

**PHARMACOLOGY BIOCHEMISTRY
&
BEHAVIOR**

Index to

VOLUME 25 1986

VOLUME 25 1986

SUBJECT INDEX

- Abrupt refeeding, 623
food deprivation
phentermine
self-administration
- Acarbose, 491
dietary starch
intestinal distention
- Acetylcholine release, 943
drug interactions
locomotor activity
N-methyl aspartate
- Acoustic startle, 1175
amphetamine
cocaine
cross-tolerance
habituation
phencyclidine (PCP)
sensitization
tolerance
- Acute administration
aggression, 1195
antipsychotic drugs, 897
chronic administration, 897, 1195
magnesium, 1195
spontaneous chewing movements, 897
tardive dyskinesia, 897
tolerance, 1195
- Acylation phenylcyclidines, 51
calcium antagonist binding
drug interactions
- Adenosine receptors, 769
hypothermia
inbred strains
locomotor activity
methylxanthines
theobromine
- Adenylate cyclase, 223
³H-cyclic AMP
norepinephrine (NE)
REM sleep deprivation
- Adipsia, 17
amphetamine
anorexia
dopamine terminal area
- Adjunctive consumption
alcohol, 1159, 1163
drinking, 1159, 1163
extinction, 1159, 1163
lithium, 1159, 1163
shock, 1163
stress, 1163
water, 1159
- Adrenal cortex, 753
adrenocorticotrophin 1-24 (ACTH 1-24)
corticosterone synthesis
steroidogenesis
- alpha₂-Adrenergic antagonists, 155
amphetamine
in vivo
locomotor activity
stereotypy
- Adrenergic receptors
clonidine, 989
continuous infusion, 989
dopamine receptors, 763
drug interactions, 989
marijuana, 763
naloxone, 989
opiate abstinence syndrome, 989
perinatal exposure, 763
tyrosine hydroxylase activity, 763
- Adrenoceptors, 329
antidepressants
³H-dihydroalprenolol binding
³H-prazosin
REM sleep deprivation
alpha Adrenoceptors, 903
cerebral cortex
cold exposure
 α_1 -Adrenoceptors, 743
 β -adrenoceptors
functional sensitivity
noradrenergic denervation
N-(2-chloroethyl)-N-ethyl-2-bromobenzylamine (DSP-4)
- β -Adrenoceptors, 743
 α_1 -adrenoceptors
functional sensitivity
noradrenergic denervation
N-(2-chloroethyl)-N-ethyl-2-bromobenzylamine (DSP-4)
- Adrenocorticotrophin 1-24 (ACTH 1-24), 753
adrenal cortex
corticosterone synthesis
steroidogenesis
- Age differences
antinociception, 599
avoidance conditioning, 673
cats, 359
locomotor activity, 599
maze learning, 673
memory, 673
morphine, 599
phencyclidine (PCP) metabolites, 359
scopolamine, 673
tolerance, 359
- Aggression
acute administration, 1195
bull breeds, 71
chronic administration, 1195
limbic system, 71
magnesium, 1195
neurotransmitter amino acids, 71
tolerance, 1195
- Alcohol
adjunctive consumption, 1159, 1163
drinking, 1159, 1163
extinction, 1159, 1163
lithium, 1159, 1163
shock, 1163
stress, 1163
water, 1159
- Alcohol dehydrogenase, 1013
alcohol elimination rate
alcohol-preferring rats
free-choice drinking
metabolic tolerance
- Alcohol elimination rate, 1013
alcohol dehydrogenase
alcohol-preferring rats
free-choice drinking
metabolic tolerance
- Alcohol-preferring rats, 1013
alcohol dehydrogenase
alcohol elimination rate
free-choice drinking
metabolic tolerance
- Alternation, 29
amphetamine
locomotor excitation
perseveration
- Ambient temperature, 667
chronic administration
ethanol
hypothermia, ethanol-induced tolerance
- Amnesia
anisomycin, 567
cycloheximide, 567
drug interactions, 567, 925
hemicholinium-3, 925
naloxone, 567
passive avoidance, 567
piracetam-like compounds, 925
shuttle avoidance, 567
- Amphetamine
acoustic startle, 1175
adipsia, 17
alpha₂-adrenergic antagonists, 155
alternation, 29
anorexia, 17
anorexia, drug induced, 711
cocaine, 1175
cross-tolerance, 1175
dopamine depletion, 1307
dopamine terminal area, 17
eating, 1149
eating motivation, 123
fenfluramine, 123
habituation, 1175
hyperactivity, drug induced, 711
in vivo, 155
lesions, 6-hydroxydopamine (6-OHDA), 1307
lesions, substantia nigra, 1307
locomotor activity, 115, 161, 1149
locomotor excitation, 29
metabolic rate, 161
naloxone, 123
naltrexone, 123
nucleus accumbens, 1149
perseveration, 29
phencyclidine (PCP), 1175
phenylethylamine (PEA), 711

recovery, 1307
 rotation, 1307
 satiety, 123
 sensitization, 1175
 stereotypy, 155
 tolerance, 1175
Amphetamine-induced hyperactivity, 919
 estrogen
 time-dependent modulation
Amphetamine self-administration
 brain catecholamines, 1027
 L-tryptophan, 849
 L-tyrosine, 1027
d-Amphetamine
 bin analysis, 145
 inter-response time, 145
 monkeys, 145
 Sidman avoidance schedule, 145
 simultaneous brightness discrimination, 939
 two stage administration, 939
Analgesia
 benzodiazepine receptors, 215
 classical conditioning, 1201
 environmental specific cues, 1201
 habituation, 1201
 morphine, 215, 1201
 snails, 1201
 stress, 1201
 tolerance, 1201
Analgesia, stress-induced, 171
 cold water swim
 hyperphagia
 hypothermia
 muscarinic agents
 pain
Analgesiometry, 481
 ear-withdrawal
 rabbits
Anesthesia, 641
 antinociception
 cardiovascular system
 [D-Ala²]-methionine enkephalinamide (DALA)
 renal sympathetic nerve
Angiotensin converting enzyme (ACE) activity, 953
 aspartic acid
 brain asparaginase
 morphine dependent rats
 naloxone
 plasma cortisol level
Anhedonia
 duration of response, 615
 force of response, 615
 haloperidol, 1231
 licking, 219
 partial reinforcement extinction effect, 1231
 pimozide, 219, 615
 response rate, 615
 reward omission, periodic, 1231
 sucrose concentration, 219
 water reinforcement, 1231
Animal model, 297
 Huntington's disease
 locomotor hyperactivity
 neural transplants
Anisomycin, 567
 amnesia
 cycloheximide
 drug interactions
 naloxone
 passive avoidance
 shuttle avoidance
Anorexia
 adipisia, 17
 amphetamine, 17
 dopamine terminal area, 17
 eating, 99
 fenfluramine, 967
 FG 7142, 99
 gastrointestinal tract, 967
 grooming, 99
 hyperphagia, 99
 locomotor activity, 99
 midazolam, 99
 opioid peptides, 967
Anorexia, drug induced, 711
 amphetamine
 hyperactivity, drug induced
 phenylethylamine (PEA)
Anticonvulsant effects, 1059
 bicuculline
 drug interactions
 GABA_A receptors
 maximal electroshock
 pentobarbital
 phenobarbital
 picrotoxin
 seizures
Antidepressants
 adrenoceptors, 329
³H-dihydroalprenolol, 329
 escape deficit, 1
 inescapable shock, 1
 intraspecies behavior, 515
 learned helplessness, 1
 locomotor activity, 515
 model of depression, 805
 pharmaco-ethological analysis, 515
³H-prazosin, 329
 REM sleep deprivation, 329
 serotonergic neurons, 1
 serotonergic receptors, 805
Antinociception
 age differences, 599
 anesthesia, 641
 cardiovascular system, 641
 drug comparisons, 835
 drug interactions, 835
 locomotor activity, 599
 [D-Ala²]-methionine enkephalinamide (DALA), 641
 morphine, 599, 835
 renal sympathetic nerve, 641
 tizanidine, 835
 tolerance, 835
Antinociceptive system, 533
 morphine
 opiate tolerance
 stimulation-produced analgesia
Antipsychotic drugs, 897
 acute administration
 chronic administration
 spontaneous chewing movements
 tardive dyskinesia
Anxiety
 anxiolytic drugs, 371
 beta-blockers, 371
 convulsions, 595
 6,7-dimethoxy, 4 ethyl β -carboline carboxylic acid methyl ester, 595
 locomotor activity, 595
 naltrexone, 595
 pigeons, 371
 propunishment, 595
 punished responding, 371
Anxiolytic drugs, 371
 anxiety
 beta-blockers
 pigeons
 punished responding
Apomorphine
 behavioral deficits, 503
 cognitive deficits, 503
 dopamine receptors, 473
 dopaminergic mechanism, 693
 exploratory behavior, 473
 lateralized rotation, 689
 neuroleptics, 473, 503
 operant behavior, 503
 postural asymmetry, 689
 shock escape mechanisms, 693
Apomorphine-induced stereotypy, 757
 dopaminergic neuron activity
 MSH-release inhibiting factor-1 (MIF-1)
 Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
Apparatus
 Animex activity meter, 411
 8-choice arena, 747
 holeboard, 473
 intracerebral cannula system, 487
 osmotic minipump, 1263
 radial arm maze, 521, 703, 747, 1117
 radiant heat apparatus, 481
 rotometer, 1021
 runway, 123
 shuttlebox, 145
 toggle-box, 289
 Y catheter, 483
 Y-maze, 29, 939
Appetite regulation, 381
 deprivation
 eating
 glucoprivic feeding
 lesions, paraventricular nucleus (PVN)
Appetite suppressants, 733
 brown adipose tissue (BAT)
 purine nucleotide binding
Appetitive learning, 651
 brain DNA
 DNA synthesis
 reverse handedness
Area postrema, 269
 conditioned taste aversion
 locomotor activity
 scopolamine
N-methyl Aspartate, 943
 acetylcholine release
 drug interactions
 locomotor activity
Aspartic acid, 953
 angiotensin converting enzyme (ACE) activity
 brain asparaginase
 morphine dependent rats
 naloxone
 plasma cortisol level
Ca⁺⁺-ATPase activity, 549
 dihydropyridine receptors
 thermoregulation
Atropine, 985
 clonidine

drug interactions
 locomotor activity
 stereotypy
Autoradiography, 1051
 discriminative stimulus properties
³H-PCP binding potency
 phencyclidine (PCP)-related compounds
Avoidance conditioning, 673
 age differences
 maze learning
 memory
 scopolamine
Avoidance learning, 469
 inhibitory avoidance
 substance P

Barrel rotation
 behavioral changes, 589
 lesions, kainic acid, 583, 589
 nicotine, 583
 prostration, 583
 receptors changes, 589
 vasopressin, 583
 vestibular cerebellum, 583
Bat/rat/mouse/hamster comparisons, 527
 brain opioid receptors
 hibernation
Behavioral analysis, 577
 caloric intake
 eating
 human studies, males
 marijuana
Behavioral changes, 589
 barrel rotation
 lesions, kainic acid
 receptor changes
Behavioral deficits, 503
 apomorphine
 cognitive deficits
 neuroleptics
 operant behavior
Behavioral despair test, 511
 H₂-receptor blockers
 naloxone
Behavioral development, 1089
 lead retention
 preweaning lead exposure
Benzodiazepine antagonists, 537
 drug interactions
 schedule-controlled behavior
Benzodiazepine receptors, 215
 analgesia
 morphine
Benzodiazepines
 brown adipose tissue (BAT), 913
 cafeteria diet, 913
 chickens, 1237
 chlordiazepoxide, 1237
 conditioned taste aversion, 431
 convulsions, 1145
 drinking, 431
 food intake, 913
 food preference, 913
 hyperactivity, 1145
 neonates, 1145
 polydipsia, 431
 tolerance, 1237
 tonic immobility, 1237
 two-bottle choice paradigm, 431
 type 2 receptors, 1145

