Microbial Communities and Habitats in Aquatic Environments Laboratory (MiCHAEL)

University of Thessaly, Greece

The research interests of MiCHAEL are ... small. We investigate patterns and processes that underpin the distribution and abundance of microorganisms in various aquatic habitats.

Some of our quests deal with the following:

- How do aquatic microbial communities assemble?
- Which members of the microbial trophic web are the key players in defining and maintaining community structure?
- How do these trophic links change over time?
- What is the role of spatial structure in regulating the community's stability?
- How do abiotic parameters regulate ecosystem functioning of microbial processes?
- What types of association exist between prokaryotes and aquatic animals?

People have the power! MiCHAEL consists mostly of undergraduate and graduate students.

And money makes the world go round; funding comes national and international funding agencies. We collaborate with several scientific teams in Greece and abroad, both in research and academic education in microbial ecology

Recent research projects

- "Use of processed animal protein in fish meal of sea bream of sea bream (Sparus aurata)" Ministry of Rural Development and Food - GR
- "The relative role of niche and neutral mechanisms in controling phytoplankton genetic and morphological diversity" GSRT-GR
- "Lakes under Reconstruction: Mathematical Modeling of *Microcystis aeruginosa*" GSRT-GR
- "Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and management" E.U. COST Action
- "Cyanotoxins in fresh water. Advances in analysis, occurrence and treatment" GSRT-GR
- "Ecological condition of the Igoumenitsa Bay, Ionian Sea, revealed by classical and modern methods" EU Cohesion Fund

Recent publications

- Parlapani F, Kormas KA, Boziaris IS (2015) Microbiological changes, shelf life and identification of initial and spoilage microbiota of sea bream fillets stored under various conditions using 16S rRNA genes analysis. J. Sci. Food Agricult. DOI:10.1002/jsfa.6957
- Bernhard JM, Kormas K, Pachiadaki MG, Rocke E, Beaudoin DJ, Morrison C, Visscher PT, Cobban A,Starczak VR, Edgcomb VP (2014) Benthic protists and fungi of Mediterranean deep hypsersaline anoxic basin redoxcline sediments. Front. Microbiol. 5,60
- Kormas KA, Meziti A, Mente E, Frentzos A(2014) Dietary differences are reflected on the gut prokaryotic community structure of wild and commercially reared sea bream (*Sparus aurata*). MicrobiologyOpen 3:718-728
- Kormas KA, Karayanni H,Christaki U, Giannakourou A, Assimakopoulou G, Gotsis-Skretas O (2014) Microbial food web structure and its impact on primary production in a meso-oligotrophic coastal area (Pagasitikos Gulf, Aegean Sea). Turk. J. Fish.Aquat. Sci. 14:527-537
- Berillis P, Papadimitriou Th, Petridou E, Kormas KA, Kagalou I (2014) Histopathological findings in the brain and liver of Carassiusgibelio from a newly reconstructed lake with toxic cyanobacteria. Turkish J. Fish. Aquat. Sci. 14:213-219
- Genitsaris S, Kormas KA, Christaki U, Monchy S, Moustaka-Gouni M (2014) Molecular diversity reveals previously undetected air-dispersed protist colonists in a Mediterranean area. Sci. Tot. Environ. 478:70-79
- Christaki U, Kormas KA, Genitsaris S, Georges C, Sime-Ngando T, Viscogliosi E, Monchy S (2014) Winter-summer succession of unicellular eukaryotes in a meso-eutrophic coastal system. Microb. Ecol. 67:13-23

Contact information

Kostas Kormas

Department of Ichthyology & Aquatic Environment
Faculty of Agricultural Sciences
University of Thessaly
384 46 Volos
Greece

Tel.: +30-242-109-3082
Fax: +30-242-109-3157
Email: kkormas@uth.gr
URL : https://sites.google.com/site/kkormas/
Twitter: @kkormas