



**PEDIATRIC  
ENDOCRINE  
SOCIETY**

**April 29 - May 2, 2011  
Colorado Convention Center  
Denver, CO**

Friday, April 29	Sunday, May 1	Monday, May 2
<p>7:00pm–9:00pm <b>PES President’s Poster Reception</b></p>	<p>7:00am–8:00am <b>Meet the Professor Breakfast Session</b></p> <ul style="list-style-type: none"> <li>• Industry: George Bright</li> <li>• Academia: Thomas Wilson</li> <li>• Private Practice: Clifford Bloch</li> </ul>	<p>7:00am–8:00am <b>Workshops</b></p> <ul style="list-style-type: none"> <li>• Managing a Private Practice in Pediatric Endocrinology</li> <li>• Quality Improvement</li> </ul>
<b>Saturday, April 30</b>		
<p>7:00am–8:00am <b>Workshops</b></p> <ul style="list-style-type: none"> <li>• Interpretation of Genetic Tests</li> <li>• Striking balance between Family and Career</li> </ul>	<p>8:00am–10:00am <b>Invited Science Sessions</b></p> <ul style="list-style-type: none"> <li>• Role of Endoplasmic Reticulum “Stress” and Protein Misfolding in Disease States</li> <li>• Stopping Growth Hormone Therapy: How Tall is Tall Enough</li> </ul>	<p>8:00am–10:00am <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• Evaluation and Management of Thyroid Nodules in Children</li> </ul> <p>10:15am–12:15pm <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• Newly Discovered Causes of Hereditary Hypothyroidism / Breakthroughs in the Molecular Pathogenesis of Congenital Thyroid</li> </ul>
<p>8:00am–10:00am <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• Metabolic Syndrome / Obesity in the Eastern and Western World</li> </ul>	<p>10:15am–11:45am <b>APS Presidential Plenary and Awards</b></p>	<p>10:15am–12:15pm <b>SPR Presidential Plenary and Awards</b></p>
<p>10:15am–1:15pm <b>PES Plenary Session I</b></p> <ul style="list-style-type: none"> <li>• Business Meeting</li> <li>• Clinical Scholars Awards</li> <li>• Robert M. Blizzard Lecture: Diagnosis and Management of Craniopharyngioma - Edward R Laws</li> </ul>	<p>10:30am–12:30pm <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• Bone and Beyond: Pediatric Bone and Mineral Disorders in 2011</li> </ul>	<p>10:30am–12:30pm <b>Original Science Abstract Platform Sessions</b></p> <ul style="list-style-type: none"> <li>• Clinical Endocrinology</li> <li>• Endocrinology &amp; Diabetes: Basic Research</li> </ul>
<p>1:15pm–2:45pm <b>Poster Session I &amp; Opening Reception</b></p> <ul style="list-style-type: none"> <li>• Endocrinology Posters I</li> </ul>	<p>1:00pm–3:30pm <b>PES Presidential Lecture and Plenary Session II</b></p> <ul style="list-style-type: none"> <li>• Award Presentations</li> <li>• Presidential Lecture: Lessons Learned From the hGH Era - David B. Allen</li> <li>• Lawson Wilkins Lecture: Aquaporins and Water Balance - Daniel Bichet</li> </ul>	<p>1:00pm–3:00pm <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• Updates of Ongoing Diabetes Studies</li> </ul>
<p>2:45pm – 4:45pm <b>PES Year in Review</b></p> <ul style="list-style-type: none"> <li>• Pituitary; Adrenal; Sexual Differentiation / Gonad</li> </ul>	<p>3:30pm–5:30pm <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• Transgenerational Inheritance of Human Diseases: Impact and Consequences of Epigenetic Alterations</li> </ul>	<p>1:00pm–3:00pm <b>March of Dimes Lectures</b></p> <ul style="list-style-type: none"> <li>• Patricia Ann Jacobs</li> <li>• David C. Page</li> </ul>
<p>2:45pm–4:45pm <b>Invited Science Session</b></p> <ul style="list-style-type: none"> <li>• The Role of Dietary Electrolytes in Determining Blood Pressure</li> </ul>	<p>3:30pm–5:30pm <b>Original Science Abstract Platform Session</b></p> <ul style="list-style-type: none"> <li>• Diabetes</li> </ul>	<p>3:15pm–4:15pm <b>PES Meet the Professor Session</b></p> <ul style="list-style-type: none"> <li>• Menstrual Disorders</li> </ul> <p>3:30pm – 5:30pm <b>Invited Science Sessions</b></p> <ul style="list-style-type: none"> <li>• Effects of Chronic Inflammation on Growth and Development, Skeletal Health, and Body Composition</li> </ul>
<p>5:00pm–6:30pm <b>PAS/ASPR Opening General Session</b></p>	<p>5:45pm–7:30pm <b>Poster Session II</b></p> <ul style="list-style-type: none"> <li>• Endocrinology Posters II</li> </ul>	<p>3:45pm – 5:45pm <b>Invited Science Sessions</b></p> <ul style="list-style-type: none"> <li>• Renovascular Hypertension: Diagnostic and Therapeutic Considerations</li> </ul>
<b>Tuesday, May 3</b>		
<p>8:30am–11:30am <b>Workshop</b></p> <ul style="list-style-type: none"> <li>• Bone Health and Adolescence – Clinical Dilemmas for the Pediatrician</li> </ul>		
<p><b>Exhibits Open 1:00pm - 4:00pm</b></p>	<p><b>Exhibits Open 4:15pm - 7:30pm</b></p>	<p><b>Exhibits Open 4:15pm - 7:30pm</b></p>

PES



Join us in Denver, where the Pediatric Endocrine Society (PES) formerly known as the Lawson Wilkins Pediatric Endocrine Society and the Pediatric Academic Societies (PAS) will host tightly aligned annual meetings. The entire PES program including the plenary, mini symposia, business meeting, presentations by award winners, fellows' seminar and original science will be held at the Colorado Convention Center. The Sheraton Downtown will host the PES board meetings and social activities.