Beta-blockers, 371
 anxiety
 anxiolytic drugs
 pigeons
 punished responding
Bicuculline, 1059
 anticonvulsant effects
 drug interactions
 GABA_A receptors
 maximal electroshock
 pentobarbital
 phenobarbital
 picrotoxin
 seizures
Bin analysis, 145
 d-amphetamine
 inter-response time
 monkeys
 Sidman avoidance schedule
Blood pressure, 423
 chemical stimulation
 heart rate
 mediodorsal nucleus of the thalamus
 rabbits
Body temperature, 1293
 diisopropylfluorophosphate (DFP)
 heart rate
 locomotor activity
 muscarinic receptors
³H-quinuclidinyl benzilate (³H-QNB)
 binding
 respiration rate
 tolerance
Body weight, 1131
 caloric intake
 nicotine
 physical activity
 rats, females
Bombesin, 7
 cholecystokinin (CCK)
 dietary self-selection
 isocaloric diets
Brain
 amygdala, 17, 95
 anterior hypothalamus, 353
 anteromedial caudate nucleus, 17
 basal ganglia, 233
 brainstem, 1253
 caudal medulla, 347
 caudate nucleus, 63, 521
 cerebellum, 555
 cerebral cortex, 1, 527, 743, 763, 903
 cochlear nucleus, 347, 353
 corpus striatum, 943
 cortex, 329, 521, 555, 1293
 dorsal hippocampus, 717
 dorsal raphe nucleus, 717, 1211
 entorhinal cortex, 651
 fourth ventricle, 843
 globus pallidus, 233
 hippocampus, 1, 347, 423, 521, 651,
 743, 781, 797, 1137, 1293
 hypothalamus, 95, 381, 411, 527, 549,
 555
 lateral habenula nuclei, 717
 lateral hypothalamus (LH), 59, 629
 lateral ventricle, 411
 locus coeruleus, 1211
 magnocellular basal forebrain, 293
 medial forebrain bundle, 629
 medial frontal cortex, 17
 medial hypothalamus, 401, 1223

 medial prefrontal cortex, 191
 medial septum, 521
 median raphe nucleus, 717, 1211
 midbrain central grey, 857
 midbrain raphe, 1
 midmesencephalon, 347
 nodular cerebellum, 583, 589
 nucleus accumbens, 17, 63, 263, 943,
 1095, 1149
 nucleus accumbens septi, 1027
 nucleus basalis magnocellularis, 521
 olfactory tubercle, 63
 paramedian brainstem, 347
 paraventricular nucleus (PVN), 381,
 1223
 pituitary, 967
 pontine reticular formation (PRF), 1253
 prefrontal cortex, 717
 preoptic region, 353
 right frontoparietal cortex, 263
 septum, 95, 797
 somatosensory cortex, 607
 striatum, 1, 297, 763, 865, 1027, 1095,
 1293
 substantia nigra, 317, 1307
 thalamus, 423
 ventral striatum, 233
 ventral tegmental area, 959
 ventrolateral caudate nucleus, 17
 ventromedial hypothalamus (VMH), 59
 vestibular cerebellum, 583
 visual cortex, 651
Brain asparaginase, 953
 angiotensin converting enzyme (ACE)
 activity
 aspartic acid
 morphine dependent rats
 naloxone
 plasma cortisol level
Brain catecholamines, 1027
 amphetamine self-administration
 L-tyrosine
Brain DNA, 651
 appetitive learning
 DNA synthesis
 reverse handedness
Brain iron-deficiency, 141
 learning
 water maze
Brain monoamines, 401
 hyperphagia
 lesions, medial hypothalamus
 obesity
Brain noradrenergic system, 411
 l-erythro-dihydroxyphenylserine
 (L-erythro-DOPS)
 locomotor activity
Brain opioid receptors, 527
 bat/rat/mouse/hamster comparisons
 hibernation
Brain stimulation, 629
 drug interactions
 nalbuphine
 reward threshold
 triplennamine
Brown adipose tissue (BAT)
 appetite suppressants, 733
 benzodiazepines, 913
 cafeteria diet, 913
 food intake, 913
 food preference, 913
 purine nucleotide binding, 733

- Buccal mucosa, 1181
 human studies
 nicotine absorption
 passive smoking
- Bull breeds, 71
 aggression
 limbic system
 neurotransmitter amino acids
- Buspirone, 457
 corticosterone secretion
 prolactin secretion
 stress
- BW813U, 521
 choline acetyltransferase (ChAT)
 inhibitor
 radial maze performance
 spatial memory
- Cafeteria diet, 913
 benzodiazepines
 brown adipose tissue (BAT)
 food intake
 food preference
- Caffeine, 1271
 locomotor activity
 strain differences
 theophylline
- Calcium antagonist binding, 51
 acylating phencyclidines
 drug interactions
- Calcium antagonists, 45
 drug interactions
 motor activity
 phencyclidine (PCP)
- Calcium channel antagonists, 555
 drug interactions
 hyperthermia
 thermoregulation
- Caloric intake
 behavioral analysis, 577
 body weight, 1131
 eating, 577
 human studies, males, 577
 marijuana, 577
 nicotine, 1131
 physical activity, 1131
 rats, females, 1131
- Cannabidiol, 89
 cats
 electrophysiological properties
 spinal motoneurons
 synaptic effects
- Carbon monoxide exposure, 1245
 filter vent blocking
 human studies
 smoking topography
 tobacco
- Cardiovascular system, 641
 anesthesia
 antinociception
 $[D\text{-Ala}^2]\text{-methionine enkephalinamide}$
 renal sympathetic nerve
- Cataleptic behavior, 463
 drug interactions
 neuroleptics
 prostaglandins
- Catecholamines, 949
 α -methyl-p-tyrosine
 6-hydroxydopamine (6-OHDA)
 seizures, pentylenetetrazol (PTZ)
 induced
- I-Cathinone
 chronic administration, 13
 dopaminergic neuronal systems, 337
 drug discrimination, 13, 337
 drug interactions, 337
 tolerance, 13
- Cats
 age differences, 359
 cannabidiol, 89
 electrophysiological properties, 89
 phencyclidine (PCP) metabolites, 359
 spinal motoneurons, 89
 synaptic effects, 89
 tolerance, 359
- Cerebral cortex, 903
 alpha adrenoceptors
 cold exposure
- CGS 8216
 drinking, 341
 drug interactions, 439
 ethanol, 439
 naltrexone, 439
 saccharin consumption, 341
 shock avoidance, 439
 timeout from avoidance, 439
- Chemical stimulation, 423
 blood pressure
 heart rate
 mediodorsal nucleus of the thalamus
- Chickens, 1237
 benzodiazepines
 chlordiazepoxide
 tolerance
 tonic immobility
- Chicks, 823
 memory
 testosterone
- Chlordiazepoxide
 benzodiazepines, 1237
 chickens, 1237
 sodium valproate, 747
 spatial behavior, 747
 tolerance, 1237
 tonic immobility, 1237
- Chlordiazepoxide-induced sleep, 1077
 GABAergic drugs
 selective breeding
- N-(2-Chloroethyl-N-ethyl-2-bromobenzylamine (DSP-4), 743
 α -adrenoceptors
 β -adrenoceptors
 functional sensitivity
 noradrenergic denervation
- Cholecystokinin (CCK)
 bombesin, 7
 dietary self-selection, 7
 hamsters, 1067
 hyperactivity, 1067
 hypoactivity, 1067
 isocaloric diets, 7
 morphine, 1067
- Cholesterol, 1285
 dietary manipulation
 essential fatty acids
 ethanol preference
 hamsters
 retinal palmitate
- Choline acetyltransferase (ChAT)
 inhibitor, 521
 BW813U
 radial maze performance
 spatial memory
- Cholinesterase inhibition, 1071
 clinical chemistry
 heat
 pyridostigmine
 thermoregulation
- Cholinesterase inhibitors, 1217
 perioral behaviors
 physostigmine
 tardive dyskinesia
- Cholinomimetics, 1253
 chronic microinfusion
 rapid eye movement (REM) sleep
- Chronic administration
 acute administration, 897, 1195
 aggression, 1195
 ambient temperature, 667
 antipsychotic drugs, 897, 1195
 I-cathinone, 13
 dopamine receptors, 129
 drug discrimination, 13
 ethanol, 667
 hypothermia, ethanol-induced, 667
 magnesium, 1195
 motor activity, 129
 phenylethylamine, 129
 sensitization, 129
 spontaneous chewing movements, 897
 tardive dyskinesia, 897
 tolerance, 13, 667, 1195
- Chronic infusion, 483
 intrathecal injection
 tolerance
- Chronic microinfusion, 1253
 cholinomimetics
 rapid eye movement (REM) sleep
- Circadian rhythm, 333
 sedation hypnosis
 sleep time
 strain differences
- Circling behavior, 1021
 locomotor activity
 prenatal alcohol exposure
- Circling, opiate-induced, 959
 dopaminergic system
 opiate receptors
 ventral tegmental area
- Classical conditioning
 analgesia, 1201
 cross tolerance, 35
 drug reinforcement, 1169
 environmental specific cues, 1201
 ethanol, 35
 exploratory behavior, 1169
 habituation, 1169, 1201
 morphine, 1169, 1201
 place preference, 1169
 snails, 1201
 sodium pentobarbital, 35
 stress, 1201
 stress-induced analgesia, 181
 tail flick, 181
 tolerance, 1201
- Clinical chemistry, 1071
 cholinesterase inhibition
 heat
 pyridostigmine
 thermoregulation
- Clonidine
 adrenergic receptors, 989
 atropine, 985
 continuous infusion, 989
 drug interactions, 985, 989

- eating, 1107
- hamsters, 1107
- locomotor activity, 985
- naloxone, 989
- opiate abstinence syndrome, 989
- stereotypy, 985
- Cocaine**
 - acoustic startle, 1175
 - amphetamine, 1175
 - cross-tolerance, 1175
 - habituation, 1175
 - haloperidol, 497
 - lesions, neurotoxic, 191
 - medial prefrontal cortex, 191
 - phencyclidine (PCP), 1175
 - presynaptic dopaminergic terminal, 191
 - self-administration, 497
 - self-administration, intracranial, 191
 - sensitization, 1175
 - sex differences, 497
 - tamoxifen, 497
 - tolerance, 1175
- Cochlear nucleus (CN), 353
 - prostaglandin (PGE₁)
 - pyrexia
- Cognitive deficits, 503
 - apomorphine
 - behavioral deficits
 - neuroleptics
 - operant behavior
- Cold exposure, 903
 - alpha adrenoceptors
 - cerebral cortex
- Cold-restraint stress, 775
 - gastric ulceration
 - motility
- Cold water swim, 171
 - analgesia, stress-induced
 - hyperphagia
 - hypothermia
 - muscarinic agents
 - pain
- Conditioned aversions, 973
 - drug-paired stimuli
 - lever pressing
 - lithium chloride (LiCl)
 - monkeys
- Conditioned hyperactivity hypothesis, 83
 - drug interactions
 - thermic response shifts
- Conditioned place aversion, 1041
 - conditioned place preference
 - locomotor activity
 - nicotine
- Conditioned place preference
 - conditioned place aversion, 1041
 - drug reinforcement, 1101
 - locomotor activity, 1041
 - morphine, 1101
 - nicotine, 1041
 - single-trial, 1101
- Conditioned taste aversion
 - area postrema, 269
 - benzodiazepines, 431
 - drinking, 431
 - duration of action, 995
 - locomotor activity, 269
 - polydipsia, 431
 - scopolamine, 269
 - temporal analysis, 995
 - tryptamine, 995
 - two-bottle choice paradigm, 431
- Consolidation**, 1125
 - memory effects, time related
 - passive avoidance behavior
 - retrieval
 - vasopressin
 - vasopressin analogues
- Continuous infusion, 989
 - adrenergic receptors
 - clonidine
 - drug interactions
 - naloxone
 - opiate abstinence syndrome
- Convulsions**
 - anxiety, 595
 - benzodiazepines, 1145
 - 6,7-dimethyl, 4 ethyl β-carboline carboxylic acid methyl ester, 595
 - hyperactivity, 1145
 - locomotor activity, 595
 - naltrexone, 595
 - neonates, 1145
 - propunishment, 595
 - type 2 receptors, 1145
- Corticosterone**, 107
 - oxytocin
 - psychological stressor
- Corticosterone secretion, 457
 - buspirone
 - prolactin secretion
 - stress
- Corticosterone synthesis, 753
 - adrenal cortex
 - adrenocorticotrophin 1–24 (ACTH 1–24)
 - steroidogenesis
- Cross tolerance**
 - acoustic startle, 1175
 - amphetamine, 1175
 - classical conditioning, 35
 - cocaine, 1175
 - ethanol, 35
 - habituation, 1175
 - phencyclidine (PCP), 1175
 - sensitization, 1175
 - sodium pentobarbital, 35
 - tolerance, 1175
- ³H-Cyclic AMP, 223
 - adenylate cyclase
 - norepinephrine (NE)
 - REM sleep deprivation
- Cyclo (leucyl-glycyl) (cLG), 1279
 - dopamine receptors
 - haloperidol
 - stereotypy, apomorphine-induced
 - supersensitivity
- Cycloheximide, 567
 - amnesia
 - anisomycin
 - drug interactions
 - naloxone
 - passive avoidance
 - shuttle avoidance
- Cytisine, 843
 - dogs
 - fourth ventricle
 - high/low affinity sites
 - 2-methylpiperidine
 - nicotine
- D₂ receptors, 1185
 - dopamine
- internal clock speed
- neuroleptics
- time estimation
- Deer mouse**, 543
 - food hoarding
 - ingestion
 - opiate agonists
- Defensive behavior, 561
 - diazepam
 - environmental constraints
 - fear reactions
- Delayed-matching-to-sample, 929
 - drug interactions
 - phenobarbital
 - phenytoin
 - pigeons
 - valproic acid
- Delayed performance, 201
 - monkeys
 - phencyclidine (PCP)
 - repeated acquisition
 - response chains
 - retention
- Delayed response, 633
 - discrimination
 - response bias
 - scopolamine
 - working memory
- 2-Deoxy-D-glucose
 - feeding behavior, 59
 - glucoprivation, 1153
 - hyperphagia, 59
 - hypophagia, 1153
 - lateral hypothalamus, 59
 - liquid diet, 1153
 - 5-thioglucose, 59
 - ventromedial hypothalamus, 59
 - water deprivation, 1153
- Deprivation**
 - appetite regulation, 381
 - eating, 381, 1223
 - glucoprivic feeding, 381
 - lesions, paraventricular nucleus (PVN), 381
 - medial hypothalamus, 1223
 - norepinephrine (NE), 1223
 - paraventricular nucleus (PVN), 1223
 - serotonin, 1223
- Diazepam, 561
 - defensive behavior
 - environmental constraints
 - fear reactions
- Dietary manipulation, 1285
 - cholesterol
 - essential fatty acids
 - ethanol preference
 - hamsters
 - retinol palmitate
- Dietary self-selection, 7
 - bombesin
 - cholecystokinin (CCK)
 - isocaloric diets
- Dietary starch, 491
 - acarbose
 - intestinal distention
- Differential reinforcement of low rate of response (DRL), 1191
 - fixed ratio performance
 - operant behavior
 - 3-quinuclidinyl benzilate (QNB)
 - schedule dependent effects
- ³H-Dihydroalprenolol binding, 329
 - adrenoceptors

