
Microbial Immunology Laboratory

(Assoc. Prof. Jan Dobeš, Ph.D.)

The **Microbial Immunology Laboratory**, led by **Assoc. Prof. Jan Dobeš** at the Faculty of Science, Charles University, focuses on the complex interactions between the immune system and microbes. The group's research provides key insights into how the human immune system recognizes and regulates microorganisms — from commensal gut bacteria to pathogenic yeasts.



Dr. Dobeš and his team have discovered a **new type of immune cells** that play a crucial role in the body's defense against **fungal infections** and in maintaining the delicate balance between immune protection and tolerance to the intestinal microbiota. Their findings significantly expand our understanding of **immune regulation mechanisms** and may open new avenues for therapies targeting **autoimmune and inflammatory diseases**.

The group maintains strong international collaborations, including with the **Weizmann Institute of Science** in Israel, and publishes in leading journals such as **Nature Reviews Immunology**.

"Research into rare diseases has led us to discoveries that reveal the fundamental principles of how the immune system works," says Jan Dobeš.

Assoc. Prof. Jan Dobeš is a **recipient of the ERC CZ grant** and **laureate of the ABB Invention Award (Czech Head 2024)**.

In addition to his research, he is actively involved in teaching immunology and mentoring the next generation of scientists.

Photo: Petr Jan Juračka, archive of Jan Dobeš