

Curriculum Vitae & Bibliography

Min Wang

Professor

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Google Scholar: <http://scholar.google.com.hk/citations?user=VB4IvuoAAAAJ&hl=en>

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Research Interests

I'm curious about various aspects of the evolution of birds during the Mesozoic Era, a critical phase when birds split from the dinosaur branch and evolved the bauplan of modern birds. In doing so, I'm collecting comparative anatomical, histological and ontogenetic data to infer the taxonomy, phylogeny, ontogeny and ecology of Mesozoic birds. Also, Cenozoic bird fossils are my favorite if they are not that boring.

Education

09/2009–05/2014: Ph.D., Institute of Vertebrate Paleontology and Paleoanthropology,

University of Chinese Academy of Sciences (major: Vertebrate Paleontology;
advisor: Dr. Zhonghe Zhou)

Doctoral Dissertation Title: Taxonomical revision, ontogenetic, habitat and
phylogenetic analyses of Enantiornithes (Aves: Ornithothoraces) of China

09/2005–06/2009: B.S., Nanjing University (major: Paleontology and Stratigraphy)

Professional Experience

09/2016–present: Professor, Institute of Vertebrate Paleontology and

Paleoanthropology, Chinese Academy of Sciences

01/2016–08/2018: Associate Professor, Institute of Vertebrate Paleontology and
Paleoanthropology, Chinese Academy of Sciences

07/2014–12/2015: Assistant Research Fellow, Institute of Vertebrate Paleontology and
Paleoanthropology, Chinese Academy of Sciences

Memberships

Executive member of Society of Avian Paleontology and Evolution
(2011–Present)

Selected Academic Awards

2018: Youth Paleontologist of Palaeontological Society of China

2015: Excellent doctoral dissertation of Chinese Academy of Sciences

2013: Chinese Academy of Sciences President Award

2013: Pacemaker to Outstanding Students, University of Chinese Academy of
Sciences

2012: National Scholarship (PhD Student), University of Chinese Academy of
Sciences

2011: Di Ao Scholarship, Graduate University of Chinese Academy of Sciences

2009: The Baogang Scholarship

2009: National innovation experiment program for university students (PI), Nanjing
University

2007: The second Prize, People's Scholarship, Nanjing University

2006: The second Prize, People's Scholarship, Nanjing University

Selected Grants as PI

01/2018–12/2020: National Science Fund for Excellent Young Scholars

01/2016–12/2019: Youth Innovation Promotion Association (CAS)

01/2016–12/2018: National Natural Science Foundation of China;

2015–2018: State Key Laboratory of Palaeobiology and Stratigraphy (Nanjing Institute of Geology and Palaeontology, CAS);

2015–2016: National Science Foundation for Fostering Talents in Basic Research of the National Natural Science Foundation of China

Peer Reviewed Papers (* corresponding author) update to 2019

Wang Min*, J. K. O'Connor, Xu Xing, and Zhou Zhonghe. 2019. A new Jurassic scansoriopterygid and the loss of membranous wings in theropod dinosaurs. *Nature* 569:256-259. (SCI)

Wang Min*, J. K. O'Connor, Shuang Zhou, and Z. Zhou. 2019. New toothed Early Cretaceous ornithuromorph bird reveals intraclade diversity in pattern of tooth loss. *Journal of Systematic Palaeontology*. DOI: 10.1080/14772019.2019.1682696

Wang Min*, and Zhou Zhonghe. 2019. A new enantiornithine (Aves: Ornithothoraces) with completely fused premaxillae from the Early Cretaceous of China. *Journal of Systematic Palaeontology*. 17(15): 1079–1092. (SCI)

Wang Min*, O'Connor J.K., and Zhou Zhonghe. 2019. A taxonomical revision of the Confuciusornithiformes (Aves: Pygostylia). *Vertebrata Palasiatica*. 57(1). 1–37.

Wang Min*, T. A. Stidham, and Zhou Zhonghe*. 2018. A new clade of basal Early Cretaceous pygostylian birds and developmental plasticity of the avian shoulder girdle. *PNAS*. 115 (42) 10708–10713. (SCI)

Wang Min*, and Zhou Zhonghe. 2018. A new confuciusornithid (Aves: Pygostylia) from the Early Cretaceous increases the morphological disparity of the Confuciusornithidae. *Zoological Journal of the Linnean Society*. 185(2): 417–430. (SCI)

Wang Min*, Li Zhiheng, and Zhou Zhonghe*. 2017. Insight into the growth pattern and bone fusion of basal birds from an Early Cretaceous enantiornithine bird. *PNAS* 114:11470–11475. (SCI)

