

David William Cooke

October 29, 2013

DEMOGRAPHIC INFORMATION

Current Appointments

Associate Professor, Pediatrics, Johns Hopkins University School of Medicine
Active Staff, Johns Hopkins Hospital

Personal Data

Address: David M. Rubenstein Children's Health Building
Room 3120
200 North Wolfe Street
Baltimore, Maryland 21287
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Education and Training

1979 to 1983 MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Massachusetts
S.B. in Mechanical Engineering
S.B. in Biology
Honors: Tau Beta Pi, Pi Tau Sigma, Phi Beta Kappa, Sigma Xi
1983 to 1987 DUKE UNIVERSITY SCHOOL OF MEDICINE, Durham, North Carolina
Doctor of Medicine
1987 to 1990 JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
Johns Hopkins Hospital, Baltimore, Maryland
Pediatric Internship and Residency
1990 to 1993 JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
Johns Hopkins Hospital, Baltimore, Maryland
Fellowship in Pediatric Endocrinology

Professional Experience

1991 to 1993 Pediatric House Staff Physician, Carrol County General Hospital, Westminster, Maryland
1993 to 1994 Instructor, Pediatrics, Johns Hopkins University School of Medicine
1994 to 2001 Assistant Professor, Pediatrics, Johns Hopkins University School of Medicine
2001 to present Associate Professor, Pediatrics, Johns Hopkins University School of Medicine
2003 to present Director, Pediatric Endocrinology Fellowship Training Program, Johns Hopkins University School of Medicine
2003 to 2005 Acting Director, The Ilyssa Center for Molecular and Cellular Endocrinology
2012 to present Clinical Director, Pediatric Endocrinology, Johns Hopkins University School of Medicine

RESEARCH ACTIVITIES

Publications

Peer-reviewed scientific articles

1. Levinson M, **Cooke DW**: On the two frequency spectra of Timoshenko beams. *Journal of Sound and Vibration* 1982;84:319-326.
2. **Cooke, DW** A model for direct alveolar ventilation. 102p. 1983. Thesis, Bachelor of Science in

