CURRICULIM VITAE
THOMAS JOSEPH WEBER

PERSONAL DATA:

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EDUCATION:

1981-1985	University of Chicago, Chicago, IL; B.A. Biology
1985-1989	University of Chicago-Pritzker, Chicago, IL; M.D.

PROFESSIONAL TRAINING/APPOINTMENTS:

1984-1986	Research Assistant, Division of Biological Sciences, University of Chicago
1989-1992	Internal Medicine Residency, Yale-New Haven Hospital, New Haven, CT
1992-1993	Instructor in Medicine, Yale-New Haven Hospital
1993-1997	Fellow in Endocrinology and Metabolism Duke University Medical Center, Durham, NC
1997-2001	Associate in Medicine, Division of Endocrinology and Metabolism, Duke University Medical Center, Durham, NC
1998-2000	Medical Director, Bone and Metabolic Diseases Clinic, Duke University Medical Center
1999-present	Medical Director, Duke Clinical Bone Laboratory
2001-2010	Assistant Professor of Medicine, Duke University Medical Center, Durham, NC
2005-2015	Fellowship Training Program Director, Endocrinology, Metabolism and Nutrition
2010-2020	Associate Professor of Medicine, Duke University Medical Center, Durham, NC
2020-present	Professor of Medicine, Duke University Medical Center, Durham, NC
2008-present	Faculty member, Clinical Research Training Program Duke University Medical Center
2015-2018	Member, Ethics Advisory Committee, American Society for Bone and Mineral Research
2018-present	Member, Professional Practice Committee, American Society for Bone and Mineral Research

CONSULTANT APPOINTMENTS/MEETINGS:

2012-2016 Ad Hoc Member, Endocrinologic and Metabolic Drugs Advisory Committee (EMDAC), Food and Drug Administration, Silver Spring, MD

2016-present Permanent Member, Endocrinologic and Metabolic Drugs Advisory Committee (EMDAC), Food and Drug Administration, Silver Spring, MD

Specific FDA Meetings:

1/16/2019 Discuss biologics license application 761062, romosozumab injection, submitted by Amgen, for the proposed indication of treatment of osteoporosis in postmenopausal women at high risk for fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or patients who have failed or are intolerant of other available osteoporosis therapy.

5/10/2018 Discuss the safety and efficacy of volanesorsen as an adjunct to diet for the treatment of patients with familial chylomicronemia syndrome (FCS), which is the subject of a new drug application (NDA) submitted by Akcea Therapeutics, Inc.

5/11/2018 Discuss drug development for the treatment of children with achondroplasia. The following topics were considered for discussion: evidence required to establish dose-response, study design, study duration, intended population, and endpoints.

10/18/2017 Discuss the safety and efficacy of new drug application (NDA) 209637 for semaglutide injection, submitted by Novo Nordisk, as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.

11/4/2015 Osteoporosis Drug Development: Moving Forward. The purpose of this workshop was to seek input from experts on scientific issues important to clinical development of drugs and therapeutic biologics intended to treat osteoporosis. During the workshop, attendees discussed potential surrogate endpoints and the endpoints. Food and Drug Administration's(FDA or Agency) Division of Bone, Reproductive, and Urologic Products.

9/12/2014: BLA 125511 Natpara® (established name: Recombinant Human Parathyroid Hormone (rDNA) or (rhPTH[1-84]) for the proposed indication of replacement for endogenous parathyroid hormone (1-84) for the long-term treatment of hypoparathryoidism.

3/5/2013: Discuss whether the benefit of calcitonin salmon for the treatment of postmenopausal osteoporosis (thinning and weakening of bones that increases the chance of having a broken bone) outweighs a potential risk of cancer. Joint Meeting of the Advisory Committee for Reproductive Health Drugs (ACRHD) and the Drug Safety and Risk Management Advisory Committee (DSaRM)

9/8/2012: Safety and efficacy of new drug applications (NDAs) 203313, insulin degludec/insulin aspart [rDNA origin] injection and 203314, insulin degludec [rDNA origin] injection, manufactured by Novo Nordisk Inc.

2014-2015 Alexion Pharmaceuticals

2014-present Ultragenyx Pharmaceuticals

2016-present: Pharmacosmos

2016-17: Editorial Board Member, Journal of Clinical Investigation

2017-present Member, Self Assessment Committee, Endocrine Self Assessment Program (ESAP), The Endocrine Society.

2018-present Member, Clinical Events Classification (CEC) Committee, Sanofi SCORED Trial (ClinicalTrials.gov Identifier: NCT03315143), Duke Clinical Research Institute

MEMBERSHIP IN NATIONAL ORGANIZATIONS:

Endocrine Society
American Society for Bone and Mineral Research
International Society for Clinical Densitometry
National Osteoporosis Foundation (NOF)

CERTIFICATIONS:

Diplomate in Internal Medicine (1992, 2002)
Diplomate in Endocrinology, Diabetes and Metabolism (1995, 2005, 2015)
North Carolina Medical License

HONORS AND AWARDS: Phi Beta Kappa (1981)
General Honors in the College (1985)
Alpha Omega Alpha (1989)

TRAINEES :

Fellows :

Lekshmi Nair, MD (2007-09) Assistant Professor of Medicine, The Ohio State University.

Reena Thomas (2013-15) Patuxent Endocrinology Associates, Prince Frederick, MD

PEER REVIEWED PUBLICATIONS:

1. Welsh M, Weber T, Wrange O, Nielsen DA, Matthieu M, Steiner DF Regulation of insulin gene expression by dexamethasone, Ca^{2+} and a phorbol ester. *Biomedica Biochimica Acta*, 47(4):299-303, 1988. PMID: 3071361

2. Swain A, Ikeda Y, Weber TJ, Hentges KE, Zanaria E, Lalli E, Tamai KT, Sassone-Corsi P, Lovell-Badge R, Camerino G, Parker KL Steroidogenic factor 1 and Dax-1 co-localize in multiple cell lineages: potential links in endocrine development. *Molecular Endocrinology* 10:1261-1272, 1996. PMID: 9121493

3. Wong M, Ikeda Y, Luo X, Caron KM, Weber TJ, Swain A, Schimmer BP, Parker KL Steroidogenic factor 1 plays multiple roles in endocrine development and function. *Recent Progress in Hormone Research* 52:167-82, 1997. PMID: 9238852

