

# Seminar Invitation

## Genomes everywhere, but what to make of them? A 2-part story of mud and matrix wrangling

Speaker **Daan Speth, Postdoc in the Orphan Lab at Caltech**

When **April 27, 2021, 16.00 – 17.00**

Where **Online via Zoom**, contact [admin.umik@eawag.ch](mailto:admin.umik@eawag.ch) for access details

Abstract Metagenomic sequencing has revolutionized our insight in environmental microbial communities, particularly those in conditions challenging to replicate in the lab. In the first part of this talk I'll discuss sampling, metagenomic sequencing and analysis of the sediment community at the deepest hydrothermal vent field in the pacific ocean, the recently discovered Auka vents in Pescadero Basin, Gulf of California.

In addition to providing insight in the microbial communities at the sampled sites, metagenomic analyses yield genomic information of diverse lineages which can be leveraged for follow up studies on wide-ranging topics. The second part of the talk I'll provide an example of this, leveraging available genomic data to gain new insight in the complex iron sulfur molybdenum superfamily, dubbed "life's most versatile bioenergetic enzyme".