

## ***Global Perspectives Trip Report***

**Trip Date:** April 15, 2024 - June 15, 2024

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**Project Title from Application:** Integrating plant functional ecology and demography

### **Non-technical summary:**

The Global Perspectives grant funded my two-month trip to Oxford, England. I was a Visiting Fellow at Pembroke College and the Department of Biology at Oxford University, where I worked with my colleague Roberto Salguero-Gómez. We wrote a review paper that is nearly ready to submit to *Trends in Ecology and Evolution*, where we articulate the differences and causal relations between functional traits and life history traits of organisms. I also contributed to tutorials to biology undergraduates at Pembroke College. I regularly worked in the 500-year-old Bodleian library surrounded by frescoes and books hand-written on velum, and ate lunches and dinners with faculty at Pembroke College where we engaged in conversations ranging from biology to astrophysics, philosophy and theology. I also met regularly with my Editor at Oxford University Press to discuss the potential of future book projects. During my stay I delivered invited lectures in the Department of Biology at Oxford University, at the Ecology Center at Cambridge University, and at Charles University in Prague, Czechia. I am deeply grateful for the funding that off-set many of the costs associated with this trip.

## Main results

The Global Perspectives grant funded my two-month trip to Oxford, England during my sabbatical. I was a Visiting Fellow at Pembroke College and the Department of Biology at Oxford University. Pembroke College is well-known as the college where J.R.R. Tolkien was a Fellow of English Literature and Roger Bannister was the Master of the College.



*Pembroke College, Oxford University*

During my stay I worked with my colleague Roberto Salguero-Gómez on a review article that is nearly ready to submit to *Trends in Ecology and Evolution*, where we articulate the differences and causal relations between functional traits and life history traits of organisms. These concepts are conceptually distinct and failure to recognize these differences can lead to errors and misconceptions in our discipline. We expect this to be widely read and cited by demographers and functional ecologists alike.

I met with Rob's large research group every week where we discussed topics in plant demography. I regularly worked in the 500-year-old Bodleian library surrounded by frescoes and books hand-written on velum. As a Fellow at Pembroke with dining rights, I ate dinner at high table with other faculty at Pembroke where we engaged in deep conversations ranging from biology to astrophysics, philosophy and theology. I also contributed to tutorials to biology undergraduate students at the College.



*Dining Hall, Pembroke College*

During my stay I delivered invited lectures in the Department of Biology at Oxford University, at the Ecology Center at Cambridge University, and at Charles University in Prague, Czechia.

### **Future plans**

Rob and I will be finishing our paper and aim to submit it for publication within the next few months. We aim to continue our international collaboration through many more papers to come. In fact, this is not the first paper in our collaboration. My former PhD student Alice Stears just received her acceptance letter from the journal *Oikos* for a paper on which Rob was a co-author on the demography of a rare plant in Wyoming.

### **Impacts**

On our research paper, the University of Wyoming and Oxford University will be prominently displayed at the top of the paper as the affiliations of the two authors, demonstrating that faculty in Wyoming are collaborating internationally with some of the best biologists in the world.

During my visit to Oxford University, I was able to see first-hand how the education system in an ancient, storied university system works. The tutorial system is unique to the 'Oxbridge' universities where fellows meet with small groups of undergraduates to discuss topics relevant to their studies. I engaged in this system by discussing my recent "Letter to a Young Ecologist" with Pembroke biology students. I aim to bring this unique pedagogical technique to my research lab as well as with my undergraduate and graduate courses that I teach. I am deeply grateful for the funding that off-set many of the costs associated with this trip.



The Radcliffe Camera, Bodleian Library, Oxford University.



Oxford University Press, the publisher of my recent book *Plant Strategies*.