



Proiect: PN-III-P4-ID-PCE-2020-1559 - “Ecogenomica microorganismelor necultivate pentru elucidarea rolului lor în circuitul biogeochimic al nutrienților din lacuri hipersărate stratificate (UnCycle)”/ “Ecogenomics of uncultured microorganisms to unravel their functional roles in biogeochemical nutrient cycling in hypersaline stratified lake (UnCycle)”

Post: asistent de cercetare științifică - doctorand / research assistant PhD(c)

Tematica/ Theme:

- Metode si tehnici de caracterizare a diversitatii moleculare a comunitatilor microbiene din mediu;
- Analiza metagenomica și metatranscriptomică a comunitatilor microbiene.
- Methods and techniques for characterizing the molecular diversity of microbial communities in the environment
- Metagenomics and metatranscriptomic analysis of microbial communities

Bibliografie / Bibliography

Andrei, A.-Ș., Robeson, M.S., Baricz, A., Coman, C., Muntean, V., Ionescu, A., Etiope, G. et al (2015). Contrasting taxonomic stratification of microbial communities in two hypersaline meromictic lakes. *ISME J.*, 9 (12): 2642-2656.

Andrei, A.Ș., Baricz, A., Robeson, M.S., Păușan, M.R., Tămaș, T., Chiriac, C., Szekeres, E. et al. (2017) Hypersaline sapropels act as hotspots for microbial dark matter. *Sci. Rep.* 7(1):6150.

Baricz, A., Chiriac, C. M., Andrei, A. Ș., Bulzu, P. A., Levei, E. A., Cadar, O., ... & Banciu, H. L. (2021). Spatio - temporal insights into microbiology of the freshwater - to - hypersaline, oxic - hypoxic - euxinic waters of Ursu Lake. *Environmental Microbiology*, 23(7), 3523-3540.

Dinsdale, E.A., Edwards, R.A., Hall, D., Angly, F., Breitbart, M., Brulc, J.M., Furlan M. et al. (2008) Functional metagenomic profiling of nine biomes. *Nature* 452, 7187: 629.

Frioux, C., Singh, D., Korcsmaros, T., & Hildebrand, F. (2020). From bag-of-genes to bag-of-genomes: metabolic modelling of communities in the era of metagenome-assembled genomes. *Computational and Structural Biotechnology Journal*, 18, 1722-1734.