4. Swerdloff R, Wang C, Cunningham G, Dobs A, Iranmanesh A, Matsumoto A, Snyder P, Weber T, Longstreth J, Berman N, and the Testosterone Gel Study Group Transdermal testosterone gel improves sexual function, mood, muscle strength, and body composition parameters in hypogonadal men. *J Clin Endocrinol Metab* 85:2839-53, 2000. PMID: 10946892

5. Swerdloff R, Wang C, Cunningham G, Dobs A, Iranmanesh A, Masumoto A, Synder P, Weber T, Longstreth J, Berman; Long-term pharmacokinetics of transdermal testosterone gel in hypogonadal men. *J Clin Endocrinol Metab* 85: 4500-4510, 2000. PMID: 11134099

6. Weber TJ, Green J, Chow H, Spitz A and Wagner, G How bone density testing influenced osteoporosis treatment in a community hospital. *North Carolina Medical Journal* 61:321-324, 2000. PMID: 11103606

7. Weber TJ, Drezner MK Effect of alendronate on bone mineral density in male idiopathic osteoporosis. *Metabolism*, 50: 912-915, 2001. PMID: 11474478

8. Wang, C, Swerdloff, R., Iranmanesh, A, Dobs, A, Synder, P, Cunningham, G, Matsumoto, A, Weber, T, Berman, N and the Testosterone Gel Study Group. Effects of transdermal testosterone gel on bone turnover markers and bone mineral density in hypogonadal men. Clinical Endocrinology , 54: 739-750, 2001. PMID: 11422108

9. Weber T, Liu S, Indridason O, Quarles LD. Serum FGF-23 levels in normal and disordered phosphorus homeostasis. *J Bone Miner Res,* 18:1227-1234, 2003. PMID: 12854832

10. Wang C, Swerdloff, R, Cunningham, G, Dobs, A, Iranmanesh, A, Matsumoto, A, Synder, P, Weber, T, Berman, N, Hull L and the Testosterone Gel Study Group. Long-term testosterone gel (AndroGel ®) treatment for maintains beneficial effects on sexual function and mood, lean and fat mass, and bone mineral density in hypogonadal men. J *Clin Endocrinol Metab*. 89:2085-98, 2004. PMID: 15126525

11. Wang C, Swerdloff R, Kipnes M, Matsumoto AM, Dobs AS, Cunningham G, Katznelson L, Weber TJ, Friedman TC, Snyder P, Levine HL. New testosterone buccal system (striant) delivers physiological testosterone levels: pharmacokinetics study in hypogonadal men. *J Clin Endocrinol Metab*. 89:3821-9, 2004. PMID: 15292312

12. Gold DT, Weber TJ. Update on Male Osteoporosis. *Adv Stud Med*: 6(4):171-181, 2006.

13. Case LE, Hanna R, Frush DP, Krishnamurthy V, DeArmey S, Mackey J, Boney A, Morgan C, Corzo D, Bouchard S, Weber TJ, Chen YT, Kishnani PS. Fractures in children with Pompe disease: a potential long-term complication.*Pediatr Radiol.* 2007 May;37(5):437-45. Epub 2007 Mar 7. PMID: 17342521

14. Coursey C, Weber T, Dodd L, Martinez S.Skeletal Radiol. Fibrogenesis imperfecta ossium: MR imaging of the axial and appendicular skeleton and correlation with a unique radiographic appearance. *Skeletal Radiol*. 2007 Nov;36(11):1077-84. Epub 2007 Jul 6. PMID: 17618434

15. Matsumoto AM, Snyder PJ, Bhasin S, Martin K, Weber T, Winters S, Spratt S, Brentzel J, O'Dea L Stimulation of spermatogenesis with recombinant human follicle-stimulating hormone (follitropin alfa; GONAL-f) long-term treatment in azoospermic men with hypogonadotropic hypogonadism. Fertil Steril. 2009 Sep;92(3):979-90. PMID: 18930190

16 Pham AN, Colon-Emeric CS, Weber TJ. Osteoporosis in Older Women. *Clin Geriatrics.* 17(10): 20-28, 2009.

17. Nair LT, Dodd L, Weber TJ. Following the Forgotten Phosphorus. *Am J Med*. 2009 Dec;122(12):1093-5. PMID: 19958885

18. Banugaria SG, Austin SL, Boney A, Weber TJ, Kishnani SP. Hypovitaminosis D in Glycogen Storage Disease Type I *Molecular Genetics and Metabolism*, Mol Genet Metab. 2010 Apr;99(4):434-437. Epub 2009 Dec 21. PMID: 20060350

19. Lakey WC, Spratt S, Vinson EN, Gesty-Palmer D, Weber T, Palmer S.Osteoporosis in Lung Transplant Candidates Compared to Matched Healthy Controls. *Clin Transplant*. 2011 May-Jun;25(3):426-35. PMID: 20482557

20. Weber T, Lee R. Disorders of Phosphorus Homeostasis. Curr Opin Endocrinol Diabetes Obes. 2010 Dec;17(6):561-7. PMID: 20962635

21. Solimeo SL, Weber TJ, Gold DT.Older Men's Explanatory Model for Osteoporosis. Gerontologist. 2011 Aug;51(4):530-9. PMID: 21310768

22. Pham AN, Datta SK, Weber TJ, Walter LC, Colón-Emeric CS. Cost-Effectiveness of Oral Bisphosphonates for Osteoporosis at Different Ages and Levels of Life Expectancy. J Amer Geriatr Soc. Sept 2011; 59(9): 1642–1649. PMID: 21883116

23. Emick DM, Weber TJ, Scheri RP. Tumor-Induced Osteomalacia Masking Primary Hyperparathyroidism. Surgery. 2012 152(6):1256-8, PMID:23158192.

