

DEBORAH A. BOWLBY, MD, MSc, FAAP

BUSINESS INFORMATION

Medical University South Carolina
Pediatric Endocrinology
96 Jonathan Lucas Street CSB 316
PO Box 250608
Charleston, SC 29425

EDUCATION

1989-1993 **Bachelor of Science Honours, Life Sciences, First Class Standing**, Queen's University, Kingston, Ontario
1993-1995 **Master of Science, Physiology**, University of Toronto, Toronto, Ontario
1995-1999 **Doctor of Medicine, Honours**, University of Toronto, Toronto, Ontario
1999-2000 **Internship – Pediatrics**, Mount Sinai School of Medicine, New York, New York
2000-2002 **Residency – Pediatrics**, Mount Sinai School of Medicine, New York, New York
2002-2005 **Fellowship – Pediatric Endocrinology and Diabetes**, Mount Sinai School of Medicine, New York, New York

BOARD CERTIFICATIONS

Pediatric Endocrinology – Board Certified (2007) (No. 1067)
American Board of Pediatrics - Board Certified (2002) (No. 074879)

FACULTY APPOINTMENT

2005-present **Assistant Professor - Division of Pediatric Endocrinology**, Medical University of South Carolina, Charleston, South Carolina

PROFESSIONAL MEMBERSHIPS

National

American Academy of Pediatrics
Lawson Wilkins Pediatric Endocrine Society
Endocrine Society
American Diabetes Association
American Medical Association

Local

Southern Pediatric Endocrine Society
Charleston County Medical Society

MANUSCRIPT REVIEWER

Journal of the American Academy of Dermatology 2008-present

CURRENT RESEARCH - Principal Investigator

Recombinant Human Growth Hormone (rhGH) and Recombinant Human Insulin-like Growth Factor-I (rhIGF-I) Combination Therapy in Children with Short Stature Associated with IGF-I Deficiency: A Three-Year, Randomized, Multi-center, Open-label, Parallel-group, Active treatment controlled dose selection

Trial. Clinical trial assessing efficacy and safety of using rhGH with rhIGF-I in IGF-I deficient pre-pubertal children to improve growth. (Tercica; \$8738 per patient; 2008-present)

Recombinant Human Insulin-Like Growth Factor-I (rhIGF-I) Treatment of Short Stature Associated with Primary IGF-I Deficiency: A Multi-center, Open-label, Concentration-controlled Trial. Clinical trial assessing efficacy and safety in using rhIGF-I in IGF-I deficient pre-pubertal children to improve growth. (Tercica; \$22,389; 2005-present)

Increlex™ Growth Forum Database—IGFD Registry: A Patient Registry for Monitoring Long-term Safety and Efficacy of Increlex™. Post-marketing observational study looking at dosing, adverse events, long-term safety and efficacy within children and adolescents that have been prescribed Increlex™. (Tercica; \$5,604; 2007-present)

A Four-Year Open-Label Multi-Center Randomized Two-Arm Study of Genotropin in Idiopathic Short Stature (ISS) Patients: Comparing An Individualized, Target-Driven Treatment Regimen To Standard Dosing of Genotropin. Clinical trial assessing efficacy and safety of targeted growth hormone therapy in pre-pubertal children with ISS. (Pfizer; \$129,765; 2007-present)

Growth Hormone Monitor Patient Registry. Post-marketing observational study looking at dosing, adverse events, long-term safety and efficacy within children and adolescents that have been prescribed a Saizen growth hormone product. (Serono; \$250 per patient; 2005-present)

CURRENT RESEARCH – Co-Investigator

Phase Three, Randomized, Multi-center, Open-label Study to Evaluate the Efficacy and Safety of Leuprolide Acetate 11.25 mg and 30 mg Formulations in Children with Central Precocious Puberty. Clinical trial to assess three month formulation of Leuprolide in children with central precocious puberty. (TAP; \$ 8615 per patient; 2008-present)