- Wang Min***, O'Connor J.K., Pan Yanhong, Zhou Zhonghe. 2017. A bizarre Early Cretaceous enantiornithine bird with unique crural feathers and an ornithuromorph plough-shaped pygostyle. *Nature Communications* 8, 14141. (SCI)
- Wang Min***, and Zhou Zhonghe. 2017. The Evolution of Birds with Implications from New Fossil Evidences. In: *The Biology of the Avian Respiratory System* (N. J. Maina, ed.). pp. 1–26, Springer International Publishing.
- Wang Min***, and Hu Han. 2017. A comparative morphological study of the jugal and quadratojugal in early birds and their dinosaurian relatives. *The Anatomical Record* 300:62–75. (SCI)
- Wang Min***, and Zhou Zhonghe. 2017. A morphological study of the first known piscivorous enantiornithine bird from the Early Cretaceous of China. *Journal of Vertebrate Paleontology*:e1278702. (SCI)
- Wang Min***, Zhou Zhonghe*, and Corwin Sullivan. 2016. A fish-eating enantiornithine bird from the Early Cretaceous of China provides evidence of modern avian digestive features. *Current Biology* 26:1170–1176. (SCI)
- Wang Min***, and Lloyd G. T. *. 2016. Rates of morphological evolution are heterogeneous in Early Cretaceous birds. *Proceedings of the Royal Society of London B: Biological Sciences* 283, 20160214. (SCI)
- Wang Min***, and Zhou Zhonghe. 2017. A new adult specimen of the basalmost ornithuromorph bird *Archaeorhynchus spathula* (Aves: Ornithuromorpha) and its implications for early avian ontogeny. *Journal of Systematic Palaeontology* 15:1–18. (SCI)
- Wang Min***, Wang Xiaoli, Wang Yan, and Zhou Zhonghe*. 2016. A new basal bird from China with implications for morphological diversity in early birds. *Scientific Reports* 6:19700. (SCI)
- Wang Min***, Zhou Zhonghe, and Zhou Shuang. 2016. A new basal ornithuromorph bird (Aves: Ornithothoraces) from the Early Cretaceous of China with implication for morphology of early Ornithuromorpha. *Zoological Journal of the Linnean Society* 176:207–223. (SCI)

- Wang Yan, **Wang Min***, O'Connor J.K., Wang Xiaoli, Zheng Xiaoting, Zhang Xiaomei. 2016. A new Jehol enantiornithine bird with three-dimensional preservation and ovarian follicles. *Journal of Vertebrate Paleontology*, 36(2) e1054496. (SCI)
- Wang Min***, Liu Di. 2016. Taxonomical reappraisal of Cathayornithidae (Aves: Enantiornithes). *Journal of Systematic Palaeontology*. 14: 29–47. (SCI)
- Wang Min***, Zheng Xiaoting, O'Connor J.K., Lloyd G.T., Wang Xiaoli, Wang Yan, Zhang Xiaomei, Zhou Zhonghe *. 2015. The oldest record of Ornithuromorpha from the Early Cretaceous of China. *Nature Communications* 6987. (SCI)
- Wang Min***, Hu Han, Li Zhiheng. 2016. A new small enantiornithine bird from the Jehol Biota, with implications for early evolution of avian skull morphology. *Journal of Systematic Palaeontology*. 14: 481–497. (SCI)
- Wang Min***, Li Daqing, O'Connor J.K., Zhou Zhonghe, You Hailu. 2015. Second species of enantiornithine bird from the Lower Cretaceous Changma Basin, northwestern China with implications for the taxonomic diversity of the Changma avifauna. *Cretaceous Research*, 55: 56–65. (SCI)
- Wang Min***, O'Connor, J. K., Zhou Zhonghe. 2014. A new robust enantiornithine bird from the Lower Cretaceous of China with scansorial adaptations. *Journal of Vertebrate Paleontology*, 34(3): 657–671. (SCI)
- Wang Min***, Zhou Zhonghe, Xu Guanghui. 2014. The first enantiornithine bird from the Upper Cretaceous of China. *Journal of Vertebrate Paleontology*, 34(1): 135–145. (SCI)
- Wang Min***, Zhou Zhonghe, O'Connor, J. K., Zelenkov, N. V. 2014. A new diverse enantiornithine family (Bohaiornithidae fam. nov.) from the Lower Cretaceous of China with information from two new species. *Vertebrata Palasiatica* 52 (1): 31–76.
- Wang Min***, O'Connor J. K., Zhou Zhonghe. 2013. The first fossil crow (*Corvus* sp. indet.) from the Early Pleistocene Nihewan Paleolithic sites in North China. *Journal of Archaeological Science* 40: 1623–1628. (SCI)
- Wang Min***, Mayr G., Zhang Jiangyong, Zhou Zhonghe. 2012. Two new skeletons of