24. Lee RH, Weber T, Colón-Emeric C. Comparison of cost-effectiveness of vitamin d screening with that of universal supplementation in preventing falls in community-dwelling older adults. J Am Geriatr Soc. 2013 61(5):707-14. PMID:3631393

25. Carpenter TO, Imel EA, Ruppe MD, Weber TJ, Klausner MA, Wooddell MM, Kawakami T, Ito T, Zhang X, Humphrey J, Insogna KL, Peacock M. Randomized trial of the anti-FGF23 antibody KRN23 in X-linked hypophosphatemia. J Clin Invest. 2014 Apr 1;124(4):1587-97. PMID: 24569459

26. Imel EA, Zhang X, Ruppe MD, Weber TJ, Klausner MA, Ito T, Vergeire M, Humphrey JS, Glorieux FH, Portale AA, Insogna K, Peacock M, Carpenter TO.
Prolonged Correction of Serum Phosphorus in Adults With X-Linked Hypophosphatemia Using Monthly Doses of KRN23. J Clin Endocrinol Metab. 2015 Jul;100(7):2565-73. PMID:25919461

27. Zhang X, Imel EA, Ruppe MD, Weber TJ, Klausner MA, Ito T, Vergeire M, Humphrey J, Glorieux FH, Portale AA, Insogna K, Carpenter TO, Peacock M.Pharmacokinetics and pharmacodynamics of a human monoclonal anti-FGF23 antibody (KRN23) in the first multiple ascending-dose trial treating adults with X-linked hypophosphatemia. J Clin Pharmacol. J Clin Pharmacol. 2016 Feb;56(2):176-85. PMID:26073451

28. Weber TJ, Sawyer EK, Moseley S, Odrljin T, Kishnani PS. Burden of disease in adult patients with hypophosphatasia: Results from two patient-reported surveys. Metabolism. 2016 Oct;65(10):1522-30. PMID: 27621187.

29. Mori M, DeArmey SL, Weber TJ, Kishnani PS, Case series: Odontohypophosphatasia or missed diagnosis of childhood/adult-onset hypophosphatasia? – Call for a long-term follow-up of premature loss of primary teeth, Bone Reports. Dec 2016, Volume 5: Pages 228-232. PMID: 28580391

30. Ruppe M, Zhang X, Imel EA, Weber TJ, Klausner M, Ito T, Vergeire M, Humphrey JS, Glorieux FH, Portale AA, Insogna K, Peacock M, Carpenter TO, Effect of four monthly doses of a human monoclonal anti-FGF23 antibody (KRN23) on quality of life in X-linked hypophosphatemia. Bone Reports. Dec 2016, Volume 5: Pages 158-162. PMID: 28326356

31. Weber TJ, Koh J, Thomas SM, Hogue JA, Scheri RP, Roman SA, and Sosa JA. Impaired calcium sensing distinguishes primary hyperparathyroidism (PHPT) patients with low bone mineral density. Metabolism. June 2017. 74:22-31. PMID: 28764845

32. Insogna KL, Briot K, Imel EA, Kamenický P, Ruppe MD, Portale AA, Weber T, Pitukcheewanont P, Cheong HI, Jan de Beur S, Imanishi Y, Ito N, Lachmann RH, Tanaka H, Perwad F, Zhang L, Chen CY, Theodore-Oklota C, Mealiffe M, San Martin
33. J, Carpenter TO; AXLES 1 Investigators. A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Trial Evaluating the Efficacy of Burosumab, an Anti-FGF23 Antibody, in Adults With X-Linked Hypophosphatemia: Week 24 Primary Analysis. J Bone Miner Res. 2018 Aug;33(8):1383-1393.
Epub 2018 Jun 26. PMID: 29947083

34. Kim-Chang JJ, Wilson L, Chan C, Fischer B, Venturi G, Goodenow M, Aldrovandi G, Weber T, Sleasman JW. Tenofovir has minimal effect on biomarkers of bone health in Youth with HIV receiving initial antiretroviral therapy. AIDS Res Hum Retroviruses.2019 Aug;35(8):746-754. PMID: 31115244.

35. Portale AA, Carpenter TO, Brandi ML, Briot K, Cheong HI, Cohen-Solal M, Crowley R, Jan De Beur S, Eastell R, Imanishi Y, Imel EA, Ing S, Ito N, Javaid M, Kamenicky P, Keen R, Kubota T, Lachmann R, Perwad F, Pitukcheewanont P, Ralston SH, Takeuchi Y, Tanaka H, Weber TJ, Yoo HW, Zhang L, Theodore-Oklota C, Mealiffe M, San Martin J, Insogna K. Continued Beneficial Effects of Burosumab in Adults with X-Linked Hypophosphatemia: Results from a 24-Week Treatment Continuation Period After a 24-Week Double-Blind Placebo-Controlled Period. Calcif Tissue Int. 2019 Sep;105(3):271-284. PMID: 31165191.

36. Weber TJ, Quarles LD. Molecular Control of Phosphorus Homeostasis and Precision Treatment of Hypophosphatemic Disorders. Curr Mol Biol Rep. 2019 Jun;5(2):75-85. PMID: 31871877.

37. Wolf M, Rubin J, Achebe M, Econs M, Peacock M, Imel E, Thomsen LL, Carpenter T, Weber T, Brandenburg V, Zoller H. Effects of Iron Isomaltoside vs Ferric Carboxymaltose on Hypophosphatemia in Iron-Deficiency Anemia: Two Randomized Clinical Trials. *JAMA.* 2020;323(5):432–443. doi:10.1001/jama.2019.22450.

Chapters, Reviews and Editorials:

1. Weber, TJ. Approach to the Patient with Metabolic Bone Disease. Cecil-Goldman Medicine, 26th edition, ISBN: 978-0323532662. Philadelphia, PA : Elsevier/Saunders, [2019].

2. Weber, TJ. Osteoporosis. Cecil-Goldman Medicine, 26th edition, ISBN: 978-0323532662. Philadelphia, PA : Elsevier/Saunders, [2019].

3.Weber TJ. Battle of the sex steroids in the male skeleton: and the winner is….J Clin Invest. 2016 Mar 1;126(3):829-32. doi: 10.1172/JCI85006. PMID: 26901810

4. Weber, TJ. Approach to the Patient with Metabolic Bone Disease. Cecil-Goldman Medicine, 25th edition, ISBN: 978-1-4557-5017-7, Philadelphia, PA : Elsevier/Saunders, [2016].

5. Weber, TJ. Osteoporosis. Cecil-Goldman Medicine, 25th edition, ISBN: 978-1-4557-5017-7, Philadelphia, PA : Elsevier/Saunders, [2016].

6. Weber TJ, Quarles LD Preventing Bone Loss after Renal Transplantation with Bisphosphonates: we can……but should we? *Kidney International* 57(2):735-737, 2000.

7. Harper, KD, Weber, TJ. Secondary Osteoporosis: Diagnostic Considerations. *Endocrinology and Metabolism Clinics of North America* 27:325-348, 1998.

