



Palacký University  
Olomouc

## PhD thesis:

### Population genomics and biogeography of cyanobacteria

Earth is inhabited by billions of prokaryotic species. However, drivers of such incredible diversity are mostly enigmatic. Recent advances in sequencing techniques allowed to gather datasets which can effectively describe population diversity using whole genome data. This project will be focused on an analysis of speciation using next generation sequencing of cultured species and/or single cell genomics of uncultured samples. The model system will be selected cosmopolitan cyanobacterium (e.g. *Microcoleus*). Data will be analyzed using tools of population genomics, phylogeny and biogeography. The PhD thesis project will be carried out at the Department of Botany of Palacký University Olomouc at the laboratory of Prof. Aloisie Pouličková. The laboratory has a long-term experience in algal and cyanobacterial research with wide range of collaborative laboratories in Europe and USA, which can be utilized for obligatory stay abroad (University of North Florida, USA; Uppsala University, Sweden etc.).

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