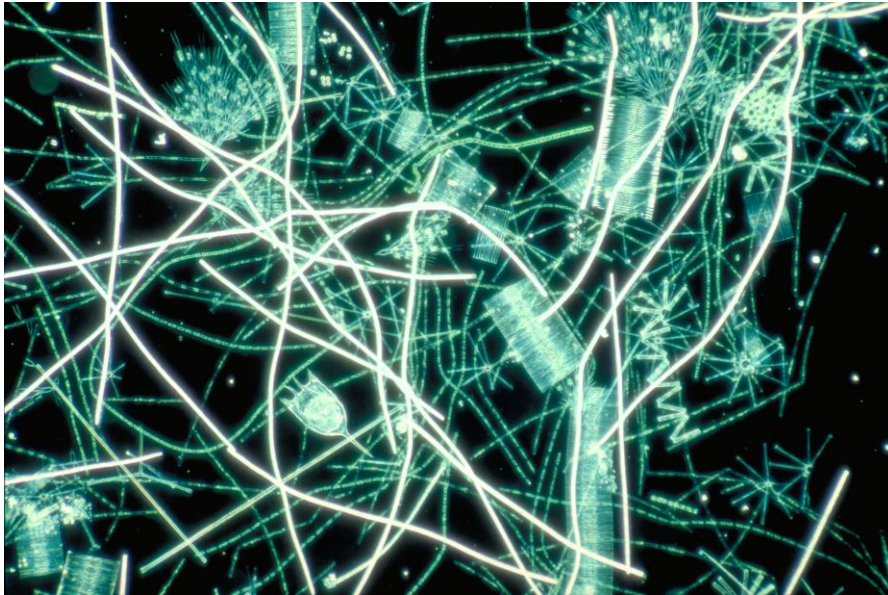


“MSc project on lake microbial ecology”

How interactions between warming and nutrient fluctuations can favour the dominance of buoyant deep-water cyanobacteria in Swiss lakes

Francesco Pomati (Eawag) and Fabio Lepori (University of Applied Sciences and Arts of Southern Switzerland - SUPSI)



We are looking for a motivated Masters student to work on a collaborative project between Eawag (Duebendorf) and SUPSI (Lugano). Using monitoring data from Lake Zürich and Lake Lugano, and/or by performing field experiments (depending on time and student's preferences), the student will study how stability of the water column, depth of mixing and nutrient concentrations favour buoyant and colonial cyanobacteria over other taxa. The focus will be particularly on toxic species that have become dominant in many Swiss lakes over the past decades (e.g. Planktothrix, Dolichospermum). The main aim of this project will be to identify what combination of environmental conditions leads to the dominance of buoyant cyanobacteria in deep lakes. As a broader goal, we hope that the insights gained from the study will contribute to form a solid scientific basis for the management of Swiss lakes. The study will involve the analysis of time series, statistical modelling and possible experimental work in the field. The successful candidate will have the opportunity to work both in canton Zurich and canton Ticino.

For more information please contact:

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