- antidepressants
- ³H-prazosin
- REM sleep deprivation
- Dihydropyridine receptors, 549
- Ca⁺⁺-ATPase activity
- thermoregulation
- Diisopropylfluorophosphate (DFP), 1293
 - body temperature
 - heart rate
 - locomotor activity
 - muscarinic receptors
 - ³H-quinuclidinyl benzilate (³H-QNB) binding
 - respiration rate
 - tolerance
- 6,7-Dimethyl, 4 ethyl β -carboline carboxylic acid methyl ester (DMCM), 595
 - anxiety
 - convulsions
 - locomotor activity
 - naltrexone
 - propunishment
- Diphenhydramine, 365
 - driving related tasks
 - human studies, males
 - plasma levels
- Discrimination, 633
 - delayed response
 - response bias
 - scopolamine
 - working memory
- Discriminative stimulus properties, 1051
 - autoradiography
 - ³H-PCP binding potency
 - phencyclidine (PCP)-related compounds
- Diurnal cycle, 293
 - lesions, nucleus basalis
 - magnocellularis
 - locomotor activity
- DNA synthesis, 651
 - appetitive learning
 - brain DNA
 - reverse handedness
- Dogs, 843
 - cytisine
 - fourth ventricle
 - high/low affinity sites
 - 2-methylpiperidine
 - nicotine
- DOPAC concentrations, 63
 - electrical stimulation
 - intracranial self-stimulation
 - in vivo
 - nigro-striatal pathway
- DOPAC/DA ratio, 865
 - dopamine release
 - striatal dopamine system
 - unilateral barpressing
- Dopamine, 1185
 - D₁ receptors
 - internal clock speed
 - neuroleptics
 - time estimation
- Dopamine agonists, 249
 - dopamine antagonists
 - locomotor activity
- Dopamine antagonists, 249
 - dopamine agonists
 - locomotor activity
- Dopamine autoreceptor agonists, 255
 - exploratory activity
 - locomotor activity, drug-induced
- Dopamine depletion, 1307
 - amphetamine
 - lesions, 6-hydroxydopamine (6-OHDA)
 - lesions, substantia nigra
 - recovery
 - rotation
- Dopamine metabolism, 1095
 - feeding behavior
 - ingestion
 - nucleus accumbens
 - striatum
- Dopamine receptors
 - adrenergic receptors, 763
 - apomorphine, 473
 - chronic administration, 129
 - cyclo (leucyl-glycyl) (cLG), 1279
 - exploratory behavior, 473
 - haloperidol, 1279
 - marijuana, 763
 - motor activity, 129
 - neuroleptics, 473
 - perinatal exposure, 763
 - phenylethylamine (PEA), 129
 - sensitization, 129
 - stereotypy, apomorphine-induced, 1279
 - supersensitivity, 1279
 - tyrosine hydroxylase activity, 763
- Dopamine release, 865
 - DOPAC/DA ratio
 - striatal dopamine system
 - unilateral barpressing
- Dopamine systems, 1117
 - LY 171555
 - radial arm maze
- Dopamine terminal area, 17
 - adipsia
 - amphetamine
 - anorexia
- Dopaminergic mechanisms, 693
 - apomorphine
 - shock escape learning
- Dopaminergic neuron activity, 757
 - apomorphine-induced stereotypy
 - MSH-release inhibiting factor-1 (MIF-1)
 - Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
- Dopaminergic neuronal systems, 337
 - l-cathinone
 - drug discrimination
 - drug interactions
- Dopaminergic system, 959
 - circling, opiate-induced
 - opiate receptors
 - ventral tegmental area
- Dose-dependent effects, 1207
 - drug discrimination
 - 5-methoxy-N,N-dimethyltryptamine (5-OMe DMT)
 - serotonin antagonists
 - stimulus properties
- Drinking
 - adjunctive consumption, 1159, 1163
 - alcohol, 1159, 1163
 - benzodiazepines, 431
 - CGS 8216, 341
 - conditioned taste aversion, 431
 - extinction, 1159, 1163
 - hamsters, 449
 - high-caloric fluids, 449
- lithium, 1159, 1163
- morphine, 1001
- naloxone, 697
- naloxone-precipitated withdrawal, 1001
- opioid agonists, 77
- palatability, 697
- physical dependence, 1001
- polydipsia, 431
- reproduction, 449
- saccharin consumption, 341
- satiation, 697
- sequential presentation, 697
- shock, 1163
- social stress, 449
- stress, 1163
- sucrose, 1001
- two-bottle choice paradigm, 431
- water, 1159
 - water balance, 77
- Driving related tasks, 365
 - diphenhydramine
 - human studies, males
 - plasma levels
- Drug
 - alcohol, 1159, 1163
 - amino-oxyacetic acid, 1077
 - aminophosphonovaleric acid, 943
 - amisulpride, 503
 - ammonium sulfate, 161
 - amphetamine, 17, 129, 155, 161, 277, 515, 711, 919, 1149, 1175, 1307
 - d-amphetamine, 29, 123, 145, 255, 297, 733, 849, 939, 1021, 1027
 - anisomycin, 567
 - apomorphine, 41, 255, 277, 473, 503, 689, 757, 1279
 - apomorphine hydrochloride, 693
 - artificial cerebrospinal fluid (5-ion), 411
 - L-aspartic acid, 953
 - aspirin, 463
 - atenolol, 371
 - atropine, 775, 897, 985
 - atropine sulfate, 83
 - baclofen, 1059
 - BAY K8644, 549, 555
 - bethanechol, 775
 - bicuculline, 59, 1059, 1077
 - brotizolam, 913
 - buspirone, 457
 - BW813U, 521
 - caffeine, 277
 - cannabidiol, 89
 - cannabinol monoethyl ether, 393
 - captopril, 317
 - carbachol, 423, 1253
 - l-cathinone, 13, 337
 - CGS 8216, 341, 439, 537
 - chlor diazepoxide, 431, 747, 973, 1077, 1237
 - N-(2-chloroethyl)-N-ethyl-2-bromobenzylamine (DSP-4), 743
 - p-chlorophenylalanine (PCPA), 415
 - chlorpromazine, 255, 503, 805, 897, 1185
 - choline, 925
 - cimetidine, 511
 - cinanserin, 1207, 1223
 - cis-flupenthixol, 473
 - CL 218,872, 1145
 - clomipramine, 1, 515, 805
 - clonazepam, 1145

- clonidine, 835, 985, 989, 1107, 1211
 clozapine, 255, 897
 cocaine, 191, 497, 1175
 cycloheximide, 567
 N^6 cyclohexyladenosine, 1271
 cyproheptadine, 1207
 cytisine, 843
 2-deoxy-D-galactose, 1137
 2-deoxy-D-glucose, 59, 171, 1153
 desipramine, 1, 805
 dexamethasone, 781
 dextrorphan tartrate, 959
 diazepam, 215, 431, 537, 561, 913, 1145
 N - N -diethylaminoethylhexyl-amine, 359
 diethylpropion, 733
 dihydropyridine, 51
 5,7-dihydroxytryptamine, 1
 diisopropylfluorophosphate (DFP), 1293
 diltiazem, 51, 549, 555
 6,7-dimethoxy, 4 ethyl β -carboline carboxylic acid methyl ester (DMCM), 595
 1-(2,5-dimethoxy-4-methylphenyl)-2-aminopropane (DOM), 135
 4-(5,6)-dimethyl-2-benzofuranyl/piperidine hydrochloride (CGP 6085 A), 743
 diprenorphine HCl, 959
 dopamine, 191, 813, 943, 1185
 doxepine, 805
 EMD 23448, 255
 L-erythro-dihydroxyphenylserine (L-erythro-DOPS), 411
 ethanol, 35, 289, 333, 439, 607, 667, 889, 1013, 1021, 1035, 1083, 1285
 5'-(N-ethylcarboxamide) adenosine, 769, 1271
 ethylketazocine methanesulfonate, 959
 ethylketocyclazocine, 77
 etiracetam, 925
 fenfluramine, 123, 733, 967, 1223
 FG 7142, 99
 fluoxetine, 515
 fluphenazine, 503, 897
 FOURPHIT, 51
 l-glutamate, 423
 haloperidol, 255, 337, 463, 473, 497, 503, 791, 813, 897, 959, 1175, 1185, 1231, 1279
 harmine, 111
 hemicholinium-3, 925
 hydralazine, 317
 p-hydroxyamphetamine, 161
 6-hydroxydopamine (6-OHDA), 191, 381, 401, 949
 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT), 135
 N-(5-hydroxypentyl)-1-phenylcyclohexylamine, 359
 5-hydroxytryptamine (5-HT), 23, 849, 883
 5-hydroxy-L-tryptophan (5-HTP), 805, 873
 idazoxan, 903
 imipramine, 1, 149, 805
 indomethacin, 739
 iprazidol, 515
 kainic acid, 297, 589
 ketamine, 111
 ketanserin, 135
 ketocyclazocine hydrochloride, 543
 lead, 1089
 levorphanol bitartrate, 959
 lithium chloride (LiCl), 431, 973, 1159, 1163
 lorazepam, 1145
 LY 171555, 1117
 lysergic acid diethylamide (LSD), 41, 227, 717
 magnesium, 1195
 marijuana, 577, 763
 mazindol, 733
 METAPHIT, 51
 metazocine, 785
 metergoline, 1223
 methadone, 149, 959
 d-methamphetamine, 1035
 methanesulfonyl fluoride, 1217
 methergoline, 1207
 [D-Ala²]-methionine enkephalinamide (DALA), 641
 5-methoxy- N , N -dimethyltryptamine (5-O-Me DMT), 1207
 N-methyl aspartate (NMA), 943
 2-methylpiperidine, 843
 methylscopolamine, 171, 633, 673
 [³H-methyl]thymidine, 651
 α -methyl-p-tyrosine (α -MPT), 949
 methysergide, 23, 805, 1207, 1223
 metoclopramide, 473, 503
 mianserin, 805
 midazolam, 99
 morphine, 77, 209, 215, 481, 533, 555, 599, 835, 1001, 1007, 1067, 1101, 1169, 1201, 1263
 morphine sulphate, 959
 muscimol, 1059
 nalbuphine, 629
 naloxone, 123, 209, 511, 533, 543, 567, 697, 835, 953, 989, 1007, 1101, 1263
 naloxone hydrochloride, 555, 959
 naltrexone, 123, 439, 575, 595, 959
 nialamide, 1, 943
 nicotine, 185, 277, 583, 589, 727, 843, 879, 1131
 nifedipine, 45
 nimodipine, 549, 555
 nitrendipine, 51
 norepinephrine (NE), 223, 381
 8-OH-2-(di-n-propylamino)tetralin (8-OH-DPAT), 883
 oxotremorine, 1293
 oxytocin, 107
 pentetetrazeole, 41
 pentobarbital, 333, 375, 835, 1059
 pentylenetetrazol (PTZ), 949, 1077
 phenacyclidine (PCP), 45, 51, 117, 129, 185, 201, 359, 785, 827, 1175
 phenacyclidine hydrochloride, 959
 phenobarbital, 929, 1059
 phentermine, 623
 1-phenylcyclohexylamine, 827
 1-(1-phenylcyclohexyl)-4-hydroxypiperidine, 827
 (-) N^6 phenylisopropyladenosine, 1271
 1-(1-phenyl-4-hydroxycyclohexyl)piperidine, 827
 phenylephrine, 743
 phenylethylamine (PEA), 129, 711
 phenylmethanesulfonyl fluoride, 1217
 phenytoin, 929
 physostigmine, 1217
 picrotoxin, 59, 1059, 1077
 pilocarpine, 463
 pimoline, 933
 pimozone, 219, 503, 615, 711, 1185
 piperoxan, 155
 piracetam, 925
 pirenperone, 111
 pizotyline, 227
 pramiracetam, 925
 prazosin, 903
 procaine, 583, 857
 promazine, 1185
 propranolol, 23, 41, 135, 371, 463
 N -n-propyl-3-(3-hydroxyphenyl)-piperidine (3-PPP), 255
 N -n-propylnorapomorphine (NPA), 255
 pyrazidol, 515
 pyridostigmine, 1071
 3-quinuclidinyl benzilate (QNB), 1191
 racemic N-allyl-N-normetazocine (SKF 10,047), 959
 ranitidine, 511
 rauwolscine, 155
 Ro 15-1788, 215, 537, 1145
 RS 21361, 155
 RX-781094, 155, 903
 SCH 23390, 473
 scopolamine, 171, 277, 673, 1253
 scopolamine hydrochloride, 269
 scopolamine methyl nitrate, 269
 secobarbital, 375
 serotonin, 191, 1223
 SKF 83566, 249
 sodium pentobarbital, 35, 83
 sodium valproate (VPA), 747
 spiperone, 135
 spiroperidol, 1185
 sulpiride, 191, 473, 503, 897
 tamoxifen, 497
 Δ^1 -tetrahydrocannabinol (Δ^1 -THC), 393
 Δ^9 -tetrahydrocannabinol (Δ^9 -THC), 827
 tetrodotoxin, 857
 theobromine, 769
 5-thioglucose, 59
 thioridazine, 503, 897
 tizanidine, 835
 tolazoline, 155
 trazodone, 515, 805
 1-(3-trifluoromethylphenyl)piperazine (TFMPP), 135
 tripeptenamine, 629
 tryptamine, 995
 L-tryptophan, 849
 L-tyrosine, 1027
 U50,488H, 77, 543
 valproic acid, 929
 verapamil, 45, 227, 549, 555, 775
 yohimbine, 155
 zimelidine, 805
 zolpidem, 537
- Drug comparisons**
- antinociception, 835
 - drug interactions, 835, 1035
 - ethanol, 1035
 - inhibition and stimulation, 1035
 - locomotor activity, 1035
 - d-methamphetamine, 1035
 - morphine, 835