- the enigmatic, rail-like avian taxon *Songzia Hou*, 1990 (Songziidae) from the early Eocene of China. *Alcheringa* 36, 487–499. (SCI)
- Wang Min***, Mayr G., Zhang Jiangyong, Zhou Zhonghe. 2012. New bird remains from the Middle Eocene of Guangdong, China. *Acta Palaeontologica Polonica* 57(3): 519–526. (SCI)
- Zhang, C., and **Wang Min**. 2019. Bayesian tip dating reveals heterogeneous morphological clocks in Mesozoic birds. *Royal Society Open Science* 6:182062.
- Chiappe, L. M., M. Qingjin, F. Serrano, T. Sigurdson, **Wang Min**, A. Bell, and L. Di. 2019. New Bohaiornis-like bird from the Early Cretaceous of China: enantiornithine interrelationships and flight performance. *PeerJ* 7:e7846.
- Falk, A., J. O'Connor, **Wang Min**, and Z. Zhou. 2019. On the preservation of the beak in *Confuciusornis* (Aves: Pygostylia). *Diversity* 11:212.
- Imai, T., Y. Azuma, S. Kawabe, M. Shibata, K. Miyata, **Wang Min**, and Z. Zhou. 2019. An unusual bird (Theropoda, Avialae) from the Early Cretaceous of Japan suggests complex evolutionary history of basal birds. *Communications Biology* 2:399.
- Pan, Y., W. Zheng, R. H. Sawyer, M. W. Pennington, X. Zheng, X. Wang, **Wang Min**, L. Hu, J. O'Connor, T. Zhao, Z. Li, E. R. Schroeter, F. Wu, X. Xu, Z. Zhou, and M. H. Schweitzer. 2019. The molecular evolution of feathers with direct evidence from fossils. *PNAS* 116:3018-3023. (SCI)
- Zhang, C., and **Wang Min**. 2019. Bayesian tip dating reveals heterogeneous morphological clocks in Mesozoic birds. *Royal Society Open Science* 6:182062. (SCI)
- Wang, X., J. K. O'Connor, J. N. Maina, Y. Pan, **Wang Min**, Y. Wang, X. Zheng, and Z. Zhou. 2018. *Archaeorhynchus* preserving significant soft tissue including probable fossilized lungs. *PNAS* 115:11555–11560. (SCI)
- Zheng, X., J. K. O'Connor, X. Wang, Y. Pan, Y. Wang, **Wang Min**, and Z. Zhou. 2017. Exceptional preservation of soft tissue in a new specimen of *Eoconfuciusornis* and its biological implications. *National Science Review* 4:441–452. (SCI)
- Pan, Y., W. Zheng, A. E. Moyer, J. K. O'Connor, **Wang Min**, X. Zheng, X. Wang, E.

- R. Schroeter, Z. Zhou, and M. H. Schweitzer. 2016. Molecular evidence of keratin and melanosomes in feathers of the Early Cretaceous bird *Eoconfuciusornis*. *PNAS* 113:E7900–E7907. (SCI)
- O'Connor J. K., Li D., Lamanna M., **Wang Min**, Harris, J. D., Atterholt, J., and You, Hailu. 2015. A new Early Cretaceous enantiornithine (Aves, Ornithothoraces) from northwestern China with elaborate tail ornamentation. *Journal of Vertebrate Paleontology*:e1054035. (SCI)
- O'Connor J. K., **Wang Min**, Zhou Shuang, Zhou Zhonghe. 2015. Osteohistology of the Lower Cretaceous Yixian Formation ornithuromorph (Aves) *Iteravis huchzermeyeri*. *Palaeontologia Electronica* 18:1–11. (SCI)
- Zhao Tao, Mayr G., **Wang Min**, Wei Wang. 2015. A trogon-like arboreal bird from the early Eocene of China. *Alcheringa*. 39(2): 289–294. (SCI)
- O'Connor J. K., **Wang Min**, Zheng Xiaoting, Zhonghe Zhou. 2014. Reply to Foth: Preserved cartilage is rare but not absent: Troodontid sternal plates are absent, not rare. *PNAS* 111:E5335. (SCI)
- Zhou Shuang, O'Connor J. K., **Wang Min**. 2014. A new species from an ornithuromorph (Aves: Ornithothoraces) dominated locality of the Jehol Biota. *Chinese Science Bulletin* 59:5366-5378. (SCI)
- Zheng Xiaoting, O'Connor J. K., Wang Xiaoli, **Wang Min**, Zhang Xiaomei, Zhou Zhonghe. 2014. On the absence of sternal elements in *Anchiornis* (Paraves) and *Sapeornis* (Aves) and the complex early evolution of the avian sternum. *PNAS* 111:13900–13905. (SCI)
- Li Zhiheng, Zhou Zhonghe, **Wang Min**, J. A. Clarke. 2014. A New Specimen of Large-Bodied Basal Enantiornithine *Bohaiornis* from the Early Cretaceous of China and the Inference of Feeding Ecology in Mesozoic Birds. *Journal of Paleontology* 88:99–108. (SCI)
- Zheng Xiaoting, O'Connor J. K., F. Huchzermeyer, Wang Xiaoli, Wang Yan, **Wang Min**, Zhou Zhonghe. 2013. Preservation of ovarian follicles reveals early evolution of avian reproductive behavior. *Nature* 495:507–511. (SCI)

