abundant Adrenal-Specific Transcription of the P450c21A Pseudogene—Implications for Congenital Adrenal Hyperplasia*
J. D. Bristow, S. E. Gitelman, M. K. Tee, and W. L. Miller
Recipients of the HENNING ANDERSEN PRIZE awarded by the ESPE Council for the best-rated abstract
- 2:00 124. *Germ Cell Localization of Testicular Growth Hormone Releasing Hormone (GHRH)*
P. R. Breyer, C. Srivastava, M. Peredo, J. Rothrock, M. Collard, and O. H. Pescovitz
- 2:15 66. *A Point Mutation of the ACTH Receptor in Familial Glucocorticoid Deficiency*
A. J. L. Clark, A. Weber, A. Grossman, and M. O. Savage

- 2:30 120. *Homozygous Deletion of Amino Acids 487-489 in P450c17 Causes Severe 17alpha-Hydroxylase (17OH) Deficiency*
C. E. Fardella, L. Zhang, P. Mahachoklertwattana, D. Lin, and W. L. Miller
- 2:45 126. *Activating Mutation in the Stimulatory G Protein Gene in an Infant with Adrenocorticonodular Dysplasia*
B. A. Boston, M. Bliziotis, S. Mandel, and S. LaFranchi

SESSION C: Thyroid

Stanford Court Ballroom

- 1:30 536. *Antibodies Blocking Thyroid Growth and Function in Patients with Permanent Congenital Hypothyroidism—In Vitro and In Vivo Study*
A. Gruters, P. M. Schumm-Draeger, U. Bogner, K. P. Liesenkotter, and H. Helge
- 1:45 542. *Thyroid Autoimmunity is Associated with Cognitive Impairment in Turner Syndrome*
J. M. Watkins, T. E. Elliott, E. K. Neely, R. L. Hintz, R. G. Rosenfeld, and B. Lippe
- 2:00 525. *Long-Term Neurodevelopmental Correlates of Treatment Adequacy in Screened Hypothyroid Children*
J. F. Rovet, R. M. Ehrlich, and E. Donner
- 2:15 543. *Pattern of Intrathyroid Subsets of Lymphocytes and Its Correlation with Serum Thyroid Antibodies (Ab) in Juvenile Autoimmune Thyroid Disease (ATD)*
S. Iorcansky, V. Herzovich, J. Rossi, and J. Goldberg
- 2:30 552. *Thyroid Autoimmunity in Children from an Area Contaminated After the Chernobyl Accident*
I. I. Dedov, V. A. Peterkova, A. N. Tiul'pakov, T. V. Semicheva, V. I. Kandror, V. P. Fedotov, and V. F. Stepanenko
- 2:45 529. *Normal Serum T3 Postnatal Surge and Increased Reverse T3 Levels in Selenium-Deficient Rat Pups*
J. P. Chanoine, S. Alex, S. Stone, S. L. Fang, J. L. Leonard, and L. E. Braverman

CONCURRENT SYMPOSIA, IV

3:00-4:30 P.M.

SESSION A: Growth Hormone

Fairmont Grand Ballroom

- 3:00 34. *Molecular Basis of Growth Hormone Action*
Christin Carter-Su
Department of Physiology
University of Michigan Medical School,
Ann Arbor, MI
- 3:30 35. *Structure and Functional Analysis of the Human Growth Hormone Receptor*
William I. Wood
Department of Molecular Biology
Genentech, Inc.,
South San Francisco, CA

- 4:00 36. *Growth Hormone (GH) Deficiency in Adulthood: Short and Long Term Effects of GH Substitution*
Jens Otto Lunde Jorgensen
Medical Department,
Division of Endocrinology and Diabetes
Aarhus Kommunehospital,
Aarhus, Denmark