- tizanidine, 835
 tolerance, 835
Drug discrimination
 l-cathinone, 13, 337
 chronic administration, 13
 dopaminergic neuronal systems, 337
 dose-dependent effects, 1207
 drug interactions, 337
 hexahydrocannabinol stereochemistry, 393
 8-hydroxy-2-(di-n-propyl-amino)tetralin (8-OH DPAT), 135
 ketanserin pretreatment, 135
 metazocine, 785
 5-methoxy-N,N-dimethyltryptamine (5-OMe DMT), 1207
 monkeys, 785
 morphine, 209
 naloxone antagonism, 209
 phencyclidine (PCP), 117
 pigeons, 117, 209
 plasma phencyclidine, 117
 rat/pigeon comparisons, 393
 self-administration, 785
 serotonin antagonists, 1207
 stimulus properties, 785, 1207
 tetralin analogues, 135
 tolerance, 13
Drug interactions
 acetylcholine release, 943
 acylating phencyclines, 51
 adrenergic receptors, 989
 amnesia, 567, 925
 anisomycin, 567
 anticonvulsant effects, 1059
 antinociception, 835
 atropine, 985
 benzodiazepine antagonists, 537
 bicuculline, 1059
 brain stimulation, 629
 calcium antagonist binding, 51
 calcium antagonists, 45
 calcium channel antagonists, 555
 cataleptic behavior, 463
 l-cathinone, 337
 CGS 8216, 439
 clonidine, 985, 989
 conditioned hyperactivity hypothesis, 83
 continuous infusion, 989
 cycloheximide, 567
 delayed-matching-to-sample, 929
 dopaminergic neuronal systems, 337
 drug comparisons, 835, 1035
 drug discrimination, 337
 endogenous opioids, 1007
 ethanol, 439, 1035
 $GABA_A$ receptors, 1059
 hemicholinium-3, 925
 5-hydroxytryptamine (5-HT), 23
 hyperdipsia, 23
 hyperthermia, 555
 hypophagia, 23
 imipramine, 149
 inhibition and stimulation, 1035
 locomotor activity, 943, 985, 1035
 maximal electroshock, 1059
 methadone, 149
 d -methamphetamine, 1035
 N-methyl aspartate (NMA), 943
 methylscrgide, 23
 monkeys, 185
 morphine, 835
 motor activity, 45
 nalbuphine, 629
 naloxone, 567, 989
 naltrexone, 439
 neuroleptics, 463
 nicotine, 185
 opiate abstinence syndrome, 989
 opiates, 1007
 passive avoidance, 567
 pentobarbital, 1059
 phencyclidine (PCP), 45, 185
 phenobarbital, 929, 1059
 phenytoin, 929
 picrotoxin, 1059
 pigeons, 149, 929
 piracetam-like compounds, 925
 postpartum aggression, 1007
 propranolol, 23
 prostaglandins, 463
 repeated acquisition, 185
 response chains, 185
 reward threshold, 629
 schedule-controlled behavior, 537
 seizures, 1059
 shock avoidance, 439
 shuttle avoidance, 567
 stereotypy, 985
 thermic response shifts, 83
 thermoregulation, 555
 timeout from avoidance, 439
 tizanidine, 835
 tolerance, 835
 tripeplennamine, 629
 valproic acid, 929
 variable interval schedule, 149
Drug-paired stimuli, 973
 conditioned aversions
 lever pressing
 lithium chloride (LiCl)
 monkeys
Drug reinforcement
 classical conditioning, 1169
 conditioned place preference, 1101
 exploratory behavior, 1169
 habituation, 1169
 morphine, 1101, 1169
 place preference, 1169
 single-trial, 1101
Duration of action, 995
 conditioned taste aversion
 temporal analysis
 tryptamine
Duration of response, 615
 anhedonia
 force of response
 pimozide
 response rate
Ear-withdrawal, 481
 analgesiometry
 rabbits
Eating
 amphetamine, 1149
 anorexia, 99
 appetite regulation, 381
 behavioral analysis, 577
 caloric intake, 577
 clonidine, 1107
 deprivation, 381, 1223
 FG 7142, 99
 glucoprivic feeding, 381
 grooming, 99
 hamsters, 1107
 human studies, males, 577
 hyperphagia, 99
 lesions, paraventricular nucleus (PVN), 381
 locomotor activity, 99, 1149
 marijuana, 577
 medial hypothalamus, 1223
 midazolam, 99
 norepinephrine (NE), 1223
 nucleus accumbens, 1149
 paraventricular nucleus (PVN), 1223
 rearing, 99
 serotonin, 1223
Eating motivation, 123
 amphetamine
 fenfluramine
 naloxone
 naltrexone
 satiety
EEG alpha activity, 889
 ethanol-induced euphoria
 human studies, males
 plasma ethanol levels
Electrical stimulation, 63
 DOPAC
 intracranial self-stimulation
 in vivo
 nigro-striatal pathway
Electroencephalographic effects, 879
 human studies, smokers
 nicotine gum
 tobacco deprivation
Electrophysiological properties, 89
 cannabidiol
 cats
 spinal motoneurons
 synaptic effects
Endogenous opiates, 1303
 opiate receptor sites
 peptide interactions
 Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
Endogenous opioids
 drug interactions, 1007
 naltrexone, 573
 opiates, 1007
 postpartum aggression, 1007
 prenatal stress, 573
 sexual behavior differentiation, 573
Environmental constraints, 561
 defensive behavior
 diazepam
 fear reactions
Environmental influences, 95
 GABA receptors
 muricide
Environmental specific cues, 1201
 analgesia
 classical conditioning
 habituation
 morphine
 snails
 stress
 tolerance
L-Erythro-dihydroxyphenylserine (L-erythro-DOPS), 411
 brain noradrenergic system
 locomotor activity

- Escape deficit, 1
 antidepressants
 inescapable shocks
 learned helplessness
 serotonergic neurons
- Essential fatty acids, 1285
 cholesterol
 dietary manipulation
 ethanol preference
 hamsters
 retinol palmitate
- Estrogen, 919
 amphetamine-induced hyperactivity
 time-dependent modulation
- Ethanol
 ambient temperature, 667
 CGS 8216, 439
 chronic administration, 667
 classical conditioning, 35
 cross tolerance, 35
 drug comparisons, 1035
 drug interactions, 439, 1035
 ethanol withdrawal, 1111
 food-deprived/free-feeding rat comparisons, 739
 hypoglycemia, 739
 hypothermia, 739
 hypothermia, ethanol-induced, 667
 indomethacin, 739
 inhibition and stimulation, 1035
 locomotor activity, 1035
 d -methamphetamine, 1035
 naltrexone, 439
 Pavlovian conditioning, 1111
 radial arm maze performance, 703
 sex differences, 703
 shock avoidance, 439
 sodium pentobarbital, 35
 timeout from avoidance, 439
 tolerance, 667
- Ethanol effects, 607
 single unit activity
 somatosensory cortex
- Ethanol-induced euphoria, 889
 EEG alpha activity
 human studies, males
 plasma ethanol levels
- Ethanol preference, 1285
 cholesterol
 dietary manipulation
 essential fatty acids
 hamsters
 retinol palmitate
- Ethanol tolerance, 797
 limbic structures
 serotonin synthesis
 vasopressin-like peptides
- Ethanol withdrawal, 1111
 ethanol
 Pavlovian conditioning
 Exploratory activity, 255
 dopamine autoreceptor agonists
 locomotor activity, drug-induced, 255
- Exploratory behavior
 apomorphine, 473
 classical conditioning, 1169
 dopamine receptors, 473
 drug reinforcement, 1169
 habituation, 1169
 morphine, 1169
 neuroleptics, 473
 place preference, 1169
- Exponential data analysis, 979
 passive avoidance
 step-through latencies
- Extinction
 adjunctive consumption, 1159, 1163
 alcohol, 1159, 1163
 drinking, 1159, 1163
 food reward, 813
 haloperidol, 813
 lithium, 1159, 1163
 shock, 1163
 stress, 1163
 water, 1159
- Fear reactions, 561
 defensive behavior
 diazepam
 environmental constraints
 Feeding behavior
 2-deoxy-D-glucose, 59
 dopamine metabolism, 1095
 hyperphagia, 59
 ingestion, 1095
 lateral hypothalamus, 59
 nucleus accumbens, 1095
 striatum, 1095
 5-thioglucose, 59
 ventromedial hypothalamus, 59
- Fenfluramine
 amphetamine, 123
 anorexia, 967
 eating motivation, 123
 gastrointestinal tract, 967
 naloxone, 123
 naltrexone, 123
 opioid peptides, 967
 satiety, 123
- FG 7142, 99
 anorexia
 eating
 grooming
 hyperphagia
 locomotor activity
 midazolam
 rearing
- Filter vent blocking, 1245
 carbon monoxide exposure
 human studies
 smoking topography
 tobacco
- Finger tapping, 727
 human studies, non-smokers
 nicotine
- Fixed ratio/fixed interval schedule, 375
 locomotor activity
 pentobarbital
 secobarbital
 stereoisomers
 variable interval schedule
- Fixed ratio performance, 1191
 differential reinforcement of low rate of response (DRL)
 operant behavior
 3-quinuclidinyl benzilate (QNB)
 schedule dependent effects
- Focal brain injury, 263
 lateralized hyperactivity
 lesions, cortical island
- Food deprivation, 623
 abrupt refeeding
 phentermine
 self-administration
- Food-deprived/free feeding rat comparisons, 739
 ethanol
 hypoglycemia
 hypothermia
 indomethacin
- Food hoarding, 543
 deer mouse
 ingestion
 opiate agonists
- Food intake, 913
 benzodiazepines
 brown adipose tissue (BAT)
 cafeteria diet
 food preference
- Food preference, 913
 benzodiazepines
 brown adipose tissue (BAT)
 cafeteria diet
 food intake
- Food reward, 813
 extinction
 haloperidol
- Force of response, 615
 anhedonia
 duration of response
 pimozide
 response rate
- Fourth ventricle, 843
 cytisine
 dogs
 high/low affinity sites
 2-methylpiperidine
 nicotine
- Free-choice drinking, 1013
 alcohol dehydrogenase
 alcohol elimination rate
 alcohol-preferring rats
 metabolic tolerance
- Functional sensitivity, 743
 α_1 -adrenoceptors
 β -adrenoceptors
 N-(2-chloroethyl)-N-ethyl-2-bromobenzylamine (DSP-4)
 noradrenergic denervation
- GABA receptors, 95
 environmental influences
 muricide
- GABA_A receptors, 1059
 anticonvulsant effects
 bicuculline
 drug interactions
 maximal electroshock
 pentobarbital
 phenobarbital
 picrotoxin
 seizures
- GABAergic drugs, 1077
 chlordiazepoxide-induced sleep
 selective breeding
- Gastric ulceration, 775
 cold-restraint stress
 motility
- Gastrointestinal tract, 967
 anorexia
 fenfluramine
 opioid peptides
- Genetic behavior, 289
 genetic breeding
 habituation

