Health and Microbiome

The University of Vienna invests heavily in the field of health and microbiome research. With 19 new professors, it pools a high number of experts across faculty boundaries in this area which covers the diverse relationships between living beings and their environment. These professorships were advertised in November 2018 and will be appointed in the coming one to two years. Funding is channelled through an increase in the university budget.

A significant increase in funding enables the University of Vienna to specifically invest in 73 new professorships and tenure track professorships in the coming years. It therefore sets interdisciplinary, interconnected and future-oriented priorities across faculties: Health and microbiome and other socially relevant areas such as data science and digital humanities, society and communication, molecular biology and cognitive neuroscience as well as materials and quantum science.

The University of Vienna currently conducts research in the field of health and in the field of microbiome. In addition, it also researches the interface between the two areas to answer complex questions in an interdisciplinary way. The University of Vienna meets this challenge by appointing more than ten new professors in this research area. The spectrum ranges from the rather medical and pharmaceutical aspect (microbial biochemistry, clinical pharmacy or public health nutrition), global health and medical law to the psychological perspective with professorships in the area of psychology of motivation, urban and environmental psychology, but also psychology of ageing and sport.

The Faculty of Psychology has been running its own research, teaching and practice ambulance since 2018, where the focus is on psychological assessment and counselling. Furthermore, academics from the Faculty of Social Sciences also explore the social dimension of health issues. Aspects related to natural sciences are covered by scientists from the fields of microbiology, chemistry and life sciences as well as from the Centre for Molecular Biology at the University of Vienna.

In early 2019, the University of Vienna established its own Centre for Microbiology and Environmental Systems Science to create an attractive organisational framework for two of its cross-faculty research specialisations and to enable intensive interdisciplinary cooperation in the field of the University’s strategic priority of Health and Microbiome. The microbiome, i.e. the totality of microorganisms in a system, plays a decisive role for all ecosystems and humans. Also in this area, intensive research is conducted at the University of Vienna, also in cooperation with the Medical University of Vienna.

The University of Vienna implements joint translational research projects and operates core facilities with the Medical University of Vienna to share infrastructure. Here, cooperation ranges from imaging, research into anti-epileptics and cancer therapeutics to the previously mentioned microbiome and metabolome research. This cooperation is aimed at strengthening and deepening cooperation between the two universities, developing synergies in strategic research areas and embedding them at the institutional level. This includes effective cooperation in the Max Perutz Labs, which is a joint venture in the field of molecular biology between the University of Vienna and the Medical University of Vienna.
The erection of a separate biology centre located at the Vienna Biocenter in St. Marx is intended to ensure that life-science research and teaching continues to be future-oriented and internationally competitive, thus creating one of Europe’s most comprehensive life science clusters in Vienna.

The University of Vienna is also trying to expand high-profile research collaborations between business/industry partners and science. For the University’s strategic priority of Health and Microbiome, two Christian Doppler laboratories (CD) are available at the University of Vienna. One CD covers research on taste, especially research on taste receptors involved in the perception of sweet food in the human body. Another CD laboratory that addresses entropy-oriented drug design will be founded in 2019.

**International cutting-edge research**
Currently, ten ERC grants at the University of Vienna cover the topic of microbiome and health.

New professorships that belong to the University’s strategic priority of Health and Microbiome
- Microbial Biochemistry
- Psychology of Motivation
- Psychology of Ageing
- Urban and Environmental Psychology
- Medical Anthropology and Global Health
- Emerging Pollutants
- Sports Nutrition
- Medical Law
- Public Health Nutrition (in cooperation with the Medical University of Vienna)

Tenure track professorships
- Nutrition in the Prevention of Chronic Diseases
- Clinical Pharmacy
- Psychology of Sport
- Terrestrial Ecosystem Science