RLS-Sciences
Explore Session:
Space, Earth, and Health

12 March, 13:00-15:00 CET
Online Event

Session Programme (please note all times are in CET)

13:00	**Welcome** Dr. Florence GAUZY, RLS-Sciences Lead Management Partner
13:05	**Opening Remarks** Johannes FRIK, Bavarian State Chancellery Prof. Janice BAILEY, Fonds de recherche du Québec – Nature et technologies, Québec
13:15	**RLS-Sciences Introduction** Dr. Sebastian GOERS, RLS-Sciences President, Upper Austria PD Dr. Sebastian BICKELHAUPT, RLS-Digital Health (video contribution), Bavaria Dr. Peter HÜLSE, RLS-Global Aerospace Campus, Bavaria
13:30	**Explore Session** Prof. Klaus SCHILLING, Zentrum für Telematik, Bavaria Dr. Annie MARTIN, Canadian Space Agency
13:50	**Explore Session: Dialogue** Moderation: PD Dr. Judith BUCHHEIM, LMU Klinikum Prof. Yves JOANETTE Consortium Santé Numérique, Université de Montreal Québec Prof. Alexander CHOUKÉR LMU Klinikum Bavaria Prof. Hélène GIROUARD Université de Montreal Québec Prof. Gisela DETRELL Technische Universität München Bavaria
14:40	**Closing** Prof. João AZEVEDO, Instituto Tecnológico de Aeronáutica, São Paulo

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Organisation:
Scientific Coordination Office Bavaria-Québec/Alberta/International

Munich Aerospace

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Further Information

Prof. Klaus Schilling is president of the research company "Zentrum für Telematik". After completing his doctorate, he moved to the space industry in 1985: at Dornier System, he headed the "Mission and System Analyses" group in the scientific satellites division. On behalf of the European Space Agency ESA, his team was then responsible for the conception of the interplanetary space probes HUYGENS and ROSETTA. From 2003 to 2023, he led the Chair of Computer Science VII (Robotics and Telematics) at Julius-Maximilians-Universität Würzburg. He was awarded an ERC Advanced Grant (2012) and an ERC Synergy Grant (2018). His most recent awards include the IAF Frank J. Malina Astronautics Medal (2023) and the Eugene-Sänger Medal (2021).

Dr. Annie Martin has been with the Canadian Space Agency for over 15 years in the Operational Space Medicine group and is the Portfolio Manager of the Health Beyond Initiative. This initiative envisions a major Canadian contribution to the Artemis Program – Canadian healthcare services and technologies for lunar missions, paving the way to human exploration missions on Mars while also helping to bridge the gap of healthcare access inequities in Canada. Annie holds a bachelor's and master's degree in kinesiology from UQAM and a master's degree and a doctorate in industrial engineering from Polytechnique Montréal; her thesis focused on innovation and collaboration in the Canadian space sector.

Prof. Yves Joanette is full professor at Université de Montréal in Cognitive neurosciences of aging at the Faculty of Medicine. He is currently Deputy Vice-Principal Research at the Université de Montréal, and serves as the first Director of the Digital Health Consortium at the University of Montreal. His research combines cognitive and neuroimaging approach, he contributes to knowledge about the neurofunctional reorganization allowing to maintain communicative abilities in aging, to the impact of right-hemispheric cerebral lesions on those abilities as well as to the cognitive deficits in Alzheimer's disease. He is part of the Expert Group on the Potential of Canadian Healthcare and Biomedical Roles for Deep-Space Human Spaceflight.

Prof. Alexander Choukér attended medical school at the Ludwig-Maximilians-University (LMU) in Munich, Germany. He completed scientific training at the LMU as well as in the United States at the National Institutes of Allergy and Infectious Diseases (NIAID) at the NIH in Bethesda, Maryland. He is Professor and based in the department of Anaesthesiology at the LMU where he is academic director and clinical specialist in Anaesthesiology at the LMU's Medical Faculty. He heads the laboratory of translational research "Stress and Immunity" and leads experimental, clinical and space flight related studies in the field of stress-associated immune consequences.

Prof. Hélène Girouard is full professor at the Department of pharmacology and physiology at the Université de Montréal and the director of the cerebrovascular pharmacology laboratory. She is codirector of the GRUM, a drug research group. She has been Co-Chair of the Advisory Committee on Space Health and Aging Research: CAN-SHARE (CANadian Space Health and Aging Research) and part of the Space Health Topical team to deliver a community report on Science and Space health priorities for next decade and beyond. Her research focuses on the mechanisms underlying cerebrovascular regulation in health and diseases especialy in the context of hypertension, arterial stiffness, menopause on earth and in space. The main objective of her research is to find therapeutical targets to protect the brain from vascular diseases.

Prof. Gisela Detrell's field of research is the development of technologies to enable human spaceflight, with special focus on Life Support Systems Technologies (especially on the use of microalgae photobioreactors for oxygen and food production for long duration missions), human spaceflight simulation and human spaceflight performance. She studied Aerospace Engineering at the Polytechnic University of Catalonia and completed her doctorate in Life Support Systems reliability analysis for long duration space missions at the University of Stuttgart and the Polytechnic University of Catalonia in 2015. In 2023 Prof. Detrell was appointed to the professorship for Human Spaceflight Technology at TUM.