

**Boston University** Goldman School of Dental Medicine  
Department of Molecular and Cell Biology



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## **PAOLA DIVIETI PAJEVIC, MD, PhD**

*Associate Professor*, Molecular and Cell Biology, Goldman School Dental Medicine, Boston University  
Boston MA  
Director Bone Cell Core, Center for Skeletal Research, Massachusetts General Hospital, Boston MA

## **CURRICULUM VITAE**

### **ACADEMIC TRAINING:**

1995 PhD University of Florence, Molecular and Bone Biology (Prof. Pontiroli and Rubinacci)  
1990 MD University of Milan, Medicine and Surgery. 110/110 Summa Cum Laude

### **POSTDOCTORAL TRAINING:**

1993-1998 Research Fellow in Dr. Bringham's group, Endocrine Unit, Mass. General Hospital, Harvard Medical School, Boston MA  
1992 Visiting Fellow, Department of Biochemistry; Prof. G. Tenni, University of Pavia, Italy  
1990-1993 Clinical fellow, Orthopaedic Department, Prof. Rubinacci, San Raffaele Hospital (HSR), Milano, Italy

### **ACADEMIC APPOINTMENTS:**

2015- present Associate Professor, Molecular and Cell Biology, Goldman School Dental Medicine, Boston University Boston MA  
2013-present Director Bone Cell Core, Center for Skeletal Research, Massachusetts General Hospital, Boston MA  
2013-2015 Associate Professor, Department of Medicine, Harvard Medical School, Boston MA  
2005-2013 Assistant Professor, Department of Medicine, Harvard Medical School, Boston MA  
1998-2005 Instructor, Department of Medicine, Harvard Medical School, Boston MA

### **HOSPITAL APPOINTMENTS:**

2013-present Associate in Biology, Mass. General Hospital, Boston MA  
1999-2013 Assistant in Biology, Mass. General Hospital, Boston MA

### **HONORS:**

2013 Australia-Harvard Fellowship, Harvard Club of Australia  
2003-2004 Claflin Distinguished Scholar Award, Harvard Medical School, Boston MA  
2001 A L. Jee Memorial Young Investigator Award, University of Utah  
2000 John Haddad Young Investigator Award, AIMM/ASBMR  
1990-1994 M.U.R.S.T Fellowship, Italian Minister for Scientific and Technologic Research  
1990 MD Summa Cum Laude, University of Milan

### **DEPARTMENTAL AND UNIVERSITY COMMITTEES:**

2016- present Admission Committee, Program in Biomedical Science (PiBS), BUMC, Boston University, Boston MA

- 2015- present New Faculty Recruitment Committee, Goldman School of Dental Medicine, Boston University, Boston MA
- 2013-present Director Bone Cell core, Mass. General Hospital, Boston MA
- 2010-2015 Harvard Graduate Women in Science and Engineering (HGWISE) Harvard University
- 2010-2015 Co-Chair, PhD Steering Committee, Mass. General Hospital, Boston MA
- 2007-2015 Department representative Research Council, Executive Committee of Research, Mass General Hospital, Boston MA
- 2007-2015 Office for Research and Career Development (ORCD), Steering Committee. Mass General Hospital, Boston MA

**TEACHING EXPERIENCE AND RESPONSABILITIES:**

- 2016-present Course Director, Oral Biology Seminar OB805/806, GSDM, Boston University
- 2016 Lecturer for Orthopaedic Resident, Basic Science BUMC, Boston University, 4 lecturers
- 2016 Faculty Development Week, July 18-25, GSDM, 1 lecture
- 2015 Course Co-Director, Oral Biology II, OB520, GSDM, Boston University
- 2015 present Advanced Oral biology, lecturer, GSDM
- 2012,2014 PhD student course of bone and calcium, Karolinska Institute, Sweden
- 2004-2008 Musculoskeletal, Endocrine, Reproductive, Harvard Medical School
- 2003-2004 Endocrine fellowship, lecturer, Harvard Medical School

