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## Scorpion toxins as drug and pharmacological tolls candidates

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Scorpions are known for their dangerous stings that can result in severe consequences for humans, including death. Neurotoxins present in their venoms are responsible for their toxicity, and due to their medical relevance, toxins have been the main motive for scorpion toxins research field. On the other hand, for thousands of years, scorpion venoms have been applied in traditional medicine, mainly in Asia and Africa. With the advent of novel methodologies for the massive study and characterization of venom components, several drug candidates have been found with the potential to tackle many of the emerging global medical threats. Scorpions have become a valuable source of biologically active molecules, from novel antibiotics to potential anticancer therapeutics. Due to their pharmacological action on ion channels and their clinical relevance,

neurotoxins have drawn attention as useful scaffolds for the development of drugs, and new pharmacological tolls. Most of the knowledge about the structure and functioning of ion channels was obtained using animal toxins that modulate these membrane proteins, especially scorpion toxins. This talk will summarize the scorpion toxins that are the most promising candidates for drugs and pharmacological tolls.

## **Biography**

Elisabeth Ferroni Schwartz has completed her PhD from São Paulo University, SP, Brazil. She is professor of University of Brasilia, DF, Brazil. She has over 60 publications that have been cited over 1200 times, and her publication H-index is 21. Her main research subjects have been scorpion toxins, and ion channel modulators.

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