SESSION B: Neurosteroids

Mark Hopkins Peacock Court

- 3:00 37. *Neurosteroid Biosynthesis: Genes for Adrenal Steroidogenic Enzymes are Expressed Regionally in the Rat Brain*
Synthia H. Mellon
Department of Obstetrics, Gynecology, and Reproductive Sciences
University of California,
San Francisco, CA
- 3:30 38. *Neuroactive Steroids*
Steven M. Paul
Section on Molecular Pharmacology,
Clinical Neuroscience Branch
National Institute of Mental Health,
Bethesda, MD
- 4:00 39. *GABA_A Receptors and Actions of Neurosteroids*
Maria Dorota Majewska
Medications Development Division
National Institute on Drug Abuse, NIH,
Rockville, MD

SESSION C: Bone and Mineral Metabolism

Stanford Court Ballroom

- 3:00 40. *The Role of TGF-beta Family Members in Mesenchymal Differentiation*
Rik Derynck
Departments of Growth and Development,
Anatomy, and Pediatrics
University of California,
San Francisco, CA
- 3:30 41. *Effects of 17β-Estradiol on Human Cartilage Cell Proliferation and Differentiation*
M. T. Corvol
I.N.S.E.R.M.
Hopital Enfants Malades,
Paris, France
- 4:00 42. *Bone Mass Growth During Normal Pubertal Development*
G. E. Theintz
Division of Biology of Growth and Reproduction
Department of Pediatrics
University Hospital,
Geneva, Switzerland

4:30 **BREAK**

PLENARY SESSION, IV

Fairmont Grand Ballroom

- 5:00 4. *The Genetics and Biochemistry of Sex Determination*
Peter N. Goodfellow
Department of Genetics
University of Cambridge,
Cambridge, UK

6:00 **ADJOURN**

SUNDAY, JUNE 6, 1993

MORNING

PLENARY SESSION, V

Masonic Auditorium

- 8:30 5. *Diffusible Factors and Cell Differentiation*
J. B. Gurdon
Wellcome CRC Institute of Cancer and
Developmental Biology
Cambridge, UK
- 9:30 **BREAK**
SYMPOSIUM, V
10:00-11:30 A.M.
Final and Near Height Symposium
Masonic Auditorium
- 10:00 43. *Final Height Attainment in Normal Children with Short Stature Treated with Growth Hormone*
Harvey Guyda
Division of Endocrinology and Metabolism
Montreal Children's Hospital,
Montreal, Canada
- 10:30 44-45. *Height Development in Turner Syndrome (TS): Results of an International Survey Conducted by ESPE/LWPES*
Michael B. Ranke
Section for Paediatric Endocrinology
University Children's Hospital,
Tuebingen, Germany
- 11:00 46. *Final and Near Height of Children with True Precocious Puberty Treated with GnRH (LRF) Agonists*
Robert P. Kelch
Department of Pediatrics
University of Michigan Medical Center,
Ann Arbor, MI

11:30 **LUNCH/POSTERS/EXHIBITS**

AFTERNOON

POSTER SYMPOSIUM

12:00 - 1:15 p.m.

Androgen Action

Mark Hopkins Room of the Dons

123. *Molecular-Phenotypic Correlations in the Androgen Insensitivity Syndrome*
C. A. Quigley, A. Debellis, M. K. El-Awady,
E. M. Wilson, and F. S. French
96. *Receptor Accessory Factor (RAF) Enhances Specific DNA Binding of Androgen and Glucocorticoid Receptors*
S. R. Kupfer, K. B. Marschke, E. M. Wilson, and
F. S. French
60. *Clinical, Biochemical and Genetic Studies in Androgen Insensitivity Syndrome: A Two Year Study*
M. N. Patterson, H. R. Davies, J. A. Batch,
D. M. Williams, B. D. Brown, and I. A. Hughes
95. *Improved Detection of Point Mutations in the Human Androgen Receptor Gene by Denaturing Gradient Gel Electrophoresis of DNA Heteroduplexes Under Stringent Denaturing Conditions*
P. Ghirri and T. R. Brown
114. *Androgen Receptor (AR) Gene Mutations in 6 Families with Androgen Insensitivity Syndrome*
J. M. Lobaccaro, S. Lumbroso, Ch. Belon,
J. L. Chaussain, J. E. Toublanc, B. Leheup, and
Ch. Sultan
73. *High Frequency of Carcinoma-in-Situ and Gonadoblastoma in Children and Adolescents with Androgen Insensitivity (AI) and Gonadal Dysgenesis (GD)*
J. Muller and N. E. Skakkebaek