**MAJOR MENTORING ACTIVITIES:**

- 2018 Thesis reviewer, Alyson Ruth Morse, PhD candidate, Sydney University, Sydney Australia
- 2017 Thesis Opponent, Karuna Vuppalapati PhD, Karolinska Institute, Sweden
- 2016 Thesis external advisor, Francesco Cristofaro, PhD University of Pavia, Italy
- 2016 Dannis Gan, Apex DMD student
- 2016 Rachel Zhou, RISE summer student, incoming freshman at Northwest University
- 2016-present Thesis Committee member for Ahmed Alamoudi (Chair. DDS student), Faranak Majhour (Chair, PhD student) Arwa Alnouri (DDS student), Eileen Daley(PhD student), Dina Hussein(DDS student)
- 2015-present Neha Racmchandari (CAS 2019) Christopher Petty (CAS 2019), Emily Evans (CAS 2017), Kevin Corderio (CAS2019), Christine Asare (CAS 2018) UROP students
- 2015-present Nynguan Sun, PhD student PiBs, BUMC, Boston MA
- 2015-Present Ehab Azab, DDS student, GSDM, Boston MA
- 2015 Majed Alsheri, Ms student, GSDM, currently in the GSDM endodontic program
- 2013-2014 Padrig Tuck, UMass undergraduate students, Biology Major. Currently Clinical Research Assistant at Mass General Hospital
- 2012-2015 Arlington High School students, senior internships. Current colleges: Brown, Vassar, Washington University, Columbia, College of William and Mary, American University
- 2011-2014 Xiaolong Liu, currently third year Medical Student Ohio State University
- 2011- 2015 Dean Marengi and Jenna Garr, UMass undergraduate students, Biology Major. Currently working at Harvard Medical School and Mass General Hospital
- 2009-2015 Jordan Spatz. PhD, MIT-Harvard, current medical student at UCSF
- 2009-2013 Keertik Fulzele, PhD, Assistant Research professor GSDM
- 2009-2013 Vaibhav Saini, PhD Instructor in Medicine Harvard Medical School
- 2009-2012 Kevin J. Barry, currently working at Biogen
- 2008-2009 Irena Tulum, MD. Rheumatology Fellow, Tufts University
- 2005-2009 William Powell Junior, MD
- 2004-2007 Santanu Banarjee, PhD. Currently research Associate, University of Minnesota
- 2004-2006 Hafez Selim, MD PhD Currently Principal Scientist, Osteotech, CT
- 2002-2003 Matteo Iachetti (thesis advisor), Pharmacology, University of Milan, Italy
- 1999-2001 Andrew Geller, MD.

1998-1999 Kelly Chapin, MD

#### **OTHER PROFESSIONAL ACTIVITIES:**

#### **PROFESSIONAL SOCIETIES: MEMBERSHIPS, OFFICES AND COMMITTEE**

1994-present American Society for Bone and Mineral Research

2004-2010 International Bone and Mineral Society

1996-2010 Endocrine Society

1990-2004 Italian Society of Osteoporosis

2010-present Chair, Abstract Selection Committee, "Osteocytes", "Hematopoietic niche", "Progenitor Cells and Lineage tracing" American Society for Bone and Mineral Research

2004 Member, Abstract Selection Committee, American Society for Bone and Mineral Research

#### **MAJOR COMMITTEE ASSIGNMENT**

#### **Private Foundation**

2018-present Member of the Editorial Board of the Journal Of Bone and Mineral Research

2017- present Member Development Committee, American Society for Bone and Mineral Research

2010-2013 Member Advocacy and Science Policy Committee, American Society for Bone and Mineral Research

2009-2015 ECOR Subcommittee on Review of Research proposal, Mass General Hospital

#### **Study Sections:**

2017-present Department of Defense

2016-present NASA

2016-present CASIS

2017 NIH-NCATS Special Panel Study Section

2016 NIH-NIAMS

2011-present NIH-NIAMS SBDD, ad hoc reviewer

2015 NIH-NIAMS MOSS

2015 NIH ZDK1 GRB-N Special Panel Study section

2012 BBSRC, Biological and Biological Science Research Council, United Kingdom

2010-present Italian Ministry of Health, Italy

#### **CURRENT OTHER SUPPORT**

2015-2019 Discretionary funds (recruitment package)