## Registration Information

There will be a single registration fee for the PES/PAS meeting set at the PAS registration fee schedule. This registration fee allows participation in all PAS and alliance functions.

## Continuing Education

Continuing Education is through the PAS. See page 3 for complete information.

### The Pediatric Endocrine Society thanks the members of the Corporate Advisory Board for their Support

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## Friday, April 29

7:00pm–9:00pm

### 0900A PES President's Poster Reception

Sheraton Downtown, Plaza Ballroom A/B

## Saturday, April 30

7:00am–8:00am

### 1030A Interpretation of Genetic Tests

PES Workshop~Room 205

Target Audience: Pediatricians, subspecialists, geneticists.

Objective:

- Acquaint audience with the methods used in genetic testing and the interpretation of genetic tests

Leader: Joseph A. Majzoub, Children's Hospital Boston, Boston, MA

A workshop devoted to improving the understanding of genetic tests.

Sponsored by the Pediatric Endocrine Society

7:00am–8:00am

### 1040A Striking a Balance Between Career and Family

PES Workshop~Room 207

Leader: Linda A. DiMeglio and Emily C. Walvoord, Riley Hospital for Children, Indiana University School of Medicine, Indianapolis, IN

A session to discuss strategies for balancing the demands of an academic career and domestic life.

Sponsored by the Pediatric Endocrine Society

8:00am–10:00am

### 1115 Metabolic Syndrome / Obesity in the Eastern and Western World

PAS Topic Symposium~Korbel 2B/3B

Target Audience: General pediatricians, endocrinologists, geneticists, epidemiologists, dieticians, adolescent medicine, cardiologists, scientists and clinicians interested in obesity and metabolic syndrome.

Objectives:

- To understand differences in presentation of metabolic syndrome and risk for diabetes in children and adolescents in Asian and western countries
- To learn the principles of management of metabolic syndrome

Chairs: Silva A. Arslanian, Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA and Takehiko Ohzeki, Hamamatsu University School of Medicine, Hamamatsu, Japan

Metabolic syndrome in association with obesity is one of the most pressing medical topics not only in North America but also in Asian countries. Because obesity in childhood predominantly tracks into adulthood, it should be a key for prevention of obesity/metabolic syndrome and following type 2 diabetes mellitus in adults. In addition to genes related to the function of adipocyte and energy-controlling system, changes in lifestyle in various countries all over the world is one of the most important causes for obesity. Comparison of the metabolic syndrome between areas with different ethnic and cultural backgrounds will show more clearly the pathophysiology. It may be interesting to compare the syndrome in children and adolescents in Western countries, such as USA, with those in Asia, including Japan and Korea. In this symposium, diagnosis, epidemiology, and management of metabolic syndrome and related disorders in the USA and Asian countries are discussed.

#### 8:00 Metabolic Syndrome in Youth in the Western World

So Jung Lee, Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA

#### 8:20 Genetic Backgrounds and Metabolic Syndrome in Obese Children in the Eastern World

Keiichi Hanaki, Tottori University School Of Medicine, Yonago, Japan

#### 8:30 Epidemiology and Risk Factors for Metabolic Syndrome

Mi Jung Park, Inje University College of Medicine, Seoul, Korea

#### 9:00 Type 2 Diabetes Mellitus and Obesity/Metabolic Syndrome in Children and Adolescents

Philip S. Zeitler, The Children's Hospital, Denver, CO

#### 9:30 Earlier Screening and Management for Metabolic Syndrome in Children and Adolescents: Governmental Projects in Japan

Takehiko Ohzeki, Hamamatsu University School of Medicine, Hamamatsu, Japan

Jointly sponsored by the Asian Society for Pediatric Research, Pediatric Endocrine Society and the Pediatric Academic Societies



10:15am–1:15pm

**1300A PES Plenary Session I**

Korbel 1A/D

**10:15 PES Business Meeting**

David B. Allen, President, Pediatric Endocrine Society, University of Wisconsin School of Medicine and Public Health, Madison, WI

**11:15 Introduction: Clinical Scholars Awardee I**

Cem Demirci, University of Connecticut, Connecticut Children's Medical Center, Hartford, CT

**11:20 Clinical Scholar Awardee I: Genetic Modifiers of Diabetes in Cystic Fibrosis**

Scott Blackman, Johns Hopkins University, Baltimore, MD

**11:45 Introduction: Clinical Scholars Awardee II**

Cem Demirci, University of Connecticut, Connecticut Children's Medical Center, Hartford, CT

