



A NEW CONTEXT FOR DELVING INTO  
THE DEEP PAST  
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I started my Wiko stay in late August for the intensive German course. Taking advantage of the opportunity to learn German during my year stay was something I was really looking forward to. I am glad I did the course and thank Giancarlo, Eva, and my course-mates. But I took the four-hour per day course, then did the homework from the course,

then had meetings with my lab group or other collaborators in the afternoon and evening. Keeping up was a bit of a struggle. My class was the wonderful “false beginners” with Mariana, Tolik, Basile, and me. I relished the opportunity to get to know this group and the other course-takers before the start of the program.

In September, the program began. While kicking off my project, excitedly getting key help from the library on sources I had longed to find, I was also working intensively to contribute to two manuscripts on the evolution of mammal coloration for publication (1–2). The research for (1) started nearly 10 years ago. We needed to do final analyses and figures and edit the written text. Next, I needed to focus on two projects on pterosaur color (3, in preparation); these needed more extensive work. Unfortunately, I had a conference (GSA Connects), which I had to attend to run a program and to chair sessions related to a new grant (see below) almost as soon as the stay started. I got COVID at this conference, and it was a struggle.

By early October, I had settled into a routine. I could read, write, and work on my project or other papers in the mornings and have meetings (to keep my lab going) in the afternoons. This worked pretty well. I was approached by an editor who had seen the description of my Wiko project and asked if I was thinking about a book. The several conversations I had with them over the year were very helpful. November was noteworthy because the chef finally arrived. The weather turned, and the lake was visible through the trees. Sometime in the winter, a dead body was found in the snow near the main villa; it was said that it was discovered because several foxes were acting strangely.

I made progress on my project. Edits on three other joint projects enabled them to be submitted (4–6). I also met with my former student Hans Bilger, who lives in Berlin, to work on getting three other manuscripts submitted. At Wiko, everyone was out sick for some duration. It seemed we shared our germs freely and efficiently at the mealtimes.

January was to be very short. My presentation was on February 7; there didn’t seem to be nearly enough time to complete what I wanted to by that date. I undertook a long-planned trip to South Korea in late February to go in the field and work with collaborators. On my return, my experience of Wiko also really started to shift.

Around this time, I had to start having emergency meetings with co-investigators about the possible cancelation of our major National Science Foundation grant, one that had just been funded in August 2024 for five years. The focus of this grant was a complex, tiered program for mentors and scholars to increase access, retention, and support leadership in geosciences for all groups historically underrepresented in this, the least diverse of

STEM disciplines. The information we received was changing weekly. Would we be canceled? Were other colleagues being canceled? We escaped the earliest rounds of cuts. Maybe it would be ok? We proceeded with paperwork required by NSF and, with most other science funding, our funding was cut off for about 10 days, halting payments to staff. On April 25 the grant was terminated as no longer aligned with NSF's priorities. Was this legal? Now my time was even more impacted by emergency meetings about appeals, possible legal action, the fate of staff, student grants intended for fall, and programming. While following the progression of bills affecting my position and all other public university faculty in Texas, it was still a pleasure to work with my former student Hector Garza on completing a joint project (7). This was a small light. He graduated with his PhD while I was out of the country.

Since February, concerns about the fate of science, higher education, and more broadly democracy in the US felt existential. I can imagine what Wiko colleagues directly impacted by war were feeling. This too was often a topic of conversation at meals. How to celebrate scholarship and discovery in a time of global crisis? I found myself reflecting more on the purpose of research and higher education in these times than on my original project. Indeed, focusing on my book project was difficult. I felt I needed to focus on action, and, in my scholarship, I needed to focus on activities that would directly relate to persisting in my career. In science, unfortunately, creative book projects are largely luxuries not rewarded in our system. Thus, in May and June, I prioritized meeting with European collaborators and colleagues to lay possible foundations for projects. I also accepted an invitation for a trip to New Zealand as a distinguished speaker. This trip also allowed me to reconnect with colleagues and further explore new projects that could be developed moving forward. Wiko colleagues generously shared information on proposal preparation and scoping for ERC grants.

It has been a strange, and in many ways, uncomfortable year, but the green and lakes and new friendships with many fellow Fellows have been bright lights in this time. A sincere thank you to Wiko staff and colleagues for an invaluable stay affording me the freedom (not to be taken lightly) to pivot but still explore and discover.

Partial list of works submitted:

1. Li, R., L. D'Alba, G. Debruyne, J.L. Dobson, C.-F. Zhou, **J.A. Clarke**, J. Vinther, Q. Li, and M.D. Shawkey. 2025. "Mesozoic mammaliaforms illuminate the origins of pelage coloration." *Science* 387: 1193–1198. doi:10.1126/science.ads9734.

2. Li, X., S. Bi, **J.A. Clarke**, Z. Li, X. Zhu, Q. Liu, Y. Peng, L. Zhao, Z. Li, and Y. Pan. 2025. "High mammalian melanosome diversity exhibits weak correlation with color and environmental variables in the early evolution of therian mammals." *Science Advances* 11 (43): eadw8707. doi:10.1126/sciadv.adw8707.
3. Wu, Z., L. D'Alba, C.-F. Zhou, **J.A. Clarke**, J. Li, M. Shawkey, and Q. Li. *In review*. "Iridescence in pterosaur pycnofibers and the evolution of integumentary coloration." *Science*.
4. Mishkind, D., C. Lee, C. Prabhakara, P. Tir, E.P. Kingsley, **J.A. Clarke**, F. Goller, and C.J. Tabin. 2024 and *in review*. "Integration of sexual dimorphism and left-right asymmetry in the development of the duck syrinx." *Proceedings of the National Academy of Sciences, USA* and *bioRxiv*. doi:10.1101/2024.12.10.627783.
5. Li, Z., G. Musser, A. Aase, and **J.A. Clarke**. 2025. "A new raptorial bird from the lower Eocene Green River Formation of North America." *Contributions from the Museum of Paleontology, University of Michigan. Lance Grande Festschrift Volume 37* (1).
6. Mayr, G., V.L. De Pietri, J. Proffitt, J.C. Blokland, **J.A. Clarke**, L. Love, Al A. Manerling, E.M. Crouch, C. Reid, and R.P. Scofield. 2025. "Multiple exceptionally preserved fossils from the Paleocene Waipara Greensand inform the diversity of the oldest stem group Sphenisciformes and the formation of their diving adaptations." *Zoological Journal of the Linnean Society* 204 (4): zlaf080. <https://doi.org/10.1093/zoolinnean/zlaf080>.
7. Garza, H.K., E.J. Catlos, T.J. Lapen, **J.A. Clarke**, and M.E. Brookfield. 2025. "New U-Pb constraints and geochemistry of the East Kirkton Quarry, Scotland: Implications for early tetrapod evolution in the Carboniferous." *PLoS ONE* 20 (4): e0321714. <https://doi.org/10.1371/journal.pone.0321714>.