

Special Issue

Venom Gene Evolution: Past, Present and Future

Message from the Guest Editor

Ongoing advances in sequencing platforms have generated a tremendous wealth of data, and their impact on the research of venom gene evolution has already been documented. A simplistic picture of venom genes emerging via duplication followed by a neofunctionalization is being questioned, with multiple high-profile studies participating in this exciting scientific debate. Many crucial questions remain open: Do venom genes share a common origin pattern? Are there any genomic or protein structure effects that increase the chance of a gene being weaponised into venom? Do venoms evolve repeatedly within the same clade or is it a predominantly singular event within each of the venomous taxa? And many more. Some of these questions can be answered already, some might be ripe for a machine learning approach, yet some might remain forever open. The aim of this Special Issue is to provide a snapshot of the field of venom gene evolution and to serve as a topical roadmap of the field in the future.

Keywords

- venom genes evolution
- current state of venom genetics
- patterns in venom evolution

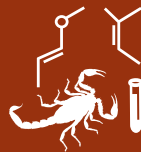
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