

Dr. Michael Eisen

Michael Eisen majored in math as an undergraduate at Harvard, and used the department's utter lack of interest in what students did outside of math class to pursue his true loves of ecology and evolutionary biology. He did his PhD in biophysics with Don Wiley, trying to unite his quantitative side with his interest in biology by using X-ray crystallography to study the evolution of influenza virus proteins. After a stint as the play-by-play voice of the Columbia Mules Professional Baseball Club, he joined the labs of Pat Brown and David Botstein at the dawn of the era of functional genomics. He played multiple roles in the development of DNA microarrays as a tool for studying biology, his biggest contribution being a 1998 paper showing how clustering methods can reveal underlying biological structure in genomic data. He began his independent career at Lawrence Berkeley National Lab, before moving to the Department of Molecular and Cell Biology at UC Berkeley where he is now a Professor and HHMI Investigator. In addition to the main focus of his lab – using experimental, computational and evolutionary methods to study spatial patterns of gene regulation in the early *Drosophila* embryo – he has a longstanding interest in the varied microorganisms that have evolved to manipulate animal behavior, the subject of his talk today. Outside of the lab, he has been a fervent and occasionally strident advocate for opening up the system of scholarly publishing, founding, along with Brown and Harold Varmus, the Public Library of Science (PLOS). More recently he has dabbled in politics and serves as an advisor to Impossible Foods, a company Brown started to create plant-based meats to end the planetary scourge of animal farming.