- Mechanical Engineering, Massachusetts Institute of Technology.
3. Levinson M, **Cooke DW**: Thick rectangular plates: I. The generalized Navier solution. *International Journal of Mechanical Sciences* 1983;25:199-205.
 4. **Cooke DW**, Levinson M: Thick rectangular plates: II. The generalized Levy solution. *International Journal of Mechanical Sciences* 1983;25:207-215.
 5. **Cooke DW**, Lallinger GJ, Durack DT: In vitro sensitivity of *Naegleria fowleri* to qinghaosu and dihydroqinghaosu. *Journal of Parasitology* 1987;73:411-413.
 6. Lallinger GJ, Reiner SL, **Cooke DW**, Toffaletti DL, Perfect JR, Granger DL, Durack, DT: Efficacy of immune therapy in early experimental *Naegleria fowleri* meningitis. *Infection & Immunity* 1987;55:1289-1293.
 7. **Cooke DW**, Bankert LA, Roberts CT, Jr., LeRoith D, Casella SJ: Analysis of the human type I insulin-like growth factor receptor promoter region. *Biochemical & Biophysical Research Communications* 1991;177:1113-1120.
 8. **Cooke DW**, Casella SJ: The 5'-untranslated region of the IGF-1 receptor gene modulates reporter gene expression by both pre- and post-transcriptional mechanisms. *Molecular and Cellular Endocrinology* 1994;101:77-84.
 9. **Cooke DW**, Naidu S, Plotnick L, Berkovitz GD: Abnormalities of thyroid function and glucose control in subjects with Rett syndrome. *Hormone Research* 1995;43:273-278.
 10. Tsunoda N, **Cooke DW**, Ikemoto S, Maruyama k, Takahashi M, Lane MD, Ezaki O: Regulated expression of 5'-deleted mouse GLUT4 minigenes in transgenic mice: Effects of exercise training and high-fat diet. *Biochemical & Biophysical Research Communications* 1997;239:503-509.
 11. **Cooke DW**, Lane MD: A sequence element in the GLUT4 gene that mediates repression by insulin. *Journal of Biological Chemistry* 1998;273:6210-6217.
 12. **Cooke DW**, Lane MD: The transcription factor nuclear factor I mediates repression of the GLUT4 promoter by insulin. *Journal of Biological Chemistry* 1999;274:12917-12924.
 13. Tsuboyama-Kasaoka N, Tsunoda N, Maruyama K, Takahashi M, Kim H, **Cooke DW**, Lane MD, Ezaki O: Overexpression of GLUT4 in mice causes up-regulation of UCP3 mRNA in skeletal muscle. *Biochemical & Biophysical Research Communications* 1999;258:187-193.
 14. **Cooke DW**, Lane MD: Transcription factor NF1 mediates repression of the GLUT4 promoter by cyclic-AMP. *Biochemical & Biophysical Research Communications* 1999;260:600-604.
 15. Tsunoda N, Maruyama K, **Cooke DW**, Lane MD, Esaki O: Localization of exercise and denervation-responsive elements in the mouse GLUT4 gene. *Biochemical & Biophysical Research Communications* 2000;267:744-751.
 16. Dowell P, **Cooke DW**: Olf-1/early B-cell factor (O/E) is a regulator of GLUT4 gene expression in 3T3-L1 adipocytes. *Journal of Biological Chemistry* 2002; 277:1712-1718.
 17. Courvoisie HE, **Cooke, DW**, Riddle MA. Olanzapine induced ketosis in a prepubertal boy. *Journal of Child and Adolescent Psychopharmacology*; 2004; 14(4):612-6.
 18. Miura S, Tsunoda N, Ikeda S, Kai Y, **Cooke DW**, Lane MD, Ezaki O. Nuclear Factor 1 regulates adipose tissue-specific expression in the mouse GLUT4 gene. *Biochemical & Biophysical Research Communications* 2004; 325(3):812-8.
 19. **Cooke DW** and Patel YM. GLUT4 expression in 3T3-L1 adipocytes is repressed by proteasome inhibition, but not by inhibition by calpains. *Molecular and Cellular Endocrinology* 2005; 232(1-2):37-45.
 20. Lietman SA, Ding C, **Cooke DW**, Levine MA. Reduction in Gs α induces osteogenic differentiation in human mesenchymal stem cells. *Clinical Orthopaedics and Related Research* 2005; 434:213-238.
 21. Miller RS, Diaczok D, **Cooke DW**. Repression of GLUT4 expression by the endoplasmic reticulum stress response in 3T3-L1 adipocytes. *Biochem Biophys Res Commun* 2007; 362(1):188-92.
 22. Miller RS, Becker KG, Prabhu V, **Cooke DW**. Adipocyte gene expression is altered in formerly obese mice and as a function of diet composition. *J of Nutrition* 2008; 138:1033-1038.
 23. Srinath A, Costello B, **Cooke DW**. Index of suspicion in the nursery – hypercalcemia. *NeoReviews* 2008; 9(12):e590-593.
 24. Paz-Priel I, **Cooke DW**, Chen AR Cyclophosphamide for Rapid-Onset Obesity, Hypothalamic Dysfunction, Hypoventilation, and Autonomic Dysregulation Syndrome. *J Pediatr*. 2011; 158(2):337-9
 25. Tucker E, **Cooke DW**, Kudchadkar S, and Klaus SA. Dexmedetomidine infusion associated with transient adrenal insufficiency in a pediatric patient: a case report. *Case reports in pediatrics*. 2013; Article ID 207907, 2013. doi:10.1155/2013/207907.

26. Dudas RA, Colbert-Getz JM, Balighian E, **Cooke D**, Golden WC, Khan S, Stewart R, Barone M. Evaluation of a Simulation-Based Pediatric Clinical Skills Curriculum for Medical Students. *Simulation in Health Care: The Journal of the Society for Simulation in Healthcare*. 2013. doi: 10.1097/SIH.0b013e3182a89154

