"Forgotten" aspects of cell death in salivary

Robert Farkaš

In all metazoans programmed cell death (PCD) is a genetically encoded form of cell suicide that results in the orderly death of excessive, damaged or dangerous cells during normal development and adult life and thereby contributes to the maintenance of body homeostasis. During *Drosophila* metamorphosis in response to sequential ecdysone pulses, obsolete larval tissues are destroyed in a stage-specific manner as adult tissues and structures develop from small clusters of progenitor cells, resulting in the transformation of a larva into an adult fly. Here we analyze relationships between autophagic and apoptotic signaling pathways how they contribute to elimination of *Drosophila* larval salivary glands which serve as model organ to study metamorphic PCD.