**11:50 Clinical Scholar Awardee II: A Novel Transcriptional Factor in VMH Development and Physiology**

Clement Cheung, University of California San Francisco, San Francisco, CA

**12:15 Introduction: Robert M. Blizzard Lecture**

Alan D. Rogol, Riley Children's Hospital, Indiana University School of Medicine, Indianapolis, IN, University of Virginia, Charlottesville, VA

**12:20 Robert M. Blizzard Lecture: Diagnosis and Management of Craniopharyngioma**

Edward R. Laws, Brigham and Women's Hospital, Boston, MA

*Sponsored by the Pediatric Endocrine Society*

1:00pm–4:00pm

**Commercial Exhibits Open and Posters Available for Viewing**

Exhibit Hall A/F

Author Attendance and Opening Reception: 1:15pm–2:45pm

1:15pm–2:45pm

**Endocrinology Posters I and Opening Reception**

Exhibit Hall F

Course #	Topics	Boards
1400	Adrenal	1-3
1401	Thyroid	4-13
1402	Growth / Pituitary	14-25
1403	Bone - Vitamin D	26-35
1404	Genetic Disorders	36-43
1405	Puberty	44-57
1411	Micronutrients [amp] Vitamins	142-158
1412	Early (Fetal) Origins of Adult Disease	159-166
1415	Sequelae of Maternal Diabetes	185-189
1420	Neonatal Metabolism / Electrolytes	207-211
1444	Obesity	389-393

Refer to PAS Daily Programming for complete details.

2:45pm–4:45pm

**1620 The Role of Dietary Electrolytes in Determining Blood Pressure**

PAS Topic Symposium~Korbel 2C

Target Audience: Clinicians who care for children and adolescents with hypertension and who wish to gain insights into the contribution that electrolytes play in the role of blood pressure control.

Objectives:

- To understand how sodium contributes to the epidemiology of hypertension
- To gain insights into the area of salt sensitivity and its relation to blood pressure
- To review the value of diuretics in the management of hypertension in pediatric and adolescent patients

Chairs: Donald Batsky, Emory University, Children's Healthcare of Atlanta, Atlanta, GA and Julie Ingelfinger, Massachusetts General Hospital, Boston, MA

Blood pressure is greatly affected by diet. This symposium will consider the epidemiology and anthropology of sodium chloride intake as it influences blood pressure, and it will discuss the phenomenon of salt sensitivity and its mechanism in blood pressure control. The symposium will end with a consideration of the use of diuretics in pediatric patients with hypertension.

**2:45 The Role of Dietary Electrolytes in Determining Blood Pressure: An Overview**

Julie R. Ingelfinger, MassGeneral Hospital for Children at Massachusetts General Hospital, Boston, MA

**3:00 The Anthropology of Sodium Chloride Intake**

Kirsten Bibbins-Domingo, The University of California, San Francisco, San Francisco, CA

**3:30 Salt Sensitivity in 2011**

Coral D. Hanevold, Seattle Children's Hospital, Seattle, WA

**4:00 Rational Use of Diuretics in the Treatment of Pediatric Hypertension**

Gaurav Kapur, Children's Hospital of Michigan, Detroit, MI

**4:30 Discussion**

*Jointly sponsored by the American Society of Pediatric Nephrology, International Pediatric Hypertension Association, Pediatric Endocrine Society and the Pediatric Academic Societies*

2:45pm–4:45pm

**1630A Year in Review**

PES Symposium~Korbel 1A/D

Target Audience: Pediatric endocrinologists, neonatologists, adolescent medicine.

Objective:

- To review for the audience important recent literature on the Pituitary, the Adrenal, the Gonad and Disorders of Sexual Differentiation

Chairs: Mary M. Lee, University of Massachusetts Medical School, Worcester, MA and Mark R. Palmert, University of Toronto, The Hospital for Sick Children, Toronto, ON, Canada

A review of pertinent literature within the past year on the Pituitary, The Adrenal, The Gonad and Disorders of Sexual Differentiation

**2:45 Pituitary: Year in Review**

Laurie E. Cohen, Harvard Medical School, Children's Hospital of Boston, Boston, MA

**3:25 Adrenal: Year in Review**

Perrin C. White, The University of Texas Southwestern Medical Center, Dallas, TX

**4:05 Gonad / Disorders of Sexual Differentiation: Year in Review**

Eric J. Vilain, David Geffen School of Medicine at UCLA, Los Angeles, CA

5:00pm–6:30pm

**1800 PAS/ASPR Opening General Session**

Four Seasons I

6:45pm–8:00pm

**1900 PAS/ASPR Presidential and New Member Reception**

Hyatt Regency Downtown, Centennial D

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S

Sunday, May 1

7:00am–8:00am

**PAS Meet the Professor Breakfast Sessions**

The purpose of these sessions is to provide trainees and junior faculty the opportunity to meet with senior physicians who can provide insights in their field and provide career guidance in a small interactive group. Attendance at each session is limited and available on a first-come, first-served basis to maintain an intimate interactive format. These sessions are of particular interest to trainees and junior faculty.

7:00am–8:00am

**2022 Choosing an Endocrine Career Path: Academic, Industry or Private Practice**

PAS Meet the Professor Breakfast Session  
Hyatt Regency Downtown, Mineral Hall G

A discussion of career choices in Pediatric Endocrinology: Academic, Industry or Private Practice. A representative in each field will be present to discuss the pros and cons of each career path and what factors led each individual to make the choices leading to his current career.

