

## TABLE OF CONTENTS

### **PLENARY SESSION**

<b>President's Comments: Behavioral Science is Fundamental to Drug Abuse Research and Treatment</b> <i>George E. Bigelow</i> .....	1
<b>Drug Abuse and Addiction Research: Opportunities for Progress in 1995</b> <i>Alan I. Leshner</i> .....	6
<b>Introduction to the Nathan B. Eddy Memorial Award Recipient</b> <i>J. V. Brady</i> .....	16
<b>The Nathan B. Eddy Lecture: Science, Policy, Happenstance</b> <i>J. H. Jaffe</i> .....	18

### **SYMPOSIUM I**

<b>The Relationship of Science to Drug Abuse Policy</b> .....	33
<b>Titles and Participants</b> <i>Chairpersons: C. R. Schuster and S. W. Gust</i>	
<b>Does Science Really Inform the Making of Substance Abuse Policy?</b> <i>H. Kleber</i>	
<b>Formulating Drug Policy: A View from Congress</b> <i>R. H. Weich</i>	
<b>Scientists and Policymakers: Strange Bedfellows</b> <i>A. L. Solarz</i>	
<b>Discussant</b> <i>M. Kleiman</i>	

### **SYMPOSIUM II**

<b>Update on Opioid Receptor Cloning: Implications for Research on Addiction</b> .....	37
<b>Titles and Participants</b> <i>Chairpersons: M. J. Kreek and E. Simon</i>	
<b>Characterization of Opioid Receptors at the Molecular Level</b> <i>C. Evans</i>	
<b>Human Opiate Receptors and Their Genes</b> <i>G. Uhl; J. Wang; P. Johnson; Y. Imai; D. Walther; J. M. Wu; W. Wang; and A. Moriwaki</i>	
<b>Opioid Receptors: Molecular Cloning and Cellular Function</b> <i>Lei Yu</i>	

