

**David R. Weber, M.D., M.S.C.E.**  
**Assistant Professor of Pediatrics (Endocrinology and Diabetes)**

**Education**

**Masters: University of Pennsylvania**, Philadelphia, Pennsylvania (7/2011 – 12/2013)

- Master of Science in Clinical Epidemiology

**Medical School: University of Kansas Medical Center**, Kansas City, Kansas (8/2003 – 5/2007)

- Doctor of Medicine

**College: Carleton College**, Northfield, Minnesota (9/1998 – 6/2002)

- Bachelor of Arts with a major in Biology

**Medical Training**

**Fellowship: Children’s Hospital of Philadelphia**, Philadelphia, Pennsylvania (7/2010 – 6/2013)

- Pediatric Endocrinology and Diabetes

**Residency: Yale-New Haven Children’s Hospital**, New Haven, Connecticut (6/2007 – 6/2010)

- Pediatrics

**Faculty Appointments**

**Assistant Professor of Pediatrics: Golisano Children’s Hospital, University of Rochester** (8/2014-present)

**Attending Physician & Instructor: The Children’s Hospital of Philadelphia** (7/2013-6/2014)

**Relevant Clinical Experience**

**Director of Pediatric Bone Health Program, Golisano Children’s Hospital, University of Rochester**

- Multi-disciplinary clinical program closely integrated with Pediatric Endocrinology, Pediatric Orthopedic Surgery, Nutrition, Physical Therapy with additional team members in Sports Medicine and Pediatric Dentistry
- We care for patients from across Western/Upstate New York with a variety of genetic/metabolic bone diseases as well as secondary osteoporosis. Website: [Golisano.urmc.edu/pedsbonehealth](http://Golisano.urmc.edu/pedsbonehealth)

**Research Support**

**Ongoing Support:**

**K23 DK114477** Weber (PI) (7/1/2017-6/30/2020)

- Investigation of hypercalciuria as a cause of impaired bone mineral accrual in type 1 diabetes
- Role: PI
- Mentors: George Schwartz, Kimberly O’Brien
- Project Goals: To determine if excess urinary calcium loss impairs bone mineral accrual during adolescence in type 1 diabetes.

**Strong Children’s Research Center Pilot Award** Weber (PI) (1/1/2017-12/30/18)

- Investigation of Bone Density and Quality in Type 1 Diabetes
- Role: PI
- Mentors: George Schwartz
- Project Goals: To determine if Trabecular Bone Score is lower in adolescents with type 1 diabetes compared to age-, and sex-matched healthy controls

**Scoliosis Research Society Pilot Grant:** Sanders (PI) (7/1/2018-6/30/2019)

- Growth of the Spine in Children - a Longitudinal, Prospective Investigation
- Role: Co-I
- Project goals: To evaluate the ability of different skeletal maturing rating scales to predict future spine growth in children

**R01 NS095813** Heatwole (PI) (8/1/2017-4/30/2021)

- The Study of Testosterone and rHGH in FSHD (STARFISH)
- Role: Consultant, member of data safety and monitoring committee
- Project Goals: Phase 1 clinical trial of growth hormone and testosterone to improve muscle strength in adults with facioscapulohumeral muscular dystrophy

**Alexion HPP-501** Industry sponsored (1/1/2017-

- An Observational, Longitudinal, Prospective, Long Term-Term Registry of Patients with Hypophosphatasia
- Multi-center registry study to study natural history of hypophosphatasia
- Role: Site PI

**Trial Net TN-01: Natural History Study of the Development of Type 1 Diabetes** (7/2017-

- Multicenter prospective study of siblings to patients with T1D monitoring for development of T1D
- Role: Site PI

**Past Support:**

**K12HD068373** Schor (PI) (9/1/2014-8/30/2016)

- Translational/Molecular Pediatric Research career development award
- Role: Scholar
- Project goals: Investigation of calcium homeostasis in children with type 1 diabetes

**University of Rochester Core Center for Musculoskeletal Biology and Medicine Pilot Award**

**(P30AR061307)** Weber (PI) (7/2015-6/2016)

- Role: PI
- Project goals: Determine if calcium absorption is impaired in children with type 1 diabetes

**K12DK094723** Willi (PI) (7/1/2013- 6/30/2014)

- Career Development Program in Pediatric Diabetes Research (K12) at CHOP
- Role: Scholar
- Project Goals: To describe the natural history of bone disease in children and adolescents with type 1 diabetes and to identify risk factors for poor bone accrual in patients with type 1 diabetes

**CHOP Junior Investigator Preliminary/Feasibility Grant Program** Weber (PI) (7/1/2013-6/30/2014)

- Longitudinal Evaluation of Bone Density and Structure in Children and Adolescents with Type 1 Diabetes