**Academic**

**Thomas A. Wilson**

Division of Pediatric Endocrinology  
Department of Pediatrics  
State University of New York, Stony Brook, NY

**Private Practice**

**Clifford A. Bloch**

Clinical Professor of Pediatrics  
University of Colorado School of Medicine  
Greenwood Village, CO

**Industry**

**George M. Bright**

CEO, EndoTrials Advisory, LLC  
San Mateo, CA

8:00am–10:00am

**2130 Role of Endoplasmic Reticulum “Stress” and Protein Misfolding in Disease States**

PAS Topic Symposium~Korbel 2C

Target Audience: Gastroenterologists, endocrinologists, infectious disease, nephrologists, rheumatologists, obesity, basic scientists, and generalists.

Objective:

- At the conclusion of this session, participants should understand the role of the ER and how ER dysfunction can result in misfolded proteins which result in disease

Chairs: Paul W. Hruz, Washington University School of Medicine, St. Louis, MO and Patricia M. Vuguin, Children’s Hospital at Montefiore, Albert Einstein College of Medicine, Bronx, NY

This symposium session is designed to bring the audience up to date on current concepts of ER “stress” and protein misfolding as they pertain to cellular function in certain disease states such as diabetes.

**8:00 Proinsulin Misfolding in Diabetes States**

Peter Arvan, University of Michigan, Ann Arbor, MI

**8:40 Wolfram Syndrome, a Prototype Disorder of ER Stress and Protein Misfolding**

Fumihiko Urano, University of Massachusetts Medical School, Worcester, MA

**9:20 Targeting the Unfolded Protein Response to Protect Against Pancreatic Beta Cell Loss**

Scott A. Oakes, University of California at San Francisco, San Francisco, CA

Jointly sponsored by the Pediatric Endocrine Society, Pediatric Infectious Diseases Society and the Pediatric Academic Societies

8:00am–10:00am

**2135A Stopping Growth Hormone Therapy: How Tall Is Tall Enough?**

PES Symposium~Korbel 1A/D

Target Audience: Endocrinologists, nephrologists, general pediatricians, ethicists.

Objectives:

- To understand the issues around stopping growth hormone from an ethical, economic and psychosocial perspective
- Weigh the arguments for and against stopping growth hormone prior to epiphyseal fusion at a normal but not maximal height
- Discuss the utility or futility of creating guidelines for stopping growth hormone therapy

Chairs: David B. Allen, University of Wisconsin, Madison, WI and Maria G. Vogiatzi, Weill Cornell Medical College, New York, NY

There is no consensus among practitioners who prescribe growth hormone regarding when therapy should be discontinued. Should growth hormone be given to children until epiphyseal fusion? Should it be used only to achieve a height within the normal range for the population? Should attaining the target height for family be considered adequate?

**8:00 GH Treatment and Enhancement: Clinical and Historical Perspective**

David B. Allen, President, Pediatric Endocrine Society, University of Wisconsin School of Medicine and Public Health, Madison, WI

**8:15 Ethical Issues in Determining Proper Therapeutic Height Goals for GH Therapy**

Douglas S. Diekema, University of Washington School of Medicine, Seattle Children’s Hospital, Seattle, WA

**8:50 Economic Impact: Is There a Height to Which GH Therapy Can/Should Be Considered an Entitlement?**

Daniel Wikler, Harvard School of Public Health, Boston, MA

**9:25 Psychosocial Aspects: Should/Can Patient Psychosocial Well-Being Guide the Decision To Stop GH?**

David E. Sandberg, University of Michigan, Ann Arbor, MI

Sponsored by the Pediatric Endocrine Society

10:15am–11:45am

**2250 APS Presidential Plenary and Awards**

Four Seasons I

10:30am–12:30pm

**2260 Bone and Beyond: Pediatric Bone and Mineral Disorders in 2011**

PAS Topic Symposium~Korbel 1A/D

Target Audience: Clinical and academic general pediatricians and pediatric subspecialists, including endocrinologists, nephrologists, and adolescent medicine specialists.

Objectives:

- Participants will be able to recommend appropriate vitamin D replacement for children and adolescents with bone disease and those identified to have vitamin D deficiency or insufficiency
- Evaluate the regulation of phosphate metabolism in patients with bone disease
- Outline a management plan for dialysis patients with hyperparathyroidism-induced bone disease
- Assess the possible role for recombinant human parathyroid hormone in the treatment of hypoparathyroidism

Chairs: Laura K. Bachrach, Stanford University Medical Center, Stanford, CA and John S. Fuqua, Riley Hospital for Children and Indiana University School of Medicine, Indianapolis, IN

Pediatric bone disease has become a well recognized and important aspect of health care, as disorders of skeletal mineralization result in lifelong effects. Although vitamin D has a well known role in calcium and bone metabolism, it also has important effects in other organ systems, and vitamin D insufficiency

has become widespread in the general population. Regulatory mechanisms for phosphate homeostasis have recently been elucidated, and their role in disease has become apparent. New advances in the management of parathyroid disease in patients with renal failure and others include the use of calcimimetic agents and exploration of parathyroid hormone replacement therapy in chronic hypoparathyroidism.