- open-field activity
 pharmacogenetics
 Genetic breeding, 289
 genetic behavior
 habituation
 open-field activity
 pharmacogenetics
Glucoprivation, 1153
 2-deoxy-D-glucose
 hypophagia
 liquid diet
 water deprivation
Glucoprivic feeding, 381
 appetite regulation
 deprivation
 eating
 lesions, paraventricular nucleus (PVN)
Glycoprotein fucosylation, 1137
 memory function
Grooming, 99
 anorexia
 eating
 FG 7142
 hyperphagia
 locomotor activity
 midazolam
 rearing
- H₂-receptor blockers**, 511
 behavioral despair test
 naloxone
- Habituation**
 acoustic startle, 1175
 amphetamine, 1175
 analgesia, 1201
 classical conditioning, 1169, 1201
 cocaine, 1175
 cross-tolerance, 1175
 drug reinforcement, 1169
 environmental specific cues, 1201
 exploratory behavior, 1169
 genetic behavior, 289
 genetic breeding, 289
 morphine, 1169, 1201
 open-field activity, 289
 pharmacogenetics, 289
 phenacyclidine (PCP), 1175
 place preference, 1169
 sensitization, 1175
 snails, 1201
 stress, 1201
 tolerance, 1175, 1201
- Haloperidol**
 anhedonia, 1231
 cocaine, 497
 cyclo(leucyl-glycyl) (cLG), 1279
 dopamine receptors, 1279
 extinction, 813
 food reward, 813
 motor effects, 791
 neuroleptics, 791
 operant responding, 791
 partial reinforcement extinction effect, 1231
 reward omission, periodic, 1231
 self-administration, 497
 sex differences, 497
 stereotypy, apomorphine-induced, 1279
 supersensitivity, 1279
 tamoxifen, 497
 water reinforcement, 1231
- Hamsters**
 cholecystokinin (CCK), 1067
 cholesterol, 1285
 clonidine, 1107
 dietary manipulation, 1285
 drinking, 449
 eating, 1107
 essential fatty acids, 1285
 ethanol preference, 1285
 high-calorie fluids, 449
 hyperactivity, 1067
 hypoactivity, 1067
 morphine, 1067
 reproduction, 449
 retinol palmitate, 1285
 social stress, 449
- Harmine**, 111
 ketanserin
 lordosis
 pirenperone
- Heart rate**
 blood pressure, 423
 body temperature, 1293
 chemical stimulation, 423
 diisopropylfluorophosphate (DFP), 1293
 locomotor activity, 1293
 mediodorsal nucleus of the thalamus, 423
 muscarinic receptors, 1293
³H-quinuclidinyl benzilate (³H-QNB) binding, 1293
 rabbits, 423
 respiration rate, 1293
 tolerance, 1293
- Heat**, 1071
 cholinesterase inhibition
 clinical chemistry
 pyridostigmine
 thermoregulation
- Hemicholinium-3**, 925
 amnesia
 drug interactions
 piracetam-like compounds
- Hexahydrocannabinol stereochemistry**, 393
 drug discrimination
 rat/pigeon comparisons
- Hibernation**, 527
 bat/rat/mouse/hamster comparisons
 brain opioid receptors
- High-calorie fluids**, 449
 drinking
 hamsters
 reproduction
 social stress
- High/low affinity sites**, 843
 cytisine
 dogs
 fourth ventricle
 2-methylpiperidone
 nicotine
- Hippocampal 5-HT activity**, 781
 rabbits
 tonic immobility
- Hormone**
 estradiol, 857
 estradiol benzoate, 111, 919
 estrogen, 857
 norepinephrine (NE), 1223
 progesterone, 111, 857
 prostaglandin, 463
- prostaglandin (PGE₁), 347, 353
 testosterone, 823
- Hotplate test**, 933
 pemoline
 self-injurious behavior
 stereotypy
- 5-HT syndrome**, 873
 offspring behavior
 open-field behavior
 prenatal stress
- Human studies**
 buccal mucosa, 1181
 carbon monoxide exposure, 1245
 filter vent blocking, 1245
 marijuana smoking, 659
 nicotine absorption, 1181
 passive smoking, 1181
 smoking topography, 1245
 subjective ratings, 659
 tobacco, 1245
 tobacco smoking, 659
- Human studies, males**
 behavioral analysis, 577
 caloric intake, 577
 diphenhydramine, 365
 driving related tasks, 365
 eating, 577
 EEG alpha activity, 889
 ethanol-induced euphoria, 889
 marijuana, 577
 plasma ethanol levels, 889
 plasma levels, 365
- Human studies, non-smokers**, 727
 finger tapping
 nicotine
- Human studies, smokers**, 879
 electroencephalographic effects
 nicotine gum
 tobacco deprivation
- Huntington's disease**, 297
 animal model
 locomotor hyperactivity
 neural transplants
- 8-Hydroxy-2-(di-n-propylamino)tetralin (8-OH DPAT)**, 135
 drug discrimination
 ketanserin pretreatment
 tetralin analogues
- 6-Hydroxydopamine (6-OHDA)**, 949
 α -methyl-p-tyrosine (α -MPT)
 catecholamines
 seizures, pentylenetetrazol (PTZ) induced
- 5-Hydroxytryptamine (5-HT)**
 drug interactions, 23
 hyperalgesia, 883
 hyperdipsia, 23
 hypoalgesia, 883
 hypophagia, 23
 methysergide, 23
 nociception sensitivity, 883
 8-OH-2-(di-n-propylamino)tetralin (8-OH-DPAT), 883
 propranolol, 23
 route of administration, 883
- Hyperactivity**
 benzodiazepines, 1145
 cholecystokinin (CCK), 1067
 convulsions, 1145
 hamsters, 1067
 hypoactivity, 1067
 morphine, 1067

- neonates, 1145
- type 2 receptors, 1145
- Hyperactivity drug induced, 711**
 - amphetamine
 - anorexia, drug induced
 - phenylethylamine (PEA)
- Hyperalgesia, 883**
 - 5-hydroxytryptamine (5-HT)
 - hypoalgesia
 - nociception sensitivity
 - 8-OH-2-(di-n-propylamino)tetralin (8-OH-DPAT)
 - route of administration
- Hyperdipsia, 23**
 - drug interactions
 - 5-hydroxytryptamine (5-HT)
 - hypophagia
 - methysergide
 - propranolol
- Hyperphagia**
 - analgesia, stress-induced, 171
 - anorexia, 99
 - brain monoamines, 401
 - cold water swim, 171
 - 2-deoxy-D-glucose, 59
 - eating, 99
 - feeding behavior, 59
 - FG 7142, 99
 - grooming, 99
 - hypothermia, 171
 - lateral hypothalamus, 59
 - lesions, medial hypothalamus, 401
 - locomotor activity, 99
 - midazolam, 99
 - muscarinic agents, 171
 - obesity, 401
 - pain, 171
 - rearing, 99
 - 5-thioglucose, 59
 - ventromedial hypothalamus, 59
- Hypertension, 317**
 - lesions, substantia nigra
 - open field
 - strain differences
 - striatal dopamine content
- Hyperthermia, 555**
 - calcium channel antagonists
 - drug interactions
 - thermoregulation
- Hypoactivity, 1067**
 - cholecystokinin (CCK)
 - hamsters
 - hyperactivity
 - morphine
- Hypoalgesia, 883**
 - 5-hydroxytryptamine (5-HT)
 - hyperalgesia
 - nociception sensitivity
 - 8-OH-2-(di-n-propylamino)tetralin (8-OH-DPAT)
- Hypocaloric diets, 681**
 - insulin receptors
 - obesity
 - simple carbohydrate comparisons
- Hypoglycemia, 739**
 - ethanol
 - food-deprived/free-feeding rat comparisons
 - hypothermia
 - indomethacin
- Hypophagia**
 - 2-deoxy-D-glucose, 1153
- drug interactions, 23**
 - glucoparivation, 1153
 - 5-hydroxytryptamine (5-HT), 23
- hyperdipsia, 23**
 - liquid diet, 1153
 - methysergide, 23
 - propranolol, 23
 - water deprivation, 1153
- Hypothermia**
 - adenosine receptors, 769
 - analgesia, stress-induced, 171
 - cold water swim, 171
 - ethanol, 739
 - food-deprived/free-feeding rat comparisons, 739
 - hyperphagia, 171
 - hypoglycemia, 739
 - inbred strains, 769
 - indomethacin, 739
 - locomotor activity, 769
 - methylxanthines, 769
 - muscarinic agents, 171
 - pain, 171
 - theobromine, 769
- Hypothermia, ethanol-induced, 667**
 - ambient temperature
 - chronic administration
 - ethanol
 - tolerance
- Imipramine, 149**
 - drug interactions
 - methadone
 - pigeons
 - variable interval schedule
- Immobilization, acute, 41**
 - neurobiological responses
 - social isolation
- Inbred strains, 769**
 - adenosine receptors
 - hypothermia
 - locomotor activity
 - methylxanthines
 - theobromine
- Indomethacin, 739**
 - ethanol
 - food-deprived/free-feeding rat comparisons
 - hypoglycemia
 - hypothermia
- Inescapable shock, 1**
 - antidepressants
 - escape deficit
 - learned helplessness
 - serotonergic neurons
- Ingestion**
 - deer mouse, 543
 - dopamine metabolism, 1095
 - feeding behavior, 1095
 - food hoarding, 543
 - nucleus accumbens, 1095
 - opiate agonists, 543
 - striatum, 1095
- Inhibition and stimulation, 1035**
 - drug comparisons
 - drug interactions
 - ethanol
 - locomotor activity
 - d*-methamphetamine
- Inhibitory avoidance, 469**
 - avoidance learning
 - substance P
- Insulin receptors, 681**
 - hypocaloric diets
 - obesity
 - simple carbohydrate comparisons
- Internal clock speed, 1185**
 - D₂ receptors
 - dopamine
 - neuroleptics
 - time estimation
- Inter-response time, 145**
 - d-amphetamine
 - bin analysis
 - monkeys
 - Sidman avoidance schedule
- Intestinal distention, 491**
 - acarbose
 - dietary starch
- Intracerebral cannula, 487**
 - rodents, small
 - unrestrained animals
- Intracranial administration, 717**
 - lysergic acid diethylamide (LSD)
 - operant behavior
 - route of administration
- Intracranial self-stimulation, 63**
 - DOPAC
 - electrical stimulation
 - in vivo
 - nigro-striatal pathway
- Intraspecies behavior, 515**
 - antidepressants
 - locomotor activity
 - pharmacological analysis
- Intrathecal injection, 483**
 - chronic infusion
 - tolerance
- Investigatory behavior, 277**
 - locomotor activity
 - multivariate assessment
 - stimulants
- In vitro, 827**
 - metabolic interactions
 - phencyclidine (PCP)
 - Ca⁺⁺-precipitated liver microsomes
 - Δ⁹-tetrahydrocannabinol (Δ⁹-THC)
- In vivo**
 - alpha₂-adrenergic antagonists, 155
 - amphetamine, 155
 - DOPAC concentrations, 63
 - electrical stimulation, 63
 - intracranial self-stimulation, 63
 - locomotor activity, 155
 - nafion-coated electrodes, 325
 - nigro-striatal pathway, 63
 - stereotypy, 155
 - voltammetric recording, 325
- Isocaloric diets, 7**
 - bombesin
 - cholecystokinin (CCK)
 - dietary self-selection
- Ketanserin, 111**
 - harmine
 - lordosis
 - pirenperone
- Ketanserin pretreatment, 135**
 - drug discrimination
 - 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH DPAT)
 - tetralin analogues