Book Chapters and Invited Reviews

1. The Harriet Lane Handbook Mosby, Inc., St. Louis Faculty advisor for endocrinology sections for the 13th, 14th, 15th, 16th, 17th, 18th, and 19th editions. Editor of endocrinology sections for the 12th edition. 1991-2011.
2. **Cooke DW**, Plotnick L. Diabetes Mellitus in Children and Adolescents. In: Rankel RE and Bope ET, editors. *Conn's Current Therapy, 2002*. Philadelphia: W.B.Saunders, 2002: 556-563.
3. **Cooke DW**, Plotnick L. Management of Type 1 Diabetes. In: Pescovitz OH and Eugster E, editors, *Pediatric Endocrinology, Mechanisms, Manifestations, and Management*. Philadelphia: Lippincott Williams & Wilkins, 2004: 427-449.
4. **Cooke DW** Diabetes Mellitus. In: Lennarz WJ and Lane MD, editors. *Encyclopedia of Biological Chemistry*. Elsevier, 2004, Oxford: Vol. 1:582-592.
5. **Cooke DW** Type 2 Diabetes Mellitus. In: McMillan J, DeAngelis C, Feigin R and Warshaw J, editors. *Oski's Pediatrics: Principles and Practice, Fourth edition*. Lippincott Williams & Wilkins, 2006, Philadelphia:2115-2122.
6. **Cooke DW** Metabolism and Endocrinology. In: Seidel HM, Rosenstein BJ, Pathak A, McKay WH, editors. *Primary Care of the Newborn*, Fourth edition. Saunders Elsevier, 2006, Philadelphia.
7. Rosenfield RL, **Cooke DW**, and Radovick S. Puberty in the female and its disorders. In: Sperling M, Ed. *Pediatric Endocrinology*, Third edition. Saunders Elsevier, 2008, Philadelphia:530-609.
8. **Cooke DW** and Plotnick L. Management of diabetic ketoacidosis in children and adolescents. *Peds in Review*, 2008 29(12):431-436.
9. **Cooke DW** and Plotnick L. Type 1 diabetes mellitus in pediatrics. *Peds in Review*, 2008 29(11):374-385.
10. Djedjos, CS and **Cooke DW**. New tools for children with type 1 diabetes. *Contemporary Peds*, 2009 26 (9); 44-54.
11. **Cooke DW** and Plotnick L. Diabetes Mellitus. In: Kappy, MS, Allen DB, Geffner ME, editors. *Pediatric Practice: Endocrinology*. McGraw Hill, 2010, New York:343-367
12. Mohamadi A, and **Cooke DW**. Type 2 diabetes mellitus in children and adolescents. AMSTARs reviews. 2010 21(1):103-19.
13. Mohamadi A and **Cooke DW**. Maturity Onset Diabetes of Youth (MODY). The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. April 2010.
14. Mohamadi A and **Cooke DW**. Children and Type 2 Diabetes. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. May 2010.
15. Mohamadi A and **Cooke DW**. Type 2 diabetes mellitus in children and adolescents. *Adolescent Medicine: State of the art Reviews*, 2010 21(1):103-119.
16. DiVall S, **Cooke DW**, and Radovick SA. Normal and aberrant growth. In: Melmed S, Polonsky KS, Larsen PR, editors. *Williams Textbook of Endocrinology*, 12th Edition. Saunders Elsevier, 2012:935-1053.
17. Blackman SM, and **Cooke DW**. In: Lennarz WJ and Lane MD, editors. *Encyclopedia of Biological Chemistry*, Vol. 3. Academic Press. Waltham, MA, 2013, pp. 649-658.
18. **Cooke DW**. New Onset Type 1 Diabetes Mellitus. In: McMillan J, Barrett D, Jones D, and Boney C, editors. *Clinical Decision Support: Pediatrics*. 2013. <https://www.decisionsupportinmedicine.com/>
19. Rosenfield RL, **Cooke DW**, and Radovick S. Puberty in the female and its disorders. In: Sperling M, Ed. *Pediatric Endocrinology*, Fourth edition. Saunders Elsevier, 2013, Philadelphia (in press).
20. **Cooke DW** and Plotnick L. Diabetes Mellitus. In: Kappy, MS, Allen DB, Geffner ME, editors. Second Edition. *Pediatric Practice: Endocrinology*. McGraw Hill, 2014, New York (in preparation).
21. **Cooke DW**. Children and Type 2 Diabetes. The Johns Hopkins Diabetes Guide POC-IT Center (Johns Hopkins Point of Care Information Technology Center), Baltimore, MD. 2013.

Extramural Sponsorship Previous:

Title: GLUT4 expression in adipocytes
Dates: 7/1/00 to 6/30/06
Sponsor: National Institutes of Health, NIDDK
R01 DK55831-01A1
Total direct cost: \$879,177
First year direct cost: \$162,663
Role: Principal Investigator
Per cent effort: 75%

Title: Insulin Resistance and Type 2 Diabetes in Adolescents Who Have Gained Weight on Atypical Antipsychotics: Reversal After Switch to Ziprasidone?
Dates: 7/1/01-6/31/03
Sponsor: Pfizer
Role: Co-Investigator (PI: Mark Riddle)
Per cent effort: 2%