P.I. (100,000/year)

2015-2020 NIAMS P30- AR066261 Center for Skeletal Research (Kronenberg. PD)

Subcontract: Bone cell core (Divieti Pajevic, PI) (\$35,000/year)

2017-2021 NIDDK/R01 XLas Relative to Gsa in Bone and Mineral Ion Metabolism (Bastepe PI)

Subcontract: (Divieti Pajevic, PI) (8,900/year)

2017-2018 CTSI, Clinical and Translational Science Institute, seed grant (\$20,000/year)

#### **PAST OTHER SUPPORT**

2011-2017 NIAMS/R01-AR060221 Effects of osteocyte specific Gs alpha signaling on bone mass and hematopoiesis

P.I. (\$ 225,000 direct cost)

2010-2015 NIAMS/UH3-AR060221 Osteocytes and Mechano-Transduction

P.I. (\$ 300,000/year)

2013 Novel Function of Osteocytes, Harvard Club of Australia

P.I. (\$ 17,000 direct cost)

2011-2013 Boston Area Diabetes Endocrinology Research Center (BADERC)- P&F Loss of G-s alpha signaling in osteocytes decreases peripheral fat accumulation  
P.I. (\$ 30,000/year)

2009-2014 NIDDK/ RO1-DK079161 Actions of Parathyroid Hormone (PTH)/PTH related-peptide receptor in Osteocytes in vivo  
P.I. (\$ 220,000/year)

2008-2009 NIDDK/ R56-6079161 Role of PTH/PTHrP receptor in osteocytes in vivo  
P.I. (\$115,000)

2007 MGH ECOR Interim Support Fund, 205655, Action of PTH/PTHrP receptor in osteocytes in vivo  
P.I. (\$ 50,000)

2004-2008 NIDDK/ PPDK11794 Potts (PI), Hormonal Control of Calcium Metabolism  
Co-Investigator

2003-2004 Claflin Distinguish Scholar Award, Harvard Medical School  
P.I. (\$ 30,000/year)

2003-2005 NIDDK/ R03-DK065032 Amino and Carboxyl-terminal PTH Receptors in Osteocytes  
P.I. (\$ 86,500/year)

2001-2006 Receptor for Carboxyl-terminal PTH, NPS Pharmaceutical  
CO-P.I. (\$250,000/year)

2000-2005 NIDDK/ K08-DK002889, Amino and Carboxyl-terminal PTH receptor in Osteocytes  
P.I. (125,000/year)

#### **INVITED LECTURES and PRESENTATIONS**

2017 Bone, blood and fat metabolism, and osteocyte centered view, FyFa lecture, Karolynska Institute, Sweden

2016 Bone, blood and fat metabolism, and osteocyte centered view, Faculty seminars, GSDM, Boston MA

2016 Bone Biology and fracture repair, Faculty lectures, GSDM

2016 Osteocytes, hematopoiesis and fat metabolism, University of Connecticut

2015 Osteocytes and hematopoiesis, Baylor College of Medicine, Houston TX

2015 Mechanical forces, intracellular signals and skeletal integrity: the OSTEO-4 mission. GSDM Advisory

2015 OSTEO-4 Mission, CASIS, Alexandria VA

2014 Osteocytes and Hematopoiesis, Clare Valley Bone Meeting, Clare South Australia

2014 PTH actions in osteocytes, Clare Valley Bone Meeting, Clare South Australia

2014 To Mars and Beyond, working with NIH. ASBMR, Huston TX

2014 Osteocytes and mechanostransduction, Gordon Conference, Bone and Teeth, Galveston, TX

2014 Gs alpha signaling in Osteocytes, FyFa talks, Karolinska Institute, Sweden

2013 New Insight into osteocytes, Endocrine Grand Round, MGH, Boston MA

2013 Space flight and Bone: translational medicine in orbit, MGH series Medical History and Innovation, MGH Russell Museum, Boston MA

2013 State-of-the-art lecture. American Society of Bone and Mineral Research, Baltimore MD

2013 Can Manipulation of osteocytes function impact bone formation/resorption in zero gravity? Osteocyte Biology in Space Workshop. MD Anderson Cancer Center, Houston Texas

