Development of a platform for in vivo and in vitro metabolism studies with natural products from the Brazilian Biodiversity

Brazil hosts the largest proportion of global biodiversity. Several actions for the development of bioactive natural products have been taken at national and state level, in majority ones that led to the identification of substances with therapeutic potential. A prerequisite for clinical and compound stability studies is the chemical characterization of active targets and also the elucidation of possible metabolites. In this context, our research aims the establishment of a working platform based that envisions supporting pre-clinical studies. At the central part we development a mass spectrometry map for gas phase decomposition reactions of activity products furnisheb by several research groups. The possibility of a variable number of secondary metabolites occurs in function of the demand and opportunity of identifying a potentially active compound as well as having it in sufficient quantity for studies, which finally is the limiting factor for different works.

In this way, we will present an overview of the employed mass spectrometry strategy and the results from in vitro metabolism to pharmacokinetics data of natural products isolated from a plant from the Brazilian biodiversity.

Biography

Norberto Peporine Lopes has completed his Ph.D. at the age of 28 years from University of Sao Paulo and postdoctoral studies from Chemistry Department-University of Cambridge-UK. He has published more than 190 papers in reputed journals and serving as an editorial board member of repute. He is author of 5 books in addition to others 10 book chapters. He is currently Full Professor in Organic Chemistry at the University of São Paulo and is board member of the Brazilian Chemical Society and of the Brazilian Society of Mass Spectrometry.