

## Publications J. A. Schultz

### Peer-reviewed

- Mähler, B., A. H. Schwermann, M. Wuttke, **J. A. Schultz** and T. Martin (2015). 4D-Virtopsy and the taphonomy of a mole from the Oligocene of Lake Enspel (Germany). *Palaeobiodiversity and Palaeoenvironments* 95 (1): 115-131.
- Hielscher, R. C., J. A. Schultz and T. Martin (2014). Wear pattern of the molar dentition of an extant an Oligocene bat assemblage with implications on functionality. *Palaeobiodiversity and Palaeoenvironments* (online first). <http://dx.doi.org/10.1007/s12549-015-0186-z>
- Schultz J. A.**, D. W. Kause, W. v. Koenigswald and E. R. Dumont. Dental function and diet of *Vintana sertichi* (Mammalia, Gondwanatheria) from the Late Cretaceous of Madagascar. Memoir to the Journal of Vertebrate Paleontology Volume 34, Suppl. 1: 182-202.
- Krause, D. W., S. Hoffmann, J. R. Wible, E. C. Kirk, **J. A. Schultz**, W. v. Koenigswald, J. R. Groenke, J. B. Rossie, P. O'Connor, E. R. Seiffert, E. R. Dumont, W. L. Holloway, R. R. Rogers, L. J. Rahantarisoa, A. D. Kemp & H. Andriamialison. 2014. First cranial remains of a goandwanatherian mammal reveal remarkable mosaicism. *Nature* 515: 512–517. <http://dx.doi.org/10.1038/nature13922>
- Schultz, J. A.** & T. Martin. 2014. Function of pretribosphenic and tribosphenic mammalian molars inferred from 3D animation. *Naturwissenschaften* 101:771-781. <http://dx.doi.org/10.1007/s00114-014-1214-y>
- Angelone, C., **J. A. Schultz** & M. A. Erbajewa (2014). Determining the ontogenetic variation of lower cheek teeth occlusal surface patterns in lagomorphs using micro-ct technology. *Palaeontologia Electronica*, Article number: 17.1.5A., 13p. <http://palaeo-electronica.org/content/pdfs/415.pdf>
- Hoffmann, R., **J. A. Schultz**, R. Schellhorn, E. Rybacki, H. Keupp, S. R. Gerden, R. Lemanis & S. Zachow (2013). Non-invasive imaging methods applied to neo- and paleontological cephalopod research. *Biogeosciences Discussions* 10: 1-49, doi: 10.5194/bgd-10-18803-2013. <http://dx.doi.org/10.5194/bgd-10-18803-2013>
- Koenigswald, W. v., U. Anders, S. Engels, J. A. Schultz, and O. Kullmer. 2012. Jaw movement in fossil mammals: analysis, description and visualization. *Paläontologische Zeitschrift* 87:141-159.

### Non peer-reviewed

- Schultz, J. A.** (2012). Funktionelle Morphologie und Abnutzungsmuster prätribosphenischer Molaren am Beispiel der Dryolestida (Mammalia, Cladotheria). *Dissertation Thesis* Rheinische Friedrich-Wilhelms-Universität Bonn: 170 pp. <http://hss.ulb.uni-bonn.de/2012/2787/2787.htm>

### Conference contributions

- Schultz, J. A.** & T. Martin (2015). The inner and middle ear of Jurassic Paulchoffatiid multituberculates. *75<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology in Dallas 2015. Supplement to the Journal of Vertebrate Paleontology* October 2015: 210.
- Schultz, J. A.**, D. Kalthoff, E. Schulz, S. McLoughlin, I. Corfe & T. Martin (2014). Reconstructing dental function and mastication in tritylodontids (Synapsida, Cynodontia) with implications for