Title: Regulation of GLUT4 expression in adipocytes
Dates: 7/1/99 to 6/30/02
Sponsor: American Diabetes Association
Research Award
Total direct cost: \$105,400
Current year direct cost: \$12,750
Role: Principal Investigator
Per cent effort: 10% 7/1/00 to 6/30/02; 50% effort 7/1/99 to 6/30/00

Title: Control of an insulin-responsive glucose transporter
Dates: 2/1/94 to 1/31/99
Sponsor: National Institutes of Health, NIDDK
K11 DK02223
Total direct cost: \$406,250
Role: Principal Investigator
Per cent effort: 90%

Title: Control of an insulin-responsive glucose transporter
Dates: 7/1/93 to 2/1/94
Sponsor: National Institutes of Health, NICHD; Child Health Research Center Award
Total direct cost: \$35,000
Role: Principal Investigator
Per cent effort: 50%

EDUCATIONAL ACTIVITIES

Teaching, recurring lectures:

Core Pediatric Clerkship (once per session), SOM: "Statural and sexual growth and development" (through 2010)

Molecular Endocrinology, JHUSHPH graduate course: "Insulin signaling"

Molecules and Cells, Metabolism Section, SOM (Year 1) – Diabetes Clinical Correlation (1993-2009)

Pediatric Residents Core Lectures: "Diabetic Ketoacidosis"

Pediatric Residents Core Lectures: "Type 2 diabetes in children"

Pediatric Residents Core Lectures: "Diabetes Insipidus"

Endocrinology and Metabolism, small group discussion, SOM: "Diabetes" (through 2010)

Endocrinology and Metabolism, small group discussion, SOM: "Pediatric Endocrinology, Obesity" (through 2010)

Clinical Pathology Lecture Series (JHH) – Adrenal Testing

Physiology, SOM (Year 2) – "Growth and Puberty" (through 2010)

Organ Systems, SOM – Adrenal Function (through 2010)

Graduate Program in Cellular and Molecular Medicine, SOM – Adrenal Function

PRECEDE, Pediatrics – Core faculty (2010 -2013) ; Faculty developer of "Growth" session; Faculty developer of "New-onset enuresis" lecture/TBL exercise; small group leader: "respiratory

distress", "Headache, outpatient SP", "Interpretation of Data", "newborn exam", "talking to adolescents", "fever in neonate" modules.
Genes to Society (2010 -)

Lectures:

HPA axis and the adrenal cortex
HPA axis Testing
Autonomic Nervous system and the adrenal medulla
Secondary Hypertension
Steroid Pharmacology (2011-)

Small group cases: developer and small group leader:

Adrenal cases (e.g. Cushing's Syndrome, Adrenal insufficiency, CAH)
When Hypertension isn't Idiopathic Cases - primary hyperaldosteronism, pheochromocytoma (2011)

Small group cases: small group leader (2011-)

Bone Calcium
Posterior Pituitary
Short stature/acromegally
Puberty
Thyroid
Thyroid: nodules and cancer
Obesity
Diabetes
Diabetes complications
Multisystem endocrine cases

Teaching, additional lectures:

Department of Pediatrics, Saturday Rounds: "Type 2 diabetes in children" 1999
Pediatric Residents Core Lectures: "Glucocorticoid treatment" 2000
The Johns Hopkins Inter-Departmental Training Program in Cellular and Molecular Endocrinology, Research Conference: "Molecular mechanisms of the regulation of GLUT4 expression by insulin and cAMP." 2000
Pharmacology, SOM (Year 2) – "Mechanism of action of regulators of glucose homeostasis" 2001-2003
The Johns Hopkins Inter-Departmental Training Program in Cellular and Molecular Endocrinology, Research Conference: "O/E-1 mediates insulin-induced repression of GLUT4 in adipocytes" 2002
Department of Pediatrics, Faculty Research Conference: "The adipocyte and insulin resistance: Regulation of *glut4* gene expression in 3T3-L1 Adipocytes" 2003
Pharmacology, SOM (Year 2) – "Mechanism of action of regulators of glucose homeostasis" 2010

