

Chemical Biotechnology Applied to Metabolic Diseases

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The epidemic of obesity and its associated comorbidities represents a medicinal challenge that recruits broad molecular diversity. We have pioneered the application of endogenous hormones and physiological mechanisms optimized for pharmacological purposes as a means to address the broad heterogeneity constituted by the multiple diseases associated with the metabolic syndrome. From the earliest demonstration with lispro-insulin to the most recent discovery of incretin-based poly-pharmacophores we have pursued the discovery of therapeutics directed at the successful management of insulin-dependent diabetes, obesity and related diseases. We have coined the term “chemical biotechnology” to reflect the integration of classical small and large molecule-based chemistries. The integrated pharmacology of these peptides, proteins and nuclear hormones has provided a library of medicinal agents to be interrogated in cardio-metabolic diseases

References

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