

CURRICULUM VITAE

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EDUCATION

1969 - 1973	University of Pennsylvania Philadelphia, PA	BA, Biology Summa cum laude Phi Beta Kappa
1973 - 1977	Johns Hopkins University School of Medicine Baltimore, MD	MD
1977 - 1980	Osler Medical Service Johns Hopkins Hospital Baltimore, MD	Intern/Resident
1980 - 1983	Endocrine - Hypertension Division Harvard Medical School Brigham and Women's Hospital Boston, MA	Research Fellow Endocrinology/ Hypertension

POSITIONS HELD

1983 - 1985	University of California Endocrine Research Unit Veterans Administration Medical Center San Francisco, CA	Research Endocrinologist
1984 - 1988	Endocrine Research Unit Veterans Administration Medical Center San Francisco, CA	Research Associate
1985 - 1992	University of California San Francisco, CA	Assistant Professor of Medicine in Residence
1991 - 1996	Endocrine Research Unit Veterans Affairs Medical Center San Francisco, CA	Clinical Investigator
1992 - 1999	University of California San Francisco, CA	Associate Professor of Medicine in Residence

1996 - 2007	University of California San Francisco, CA	Director, Diabetes/ Endocrinology/Metabolism Training Program
1996 -	University of California San Francisco, CA	Member, Biomedical Sciences Program
1997 -	No. California Institute for Research and Education, San Francisco, CA	Associate Research Scientist
1999 -	University of California San Francisco, CA	Professor of Medicine in Residence Step 7
2007 -	University of California San Francisco, CA	Associate Director, Diabetes/ Endocrinology/Metabolism Training Program

AWARDS and HONORS

2008	Boy Frame Award for Excellence in Clinical Research in Bone and Mineral Metabolism, presented at the 2008 Annual Meeting of the Adult Bone and Mineral Working Group, American Society for Bone and Mineral Research, Montreal, Canada
2009	Leonard Lectureship, Department of Medicine, University of Washington, Seattle, WA
2009	Excellence in Teaching Award, The Haile T. Debas Academy of Medical Educators, University of California, San Francisco
2010	John Karam Clinician Educator Award presented by the UCSF Diabetes, Endocrinology and Metabolism Fellows
2012	Robert Utiger Memorial Lecture, Department of Medicine Grand Rounds, Brigham and Women's Hospital, Harvard Medical School
2013	16 th John Haddad, Jr, MD, Memorial Lecture, University of Pennsylvania Perelman School of Medicine
2014	Master Clinician, UCSF Department of Medicine
2015	Dr. Beverly Todd Towery Honorary Lectureship, Department of Medicine Grand Rounds, University of Louisville
2015	Named as 2015 Honorary Faculty Member of the UCSF Gold-Headed Cane Society (initiated in 1939 at UCSF by Dr. William J. Kerr for graduating students and faculty who demonstrate the 'qualities of the true physician')
2015	UCSF School of Medicine Class of 2015 Teaching Award for Clinical Faculty
2016	Sidney H. Ingbar Award for Distinguished Service, The Endocrine Society
2017	Parathyroid Medal from the Fondazione Raffaella Becaglia (F.I.R.M.O), Florence, Italy, presented at the 3 rd International Symposium on the Extracellular Calcium-Sensing Receptor, Florence, Italy
2020	Florence and Jorge Mestman Visiting Professorship, University of Southern California, Los Angeles, CA
2020	Mona Shimshi Lectureship, Icahn School of Medicine at Mount Sinai, New York
2021	Kramer Lectureship, Providence Portland

PROFESSIONAL ACTIVITY

Co-Editor:

2004- *Textbook of Endocrinology and Metabolism* (8th, 9th and 10th editions), McGraw Hill

Associate Editor:

2004-2009 *Journal of Clinical Endocrinology and Metabolism*
2019- *Physiological Reviews*

2020- Journal of Bone and Mineral Metabolism

Reviewing Editor:

2019- eLIFE

Section/Guest Editor:

