



MEET OUR AMBASSADORS



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Field of Research:

Evolution; interdisciplinary research in biology and computer science; broad implications for biology, medicine, and AI

SHORT BIO

I earned my B.Sc. with honors at Stanford University, M.Sc. and Ph.D. at Princeton University, and was then a Fellow at the Miller Institute for Basic Research in Science at UC Berkeley—one of the most prestigious fellowships for young investigators in the Natural Sciences.

My lab studies evolution—the process that generates life on this planet. For organisms to gradually change over the millennia, changes in the DNA, called mutations, must accumulate. For over a century, it has been thought that mutations are random, i.e., accidental, and that the survival of the fittest allows random beneficial mutations to accumulate. Having developed what is currently the most accurate mutation-detection method in the world, my lab has discovered that mutations are not random at all but instead are guided by internal information that is accumulated in the genome over the generations. This finding challenges the most basic assumption regarding how evolution happens, with profound implications for biology, medicine and beyond. As an example, my theoretical work has been cited as a source of motivation for the development of an algorithm that played a role in enabling the global artificial intelligence revolution.

FUNDRAISING NEEDS

My goal is to revolutionize evolution, with far reaching implications in biology, medicine, computation and beyond. My lab has secured over NIS 8 million in recent years and these funds have brought us so far. **To upscale our efforts and bring about a revolution with far reaching implications, we would like to establish a dedicated research center.** As our research is counter-dogmatic in a world of conservative government agencies, this presents a unique opportunity for donors to make a difference.