Norditropin Registry. Post-marketing observational study looking at dosing, adverse events and long-term safety and efficacy within children and adolescents that have been prescribed Norditropin®. (Novo-Nordisk; \$ 250 per patient; 2005-present)

Genentech National Cooperative Growth Study (NCGS) Post-Marketing Surveillance Program for Nutropin AQ®, Nutropin®, Nutropin Depot® and Protropin®. Post-marketing observational study looking at dosing, adverse events and long-term safety and efficacy within children and adolescents that have been prescribed a Genentech growth hormone product. (Genentech; \$200 per patient; 2005-present)

Pfizer's International Growth Study (KIGS). Post-marketing observational study looking at dosing, adverse events, long-term safety and efficacy within children and adolescents that have been prescribed Genotropin®. (Pfizer; \$200 per patient; 2005-present)

Eli Lilly's Genesis Study. Post-marketing observational study looking at dosing, adverse events and long-term safety and efficacy within children and adolescents that have been prescribed Humatrope®. (Eli Lilly; \$ 400 per new patient, \$180 per return visit; 2005-present)

COMPLETED RESEARCH

Environmental Compounds and Sexual Precocity in South Carolina. Co-Investigator. Investigator-initiated pilot study assessing precocious puberty in the coastal and mid-land areas of South Carolina. (2007)

External Continuous Infusion of Novolog versus Humalog: An Open-Label, Randomized, Parallel Group, Multi-center Study in Children and Adolescents with Type 1 Diabetes. Co-Investigator. Non-inferiority study of two different brands of insulin within the insulin pump. (Novo-Nordisk; 2004-2006)

Genentech National Cooperative Metabolic Study of Nutropin AQ® and Nutropin® and Nutropin AQ Pen® for Replacement Therapy in Adults with Growth Hormone Deficiency (NCMS). Co-Investigator.

Post-marketing observational study looking at dosing, adverse events, long-term safety and efficacy within adults that have been prescribed a Genentech growth hormone product. (Genentech; \$1500; 2004-2006)

AWARDS

2008 **Best Doctors in America® 2007-2008**
2004 **Preceptor Program – Pediatric Endocrinology and Diabetes, Childrens Hospital Los Angeles, Endocrine Fellows Foundation**
1996 **Summer Scholarship Research Program, Medical Research Council of Canada**
1993 **Ontario Graduate Scholarship 1994-1995, Ontario Provincial Government**
1994 **University of Toronto Open Fellowship, University of Toronto, School of Graduate Studies**

COMMITTEE MEMBERSHIPS

Institutional

Compliance Committee – Department of Pediatrics – 2005-present
Women in Pediatrics – Department of Pediatrics – 2005-present

PROFESSIONAL BACKGROUND

Specific Teaching Responsibilities

Pediatric Endocrinology Post-Graduate Fellow Bi-weekly Educational Conference 2007-present

Bi-monthly Lectures in Pediatric Endocrine Disorders – Co-ordinate for pediatric residents 2007-present

Pediatric Endocrinology Elective – Co-ordinate for pediatric residents 2007-present

Inpatient Endocrinology Attending – 6 months per year 2005-present

Health Science Internship – Clemson University
Emma Rice 2008

Post-Graduate Fellows Supervision

Brunilda Cordero, MD	2005-2008
Rimon Youssef, MD	2005-2008
Elizabeth Walsh, MD	2007-present
Priya Raman, MD	2008-present

INVITED LECTURES

2008 Short Stature – Clinician’s Perspective, Tercica, Charleston, South Carolina

2006 Update on Management: Type 1 Diabetes Mellitus Childhood, Pediatric Grand Rounds, Medical University of South Carolina, Charleston, South Carolina

2006 Update on Management: Type 1 Diabetes Mellitus Childhood, 9th Annual Frontiers in Pediatrics, Charleston, South Carolina

2006 Youth: Growing Up with Diabetes, 4th Annual Diabetes/CVH Winter Symposium, Myrtle Beach, South Carolina

2004 Pediatric Diabetes Mellitus – Beyond Banting and Best, Pediatric Housestaff, Mount Sinai Medical Center, New York, New York