2019-20 Current Osteoporosis Reports

of Endocrinology, Endocrine Scholars Program, Baylor University School of
Medicine, MD Anderson Medical Center, Houston, TX
2013 Endocrinology Division and Australian Institute of Musculoskeletal Science, Melbourne,
Australia
2013 Division of Endocrinology and Metabolism, University of Pennsylvania
2014 New York University, Department of Medicine, New York, NY
2015 University of Louisville, Division of Endocrinology and Metabolism, Louisville, KY
2015 Vanderbilt University, Division of Endocrinology and Metabolism, Nashville, TN
2015 University of Iowa, Division of Endocrinology and Metabolism, Iowa City, IA
2016 University of Nebraska, Division of Diabetes, Endocrinology, and Metabolism,
Department of Medicine, Omaha, NE
2017 University of Colorado, Division of Endocrinology, Metabolism and Diabetes, Denver, CO
2017 UCSF-Fresno, Department of Medicine, Division of Endocrinology, Fresno, CA
2017 Metabolic Bone Disease Core, 2017 Visiting Professor, Mayo Clinic, Rochester, MN
2018 Harvard Medical School, Massachusetts General Hospital, Boston, MA
2019 Department of Medicine, University of Texas at Austin, Austin, TX
2020 University of Southern California/LA County, Division of Endocrinology and Metabolism,
Los Angeles, CA

ORIGINAL JOURNAL ARTICLES

1. Vlay SC, Blumenthal DS, **Shoback D**, Fehir K, Bulkley BH Delayed acute myocardial infarction after blunt chest trauma in a young woman. *Am Heart J* 100: 907-916, 1980.
2. **Shoback DM**, Thatcher J, Leombruno R, Brown E. Effects of extracellular Ca⁺⁺ and Mg⁺⁺ on cytosolic Ca⁺⁺ and PTH release in dispersed bovine parathyroid cells. *Endocrinology* 113: 424-426, 1983.
3. **Shoback DM**, Williams GH, Hollenberg NK, Davies RO, Moore TJ, Dluhy RG. Endogenous angiotensin II as a determinant of sodium modulated changes in tissue responsiveness to angiotensin II in normal man. *J Clin Endocrinol Metab* 57: 764-770, 1983. PMID: 6309884
4. Serfas D, **Shoback DM**, Lorell BH. Pheochromocytoma and hypertrophic cardiomyopathy: apparent suppression of symptoms and norepinephrine secretion by calcium-channel blockade. *Lancet* 2: 711-713, 1983.
5. **Shoback DM**, Williams GH, Swartz SS, Davies RO, Hollenberg NK. Time course and effect of sodium intake on vascular and hormonal responses to enalapril (MK421) in normal subjects. *J Cardiovasc Pharmacol* 5: 1010-1018, 1983.
6. **Shoback DM**, Williams GH, Moore TJ, Dluhy RG, Podolsky S, Hollenberg NK. Defect in the sodium-modulated tissue responsiveness to angiotensin II in essential hypertension. *J Clin Invest* 72: 2115-2124, 1983.
7. **Shoback DM**, Brown EM. Forskolin increases cellular cyclic adenosine monophosphate content and parathyroid hormone release in dispersed bovine parathyroid cells. *Metabolism* 33: 509-514, 1984.

