

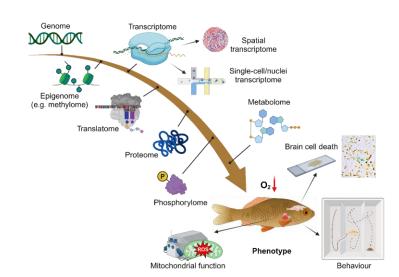
## Insights from 'omics about anoxic crucian carp

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The crucian carp (*Carassius carassius*) is extremely tolerant of variations in oxygen availability, and its metabolically most active organs, such as the brain, can maintain function over extended periods of anoxia. In our current work we take a discovery-driven approach, using epigenomics, transcriptomics and translatomics, to investigate the cellular and molecular mechanisms involved in regulating the response. Sequencing of mRNA and ribosome-protected mRNA fragments has, for example, revealed striking changes in transcriptiontranslation dynamics in response to anoxia and reoxygenation, and recent results indicate a potential role of long non-coding RNAs and DNA methylation in transcriptional regulation of specific genes.





Friday, June 13<sup>th</sup> – 13.00 - 14.00, 1131-127