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About the cover:

An NSF-supported University of Washington-led team has taken a sample of mud collected at Lake Washington and successfully sequenced a complete genome for an unknown microorganism. Their method provides a way to discover new microscopic life in complex communities. Using the genetic technique of metagenomics, University of Washington researchers have revealed the possibility to uncover the genomes of unknown species with this approach. This is a particularly important finding for microbial research since few microbes survive in the lab and have therefore gone largely unidentified. Such techniques could allow scientists and engineers to identify microbial species based on particular, desired functions and to develop such microbes for practical applications.

Credit: Photo by Dennis Kunkel (Dennis Kunkel Microscopy, Inc.); color by E. Letypova (University of Washington)