8. **Shoback DM**, Thatcher J, Leombruno R, Brown EM. Relationship between parathyroid hormone secretion and cytosolic calcium concentration in dispersed bovine parathyroid cells. *Proc Natl Acad Sci USA* 81: 3113-3117, 1984.
9. Weiss A, Imboden J, **Shoback D**, Stobo J. Role of T₃ surface molecules in human T cell activation: T₃ dependent activation results in a rise in cytoplasmic calcium. *Proc Natl Acad Sci USA* 81: 4169-4173, 1984.
10. **Shoback D**, Thatcher JG, Brown EM. Interaction of extracellular calcium and magnesium in the regulation of cytosolic calcium and PTH release in dispersed bovine parathyroid cells. *Mol Cell Endocrinol* 38: 179-186, 1984.
11. **Shoback DM**, Thatcher JG, Brown EM. PTH release stimulated by high extracellular potassium is associated with a decrease in cytosolic calcium in bovine parathyroid cells. *Biochem Biophys Res Comm* 123: 684-690, 1984.
12. Brown EM, **Shoback DM**. The relationship between PTH secretion and cytosolic calcium concentration in bovine parathyroid cells. *Prog Clin Biol Res* 168: 139-144, 1984.
13. LeBoff M, **Shoback DM**, Brown EM, Thatcher J, Leombruno R, Beaudoin D, Henry M, Wilson R, Pallotta J, Marynick S, Stock J, Leight G. Regulation of parathyroid hormone release and cytosolic calcium by extracellular calcium in dispersed and cultured bovine and pathological human parathyroid cells. *J Clin Invest* 75: 49-57, 1985.
14. Imboden JB, **Shoback DM**, Pattison G, Stobo JD. Cholera toxin inhibits the T-cell antigen receptor-mediated increases in inositol trisphosphate and cytoplasmic free calcium. *Proc Natl Acad Sci USA* 83: 5673-5677, 1986.
15. Hollenberg NK, Moore T, **Shoback DM**, Redgrave J, Rabinowe S, Williams GH. Abnormal renal sodium handling in essential hypertension. Relation to failure of renal and adrenal modulation of responses to angiotensin II. *Am J Med* 81: 412-418, 1986.
16. Rabinowe SL, Redgrave JE, **Shoback DM**, Podolsky S, Hollenberg NK, Williams GH. Renin suppression by saline is blunted in nonmodulating essential hypertension. *Hypertension* 10: 404-408, 1987.
17. Brown EM, Watson EJ, Thatcher JG, Koletsky R, Dawson-Hughes BF, Posillico, JT, **Shoback DM**. Ouabain and low extracellular potassium inhibit PTH secretion from bovine parathyroid cells by a mechanism that does not involve increases in the cytosolic calcium concentration. *Metabolism* 36: 36-42, 1987.
18. **Shoback DM**, McGhee JM. Fluoride stimulates the accumulation of inositol phosphates, increases intracellular free calcium, and inhibits parathyroid hormone release in dispersed bovine parathyroid cells. *Endocrinology* 122: 2833-2839, 1988.
19. **Shoback DM**, Membreno LA, McGhee JM. High calcium and other divalent cations increase inositol trisphosphate in bovine parathyroid cells. *Endocrinology* 123: 382-389, 1988.
20. Gavin LA, Moeller M, **Shoback DM**, Cavalieri RR. Reverse T₃ and modulators of the calcium messenger system rapidly decrease T₄-5'-deiodinase II activity in cultured mouse neuroblastoma cells. *Thyroidology* 1: 5-12, 1988.
21. Membreno LA, Chen T-H, Woodley S, Gagucas R, **Shoback DM**. The effects of protein kinase C agonists on parathyroid hormone release and intracellular free Ca²⁺ in bovine parathyroid cells. *Endocrinology* 124: 789-797, 1989.
22. McGhee JG, **Shoback DM**. Effects of phosphatidic acid on parathyroid hormone release, intracellular free [Ca²⁺], and inositol phosphates in dispersed bovine parathyroid cells. *Endocrinology* 126: 899-907, 1990.
23. **Shoback DM**, Chen T-H. Effects of protein kinase C activation on inositol phosphate generation and intracellular Ca²⁺ mobilization in bovine parathyroid cells. *Endocrinology* 127: 141-148, 1990.