2003 Pediatric Diabetes Mellitus – “New” Therapies, Pediatric Grand Rounds, St. Vincent’s Hospital, New York, New York

PRESENTATIONS - POSTER

1. Greig F, Hyman S, **Bowlby D**, Patel A, Wallach E, Rapaport R. Comparison of Obese Youth with or without Type 2 Diabetes (T2D): Evaluation of Clinical Features used in Screening. Pediatric Academic Society 2006; San Francisco, California Abstract: poster
2. Greig F, Hyman S, Patel A, **Bowlby D**, Wallach E, Rapaport R. Evaluation of Obese Youth at Risk for Type 2 Diabetes: Fasting Glucose and Insulin or Glucose Tolerance. American Diabetes Association 2006; Abstract 2595-PO
3. **Bowlby DA**, Rumbo C, Surillo D, Martinez M, Kaufman S, Gondolesi G, Rapaport, R. Growth of Pediatric Patients with Intestinal Transplantation. IXth International Small Bowel Transplantation Symposium 2005; Brussels, Belgium: Abstract P8
4. Patel A, Sathasivam A, Garibaldi L, Greig F, Wallach E, Hyman S, Trinh L, **Bowlby D**, Reddy S, Rapaport R. Leuprolide Stimulation Tests for the Evaluation of Pubertal Disorders. Endocrine Society 2005; San Diego, California: Abstract P2-486
5. Wallach E, Iazzetti I, **Bowlby DA**, Greig F, Patel A, Hyman S, Boscarino J, Rapaport R. Sustained Improvement in Hemoglobin A1C during Long-Term Treatment with Continuous Subcutaneous Insulin Infusion (CSII) in Pediatric Patients. American Diabetes Association 2005 Abstract 2770-PO
6. Hyman S, Greig F, Patel A, **Bowlby D**, Wallach E, Holzman I, Rapaport R. Late Rise of TSH in Ill Newborns Is Common and Not Dependent on Birth Weight. Pediatric Academic Society 2005; Washington, DC
7. **Bowlby DA**, Rumbo C, Surillo D, Martinez M, Kaufman S, Gondolesi G, Rapaport, R. Growth of Pediatric Patients with Intestinal Transplantation. Mount Sinai School of Medicine Annual Pediatric Research Day 2005; New York, New York
8. Hyman S, Greig F, Patel A, **Bowlby D**, Wallach E, Holzman I, Rapaport R. Late Rise of TSH in Ill Newborns Is Common and Not Dependent on Birth Weight. Mount Sinai School of Medicine Annual Pediatric Research Day 2005; New York, New York
9. Patel A, Sathasivam A, Garibaldi L, Greig F, Wallach E, Hyman S, Trinh L, **Bowlby D**, Reddy S, Rapaport R. Leuprolide Stimulation Tests for the Evaluation of Pubertal Disorders. Mount Sinai School of Medicine Annual Pediatric Research Day 2005; New York, New York
10. Hyman S, Greig F, Patel A, **Bowlby D**, Wallach E, Holzman I, Rapaport R. Late Rise of TSH in Ill Newborns Is Common and Not Dependent on Birth Weight. Eastern Society for Pediatric Research 2005; Greenwich, Connecticut
11. Oh V, **Bowlby DA**, Rapaport R. Idiopathic Combined Growth Hormone Deficiency and Central Diabetes Insipidus: Prevalence and Long-Term Follow-Up. Endocrine Society 2004; New Orleans, Louisiana: Abstract P1-465
12. Patel A, **Bowlby DA**, Reddy S, Greig F, Wallach E, Rapaport R. Asymptomatic Hyperglycemia: Expanding the Spectrum of New Onset Diabetes in Youth. American Diabetes Association 2004; Orlando, Florida: Abstract 1779-P
13. **Bowlby DA**, Moghaddas R, Reddy S, Wallach E, Greig F, Sokoloff A, Wajnrajch M, Rapaport R. Ghrelin, Leptin and Growth Hormone During Growth Hormone Stimulation Testing in Children. Mount Sinai School of Medicine Annual Pediatric Research Day 2004; New York, New York Abstract 13
14. Oh V, **Bowlby DA**, Rapaport R. Idiopathic Combined Growth Hormone Deficiency and Central Diabetes Insipidus: Prevalence and Long-Term Follow-Up. Mount Sinai School of Medicine Annual Pediatric Research Day 2004; New York, New York Abstract 14

