

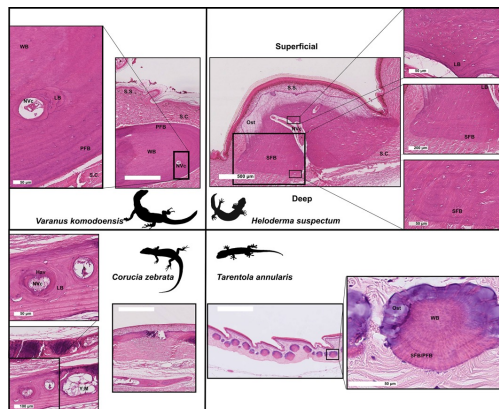


# The harder you look, the more you see - Osteoderms in Lizards

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Osteoderms are mineralisations forming directly in the dermis of many tetrapods (some amphibians, crocodilians, some dinosaurs, armadillos) and especially across various extant lizard (but not snake) taxa. I will present work from an HFSP funded collaboration investigating osteoderms from phylogenetic, histological, biomechanical, developmental and material engineering perspectives. Can osteoderms contribute to skull mechanics? How variable are they? and what do they look like at the nano scale? One intriguing finding is the presence of a capping tissue with different mechanical and histological properties from the underlying bone. For the latter we obtained nano-holotomography data at the ESRF synchrotron.



**Friday, February 24<sup>th</sup> at 13.00 in the Zoophysiology Seminar Room (1131-127)**