

Seminar talk

6th May 2019, 10:00 AM

Institute of Zoology, Slovak Academy of Sciences (conference room)

The CHH-superfamily of multifunctional peptides in arthropods

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Abstract

The large group of Crustacean Hyperglycemic Hormone (CHH)-superfamily peptides exists likely in all arthropods as studied extensively in crustaceans but also in insects. Apart from CHHs discovered as "diabetogenic" factors having now at least 8 established functions including growth and ecdysis control, there are three other crustacean members with hitherto only one function: moult-/or mandibular organ-inhibiting hormone and gonad/vitellogenesis-inhibiting hormone. The CHH-like Ion transport peptide (ITP) in insects is known as an antidiuretic and homeostatic hormone and occurs in distinct biological clock-interneurons as evening activity controlling factor. I will present genomic data and putative alternative splice forms leading to differentially localised isoform peptides some with hitherto unknown functions. The CHH-superfamily peptides are true homologs in arthropods as are likely their localisations in the nervous system and their roles in arthropod endocrinology.

If you would like to talk to the speaker, contact Martina Gáliková at martina.galikova@savba.sk.