- 10:30 Vitamin D Therapy: Pharmacologic and Physiologic**  
Michael Levine, University of Pennsylvania, Philadelphia, PA
- 11:00 Phosphate Metabolism in Health and Disease**  
Erik A. Imel, Riley Children's Hospital, University of Indiana, Indianapolis, IN
- 11:30 Bone Disease in Chronic Renal Failure**  
Craig B. Langman, Children's Memorial Hospital, Northwestern University, Chicago, IL
- 12:00 Use of rhPTH in Children with Hypoparathyroidism**  
Karen K. Winer, National Institute of Child Health and Human Development, NIH, Bethesda, MD

Jointly sponsored by the American Society of Pediatric Nephrology, Pediatric Endocrine Society and the Pediatric Academic Societies



11:00pm-3:20pm

**2760A PES Presidential Lecture and Plenary Session II**  
Korbel 1A/D

Chair: David B. Allen, President, Pediatric Endocrine Society, University of Wisconsin, Madison, WI

- 1:00 Introduction: Judson J. Van Wyk Award**  
Joseph A. Majzoub, Children's Hospital Boston, Boston, MA
- 1:10 Judson J. Van Wyk Award Recipient**  
John F. Crigler, Children's Hospital Boston, Boston, MA
- 1:20 Presidential Lecture: Lessons Learned From the hGH Era**  
David B. Allen, President, Pediatric Endocrine Society, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 2:10 Introduction: Lawson Wilkins Lecture**  
David B. Allen, President, Pediatric Endocrine Society, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 2:15 Lawson Wilkins Lecture: Aquaporins and Water Balance**  
Daniel G. Bichet, University of Montreal, Quebec, Canada

Sponsored by the Pediatric Endocrine Society

3:30pm-5:30pm

**2795 Transgenerational Inheritance of Human Diseases: Impact and Consequences of Epigenetic Alternations**

PAS State of the Art Plenary~Korbel 2A/3A

Target Audience: Basic and translational scientists as well as practicing clinicians who wish to understand the impact of transient exposure to environmental toxins on transgenerational epigenetic errors leading to developmental defects and heritable human diseases.

Objectives:

- To understand, the interplay of environmental susceptibility, epigenetic alteration and phenotype impacting human health and diseases
- To understand epigenetic memory, transgenerational heritable disorders / diseases resulting from transient exposure to environmental agents, nutrients, hormones and medications
- To understand epigenetic profiling techniques, and possible reversal of the disease through removal of the stressor using targeted epigenetic therapeutics

Chairs: Mala R. Chinoy, Tufts University School of Medicine, Boston, MA and Thomas P. Shanley, C.S. Mott Children's Hospital, University of Michigan, Ann Arbor, MI

Developmental origins of pediatric or adult diseases and their transgenerational impact have enormous implications on human health and well-being. Environmental toxicants entering a human system of an individual, community or society today can lead to disease susceptibility in future generations. Scientific attention on early life / in utero transient exposure to environmental agents – external or internal – such as pollutants including smoke and toxic industrial chemicals, plastics and pesticides, dietary preferences of mother, hormonal supplements and medications, can reprogram Epigenome through DNA methylation. The epigenetic changes result in chronic lung and heart diseases; autoimmune diseases such as lupus and arthritis; neurological disorders such as autism and bipolar disorder; cancers; diabetes; obesity; metabolic diseases; infertility. This session is intended for a better understanding of transgenerational impact and consequences of environmental exposure in early life, identify epigenetically labile targets and develop epigenetic therapeutics to reverse the disease condition / improve human health.

- 3:30 Developmental Origins of Diseases and Transgenerational Susceptibility**  
Mala R. Chinoy, Tufts University School of Medicine, Boston, MA
- 3:40 Fetal Basis of Adult Diseases: Environmental Exposure, Susceptibility and Transgenerational Effect**  
Retha Newbold, National Institute of Environmental Health Sciences, Research Triangle Park, NC
- 4:05 Epigenetic Effects of Fetal and Post-natal Environmental and Nutritional Exposures on Later Outcomes in Life**  
Dana Dolinoy Cipolla, University of Michigan School of Public Health, Ann Arbor, MI
- 4:30 Developmental Origins of Diabetes and Underlying Epigenetic Mechanisms**  
Rebecca A. Simmons, University of Pennsylvania School of Medicine, Philadelphia, PA
- 4:55 Epigenetic Transgenerational Actions of Endocrine Disruptors**  
Michael K. Skinner, Washington State University, Pullman, WA
- 5:20 Conclusion**  
Thomas P. Shanley, C.S. Mott Children's Hospital, University of Michigan School of Medicine, Ann Arbor, MI

Jointly sponsored by the Consortium Child Health Oversight Committee, Pediatric Endocrine Society and the Pediatric Academic Societies

3:30pm-5:30pm

**2800 Diabetes / Metabolic Syndrome**

Platform Session~Korbel 4B

Chairs: Nicholas Jospe and Kimberly Tafuri

Refer to PAS Daily Programming for complete details.