8. Weber T. Osteoporosis. In: EBM Solutions Guidelines for Health Care Providers and Consumers [online database]. Issue 2. Nashville, Tenn: EBM Solutions, Inc; September, 2002.

Abstracts:

1. Weber TJ, Drezner MK Alendronate Increases Bone Mineral Density in Male Idiopathic Osteoporosis. #F345. American Society for Bone and Mineral Research, 1999 St Louis, MO.

2. Schwingl PJ, Visness CM, Brown S, Pan J, Weber T, Garner SC. Does Depot-Medroxyprogesterone Acetate Reduce Bone Mineral Density in Adolescent Users? Results of a Pilot Study. North American Society for Pediatric and Adolescent Gynecology, 1999, New Orleans, LA

3. TJ Weber, S Liu, R Guo, LG Simpson, LD Quarles Elevated Serum FGF23 Concentration in XLH: An Indirect Consequence of Inactivating Phex Mutation? # 2108. American Society for Bone and Mineral Research. 2002, San Antonio, TX.

4. R. Recker1, J. A. Stakkestad, T. Weber, S. Cohen, P. Delmas, R. Schimmer, P. Mahoney, J. Kilbride. Non-Vertebral Fracture Benefit from Oral Ibandronate Administered Daily or with a Unique Drug-Free Interval: Results from a Pivotal Phase III Study in postmenopausal osteoporosis (PMO). #1038. American Society for Bone and Mineral Research. 2002, San Antonio, TX.

5. C Wang, M Kipnes, A Matsumoto, AS Dobs, G Cunningham, L Katznelson, TJ Weber, TC Friedman, P Snyder. Novel Testosterone Bioadhesive Buccal Tablet - Pharmacokinetics and Safety Evaluation. P2-645. The Endocrine Society, ENDO 2002, San Francisco, CA.

6. C Wang, RS Swerdloff, A Iranmanesh, AS Dobs, PJ Snyder, G Cunningham, AM Matsumoto, T Weber. Long Term Efficacy and Safety of Transdermal Testosterone Gel (Androgel) in Hypogonadal Men. P2-646. The Endocrine Society, ENDO 2002, San Francisco, CA.

7. RS Swerdloff, C Wang, A Iranmanesh, AS Dobs, PJ Snyder, G Cunningham, AM Matsumoto, TJ Weber. Transdermal Testosterone (T) Gel Is Efficacious and Safe in Older Compared to Young Men. P2-648. The Endocrine Society, ENDO 2002, San Francisco, CA.

8. JC Parker, D Kelling, G Wagner, TJ Weber. Prevalence of Hypovitaminosis D (Vitamin D Insufficiency and Deficiency) in Southern Elderly Osteoporotic Patients. # M475. American Society for Bone and Mineral Research. 2003, Minneapolis, MN.

9. Krishnamurthy V, DeArmey S, Mackey J, Frush D, Weber T, Freidman N, et al. Osteopenia in infantile Pompe disease: an unrecognized long term complication at the Society of Inherited Metabolic Disorders in Monterey, CA March 2005. Mol Genet Metab 84:227-8. 2005.

10. Solimeo S, Weber TJ, and Gold DT. A Women's Disease? Report on Men's Experiences of Osteoporosis. Gerontological Society of America, San Francisco, CA 2007.

11. MD Schwarcz, M Diaz-Arjonilla, V Mahabadi, A Iranmanesh, AS Dobs, PJ Snyder, G Cunningham, AM Matsumoto, T Weber, PD Christenson, RS Swerdloff, C Wang Correlation between Body Mass Index and Serum Sex Hormones in Hypogonadal Men before and after Transdermal Testosterone. . P3-647 The Endocrine Society, ENDO 2008, San Francisco, CA.

12. D Padhi, A Kivitz, T Weber, K Lyles,3 E Lee, B Cooke, H Deng, E Posvar. An Assessment of Serum Calcium and Bone Resorption Markers in Patients Transitioned from Alendronate to Denosumab. M394. American Society for Bone and Mineral Research, Montreal, Canada 2008.

13. K. M. Shipp, E. Hegedus*, C. F. Pieper*, H. White*, J. K. Richardson*, T. J. Weber, H. Hoenig Rehabilitation after Clinically-diagnosed Osteoporotic Vertebral Fracture: Results of a Pilot Study. Su411 American Society for Bone and Mineral Research, Montreal, Canada 2008.

14. MP Whyte, H Landy, T Edgar, T Weber, P Kishnani, D Wenkert, WH McAlister, ML Bauer, BJ Van Sickle[7] and C Rockman-Greenberg[8]. Hypophosphatasia: Enzyme Replacement Therapy with ENB-0040, a Bone-Targeted Human Recombinant Tissue Nonspecific Alkaline Phosphatase (TNSALP) Fusion Protein. S21-3. The Endocrine Society, Washington, DC 2009.

15. Pham AN, Datta SK, Weber TJ, Walter LC, Colon-Emeric C. Cost-Effectiveness of Oral Bisphosphonates for Osteoporosis at Different Ages and Levels of Life Expectancy. P3-170. The Endocrine Society, San Diego, CA 2010

16. Nair LT, Weber TJ, Pieper C, Colon-Emeric C. Renal Function and Fracture Risk in a Cohort of Community Dwelling Adults MO0348 American Society for Bone and Mineral Research. Toronto, Canada 2010.

17. Abou Assi, H, Weber,T, Perkins,J. Severe hypercalcemia in a patient with liver metastasis of unknown primary: an unusual case of coexistent primary hyperparathyroidism (PHPT) and humoral hypercalcemia of malignancy (HLM). Endocrine Society 93rd Annual Meeting, Boston, MA, 2011.

18. Lee RH, Weber T, Colon-Emeric C. Cost-effectiveness analysis of screening for vitamin D insufficiency to prevent falls and fractures among community-dwelling olderadults. P45. American Geriatrics Society Meeting, Seattle, WA 2012.

19. Mayer SB, Weber TJ. Vitamin D deficiency obfuscates the work-up of hypercalcemia. AACE 21st Annual Scientific and Clinical Congress, Philadelphia, PA, 2012.

