



## Preface

This special issue of *Life Sciences* stems from a symposium entitled “Stimulants and Other Drugs of Abuse and Their Effects on Neuropeptides and the Peptidergic Systems” held June 28–29, 2002 at Marco Island, Florida.

The symposium was the result of the rapid emergence of information on the actions of drugs of abuse, especially stimulants, on neuropeptidergic systems. It was the aim of the National Institute of Drug Abuse (NIDA), who sponsored the symposium, to bring together chemists, biochemists, molecular biologists, physiologists and pharmacologists. These investigators came together with a common interest in drugs of abuse to share their latest research on the mechanisms by which these drugs can alter the function of neuropeptidergic systems. Their studies also help to identify the specific gaps in our knowledge and to determine areas which may prove fruitful for future investigation.

This issue contains many of the key elements of the presentations that formed the symposium. Many of the presentations focused on the mechanistic intersection of the effects of drugs of abuse on monoaminergic systems and the integration of these actions with diverse neuropeptidergic systems including galanin, NPY, neurotensin, nociceptin/OFQ, substance P, cholecystokinin, opioids, CART, orexins/hypocretins, somatostatins, melanocortins, CGRP and CRF. Discussion focused on neuropeptide biosynthesis, peptide receptor types and subtypes, peptidic and non-peptidic ligands for the receptors, structure activity relationships, and resulting physiological pathophysiological changes in these systems elicited by drugs of abuse. The goal of the discussion was to identify rational approaches that might eventually be employed for therapy.

The success of the symposium was the result of the outstanding presentations and discussions by investigators who are leading the field with current contributions that are unraveling the complex brain mechanisms by which drugs of abuse produce their effects. It is hoped that the contributions presented in this special issue of *Life Sciences* will stimulate further investigation which may help identify approaches that can rapidly translate to treatment of drug abuse in humans.

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