

## **CIESM Congress Session : Microbial diversity**

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### *Moderator's Synthesis*

The session on microbial ecology began with several flash presentations that demonstrated the diversity of topics and methodologies in use in current microbial ecology/diversity research. This diversity formed the backdrop for the ensuing discussion. Discussion topics revolved around the enormous potential of new technologies such as molecular tools in the study of microbial diversity. Such techniques allow much more detailed studies (even in very remote areas) than would be possible with conventional techniques. However, with the diversity of methods developing (not just molecular) there are also issues with the comparability of data sets between different studies but also within long-term studies at the same sites.

High throughput techniques are also heavy on IT resources (although some good, stable database systems are now available) and are still costly, financially beyond the means of a number of researchers. The participants agreed that one needs to take a pragmatic approach to the assessment of microbial diversity and ecology in general. Not every study can deliver the greatest possible detail but different studies might still be comparable if data sets are compared at a lower taxonomic resolution for instance. Participants agreed that there is a need for improved communication between research communities and a need for multidisciplinary approaches applying a number of skills -from taxonomy, via molecular approaches to IT and data management.

