

NOMIS Foundation ETH Fellowship 2024

Welcome to

Taylor Priest



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Dr. Taylor Priest's research will combine DNA sequence data and innovative computational approaches with field sampling and experimental analyses to explore mobile genetic elements across Earth's diverse biomes. Under the mentorship of Assoc. Prof. Dr. Shinichi Sunagawa and Asst. Prof. Dr. Marie Schoelmerich at ETH Zürich, he aims to unravel the diversity of these elements, decipher the genetic material they shuttle across environments, and discern their evolutionary trajectories and influence on the evolution of microbial life forms.

Dr. Taylor Priest is a microbiologist and microbial ecologist who is passionate about understanding the ecological and evolutionary processes that have shaped microbial life on Earth. During his PhD at the Max Planck Institute for Marine Microbiology in Bremen, Germany, he studied the diversity and function of microorganisms in polar ocean ecosystems and how they have adapted to such pronounced environmental conditions. More recently, Dr. Taylor Priest joined the Microbiome Lab at ETH Zürich, where he has been focused on researching the mechanisms that drive diversification in microorganisms, to better understand how evolution progresses. Now, Dr. Taylor Priest aims to investigate evolution from a different perspective: that of mobile genetic elements.

"One of the central mechanisms through which life has evolved over the past four billion years is the exchange of genetic material between organisms. This process is driven by mobile genetic elements.", explains Dr. Priest, "The significance of these elements in shaping evolution is evidenced by their imprints in the genomes of all living organisms today. Studying mobile genetic elements can thus provide fundamental insights into how life adapts and evolves across different ecosystems and under different conditions."