- Role: Principal Investigator
- Project Goals: To evaluate bone density in structure in children and adolescents in the first year following diagnosis of type 1 diabetes

**CHOP Metabolism, Nutrition and Development Research Affinity Group** Weber (PI) (10/1/2012-6/30/2014)

- Evaluation of Circulating Osteogenic Precursor Cells and Osteoblast Function in a Cohort of Children and Adolescents Newly Diagnosed with Type 1 Diabetes.
- Role: Principal Investigator
- Project Goals: To evaluate markers of osteoblast function in type 1 diabetes

**F32DK096785** Weber (PI) (Awarded/Declined 7/22/2013)

- Evaluation of Fat Lean Body Mass Index as Measures of Metabolic Risk in Youth
- Role: Principal Investigator
- Project Goals: To develop and evaluate a fat mass index and lean body mass index as markers of adiposity and predictors of metabolic disease in children.

**T32 DK36388** Stanley (PI) (7/1/2011-6/30/2013)

- Principal Investigator: Charles Stanley, MD
- Role: Scholar
- Project Goals: To develop and evaluate a fat mass index and lean body mass index as markers of adiposity and predictors of metabolic disease in children.

## Publications

*\* denotes trainee/supervisee*

### Peer Reviewed Research Articles:

\*Vajravelu ME, Keren R, **Weber DR**, Verma R, DeLeon DD, Denburg MR. Incidence and Risk of Celiac Disease after Type 1 Diabetes: A Population-Based Cohort Study Using The Health Improvement Network Database. *Pediatr Diabetes*. 2018; 19(8):1422-28. PMID 30209881

**Weber DR**, Thomas S, Erickson SW, Fox D, Oleszek J, Pandya S, Venkatesh Y, Westfield C, Ciaffaloni E. Bone Health and Endocrine Care of Boys with Duchenne Muscular Dystrophy: Data from the MD STARnet. *J Neuromuscul Dis* 2018; 5(4):497-507. PMID 30149461

Knapik DM, Sanders JO, Gilmore A, **Weber DR**, Cooperman DR. A quantitative method for radiologic assessment of skeletal maturity using the distal femur. *Bone Joint J*. 2018 Aug; 100(8): 1106-11. PMID: 30062944.

Thong EP, Herath M, **Weber DR**, Ranasinha S, Ebling PR. Fracture risk in young and middle-aged adults with Type 1 diabetes mellitus: a systematic review and meta-analysis. *Clin Endocrinol*. 2018 Sep; 89(3):314-323 PMID: 29876960 PMCID: PMC6105385

Baker JF, Newman AB, Kanaya L, Leonard MB, Zemel B, Miljkovic I, Long J, **Weber D**, Harris TB. The adiponectin paradox in the elderly: associations with body composition, physical functioning, and mortality. *J Gerontol A Biol Sci Med Sci*. 2018 Feb 9 *epub ahead of print* PMID 29438496

Sanders JO, Qiu X, Lu X, Duren DL, Liu RW, Dang D, Menendez ME, Hans SD, **Weber DR**, Cooperman DR. The uniform pattern of growth and skeletal maturation during the human adolescent growth spurt. *Sci. Rep.* 2017 Dec 1; 7(1):16705. PMID 29196711 PMCID: PMC5711808

**Weber DR**, O'Brien KO, Schwartz GJ. Evidence of disordered calcium metabolism in adolescent girls with type 1 diabetes: an observational study using a dual-stable calcium isotope technique. *Bone.* 2017 Dec; 105:184-190. PMID 28882565. PMCID: PMC5650924

Baker JF, Long J, Leonard MB, Harris T, Delmonico MJ, Santanasto A, Satterfield S, Zemel B, **Weber DR**. Estimation of skeletal mass muscle relative to adiposity improves prediction of physical performance and incident disability. *J Gerontol A Biol Sci Med Sci.* 2018 June 14; 73(7):946-952. PMID 28958026 PMCID: PMC6001879.

Wittlieb-Weber CA, Rossano J, **Weber D**, Lin KY, Ravishankar C, Mascio CE, Shaddy R, O'Connor MJ. Emergency department utilization in pediatric heart transplant recipients. *Pediatr Transplant.* 2017 Jun;21(4). PMID: 28455909

Baker JF, Giles JT, **Weber D**, Leonard MB, Zemel BS, Long J, Ibrahim S, Katz PP. Assessment of muscle mass relative to fat mass and associations with physical functioning in rheumatoid arthritis. *Rheumatology (Oxford).* 2017 Jun;56(6):981-988. PMID: 28340012.