- Lateral hypothalamus, 59
 2-deoxy-D-glucose
 feeding behavior
 hyperphagia
 5-thioglucose
 ventromedial hypothalamus
- Lateralized hyperactivity, 263
 focal brain injury
 lesions, cortical island
- Lateralized rotation, 689
 apomorphine
 postural asymmetry
- Lead retention, 1089
 behavioral development
 preweaning lead exposure
- Learned helplessness, 1
 antidepressants
 escape deficit
 inescapable shock
 serotonergic neurons
- Learning, 141
 brain iron-deficiency
 water maze
- Lesions, cortical island, 263
 focal brain injury
 lateralized hyperactivity
- Lesions, dorsal raphe nucleus, 1211
 lesions, locus coeruleus
 lesions, medial raphe nucleus
 locomotor activity
 open field
 α_2 -receptors
 sedation, clonidine-induced
- Lesions, 6-hydroxydopamine (6-OHDA), 1307
 amphetamine
 dopamine depletion
 lesions, substantia nigra
 recovery
 rotation
- Lesions, kainic acid, 583
 barrel rotation, 583, 589
 behavioral changes, 589
 nicotine, 583
 prostration, 583
 receptor changes, 589
 vasopressin, 583
 vestibular cerebellum, 583
- Lesions, locus coeruleus, 1211
 lesions, dorsal raphe nucleus
 lesions, medial raphe nucleus
 locomotor activity
 open field
 α_2 -receptors
 sedation, clonidine-induced
- Lesions, medial hypothalamus, 401
 brain monoamines
 hyperphagia
 obesity
- Lesions, medial raphe nucleus, 1211
 lesions, dorsal raphe nucleus
 lesions, locus coeruleus
 locomotor activity
 open field
 α_2 -receptors
 sedation, clonidine-induced
- Lesions, neurotoxic, 191
 cocaine
 medial prefrontal cortex
 presynaptic dopaminergic terminals
 self-administration, intracranial
- Lesions, nucleus basalis magnocellularis, 293
 diurnal cycle
 locomotor activity
- Lesions, paraventricular nucleus (PVN), 381
 appetite regulation
 deprivation
 eating
 glucoprivic feeding
- Lesions, substantia nigra
 amphetamine, 1307
 dopamine depletion, 1307
 hypertension, 317
 lesions, 6-hydroxydopamine (6-OHDA), 1307
 open field, 317
 recovery, 1307
 rotation, 1307
 strain differences, 317
 striatal dopamine content, 317
- Lever pressing, 973
 conditioned aversions
 drug-paired stimuli
 lithium chloride (LiCl)
 monkeys
- Licking, 219
 anhedonia
 pimozide
 sucrose concentration
- Limbic structures, 797
 ethanol tolerance
 serotonin synthesis
 vasopressin-like peptides
- Limbic system, 71
 aggression
 bull breeds
 neurotransmitter amino acids
- Liquid diet, 1153
 2-deoxy-D-glucose
 glucoprivation
 hypophagia
 water deprivation
- Lithium
 adjunctive consumption, 1159, 1163
 alcohol, 1159, 1163
 drinking, 1159, 1163
 extinction, 1159, 1163
 shock, 1163
 stress, 1163
 water, 1159
- Lithium-chloride (LiCl), 973
 conditioned aversions
 drug-paired stimuli
 lever pressing
 monkeys
- Locomotor activity
 acetylcholine release, 943
 adenosine receptors, 769
 alpha₂-adrenergic antagonists, 155
 age differences, 599
 amphetamine, 155, 161, 1149
 anorexia, 99
 antidepressants, 515
 antinociception, 599
 anxiety, 595
 area postrema, 269
 atropine, 985
 body temperature, 1293
 brain noradrenergic system, 411
 caffeine, 1271
 circling behavior, 1021
- clonidine, 985
 conditioned place aversion, 1041
 conditioned place preference, 1041
 conditioned taste aversion, 269
 convulsions, 595
 diisopropylfluorophosphate (DFP), 1293
 6,7-dimethoxy, 4 ethyl β -carboline carboxylic acid methyl ester (DMCM), 595
 diurnal cycle, 293
 drug comparisons, 1035
 drug interactions, 943, 985, 1035
 eating, 99, 1149
 L-erythro-dihydroxyphenylserine (L-erythro-DOPS), 411
 ethanol, 1035
 fixed ratio/fixed interval schedule, 375
 FG 7142, 99
 grooming, 99
 heart rate, 1293
 hyperphagia, 99
 hypothermia, 769
 inbred strains, 769
 inhibition and stimulation, 1035
 intraspecies behavior, 515
 investigatory behavior, 277
 in vivo, 155
 lesions, dorsal raphe nucleus, 1211
 lesions, locus coeruleus, 1211
 lesions, medial raphe nucleus, 1211
 lesions, nucleus basalis magnocellularis, 293
 metabolic rate, 161
 d-methamphetamine, 1035
 N-methyl aspartate, 943
 methylxanthines, 769
 midazolam, 99
 morphine, 599
 multivariate assessment, 277
 muscarinic receptors, 1293
 naltrexone, 595
 nicotine, 1041
 nucleus accumbens, 1149
 open field, 1211
 pentobarbital, 375
 pharmaco-ethological analysis, 515
 prenatal alcohol exposure, 1021
 propunishment, 595
³H-quinuclidinyl benzilate (³H-QNB) binding, 1293
 rearing, 99
 α_2 -receptors, 1211
 respiration rate, 1293
 scopolamine, 269
 secobarbital, 375
 sedation, clonidine-induced, 1211
 stereoisomers, 375
 stereotypy, 155, 985
 stimulants, 277
 strain differences, 1271
 theobromine, 769
 theophylline, 1271
 tolerance, 1293
 variable interval schedule, 375
- Locomotor activity, drug-induced, 255
 dopamine autoreceptor agonists
 exploratory activity
- Locomotor behavior, 233
 opiates
 psychostimulants
 sympathomimetics

- Locomotor excitation**, 29
 alternation
 amphetamine
 perseveration
Locomotor hyperactivity, 297
 animal model
 Huntington's disease
 neural transplants
Lordosis, 111
 harmine
 ketanserin
 pirenperone
Lordosis disruption, 857
 midbrain infusions
 procaine
 tetrodotoxin
LY 171555, 1117
 dopamine systems
 radial arm maze
Lysergic acid diethylamide (LSD)
 intracranial administration, 717
 operant behavior, 717
 pizotyline, 227
 route of administration, 717
 stimulus control, 227
 verapamil, 227
- Magnesium**, 1195
 acute administration
 aggression
 chronic administration
 tolerance
Marijuana
 adrenergic receptors, 763
 behavioral analysis, 577
 caloric intake, 577
 dopamine receptors, 763
 eating, 577
 human studies, males, 577
 perinatal exposure, 763
 tyrosine hydroxylase activity, 763
Marijuana smoking, 659
 human studies
 subjective rating
 tobacco smoking
Maximal electroshock, 1059
 anticonvulsant effects
 bicuculline
 drug interactions
 $GABA_A$ receptors
 pentobarbital
 phenobarbital
 picrotoxin
 seizures
Maze learning, 673
 age differences
 avoidance conditioning
 memory
 scopolamine
Medial hypothalamus, 1223
 deprivation
 eating
 norepinephrine (NE)
 paraventricular nucleus (PVN)
 serotonin
Medial prefrontal cortex, 191
 cocaine
 lesions, neurotoxic
 presynaptic dopaminergic terminals
 self-administration, intracranial
- Mediodorsal nucleus of the thalamus**, 423
 blood pressure
 chemical stimulation
 heart rate
 rabbits
Memory
 age differences, 673
 avoidance conditioning, 673
 chicks, 823
 maze learning, 673
 scopolamine, 673
 testosterone, 823
Memory effects, time related, 1125
 consolidation
 passive avoidance behavior
 retrieval
 vasopressin
 vasopressin analogues
Memory function, 1137
 glycoprotein fucosylation
Metabolic interactions, 827
 in vitro
 phencyclidine (PCP)
 Ca^{++} -precipitated liver microsomes
 Δ^9 -tetrahydrocannabinol (Δ^9 -THC)
Metabolic rate, 161
 amphetamine
 locomotor activity
Metabolic tolerance, 1013
 alcohol dehydrogenase
 alcohol elimination rate
 alcohol-preferring rats
 free-choice drinking
Metazocine, 785
 drug discrimination
 monkeys
 self-administration
 stimulus properties
Methadone, 149
 drug interactions
 imipramine
 pigeons
 variable interval schedule
d-Methamphetamine, 1035
 drug comparisons
 drug interactions
 ethanol
 inhibition and stimulation
 locomotor activity
[D-Ala²]-Methionine enkephalinamide (DALA), 641
 anesthesia
 antinociception
 cardiovascular system
 renal sympathetic nerve
Method
 autoradiography, 1051
 Behavioral Pattern Monitor, 277
 color tracing, 117
 formalin test, 883
 gas chromatography, 827
 high performance liquid chromatography (HPLC), 415, 865, 903
 hot-plate test, 883
 kainate lesioning, 583, 589
 key peck, 371
 pendulum technique, 329
 platform technique, 329
 radio-frequency lesions, 1279
 Sidman avoidance schedule, 145
 tail-flick test, 883
- 5-Methoxy-N,N-dimethyltryptamine (5-OMe DMT)**, 1207
 dose-dependent effects
 drug discrimination
 Sidman avoidance schedule, 145
 serotonin antagonists
 stimulus properties
2-Methylpiperidone, 843
 cytisine
 dogs
 fourth ventricle
 high/low affinity sites
 nicotine
 α -Methyl-p-tyrosine (α -MPT), 949
 catecholamines
 6-hydroxydopamine (6-OHDA)
 seizures, pentylenetetrazol (PTZ)
Methylxanthines, 769
 adenosine receptors
 hypothermia
 inbred strains
 locomotor activity
 theobromine
Methysergide, 23
 drug interactions
 5-hydroxytryptamine (5-HT)
 hyperdipsia
 hypophagia
 propranolol
Midazolam, 99
 anorexia
 eating
 FG 7142
 grooming
 hyperphagia
 locomotor activity
 rearing
Midbrain infusions, 857
 lordosis disruption
 procaine
 tetrodotoxin
Model of depression, 805
 antidepressants
 serotonergic receptors
Monkeys
 d-amphetamine, 145
 bin analysis, 145
 conditioned aversions, 973
 delayed performance, 201
 drug discrimination, 785
 drug interactions, 185
 drug-paired stimuli, 973
 inter-response time, 145
 lever pressing, 973
 lithium chloride (LiCl), 973
 metazocine, 785
 nicotine, 185
 phencyclidine (PCP), 185, 201
 repeated acquisitions, 185, 201
 response chains, 185, 201
 retention, 201
 self-administration, 785
 Sidman avoidance schedule, 145
 stimulus properties, 785
Morphine
 age differences, 599
 analgesia, 215, 1201
 antinociception, 599, 835
 antinociceptive system, 533
 benzodiazepine receptors, 215
 cholecystokinin (CCK), 1067

- classical conditioning, 1169, 1201
 conditioned place preference, 1101
 drinking, 1001
 drug comparisons, 835
 drug discrimination, 209
 drug interactions, 835
 drug reinforcement, 1101, 1169
 environmental specific cues, 1201
 exploratory behavior, 1169
 habituation, 1169, 1201
 hamsters, 1067
 hyperactivity, 1067
 hypoactivity, 1067
 locomotor activity, 599
 naloxone antagonism, 209
 naloxone-precipitated withdrawal, 1001
 opiate tolerance, 533
 physical dependence, 1001
 pigeons, 209
 place preference, 1169
 reinforcement threshold, 1263
 response rate, 1263
 self-stimulation, 1263
 single-trial, 1101
 snails, 1201
 stimulation-produced analgesia, 533
 stress, 1201
 sucrose, 1001
 tizanidine, 835
 tolerance, 835, 1201
 withdrawal, precipitated, 1263
 withdrawal, spontaneous, 1263
Morphine dependent rats, 953
 angiotensin converting enzyme (ACE) activity
 aspartic acid
 brain asparaginase
 naloxone
 plasma cortisol level
Motility, 775
 cold-restraint stress
 gastric motility
Motor activity
 calcium antagonists, 45
 chronic administration, 129
 dopamine receptors, 129
 drug interactions, 45
 phencyclidine (PCP), 45
 phenylethylamine (PEA), 129
 sensitization, 129
Motor effects, 791
 haloperidol
 neuroleptics
 operant responding
MSH-release inhibiting factor-1 (MIF-1), 757
 apomorphine-induced stereotypy
 dopaminergic neuron activity
 Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
 apomorphine-induced stereotypy, 757
 dopaminergic neuron activity, 757
 endogenous opiates, 1303
 MSH-release inhibiting factor-1 (MIF-1), 757
 opiate receptor sites, 1303
 peptide interactions, 1303
Multivariate assessment, 277
 investigatory behavior
 locomotor activity stimulants
Muricide, 95
 environmental influences
 GABA receptors
Muscarinic agents, 171
 analgesia, stress-induced
 cold water swim
 hyperphagia
 hypothermia
 pain
Muscarinic receptors, 1293
 body temperature
 diisopropylfluorophosphate (DFP)
 heart rate
 locomotor activity
³H-quinuclidinyl benzilate (³H-QNB) binding
 respiration rate
 tolerance
Nafion-coated electrodes, 325
 in vivo
 voltammetric recording
Nalbuphine, 629
 brain stimulation
 drug interactions
 reward threshold
 tripeptenamine
Naloxone
 adrenergic receptors, 989
 amnesia, 567
 amphetamine, 123
 angiotensin converting enzyme (ACE) activity, 953
 anisomycin, 567
 aspartic acid, 953
 behavioral despair test, 511
 brain asparaginase, 953
 clonidine, 989
 continuous infusion, 989
 cycloheximide, 567
 drinking, 697
 drug interactions, 567, 989
 eating motivation, 123
 fenfluramine, 123
 H₂-receptor blockers, 511
 morphine dependent rats, 953
 naltrexone, 123
 opiate abstinence syndrome, 989
 palatability, 697
 passive avoidance, 567
 plasma cortisol level, 953
 satiation, 697
 sequential presentation, 697
 shuttle avoidance, 567
Naloxone antagonism, 209
 drug discrimination
 morphine
 pigeons
Naloxone-precipitated withdrawal, 1001
 drinking
 morphine
 physical dependence
 sucrose
Naltrexone
 amphetamine, 123
 anxiety, 595
 CGS 8216, 439
 convulsions, 595
 6,7-dimethoxy, 4 ethyl β -carboline carboxylic acid methyl ester (DMCM), 595
 drug interactions, 439
 eating motivation, 123
 endogenous opioids, 573
 ethanol, 439
 fenfluramine, 123
 locomotor activity, 595
 naloxone, 123
 prenatal stress, 573
 propunishment, 595
 satiety, 123
 sexual behavior differentiation, 573
 shock avoidance, 439
 timeout from avoidance, 439
Neonates, 1145
 benzodiazepines
 convulsions
 hyperactivity
 type 2 receptors
Neural transplants, 297
 animal model
 Huntington's disease, 297
 locomotor hyperactivity, 297
Neurobiological responses, 41
 immobilization, acute
 social isolation
Neuroleptics
 apomorphine, 473, 503
 behavioral deficits, 503
 cataleptic behavior, 463
 cognitive deficits, 503
 D₂ receptors, 1185
 dopamine, 1185
 dopamine receptors, 473
 drug interactions, 463
 exploratory behavior, 473
 haloperidol, 791
 internal clock speed, 1185
 motor effects, 791
 operant behavior, 503
 operant responding, 791
 prostaglandins, 463
 time estimation, 1185
Neurotransmitter amino acids, 71
 aggression
 bull breeds
 limbic system
Nicotine
 barrel rotation, 583
 body weight, 1131
 caloric intake, 1131
 conditioned place aversion, 1041
 conditioned place preference, 1041
 cytisine, 843
 dogs, 843
 drug interactions, 185
 finger tapping, 727
 fourth ventricle, 843
 high/low affinity sites, 843
 human studies, non-smokers, 727
 lesions, kainic acid, 583
 locomotor activity, 1041
 2-methylpiperidone, 843
 monkeys, 185
 phencyclidine (PCP), 185
 physical activity, 1131
 prostration, 583
 rats, females, 1131
 repeated acquisition, 185
 response chain, 185