Clinical instruction

General Pediatric Ward Attending, Infants Service, 10/24/94 – 10/31/94
General Pediatric Ward Attending, Infants Service, 7/30/96 – 8/15/96
General Pediatric Ward Attending, Infants Service, 8/1/98 – 8/31/98
General Pediatric Ward Attending, Infants Service, 10/17/98 – 10/22/98
General Pediatric Ward Attending, Neill Team, 11/1/99 – 11/31/99
General Pediatric Ward Attending, Neill Team, 10/1/00 – 10/31/00
General Pediatric Ward Attending, Zinkham Team, 10/1/01 – 10/31/01
General Pediatric Ward Attending, Neill Team, 10/1/02 – 10/31/02
General Pediatric Ward Attending, Neill Team, 9/22/03 – 10/19/03
General Pediatric Ward Attending, Neill Team, 9/22/04 – 10/19/04
General Pediatric Ward Attending, Zinkham Team, 9/20/05 – 10/17/05
Medical Student Teaching Attending, Neill Team, 1/9/06 – 2/6/06
General Pediatric Ward Attending, 9/19/06 – 10/16/06; 1/9/07 – 2/5/07; 4/3/07 - 4/24/07
Medical Student Teaching Attending 10/30/06 – 11/28/06; 4/25/07 – 5/25/07
General Pediatric Ward Attending, 8/21/07 – 9/3/07; 9/18/07 – 10/15/07; 1/1/08 – 1/7/08; 1/8/08 – 2/4/08
Medical Student Teaching Attending 8/28/07 – 9/26/07; 10/29/07 – 11/27/07; 3/24/08 – 4/22/08; 5/27/08

– 6/25/08

General Pediatric Ward Attending, 8/26/08-9/22/08; 10/21/08-11/17/08; 12/16/08-12/29/08; 1/6/09-1/12/09; 1/13/09-2/9/09.

Medical Student Teaching Attending 9/25/08-10/22/08; 11/20/08-12/22/08; 2/5/09-3/6/09.

General Pediatric Ward Attending, 8/25/09-9/21/09; 10/20/09-11/16/09; 12/15/09-12/21/09; 1/5/10-1/11/10; 3/9/10-4/5/10; 5/4/10-5/31/10

Medical Student Teaching Attending 11/30/09-1/08-10; 1/11/10-2/10/10; 2/11/10-3/12/10; 3/29/10-4/23/10

General Pediatric Ward Attending, 9/21/10-10/18/01; 12/14/10-12/20/10; 1/11/11-2/8/11; 4/5/11-5/2/11

Medical Student Teaching Attending 6/28/10-7/22/10; 10/25/10-11/19/10; 5/31/11-6/24/11

General Pediatric Ward Attending, 9/20/11-10/17/11; 11/15/11-12/12/11; 12/13/11-12/19/11; 3/6/12-4/2/12; 4/17/12-4/30/12; 8/21/12-9/17/12; 12/18/12-12/24/12; 1/1/13-1/7/13; 4/2/13-4/29/13

Medical Student Teaching Attending 8/22/11-9/16/11; 1/9/11-2/3/12; 5/29/12-6/22/12; 6/25/12-7/20/12; 8/20/12-9/17/12; 2/4/13-3/1/13

General Pediatric Ward Attending, 8/21/12-9/17/12; 12/18/12-12/24/12; 1/1/13-1/7/13; 4/2/13-4/29/13

Medical Student Teaching Attending 6/25/12-7/20/12; 8/20/12-9/17/12; 2/4/13-3/1/13

CME instruction, lectures:

Pediatric Trends, Johns Hopkins University, 4/4/95, "Management of DKA in Children"

Endocrine Grand Rounds, Johns Hopkins University, 9/13/95, "Glucose Transporters and Disease"

Pediatric Trends, Johns Hopkins University, 4/16/96, "Managing hyperthyroidism in children"

Endocrine Grand Rounds, Johns Hopkins University, 1/15/97, "The Cellular Basis of Insulin Resistance"

Endocrine Grand Rounds, Johns Hopkins University, 2/18/98, "Molecular Basis of Insulin Resistance"

Pediatric Trends, Johns Hopkins University, 4/21/98, "Interpreting Thyroid Function Tests in Children"

Pediatric Trends, Johns Hopkins University, 4/99, "Rickets"

Pediatric Trends, Johns Hopkins University, 4/11/00, "Type 2 diabetes in children"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/16/00, "Growth abnormalities"

Pediatric Trends, Johns Hopkins University, 4/17/01, "New treatments for kids with diabetes"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 7/15/01, "Type 2 Diabetes in Children" (workshop)

Pediatric Trends, Johns Hopkins University, 4/16/02, "Polycystic Ovary Syndrome"

Pediatric Trends, Johns Hopkins University, 4/8/03, "Diabetes Update"

Pediatric Trends, Johns Hopkins University, 4/20/04, "Type 2 Diabetes in Children"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/11/04, "Type 2 Diabetes in Children"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/11/04, "Glucocorticoids in primary care" (workshop)

Pediatric Trends, Johns Hopkins University, 4/12/05, "Type 2 Diabetes in Children"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/17/05, "Type 2 Diabetes in Children" (workshop)

Endocrine Grand Rounds, Johns Hopkins University, 9/21/05, "Insulin resistance, GLUT4, and the endoplasmic reticulum stress response."

