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ABSTRACTS

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BEHAVIORAL CONSEQUENCES OF ACTIVATION AND ANTAGONISM AT THE PCP/NMDA RECEPTOR COMPLEX. Robert L. Balster. Medical College of Virginia, Virginia Commonwealth University, Richmond, VA.
(Abstract not available)

INVITED ADDRESS
Chair: *Nancy A. Ator*, The Johns Hopkins University School of Medicine, Baltimore, MD

COCAINE RECEPTORS; SIGNIFICANCE FOR PSYCHOPHARMACOLOGY. Roger D. Spealman. New England Regional Primate Research Center, Harvard Medical School, Southborough, MA.
(Abstract not available)

INVITED ADDRESS
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ALCOHOL EFFECT AND SEX HORMONES IN MAN AND WOMAN. Jack E. Mendelson. Alcohol and Drug Abuse Research Center, Belmont, MA.
(Abstract not available)

NEW FELLOWS ADDRESS
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MOTIVATIONAL DETERMINANTS OF ALCOHOL USE: A THEORY AND ITS APPLICATIONS. W. Miles Cox. North Chicago VA Medical Center, University of Health Services, The Chicago Medical School, North Chicago, IL.

The motivational model of alcohol uses conceptualizes the biological, psychological, and environmental determinants of alcohol use as feeding through a motivational pathway. The motivation to drink depends on the balance between the satisfaction that a person expects to find by drinking alcohol and the emotional satisfaction that he or she expects to obtain nonchemically. One set of factors affecting drinking is a person's nonchemical positive incentives (that enhance positive affect) and nonchemical negative incentives (that intensify negative affect). Systematic Motivational Counseling focuses on alcoholics' nonchemical incentives, aiming to maximize the emotional satisfaction that they derive from them, thereby reducing their motivation to seek emotional satisfaction by drinking alcohol.

BEHAVIORAL EFFECTS OF NICOTINE: INTERACTIONS WITH EXPERIENCE. Charles Ksir. University of Wyoming, Laramie, WY.

When rats are given injections of nicotine and their activity is monitored by any of several means, the effect of an initial dose of nicotine in the range 0.1 to 0.4 mg/kg depends upon whether the rats had previously been adapted to the test environment. Since rats not adapted to the environment show higher activity levels under control conditions, we may interpret this as demonstrating the drug effect's dependence on the baseline activity level. If the injections are repeated once per day for five days, then nicotine produces a consistent, dose-related "stimulant" effect (increased locomotor activity).

NEW FELLOWS ADDRESS
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DISCRIMINATIVE STIMULUS EFFECTS OF DRUGS ACTIVE AT THE BENZODIAZEPINE/GABA COMPLEX. Nancy A. Ator. The Johns Hopkins University School of Medicine, Baltimore, MD.
(Abstract not available)

THE EFFECTS OF DRUGS ON SUPPRESSED RESPONDING. John R. Glowa. National Institute of Mental Health, Bethesda, MD.

Drugs that increase suppressed responding are effective anxiolytics in clinical settings. The high correlation between these two behavioral effects of anxiolytic drugs has maintained an interest in obtaining a better understanding of behavioral and pharmacological mechanisms associated with these effects. Such an understanding may lead to better drugs and better strategies to treat the clinical phenomenon for which they are taken. Currently, the most widely prescribed anxiolytic is the 1,4 dibenzodiazepine, alprazolam (Xanax). The effects of alprazolam on various types of suppressed responding, and in different species, are compared. Studies designed to assess (a) the ability of alprazolam to serve as a discriminative stimulus, especially under conditions where responding is suppressed, and (b) the ability of stimuli associated with the precipitated withdrawal from chronic alprazolam administration to serve as noxious stimuli, are described. Studies that contrast the effects of drugs on the development of response suppression and established responding that is suppressed are discussed. These studies are discussed in terms of potential behavioral mechanisms of anxiolytic drug action. Studies assessing potential serotonergic, cholinergic, noradrenergic, and GABAergic mechanisms associated with the behavioral effects of alprazolam are reviewed to emphasize the complexity of systems involved in the actions of drugs on suppressed responding. Finally, the notion that clinically related changes in physiological systems may set the occasion for some of the behavioral effects of anxiolytic drugs on suppressed responding is entertained. The study of the behavioral pharmacology of response suppression has been fundamental in