24. **Shoback DM**, Chen T-H, Lattyak B, King K, Johnson RM. Effects of high extracellular calcium and strontium on 1,4,5-InsP₃ and 1,3,4,5-InsP₄ in bovine parathyroid cells. *J Bone Miner Res* 8: 889-896, 1993.
25. Nissenson RA, Huang Z, Blind E, **Shoback DM**. Structure and function of the receptor for parathyroid hormone and parathyroid hormone-related protein. *Receptor* 3: 1-7, 1993.
26. Chen T-H, Pratt SA, **Shoback DM**. Injection of bovine parathyroid poly(A)⁺ RNA into *Xenopus* oocytes confers sensitivity to high extracellular calcium. *J Bone Min Res* 9: 293-300, 1994.
27. **Shoback DM**, Chen T-H, Lattyak B, Pratt SA. Thapsigargin mobilizes intracellular calcium and inhibits parathyroid hormone release. *J Bone Min Res* 10: 743-750, 1995.
28. Chang W, Chen T-H, Gardner P, **Shoback DM**. Regulation of calcium-conducting currents in parathyroid cells by extracellular calcium and channel-blockers. *Amer J Physiol* 269: E864-E877, 1995.
29. Funk JL, **Shoback DM**, Genant HK. Transient osteoporosis of the hip in pregnancy: natural history of changes in bone mineral density. *Clin Endocrinol* 43: 373-382, 1995.
30. Huang Z, Chen Y, Pratt S, Chen T-H, Bambino T, **Shoback DM**, Nissenson RA. Mutational analysis of the cytoplasmic tail of the G-protein-coupled receptor for parathyroid hormone and parathyroid hormone-related protein: effects on receptor expression and signal transduction. *Molec Endocrinol* 9: 1240-1249, 1995. PMID:
31. Huang Z, Chen Y, Pratt S, Chen T-H, Bambino T, Nissenson RA, **Shoback DM**. The N-terminal region of the third intracellular loop of the parathyroid hormone (PTH)/PTH-related peptide (PTHrP) receptor is critical for coupling to cAMP and IP₃/Ca²⁺ signal transduction pathways. *J Biol Chem* 271: 33382-33389, 1996. PMID:
32. Chang W, Chen T-H, Pratt SA, Yen B, Fu M, **Shoback DM**. Parathyroid Ca²⁺-conducting currents are modulated by muscarinic receptor agonists and antagonists. *Am J Physiol* 273: E880-E890, 1997. PMID:
33. Loh K-C, Duh Q-Y, **Shoback DM**, Gee L, Siperstein A, Clark OH. Clinical profile of primary hyperparathyroidism in adolescents and young adults. *Clin Endocrinol* 48: 435-43, 1998. PMID:
34. Chang W, Pratt S, Chen T-H, Nemeth E, Huang Z, **Shoback D**. Coupling of calcium receptors to inositol phosphate and cyclic AMP generation in mammalian cells and *Xenopus laevis* oocytes and immunodetection of receptor protein by region-specific anti-peptide antisera. *J Bone Miner Res* 13: 570-580, 1998. PMID:
35. Chang W, Chen T-H, Pratt S, **Shoback D**. Regulation of high extracellular calcium-activated nonselective cation currents by cyclic AMP-dependent phosphorylation in parathyroid cells. *Am J Physiol* 275: E213-E221, 1998. PMID:
36. Loh K-C, Hoover M, Bracho FA, Cortez AB, Conte FA, Albanese CT, Miller TR, Price DC, Flores AJ, Kaviani A, Matthay KK, **Shoback D**. Hypercalcemia in malignant paraganglioma due to parathyroid hormone-related protein (PTHrP). *Horm Res* 50: 217-221, 1998. PMID:
37. Chang W, Tu C, Bajra R, Komuves L, Miller S, **Shoback D**. Calcium-sensing in cultured chondrogenic RCJ3.1C5.18 cells. *Endocrinology* 140: 1911-1919, 1999. PMID:
38. Chang W, Pratt S, Chen T-H, **Shoback D**. Protein kinase C activation blocks calcium receptor signaling in *Xenopus laevis* oocytes. *Mol Cell Endocrinol* 158: 13-23, 1999. PMID:
39. Khovidhunkit W, **Shoback DM**. Clinical effects of raloxifene hydrochloride in women. *Ann Int Med* 130: 431-439, 1999. PMID:

40. Chang W, Tu C, Chen T-H, Komuves L, Pratt S, Miller S, **Shoback D**. Expression of calcium-sensing receptors in cartilage and bone. *Endocrinology* 140: 5883-5893, 1999. PMID: 10579354
41. Chang W, Chen T-H, Pratt S, **Shoback D**. Amino acids in the second and third intracellular loops of the parathyroid Ca²⁺-sensing receptor mediate efficient coupling to phospholipase C. *J Biol Chem* 275: 19955-19963, 2000. PMID: 10764812
42. Chang W, Pratt S, Chen T-H, **Shoback D**. Parathyroid cells express dihydropyridine-sensitive cation currents and L-type calcium channel subunits. *Am J Physiol* 281: E180-E189, 2001. PMID: 11404236
43. Chang W, Pratt S, Chen T-H, Bourguignon L, **Shoback D**. Amino acids in the cytoplasmic carboxyterminus of the parathyroid Ca²⁺-sensing receptor mediate effective cell-surface expression and phospholipase C activation. *J Biol Chem* 276: 44129-44136, 2001. PMID: 11535593
44. Chang W, Tu C, Chen T-H, Pratt SA, **Shoback D**. Extracellular Ca²⁺ and PTHrP modulate matrix production and mineralization in chondrogenic RCJ3.1C5.18 cells. *Endocrinology* 140: 1467-74, 2002. PMID: 11897705
45. Shattuck TM, Kim TS, Costa J, Yandell DW, Imanishi Y, Palanisamy N, Gaz RD, **Shoback D**, Clark OH, Monchik JM, Wierman ME, Hollenberg A, Tojo K, Chaganti RSK, Arnold A. Mutational analyses of *RB* and *BRCA2* as candidate tumour suppressor genes in parathyroid carcinoma. *Clin Endocrinol* 59: 180-189, 2003. PMID: 12664795
46. Costa J, Shattuck TM, Imanishi Y, Palanisamy N, Gaz RD, **Shoback D**, Clark OH, Monchik JM, Wierman ME, Hollenberg A, Tojo K, Chaganti RSK, Arnold A. Mutational analyses of connexin 26, connexin 30 and connexin 46 as candidate tumor suppressor genes in parathyroid carcinoma. *J Endo Genetics* 3: 57-62, 2003.
47. **Shoback DM**, Bilezikian JP, Turner SA, McCary LC, Guo MD, Peacock M. The calcimimetic AMG 073 normalizes serum calcium in patients with primary hyperparathyroidism. *J Clin Endocrinol Metab* 88: 5644-5649, 2003. PMID: 14671147
48. Shattuck TM, Valimaki S, Obara T, Gaz RD, Clark OH, **Shoback D**, Wierman ME, Tojo K, Robbins CM, Carpten JD, Farnebo L-O, Larsson C, Arnold A. Somatic and germline mutations of the *HRPT2* gene in sporadic parathyroid carcinoma. *N Engl J Med* 349: 1722-1729, 2003. PMID: 14585940
49. Earle K, Seneviratne T, Shaker J, **Shoback D**. Fanconi's syndrome in HIV positive adults: report of three cases and literature review. *J Bone Min Res* 19: 714-721, 2004. PMID: 15066493
50. Loretz CA, Pollina C, Hyodo S, Chang W, Takei Y, **Shoback D**. cDNA cloning and functional expression of a Ca²⁺-sensing receptor with truncated intracellular domain from the Mozambique tilapia. *J Biol Chem* 279: 53288-97, 2004. PMID: 15456780
51. Peacock M, Bilezikian JP, Klassen PS, Guo MD, Turner SA, **Shoback D**. Cinacalcet hydrochloride maintains long-term normocalcemia in patients with primary hyperparathyroidism. *J Clin Endocrinol Metab* 90: 135-141, 2005. PMID: 15522938
52. Rodriguez L, Tu C, Cheng Z, Chen T-H, Bikle D, **Shoback D**, Chang W. Expression and functional assessment of an alternatively spliced extracellular Ca²⁺-sensing receptor in growth plate chondrocytes. *Endocrinology* 146: 5294-5303, 2005. PMID: 16166224
53. Dvorak MM, Chen T-H, Orwoll B, Garvey C, Chang W, Bikle DD, **Shoback DM**. Constitutive activity of the osteoblast Ca²⁺-sensing receptor promotes loss of cancellous bone. *Endocrinology* 148: 3156-3163, 2007. PMID: 17412806