2013 Osteocyte and PTH, Australia and New Zealand Society of Bone and Mineral Research, Melbourne, Victoria Australia

2013 Osteocytes and Hematopoiesis, San Vincent Institute, Melbourne, Victoria Australia

2013 Novel insight in Osteocyte function, Translational Research Institute, Mater University, Brisbane, Queensland, Australia

2012 PTH/PTHrP receptor signaling in osteocytes regulate anabolic and catabolic skeletal responses to PTH, Craniofacial and Skeletal Diseases Branch Seminar Series NIH NIDCR

2012 Osteocyte and PTH, Karolinska Institute, Sweden

2011 New Insight into Osteocyte Biology, Genzyme Corporation

2011 PTH and Osteocytes, Meet-the-Professor ASBMR San Diego, CA

2011 New insight into osteocyte function, Department of Pharmacology, University of Milan, Italy

2010 PTH receptor and Osteocytes, Joint Research Meeting HMS-HSDM

2010 Osteocytes and calcium homeostasis, European Calcified Tissue Society, Glasgow, UK

2009 Target ablation of Gs alpha from osteocytes impairs bone structure and induce splenomegaly, ASBMR Denver, CO

2009 Mice lacking PTHR in osteocytes failed to respond to intermittent PTH, ASBMR Denver, CO

2007 Target ablation of PTH in osteocytes induce hypocalcemia, ASBMR, Montreal Canada

2005 PTH and Osteocytes, Hard Tissue Workshop, Sun Valley Idaho

2004 Understanding the role of C-PTHrP, Scantibodies Inc, Chicago, IL

2000 Receptor specific for the C-terminal portion of PTH: new insights, Advances in Mineral metabolism, Snowmass CO

#### ORIGINAL PEER REVIEWED ARTICLES

1. Rubinacci A, **Divieti P**, Capponi A, Resmini G, Daverio R, Veglia F, Tessari L. [Reduction in parathormone secretion after oral calcium loading in osteoporotic adults]. *Minerva Endocrinol.* 1992;17(2):55-65.
2. Rubinacci A, Resmini G, **Divieti P**, Capponi A, Daverio R, Tessari L. [The blood calcium error induced by oral calcium loading: study of the homeostatic compensation mechanism]. *Minerva Endocrinol.* 1992;17(2):47-54
3. Rubinacci A, **Divieti P**, Lodigiani S, De Ponti A, Samaja M. Thyroid hormones and active calcium transport of inside-out red cell membrane vesicles. *Biochem Med Metab Biol.* 1992;48(3):235-40.
4. Rubinacci A, **Divieti P**, Polo RM, Zampino M, Resmini G, Tenni R. Effect of an oral calcium load on urinary markers of collagen breakdown. *J Endocrinol Invest.* 1996;19(11):719-26.
5. Liu BY, Guo J, Lanske B, **Divieti P**, Kronenberg HM, Bringhurst FR. Conditionally immortalized murine bone marrow stromal cells mediate parathyroid hormone-dependent osteoclastogenesis in vitro. *Endocrinology.* 1998;139(4):1952-64.
6. **Divieti P**, Lanske B, Kronenberg HM, Bringhurst FR. Conditionally immortalized murine osteoblasts lacking the type 1 PTH/PTHrP receptor. *J Bone Miner Res.* 1998;13(12):1835-45.
7. Lanske B, **Divieti P**, Kovacs CS, Pirro A, Landis WJ, Krane SM, Bringhurst FR, Kronenberg HM. The parathyroid hormone (PTH)/PTH-related peptide receptor mediates actions of both ligands in murine bone. *Endocrinology.* 1998;139(12):5194-204
8. Whitfield JF, Morley P, Willick GE, Isaacs RJ, MacLean S, Ross V, Barbier JR, **Divieti P**, Bringhurst FR. Lactam formation increases receptor binding, adenylyl cyclase stimulation and bone growth stimulation by human parathyroid hormone (hPTH)(1-28)NH<sub>2</sub>. *J Bone Miner Res.* 2000;15(5):964-70.