Pediatric Grand Rounds, Johns Hopkins University, 12/14/05, "Molecular defects in insulin resistance and type 2 diabetes mellitus."

Pediatric Trends, Johns Hopkins University, 4/4/06, "Precocious Puberty"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/16/06, "Type 2 Diabetes in Children"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/16/06, "Adrenal Suppression" (workshop)

Pediatric Trends, Johns Hopkins University, 4/17/07, "Type 2 diabetes mellitus, pre-diabetes, and the metabolic syndrome in children and adolescents"

Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/15/07, "Type 2 Diabetes in Children" (workshop)

Pediatrics for the Practitioner, Johns Hopkins University, 9/28/07, "Type 2 diabetes mellitus, pre-diabetes, and the metabolic syndrome in children and adolescents"

Endocrine Grand Rounds, Johns Hopkins University, 3/5/08, "ROHHAD: A Syndrome of Rapid-Onset

Obesity, Hypothalamic Dysfunction, Hypoventilation, and Autonomic Dysregulation Associated with Neural Crest Tumors”
 Pediatric Trends, Johns Hopkins University, 4/8/08, “What’s new in Type 1 diabetes mellitus?”
 Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/20/08, “Type 2 Diabetes Mellitus – Screening and Treatment”
 Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/20/08, “Type 1 and other forms of diabetes”
 Advances in Pediatric Nutrition, Baltimore, MD, 9/23/08, “Type 2 diabetes mellitus in children – screening and treatment”
 Pediatric Trends, Johns Hopkins University, 4/21/09, “Endocrine manifestations of obesity, diabetes, and polycystic ovary syndrome.”
 Pediatric Endocrinology for the Primary-Care Clinician, Johns Hopkins University, 6/19/09. “Newborn screening and neonatal endocrinology.”
 Endocrine Grand Rounds, Johns Hopkins University, 9/9/09. “A Review of Current Efforts at Immunomodulation for the Prevention and Treatment of Type 1 Diabetes Mellitus.”
 Pediatrics for the Practitioner, Johns Hopkins University, 9/25/09, “Type 2 diabetes mellitus.”
 Pediatrics and OB/GYN Social Work Educational Symposium, 10/7/09, Johns Hopkins Hospital, “Diabetes in Children and Adolescents Workshop”.
 Pediatric Trends, Johns Hopkins University, 4/13/10, “Endocrine aspects of neonatal screening”
 Pediatric Trends, Johns Hopkins University, 4/17/12, “Thyroid testing in Pediatrics”
 Pediatric Trends, Johns Hopkins University, 4/16/13, “Endocrine aspects of obesity”

Mentoring

Preceptor in the Johns Hopkins Inter-Departmental Training Program in Cellular and Molecular Endocrinology.
 Ph.D. Thesis committee – Chryssanathi Stylianopoulos, Division of Human Nutrition, Department of International Health, Johns Hopkins School of Hygiene and Public Health. “The role of intramyocellular fatty acid accumulation on the insulin resistance of obesity.”
 Ph.D. Dissertation Committee – Andrea Hanlon, Division of Human Nutrition, Department of International Health, Johns Hopkins School of Hygiene and Public Health. “Post-meal ghrelin secretion and its relationship with appetite and food intake behaviors in children.”
 Research Mentor – Ryan Miller, M.D., Fellow, Pediatric Endocrinology. “Microarray analysis of gene expression in adipocytes in a model of diet-induced obesity.”
 Johns Hopkins University School of Medicine, Colleges Advising Program; Thomas College Advisor, 2010 to present

CLINICAL ACTIVITIES

Certification:

Diplomate, National Board of Medical Examiners (1988)
 Medical License, Maryland (1990 to present; D0040669)
 Diplomate, Pediatrics, American Board of Pediatrics (Initial certification 1990; meeting the requirements of maintenance of certification 2010-2014; 216275)
 Diplomate, Pediatric Endocrinology, American Board of Pediatrics (Initial certification 1995; meeting the requirements of maintenance of certification 2010-2014; 000657)

Service Responsibilities:

Pediatric endocrinology outpatient clinic – one clinic session per week (one clinic per month of pediatric diabetes, the remainder are general pediatric endocrinology.)
 Pediatric endocrinology fellow outpatient clinic preceptor – 2 clinic sessions per month
 Pediatric endocrinology inpatient and consultation service – 12 weeks per year
 General Pediatrics ward attending – 3 months per year (beginning 2006; 1 month per year prior to 2006)
 Teaching attending, general pediatric clerkship – 2 to 3 months per year (beginning 2006)
 Attending Physician, Pediatric Emergency Room, Johns Hopkins Hospital, 1995 - 2003
 Johns Hopkins Klinefelter Syndrome Center – Pediatric Endocrinologist, 2012 -

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments:

General Clinical Research Center – Pediatric Protocols Review Committee, 1998 to 2010
Schwentker Award Committee – Review committee member, 1999 to present
Gastroenterology Division Chief Search Committee – 2003-2004
Pediatrics Clinical Practice Association Board of Governors, elected member, 2004-2007
Pediatric Intern Selection Committee – 2005 to 2011
Subcommittee Chair, Graduate Medical Education Council, 2006 to 2009
Glucose control task force, 2006 to 2009
Medical School Council, elected member, 2007-2009; 2009-2010
Pediatric Subspecialty Committee member, 2007 to present
Insulin pump task force 2008 to 2010
Co-Chair, Pediatric Professional Practice Evaluation Committee, 2009 to present
Pediatric Curriculum Committee, 2012 to present

Professional Societies

1995 American Academy of Pediatrics, Fellow
1995 Lawson Wilkins Pediatric Endocrinology Society
1996 The Endocrine Society
1996 American Diabetes Association

Advisory committees

1995-present New Foundation for Diabetes – ad hoc grant reviewer
1999 Ad hoc reviewer, Department of Veterans Affairs, Office of External Reviews, Merit Review
2001 Ad hoc member, Program Project Grant Study Panel, NICHD
2002 Ad hoc member, Program Project Grant Study Panel, NICHD
2004 Ad hoc member, Diabetes Endocrine Research Center Study Section, NIDDK
2006 Ad hoc member, Diabetes Endocrine Research Center Study Section, NIDDK
2003-2006 Board of Directors, Human Growth Foundation
2005-2006 Executive Board Member, Human Growth Foundation
2010-present Pediatric Endocrine Society Training Council
2012-present Endocrine and Metabolic Drugs Advisory Committee, FDA
2012-present Pediatric Endocrine Society Spring Retreat; Organizing Committee Member

RECOGNITION

Awards

The Johns Hopkins Children's Center Harriet Lane Home Research Fellowship, 1990
Lawson Wilkins Pediatric Endocrine Society/Lilly Research Award, 1992
Passano Physician Scientist Award, 1993
Alexander J. "Buck" Schaffer Award for "Outstanding Contribution to the Clinical Teaching of House Officers", Harriet Lane House Staff, Johns Hopkins, 2009
Frederick J Heldrich, M.D. Award in recognition of "Dedication and Outstanding Contribution to Medical Student Teaching", Johns Hopkins University Department of Pediatrics, 2009
Johns Hopkins University School of Medicine Institute for Excellence in Education. Award for "Outstanding Achievement in Medical and Biomedical Education", 2012

Honors

Society for Pediatric Research, elected to membership 2000

Invited Talks

Johns Hopkins Health Plan, Department of Pediatrics, 12/2/94, "Growth Disorders"
Endocrine Grand Rounds, College of Physicians and Surgeons. "NF-1 mediates the repression of the GLUT4 promoter by insulin." 10/9/98.
Mid-Atlantic Diabetes Research Symposium, NIH. "NF-1 mediates the repression of the GLUT4 promoter by

insulin." 9/19/98

Pediatric Grand Rounds, York Hospital, York, Pennsylvania. "Use and interpretation of thyroid function tests in pediatrics." 9/23/99

Bayview Medical Center, Department of Pediatrics, Grand Rounds, 2/15/00, "Type 2 diabetes in children"

Johns Hopkins Health Plan, Department of Pediatrics, 5/5/00, "Type 2 diabetes in children"

Pediatrics for the Practitioner Update 2001, Johns Hopkins University School of Medicine. Type 2 Diabetes in Adolescents." 9/14/01

National Conference for Nurse Practitioners, Baltimore, Maryland: "Growth in Pediatric Patients" 11/8/01

