

MOLECULAR INTEGRATIVE PHYSIOLOGY IN DROSOPHILA



Find out why the immune system is selfish. Gain deeper insights into the metabolism of the immune response using state-of-the-art metabolomics techniques.

When the immune system is activated, it requires an increased supply of nutrients and thus becomes privileged in obtaining nutrients within the organism. This is essential for survival. However, the immune response also poses a danger to the host, which must protect itself from its own immune response.

To study these problems, we use infection of *Drosophila* larvae with parasitoid wasp, the excellent *Drosophila* genetic tools for cell-specific gene manipulation, and ^{13}C stable isotope tracing for metabolic analysis.



Join my research team!

After a four-year research stay at the University of California, Irvine, USA, I established my research group in 2006. From 2012-2014, I was a visiting assistant professor at Stanford University, and then became the head of the Department of Molecular Biology and Genetics, and the head of the PhD program Integrative Biology.

My team includes 3 researchers, 2 PhD students and couple undergraduate students.

Contact:

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Master's research project 2024-2026:

Host protection from its own immune response

Enroll in the new two-year Masters Programme **Functional Genetics & Bioinformatics** at Faculty of Science, University of South Bohemia in České Budějovice, Czech Republic.

Offered specializations:

- Bioinformatics
- Biotechnology
- Human Molecular Genetics
- Molecular Cell Biology & Genetics

Application deadline: 19 May 2024

Study start: September 2024

Find more information [HERE](#)