9. **Divieti P**, Inomata N, Chapin K, Singh R, Juppner H, Bringham FR. Receptors for the carboxyl-terminal region of pth(1-84) are highly expressed in osteocytic cells. *Endocrinology*. 2001;142(2):916-25.
10. Guo J, Lanske B, Liu BY, **Divieti P**, Kronenberg HM, Bringham FR. Signal-selectivity of parathyroid hormone (PTH)/PTH-related peptide receptor-mediated regulation of differentiation in conditionally immortalized growth-plate chondrocytes. *Endocrinology*. 2001;142(3):1260-8.
11. Whitfield JF, Isaacs RJ, Chakravarthy B, Maclean S, Morley P, Willick G, **Divieti P**, Bringham FR. Stimulation of protein kinase C activity in cells expressing human parathyroid hormone receptors by C- and N-terminally truncated fragments of parathyroid hormone 1-34. *J Bone Miner Res*. 2001;16(3):441-7.
12. Gori F, **Divieti P**, Demay MB. Cloning and characterization of a novel WD-40 repeat protein that dramatically accelerates osteoblastic differentiation. *J Biol Chem*. 2001;276(49):46515-22.
13. **Divieti P**, John MR, Juppner H, Bringham FR. Human PTH-(7-84) inhibits bone resorption in vitro via actions independent of the type 1 PTH/PTHrP receptor. *Endocrinology*. 2002;143(1):171-6
14. **Divieti P**, John MR, Juppner H, Bringham FR. Human PTH-(7-84) inhibits bone resorption in vitro via actions independent of the type 1 PTH/PTHrP receptor. *Endocrinology*. 2002;143(1):171-6
15. Calvi LM, Adams GB, Weibrecht KW, Weber JM, Olson DP, Knight MC, Martin RP, Schipani E, **Divieti P**, Bringham FR, Milner LA, Kronenberg HM, Scadden DT. Osteoblastic cells regulate the haematopoietic stem cell niche. *Nature*. 2003;425(6960):841-6.
16. Shin HI, **Divieti P**, Sims NA, Kobayashi T, Miao D, Karaplis AC, Baron R, Bringham R, Kronenberg HM. Gp130-mediated signaling is necessary for normal osteoblastic function in vivo and in vitro. *Endocrinology*. 2004;145(3):1376-85.
17. Murray TM, Rao LG, **Divieti P**, Bringham FR. Parathyroid Hormone Secretion and Action: Evidence for Discrete Receptors for the Carboxyl-Terminal Region and Related Biological Actions of Carboxyl-Terminal Ligands. *Endocr Rev*. 2005;26(1):78-113.
18. **Divieti P**, Geller AI, Suliman G, Juppner H, Bringham FR. Receptors Specific for the Carboxyl-Terminal Region of Parathyroid Hormone on bone-derived cells: Determinants of Ligand Binding and Bioactivity. *Endocrinology*. 2005;146(4):1863-1870.
19. Mahon MJ, Bonacci TM, **Divieti P**, Smrcka AV. A Docking site G protein (beta)(gamma) subunits on the Parathyroid Hormone 1 Receptor Signaling through multiple pathways. *Mol Endocrinol*. 2006;20(1):136-146.
20. Yang D, Guo J, **Divieti P**, Bringham FR. Parathyroid hormone activates PKC-delta and regulates osteoblastic differentiation via a PLC-independent pathway. *Bone*. 2006;38(4):485-96.
21. Selim AA, Mahon M, Jueppner H, Bringham FR, **Divieti P**. Role of Calcium Channels in Carboxyl-Terminal Parathyroid Hormone Receptor Signaling. *Am J Physiol Cell Physiol*. 2006.
22. Banerjee S, Selim H, Suliman G, Geller AI, Juppner H, Bringham FR, **Divieti P**. Synthesis and characterization of novel biotinylated carboxyl-terminal parathyroid hormone peptides that specifically crosslink to the CPTH-receptor. *Peptides*. 2006
23. Yang D, Singh R, **Divieti P**, Guo J, Bouxsein ML, Bringham FR. Contributions of parathyroid hormone (PTH)/PTH-related peptide receptor signaling pathways to the anabolic effect of PTH on bone. *Bone*. 2007;40(6):1453-61.
24. Yang D, Guo J, **Divieti P**, Shioda T and Bringham FR. CBP/P300-Interacting Protein CITED1 Modulates PTH regulation of Osteoblastic Differentiation. *Endocrinology*. 2008.