54. Silverberg SJ, Rubin MR, Faiman C, Peacock M, **Shoback DM**, Smallridge RC, Schwanauer LE, Olson KA, Klassen P, Bilezikian JP. Cinacalcet hydrochloride reduces the serum calcium concentration in inoperable parathyroid carcinoma. *J Clin Endocrinol Metab* 92: 3803-3808, 2007. PMID: 17666472
55. Chang W, Tu C, Cheng Z, Rodriguez L, Dvorak M, Chen T-H, Gassmann M, Bettler B, Margeta M, Jan LY, **Shoback D**. Complex formation with type B γ -aminobutyric acid receptor affects the expression and signal transduction of the extracellular calcium-sensing receptor. *J Biol Chem* 282: 25030-25040, 2007. PMID: 17591780
56. Cheng Z, Tu C, Rodriguez L, Chen T-H, Dvorak MM, Margeta M, Gassmann M, Bettler B, **Shoback D**, Chang W. Type B gamma-aminobutyric acid receptors modulate the function of the extracellular Ca^{2+} -sensing receptor and cell differentiation in murine growth plate chondrocytes. *Endocrinology* 148: 4984-4992, 2007. PMID: 17615148
57. Chang W, Tu C, Chen T-H, Bikle D, **Shoback D**. The extracellular calcium-sensing receptor (CaSR) is a critical modulator of skeletal development. *Science Signaling* 1 (35), ra1. [DOI: 10.1126/scisignal.1159945] (9/2008). PMID: 18765830
- * Images from this paper were featured on the cover of the issue of Science Signaling*
58. Pao V, Chang S, **Shoback D**, Bikle D. Hypercalcemia and overexpression of CYP27B1 in a patient with nephrogenic systemic fibrosis: clinical vignette and literature review. *J Bone Min Res* 24: 1135-39, 2009 [Epub ahead of print, 2008 Dec 29, doi: 10.1359/JBMR.091261.] PMID: 11913910
59. Marcocci C, Chanson P, **Shoback D**, Bilezikian J, Fernandez-Cruz L, Orgiazzi J, Henzen C, Cheng S, Ren L, Lu J, Peacock M. Cinacalcet reduces serum calcium concentrations in patients with intractable primary hyperparathyroidism. *J Clin Endocrinol Metab* 94: 2766-2772, 2009. PMID: 19470620
60. Peacock M, Bolognese MA, Borofsky M, Scumpia S, Sterling LR, Cheng S, **Shoback D**. Cinacalcet treatment of primary hyperparathyroidism: biochemical and bone densitometric outcomes in a five-year study. *J Clin Endocrinol Metab* 94: 4860-7, 2009. PMID: 19837909
61. Dong Q, Cheng Z, Chang W, Blackman BE, Conte FA, Hu J, **Shoback D**, Miller WL. Naturally-occurring mutation in the calcium-sensing receptor reveals the significance of the extracellular domain loop III region for class C G-protein-coupled receptor function. *J Clin Endocrinol Metab* 95: E245-52, 2010. PMID: 20631026
62. Chang W, Dvorak M, **Shoback D**. Assessing constitutive activity of extracellular calcium-sensing receptors in vitro and in bone. *Meth Enzymol* 484: 253-66, 2010. PMID: 21036236
63. Peacock M, Bilezikian JP, Bolognese MA, Borofsky M, Scumpia S, Sterling LR, Cheng S, **Shoback D**. Cinacalcet HCl reduces hypercalcemia in primary hyperparathyroidism across a wide spectrum of disease severity. *J Clin Endocrinol Metab* 96: E9-18, 2011. PMID: 20943783
64. Dvorak-Ewell MM, Chen TH, Liang N, Garvey C, Liu B, Tu D, Chang W, Bikle D, **Shoback DM**. Osteoblast extracellular $\text{Ca}(2+)$ -sensing receptor regulates bone development, mineralization, and turnover. *J Bone Min Res* 26: 2935-47, 2011. Doi: 10.1002/jbmr.520. PMID: 21912031
65. Bao Y, Wall J, Semrad A, Shen WT, Lippman SS, Swislocki ALM, **Shoback DM**, Duh Q-Y. A case of reoperative parathyroidectomy in tandem with coronary artery bypass surgery. *World J Endo Surg* 3: 47-51, 2011.
66. Schafer AL, Sellmeyer DE, Schwartz AV, Rosen CJ, Vittinghoff E, Palermo L, Bilezikian JP, **Shoback DM**, Black DM. Change in undercarboxylated osteocalcin is associated with changes in body weight, fat mass, and adiponectin: parathyroid hormone (1-84) or alendronate therapy in postmenopausal women with osteoporosis (the PaTH Study). *J Clin Endocrinol Metab* 96: E1982-9, 2011. doi: 10.1210/jc.2011-0587. PMID: 21994958

