About Us

The Ibero-american Network "TOXINS OF INTEREST FOR BIOMEDICINE, BIOTOX: 212RT0467" is sponsored by the Ibero-American Program of Science and Technology for Development (<u>www.cyted.org</u>). BIOTOX has the following purposes:

General objectives:

Exchange experiences and technologies for the molecular and functional study of toxins of biomedical interest in order to develop common strategies and enhance regional capacity associated with its application in the treatment of various diseases.

Specific objectives:

1. To increase understanding of the structure-function relationship of molecules produced by terrestrial and marine venomous animals of Iberoamerica.

2. To understand the molecular and cellular causes of envenomation and their specificities in order to mitigate them.

3. To encourage the design and characterization of new molecular entities and toxin- based particulate systems with high added value for the development of more effective products of

potential use in human health that eventually could turn into an economical source of income for the countries of the Iberian-American area.

Who are the members?

BIOTOX network encompasses 85 researchers from eight Ibero-American countries, Argentina, Brazil, Chile, Costa Rica, Cuba, Spain, Mexico, and Venezuela who have been investigating in the area of toxins with potential applications on human health from different perspectives.

Which are the benefits expected from the establishment of this network?

Latin America is a toxin-based reservoir of molecular biodiversity which has been insufficiently explored due to limited financial resources and technology. Therefore, the region is urgently needed of projects supporting scientific and technological exchanges as well as capacity building schemes.

BIOTOX represents an opportunity to promote the exchange of experiences, technologies and approaches in the study of venoms and toxins in order to use the generated knowledge for social welfare. The results of the exchange and training will allow defining effective means to treat envenomation and will promote the discovery and characterization of new molecules with therapeutic utility and hopefully will encourage the development of innovative products.

BIOTOX will provide a platform and resources to support the exchange and the identification of joint ventures with the greatest impact on the Ibero-American region. BIOTOX gathers leading groups in their respective areas of expertise and willingness to establishing alliances with long-lasting perspective.