**Weber DR**, Stark LJ, Ittenbach RF, Stallings VA, Zemel BS. Building Better Bones in Childhood: A Randomized Controlled Study to Test the Efficacy of a Dietary Intervention Program to Increase Calcium Intake. *Eur J Clin Nutr.* 2017 Jun;71(6):788-79 PMID: 28225052 PMCID: PMC5462896

Gonzalez Ballesteros LF, Ma NS, Gordon RJ, Ward L, Backeljauw P, Wasserman H, **Weber DR**, DiMeglio LA, Gagne J, Stein R, Declan C, Simmons K, Zimakas P, Swartz-Topor L, Agrawal S, Calabria A, Tebben P, Faircloth R, Imel EA, Casey L, Carpenter TO. Unexpected and Widespread Hypophosphatemia and Bone Disease Associated with Elemental Formula Use in Infants and Children. *Bone.* 2017 Apr; 97:287-292. PMID: 28167344 PMCID: PMC5884631

**Weber D**, Long J, Leonard MB, Zemel B, Baker JF. Development of Novel Methods to Define Deficits in Appendicular Lean Mass Relative to Fat Mass. *PLoS One.* 2016 Oct 10; 11(10):e0164385. PMID 27723820 PMCID: PMC5056731.

Wendel D, **Weber D**, Leonard MB, Magge SN, Kelly A, Stallings VA, Pipan M, Stettler N, Zemel BS. Body Composition Estimation Using Skinfolts in Children with and without Health Conditions Affecting Growth and Body Composition. *Ann Hum Biol.* 2017 Mar; 44(2): 108-210. PMID: 27121656 PMCID: PMC5559202

**Weber DR**, Coughlin C, Brodsky JL, Lindstrom K, Ficicoglu C, Kaplan P, Freehauf CL, Levine MA. Low Bone Mineral Density is a Common Finding in Patients with Homocystinuria. *Mol Genet Metab.* 2016 Mar; 117(3):351-4. PMID 26689745. PMCID: PMC4788514

George S, **Weber DR**, Kaplan P, Hummel K, Monk HM, Levine MA. Short Term Safety of Zoledronic Acid in Young Patients with Bone Disorders: An Extensive Institutional Experience. *J Clin Endocrinol Metab.* 2015 Nov;100(11):4163-71. PMID 26308295 PMCID: PMC4702447

† co-first author

DeBoer MD, **Weber DR**, Zemel BS, Denburg MR, Herskovitch R, Long J, Leonard MB. Bone Mineral Accrual is Associated with Parathyroid Hormone & 1,25-Dihydroxy Vitamin D Levels in Children and

Adolescents. *J Clin Endocrinol Metab.* 2015 Oct;100(10):3814-21. PMID 26241322. PMCID: PMC4596042

**Weber DR**, Haynes K, Leonard MB, Willi SM, Denburg MR. Type 1 Diabetes and Fracture Risk: A Population-Based Study Using The Health Improvement Network (THIN). *Diabetes Care.* 2015 Oct;38(10):1913-20. PMID 26216874. PMCID: PMC4580610

\*Yekta Z, Xie D, Bogner HR, **Weber DR**, Zhang X, Harhay M, Reese PP. The association of antidepressant medications and diabetic retinopathy among people with diabetes. *J Diabetes Complications.* 2015 Nov-Dec;29(8):1077-84. PMID 26233573.

Li Dong, **Weber DR**, Li Dong, Deardorff M, Hakonarson H, Levine MA. Exome Sequencing Reveals a Nonsense Mutation in MMP13 as a New Cause of Autosomal Recessive Metaphyseal Anadysplasia. *Eur J Hum Genet.* 2015; 23 (2):264-6. PMID: 24781753

† co-first author

**Weber DR**, Stanescu D, Holland C, Magge S. Continuous, Subcutaneous IGF1 Therapy via Insulin Pump in a Patient with Donohue Syndrome. *J Pediatr Endocrinol Metab.* 2014;27(11-12):1237-41. PMID: 25153212

**Weber DR**, Leonard MD, Shults J, Zemel BS. A Comparison of Fat and Lean Body Mass Index to BMI for the Identification of Metabolic Syndrome in Adolescents. *J Clin Endocrinol Metab.* 2014; 99(9):3208-16. PMID: 24926951

**Weber DR**, Katz LE, Zemel BS, Gallagher PR, Murphy KM, Dumser SM, Lipman TH. Anthropometric measures of abdominal adiposity for the identification of cardiometabolic risk factors in adolescents. *Diabetes Res Clin Pr.* 2014;103(3):e14-7. PMID: 24552682.