25. Selim H, Potts J. Jr, Bringham F.R. and **Divieti P.P.** Carboxyl-Terminal Parathyroid Hormone Receptor Regulates Osteocyte Cytoskeleton Through Mechanisms Dependent Upon Calcium Influx. *The Open Endocrinology Journal*. 2009;3.
26. **P. Divieti Pajevic** Regulation of Bone Resorption and Mineral Homeostasis By Osteocytes. *IBMS, BoneyKey*, 2009 February;6(2)63-70
27. R. Dana Carpenter, Ph.D.<sup>1</sup>, Thomas F. Lang, Ph.D.<sup>1</sup>, Susan A. Bloomfield, Ph.D.<sup>2</sup>, Jacob J. Bloomberg, Ph.D.<sup>3</sup>, Stefan Judex, Ph.D.<sup>4</sup>, Joyce H. Keyak, Ph.D.<sup>5</sup>, Ronald J. Midura, Ph.D.<sup>6</sup>, **P. Divieti Pajevic**, M.D., Ph.D.<sup>7</sup>, Jordan M. Spatz. "Effects of Long-Duration Spaceflight, Microgravity, and Radiation on the Neuromuscular, Sensorimotor, and Skeletal Systems" *Journal of Cosmology*, 2010, Vol 12, 3778-3780.
28. Powell WF Jr, Barry KJ, Tulum I, Kobayashi T, Harris SE, Bringham FR and **Divieti Pajevic P.** Targeted Ablation of the PTH/PTHrP Receptor in Osteocytes Impairs Bone Structure and Homeostatic Calcemic Responses. *J. Endocrinol.* 2011 Apr;209(1):21-32. Epub 2011 Jan 10. PMID: 21220409
29. Qing H, Ardeshirpour L, **Divieti Pajevic P**, Dusevich V, Jähn K, Kato S, Wysolmerski J, Bonewald LF. Demonstration of osteocytic perilacunar/canalicular remodeling in mice during lactation. *J Bone Miner Res.* 2012 May;27(5):1018-29. doi: 10.1002/jbmr.1567. PMID: 22308018
30. Kim SW, **Divieti Pajevic P**, Selig M, Barry KJ, Yang JY, Shin CS, Baek WY, Kim JE, Kronenberg HM. Intermittent PTH administration converts quiescent lining cells to active osteoblasts. *J Bone Miner Res.* 2012 Oct;27(10):2075-84. doi: 10.1002/jbmr.1665. PMID: 22623172
31. Spatz JM, Fields EE, Yu EW, **Divieti Pajevic P**, Bouxsein ML, Sibonga JD, Zwart SR, Smith SM. Serum Sclerostin increases in healthy adult men during bed rest. *J Clin Endocrinol Metab.* 2012 Sep;97(9):E1736-40. doi: 10.1210/jc.2012-1579. Epub 2012 Jul 5. PMID: 22767636
32. Zhu J, Siclari V, Liu F, Spatz J, Chandra A, **Divieti Pajevic P** and L Qin. Amphiregulin-EGFR signaling mediates the migration of bone marrow mesenchymal progenitors toward PTH-stimulated osteoblasts and osteocytes, *PLoS One.* 2012;7(12):e50099. doi:10.1371/journal.pone.0050099. Epub 2012 Dec 31. PMID: 23300521
33. Fulzele K, Krause D, Panaroni C, Saini V, Barry KJ, Liu X, Feng JQ, Chen M, Weinstein LS, Wu JY, Lotinun S, Baron R Kronenberg HM, Scadden DT, **Divieti Pajevic P** "Myelopoiesis is regulated by osteocytes through Gs $\alpha$ -dependent signalling" *Blood.* 2013 Feb 7;121(6):930-9. doi: 10.1182/blood-2012-06-437160. Epub 2012 Nov 16
34. Windahl SH, Börjesson AE, Farman HH, Engdahl C, Movérare-Skrtic S, Sjögren K, Lagerquist MK, Kindblom JM, Koskela A, Tuukkanen J, **Divieti Pajevic P**, Feng JQ, Dahlman-Wright K, Antonson P, Gustafsson JA, Ohlsson C. Estrogen receptor- $\alpha$  in osteocytes is important for trabecular bone formation in male mice *Proc Natl Acad Sci U S A.* 2013 Feb 5;110(6):2294-9. doi: 10.1073/pnas.1220811110. Epub 2013 Jan 23. PMID: 23345419
35. Christov M, Waikar SS, Pereira RC, Havasi A, Leaf DE, Goltzman D, **Divieti Pajevic P**, Wolf M, Jüppner H. Plasma FGF23 levels increase rapidly after acute kidney injury *Kidney Int.* 2013 May 8. doi: 10.1038/ki.2013.150. [Epub ahead of print] PMID: 23657144
36. Krause DS, Fulzele K, Catic A, Sun CC, Dombkowski D, Hurley MP, Lezeau S, Attar E, Wu JY, Lin HY, **Divieti Pajevic P**, Hasserjian RP, Schipani E, Van Etten RA, Scadden DT "Differential regulation of myeloid leukemias by the bone marrow microenvironment", *Nat Med.* 2013 Oct 27. doi: 10.1038/nm.3364
37. Saini. V, Marengi. DJ, Barry KJ, Fulzele KS, Heiden E, Liu X., Dedic C., Maeda A., Lotinun S, Roland Baron R. and **Divieti Pajevic P.** "Parathyroid Hormone (PTH)/PTH-related Peptide Type 1 Receptor