**Genomic Structure and Analysis of Promoter Sequence of a Mouse Mu Opioid Receptor Gene**

*B. H. Min; L. B. Augustin; R. F. Felsheim; J. A. Fuchs; and H. Loh*

**Mapping and Modulation of Opioid Receptor Gene Expression**

*M. J. Kreek*

**Quantitation and Localization of Opioid Receptor Gene Expression**

*C. Inturrisi*

**Historical Summary of NIDA Supported Opioid Research: A Tribute to NIDA on its 20th Anniversary**

*E. J. Simon*.....42

***SYMPOSIUM III***

**Drug Abuse and the Health of Women .....45**

**Titles and Participants**

*Chairpersons: L P. Finnegan and M. J. Kreek*

**Epidemiology of Drug Abuse Among Women**

*Z. Sloboda*

**Infectious Disorders in Drug Abusing Women**

*H. Haverkos*

**Endocrine Changes and Drug Abuse in Women**

*M. J. Kreek and N. Mello*

**Psychopathology, Life Events and Treatment - History of Female Drug Abusers**

*L. B. Cottler*

**The Impact of Drug Abuse on Children**

*D. Frank*

***SYMPOSIUM IV***

**Affective Disorders and Substance Abuse: From Bench to Bedside and Back .....49**

**Titles and Participants**

*Chairpersons: T. R. Kosten*

**Common Genetic Mechanisms in Depression and Substance Abuse**

*R. W. Pickens*

**Clinical Studies on the Relationship of Affective Disorders to Substance Abuse**

*T. R. Kosten*

**Co-vulnerability Between Affective Disorders and Substance Abuse: Preclinical Perspectives**

*E. Gardner*

**Post-Drug Elevations in Reward Thresholds as an Animal Model of Affective Disorders**

*A. Markou and G. Koob*

**SYMPOSIUM V**

*Young Investigator's Symposium*

**Environmental Modulation of Drug Effects.....53**

**Titles and Participants**

*Chairpersons: J. Kamien and L. Amass*

**Environmental Determinants of the Neurochemical Effects of Drugs**

*S. L. Vrana*

**Environmental Modulation of the Discriminative Stimulus Effects of Drugs**

*J. B. Kamien*

**Environmental Modulation of the Reinforcing Effects of Drugs**

*M. A. Nader*

**Environmental Modulation of the Subject-Rated Effects of Drugs**

*C. R. Rush*

**Environmental Modulation of Drug Effects in Drug Abuse Treatment**

*L. Amass*

**SYMPOSIUM VI**

**Brain Imaging in Substance Abuse.....58**

**Titles and Participants**

*Chairpersons: C. P. O'Brien and A. R. Childress*

**Brain Metabolism in Substance Abuse**

*E. London*

**Fluoro-dopa Studies of Human and Animal Cocaine Abuse**

*L. Baxter, Jr.*

**EEG Brain Mapping of Drug-Induced Intoxication**

*S. Lukas*

**Dopaminergic Involvement in Cocaine Dependence**

*N. Volkow*

**SPECT Imaging of DA Transporters in Cocaine Dependence with**

**[<sup>123</sup>I]β-CIT**

*R. Malison*

**Brain Imaging During Drug-Craving States**

*A. R. Childress*

**Discussant**

*C. P. O'Brien*

**SYMPOSIUM VII**

**Dr. Franklin M. Robinson Memorial Symposium**

**Medicinal Chemistry in Drug Abuse Research.....63**

**Titles and Participants**

**Chairpersons: A. H. Newman and K. C. Rice**

**In Memoriam**

*P. S. Anderson*

**A Tribute to Dr. Frank Robinson**

*K. C. Rice*

**Interaction of Nonpeptidal Ligands at Opioid Receptor Sites**

*P. Portoghese*

**Development of Selective Nonpeptide Ligands for Further  
Characterization of Delta Opioid Receptors**

*S. Calderon*

**Opioids - From Analgesics to Addict Treatments**

*J. Lewis*

**Substituted 3-Carbamoylcegonine Methyl Ester Analogues: Novel Probes  
for the Cocaine Recognition Site on the Central Dopamine Transporter**

*R. Kline*

**Studies of Conformationally Constrained Phenethylamines**

*P. Anderson*

**Novel  $\alpha$ -Diphenylmethoxytropine Analogs are Potent Dopamine Uptake  
Inhibitors Without a Cocaine-Like Behavioral Profile**

*A. H. Newman*

**SYMPOSIUM VIII**

**Is There a Dose-Response Curve for Psychosocial Services?.....71**

**Titles and Participants**

**Chairpersons: J. A. Hoffman and B. W. Fletcher**

**Effects of Amount of Services on Outcomes During Treatment:  
Preliminary Analysis from Two National Studies of Community-Based  
Treatment Programs**

*R. L. Hubbard; R. M. Etheridge; S. G. Craddock; and  
G. Dunteman*

**Psychosocial Treatments for Cocaine Abuse: Treatment Intensity as  
a Predictor of Long-Term Clinical Outcomes**

*J. A. Hoffman; B. D. Caudill; J. Koman, III; J. W. Lucke;  
P. M. Flynn; and D. W. Mayo*

**Dose-Response Studies of Psychosocial Services During Substance  
Abuse Treatment**

*A. T. McLellan*

**SYMPOSIUM IX**

**Etiology, Epidemiology and Natural History of Heroin Addiction:  
A Social Science Approach .....74**

**Titles and Participants**

*Chairpersons: J. C. Ball and D. N. Nurco*

**Sociology of Drug Abuse in Contemporary America**

*R. R. Clayton*

**Social Pathology and the Onset of Heroin Addiction**

*D. N. Nurco*

**Special Treatment Needs of Female Opiate Addicts**

*T. A. Hagan*

**Characteristics of Patients in Methadone Maintenance Programs in the  
United States**

*J. C. Ball and G. A. Groves*

**SYMPOSIUM X**

**Buprenorphine: Current Status for the Treatment of Opioid  
Dependence .....79**

**Titles and Participants**

*Chairpersons: W. K. Bickel and M. L. Stitzer*

**Clinical Pharmacology of Buprenorphine**

*M. L. Stitzer*

**Buprenorphine as a Detoxification Agent**

*R. E. Johnson*

**Routes of Prior Opiate Administration: Effects on Outcome Variables  
in the NIDA/MDD #999a Buprenorphine Multicenter Study**

*D. L. Segal and J. L. Hill*

**Improving Buprenorphine Outcomes with Behavioral Treatment**

*W. K. Bickel, L. Amass, and S. T. Higgins*

**ANNUAL REPORTS**

**Biological Evaluation of Compounds for Their Physical Dependence  
Potential and Abuse Liability. XVIII. Drug Evaluation Committee of  
the College on Problems of Drug Dependence, Inc. (1994)**

*A. E. Jacobson ..... 84*

**Progress Report from the Testing Program for Stimulant and  
Depressant Drugs (1994)**

*G. Winger; L. Woolverton; J. K. Rowlett; J. A. English;  
G. A. Patrick; M. A. Nader; R. E. McDaniel; W. T. Hawkins;  
B. W. Massey; L. S. Harris; and J. H. Woods .....105*

<b>Evaluation of New Compounds for Opioid Activity (1994)</b> <i>J. H. Woods; F. Medzihradsky; C. B. Smith; C. P. France; and G. Winger</i> .....	117
<b>Dependence Studies of New Compounds in the Rhesus Monkey, Rat and Mouse (1994)</b> <i>M. D. Aceto; E. R. Bowman; L. S. Harris; and E. L. May</i> .....	162
<b>Subject Index</b> .....	213
<b>Author Index</b> .....	226