82. *Partial Androgen Insensitivity Due to VAL — LEU Substitution in Codon 866 of the Androgen Receptor Can Be Treated with High Doses of Testosterone*
G.H.G. Sinnecker, O. Hiort, C. Brack, E. Nitsche, and K. Kruse
116. *XX Males and Ambiguous Genitalia: A Link Between SRY and Androgen Receptor (AR) Gene?*
J.M. Lobaccaro, B. Leheup, N. Boucekkine, S. Lumbroso, J.E. Toubanc, M. Fellous, and Ch. Sultan

CONCURRENT ORAL PRESENTATIONS

1:30 - 3:00 p.m.

SESSION A: Growth, Growth Factors, and Growth Hormone, III

Masonic Auditorium

- 1:30 328. *Both the Low and the High Affinity Nerve Growth Factor Receptors (NGF-R) Are Expressed in Pancreatic Beta Cell Lines*
A. Tazi, R. Scharfmann, M. Asfari, M. Polak, and P. Czernichow
- 1:45 253. *Gene Knockout Mice Demonstrate that IGF-1 Is Essential for Normal Muscle Development*
L. Powell-Braxton, P. Hollingshead, N. Gillett, S. Pitts-Meek, and T.A. Stewart
- 2:00 381. *GH Preincubation Fails to Induce Resistance to the Mitogenic Action of Insulin in a Pygmy T-Cell Line*
M.E. Geffner, N. Bersch, R.C. Bailey, and D.W. Golde
- 2:15 308. *Human Growth Hormone Increases the Intracellular Free Calcium in Cultured Human IM-9 Lymphocytes*
M. M. Ilondo, P. Bouchelouche, and P. DeMeys
- 2:30 264. *Gonadal Steroids Are Capable of Acting Within the Hypothalamus to Modulate Somatostatin (SS) Gene Expression in Pubertal Aged Rats*
P. M. Martha, Jr., J. A. Brewer, and E. O. Reiter
- 2:45 200. *The Effects of Zinc on Lactogen Stimulation of Nb2 Cells Using an Eluted Stain Assay (ESTA)*
M. T. Dattani, T. Weir, P.C. Hindmarsh, C. G. D. Brook, and N. J. Marshall

SESSION B: Steroids, Adrenals, Gonads, II

Mark Hopkins Peacock Court

- 1:30 56. *Mutational Spectrum of the Steroid 21-Hydroxylase Gene*
A. Wedell, E. M. Ritzen, and H. Luthman
- 1:45 122. *Quantitation of Cortisol (F) Production and Elimination Rates in Premature and Term Neonates: Evidence for Pulsatile Secretion*
D. L. Metzger, N. M. Wright, A. D. Rogol, J. D. Veldhuis, and J. R. Kerrigan
- 2:00 112. *The Adrenal Autoantigen in APSI is the Side-Chain Cleavage Enzyme*
O. Winqvist, J. Gustafsson, F.A. Karlsson, and O. Kampe

- 2:15 520. *Evidence that Neuropeptide Y (NPY) Could Represent A Neuroendocrine Inhibitor of Sexual Maturation in Unfavorable Metabolic Conditions in the Rat*
N. M. Gruaz, D. D. Pierroz, F. Rohner-Jeanrenaud, P. C. Sizonenko, and M. L. Aubert
- 2:30 501. *Differences in Inhibin and Gonadotropin Secretion Between Prepubertal and Late Pubertal Females*
P. K. Manasco, S. M. Muly, D. C. Godwin, and M. D. Culler
- 2:45 59. *A New Point Mutation of SRY Gene in Two Sisters With 46 XY Gonadal Dysgenesis*
T. Tajima, N. Shinohara, J. Nakae, and K. Fujieda