Selected Conference Talks

- 2019: 12th International Congress of Vertebrate Morphology, “Insight into the development of the avian shoulder girdle from a new clade of stem Pygostylian bird”.
- 2018: 5th International Palaeontological Congress, “Bone fusions in manus and pelvis in the early evolution of birds in light of new discovery”.
- 2018: 13th Symposium on Mesozoic Terrestrial Ecosystems and Biota, “A long-armed confuciusornithid bird from the Early Cretaceous Jehol Biota further increases ecomorph diversity of the Confuciusornithidae”.
- 2018: International Pennaraptoran Symposium at the University of Hong Kong, “Developmental plasticity? Bone fusions in manus and pelvis in the early evolution of birds”.
- 2018: International Symposium on Archosaurian phylogeny: new data and methods. “Estimating the rate of morphological evolution of Mesozoic birds”.
- 2017: 77th Annual meeting for the Society of Vertebrate Paleontology. “A new enantiornithine bird with a plough-shaped pygostyle and unique tibiotarsal feathers”
- 2017: Symposium of Destruction of the North China Craton: 《Evolution and temporal distribution of the vertebrates in Yanliao and Jehol biotas
- 2016: 76th Annual meeting for the Society of Vertebrate Paleontology. “The oldest known avian gastric pellet from a fish-eating enantiornithine with implications of digestive system in early birds”
- 2016: 8th International Meeting of the Society of Avian Paleontology and Evolution, “A piscivorous enantiornithine bird with a gastric pellet sheds new lights on the digestive system in early birds”
- 2015: 75th Annual meeting for the Society of Vertebrate Paleontology. “The oldest record of Ornithuromorpha with implications of evolutionary rate of Early Cretaceous birds”
- 2015: 2nd Symposium of International Geoscience Program Project 632. “The Jehol birds: a story after *Archaeopteryx*”
- 2014: 4th International Palaeontological Congress, “A new diverse enantiornithine family (Bohaiornithidae fam. nov.) from the Lower Cretaceous of China”

- 2013: 2nd International Symposium on Paleohistology, “A new egg with avian egg shape from the Upper Cretaceous of China”
- 2013: 11th Annual Meeting of the European Association of Vertebrate Palaeontologists, “A new robust enantiornithine bird from the Lower Cretaceous of China with scansorial adaptations”
- 2012: 14th Chinese Vertebrate Paleontology Annual Meeting, “New crow material from the Early Pleistocene Nihewan Locality”
- 2012: 7th International Meeting of the Society of Avian Paleontology and Evolution, “New materials with emended information of the enigmatic, rail-like avian taxon *Songzia hou*, 1990 (Songziidae) from the early Eocene of China”
- 2011: 26th Annual Meeting of Chinese Paleontological Society, “Morphological analysis of new bird remain from the Early Eocene Sanshui Basin of Guangdong”
- 2010: 71th Society of Vertebrate Paleontology Annual Meeting, “A new water bird from the Eocene of Guangdong, China”

Peer Review

Nature Communications, Proceedings of the Royal Society of London B, Scientific Reports, Journal of Vertebrate Paleontology, Cretaceous Research, Vertebrata Palasiatica, Peer J, Zootaxa, Historical Biology.

Field Work in Paleontology

- 04/2017, 07/2017: Hebei, Liaoning (fossil localities of the Jehol Biota)
- 04/2016–05/2016: Chuxiong City, Yunnan Province; Huili County, Sichuan province
- 05/2014–06/2014: Changma Basin, Gansu Province
- 06/2013–07/2013: Inner Mongolia, Liaoning and HeilongJiang Province
- 07/2012–08/2012: Erenhot, Inner Mongolia
- 09/2011–10/2011: Sanshui Basin, Guangdong Province
- 02/2011–03/2011: Chuxiong City, Yunnan Province
- 07/2010–08/2010: Hebei Province

05/2010–06/2010: Xiangxiang City, Hunan Province