

PROGRAM

4TH APPLIED MICROBIAL ECOLOGY WEBINAR:

Exploring the Ecology of the Microbial World

DAY 1

Tuesday, December 2nd, 2025

Doctoral Building Auditorium, Andrés Bello Campus
UFRO – Temuco, Chile

Time	Title	Moderator/Speaker
10:25–10:30 (5 min)	Opening	Dr. Francisco Matus , Director, Programa de Doctorado en Ciencias de Recursos Naturales
10:30–11:15 (45 min)	Interspecific bacterial interactions in the rhizosphere enhance plant growth and drought tolerance	Søren J. Sørensen , University of Copenhagen, Denmark https://scholar.google.com/citations?hl=es&user=HINN0OQAAAAJ
11:15–11:20 (5 min)	Questions, Remarks and Closing	Moderator: Dr. Milko Jorquera

DAY 2

Wednesday, December 3rd, 2025

Pucón Campus, UFRO – Pucón, Chile

Time	Title	Moderator/Speaker
10:25–10:30 (5 min)	Opening (Online)	Representante, Sociedad de Biología de Chile
10:30–11:00 (30 min)	Bioprospecting of microbial resource by new cultivation methods (Online)	Dr. Shan He , Ningbo University, China https://scholar.google.com/citations?hl=es&user=2FqW2DkAAAAAJ
11:00–11:30 (40 min)	The role of plasmid in urgent water systems for dissemination of ARG and bacterial defense systems	Søren J. Sørensen , University of Copenhagen, Denmark https://scholar.google.com/citations?hl=es&user=HINN0OQAAAAAJ
11:30–12:00 (30 min)	Predicting soil microbial activity and pesticide degradation using remote and proximal sensing technologies at field scale	Dr. Lukas Wick , UFZ–Leipzig, Germany https://scholar.google.com/citations?hl=es&user=fpFSip0AAAAAJ
12:00–12:30 (30 min)	Bacterial response mechanisms to selective environments as a foundation for bioprospecting	Marcos Pileggi , Universidade Estadual de Ponta Grossa, Brazil https://scholar.google.com/citations?hl=es&user=EeJWjXkAAAAAJ
12:30–13:00 (30 min)	Some advances on the application of plant-associated bacteria to improve growth and stress tolerance in crops of southern Chile	Milko A. Jorquera , Universidad de La Frontera, Chile https://scholar.google.com/citations?hl=es&user=mb_L_nwAAAAAJ
13:05 (5 min)	Remarks and Closing	Moderator: Dr. Milko Jorquera

Organized by:

Laboratorio de Ecología Microbiana Aplicada (EMALAB), Departamento de Ciencias Químicas y Recursos Naturales, Facultad de Ingeniería y Ciencias, Universidad de La Frontera. (Chile).

Finantial Support:

FONDECYT #1240602: Chilean winter fall-Valdivian Forest: an unexplored biodiversity hotspot for the secure agricultural production by using hitherto-uncultured bacteria (M. Jorquera)

FONDECYT #1230965: Decreasing the impact of neonicotinoids on microbiological communities and nitrogen cycle-related genes by applying a formulation based on actinobacteria in a soil-plant system (G. Briceño).

FONDECYT #1221228: Development of intelligent cooperative microbial consortia based on in situ cultivation and their functional complementarity to improve lupine stress tolerance (J. Acuña)

Acknowledments:

Programa de Doctorado en Ciencias de Recursos Naturales, Universidad de La Frontera, Temuco, Chile.

Sociedad de Biología de Chile.

Centro de Interacción Suelo-Planta y Biotecnología de Recursos Naturales, Núcleo Científico Tecnológico en Biorecursos (BIOREN-UFRO), Universidad de La Frontera, Temuco, Chile.