

## Core topics

### Riverine communities

(*Biocenosis*)

- Prokaryotes
- Protozoa
- Meiofauna
- Macroinvertebrates

Abundance (N) ↑  
↓ Body size (M)

### Habitat (*Biotope*)

- Pelagic system
- Streambed
- Groundwater systems
- Aquatic-terrestrial ecotones

### Geographic variance along latitude

- Contrasting environmental drivers of system functioning
- Lack of knowledge toward tropics
- Potential research lines for future multi-directional transfer of interdisciplinary knowledge

## Ecological drivers

- Community structure
- Food web organization
- Bioturbation processes
- Transference of energy
- Direct and indirect links with decomposition

- Organic matter substrate
- Abiotic resources
- Physicochemical conditions
- Fundamental niche
- Connectivity across habitats

- Geographical gradient of temperature
- Variation in seasonal patterns
- Contrasting conservation status
- Contrasting response to climate change

## Metabolic perspective

M-N slope-habitat interaction

Regime of OM input

- Decrease of secondary production and microbial activity towards higher latitude
- Decrease of relative body-sizes towards lower latitude
- Indirect role of relatively large organisms
- Expected interaction with M-N coefficients

## Riverine bioreactor

- Performance
- Size
- Connectivity
- Ecological importance
- Scientific interest