Wittlieb-Weber C, Paridon SM, Gaynor JW, Spray TL, **Weber DR**, Brothers, JA. Medium-term outcome after anomalous aortic origin of a coronary artery repair in a pediatric cohort. *J Thorac Cardiovasc Surg.* 2014;147(5):1580-6. PMID:23988284

**Weber DR**, Moore RH, Leonard MB, Zemel BS 2013. Fat and lean BMI reference curves in children and adolescents and their utility in identifying excess adiposity compared with BMI and percentage body fat. *Am J Clin Nutr.* 2013 Jul;98(1):49-56. PMID: 23697708 PMCID: 3683820

### **Peer Reviewed Review Articles / Evidence Based Practice Guidelines:**

Ward LM, **Weber DR** Growth, pubertal development, and skeletal health in boys with Duchenne Muscular Dystrophy. *Curr Opin Endocrinol Diabetes Obes.* Nov 30 2018 *Epub ahead of print*

**Weber DR**, Hadjiyannakis S, McMillan HJ, Noritz G, Ward LM. Obesity and Endocrine Management of the Patient with Duchenne Muscular Dystrophy. *Pediatrics* Oct 2018, 142 (Supplement 2) S43-S52. PMID: 30275248

Ward LM, Hadjiyannakis S, McMillan HJ, Noritz G, **Weber DR**. Bone health and osteoporosis management of the patient with Duchenne muscular dystrophy. *Pediatrics* Oct 2018, 142 (Supplement 2) S34-S42. PMID: 30275247

Birnkrant DJ, Bushby K, Bann CM, Alman BA, Apkon SD, Blackwell A, Brumbaugh D, Case LE, Clemens PR, Hadijyannakis S, Pandya S, Street N, Tomezsko J, Wagner KR, Ward LM, **Weber DR** for the DMD Care Considerations Working Group. diagnosis and management of Duchenne muscular dystrophy, an update, part 1: Diagnosis, neuromuscular, rehabilitation, endocrine, and nutritional management. *Lancet Neurol*. 2018 Jan 23 PMID: 29395989

Birnkrant DJ, Bushby K, Bann CM, Alman BA, Apkon SD, Blackwell A, Case LE, Cripe L, Hadijyannakis S, Olson AK, Sheehan DW, Bolen J, **Weber DR**, Ward LM for the DMD Care Considerations Working Group. Diagnosis and management of Duchenne muscular dystrophy, part 2: respiratory, cardiac, bone health, and orthopaedic management. *Lancet Neurol*. 2018 Jan 23 PMID: 29395990.

Birnkrant DJ, Bushby K, Bann CM, Apkon SD, Blackwell A, Colvin MK, Cripe L, Herron AR, Kennedy A, Kinnett K, Naprawa J, Noritz G, Poysky J, Street N, Trout CJ, **Weber DR**, Ward LM, for the DMD Care Considerations Working Group. Diagnosis and management of Duchenne muscular dystrophy, part 3: primary care, emergency management, psychosocial care, and transitions of care across the lifespan. *Lancet Neurol*. 2018 Feb 1. PMID: 29398641

**Weber DR**, Schwartz G. Epidemiology of Skeletal Health in Type 1 Diabetes. *Curr Osteoporos Rep*. 2016 Dec;14(6):327-336. PMID: 27744554. PMCID: PMC5130154

**Weber DR**, Leonard MB, Zemel BS. Body composition analysis in the pediatric population. *Pediatr Endocrinol Rev*. 2012;10(1):130-9. PMID: 23469390

### **Book Chapters:**

**Weber DR**, Zemel BS. Body composition assessment. In: Ahima, RS, ed. *Metabolic Syndrome*. Springer International Publishing. Switzerland. 2016. 1-24. DOI 10.1007/978-3-319-12125-3\_33-1

**Weber DR**, Brodsky JL, Carpenter TO. Normal and Delayed Pubertal Development. In Talwalkar JS & Fenick AM, eds. *Yale Curriculum in Primary Care Pediatrics*, 4<sup>th</sup> edition. New Haven, CT: Yale, 2010.

**Weber DR**, Brodsky JL, Carpenter TO. Precocious Puberty. In Talwalkar JS & Fenick AM, eds. *Yale Curriculum in Primary Care Pediatrics*, 4<sup>th</sup> edition. New Haven, CT: Yale, 2010.

### **Other Peer Reviewed Publications:**

\*Miller D, **Weber DR**. Fetal Bone Development. The periFACTS OB/GYN Academy. 2017; Case#16187.

**Weber DR**, Jospe N. Recognition and Evaluation of Disordered Pubertal Development in Girls. The periFACTS OB/GYN Academy. 2015; Case #1164GYN.

**Weber DR**, Econs ME, Levine MA. Osteopetrosis: Pathogenesis, Management, and Future Directions for Research. *IBMS BoneKEy*. 2014; 11, Article number: 520. Published online 12 March 2014

### **Letters, Replies and Editorials**

**Weber DR**, Haynes K, Leonard MB, Willi SM, Denburg MR. Response to Comment on Weber et al. Type 1 Diabetes Is Associated With an Increased Risk of Fracture Across the Life Span: A Population-

Based Cohort Study Using The Health Improvement Network (THIN). *Diabetes Care* 2015;38:1913-1920. *Diabetes Care*. 2015 Dec;38(12):e205-6. PMID 26604284

**Weber DR**, Moore RH, Leonard MB, Zemel BS. Reply to RF burton. *Am J Clin Nutr*. 2013; 98(5):1368-9. PMID: 24142240

**Oral Abstracts (Past 5 years):**

**Weber DR**, Gordon RJ, Kelley JC, Leonard MB, Willi SM, Hatch-Stein J, Kelly A, Kosacci O, Kucheruk O, Zemel BS. Poor glycemic control is associated with reduced bone accrual in the year following a diagnosis of type 1 diabetes in children. *Pediatric Academic Society Annual Meeting*. Toronto, ON. May 2018.

\*Stevens E, Wixom N, Rackovsky N, **Weber, DR**. Assessment of Calcium Intake in the Pediatric Type 1 Diabetes Population. *Eastern Society for Pediatric Research Annual Meeting*. Philadelphia, PA, March 2017.

**Weber DR**, O'Brien K, Leonard M, Rackovsky N, Schwartz N. Poor glycemic control is associated with increased urinary calcium excretion in adolescents with type 1 diabetes. *CHRC Annual Meeting*, Washington, D.C., September 2016

Baker JF, **Weber D**, Long J, Leonard MB, Zemel B. Characterization of the Lean-Fat Mass Associations in Age, Sex, and Racial Groups and the Development of Fat-adjusted Measures of Low Lean Mass and Sarcopenia. *International Society for Frailty and Sarcopenia Research Meeting*, Philadelphia, PA, April 2015

**Poster Abstracts (Past 5 years):**

Sanders J, Cai X, Gao S, Liu R, Cui J, Duren D, Garcia M, Hung A, Karback L, Knapik D, Li D, Nicholson A, Smith B, **Weber DR**, Cooperman D. Skeletal maturity of various skeletal regions and staging systems and their relationship to peak growth, chronological age, and growth in height, spine and lower extremities. *Pediatric Orthopedic Society of North America Annual Meeting*. Charlotte, NC. May 2019

Hughes I, Cullimore M, Habben L, **Weber DR**, Weinberg G. An old anti-epileptic therapy meets an ancient morbidity: the ketogenic diet and scurvy. *Annual Meeting of the American Epilepsy Society*. New Orleans, LA, December 2018.

Numbereye, N, **Weber, DR** and Iqbal, MA. A 235 Kb deletion at 17q21.33 encompassing the COL1A1 gene, and two additional secondary copy number variants in an infant with type I osteogenesis imperfecta: A rare case report. *American Society of Human Genetics Annual Meeting*. San Diego, CA, October 2018.

Vajravelu ME, Keren R, **Weber DR**, Verma R, DeLeon DD, Denburg M. Incidence and Risk of Celiac Disease in Children and Adults with Type 1 Diabetes: A Population-Based Cohort Study Using The Health Improvement Network Database. *American Diabetes Association Scientific Sessions*, Orlando, FL, June 2018.

Wittlieb-Weber CA, Villa CR, Conway J, Bock MJ, Gambetta KE, Johnson JN, Lal AK, Schumacher KR, Law SP, Desphande S, West SC, Friedland-Little JM, Lytrivi ID, McCulloch MA, Butts RJ, **Weber DR**, Knecht KJ. Use of Advanced Heart Failure Therapies in Duchenne Muscular Dystrophy. *International Society for Heart Lung Transplantation Annual Meeting*, Nice, FR, April 2018.

**Weber DR**, O'Brien K, Rackovsky N, Schwartz N. Evidence of Disordered Calcium Metabolism in Adolescent Girls with Type 1 Diabetes: A Study Using Dual-Stable Calcium Isotopes. Orthopedic Research Society Upstate New York and Northeast Regional Symposium. Rochester, NY, July, 2017

Thomas S, Erickson SW, Ciafaloni E, Fox D, Oleszek J, Pandya S, Venkatesh Y, Westfield C, **Weber DR**. Clinical Utilization of Endocrine and Bone Health Screening and Therapy in Boys with Duchenne Muscular Dystrophy, Data from the Muscular Dystrophy Surveillance Tracking and Research Network (MDSTARnet). Parent Project Muscular Dystrophy Annual Connect Meeting. Chicago, IL, May 2017

Sanders JO, Duren D, Qiu X, Liu R, Dang D, Menendez M, Cook P, Xiang L, Hans S, Karbach L, **Weber D**, Cooperman D. The Relationship of Age, Skeletal Maturity and Menarche to Spinal Growth During Adolescence. European Paediatric Orthopedic Society/Pediatric Orthopedic Society of North America Combined Annual Meeting. Barcelona, Spain, May 2017.

