



## SOMETHING LIKE WONDERLAND CAMILO BARBOSA

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Camilo Barbosa is a postdoctoral fellow at the University of Michigan in Ann Arbor. He was born in Bogotá, Colombia where he grew up playing football (soccer), listening to various types of music, dancing to Latin American beats, and receiving his education as a microbiologist. His PhD work at the University of Kiel in Germany focused on identifying evolutionary paths to antibiotic resistance in the opportunistic human pathogen *Pseudomonas aeruginosa*. Later in his postdoc at the University of Michigan, Camilo has been trying to identify the evolutionary principles he described during his doctoral work in a tractable clinical context and to determine their translational potential. Currently, he is aiming to establish his independent research group looking at two main projects: first, to generate a biorepository of common bacterial pathogens obtained from agricultural and clinical settings to forecast the likelihood of resistance, based on genomes and their evolutionary potential. Second, to use the power of experimental evolution and the natural diversity of bacteriophages to design “evolution-proof” phage cocktails against bacterial pathogens. – Address: Department of Infectious Diseases, University of Michigan, SPC 5680, 1150 W. Medical Center Dr., Ann Arbor, MI 48109-5680, USA.  
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I had heard about the Wiko numerous times before I got the chance to be there myself. Three of the supervisors I have worked with during my PhD and postdoctoral time had been Fellows before. In my mind, a place like the one they were describing sounded incredible – as in: I could not believe it was possible or real. Who would sponsor a place for creativity, inspiration, and cultural and knowledge exchange without expecting anything

other than for you to be there and do exactly that? Well, after spending some time at the Wiko, I can say that it is more incredible than you can disbelieve. In fact, it felt, in many ways, like Alice discovering Wonderland – except that there was no Queen of Hearts trying to chop anyone’s head off. I encountered a place where time can stand still or run too fast. A place with outstanding people working very hard to make everything run smoothly. A place where fantastic food was available at any time. A place where thoughts were thought deeply with the sole purpose of generating fascination. A place where the idea of who I was and who I wanted to be were constantly put face to face to force me to take a step closer to where I wanted to be. For a young researcher like me, the Wiko was truly a place for wonder, discovery, and growth – an unexpected and treasured gift.

I arrived in Berlin a month after receiving the award that granted me the privilege of being at the Wiko: the John Maynard Smith Prize from the European Society for Evolutionary Biology (ESEB). I immediately felt at home. Not only because I had lived in Germany for almost a decade, but also because Vera and her colleagues had made everything so that Laura and I would have everything we needed. Thank you, Vera, and everyone else at the Wiko! After a couple of days of rest from traveling all summer, and before the official start of the year at the Wiko, I sat to write down the three big purposes for my time there. It took me a while, but I eventually came up with three goals for work: finish a paper, start the analysis of the next one, and write a grant for the next project. Very ambitious, and very work-oriented. Later that day, I realized something more meaningful; I was actually in the pursuit of something else. As a young postdoc, and after coming from a very hard and long pandemic that made me question deeply my role in science, my real purpose at the Wiko was to regain my passion for curiosity.

Fundamental to this aim was the company of my fellow Fellows. Early in the year, I identified the Fellows working on topics similar to mine, including those of the College for Life Sciences, who, like me, were also younger scientists. For us, or at least for me, being at the Wiko felt a bit daunting, since most Fellows have long and very successful trajectories in their respective fields, while I was just getting started. With the help of Jana, I put us all together in the main seminar room to briefly introduce ourselves to each other through our research and what we were hoping to achieve at the Wiko. This marked the beginning of my best time at the Wiko. I got to know people whom I not only admired and respected because of their achievements and contributions to science, but whom I now also deeply cared for as friends. Lynda, Curt, Judie, Goggy, Milica, Rose, Danai, André, Oren, Daven, Dieter, Ben, the Taborskys, thank you all! But it was not just

the Fellows working on life sciences topics, it was all of them. I learned something from everyone, from their talks and their discussions during lunch, dinner, or champagne. I learned something every day. I felt like a scientist again after a couple of years of feeling like a shadow of who I was or wanted to be. All the seminars, all the discussions, all the runs organized by Daniel, every aspect of the Wiko “brought me back” or took me down the rabbit hole (of scientific curiosity), I still cannot tell.

As I started feeling more like myself, I finished a paper and submitted it to the journal *Evolutionary Medicine and Public Health*. In that paper, we analyzed the evolutionary trajectory of a chronic infection and discussed what points to further knowledge of the potential of alternative strategies, such as combination therapy or cycling antimicrobials while exploiting collateral effects. I also started analyzing a large and complex dataset, evaluating whether experimental evolution can recapture the evolution of resistance that takes place within a human host and whether there are collateral effects that can be exploited to determine evolutionarily informed strategies to delay the emergence of antibiotic-resistance evolution. Finally, I started working on a grant for the next project, but I decided to start preparing applications for assistant professor jobs to start my independent research group. This was an important step forward for me, as I had been doubting whether it was what I wanted or not.

One of the most exciting and nerve-wracking events was the preparation and delivery of my Thursday Colloquium at the Wiko. As a scientist, I am trained to present my work constantly. Personally, having to sit in many long and hard-to-swallow presentations, I have also tried to be the best I can at presenting my work in very clear and useful ways. Being a good scientist and being a good speaker are not necessarily the same thing, but the former benefits from the latter. Giving a talk at the Wiko was the first time I had to prepare a lecture both for people close to my field and for knowledgeable people in very distinct fields. This meant finding a good balance between depth, clarity, and significance. I believe this is a challenge, in fact I think this is a challenge everyone should go through once or twice in their career. It was also refreshing. I had to go back to the roots and origins of our current war against antibacterial-resistance evolution in ways that were meaningful for everyone in the audience, which included scientists, musicians, philosophers, lawyers, historians, and more. It was one of the most fun exercises I had the privilege to take part in at the Wiko. I especially want to thank Lynda for moderating the questions and helping me make that lecture the great fun that it was.

Beyond the Wiko, I found myself in wonderful Berlin. A city with everything I could possibly want: diverse electronic music, foods from everywhere and for every budget, recent historical sites and events, the merging place of two worlds, the center of Europe, culture, and so much more. A city to love.

Overall, my short time at the Wiko was, without a doubt, one of the best times of my life. I will be forever thankful for this time, and I hope that later in my career I can have the opportunity to live this experience again for more than three months and experience all of Berlin and the Wiko. Thank you.