Pediatric Grand Rounds, St. Agnes Hospital, Baltimore, Maryland: "Thyroid Function in Pediatrics." 1/25/02

Endocrinology Research Conference, Dartmouth School of Medicine, Hanover, New Hampshire: "O/E-1 mediates insulin-induced repression of GLUT4 in adipocytes." 3/28/02

Pediatric Grand Rounds, Union Memorial Hospital, Baltimore, Maryland: "Polycystic Ovary Syndrome." 9/11/02

Pri-Med Convergence, Washington, DC: "Type 2 Diabetes in Children and Adolescents." 11/22/02

Johns Hopkins Community Physicians, Baltimore, Maryland: 3/24/03, "Type 2 Diabetes in Children"

Department of Pediatrics, Howard County General Hospital, "Type 2 Diabetes in Children." 3/22/04

CKiD – Chronic Kidney Disease in Children Training Meeting, "Tanner Staging Children", 11/12/04

Pediatric Grand Rounds, St. Agnes Hospital, Baltimore, Maryland: "Glucocorticoids in Primary Care." 12/17/04

Endocrine Grand Rounds, NIH, NICHD, Bethesda, Maryland: "Regulation of GLUT4 expression in adipocytes." 1/14/05

Johns Hopkins Community Physicians, "Treatment of Type 2 Diabetes Mellitus in Children", 1/24/05.

Eastern Society for Pediatric Research, Old Greenwich, CT, "Insulin resistance, GLUT4, and the Endoplasmic Reticulum Stress Response", 3/18/06.

National Conference and Exhibition, American Academy of Pediatrics, Atlanta, Georgia. "Diabetic Ketoacidosis: an old problem still plagues us". 10/7/06

Pediatric Endocrinology Symposium, Fudan University, Shanghai, China. "Turner Syndrome". 4/26/08

Pediatric Endocrinology Symposium, Fudan University, Shanghai, China. "Idiopathic Short Stature". 4/27/08

Update in Pediatrics and Gynecology, Hospital Punta Pacifica, Panama City, Panama. 5/23/2009. "Metabolic Disorders in Adolescents: Diabetes, Obesity, Dyslipidemia, and Hypertension."

Pediatric Lecture Series, Franklin Square Hospital, Baltimore, Maryland: "Type 2 diabetes in children and adolescents." 11/24/09

Pediatric Grand Rounds, St. Agnes Hospital, Baltimore, Maryland: "Type 2 diabetes in children and adolescents." 1/29/2010

AM:PREP- An Intensive Review of Adolescent Medicine, San Antonio, Texas: "Type 1 diabetes mellitus in adolescents." 2/3/2010

AM:PREP- An Intensive Review of Adolescent Medicine, San Antonio, Texas: "Type 2 diabetes mellitus in adolescents." 2/3/2010

CREP Diabetes Update – "An updated on pediatric type 2 diabetes". FDA, Silver Spring, MD. 10/14/2010

Pediatric Endocrine Society Board Review Course: "Carbohydrate Metabolism/Type 1 Diabetes Mellitus." Arlington, Virginia. 5/2/2013

Pediatric Grand Rounds, St. Agnes Hospital, Baltimore, Maryland: "Type 2 diabetes in children and adolescents." 11/1/2013

Editorial Activities

Platform session moderator, Society for Pediatric Research, Pediatric Academic Societies Annual Meeting. Baltimore, Maryland. 2001

Platform session moderator, The Endocrine Society 83rd Annual Meeting, Denver, Colorado. 2001

Platform session moderator, Eastern Society for Pediatric Research, Old Greenwich, Connecticut, 2006

Ad hoc reviewer, *Diabetes, Molecular Endocrinology, Archives of Pediatrics & Adolescent Medicine, Endocrinology, Journal of Clinical Endocrinology & Metabolism, Pediatrics, Biochemical and Biophysical Research Communications, Genes & Development, Journal of Pediatric Endocrinology & Metabolism, Medicine.*

Faculty Development

9/9/10-12/23/10 Teaching Skills, Part 1

2/23/12 Pediatric Fellowship Cultural Competency Curriculum: "Becoming American"

3/23/2012 Institute of Excellence in Education Conference: "Teaching learners to teach in clinical and hospital settings."

4/19/12 Colleges Advising/Student Writing Group: Rita Charon: "Narrative writing."

4/3/12 Pediatric Fellowship Cultural Competency: "Bad Blood"

7/27/2013 Institute for Excellence in Education Conference, Johns Hopkins. "Small group teaching", "Enhancing Lectures"