

Annual Pharmaceutical Biotechnology Congress

May 16-17, 2018 Singapore

Molecular and cellular assays for screening and identifying potential novel phytochemical-based therapeutics

A Vieira

Simon Fraser University, Canada

The use of medicinal plant extracts as well as purified phytochemicals and phytochemical combinations for pharmacotherapy is currently under investigation for a wide range of human diseases including infectious and chronic diseases. Such phytochemical compounds are typically screened through molecular and cellular assays and further evaluated in whole-body (e.g., animal) experimental model systems. High-throughput screening assays for identifying phytochemical-based pharmacotherapeutics will be presented, with an emphasis on one or more of the following potential applications: (1) Infectious diseases and modulation of the cellular internalization of the pathogen, (2) amyloidogenic diseases and disruption of cellular redox balance and (3) metabolic diseases such as type-2 diabetes and cellular energy metabolism.

avvieira@sfu.ca