

# International Conference and Expo on **Drug Discovery & Designing**

August 11-13, 2015 Frankfurt, Germany

## Combinatorial chemistry and drug discovery

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The last two decades has witnessed major breakthroughs in the identification of genes, gene products, metabolic pathways, and signaling pathways, as well as progress in miniaturization and robotics, enabling the development of high-throughput mechanism-based biological assays. One of the central objectives of organic and medicinal chemistry is the design, synthesis, and production of molecules having value as human therapeutic agents. Our research group is interested in the design, synthesis, analysis, conformations, dynamics and structure-biological activity relationships of diverse nitrogen heterocycles of different ring sizes. Diaza- and triaza-cyclic compounds with different substitution patterns and embedded in various molecular frameworks constitute important structure classes in the search for bioactivity. The compounds are designed to follow known drug-likeness rules including "Lipinski's Rule of Five". Examples of the identification of highly active compounds will be presented.

### Biography

Adel Nefzi has completed his from the University of Lausanne in Switzerland and Post-doctoral studies from The Torrey Pines Institute of Molecular Studies, in San Diego, CA. He is the Director of Chemistry at Torrey Pines Institute. He has published more than 120 papers in reputed journals and has more than 10 patents in drug discovery.

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