21. M P Whyte, P S Kishnani, C R Greenberg, K Madson, K Mack, T Weber, A Mhanni, H Plotkin, N Kreher, H LandyHypophosphatasia: Enzyme Replacement Therapy (Asfotase Alfa) Decreases TNSALP Substrate Accumulation And Improves Functional Outcomes In Affected Adolescents And Adults. Bull Group Int Rech Sci Stomatol Odontol. 51: 35 (2012)
22. Mayer SB, Setji TL, Weber TJ. Hypoparathyroidism in Pregnancy: Complexities of Calcitriol Measurement. Endocrine Society National Meetings 2013, San Francisco, CA.

23. Hyland KA, Weber TJ. Unrecognized Milk-alkali Syndrome with Hypocalcemia following Bisphosphonate Treatment, Endocrine Society National Meeting. 2014, Chicago, IL.

24. Zhang X, , Imel EA, , Ruppe MD, Weber TJ, Klausner MA, Ito T, Vergeire M, Humphrey J, Glorieux FH, Portale AA, Insogna K, Peacock M and Carpenter TO. Pharmacokinetics (PK) and Pharmacodynamics (PD) Following Four Monthly Doses of a Human Monoclonal Anti-FGF23 (Fibroblast Growth Factor 23) Antibody (KRN23) in Adults with X-linked Hypophosphatemia (XLH). Endocrine Society National Meeting. 2014, Chicago, IL.

25. Imel EA, Zhang X, Ruppe MD, Weber TJ, Klausner MA, Ito T, Vergeire M, Humphrey J, Glorieux FH, Portale AA, Insogna K, Peacock M and Carpenter TO.
The First Multi-Dose Trial of a Human Anti-FGF23 (Fibroblast Growth Factor 23) Antibody (KRN23) in Adults with X-Linked Hypophosphatemia (XLH). Endocrine Society National Meeting. 2014, Chicago, IL.

26. Ruppe MD, Zhang X, Imel EA, Ruppe MD, Weber TJ, Klausner MA, Ito T, Vergeire M, Humphrey J, Glorieux FH, Portale AA, Insogna K, Peacock M and Carpenter TO.
Effect of Four Monthly Doses of a Human Monoclonal Anti-FGF23 (Fibroblast Growth Factor 23) Antibody (KRN23) on Quality of Life in X-linked Hypophosphatemia (XLH). Endocrine Society National Meeting. 2014, Chicago, IL.

27. X. Zhang, T. Carpenter, E. Imel, M. Ruppe, T. Weber, M. Klausner, M. Wooddell, T. Kawakami, T. Ito, J. Humphrey, K. Insogna, M. Peacock. Ascending Single-Dose Study of a Human Monoclonal Anti-FGF23 Antibody (KRN23) in X-linked Hypophosphatemia. ECTS 2014 Prague, Czech Republic, May 17-20, 2014.

28. X. Zhang, T. Carpenter, E. Imel, M. Ruppe, T. Weber, M. Klausner, T. Kawakami, T. Ito, J. Humphrey,K. Insogna, M. PeacockPharmacokinetics (PK) and
Pharmacodynamics (PD) of a Human Monoclonal Anti-FGF23 Antibody (KRN23) after Ascending Single-Dose Administration in Patients with X-linked Hypophosphatemia. ECTS 2014 Prague, Czech Republic, May 17-20, 2014.

29. T. Carpenter , X. Zhang, E Imel, M Ruppe, T Weber, M Klausner, T Ito, M Vergeire, J Humphrey, F Glorieux, A Portale , K Insogna, M Peacock. Efficacy and Safety of a Human Monoclonal Anti-FGF23 Antibody (KRN23) in Cumulative 4-Month Dose Escalation (KRN23-INT-001) and 12-Month Long-Term Extension Study (KRN23-INT-002) in Adult Subjects with X-Linked Hypophosphatemia (XLH). American Society for Bone and Mineral Research, Houston, TX, 2014.

30. X. Zhang, E Imel, M Ruppe, T Weber, M Klausner, K. Gumbhir-Shah, T Ito, M Vergeire, J Humphrey, F Glorieux, A Portale , K Insogna, M Peacock, T. Carpenter.
Pharmacokinetics (PK) and Pharmacodynamics (PD) of a Human Monoclonal Anti-FGF23 Antibody (KRN23) in a Long-Term Extension Study of Adults with X-linked Hypophosphatemia (XLH). American Society for Bone and Mineral Research, Houston, TX, 2014.

31. T Weber, E Sawyer, S Moseley, T Odrljin and P Kishnani. Burden of Disease in Adult Patients with Hypophosphatasia: Results from Patient-Reported Outcome Surveys. Endocrine Society Annual Meeting, 2015, San Diego, CA.

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32. T Weber, E Sawyer, S Moseley, T Odrljin and P Kishnani. Fracture and Surgical Burden in Pediatric and Adult Patients with Hypophosphatasia: Results from Patient-reported Outcome Surveys. World Congress on Osteoporosis, 2015. Milan, Italy.

33. T Weber, E Sawyer, S Moseley T Odrljin, P Kishnani. Fracture and Surgical Burden in Pediatric and Adult Patients with Hypophosphatasia: Results from Patient-reported Outcome Surveys. American Association of Clinical Endocrinologists, 2015. Nashville, TN.

34. T Weber, E Sawyer, S Moseley T Odrljin, P Kishnani. Burden of disease in children with hypophosphatasia: results from patient-reported surveys. International Conference on Children's Bone Health. 2015. Salzburg, Austria.

35. T Weber, E Sawyer, S Moseley, T Odrljin and P Kishnani.Diminished Health-Related Quality of Life As Measured By the Short Form-10 in Children with Hypophosphatasia. ACR/ARHP Annual Meeting, 2015. San Francisco, CA.

36. M Ruppe, M Peacock, T Weber, A Portale, K Insogna, E Imel, D Luca, A Skrinar, M Mealiffe, J San Martin, T Carpenter. Clinical and Radiographic Characteristics of Adult X-linked Hypophosphatemia (XLH) in a Cohort of Patients Treated with KRN23, an Antibody to FGF23. American Society for Bone and Mineral Research, Atlanta, GA, 2016.

37. T Carpenter, P Miller, T Weber, M Peacock, M Ruppe, K Insogna, S Osei, Ultragenyx Pharmaceutical Inc., D Luca, A Skrinar, J San Martin, S Jan de Beur/. Effects of KRN23, an Anti-FGF23 Antibody, in Patients With Tumor Induced Osteomalacia and Epidermal Nevus Syndrome: Results from an Ongoing Phase 2 Study. American Society for Bone and Mineral Research, Atlanta, GA, 2016.