SESSION C: Diabetes Mellitus/Fuel Metabolism

Stanford Court Ballroom

- 1:30 400. *Gluconeogenesis from Lactate in Fasting Infants*
N. Nurjhan, F. Rocchiccioli, J. Zeller, and P.F. Bougneres
- 1:45 428. *Time Course of Increased Lipid and Glucose Oxidation During the Early Phase of Childhood Obesity*
C. Le Stunff and P.F. Bougneres
- 2:00 444. *Growth, Development and Carbohydrate Tolerance of Formerly Small for Gestational Age Infants With and Without Glucose Infusion Therapy*
E. Keller, E. Mehlhorn, E. Patz, and H. Willgerodt
- 2:15 440. *Somatostatin (SRIH) Increases Glomerular PG E2 Production in Diabetic and Normal Rats*
D. A. Nickels and M. Poth
- 2:30 434. *Differential Effects of Hypo- & Hyperglycemia on Cognitive Function and Pancreatic Polypeptide (PP) Responses*
S. Gschwend, C. Ryan, T. Williams, S. Arslanian, J. Atchison, and D. Becker
- 2:45 429. *The Effects of rhIGF-1 on GH, IGF-BP3 and IGF-BP1 Concentrations and Insulin Sensitivity in Adolescents with Insulin Dependent Diabetes Mellitus (IDDM)*
T. D. Cheetham, J. M. P. Holly, A. M. Taylor, S. C. Cwyfan-Jones, J. Jones, D. Harris, and D. B. Dunger

CONCURRENT SYMPOSIA, VI

3:00-4:30 P.M.

SESSION A: Pituitary and Hypothalamic Tumors

Masonic Auditorium

- 3:00 47. *Pituitary Adenomas in Childhood*
Charles B. Wilson
Department of Neurosurgery
University of California,
San Francisco, CA

3:30 48. *Hypothalamic Surgery and Chemotherapy*
Michael S. B. Edwards
Department of Neurosurgery
Division of Pediatric Neurosurgery
University of California,
San Francisco, CA

4:00 49. *Endocrine Outcome*
S.M. Shalet
Department of Endocrinology
Christie Hospital,
Manchester, UK

SESSION B: Resistance Syndromes — Nuclear Receptors

Stanford Court Ballroom

3:00 50. *Nuclear Hormone Receptors: Regulators of Gene Expression*
A. O. Brinkmann
Department of Endocrinology and Reproduction
Erasmus University,
Rotterdam, The Netherlands

3:30 51. *Mutations in the Androgen Receptor Gene Causing Androgen Resistance*
Michael J. McPhaul
Department of Internal Medicine
University of Texas
Southwestern Medical Center
Dallas, TX

4:00 52. *Mineralocorticoid Receptors*
John W. Funder
Baker Medical Research Institute,
Melbourne, Australia

SESSION C: New Genetics and Endocrinology

Mark Hopkins Peacock Court

3:00 53. *Non-Traditional Forms of Inheritance That Are Relevant for Pediatric Endocrinology*
Judith G. Hall
Departments of Pediatrics and Medical Genetics
University of British Columbia,
Vancouver, BC, Canada

3:30 54. *X-Inactivation*
Larry J. Shapiro
Department of Pediatrics
University of California,
San Francisco, CA

4:00 55. *Genetically Engineered Mice to Study Endocrine Disorders*
Edward M. Rubin
Lawrence Berkeley Laboratory
University of California,
Berkeley, CA

4:30 **BREAK**

PLENARY SESSION, VI

Masonic Auditorium

5:00 6. *Andrea Prader Lecture: TBA*

6:00 **Closing**

1993 Organizing Committee and E. Martin Ritzen, Chair, 1997 Committee

6:15 **ADJOURN**