67. Bilezikian J, Khan A, Potts JT Jr, Brandi M, Clarke B, **Shoback D**, Juppner H, D'Amour P, Fox J, Rejnmark L, Mosekilde L, Rubin MR, Dempster D, Gafni R, Collins MT, Sliney J, Sanders J. Hypoparathyroidism in the adult: epidemiology, diagnosis, pathophysiology, target organ involvement, treatment and challenges for future research. *J Bone Min Res* 26: 2317-37, 2011. DOI: 10.1002/jbmr.483. PMID: 21812031
68. Prasad AP, George V, Porzig A, Horvai AE, Gross A, **Shoback D**, Link TM. Progressive craniofacial bone loss after cosmetic surgery at the forehead. *Skel Radiol* 41: 477-481, 2012. doi: 10.1007/s00256-011-1330-0. PMID: 22127344
69. Khosla S, Bilezikian JP, Dempster DW, Lewiecki EM, Miller PD, Neer RM, Recker RR, Shane E, **Shoback D**, Potts JT. Benefits and risks of bisphosphonate therapy for osteoporosis. *J Clin Endocrinol Metab* 97: 2272-82, 2012. DOI:10.120/jc.2012-1027. PMID: 22523337
70. Schafer AL, Sellmeyer DE, Palermo L, Hietpas J, Eastell R, **Shoback DM**, Black DM. Six months of parathyroid hormone (1-84) administered concurrently vs sequentially with monthly ibandronate over two years: the PTH and Ibandronate Combination Study (PICS) randomized trial. *J Clin Endocrinol Metabol* 97: 3522-29, 2012. Doi: 10.1210/jc.2012-1844. PMID: 22791766
71. Park-Sigal J, Don BR, Porzig A, Recker R, Sebastian A, Duh Q-Y, Portale A, **Shoback D**, Schambelan M. Severe hypercalcemic hyperparathyroidism developing in a patient with hyperaldosteronism and renal resistance to parathyroid hormone. *J Bone Min Res* 28: 700-708, 2013. DOI: 10.1002/jbmr.1791. PMID: 23074096
72. Cheng Z, Liang N, Chen TH, Li A, Santa Maria C, You M, Ho H, Song F, Bikle D, Tu C, **Shoback D**, Chang W. Sex and age modify biochemical and skeletal manifestations of chronic hyperparathyroidism by altering target organ responses to Ca(2+) and PTH in mice. *J Bone Min Res* 28: 1087-100, 2013. Doi: 10.1002/jbmr.1846. PMID: 23239173
73. Schafer AL, Burghardt AJ, Sellmeyer DE, Palermo L, **Shoback DM**, Majumdar S, Black DM. Postmenopausal women treated with combination parathyroid hormone (1-84) and ibandronate demonstrate different microstructural changes at the radius vs. tibia: the PTH and Ibandronate Combination Study (PICS). *Osteoporosis Int* 24: 2591-601, 2013. Doi: 10.1007/s00198-013-2349-y. PMID: 23589163
74. Hong SH, Dvorak-Ewell M, Stevens HY, Barish GD, Castro GL, Nofsinger R, Frangos JA, **Shoback D**, Evans RM. Rescue of a primary myelofibrosis model by retinoid-antagonist therapy. *Proc Natl Acad Sci USA* 110: 18820-5, 2013. doi: 10.1073/pnas.1318974110. PMID: 24191050
75. Schafer AL, Mumm S, El-Sayed I, McAlister WH, Horvai AE, Tom AM, Schaefer FV, Hsiao EC, Collins MT, Anderson MS, Whyte MP, **Shoback DM**. Panostotic high turnover bone disease with massive jaw tumor formation and a novel mutation in the signal peptide of RANK. *J Bone Min Res* 29: 911-921, 2014. Doi: 10.1002/jbmr.2094. PMID: 24014458
- * Images from this paper were featured on the cover of the JBMR issue for November, 2013.*
76. Mannstadt M, Clarke BL, Vokes T, Brandi ML, Ranganath L, Fraser WD, Lakatos PL, Bajnok L, Garceau R, Mosekilde L, Lagast H, **Shoback D**, Bilezikian JP. Efficacy and safety of recombinant human parathyroid hormone (1-84) in hypoparathyroidism (REPLACE): a double-blind, placebo-controlled, randomised phase 3 study. *Lancet Diabetes Endocrinol* 1: 275-83, 2014. doi: 10.1016/S2213-8587(13)70106-2. PMID: 2462413
- * Findings from this clinical trial were highlighted in a commentary (Linglart A, Rothnubler A. From synthesis to replacement of parathyroid hormone. Lancet Diabetes Endocrinol published on line October 7, 2013).*
77. Canales BK, Schafer AL, **Shoback DM**, Carpenter TO. Gastric bypass in obese rats causes bone loss, vitamin D deficiency, metabolic acidosis, and elevated peptide YY. *Surg Obes Relat Dis* 2014 Jan 28. pii: S1550-7289(14)00031-8. doi: 10.1016/j.soard.2014.01.021. PMID: 24969093