4:15pm-7:30pm

**Commercial Exhibits Open and Posters Available for Viewing**

Exhibit Hall A/F

Posters Available for Viewing: 4:15pm-7:30pm

Author Attendance: 5:45pm-7:30pm

5:45pm-7:30pm

**Endocrinology Posters II**

Exhibit Hall F

Course #	Topics	Boards
2919	Neonatal Endocrinology	263-268
2921	Intestinal Injury	292-298
2922	Intestinal Inflammation	299-303
2923	Intestinal Microbiome	304-306
2924	Nutrition	307-311
2925	Liver	312-314
2926	Hepatitis	315-317
2937	T1DM	390-403
2938	Type 2 Diabetes Mellitus / MODY	404-411
2939	Metabolic Syndrome / Obesity	412-434
2940	Diabetes / Metabolism: Basic Research	435-440

Refer to PAS Daily Programming for complete details.

**Monday, May 2**

7:00am–8:00am

**3040A Managing a Private Practice in Pediatric Endocrinology**

PES Workshop~Room 505/507

Target Audience: Fellows.

Objective:

- To familiarize attendees with the details of managing a private practice in pediatric endocrinology

Leader: Clifford A. Bloch, University of Colorado School of Medicine, Greenwood Village, CO

Issues in management of a private practice in Pediatric Endocrinology will be discussed.

*Sponsored by the Pediatric Endocrine Society*

7:00am–8:00am

**3045A Quality Improvement: Quality Insurance Issues**

PES Workshop~Korbel 1A/D

Target Audience: Pediatricians, subspecialists, educators.

Objective:

- An interactive workshop to discuss methods to implement quality improvements

Leader: Erinn Rhodes, Children's Hospital of Boston, Boston, MA

Quality Improvement strategies will be discussed.

*Sponsored by the Pediatric Endocrine Society*

8:00am–10:00am

**3075A Evaluation and Management of Thyroid Nodules in Children**

PES Symposium~Korbel 1A/D

Target Audience: Endocrinologists, general pediatrics, adolescent medicine physicians, geneticists, oncologists.

Objectives:

- To acquaint clinicians with the various presentations of thyroid nodules
- To review the radiographic evaluation of thyroid nodules
- To familiarize clinicians with the role of fine needle aspiration in the evaluation of thyroid nodules
- To review the molecular biology of thyroid tumors
- To review the degree of surgical intervention and the role of radioactive iodine in the management of papillary carcinoma of the thyroid
- To review MEN2A and MEN2B

Chairs: Stephen LaFranchi, Oregon Health Sciences University, Portland, OR and Jennifer Osipoff, State University of New York at Stony Brook, Stony Brook, NY

Thyroid nodules are occasionally encountered in routine physical examinations, and with increasing frequency in the course of routine imaging for other concerns. This minicourse focuses on the evaluation of thyroid nodules and focuses on controversies regarding management of thyroid nodules.

**8:00 Clinical Evaluation of Thyroid Nodules in Children and Adolescents**  
Andrew J. Bauer, Uniformed Services University, Bethesda, MD

**8:35 Thyroid Carcinomas, Molecular Biology and Management**  
Michael McDermott, University of Colorado, Aurora, CO

**9:10 Multiple Endocrine Neoplasia / Medullary Carcinoma of the Thyroid**  
Steven Waguespack, University of Texas M.D. Anderson Cancer Center, Houston, TX

**9:45 Discussion**

*Sponsored by the Pediatric Endocrine Society*

10:15am–12:15pm

**3250 Newly Discovered Causes of Hereditary Hypothyroidism / Breakthroughs in the Molecular Pathogenesis of Congenital Thyroid Dysfunction**

PAS Topic Symposium~Korbel 2A/3A

Target Audience: Pediatric endocrinologists, basic scientists, developmentalists, general pediatricians, geneticists, neonatologists.

Objectives:

- Diagnose and treat defects of the thyroid hormone cell membrane transporter (MCT8)
- Identify defects in the thyroid hormone metabolism involving the SBP2 gene, which is required for synthesis of selenoproteins
- Diagnose congenital hypothyroidism resulting from defects in the dual oxidase 2 maturation factor gene (DUOXA2)
- Recognize thyroid dehalogenase defect causing dysmaturational congenital hypothyroidism

Chairs: Guy J. Van Vliet, University of Montreal, Montreal, Quebec, Canada and Robert L. Rosenfield, University of Chicago, Chicago, IL

A symposium to cover gene defects causing congenital thyroid diseases that have been identified in the last 6 years

**10:15 Inherited Defects of Thyroid Hormone Transport into Cells**  
Samuel Refetoff, University of Chicago, Chicago, IL

**10:55 Inherited Defects of Thyroid Hormone Metabolism**  
Roy Weiss, University of Chicago, Chicago, IL

**11:35 Inherited Defects in Thyroid Hormone Synthesis Due to a Lack of Thyroidal Hydrogen Peroxide Generation**  
Helmut Grasberger, University of Michigan, Ann Arbor, MI

*Jointly sponsored by the Pediatric Endocrine Society and the Pediatric Academic Societies*

10:15am–12:15pm

**3260 SPR Presidential Plenary and Awards**

Four Seasons 4

10:30am–12:30pm

**3285 Clinical Endocrinology**

Platform Session~Korbel 1A-D

Chairs: Bradley S. Miller and Michael S. Stalvey

Refer to PAS Daily Programming for complete details.

