

Peer Reviewed Publications

1. Gamsjaeger S, Rauch F, Glorieux FH, Paschalis EP. Cortical bone material / compositional properties in growing children and young adults aged 1.5-23 years, as a function of gender, age, metabolic activity, and growth spurt. *Bone*. 2022 Sep 17;165:116548. doi: 10.1016/j.bone.2022.116548.
2. Thaler R, Khani F, Sturmlechner I, Dehghani S, Denbeigh J, Zhou X, Pichurin O, Dudakovic A, Jerez Ortega S, Zhong J, Lee JH, Natarajan R, Kalajzic I, Jiang Y-H, Deyle D, Paschalis E, Misof B, Ordog T, van Wijnen A. Vitamin C epigenetically controls osteogenesis and bone mineralization. *Nature Communications* (2022) 13:5883, <https://doi.org/10.1038/s41467-022-32915-8>
3. Paschalis EP, Gamsjaeger S, Klaushofer K, Shane E, Cohen A, Stepan J, Pavo E, Eriksen EF, Taylor KA, Dempster DW. Treatment of postmenopausal osteoporosis patients with teriparatide for 24 months reverts forming bone quality indices to premenopausal healthy control values. *Bone* 2022, doi: 10.1016/j.bone.2022.116478.
4. Fratzi-Zelman N, Hartmann MA, Gamsjaeger S, Rokidi S, Paschalis EP, Blouin S, Zwerina J. Bone matrix mineralization and response to burosumab in adult patients with X-linked hypophosphatemia: Results from the phase 3, single-arm international trial. *JBMR* 2022, doi: 10.1002/jbmr.4641.
5. Butilina M, Foeger-Samwald U, Gamsjaeger S, Wahl-Figlash K, Kothmayer M, Paschalis EP, Pusch O, Pietschmann P. Nothobranchius furzeri, the turquoise killifish: a model of age-related osteoporosis? *Gerontology* 2022 Apr 26:1-13. doi: 10.1159/000524300
6. Paschalis EP, Gamsjaeger S, Burr DB. Bone quality in an ovariectomized monkey animal model treated with two doses of teriparatide for either 18 months, or 12 months followed by withdrawal for 6 months. *Bone* 2022 Feb 12:116366. doi: 10.1016/j.bone.2022.116366.
7. Leisser C, Paschalis E, Rokidi S, Behanova M, Ruiss M, Burgmüller W, Findl O. Fourier-Transform Infrared Spectroscopy of Epiretinal Membranes and Internal Limiting Membranes after Pars Plana Vitrectomy with Membrane Peeling. *Ophthalmic Res.* 2021 May 5. doi: 10.1159/000516633.
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9. Gamsjaeger S, Fratzi P, Paschalis EP. Interplay between Mineral Crystallinity and Mineral Accumulation in Health and Postmenopausal Osteoporosis. *Acta Biomater.* 2021 Feb 11:S1742-7061(21)00097-0. doi: 10.1016/j.actbio.2021.02.011.
10. Mähr M, Blouin S, Misof BM, Paschalis EP, Hartmann, MA, Zwerina J, Fratzi-Zelman, N. Bone properties in osteogenesis imperfecta: what can we learn from a bone biopsy beyond histology? *Wien Med Wochenschr.* 2021 Feb 22. doi: 10.1007/s10354-021-00818-w.
11. Paschalis EP, Dempster DW, Chan-Diehl FW, Gamsjaeger S, Rokidi S, Hassler N, Brozek W, Klaushofer K, Taylor KA. Mineral and Organic Matrix Composition at Bone Forming Surfaces in Postmenopausal Women with Osteoporosis Treated With Either Teriparatide or Zoledronic Acid. *Bone.* 2021 Jan 13:115848. doi: 10.1016/j.bone.2021.115848.

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15. Roschger A, Wagermaier W, Gamsjaeger S, Hassler N, Schmidt I, Blouin S, Berzlanovich A, Gruber GM, Weinkamer R, Roschger P, Paschalis EP, Klaushofer K, Fratzl P. Newly formed and remodeled human bone exhibits differences in the mineralization process. Acta Biomater. 2020 Jan 8. pii: S1742-7061(20)30005-2. doi: 10.1016/j.actbio.2020.01.004.
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