

Global Congress on

# Nucleic Acids: Biology, Health & Diseases

August 04-05, 2016 New Orleans, USA



## Jonathan Perreault

*INRS - Institut Armand-Frappier, Canada*

### The versatility of nucleic acids in biology and their promise in medicine

Since the double helix structure of DNA has been solved more than fifty years ago, the field of molecular biology has produced tremendous discoveries which impacted medicine on many levels. The study of DNA and RNA unveiled the code of all living things and helped understand all processes in biology, but nucleic acids were revealed as fascinating subjects on their own. For instance, the discoveries of ribozymes and riboswitches revealed the potential duality of RNA, which can bear information and function at the same time. Largely fuelled by technology advances, numerous discoveries regarding both DNA and RNA exposed the complexity and beauty of these macromolecules. In parallel, many of these discoveries led to the development of new drugs using or targeting nucleic acids, as well as approaches that hold great promises for the future of both diagnostics and therapeutics.

### Biography

Jonathan Perreault has completed his PhD at the University of Sherbrooke in Canada and Post-doctoral studies at Yale University in the laboratory of Ronald Breaker. He joined INRS – Institut Armand-Frappier in 2011. His work on functional nucleic acids has been published in reputed journals such as *Nucleic Acids Research* and *Nature*. It encompasses bioinformatics, biochemistry, molecular biology and microbiology approaches aiming at discovering and elucidating ncRNAs as well as developing applications.

[jonathan.perreault@iaf.inrs.ca](mailto:jonathan.perreault@iaf.inrs.ca)**Notes:**