

HIGHLIGHTS

Over 70 publications documenting key discoveries, including new microbial metabolic pathways, the impact of drought on soil microbiomes, tracking of human dietary habits, and mechanisms to reduce side effects of medication via the gut microbiome.

Seven prestigious ERC grants, new industry partnerships - such as one with BASF as part of a Christian Doppler Laboratory focused on the biodegradation of water-soluble polymers, and a large-scale clinical study on small-intestinal microbes underscore the cluster's momentum.

The new "Microbiome Science" Master's program at the University of Vienna solidify Austria's international leadership in this field.



CoE publications

MiCRO PLANET

FWF Cluster of Excellence

MICROBIOMES DRIVE PLANETARY HEALTH

SELECTED ACTIVITIES



www.microplanet.at

Podcast

„Die Welt der Mikroben –
The world of microbes“



Kinderuni Wien
2026



Science Ball
2027

in



f



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Cluster of Excellence 'Microplanet'

JKU
JOHANNES KEPLER
UNIVERSITÄT LINZ

ISTA



universität
wien



MEDIZINISCHE
UNIVERSITÄT WIEN

CeMM

AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY
TOMORROW TODAY

TU
WIEN

Med Uni
Graz

FWF Austrian
Science Fund

excellent = austria

OUR MISSION

Shaping our Planet's Sustainable Future

The Excellence Cluster "Microbiomes Drive Planetary Health" bridges the previous gap between environmental science and medicine. With our mission, we contribute to safeguarding the interconnected health of our planet and its inhabitants by understanding the microbial communities that form the very foundation of the biosphere.

From Observation to Understanding

We are moving beyond the "what" to the "how." By dissolving traditional academic silos, our researchers target the fundamental mechanisms of how microbiomes function and adapt to a rapidly changing world. Our work spans the Earth's most critical ecosystems - from the human gut and fertile soils to the vast oceans and thawing permafrost.

Innovation Through Collaboration

At the heart of our initiative is a network of shared high-tech facilities. These centers are more than laboratories; they are collaborative hubs where we develop cutting-edge methods to integrate and analyze data across diverse disciplines and scales. This synergy allows us to see the "big picture" within the microscopic world.

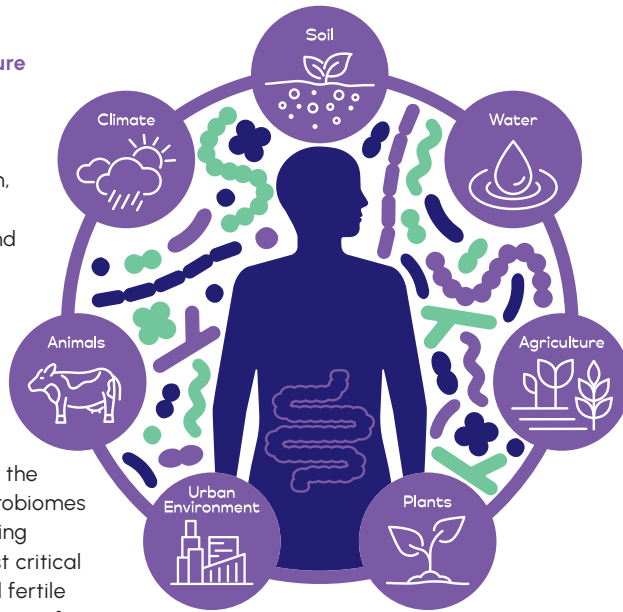
Addressing Global Challenges

Researching the microscopic world on our planet is a prerequisite for a sustainable future. By fully understanding the function of microbiomes, we can:

- Predict global change with unprecedented precision
- Engineer microbiome-based solutions for global health crises
- Develop targeted interventions for environmental and human health

A New Era for Austrian Science

Launched in October 2023 and funded by the Austrian Science Fund (FWF), the Federal Ministry (BMBWF), and our partner institutions, this initiative is building a world-leading "Austrian School of Microbiome Research." Together, we continue to strengthen Austria's role as a global pioneer in this field of science.



OUR KEY RESEARCHERS

CoE Microplanet unites 34 Key Researchers and over 60 early-career researchers and technicians from eight leading Austrian institutions, creating a powerhouse of interdisciplinary expertise.

56 ♀ 53 ♂ 3 *
Our 112 project members come from 28 countries



Learn more