10:30am–12:30pm

**3290 Endocrinology & Diabetes: Basic Research**

Platform Session~Korbel 2C

Chairs: Mark R. Palmert and Maureen Su

Refer to PAS Daily Programming for complete details.

1:00pm–3:00pm

**3515A Updates of Ongoing Diabetes Studies**

PES Symposium~Korbel 1A/D

Target Audience: Endocrinologists, adolescent medicine physicians, general pediatricians, epidemiologists, immunologists.

Objective:

- Audience will become aware of recent outcomes of the SEARCH study, an epidemiological study of diabetes in children; the NPOD study, a pathological study of the pancreases of individuals with diabetes; ongoing studies of the Immune Tolerance Network, and new iterations of insulin pump therapy

Chairs: Eba H. Hathout, Loma Linda University Children's Hospital, Loma Linda, CA and Dorothy I. Shulman, University of South Florida College of Medicine

Session devoted to bringing audience up to date on various national and international studies being conducted regarding the epidemiology, pathogenesis and management of diabetes mellitus.

- 1:00 Update on the SEARCH Study**  
Dana Dabalea, University of Colorado, Denver, CO
- 1:30 Update of the NPOD Study**  
Mark Atkinson, University of Florida, Gainesville, FL
- 2:00 Ongoing Studies in Immune Tolerance Network**  
Mario Ehlers, University of California San Francisco, San Francisco, CA
- 2:30 New Iterations of Insulin Pump Therapy**  
Steven M. Willi, Children's Hospital of Philadelphia, Philadelphia, PA

*Sponsored by the Pediatric Endocrine Society*

1:00pm–3:00pm

**3580A Sixteenth Annual Lecture: The March of Dimes Prize in Developmental Biology**  
Korbel 2A/3A

Please join us at a lecture by two pioneering scientists whose work has been essential to our understanding of sex chromosomes.

A fellow scientist has written, I consider Patricia Jacobs the mother of human cytogenetics and David Page the father of the human Y chromosome. In 1959, Prof. Jacobs was the first to describe a chromosomal abnormality in humans, the additional X chromosome in Klinefelter syndrome. Dr. Page's study and sequencing of the Y chromosome has advanced our understanding of it beyond its male determining role to a complex genetic system with a repertoire of many specialized functions. Their extraordinarily successful research continues to open up exciting new possibilities for the diagnosis and treatment of birth defects, infertility, and many diseases.

The March of Dimes Prize in Developmental Biology has been awarded annually since 1996 to investigators whose research has profoundly advanced the science that underlies our understanding of birth defects.

**My Fifty Years of Cytogenetics: Some Highlights**

Patrica Ann Jacobs, Co-Director of Research, Wessex Regional Genetics Laboratory Salisbury, Wiltshire, England

**Rethinking the Y Chromosome**

David C. Page, Director, Whitehead Institute for Biomedical Research & Professor of Biology, Massachusetts Institute of Technology, Howard Hughes Medical Investigator, Cambridge, Massachusetts

*Presented by The March of Dimes Foundation*

3:15pm–4:15pm

**3608A Menstrual Disorders**  
PES Meet the Professor~Room 205

Target Audience: Pediatric endocrinologists, adolescent physicians, pediatricians.

Objective:

- To promote understanding of the normal physiology of menarche and of disorders of menstruation in adolescents

**Disorders of Menstruation in Adolescents**

Robert L. Rosenfield, University of Chicago, Chicago, IL

*Sponsored by the Pediatric Endocrine Society*

3:30pm–5:30pm

**3610 Effects of Chronic Inflammation on Growth and Development, Skeletal Health, and Body Composition**  
PAS Hot Topic~Korbel 1A/D

Target Audience: Clinical and academic general pediatricians and pediatric subspecialists including gastroenterologists, nephrologists, rheumatologists, pulmonologists, endocrinologists, and adolescent medicine specialists.

Objectives:

- To understand the molecular effects of inflammatory cytokines on cell biology and signaling pathways involved in growth
- Understand the effects of inflammation on nutrition, especially protein metabolism, and body composition
- Understand the specific effects of chronic inflammation on growing bone
- Explore novel therapeutic interventions to ameliorate the deleterious effects of chronic inflammation

Chairs: Brandon Nathan, University of Minnesota, Minneapolis, MN and Joseph Wolfsdorf, Children's Hospital Boston, Boston, MA

This symposium addresses the protean molecular effects and clinical manifestations of chronic childhood inflammatory disease on physical growth and development, skeletal health, body composition, and well-being. Chronic inflammatory disease in children and adolescents is characterized by poor appetite and suboptimal nutrition, altered nutrient utilization, impaired growth and delayed puberty, reduced muscle and bone mass, fatigue and physical inactivity. Circulating proinflammatory cytokines affect bone cell activity, and drugs used to treat these disorders, notably glucocorticoids, have negative effects on bone formation and on linear growth. Recent studies provide insight into disturbances of growth hormone action, protein metabolism, and the pathogenesis of decreased bone mass. This symposium will review new knowledge concerning these pathophysiologic mechanisms and highlight opportunities for therapeutic intervention in selected disorders.

