

List of publications (2013-2022)

Peer-reviewed articles:

- Zollikofer, C. P., Bienvenu, T., Beyene, Y., Suwa, G., Asfaw, B., White, T. D., & Ponce de León, M. S. (2022). Endocranial ontogeny and evolution in early *Homo sapiens*: The evidence from Herto, Ethiopia. *Proceedings of the National Academy of Sciences*, 119(32), e2123553119.
- Kawada, M., Masato, N., Nishimura T, Kaneko, A, Ogihara, N, Yamada, S, Coudyzer, W, Zollikofer, CPE, Ponce de León, MS, and Morimoto, N (2022). Human shoulder development is adapted to obstetrical constraints. *Proc. Natl. Acad. Sci. USA*, 119(16), e2114935119
- Vahdati, A. R., Weissmann, J. D., Timmermann, A., de León, M. P., & Zollikofer, C. P. E. (2022). Exploring Late Pleistocene hominin dispersals, coexistence and extinction with agent-based multi-factor models. *Quaternary Science Reviews*, 279, 107391.
- Ponce de León, M.S., Bienvenu, T., Marom, A., Engel, S., Tafforeau, P., Warren, J.L.A., Lordkipanidze, D., Kurniawan, I., Murti, D.B., Suriyanto, R.A., Koesbardiati, T., Zollikofer, C.P.E., (2021). The primitive brain of early *Homo*. *Science* 372, 165-171.
- Garcia-Martinez, D., Bastir, M., Gomez-Olivencia, A., Maureille, B., Golovanova, L., Doronichev, V., Akazawa, T., Kondo, O., Ishida, H., Gascho, D., Zollikofer, C.P.E., Ponce de León, M., Heuze, Y., (2020). Early development of the Neanderthal ribcage reveals a different body shape at birth compared to modern humans. *Science Advances* 6, eabb4377.
- Morimoto, N., Kunitatsu, Y., Nakatsukasa, M., Ponce de León, M.S., Zollikofer, C.P.E., Ishida, H., Sasaki, T., Suwa, G., (2020). Variation of bony labyrinthine morphology in Mio–Plio–Pleistocene and modern anthropoids. *American Journal of Physical Anthropology* 173, 276-292.
- Ochando, J., Carrión, J., Rodríguez-Vidal, J., Jiménez-Arenas, J., Fernández, S., Amorós, G., Munuera, M., Scott, L., Stewart, J.R., Knul, M., Toro-Moyano, I., Ponce de León, M., Zollikofer, C., 2020. Palynology and chronology of hyaena coprolites from the Piñar karstic Caves Las Ventanas and Carihuela, southern Spain. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 109771.
- Alatorre Warren, J.L., Ponce de León, M.S., Hopkins, W.D. & Zollikofer, C. P. E. (2019), Evidence for independent brain and neurocranial reorganization during hominin evolution. *Proc. Natl. Acad. Sci.* 116, no. 44: 22115-22121.
- Vahdati AR, Weissmann JD, Timmermann A, Ponce de León MS, and Zollikofer CPE (2019). Drivers of Late Pleistocene human survival and dispersal: an agent-based modeling and machine learning approach. *Quaternary Science Reviews* 221:105867.
- Carrión JS, Fernández S, Jiménez-Arenas JM, Munuera M, Ochando J, Amorós G, Ponce de León M, Zollikofer C, Martín-Lerma I, Toro-Moyano I, Hajdas I, Walker MJ. (2019). The sequence at Carihuela Cave and its potential for research into Neanderthal ecology and the Mousterian in southern Spain. *Quaternary Science Reviews* 217, 194-216.
- Milella M, Gerling C, Doppler T, Kuhn T, Cooper M, Mariotti V, Belcastro MG, Ponce de León MS, Zollikofer CPE. 2019. Different in death: Different in life? Diet and mobility correlates of irregular burials in a Roman necropolis from Bologna (Northern Italy, 1st–4th century CE). *Journal of Archaeological Science: Reports* 27:101926.
- Jiménez-Arenas JM, Bienvenu T, Toro-Moyano I, Ponce de León MS, and Zollikofer CPE. 2019. Virtual reconstruction and re-evaluation of the Neanderthal frontal bone from Carigüela Cave (Granada, Spain). *Quaternary Science Reviews*, 217, 89-97.
- Ponce de León, M. S., Koesbardiati, T., Weissmann, J. D., Milella, M., Reyna-Blanco, C. S., Suwa, G., Kondo, O., Malaspinas, A. S., White, T. D. & Zollikofer, C. P. E. (2018) Human bony labyrinth is an indicator of population history and dispersal from Africa. *Proc. Natl. Acad. Sci. USA*, 115(16), 4128-4133.
- Kochiyama, T., Ogihara, N., Tanabe, H. C., Kondo, O., Amano, H., Hasegawa, K., Suzuki, H., Ponce de León, M. S., Zollikofer, C. P. E., Bastir, M., Stringer, C., Sadato, N. & Akazawa, T. (2018) Reconstructing the Neanderthal brain using computational anatomy. *Scientific Reports*, 8(1), 6296.
- Falk D, Zollikofer CPE, Ponce de León MS, Semendeferi K, Alatorre Warren JL, Hopkins WD (2018). Identification of *in vivo* sulci on the external surfaces of eight adult chimpanzee brains: Implications for interpreting early hominin endocasts. *Brain, Behavior and Evolution*, 91, 45-58.
- Ruff CB, Burgess ML, Junno JA, Mudakikwa A, Zollikofer CPE, Ponce de Leon MS, and McFarlin SC. (2018). Phylogenetic and environmental effects on limb bone structure in gorillas. *Am J Phys Anthropol.*, 10.1002/ajpa.23437
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- Zollikofer CPE, Scherrer M, Ponce de León MS (2017). Development of pelvic sexual dimorphism in hylobatids: testing the obstetric constraints hypothesis. *Anatomical Record* 300(5): 859-869

- Rightmire GP, Ponce de León MS, Lordkipanidze D, Margvelashvili A, Zollikofer CPE (2017). Skull 5 from Dmanisi: Descriptive anatomy, comparative studies, and evolutionary significance. *J. Hum. Evol.* 104: 50-79.
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- Ponce de León MS, Zollikofer CPE (2016). Primate birth at the extremes: exploring obstetric and metabolic constraints In: Rosenberg K, Trevathan W, editors. *Costly and Cute: Helpless Infants and Human Evolution* Santa Fe: SAR Press. p 51-66.
- Ponce de León MS, Huseynov A, Zollikofer CP. 2016. Developmental solutions to the obstetrical dilemma are not Gouldian spandrels. *Proc Natl Acad Sci U S A* 113:E3597-E3598.
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- Zollikofer CPE, Bienvenu T, Ponce de León MS (2016). Effects of cranial integration on hominid endocranial shape. *Journal of Anatomy* 230, 85-105.
- Ponce de León MS, Bienvenu T, Akazawa T, Zollikofer CPE. (2016). Brain development is similar in Neanderthals and modern humans. *Current Biology* 26, R665-R666.
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