15. Greig F, **Bowlby DA**, Reddy S, Wallach E, Rapaport R. Contribution of Vitamin D and Calcium Deficiency to Nutritional Rickets in Infants. Pediatric Academic Society 2004; San Francisco, California: Abstract 755
16. **Bowlby DA**, Moghaddas R, Reddy S, Wallach E, Greig F, Sokoloff A, Wajnrajch M, Rapaport R. Ghrelin, Leptin and Growth Hormone During Growth Hormone Stimulation Testing in Children. Pediatric Academic Society 2004; San Francisco, California: Abstract 883
17. **Bowlby DA**, Moghaddas R, Reddy S, Wallach E, Greig F, Sokoloff A, Wajnrajch M, Rapaport R. Ghrelin, Leptin and Growth Hormone During Growth Hormone Stimulation Testing in Children. Eastern Society for Pediatric Research 2004; Greenwich, Connecticut Abstract 19
18. Moghaddas R, Wallach E, Rolnitzky L, Reddy S, **Bowlby D**, Iazetti L, Greig F, Rapaport R. Improvement in HbA1c during Insulin Glargine Treatment in Youth with Type 1 Diabetes Mellitus. Mount Sinai School of Medicine Annual Pediatric Research Day 2003; New York, New York
19. Moghaddas R, Wallach E, Rolnitzky L, Reddy S, **Bowlby D**, Iazetti L, Greig F, Rapaport R. Improvement in HbA1c during Glargine Treatment in Youth with Type 1 Diabetes Mellitus. American Diabetes Association 2003 Abstract 2442-PO
20. Moghaddas R, Wallach E, Rolnitzky L, Reddy S, **Bowlby D**, Iazetti L, Greig F, Rapaport R. No Effect of Puberty or Sex in Metabolic Response to Insulin Glargine in Youth with Type 1 Diabetes Mellitus. Endocrine Society 2003; Philadelphia, Pennsylvania
21. Reddy R, Blakey S, **Bowlby D**, Wallach E, Sernberger J, Moghaddas R, Greig F, Iazetti L, Stene M, Rapaport R. Shox Gene Abnormalities in Children with Short Stature of Undetermined Etiology. Pediatric Academic Society 2003; Seattle, Washington: Abstract 426
22. **Bowlby DA**, Ickowicz A, Tannock R, Speigler B, Greenberg M. Acquired Attentional Deficit Associated with CNS Prophylactic Treatment in Childhood Acute Leukemia: A Pilot Study. Hospital for Sick Children, Child Psychiatry Day 1997; Toronto, Ontario
23. **Bowlby DA**, Ickowicz A, Tannock R, Speigler B, Greenberg M. Acquired Attentional Deficit Associated with CNS Prophylactic Treatment in Childhood Acute Leukemia: A Pilot Study. University of Toronto, Faculty of Medicine, Research Day 1997; Toronto, Ontario
24. **Bowlby DA**, Brown TJ, Hochberg RB, Yuan H, Scherz B, MacLusky NJ. Regulation of Estrogen Receptors in the Female Rat Brain by Gonadal Steroids. Society for Neuroscience 1995; San Diego, California: Abstract 80.16
25. Puy LA, **Bowlby DA**, Orsino A, Lye SJ, MacLusky NJ. Connexin 43 mRNA in the Rat Brain: Regulation by Ovarian Steroid Exposure during Early Development. Society for Neuroscience 1995; San Diego, California: Abstract 80.9
26. **Bowlby DA**, Brown TJ, Hochberg RB, MacLusky NJ. Regulation of Estrogen Receptors in the Rat Brain During the Estrous Cycle. The Clinical Research Society of Toronto 1995; Toronto, Ontario
27. **Bowlby DA**, Brown TJ, Hochberg RB, MacLusky NJ. Regulation of Estrogen Receptors During the Female Reproductive Cycle. Department of Obstetrics and Gynecology, University of Toronto, Annual Research Day 1995; Toronto, Ontario
28. Puy LA, **Bowlby DA**, Orsino A, Lye SJ, MacLusky NJ. Estrogen and Androgen Receptor Expression in the Developing Human Brain. Department of Obstetrics and Gynecology, University of Toronto, Annual Research Day 1995; Toronto, Ontario

