

S003 Coupling stable isotopes and nucleic acid detection to resolve microbial functions

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Nucleic acid based technologies have revolutionised the field of microbial ecology, from discovering hitherto unknown microbial species, the enormity of gene richness within the natural environment and the functions carried out by our natural biota. This latter category has developed substantially over the last decade, principally by linking the use of stable isotope based physiological tracers with nucleic acid detection. In this presentation I will outline some of the key technologies being developed in microbial ecology which allow researchers to link community processes with the organisms responsible, at scales from the total population down to the individual cells themselves.