

Category

BE Biology, Ecology, Ecosystems, Biodiversity

Session Number

BE-12

Session Title

Functional ecology of polar microbial communities in a changing world

Session Description

Cold terrestrial ecosystems play a key role in Earth's climate system. Melting glaciers and thawing of permafrost due to global warming not only promotes microbial carbon turnover with direct feedback on greenhouse gases but also has the potential to unlock unknown biodiversity and functional processes. This session will attract those interested in exploring how recent cutting edge genomic tools are being used to assess and resolve the role and resilience of microbial communities in polar and high-alpine ecosystems. This session invites microbiology and biogeochemistry experts who, through their unique understanding of the fast changing cryosphere and the factors that impact ecosystem and organism response, are attempting to predict how the system will respond to a warming world.

Keywords: polar systems, microbiology, function, ecology, ecosystem resilience

Lead Convener: Craig Cary

Email: caryc@waikato.ac.nz

Affiliation lead-convener: University of Waikato, Hamilton, New Zealand

Co-convener 1: Birgit Sattler

Email: Birgit.Sattler@uibk.ac.at

Affiliation: University of Innsbruck, Institute of Ecology

Co-convener 2: Noah Fierer

Email: noahfierer@gmail.com

Affiliation: University of Colorado

Co-convener 3: Beat Frey

Email: beat.frey@wsl.ch

Affiliation: Swiss Federal Research Institute WSL