38. J Koh, TJ Weber, S Thomas, JA Hogue and JA Sosa, Impaired calcium sensing in parathyroid tumors is selectively associated with lower bone mineral density in patients with primary hyperparathyroidism. Endocrine Society National Meeting. 2017, Orlando, FL.

39. K Insogna, K Briot, E Imel, P Kamenický, M Ruppe, A Portale, T Weber, P Pitukcheewanont, Hae Il Cheong, Suzanne Jan De Beur, Yasuo Imanishi, Nobuaki Ito, Robin Lachmann, Hiroyuki Tanaka, Diana Luca, Christina Theodore-Oklota, Matt Mealiffe, J San Martin, T Carpenter. A Phase 3 Randomized, 24 Week, Double-Blind, Placebo-Controlled Study Evaluating the Efficacy of Burosumab, an Anti-FGF23 Antibody, in Adults with X-Linked Hypophosphatemia (XLH); LB-1159. American Society for Bone and Mineral Research, Denver, CO, 2017.

40. S Jan De Beur, P Miller, T Weber, M Peacock, M Ruppe, K Insogna, D Luca, C Theodore-Oklota, J San Martin, T Carpenter. Effects of Burosumab (KRN23), a Human Monoclonal Antibody to FGF23, in Patients with Tumor-Induced Osteomalacia (TIO) or Epidermal Nevus Syndrome (ENS). SU0325. American Society for Bone and Mineral Research, Denver, CO, 2017.

41. Insogna KL, Briot K, Imel EA, Kamenický P, Ruppe MD, Portale A, Weber T, Pitukcheewanont P, Cheong HI, Jan De Beur SM, Imanishi Y, Ito N, Lachmann R, Tanaka H, Zhang L, Theodore-Oklota C, Mealiffe M, San Martin J, Carpenter T. A Phase 3 Randomized, 24-Week, Double-Blind, Placebo-Controlled Study Investigating the Efficacy and Safety of Burosumab, an Anti-FGF23 Antibody, in Adult X-Linked Hypophosphatemia. OR20-6. Endocrine Society Annual Meeting, 2018, Chicago, IL.

42. Wolf M, Rubin J, Achebe M, Econs M, Peacock M, Imel E, Thomsen L, Carpenter T, Weber T, Zoller Z. OR13-3 Effects of Iron Isomaltoside versus Ferric Carboxymaltose on Hormonal Control of Phosphate Homeostasis: The PHOSPHARE-IDA04/05 Randomized Controlled Trials, Journal of the Endocrine Society, Volume 3, Issue Supplement_1, April-May 2019, OR13–3, https://doi.org/10.1210/js.2019-OR13-3.

43. Jan De Beur S, Miller P, Weber T, Peacock M, Insogna K, Kumar R, Luca D, Theodore-Oklota C, Lampl K, San Martin J, Carpenter T. OR13-1 Burosumab Improves the Biochemical, Skeletal, and Clinical Symptoms of Tumor-Induced Osteomalacia Syndrome, Journal of the Endocrine Society, Volume 3, Issue Supplement_1, April-May 2019, OR13–1, https://doi.org/10.1210/js.2019-OR13-1.

44. Insogna KL, Portale AA, Briot K, Imel, EA, Kamenicky P, Weber T, Pitukcheewanont P, Cheong H, Jan de Beur, S, V Y, Lachman R, Tanaka H, Perwad H, Zhang L, Skrinar A, Rees L, San Martin J, Carpenter T. Long-term Safety and Improvement in Clinical Outcomes in the Phase 3 Randomized, Double-Blind, Placebo-Controlled Study of Burosumab, an Anti-FGF23 Antibody, in Adults with X-Linked Hypophosphatemia (XLH). 1077. American Society for Bone and Mineral Research, Orlando, FL 2019.

Category: Rare Bone Diseases: Clinical
Oral Presentations, Presentation Number: 1077
Session: Plenary Orals: Clinical Highlights
Sunday, September 22, 2019 10:15 AM - 10:30 AM, Orange County Convention Center , Valencia Ballroom B-D

Industry Sponsored Research:

2000-2002 Primary Investigator- Duke Site, Multicenter, double-blind, randomized, placebo controlled, study assessing the efficacy human recombinant intact PTH 1-84 in postmenopausal osteoporosis, NPS Allelix.

2002-2004 Primary Investigator- Duke Site, Multicenter, double-blind, randomized, placebo controlled, study assessing the efficacy human recombinant intact PTH 1-84 in postmenopausal osteoporosis, Extension Study, NPS Allelix.

2003-2007 Primary Investigator- Duke Site, Multinational, multicenter, double-blind, randomized, placebo

controlled, parallel group study assessing the efficacy of intravenous zoledronic acid in preventing subsequent osteoporotic fractures after a hip fracture, Novartis.

2005-2007 Primary Investigator, A Randomized Study to Evaluate Safety of Transitioning From Alendronate to a Single Dose of Denosumab in Postmenopausal Women with Low Bone Mass, Amgen.

2003-2009 Primary Investigator- Duke Site, Direct Assessment of Non-Vertebral Fractures in Community Experience (DANCE), Eli Lilly.

2006-2008 Primary Investigator, Is Lateral L-Spine DXA More Sensitive Than AP L-Spine DXA or Hip DXA for Detecting Osteoporosis in Elderly Males Who Have Had an Acute Clinical Fracture? Radiant Research.

2008-2009 Primary Investigator- Duke Site, ENB-001-08:A Multicenter, Open-Label, Dose Escalating Study of the Safety, Tolerability and Pharmacology of Human Recombinant Tissue Non-Specific Alkaline Phosphatase Fusion Protein (ENB-0040) in Adult Patients with Hypophosphatasia (HPP). First in human study. Enobia Pharma

2008-2013 Primary Investigator- Duke Site, A Phase I, Double-blind, Randomized, Placebo-controlled, Single-dose, Dose-escalation Study of KRN23 in X-linked Hypophosphatemia Patients. First in human study. Kyowa Hakko KirinPharmaceuticals.

2011-14 Primary Investigator- Duke Site, A Phase I/II, Open-Label, Repeat -Dose, Dose-Escalation Study of KRN23 in Adult Subjects with X-Linked Hypophosphatemia.

2012-14 Primary Investigator- Duke Site , An Open-Label, Long-Term, Extension Study to Evaluate the Safety and Efficacy of KRN23 in Adult Subjects with X-Linked Hypophosphatemia.