(PPR) Signaling in Osteocytes Regulates Anabolic and Catabolic Skeletal Responses to PTH” *J. Biol. Chem.* published June 2, 2013 as doi:10.1074/jbc.M112.441360

38. Sinha P, Aarnisalo P, Chubb R, Ono N, Fulzele K, Selig M, Saeed H, Chen M, Weinstein LS, **Divieti Pajevic P**, Kronenberg HM, Wu JY. Loss of Gs  $\alpha$  Early in the Osteoblast Lineage Favors Adipogenic Differentiation of Mesenchymal Progenitors and Committed Osteoblast Precursors *J Bone Miner Res.* 2014 May 7. doi: 10.1002/jbmr.2270. [Epub ahead of print] PMID: 24806274
39. Panaroni C, Fulzele K, Saini V, Chubb R, **Divieti Pajevic P**, Wu JY. PTH signaling in osteoprogenitors is essential for B-lymphocyte Differentiation and Mobilization. *J Bone Miner Res.* 2015 Jul 20. doi: 10.1002/jbmr.2581. [Epub ahead of print] PMID: 26191777
40. Spatz JM, Wein MN, Gooi JH, Qu Y, Garr JL, Liu S, Barry KJ, Uda Y, Lai F, Dedic C, Balcells-Camps M, Kronenberg HM, Babij P, **Divieti Pajevic P**. The Wnt-inhibitor Sclerostin is up-regulated by Mechanical Unloading in Osteocytes in-vitro *J Biol Chem.* 2015 May 7. pii: jbc.M114.628313. [Epub ahead of print] PMID: 25953900
41. Wein MN, Spatz J, Nishimori S, Doench J, Root D, Babij P, Nagano K, Baron R, Brooks D, Bouxsein M, **Divieti Pajevic P**, Kronenberg HM. HDAC5 controls MEF2C-driven Sclerostin expression in osteocytes *J Bone Miner Res.* 2015 Mar;30(3):400-11. doi: 10.1002/jbmr.2381 PMID: 25271055
42. Kedlaya R, Shin Kang K, Min Hong J, Bettagere V, Lim KE, Horan D, **Divieti-Pajevic P**, Robling AG. *Endocrinology.* 2016 Jun 2;en20151587. [Epub ahead of print] PMID: 27253995
43. Fulzele K, Lai F, Dedic C, Saini V, Uda Y, Shi C, Tuck P, Aronson JL, Liu X, Spatz JM, Wein M, **Divieti Pajevic P**. Osteocyte-Secreted Wnt Signaling Inhibitor Sclerostin Contributes to Beige Adipogenesis in Peripheral Fat Depots. *J Bone Miner Res.* 2016 Sep 21. doi: 10.1002/jbmr.3001. [Epub ahead of print] PMID: 27653320
44. Wein MN, Liang Y, Goransson O, Sundberg TB, Wang J, Williams EA, O'Meara MJ, Govea N, Beqo B, Nishimori S, Nagano K, Brooks DJ, Martins JS, Corbin B, Anselmo A, Sadreyev R, Wu JY, Sakamoto K, Foretz M, Xavier RJ, Baron R, Bouxsein ML, Gardella TJ, **Divieti-Pajevic P**, Gray NS, Kronenberg HM. g. Sik control osteocyte responses to parathyroid hormone. *Nature Commun.* 2016 Oct 19;7:13176. doi: 10.1038/ncomms13176. PMID: 27759007