**Weber DR**, O'Brien K, Leonard M, Rackovsky N, Schwartz N. Poor glycemic control is associated with increased urinary calcium excretion in adolescents with type 1 diabetes. American Society for Bone and Mineral Research. Atlanta, GA, USA, September 2016.

Wittlieb-Weber, CA, Rossano JW, **Weber, DR**, Lin, KY, Ravishankar, C, Mascio CE, Shaddy RE, O'Connor MJ. Emergency Department Utilization by Pediatric Heart Transplant Recipients. The International Society for Heart and Lung Transplantation Annual Meeting. Washington, D.C., April 2016

Gonzalez-Ballesteros L, Backeljauw P, Casey L, Declan C, DiMeglio L, Gagne J, Imel E, Ma N, Ward L, **Weber DR**, Zimakas PJ, Carpenter TO. Hypophosphatemia Associated with Elemental Formula Use in Children with Feeding Problems. American Society of Bone and Mineral Research National Meeting, Seattle, WA, October 2015.

**Weber DR**, Kelley J, Mawson TB, Willi SM, Leonard MB, Zemel BS. Sex Differences in Bone Density and Body Composition in Children Newly Diagnosed with Type 1 Diabetes. Endocrine Society National Meeting, San Diego CA, March 2015

George S, **Weber DR**, Bodenstab H, Hummel K, Kaplan P, Ganesh J, Levine M. Assessment of Adverse Effects Associated with Zoledronic Acid Use in Children and Young Adults with Metabolic and Genetic Bone Disease. American Society for Bone and Mineral Research National Meeting, Houston, TX, September 2014.

**Weber DR**, Haynes K, Leonard MB, Willi SM, Denburg, MR. Type 1 Diabetes and Fracture Risk: A Population-Based Study Using The Health Improvement Network (THIN). American Diabetes Association Scientific Sessions, San Francisco, CA, June 2014.

## Teaching

### Rochester Institute of Technology (2017-present)

#### *Lectures to Physician Assistant Graduate Students:*

- Pediatric Growth Disorders (3/3/2017, 2/26/2018)
- Parathyroid/Calcium Disorders (3/6/2017, 2/23/2018)



**University of Rochester School of Medicine and Dentistry: (2015-present)**

***Faculty Lectures:***

- **Evaluation of Bone Health in Cystic Fibrosis.** Cystic Fibrosis Educational Session (4/24/2018)
- **Bone Health in Anorexia Nervosa.** Division of Adolescent Medicine Educational Session (3/15/2016)
- **Evaluation and Treatment of Bone Health in Chronic Pediatric Pulmonary Disease.** Pediatric Pulmonology Faculty Lecture Series (4/29/2015)
- **Use of Bisphosphonates in the Pediatric Population.** Pediatric Hospitalist Faculty Lecture Series (3/19/2015)

***Fellow Lectures:***

- **Management of Bone Mineral Abnormalities in Neonates:** Neonatology Fellows Teaching Conference (10/19/2017)
- **Bone Health in Inflammatory Bowel Disease.** Pediatric GI Fellows Teaching Conference (1/19/2017)

***Pediatric Resident Lectures:***

- **Clinical Management of Diabetic Ketoacidosis** (7/25/2018)
- **Calcium Homeostasis and Bone Health** (1/16/2018, 7/27/2015)
- **Normal and Abnormal Pubertal Development** (11/29/2017, 7/20/2015)
- **Bisphosphonates and Fragile Bones** (7/13/2016)

***SCRC Summer Research Program Lectures:***

- **Building a research career in pediatric endocrinology** (6/2015, 6/2016, 6/2017)

***Graduate Student Courses:***

- **IND 501/506 Ethics and Professional Integrity in Research:** Small group preceptor for graduate students/research faculty (Fall Semester 2018)

**CHOP/ Perelman School of Medicine at the University of Pennsylvania: (2011-2014)**

***Faculty Lectures:***

- **Addison's Disease for Diabetes Practitioners.** Presented at Professional Development Series at the Diabetes Center for Children, Children's Hospital of Philadelphia (4/15/2011)

***Medical Student Courses:***

- **Introduction to Pediatric History and Physical Examination Course:** Teaching and supervision of medical students in classroom and clinical setting as they learn the pediatric history and physical exam
- **Differential Diagnosis Course:** Small group preceptor for medical students as they learn how to develop a differential diagnosis

## Mentoring

**Mirna Kaafarni** (2018): Undergraduate participant in the URMC Strong Children's Research Center Summer Student Program. Project: Self-reported physical activity in children with type 1 diabetes. Poster presented at SCRC Scientific Abstract Session, Rochester, NY 8/2018

**Maria Christina Gil Diaz** (2018-): Undergraduate student at UR. Preceptor for clinical research independent study: Project: Role of diet and exercise for bone health in children with type 1 diabetes. Poster presented at 8<sup>th</sup> Annual Center for Musculoskeletal Research Symposium, Rochester, NY, 10/2018.

**Blair Germain** (2017-): Neonatology Fellow at URMC. Content mentor and member of Scholarship Oversight Committee. Project: Use of qualitative ultrasound to assess metabolic bone disease of prematurity in neonates.

**Mary Ellen Vajravelu** (2016-2018): Served on her thesis committee for the Masters of Science in Clinical Epidemiology degree program at UPenn. Project: Celiac Disease Risk in Type 1 Diabetes. Resulted in first author publication in 2018.

**Roman Rahmani** (2017): Undergraduate participant in the URMC Strong Children's Research Center Summer Student Program. Project: Calcium Intake in Children with Type 1 Diabetes. Poster presented at SCRC Scientific Abstract Session, Rochester, NY 8/2017

**Elizabeth Stevens** (2016): Undergraduate participant in the URMC Strong Children's Research Center Summer Student Program. Project: Calcium Intake in Children with Type 1 Diabetes. Oral abstract presentation at Eastern Society for Pediatric Research, Philadelphia, PA, 3/2017.

**Zahra Yekta, MD** (2014-2015) Served on her thesis committee for the Masters of Science in Clinical Epidemiology degree program at UPenn. Project: Retinopathy and Antidepressant use in Type 1 Diabetes. Resulted in first-authored publication in 2015.

## National/International Committee, Meeting & Administrative Service

**Co-Chair, Pediatric Task Force for The International Society for Clinical Densitometry**, Member of the committee to review and revised the position statement regarding skeletal health assessment in children (1/2018-)

**Co-Chair, Pediatric Bone Mineral Working Group**, American Society for Bone and Mineral Research (10/2017-10/2019)

**Leader, Rare Bone Disease Poster Tour**, American Society for Bone Mineral Research Annual Meeting, Montreal, Canada (9/2018)

**Pediatric Endocrine Society – Education Committee**, Member of the Fellows' Course Committee. Co-organizer of the annual Pediatric Endocrine Fellows Educational Retreat (9/2017-8/2020)

**Moderator: Poster Session II**, Eastern Society for Pediatric Research Annual Meeting, Philadelphia, PA (3/2017)

**CDC and NCBDDD Initiative to Update the DMD Care Consideration Guidelines**, The Rare Disorders and Health Outcomes Team (RDHO) in the National Center on Birth Defects and Developmental Disabilities (NCBDDD) (2015-2017)

**Co-Chair, Disorders of Phosphate Metabolism and Metabolic Bone Disease Oral Abstract Session**, Endocrine Society National Meeting, Boston MA (4/2016)

**Chair, Diabetes and the Skeleton Symposium**, Endocrine Society National Meeting San Diego CA, (3/2015)

**Member, Pediatric Bone and Mineral Working Group Advisory Board**, American Society for Bone and Mineral Research (10/2013- present)

### **Local/Regional Committee & Administrative Service**

**Member, Medical Advisory Council, Make-A-Wish Foundation for Metro/Western NY** (2016-

**Member, Research Taskforce, Department of Pediatrics Strategic Plan**, URMC, (2016-)

**Medical Director, American Diabetes Association Camp ASPIRE**, Rochester NY (2015-)

**Medical Staff, American Diabetes Association's Camp Freedom**, Green Lane, PA (2011-2014)

**Member, Research Trainee Advisory Committee**, Children's Hospital of Philadelphia: (7/2011-6/2013)

**Poster Day Judge: CHOP Research Institute Summer Scholars Program** (8/2012)

**Member, Division of Endocrinology Fellowship Committee**, Children's Hospital of Philadelphia: (7/2010-6/2014)

**Co-Chief Fellow, Endocrinology and Diabetes Fellowship Program**, Children's Hospital of Philadelphia: (7/2012-6/2013)

**Co-Leader, Pediatric Academic Medicine Career Development Group**, Yale-New Haven Hospital: (8/2008-6/2010)

**Member, Medication Safety Subcommittee**, University of Kansas Hospital: (8/2005 – 5/2007)

**Chair, Electronic Charting Committee JayDoc Free Clinic**: Kansas City, KS (2003-2004)

### **Editorial Responsibilities**

**Editorial Board Member** – Journal of Clinical Endocrinology and Metabolism: (1/2018-12/2019)

### **Invited Talks**

**Skeletal Complications of Type 1 Diabetes.** Division of Pediatric Endocrinology, The Children's Hospital of Philadelphia (11/16/2018)