- vasopressin, 583
- vestibular cerebellum, 583
- Nicotine absorption, 1181
 - buccal mucosa
 - human studies
 - passive smoking
- Nicotine gum, 879
 - electroencephalographic effects
 - human studies, smokers
 - tobacco deprivation
- Nigro-striatal pathway, 63
 - DOPAC concentrations
 - electrical stimulation
 - intracranial self-stimulation
 - in vivo*
- Nociception sensitivity, 883
 - 5-hydroxytryptamine
 - hyperalgesia
 - hypoalgesia
 - 8-OH-2-(di-n-propylamino)tetralin (8-OH-DPAT)
 - route of administration
- Noradrenergic denervation, 743
 - α_1 -adrenoceptors
 - β -adrenoceptors
 - functional sensitivity
 - N-(2-chloroethyl)-N-ethyl-2-bromo-benzylamine (DSP-4)
- Norepinephrine (NE)
 - adenylate cyclase, 223
 - ^3H -cyclic AMP, 223
 - deprivation, 1223
 - eating, 1223
 - medial hypothalamus, 1223
 - paraventricular nucleus (PVN), 1223
 - REM sleep deprivation, 223
 - serotonin, 1223
- Nucleus accumbens
 - amphetamine, 1149
 - dopamine metabolism, 1095
 - eating, 1149
 - feeding behavior, 1095
 - ingestion, 1095
 - locomotor activity, 1149
 - striatum, 1095
- Obesity
 - brain monoamines, 401
 - hyperphagia, 401
 - hypocaloric diets, 681
 - insulin receptors, 681
 - lesions, medial hypothalamus, 401
 - simple carbohydrate comparisons, 681
- Offspring behavior, 873
 - 5-HT syndrome
 - open-field behavior
 - prenatal stress
- 8-OH-2-(di-n-propylamino)tetralin (8-OH-DPAT), 883
 - 5-hydroxytryptamine (5-HT)
 - hyperalgesia
 - hypoalgesia
 - nociception sensitivity
 - route of administration
- Open field
 - hypertension, 317
 - lesions, dorsal raphe nucleus, 1211
 - lesions, locus coeruleus, 1211
 - lesions, medial raphe nucleus, 1211
 - lesions, substantia nigra, 317
 - locomotor activity, 1211
- α_2 -receptors, 1211
 - sedation, clonidine induced, 1211
 - strain differences, 317
 - striatal dopamine content, 317
- Open-field activity, 289
 - genetic behavior
 - genetic breeding
 - habituation
 - pharmacogenetics
- Open-field behavior, 873
 - 5-HT syndrome
 - offspring behavior
 - prenatal stress
- Operant behavior
 - apomorphine, 503
 - behavioral deficits, 503
 - cognitive deficits, 503
 - differential reinforcement of low rate of response (DRL), 1191
 - fixed ratio performance, 1191
 - intracranial administration, 717
 - lysergic acid diethylamide (LSD), 717
 - neuroleptics, 503
 - 3-quinuclidinyl benzilate (QNB), 1191
 - route of administration, 717
 - schedule dependent effects, 1191
- Operant responding, 791
 - haloperidol
 - motor effects
 - neuroleptics
- Opiate abstinence syndrome, 989
 - adrenergic receptors
 - clonidine
 - continuous infusion
 - drug interactions
 - naloxone
- Opiate agonists, 543
 - deer mouse
 - food hoarding
 - ingestion
- Opiate receptor sites, 1303
 - endogenous opiates
 - peptide interactions
 - Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
- Opiate receptors, 959
 - circling, opiate-induced
 - dopaminergic system
 - ventral tegmental area
- Opiate tolerance, 533
 - antinociceptive system
 - morphine
 - stimulation-produced analgesia
- Opiates
 - drug interactions, 1007
 - endogenous opiates, 1007
 - locomotor behavior, 233
 - postpartum aggression, 1007
 - psychostimulants, 233
 - sympathomimetics, 233
- Opioid agonists, 77
 - drinking
 - water balance
- Opioid peptides, 967
 - anorexia
 - fenfluramine
 - gastrointestinal tract
- Oxytocin, 107
 - corticosterone
 - psychological stressor
- P-chlorophenylalanine (PCPA), 415
 - shock, uncontrollable
 - stress
- Pain, 171
 - analgesia, stress-induced
 - cold water swim
 - hyperphagia
 - hypothermia
 - muscarinic agents
- Palatability, 697
 - drinking
 - naloxone
 - satiation
 - sequential presentation
- Paraventricular nucleus (PVN), 1223
 - deprivation
 - eating
 - medial hypothalamus
 - norepinephrine (NE)
 - serotonin
- Partial reinforcement extinction effect, 1231
 - anhedonia
 - haloperidol
 - reward omission, periodic
 - water reinforcement
- Passive avoidance
 - amnesia, 567
 - anisomycin, 567
 - cycloheximide, 567
 - drug interactions, 567
 - exponential data analysis, 979
 - naloxone, 567
 - shuttle avoidance, 567
 - step-through latencies, 979
- Passive avoidance behavior, 1125
 - consolidation
 - memory effects, time related
 - retrieval
 - vasopressin
 - vasopressin analogues
- Passive smoking, 1181
 - buccal mucosa
 - human studies
 - nicotine absorption
- Pavlovian conditioning, 1111
 - ethanol
 - ethanol withdrawal
- ^3H -PCP binding potency, 1051
 - autoradiography
 - discriminative stimulus properties
 - phencyclidine (PCP)-related compounds
- Pemoline, 933
 - hotplate test
 - self-injurious behavior
 - stereotypy
- Pentobarbital
 - anticonvulsant effects, 1059
 - bicuculline, 1059
 - drug interactions, 1059
 - fixed ratio/fixed interval schedule, 375
 - GABA_A receptors, 1059
 - locomotor activity, 375
 - maximal electroshock, 1059
 - phenobarbital, 1059
 - picrotoxin, 1059
 - secobarbital, 375
 - seizures, 1059
 - stereoisomers, 375
 - variable interval schedule, 375

- Peptide**
- adrenocorticotrophic hormone 1–24
(ACTH 1–24), 753, 1303
 - adrenocorticotrophic hormone 1–39
(ACTH 1–39), 1303
 - alpha-methyl-p-tyrosine, 959
 - arginine vasopressin (AVP), 797, 1125
 - arginine vasopressin (1–8) (AVP-(1–8)), 1125
 - arginine vasopressin (4–8) (AVP-(4–8)), 1125
 - arginine vasopressin (4–9) (AVP-(4–9)), 1125
 - arginine vasopressin (5–8) (AVP-(5–8)), 1125
 - arginine vasopressin (5–9) (AVP-(5–9)), 1125
 - bombesin, 7
 - cholecystokinin (CCK), 7, 1067
 - cholecystokinin octapeptide (CCK-8), 1303
 - cyclo(leucyl-glycyl) (cLG), 1279
 - d-Ala(2)-d-Leu(5)-enkephalin (DADLE), 959
 - [D-Pen²,D-Pen⁵-enkephalin] (DPDPE), 77, 1303
 - desglycinamide-arginine-vasopressin (DGAVP), 797
 - dynorphin (1–13), 77, 959
 - FMRF-NH₂, 1303
 - morphiceptin, 1303
 - MSH-release inhibiting factor-1 (MIF-1), 757, 1303
 - Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1), 757, 1303
 - substance P, 469
 - (Tyr-D-Ala-Gly-(Me)Phe-Gly-ol) (DAGO), 1303
 - (Tyr-D-Ala-Gly-(Me)Phe-Met-ol) (FK33824), 1303
 - vasopressin, 583, 589
- Peptide interactions**, 1303
- endogenous opiates
 - opiate receptor sites
 - Tyr-MSH-release inhibiting factor-1 (Tyr-MIF-1)
- Perinatal exposure**, 763
- adrenergic receptors
 - dopamine receptors
 - marijuana
 - tyrosine hydroxylase activity
- Perioral behaviors**, 1217
- cholinesterase inhibitors
 - physostigmine
 - tardive dyskinesia
- Perseveration**, 29
- alternation
 - amphetamine
 - locomotor excitation
- Pharmacogenetics**, 515
- antidepressants
 - intrasppecies behavior
 - locomotor activity
- Pharmacogenetics**, 289
- genetic behavior
 - genetic breeding
 - habituation
 - open-field activity
- Phencyclidine (PCP)**
- acoustic startle, 1175
 - amphetamine, 1175
 - calcium antagonists, 45
 - cocaine, 1175
 - cross-tolerance, 1175
 - delayed performance, 201
 - drug discrimination, 117
 - drug interactions, 45, 185
 - habituation, 1175
 - in vitro*, 827
 - metabolic interactions, 827
 - monkeys, 185, 201
 - motor activity, 45
 - nicotine, 185
 - pigeons, 117
 - plasma phencyclidine, 117
 - Ca⁺⁺-precipitated liver microsomes, 827
 - repeated acquisition, 185, 201
 - response chains, 185, 201
 - retention, 201
 - sensitization, 1175
 - Δ⁹-tetrahydrocannabinol (Δ⁹-THC), 827
 - tolerance, 1175
- Phencyclidine (PCP) metabolites**, 359
- age differences
 - cats
 - tolerance
- Phencyclidine (PCP)-related compounds**, 1051
- autoradiography
 - discriminative stimulus properties
 - ³H-PCP binding potency
- Phenobarbital**
- anticonvulsant effects, 1059
 - bicuculline, 1059
 - delayed-matching-to-sample, 929
 - drug interactions, 929, 1059
 - GABA_A receptors, 1059
 - maximal electroshock, 1059
 - pentobarbital, 1059
 - phenytoin, 929
 - picrotoxin, 1059
 - seizures, 1059
 - valproic acid, 929
- Phentermine**, 623
- abrupt feeding
 - food deprivation
 - self-administration
- Phenylethylamine (PEA)**
- amphetamine, 711
 - anorexia, drug induced, 711
 - chronic administration, 129
 - dopamine receptors, 129
 - hyperactivity, drug induced, 711
 - motor activity, 129
 - sensitization, 129
- Phenytoin**, 929
- delayed-matching-to-sample
 - drug interactions
 - phenobarbital
 - valproic acid
- Physical activity**, 1131
- body weight
 - caloric intake
 - nicotine
 - rats, females
- Physical dependence**, 1001
- drinking
 - morphine
 - naloxone-precipitated withdrawal
 - sucrose
- Physostigmine**, 1217
- cholinesterase inhibitors
- perioral behaviors**
- tardive dyskinesia
- Picrotoxin**, 1059
- anticonvulsive effects
 - bicuculline
 - drug interactions
 - GABA_A receptors
 - maximal electroshock
 - pentobarbital
 - phenobarbital
 - seizures
- Pigeons**
- anxiety, 371
 - anxiolytic drugs, 371
 - beta-blockers, 371
 - delayed-matching-to-sample, 929
 - drug discrimination, 117, 209
 - drug interactions, 149, 929
 - imipramine, 149
 - methadone, 149
 - morphine, 209
 - naloxone antagonism, 209
 - phencyclidine (PCP), 117
 - phenobarbital, 929
 - phenytoin, 929
 - plasma phencyclidine, 117
 - punished responding, 371
 - variable interval schedule, 149
- Pimozone**
- anhedonia, 219, 615
 - duration of response, 615
 - force of response, 615
 - licking, 219
 - response rate, 615
 - sucrose concentration, 219
- Piracetam-like compounds**, 925
- amnesia
 - drug interactions
 - hemicholinium-3
- Pirenperone**, 111
- harmine
 - ketanserin
 - lordosis
- Pizotyline**, 227
- lysergic acid diethylamide (LSD)
 - stimulus control
 - verapamil
- Place preference**, 1169
- classical conditioning
 - drug reinforcement
 - exploratory behavior
 - habituation
 - morphine
- Plasma cortisol level**, 953
- angiotensin converting enzyme (ACE) activity
 - aspartic acid
 - brain asparaginase
 - morphine dependent rats
 - naloxone
- Plasma ethanol levels**, 889
- EEG alpha activity
 - ethanol-induced euphoria
 - human studies
- Plasma levels**, 365
- diphenhydramine
 - driving related tasks
 - human studies, males
- Plasma phencyclidine**, 117
- drug discrimination
 - phencyclidine (PCP)
 - pigeons