45. Wood CL, **Divieti Pajevic P**, Gooi JH. Osteocyte secreted factors inhibit skeletal muscle differentiation. *Bone Rep.* 2017 Mar 2;6:74-80
46. Shi C, Uda Y, Dedic C, Azab E, Sun N, Hussein AI, Petty CA, Fulzele K, Mitterberger-Vogt MC, Zwerschke W, Pereira R, Wang K, **Divieti Pajevic P**. Carbonic Anhydrase III protects osteocytes from oxidative stress. *FASEB J.* 2017 Sep 19. pii: fj.201700485RR. doi: 10.1096/fj.201700485RR. [Epub ahead of print] PMID: 28928248
47. He Q, Bouley R, Liu Z, Wein MN, Zhu Y, Spatz JM, Wang CY, **Divieti Pajevic P**, Plagge A, Babitt JL, Bastepe M. "Large G protein  $\alpha$ -subunit XLas limits clathrin-mediated endocytosis and regulates tissue iron levels in vivo. *Proc Natl Acad Sci U S A.* 2017 Nov 7;114(45):E9559-E9568. doi: 10.1073/pnas.1712670114. Epub 2017 Oct 23. PMID: 29078380
48. Ansari N, Ho PWM, Crimeen-Irwin B, Poulton IJ, Brunt AR, Forwood MR, **Divieti Pajevic P**, Gooi JH, Martin TJ, Sims NA. Autocrine and paracrine regulation of the murine skeleton by osteocyte-derived parathyroid hormone-related protein. *J Bone Miner Res.* 2017 Sep 15. doi: 10.1002/jbmr.3291. [Epub ahead of print] PMID: 28914969
49. Watt J, Baker AH, Meeks B, Divieti Pajevic P, Morgan EF, Gerstenfeld LC, Schlezinger JJ. Tributyltin induces distinct effects on cortical and trabecular bone in female C57Bl/6J mice *J Cell Physiol.* 2018 Jan 30. doi: 10.1002/jcp.26495. [Epub ahead of print] PMID: 29380368



### **EDITORIAL AND REVIEW:**

1. Bellido T, Saini V, Divieti Pajevic P. Effects of PTH on Osteocyte Functions. *Bone*. 2013 Jun;54(2):250-7. doi: 10.1016/j.bone.2012.09.016. Epub 2012 Sep 24. PMID: 23017659
2. Kalajzic I, Brya GM, Torreggiani E, **Divieti Pajevic P**, Harris MS, Harris SE. Use of cell lines and transgenic mouse models in osteocyte biology. *Bone*. 2013 Jun;54(2):296-306. doi: 10.1016/j.bone.2012.09.040. Epub 2012 Oct 13. PMID: 23072918
3. **Divieti Pajevic, P**, Spatz J, Garr J, Adamson C, Misener L Osteocyte Biology and Space Flight. *Current Biotechnology*, 2013, 2, 000-000
4. **Divieti Pajevic, P** Recent Progress in Osteocyte Research, *Endocrinology and Metabolism*, 2013
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