29. **Bowlby DA**, Yuan H, MacLusky NJ, Brown TJ. Regulation of Estrogen Receptors in the Rat Brain. *Frontiers in Physiology and Pharmacology Research Symposium*, University of Toronto 1995; Toronto, Ontario
30. **Bowlby DA**, Yuan H, MacLusky NJ, Brown TJ. Regulation of Steroid Hormone Receptors. *Society for Neuroscience* 1994; Miami, Florida: Abstract 161.7
31. **Bowlby DA**, Yuan H, MacLusky NJ, Brown TJ. Regulation of Steroid Hormone Receptors. Department of Obstetrics and Gynecology, University of Toronto, Annual Research Day 1994; Toronto, Ontario
32. **Bowlby DA**, Brown TJ, Hochberg RB, MacLusky NJ. Estrogen Receptor Levels in the Rat Brain Fluctuate with Stage of the Estrous Cycle. *Society for Gynecologic Investigation* 1994; Chicago, Illinois: Abstract P25

CONSULTANTSHIPS

National

Scientific Panel - IGFD Forum – Educational website (IGFDforum.com)

Institutional

Pod casts - MUSC (www.muschealth.org)

COMMUNITY SERVICE

Local

Board Member – Louie’s Kids – Non-profit organization to prevent childhood obesity

Abby’s Friends – Non-profit organization to increase awareness of Type 1 diabetes

PUBLICATIONS (Peer Review)

1. Edwards HE, Burnham WM, Mendonca A, **Bowlby DA**, MacLusky NJ. Steroid hormones affect limbic afterdischarge thresholds and kindling rates in adult female rats. *Brain Research* 1999;838:136-150
2. Yuan H, **Bowlby DA**, Brown TJ, Hochberg RB, MacLusky NJ. Distribution of Occupied and Unoccupied Estrogen Receptors in the Rat Brain: Effects of Physiological Gonadal Steroid Exposure. *Endocrinology* 1995;136:96-105

REVIEW ARTICLES & BOOK CHAPTERS

1. **Bowlby DA**, Rapaport R. Safety and Efficacy of Growth Hormone Therapy in Childhood. *Pediatric Endocrinology Reviews* 2004;2:68-77
2. Rapaport R, **Bowlby DA**. Clinical Aspects of Growth and Growth Disorders. In: “Pediatric Endocrinology: Mechanisms, Manifestations, and Management”, 2004 OH Pescovitz and E Eugster, Eds., Lippincott Williams and Wilkins, Philadelphia p 172-190
3. MacLusky NJ, **Bowlby DA**, Brown TJ, Peterson RE, Hochberg RB. Sex and the developing brain: suppression of neuronal estrogen sensitivity by developmental androgen exposure. *Neurochemical Research* 1997;22:1395-1414
4. MacLusky NJ, Yuan, H, **Bowlby DA**, Hochberg RB, Brown TJ. Steroid Receptor In Vitro Autoradiography. In: “The Neurobiology of Steroids”, 1994 Vol 22 ER de Kloet and W Suatanto, Eds., Academic Press, New York p 116-142

OTHER PUBLICATIONS

1. Rapaport R, **Bowlby D**. Book Review: The result is only as good as the test you order! *Trends in Endocrinology and Metabolism* 2005;16:346