

## I WISH THIS WAS ON TIME MORITZ KRAEMER

Moritz Kraemer is an Associate Professor of Computational Epidemiology (since 2022) at the University of Oxford. He's a recipient of the Branco Weiss Fellowship (2017–2023) and the Ruth L. Kirschstein National Institutes of Health (NIH) Fellowship (2017–2019). Currently he is the co-director of the Oxford Martin School Programme in Pandemic Genomics, a recipient of the Google Faculty Research Award, and the co-founder of Global.health, a data integration platform for open-access epidemiological and genomic data. Moritz's research interests are the ecology and evolution of infectious diseases; he works at the intersection of data science, epidemiology, public health, and genomics. His work has been published in Science, Nature, and The Lancet and featured widely in the New York Times, NPR, Economist, Der Spiegel, Financial Times, Nature, and Science News. Moritz has given over 100 invited international talks and taught courses in data science and epidemiology at Oxford, MIT, Harvard, the University of São Paulo, and the University of Hong Kong. His group's work has been funded by the Wellcome Trust, Google.org and AI, The Rockefeller Foundation, NIH, and The John Fell Fund, among other institutions. - Address: Oxford Martin School, University of Oxford, 34 Broad St., Oxford, OX1 3BD, United Kingdom. E-mail: moritz.kraemer@biology.ox.ac.uk.

My wife Nahema and I arrived in January 2023: she was equipped with a new job and the uncertainty and excitement that comes with it. I was hoping for intellectual adventures with Fellows from academic disciplines far away from mine. I had just established a growing research group, and I spent the first month getting used to the new way of working. Often I dreamed of being a "senior" academic or humanities scholar coming to Wiko

to write a monograph or popular science book. I might well come back for that experience.

From our first day, a community of Fellows that had already established relationships with each other welcomed us and invited us to their tables and homes, which made us feel that this would be a great few months in a country I was happy to leave behind in 2011. It is hard to know how to describe this eclectic and stimulating group of people. Friendships have followed, and I look forward to traveling to see many of you again soon (looking at you Arie, Joyce, Max, and Shai). Arie, thank you for introducing my team and me to Jewish German History. I'll forever remember your kindness and thoughtfulness and what you taught me. Daniel, Barbara, Iris, and Katharina, Maike, Stephan, Jana, Vera, Andrea, Nina, Petria, Dunia, Eva – we are grateful for showing us that German academia can be attractive. I wish I did not have to wait until the second-to-last evening to find out about Daniel's work and talent as a documentary scriptwriter.

As a researcher and professor of emerging infectious diseases and modeling, I tried to move from rapid analysis to developing a new theory at the intersection of the evolution and ecology of infectious diseases. Six months is too little to accomplish anything really, but I tried and succeeded in solving some small puzzles. For example, what are the appropriate, cost-effective, and rational ways to implement distributed disease surveillance for early detection, mitigation, and potentially containment of novel pathogens? This work took me down the paths of 1980s papers in computer science and economics and made me appreciate how much of this had already been solved by smart people. I could get distracted again, read widely, and discuss how we can actually translate some of these academic findings into policies. Academics can be obsessed about their way of working and presenting "evidence." Talks by historians and historians of science are so fascinating because they remind you that what you do matters for generations to follow. Many will come read and look at boring science papers and ask critical questions, including about how these works are embedded in and have contributed to the larger process of scientific "progress." Wiko allowed me to step back, think big (again), and slow down.

Wiko now is a second academic home away from Oxford, but near my home in Germany. I thank everyone who was involved in it and for their patience with me during and after the fellowship ended.

## A selection of works produced during my time at Wiko:

- Tegally, H., E. Wilkinson, J.L.-H. Tsui, M. Moir, D. Martin, A.F. Brito, M. Giovanetti, K. Khan, C. Huber, I.I. Bogoch, J.E. San, J. Poongavanan, J.S. Xavier, D. da S. Candido, F. Romero, C. Baxter, O.G. Pybus, R.J. Lessells, N.R. Faria, M.U.G. Kraemer, and T. de Oliveira (2023). "Dispersal patterns and influence of air travel during the global expansion of SARS-CoV-2 variants of concern." *Cell* 186 (15): 3277– 3290.e16. doi:10.1016/j.cell.2023.06.001.
- Tsui, J.L.H., J.T. McCrone, B. Lambert, S. Bajaj, R.P.D. Inward, P. Bosetti, R.E. Pena, H. Tegally, V. Hill, A.E. Zarebski, T.P. Peacock, L. Liu, N. Wu, M. Davis, I.I. Bogoch, K. Khan, M. Kall, N.I.B. Abdul Aziz, R. Colquhoun, Á. O'Toole, B. Jackson, A. Dasgupta, E. Wilkinson, T. de Oliveira, The COVID-19 Genomics UK (COG-UK) consortium, T.R. Connor, N.J. Loman, V. Colizza, C. Fraser, E. Volz, X. Ji, B. Gutierrez, M. Chand, S. Dellicour, S. Cauchemez, J. Raghwani, M.A. Suchard, P. Lemey, A. Rambaut, O.G. Pybus, and M.U.G Kraemer (2023). "Genomic assessment of invasion dynamics of SARS-CoV-2 Omicron BA.1." Science 381 (6655): 336–343. PMID: 37471538. doi:10.1126/science.adg6605.