



## Advanced microbiome research

---

Every human being has not only more microbial cells than human cells but also more microbial genes than human ones ... Our microbiome has a huge influence on our health and the same is true for animals and plants ... Let's tap this potential for a better life!

---

### BACKGROUND

It has become common knowledge that beneficial microorganisms (MOs) can protect their hosts by occupying the ecological niches of pathogens, thereby effectively suppressing them. However, they have much more positive effects through the production of essential substrates, vitamins or pre-cursors and by metabolization of important compounds. Sometimes there are also responsible for the activation of therapeutical compounds e.g. the first steo from willow bark salicin to salicylic acid or modulate the activity of anticancer drugs.

### TECHNOLOGY

acib can help you tapping this microbial potential by:

- Selecting MOs protecting algae/plants from pathogens (biocontrol agents)
- Selecting MOs conveying higher resilience and better growth to algae/plants under abiotic stress conditions (drought, heat, high salinity,)
- Selecting MOs protecting harvested fruits from spoilage
- Investigating the effect of the gut microbiome on transformation of herbal/pharmaceutical compounds
- Investigating the effect of various pharmaceutical or cosmetic compounds on the microbiome of the gut or skin
- Analyse the microbiome of different surroundings (from indoor environments over environmental samples to spacecrafts)

In addition to investigation and selection of MOs acib can also help formulate probiotics, as well as seeding pills for plant-protecting Mos.

### OFFER

Under protection of a CDA/NDA we provide you with professional strategies for investigation or modification of the microbiome of your choice including the formulation of products based on these results. IP developed in such a project would fully belong to you as our investor/industrial partner.

### acib-EXPERTS:

Prof. Dr. Gabriele Berg  
Prof. Dr. Rudolf Bauer  
Prof. Dr. Christine Moissl-Eichinger  
Dr. Tomislav Cernava  
Dr. Birgit Wassermann

### AVAILABLE FOR:

- Investments
- Joint Research Projects
- Contract Research

### DEVELOPMENT STATUS:

Technology Readiness Level 1-5

### IPR:

Will be generated for you as our industrial partner / investor

### KEYWORDS:

Microbiome  
Biocontrol Agents  
Plant Protection  
Human gut microbiome  
Human skin microbiome  
Microbiome biotransformations  
Pro-Drug Screenings  
Effects on microbial composition

### CONTACT

acib GmbH  
Krenngasse 37  
8010 Graz  
tel: +43 316 873 9316  
e-mail: [bd@acib.at](mailto:bd@acib.at)  
[www.acib.at](http://www.acib.at)