78. Schafer AL, Li X, Schwartz AV, Black DM, Tufts LS, Wheeler AL, Grunfeld C, Stewart L, Rogers SJ, Carter JT, Posselt AM, **Shoback DM**. Changes in vertebral bone marrow fat after gastric bypass surgery: a pilot study. *Bone* 74: 140-145, 2015. doi: 10.1016/j.bone.2015.01.010. PMID: 25603463.
79. Schafer AL, Weaver CM, Black DM, Wheeler AL, Chang H, Stewart L, Rogers SJ, Carter JT, Posselt AM, **Shoback DM**, Sellmeyer DE. Intestinal calcium absorption decreases dramatically after gastric bypass surgery despite optimization of vitamin D status. *J Bone Min Res* 30: 1377-85, 2015. doi: 10.1002/jbmr.2467. PMID: 25640580.
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ONLINE and WEBSITE CONTRIBUTIONS

1.WARD 86 Management Recommendations. Screening, Treatment, and Prevention of Osteoporosis in HIV-Infected Patients. Launched October 12, 2016, *updated November 2017 and January 2019*. Contributors: Carina Marquez, MD, MPH, Dolores Shoback, MD, Mark Jacobson, MD, Meredith Greene, MD, Annie Luetkemeyer, MD. Text at <http://hivinsite.ucsf.edu/InSite?doc=md-ward86-osteoporosis&page=md-ward86-index>.

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