2015-2017 Primary Investigator- Duke Site, A phase 2 open-label trial to assess the efficacy and safety of KRN23, an antibody to FGF23, in subjects with tumor-induced osteomalacia (TIO) or epidermal nevus syndrome (ENS)

2015-present Primary Investigator- Duke Site, A Phase 2b, Open-Label, Long-Term Extension Study to Evaluate the Safety and Pharmacodynamics of KRN23 in Adult Subjects with X-Linked Hypophosphatemia (XLH) .

2015-present Primary Investigator- Duke Site . A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Study to Assess the Efficacy and Safety of KRN23 in Adults with X-linked Hypophosphatemia (XLH)

Investigator Initiated Research

2002-2012 Primary Investigator, Measurement of Serum FGF-23 Levels in Human Disorders of Phosphate Homeostasis

2007-09 Primary Investigator, Association between renal dysfunction and fracture risk in patients with chronic kidney disease.

2008-present Collaborator, Clinical and Molecular Evaluations in Glycogen Storage Disease Type III.

2008-present Collaborator, Clinical and Molecular Evaluations of Glycogen Storage Disease Type 1

2015-2017 Primary Investigator, Use of female normative data to evaluate consistency of diagnosis of low bone density in men.

2015-2017 Co-investigator, Use of clinical, biochemical and cellular profiling to characterize patients with primary hyperparathyroidism. ENABLE (Enhanced Academics in a Basic Laboratory Environment) funding award, Duke Private Diagnostic Clinic.

NIH-Sponsored Research Participation:

2014-2018 Collaborator, Undiagnosed Diseases Network (UDN) NIH funded- Duke Clinical Research Unit.

INVITED JOURNAL REVIEWS:

Journal of Clinical Investigation
Journal of Bone and Mineral Research
Journal of Clinical Investigation
Journal of Clinical Endocrinology and Metabolism
Journal of the American Medical Association (JAMA)
Kidney International
World Journal of Surgery

Invited Talks (since 2004):

1. XLH, TIO, ADHR, and FGF-23: New Insights into the Pathogenesis of Hypophosphatemic Osteomalacia. Endocrine Grand Rounds, Duke University Medical Center, 2/2/2004.

2. XLH, TIO, ADHR, and FGF-23: New Insights into the Pathogenesis of Hypophosphatemic Osteomalacia. University of Puerto Rico- Protein Research Center, Embassy Suites Hotel, San Juan, PR. 4/17/2004.

3. Update on Osteoporosis 2004. Women's Health Seminar Series, Duke University Medical Center, 6/21/2004.

4. XLH, TIO, ADHR, and FGF-23: New Insights into the Pathogenesis of Hypophosphatemic Osteomalacia. Medicine Grand Rounds, Duke University Medical Center, 7/2/2004.

5. Management of Glucocorticoid-Induced Osteoporosis. North Carolina Asthma Summit for Physicians, Friday Center, UNC-Chapel Hill, 10/30/2004.

6. Management of Glucocorticoid-Induced Osteoporosis. Duke Pulmonary Fellows Conference, Duke University Medical Center, 1/24/2005.

7. Osteoporosis Update, Duke Medicine Resident Lecture Series, Duke University Medical Center, 1/27/2005.

8. Treatment of Osteoporosis, Duke /Durham VA Medical Center GRECC Osteoporosis Conference, 6/8/2005, Searle Center, Duke University Medical Library, 6/8/2005.

9. Update on Osteoporosis 2005, Medicine Grand Rounds, National Cheng-Kung University, 8/18/2005, Tainan, Taiwan, ROC.

10. Osteoporosis Update 2005, Duke Medicine Resident Lecture Series, Duke University Medical Center, 10/5/2005.

11. Osteoporosis Update 2005, Duke Reproductive Endocrinology and Fertility, Duke University Medical Center, 10/13/2005.

12. Osteoporosis Update 2005, Orthopedic Resident Conference, Duke University Medical Center, 11/10/2005.

13. Osteoporosis Update 2005: Evaluation and Treatment of Osteoporosis in Individuals with Disabilities, Murdoch Center Butner, NC, 11/18/2005.

14. Skeletal Complications of Neurological Disease, Duke Neurology Grand Rounds, 2/14/2007.

15. Hereditary and Acquired Disorders of Phosphate Homeostatsis: A Com*ph*(l)*ex* Problem, Endocrine Grand Rounds, 3/19/2007.

16. Male Osteoporosis, Endocrine Fellow Lecture Series, 10/16/2007 (also given in 2004/2005)

17. Corticosteroids: The Good, the Bad, and the Ugly (Presented concurrently with Roy Pleasants, PharmD, Duke Division of Clinical Pharmacology Lecture Series, 10/18/2007.

18. Management of Glucocorticoid-Induced Osteoporosis. North Carolina COPD Symposium, Friday Center, UNC-Chapel Hill, 10/31/2007.

19. Advances in the Prevention and Treatment of Osteoporosis, Durham Academy of Medicine, Dentistry and Pharmacy. Durham, NC, 4/16/2008.

20. Diagnosis and Management of Osteoporosis in Patients with Chronic Kidney Disease, Endocrine Grand Rounds, 10/6/2008.

21. FGF23 and Disorders of Phosphorus Homeostasis: Friend or Foe? Endocrine Grand Rounds. Virginia Commonwealth University. 10/16/2008.

22. Diagnosis and Management of Osteoporosis in Patients with Chronic Kidney Disease, Endocrine Grand Rounds, Duke University Medical Center, 10/6/2008.

23. Cases in Male Osteoporosis, Endocrine Grand Rounds, Duke University Medical Center, 7/13/2009.

24. Osteoporosis: D-fining what's important, Dermatology Grand Rounds, Duke University Medical Center, 2/24/2010

25. FGF23 and Disorders of Phosphorus Homeostasis: Friend or Foe? Endocrine Grand Rounds, Duke University Medical Center, 3/8/2010.

26. Management of Glucocorticoid-Induced Osteoporosis. Duke Pulmonary Fellows Conference, Duke University Medical Center, 3/16/2010.

27. Osteomalacia: The Forgotten Metabolic Bone Disease. Medicine Grand Rounds, Duke University Medical Center, 2/11/2011.