**3:30 Molecular Mechanisms of Growth Failure in Colitis**

Lee A. Denson, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

**4:05 How To Prevent and/or Reverse Growth Failure in Inflammatory Bowel Disease**

Athos Bousvaros, Children's Hospital of Boston, MA

**4:40 Inflammatory Disease in Children: Effects on Bone**

Francisco Sylvester, Connecticut Children's Medical Center, Hartford, CT

**5:15 Discussion**

*Jointly sponsored by the Pediatric Endocrine Society, Pediatric Infectious Diseases Society and the Pediatric Academic Societies*

3:45pm–5:45pm

**3715 Renovascular Hypertension: Diagnostic and Therapeutic Considerations**  
PAS Topic Symposium~Korbel 1E/F

Target Audience: Clinicians who care for children and adolescents with hypertension and who wish to learn more about the current clinical approaches to diagnosing and managing patients with renovascular hypertension.

Objectives:

- To understand that hypertension related to renovascular disease is a spectrum of conditions, with a variety of presentations and processes that may lead to a similar common pathway leading to hypertension as the clinical presentation
- To gain insights into the role of the interventional radiologist in the initial diagnostic evaluation as well as the management of this condition

Chairs: Kevin E. C. Meyers, Children's Hospital of Philadelphia, Philadelphia, PA and Kjell Tullus, Great Ormond Street Hospital for Children, London, United Kingdom

Renovascular disease constitutes an important cause of hypertension in the young. The diagnosis is often suspected but can be difficult to make not only due to differing clinical presentations, but also confusion over the best diagnostic approach to the problem. Management options may vary, depending on the age of the patient, underlying diagnosis and availability of skilled personnel. The presentations in this session will address the pathophysiologic spectrum of renovascular disease from a clinical and molecular perspective. A variety of genetic syndromes have components of renovascular lesions that will be discussed. Management of this condition from the perspective of an interventional radiologist will be discussed as well.

- 3:45 Renovascular Hypertension: Perspectives on the Problem and an Introduction to the Session**  
Kjell Tullus, Great Ormond Street Hospital for Children, London, United Kingdom
- 3:50 Is it Fibromuscular Dysplasia or Vasculitis?**  
Kjell Tullus, Great Ormond Street Hospital for Children, London, England
- 4:15 The Surgical Management of Pediatric Renovascular Hypertension**  
James Stanley, The University of Michigan, Ann Arbor, MI
- 4:45 Renovascular Hypertension in Genetic Syndromes**  
Kevin E.C. Meyers, Children's Hospital of Philadelphia, Philadelphia, PA
- 5:15 The Role of the Interventional Radiologist in the Diagnosis and Management of Renovascular Hypertension**  
Jack Vo, Seattle Children's Hospital, Seattle, WA

Jointly sponsored by the American Society of Pediatric Nephrology, International Pediatric Hypertension Association, Pediatric Endocrine Society and the Pediatric Academic Societies

4:15pm–7:30pm

**Commercial Exhibits Open and Posters Available for Viewing**

Exhibit Hall A/F

Posters Available for Viewing: 4:15pm–7:30pm  
Author Attendance: 5:45pm–7:30pm

**Poster Session III**

5:45pm–7:30pm  
Exhibit Hall F

**Tuesday, May 3**

8:30am–11:30am

**4212 Bone Health and Adolescence - Clinical Dilemmas for the Pediatrician**

PAS Workshop~Room 206

Target Audience: Students, residents, fellows and faculty interested in bone health in adolescents.

**Objectives:**

- Identify the different methods of assessing bone health in adolescents and understand their limitations
- Know the definition of low bone mineral density for age as defined by the International Society for Clinical Densitometry
- List three causes of low bone mass in adolescents

Leader: Neville H. Golden, Co-Leader: Catherine M. Gordon

Bone health is an exciting new field within pediatrics and one that is of interest to pediatric providers caring for adolescents. Traditionally, much of the work on osteoporosis prevention has been conducted in adults. We now know that osteoporosis prevention begins in childhood and adolescence, and bone mass attained in early in life is perhaps the most important determinant of lifelong skeletal health. A number of controversial issues arise when considering bone health in the pediatric and adolescent age group. Examples include how to interpret bone densitometry results in these young patients and whether a low bone mineral density result translates into an increased fracture risk; the role of calcium supplementation, vitamin D administration and specific exercise protocols to increase bone mass; and the use of hormone replacement therapy and bisphosphonates in the pediatric age group. New methods of assessing bone health, beyond measuring bone mineral density, are rapidly emerging.

This workshop will use small groups and case-based learning to discuss bone acquisition during adolescence, methods of assessing bone health, and implications of recent recommendations by the International Society for Clinical Densitometry on preferred terminology and diagnosis of osteoporosis in children and adolescents. We will identify conditions associated with low bone

mass in adolescents and discuss evidence-based treatment of low bone mass in the adolescent age group, including controversial topics such as hormone replacement therapy and bisphosphonates. Active audience participation is encouraged and we anticipate a lively discussion.

12:30pm–2:00pm

**Poster Session IV**

Exhibit Hall F

Course #	Topics	Boards
4501	Obesity	11-79
4506	Graduate Medical Education	154-175

Refer to PAS Daily Programming for complete details.

**Visit the International Pediatric Hypertension Association at [www.pediatrichypertension.org](http://www.pediatrichypertension.org)**

**For more IPHA information, contact:**

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