**Clinical Research Update in Type 1 Diabetes.** College Diabetes Network, University of Rochester, Rochester NY. (9/17/2018)

**Muscle-bone Cross Talk: Implications for Bone Studies in the Dystrophinopathy Setting.** European Neuromuscular Centre Workshop: Bone Protective Therapies in Duchenne Muscular Dystrophy, Amsterdam, The Netherlands. (6/1/2018)

**Skeletal Complications of Type 1 Diabetes.** Division of Pediatric Endocrinology, University of Colorado. (5/21/2018)

**Launching an Academic Research Career.** Pediatric Endocrine Society Fellows Retreat. Alton Mills, Ontario, CA. (5/9/2018)

**Diabetes and Bone: A Fragile Balance.** 19th Annual Diabetes Conference: Diabetes Management - When Conventional Wisdom Collides with Reality. Rochester, NY (3/3/2018)

**Planning for Scope of Practice at Camp.** American Diabetes Association Camp Leadership Conference, Arlington, VA (12/2/2017)

**Bad to the Bones: Investigating the Effects of Type 1 Diabetes on Bone Health.** Schor Festschrift, University of Rochester Medical Center. (9/28/2017)

**Impact of a Wish.** Pediatric Grand Rounds, Golisano Children's Hospital, University of Rochester Medical Center. Panelist (5/31/2017)

**Endocrine Complications of Duchenne Muscular Dystrophy and its Treatment:** DMD Education Day, Muscular Dystrophy Association. Rochester NY, USA (3/5/2017)

**Update in Pediatric Bone.** Pediatric Grand Rounds, Golisano Children's Hospital, University of Rochester Medical Center. (2/25/2015)

## **Awards & Honors**

ASBMR Young Investigator Travel Grant (9/2016)

ASBMR John Haddad Young Investigator Award (4/2015)

Helmsley Charitable Trust Abstract Awards in Type 1 Diabetes (3/2015)

ASBMR President's Poster Award for Exceptional Abstract Presentation (10/2013)

National Institutes of Health Loan Repayment Program (7/2013-6/2015)

CHOP Poster Day Award in Patient Oriented Research (2/2013)

Finalist CHOP Research Trainee Award (2/2013)

Tom Moshang Research Award, Children's Hospital of Philadelphia (6/2012)

Endocrine Trainee Day Travel Award (6/2012)

Endocrine Fellows Foundation Forum on Osteoporosis and Metabolic Bone Disease (9/2011)

Pediatric Endocrine Society Travel Award (4/2011)

First Place Award for Retrospective Studies, KUMC Student Research Forum (4/2006)

Paul Ambrose Scholar, Association for Prevention Teaching and Research (6/2004)

Magna Cum Laude, Carleton College (6/2002)

Southern Society for Pediatric Research Travel Award (5/2002)

### **Board Certification & Licensure**

**Pediatrics:** October 18, 2010

**Pediatric Endocrinology:** November 13, 2013

**Licensure:** New York

### **Membership in Professional Organizations**

Society for Pediatric Research: 2017-

Pediatric Endocrine Society: 2011-

Endocrine Society: 2011-

American Society for Bone and Mineral Research: 2012-

### **Other Formal Training in Research, Health Care & Leadership**

**Junior Faculty Research Core Curriculum Course,** University of Rochester Medical Center (2014)

**Endocrine Fellows Foundation Preceptorship in Bone Diseases at Columbia University** (5/2013)

### **Grant Reviewer**

**KL2 Training Grant Review Committee:** University of Rochester Medical Center (2018-2019)

**Dutch Duchenne Parent Project:** Operating Grants and Postdoctoral Fellowship Competition (2018)

### **Abstract Reviewer**

**Endocrine Society** (2018)

**Eastern Society for Pediatric Research** (2017)

### **Ad Hoc Peer Reviewer**

American Journal of Human Biology (2014)

Annals of Human Biology (2014, 2015, 2016)

British Journal of Nutrition (2014)

Bone (2016, 2018)

BMC Pediatrics (2016, 2017)

Calcified Tissue International (2016)

Diabetic Medicine (2016)

Diabetologia (2015, 2016)

Diabetes Research and Clinical Practice (2014)

Journal of the American College of Cardiology (2018)

Journal of Bone and Mineral Research (2013, 2017, 2018)

Journal of Clinical Endocrinology and Metabolism (2014, 2015, 2016, 2017,2018)

Journal of Clinical and Translational Endocrinology (2015,2016)

Journal of Paediatrics and Child Health (2015)

Nutrition, Metabolism, and Cardiovascular Diseases (2014)

Pharmacological Research (2018)