- dietary composition. *74<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology in Berlin 2014. Supplement to the Journal of Vertebrate Paleontology* November 2014: 225.
- Schwermann, A. H., **J. A. Schultz**, O. Kullmer & T. Martin (2014). Molar form and function of the Late Jurassic stem-zatherian *Nanolestes* (Mammalia). *74<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology in Berlin 2014. Supplement to the Journal of Vertebrate Paleontology* November 2014: 226.
- Hielscher, R. C., **J. A. Schultz** & T. Martin (2014). Comparison of dental wear stages and reconstruction of the masticatory movement in two bat species (Mammalia, Chiroptera). *74<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology in Berlin 2014. Supplement to the Journal of Vertebrate Paleontology* November 2014: 147.
- Martin, T., A. O. Averianov, A. V. Lopatin & **Schultz, J. A.** (2014). Mammals from the Middle Jurassic of Western Siberia. *74<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology in Berlin 2014. Supplement to the Journal of Vertebrate Paleontology* November 2014: 180.
- Kalthoff D. C., **J. A. Schultz**, E. Schulz-Kornas, T. Martin, S. Mcloughlin & I. Corfe (2014). Dietary adaptations and mastication in tritylodontids (Synapsida, Cynodontia) based on tooth wear patterns. *4th International Palaeontological Congress, Mendoza, Argentina; 01/2014*. Abstract Volume: 733.
- Mähler, B., A. H. Schwermann, M. Wuttke, **J. A. Schultz** & T. Martin (2014). 4D-Virtopsy and the taphonomy of a mole from Upper Oligocene of Enspel (Germany). *7<sup>th</sup> International Meeting on Taphonomy and Fossilization, Ferrara, Spain 2014. Annali Online dell'Università degli Studi di Ferrara, Sezione di Fisica e Scienze della Terra, Volume Speciale* (2014): 54.
- Schultz, J. A.**, I. Ruf, A. O. Averianov, A. V. Lopatin & T. Martin (2013). First docodont petrosals from the Middle Jurassic of Western Siberia (Russia). *73<sup>rd</sup> Annual Meeting of the Society of Vertebrate Paleontology in L.A. 2013. Supplement to the Journal of Vertebrate Paleontology* October 2013: 207-208.
- Martin, T., F. J. Goin, L. Chornogubsky, J. N. Gelfo & **J. A. Schultz** (2013). Early Late Cretaceous (Cenomanian) mammals and other vertebrates from the Mata Amarilla Formation of Southern Patagonia (Argentina). *73<sup>rd</sup> Annual Meeting of the Society of Vertebrate Paleontology in L.A. 2013. Supplement to the Journal of Vertebrate Paleontology* October 2013: 172.
- Schultz, J. A.** (2013). Dental functions of mammaliaforms and early mammals. *84. Jahrestagung der Paläontologischen Gesellschaft 2013. In: J. Reitner, Q. Yang, Y. Wang, and M. Reich (eds.), Palaeobiology and Geobiology of Fossil Lagerstätten through Earth History. Universitätsdrucke Göttingen*: 149.
- Hielscher, R. C., **J. A. Schultz** & T. Martin (2013). Comparison of age stages and wear facets at the molars of fossil and extant bats (Mammalia: Chiroptera). *84. Jahrestagung der Paläontologischen Gesellschaft 2013. In: J. Reitner, Q. Yang, Y. Wang, and M. Reich (eds.), Palaeobiology and Geobiology of Fossil Lagerstätten through Earth History. Universitätsdrucke Göttingen*: 70-71.

- Schultz, J. A.** (2013). Masticatory and dental functions in early mammals. *11th International Conference on Tooth Morphogenesis and Differentiation 2013*: PA 13.
- Schultz, J. A.** (2012). Major transformation in masticatory and dental functions in early mammals. *72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology in Raleigh 2012. Supplement to the Journal of Vertebrate Paleontology* October 2012: 168.
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- Schultz, J. A.** & T. Martin (2011). Structure and function of dryolestid molars (Mammalia, Cladotheria). *Society of Vertebrate Paleontology, 71st Annual Meeting Las Vegas 2011. Journal of Vertebrate Paleontology. Supplement to the Journal of Vertebrate Paleontology* October 2011: 189.
- Schultz, J. A.** & T. Martin (2011). Wear pattern analysis and functional morphology in dryolestid molars (Cladotheria, Mammalia). *82. Jahrestagung der Paläontologischen Gesellschaft. Beiträge zur Paläontologie* 32: 35.
- Koenigswald, W. v., U. Anders, S. Engels, J. A. Schultz & O. Kullmer (2011). Kaubewegungen bei rezenten und fossilen Säugetieren: Rekonstruktion und Visualisierung. *82. Jahrestagung der Paläontologischen Gesellschaft. Beiträge zur Paläontologie* 32: 15.
- Schultz, J. A.** & T. Martin (2010). 3D-Analysis of functional surfaces in the pre-tribosphenic dentition. *Society of Vertebrate Paleontology, 70th Annual Meeting Pittsburgh 2010. Journal of Vertebrate Paleontology. Supplement to the Journal of Vertebrate Paleontology* October 2010: 159A.
- Schultz, J. A.** & T. Martin (2010). Occlusal surface analysis of dryolestoid molars (Mammalia, Cladotheria). *Zitteliana* 29 (Reihe B): 94.
- Schultz, J. A.**, T. Martin & P. Tafforeau (2009). Occlusion pattern in Dryolestidae. 79. Jahrestagung der Paläontologischen Gesellschaft. *Terra Nostra - Schriften der GeoUnion Alfred Wegener* 2009/3: 110.
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- Schultz, J. A.**, K. Szdzuy & U. Zeller (2004). A comparative study of the viscera of metatherian and altricial and precocial eutherian neonates. *Advances in Ethology, Supplements to Ethology – Contribution to the 5th International Symposium on Physiology, Behavior and Conservation of Wildlife* 38: 115.
- Zeller, U., C. Freyer, K. Szdzuy & **J. A. Schultz** (2004). Stem species patterns of mammalian reproduction. *Journal of Morphology* 260: 342.
- Szdzuy, K., U. Zeller & **J. A. Schultz** (2003). Comparison of lung structures in neonate marsupial and placental mammals and its evolutionary significance, with special emphasis on the K/T-boundary. *Abstractband der 96. Jahresversammlung der Deutschen Zoologischen Gesellschaft, Berlin*: 141.