28. Phosphorus disorders, Endocrine Fellow Lecture Series, 3/1/2011.

29. Transplant Osteoporosis, Endocrine Fellow Lecture Series, 1/31/2012 (also given in 2004-11)

30. Primary Hyperparathyroidism, Department of Surgery Conference, 8/29/2012.

31. This is not your grandmother's hyperparathyroidism. Endocrine Grand Rounds, Duke University Medical Center. 9/10/2012.

32. Glucocorticoid-induced Osteoporosis. Endocrine Fellow Lecture Series 1/10/2013.

33. Male Osteoporosis, Endocrine Fellow Lecture Series, 3/14/2013 (also given in 2004-12)

34. Disorder of Phosphorus Homeostasis. Endocrine Fellow Lecture Series. 4/16/2013.

35. Osteoporosis, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 3/6/2014 (also given in 2004-13).

36. Hyperparathyroidism, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 3/6/2014 (also given in 2004-13.

37. Osteomalacia and disorders of phosphorus homeostasis. Endocrine Fellow Lecture Series. 3/11/2014.

38. Guidelines for surgical management of asymptomatic primary hyperparathyroidism 2014, Masters in Endocrine Surgery Conference, Duke University, 9/5/2014.

39. Osteoporosis. Clinical Correlation Talk, Molecules and Cells. Duke University Medical School, 9/9/2014. (also given from 2003-2013).

40. Pathobiology and Treatment of XLH and HPP: Is it "crystal " clear yet? Endocrine Grand Rounds, Feb. 2015.

41. Characterizing the burden of disease in patients with hypophosphatasia. 3/28/2015. World Congress on Osteoporosis-International Osteoporosis Foundation-The European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis**.** Milan, Italy.

42. Osteoporosis. Clinical Correlation Talk, Molecules and Cells. Duke University Medical School, 9/8/2015. (also given from 2003-2014).

43. Osteomalacia: A "Firmer" Understanding of Soft Bone Disease. Eugene D. Furth Lecture, Medicine Grand Rounds, Eastern Carolina University, 3/3/2016.

44. Osteoporosis, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 3/7/2016 (also given in 2004-15).

45. Male Osteoporosis, Endocrine Fellow Lecture Series, 5/3/2016 (also given in 2004-15)

46. Osteomalacia and disorders of phosphorus homeostasis. Endocrine Fellow Lecture Series. 5/17/2016.

47. Osteomalacia: A "Firmer" Understanding of Soft Bone Disease. Endocrinology Grand Rounds, 10/28/2016.

48. Male Osteoporosis, Endocrine Fellow Lecture Series, 2/9/2017 (also given in 2004-16)

49. Osteoporosis, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 3/6/2017 (also given in 2004-16).

50. Osteoporosis. Clinical Correlation Talk, Molecules and Cells. Duke University Medical School, 9/5/2017. (also given from 2003-2015).

51. Bone Metabolism and the Microenvironment in Prostate Cancer. Bayer Prostate Cancer Clinical Immersion Program. Duke University. 10/17/2017.

52. Glucocorticoid-induced Osteoporosis. Rheumatology Core Curriculum. Duke University. 1/29/2018.

53. Osteoporosis, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 3/5/2018 (also given in 2004-16).

54. Osteoporosis in China. Second Affiliated Hospital of Guangxi Medical University. Nanning, PRC. 7/9/2018.

55. Osteoporosis in China. Jinshan Fudan University. Shanghai, PRC. 7/11/2018.

56. Osteoporosis. Clinical Correlation Talk, Molecules and Cells. Duke University Medical School, 9/5/2018. (also given from 2003-2017).

57. DXA: Why and How To? (i.e. A Bonehead's Guide to the Practical Application of Bone Densitometry). 11/30/2018. Endocrine Grand Rounds, Duke University Medical Center.

58. What's New in Osteoporosis. American College of Physicians Annual Meeting, North Carolina Chapter. 2/22/2019. Raleigh, NC.

59. Osteoporosis, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 3/4/2019 (also given in 2004-18).

60. Male Osteoporosis. Clinical Endocrinology Update. 9/10/2019. Seattle, WA.

61. Rare Bone Disease. Clinical Endocrinology Update. 9/10/2019. Seattle, WA.

62. Update on Glucocorticoid-Induced Osteoporosis. Rheumatology Grand Rounds. Duke University Medical Center. 2/4/2020.

63. Osteoporosis, Duke Physicians Assistant Training Program Lecture Series, Hanes Bldg, Duke University Medical Center, 2/24/2020 (also given in 2004-19).

TEACHING RESPONSIBILITIES INCLUDING CONTINUING EDUCATION:

Program Director, Endocrinology Fellowship Program (2005 to 2015)
Faculty Coordinator, Internal Medicine Residency, Endocrinology Rotation, (2005 to 2015)
Faculty Director, Duke University Medical School, Endocrinology Clerkship (2003-2007)
Faculty Preceptor, Duke Endocrinology Fellow Clinic (2005 to present)
Faculty Preceptor, Duke Endocrine Self-Assessment Program (ESAP-board review) (2005-present)
Endocrine Clinic Preceptor, Internal Medicine Residency, (2005 to present)
Endocrine Clinic Preceptor, Duke University Medical Student Endocrinology Clerkship (2003 to present)
Faculty Coordinator, Endocrinology Fellow Lecture Series (2005-2010)
DXA instruction of Endocrinology Fellows (2003-present)
Faculty Preceptor, Endocrinology Fellowship Training Grant, 2T32DK007012-36A1 (2005 to present)

CLINICAL RESPONSIBILITIES:

Endocrinology/Metabolic Bone Disease Clinic (four ½ days per week)

Attending, Duke Endocrine Consult Service, Duke University Hospital (1-3 weeks per year)
DXA Bone Density Interpretation
Duke Endocrinology E-Consultation, Metabolic Bone Disease

ADMINSTRATIVE RESPONSIBILITIES:

Medical Director, Duke Clinical Bone Laboratory

-Development and continued upgrade/expansion of DXA interpretation and metabolic bone electronic consultation platform

-Oversee and direct equipment and technology development and upgrades, including expansion of DXA bone density clinical sites (currently four)

-manage and direct hiring and professional development of DXA technicians

Member, Endocrinology Fellowship Recruitment Committee
Member Endocrinology Fellowship Clinical Competency Committee
Member, Endocrinology Fellowship Research Mentoring Committee
Faculty Interviewer, Duke Internal Medicine Residency Program
Medicine Clinical Research Unit Director, Endocrinology