13^{th} International Conference on

Structural and Molecular Biology: Techniques & Market Analysis October 22-23, 2018 | Ottawa, Canada



Steven LaPlante

University of Quebec (INRS), Canada

Discovering drug seeds by practical NMR strategies

Statement: Small molecule drugs continue to be crucial for combating diseases. This presentation will convey the critical role NMR has been playing for discovering the seeds for new drugs starting from substrate peptides, high-throughput screens and fragment-based screens. Central to all the examples was the need to better understand the properties of small molecules when free in solution and to decipher the various types of binding to macromolecules. To do so, appropriate NMR methods/ strategies were developed to prioritize quality ligands for downfield medicinal chemistry purposes. Examples will be shown where NMR strategies revealed compound solution behavior (solubility, aggregation, atropisomer chirality), exposed target protein features (folding and changes), and determined stoichiometric binding attributes.

Biography

Steven LaPlante is a faculty member at the University of Quebec INRS-IAF, founder of NMX Research and Solutions, visiting scientist at the Broad Institute and consultant at Harvard Medical School and other institutions. He is a senior biophysical medicinal chemist with +20 years of drug design experience in the pharmaceutical industry. He has a proven track record of creating innovative solutions to chemical and biological challenges. He is an NMR specialist who developed novel fragment-, structure- and property-based strategies that led to drug candidates and advanced drugs for HCV and HIV.

Steven.LaPlante@iaf.inrs.ca

Notes: