





20 YEARS OF CONCORDIA RESEARCH 3 April 2025

10:00-15:45 (CET)

Italian Space Agency-ASI

Via del Politecnico snc, Roma

Timing	Item	Speaker	
10:00-10:45	General Introduction	ESA (Melike Balk) IPEV (Coline Marciau) PNRA (Riccardo Scipinotti)	
10:45-11:00	Human Interaction in Isolated, Confined, and Extreme Environments: A Study of Antarctic Winter Teams Using Wearable Sensors	Jan Schmutz and Andrea Cantisani	
11:00-11:15	Effects of long-term exposure to hypobaric hypoxia and extreme isolation on cardiac electro-mechanical activity: preliminary results from the Concordia station	Sarah Solbiati	
Coffee break 11:15-11:45			
11:45-12:00	The Third-Quarter Phenomenon Through an Interdisciplinary Lens: Towards Better Adaptation	Katia Collomp	
12:00-12:15	Metabolic Plasticity and Hypoxia Adaptation: Insights from Concordia Station for Space Exploration and Human Physiology	Michele Maffia	
12:15-12:30	MicroFunExpo project: The influence of the microbial exposome on the human mycobiome and microbiome in confined environments as support for future space travels	Duccio Cavalieri	
12:30-12:45	Decision-making adaptation at Concordia: behavioral findings from the PARADIGM project	Pierpaolo Zivi	
12:45-13:00	Optimization of sampling and DNA extraction protocols for low-biomass microbial communities in confined environments	Marta Nerini	

13:00-13:15	Diet and Sensory Adaptations of Smell and Taste in an Isolated, Confined, and Extreme Environment in Antarctica: A Longitudinal Study at Concordia Research Station	Isabelle Mack	
Lunch Break 13:15-14:30			
14:30-14:45	The do's and the don'ts for biomedical investigations at Concordia: A practical handbook from a researcher's perspective for a successful implementation of your research protocol	Katharina Biere	
14:45-15:00	Sleep, circadian rhythms and performance during Antarctic overwintering: a decade of research at Concordia Station	Nathalie Pattyn	
15:00-15:15	Cardiorespiratory fitness of Concordia crew members living in extreme environment for eleven months	Marianna Neri	
15:15-15:30	A year-long test	Massimiliano Catricala	
15:30-15:45	Protocol for Evaluation of Oral-Microbiota as Determinant for General Health Condition of Astronauts and How to Enhance Dental Health, Prevent TMD, and Improve Astronaut Performance During Long-Term Space Missions	Funda Goker	

Practicalities:

- Stick to the timing as we have a very dense agenda
- Each speaker will have <u>15 minutes for a presentation</u>, with a maximum of <u>12 slides</u>, which should be sent to <u>concordia@esa.int</u> by <u>March 27th</u>.
- If you have any remaining questions or (potential) issues to join the meeting, please contact us at Concordia@esa.int