- Polydipsia, 431
 benzodiazepines
 conditioned taste aversion
 drinking
 two-bottle choice paradigm
- Postpartum aggression, 1007
 drug interactions
 endogenous opioids
 opiates
- Postural asymmetry, 689
 apomorphine
 lateralized rotation
- ³H-Prazosin, 329
 adrenoceptors
 antidepressants
³H-dihydroalprenolol (³H-DHA)
 binding
- REM sleep deprivation
- Ca⁺⁺-Precipitated liver microsomes, 827
in vitro
 metabolic interactions
 phencyclidine (PCP)
 Δ^9 -tetrahydrocannabinol (Δ^9 -THC)
- Prenatal alcohol exposure, 1021
 circling behavior
 locomotor activity
- Prenatal stress
 endogenous opioids, 573
 5-HT syndrome, 873
 naltrexone, 573
 offspring behavior, 873
 open-field behavior, 873
 sexual behavior differentiation, 573
- Presynaptic dopaminergic terminals, 191
 cocaine
 lesions, neurotoxic
 medial prefrontal cortex
 self-administration, intracranial
- Preweaning lead exposure, 1089
 behavioral development
 lead retention
- Procaine, 857
 lordosis disruption
 midbrain infusions
 tetrodotoxin
- Prolactin secretion, 457
 buspirone
 corticosterone secretion
 stress
- Propranolol, 23
 drug interactions
 5-hydroxytryptamine (5-HT)
 hyperdipsia
 hypophagia
 methysergide
- Propunishment, 595
 anxiety
 convulsions
 6,7-dimethoxy, 4 ethyl β -carboline carboxylic acid methyl ester (DMCM)
 locomotor activity
 naltrexone
- Prostaglandins
 cataleptic behavior, 463
 drug interactions, 463
 neuroleptics, 463
 pyrexia, 347
 subdienccephalic rat brain, 347
- Prostaglandin (PGE₁), 353
 cochlear nucleus
 pyrexia
- Prostration, 583
 barrel rotation
 lesions, kainic acid
 nicotine
 vasopressin
 vestibular cerebellum
- Psychological stressor, 107
 corticosterone
 oxytocin
- Psychostimulants, 233
 locomotor behavior
 opiates
 sympathomimetics
- Punished responding, 371
 anxiety
 anxiolytic drugs
 beta-blockers
 pigeons
- Purine nucleotide binding, 733
 appetite suppressants
 brown adipose tissue (BAT)
- Pyrexia
 cochlear nucleus, 353
 prostaglandin, 347
 prostaglandin (PGE₁), 353
 subdienccephalic rat brain, 347
- Pyridostigmine, 1071
 cholinesterase inhibition
 clinical chemistry
 heat
 thermoregulation
- 3-Quinuclidinyl benzilate (QNB), 1191
 differential reinforcement of low rate of response (DRL)
 fixed ratio performance
 operant behavior
 schedule dependent effects
- ³H-Quinuclidinyl benzilate (³H-QNB) binding, 1293
 body temperature
 diisopropylfluorophosphate (DFP)
 heart rate
 locomotor activity
 muscarinic receptors
 respiration rate
 tolerance
- Rabbits
 analgesiometry, 481
 blood pressure, 423
 chemical stimulation, 423
 ear-withdrawal, 481
 heart rate, 423
 hippocampal 5-HT activity, 781
 mediodorsal nucleus of the thalamus, 423
 tonic immobility, 781
- Radial arm maze, 1117
 dopamine systems
 LY 171555
- Radial arm maze performance, 703
 ethanol
 sex differences
- Radial maze performance, 521
 BW813U
 choline acetyltransferase (ChAT) inhibitor
 spatial memory
- Rapid eye movement (REM) sleep, 1253
 cholinomimetics
 chronic microinfusion
- Rat/pigeon comparisons, 393
 drug discrimination
 hexahydrocannabinol stereochemistry
- Rats, females, 1131
 body weight
 caloric intake
 nicotine
 physical activity
- Rearing, 99
 anorexia
 eating
 FG 7142
 grooming
 hyperphagia
 locomotor activity
 midazolam
- Receptor changes, 589
 barrel rotation
 behavioral changes
 lesions, kainic acid
- α_2 -Receptors, 1211
 lesions, dorsal raphe nucleus
 lesions, locus coeruleus
 lesions, medial raphe nucleus
 locomotor activity
 open field
 sedation, clonidine induced
- Recovery, 1307
 amphetamine
 dopamine depletion
 lesions, 6-hydroxydopamine (6-OHDA)
 lesions, substantia nigra
 rotation
- Reinforcement threshold, 1263
 morphine
 response rate
 self-stimulation
 withdrawal, precipitated
 withdrawal, spontaneous
- REM sleep deprivation
 adenylate cyclase, 223
 adrenoceptors, 329
 antidepressants, 329
³H-cyclic AMP, 223
³H-dihydroalprenolol (³H-DHA) binding
 norepinephrine (NE), 223
³H-prazosin, 329
- Renal sympathetic nerve, 641
 anesthesia
 antinociception
 cardiovascular system
 [D-Ala²]-methionine enkephalinamide (DALA)
- Repeated acquisition
 delayed performance, 201
 drug interactions, 185
 monkeys, 185, 201
 nicotine, 185
 phencyclidine (PCP), 185, 201
 response chains, 185, 201
 retention, 201
- Reproduction, 449
 drinking
 hamsters
 high-caloric-fluids
 social stress

- Respiration rate**, 1293
 body temperature
 diisopropylfluorophosphate (DFP)
 heart rate
 locomotor activity
 muscarinic receptors
³H-quinuclidinyl benzilate (³H-QNB)
 binding
 tolerance
- Response bias**, 633
 delayed response
 discrimination
 scopolamine
 working memory
- Response chains**
 delayed performance, 201
 drug interactions, 185
 monkeys, 185, 201
 nicotine, 185
 phencyclidine (PCP), 185, 201
 repeated acquisition, 185, 201
 retention, 201
- Response rate**, 615
 anhedonia, 615
 duration of response, 615
 force of response, 615
 morphine, 1263
 pimozide, 615
 reinforcement threshold, 1263
 self-stimulation, 1263
 withdrawal, precipitated, 1263
 withdrawal, spontaneous, 1263
- Restraint stress**, 1083
 ulcer proliferation
 voluntary ethanol consumption
- Retention**, 201
 delayed performance
 monkeys
 phencyclidine (PCP)
 repeated acquisition
 response chains
- Retinol palmitate**, 1285
 cholesterol
 dietary manipulation
 essential fatty acids
 ethanol preference
 hamsters
- Retrieval**, 1125
 consolidation
 memory effects, time related
 passive avoidance behavior
 vasopressin
 vasopressin analogues
- Reverse handedness**, 651
 appetitive learning
 brain DNA
 DNA synthesis
- Reward omission**, periodic, 1231
 anhedonia
 haloperidol
 partial reinforcement extinction effect
 water reinforcement
- Reward threshold**, 629
 brain stimulation
 drug interactions
 nalbuphine
 tripeleannamine, 629
- Rodents**, small, 487
 intracerebral cannula
 unrestrained animals
- Rotation**, 1307
 amphetamine
- dopamine depletion
 lesions, 6-hydroxydopamine
 (6-OHDA)
 lesions, substantia nigra
 recovery
- Route of administration**
 5-hydroxytryptamine, 883
 hyperalgesia, 883
 hypoalgesia, 883
 intracranial administration, 717
 lysergic acid diethylamide (LSD), 717
 nociception sensitivity, 883
 8-OH-2-(di-n-propylamino)tetralin
 (8-OH-DPAT), 883
 operant behavior, 717
- Saccharin consumption**, 341
 CGS 8216
 drinking
- Satiation**, 697
 drinking
 naloxone
 palatability
 sequential presentation
- Satiety**, 123
 amphetamine
 eating motivation
 fenfluramine
 naloxone
 naltrexone
- Schedule-controlled behavior**, 537
 benzodiazepine antagonists
 drug interactions
- Schedule dependent effects**, 1191
 differential reinforcement of low rate of response (DRL)
 fixed ratio performance
 operant behavior
 3-quinuclidinyl benzilate (QNB)
- Scopolamine**
 age differences, 673
 area postrema, 269
 avoidance conditioning, 673
 conditioned taste aversion, 269
 delayed response, 633
 discrimination, 633
 locomotor activity, 269
 maze learning, 673
 memory, 673
 response bias, 633
 working memory, 633
- Secobarbital**, 375
 fixed ratio/fixed interval schedule
 locomotor activity
 pentobarbital
 stereoisomers
 variable interval schedule
- Sedation**, clonidine-induced, 1211
 lesions, dorsal raphe nucleus
 lesions, locus coeruleus
 lesions, medial raphe nucleus
 locomotor activity
 open field
 α_2 -receptors
- Sedation hypnosis**, 333
 circadian rhythm
 sleep time
 strain differences
- Seizures**, 1059
 anticonvulsant effects
 bicuculline
- drug interactions
 GABA_A receptors
 maximal electroshock
 pentobarbital
 phenobarbital
 picrotoxin
- Seizures**, pentylenetetrazol (PTZ)
 induced, 949
 catecholamines
 6-hydroxydopamine (6-OHDA)
 α -methyl-p-tyrosine (α -MPT)
- Selective breeding**, 1077
 chlordiazepoxide-induced sleep
 GABAergic drugs
- Self-administration**
 abrupt refeeding, 623
 cocaine, 497
 drug discrimination, 785
 food deprivation, 623
 haloperidol, 497
 metazocine, 785
 monkeys, 785
 phentermine, 623
 sex differences, 497
 stimulus properties, 785
 tamoxifen, 497
- Self-administration, intracranial**, 191
 cocaine
 lesions, neurotoxic
 medial prefrontal cortex
 presynaptic dopaminergic terminals
- Self-injurious behavior**, 933
 hotplate test
 pemoline
 stereotypy
- Self-stimulation**, 1263
 morphine
 reinforcement threshold
 response rate
 withdrawal, precipitated
 withdrawal, spontaneous
- Sensitization**
 acoustic startle, 1175
 amphetamine, 1175
 chronic administration, 129
 cocaine, 1175
 cross-tolerance, 1175
 dopamine receptors, 129
 habituation, 1175
 motor activity, 129
 phencyclidine (PCP), 1175
 phenylethylamine (PEA), 129
 tolerance, 1175
- Sequential presentation**, 697
 drinking
 naloxone
 palatability
 satiation
- Serotonergic neurons**, 1
 antidepressants
 escape deficits
 inescapable shock
 learned helplessness
- Serotonergic receptors**, 805
 antidepressants
 model of depression
- Serotonin**, 1223
 deprivation
 eating
 medial hypothalamus
 norepinephrine (NE)
 paraventricular nucleus (PVN)

- Serotonin antagonists, 1207
 dose-dependent effects
 drug discrimination
 5-methoxy-N,N-dimethyltryptamine (5-OMe DMT)
 stimulus properties
- Serotonin synthesis, 797
 ethanol tolerance
 limbic structures
 vasopressin-like peptides
- Sex differences
 cocaine, 497
 ethanol, 703
 haloperidol, 497
 radial arm maze performance, 703
 self-administration, 497
 tamoxifen, 497
- Sexual behavior differentiation, 573
 endogenous opioids
 naltrexone
 prenatal stress
- Shock, 1163
 adjunctive consumption
 alcohol
 drinking
 extinction
 lithium
 stress
- Shock avoidance, 439
 CGS 8216
 drug interactions
 ethanol
 naltrexone
 timeout from avoidance
- Shock escape learning, 693
 apomorphine
 dopaminergic mechanisms
- Shock, uncontrollable, 415
 p-chlorophenylalanine (PCPA)
 stress
- Shuttle avoidance, 567
 amnesia
 anisomycin
 cycloheximide
 drug interactions
 naloxone
 passive avoidance
- Sidman avoidance schedule, 145
 d-amphetamine
 bin analysis
 inter-response time
 monkeys
- Simple carbohydrate comparisons, 681
 hypocaloric diets
 insulin receptors
 obesity
- Simultaneous brightness discrimination, 939
 d-amphetamine
 two stage administration
- Single-trial, 1101
 conditioned place preference
 drug reinforcement
 morphine
- Single unit activity, 607
 ethanol effects
 somatosensory cortex
- Sleep time, 333
 circadian rhythm
 sedation hypnosis
 strain differences
- Smoking topography, 1245
 carbon monoxide exposure
 filter vent blocking
 human studies
 tobacco
- Snails, 1201
 analgesia
 classical conditioning
 environmental specific cues
 habituation
 morphine
 stress
 tolerance
- Social isolation, 41
 immobilization, acute
 neurobiological responses
- Social stress, 449
 drinking
 hamsters
 high-calorie fluids
 reproduction
- Sodium pentobarbital, 35
 classical conditioning
 cross tolerance
 ethanol
- Sodium valproate, 747
 chlordiazepoxide
 spatial behavior
- Somatosensory cortex, 607
 ethanol effects
 single unit activity
- Spatial behavior, 747
 chlordiazepoxide
 sodium valproate
- Spatial memory, 521
 BW813U
 choline acetyltransferase (ChAT)
 inhibitor
 radial maze performance
- Spinal motoneurons, 89
 cannabidiol
 cats
 electrophysiological properties
 synaptic effects
- Spontaneous chewing movements, 897
 acute administration
 antipsychotic drugs
 chronic administration
 tardive dyskinesia
- Step through latencies, 979
 exponential data analysis
 passive avoidance
- Stereoisomers, 375
 fixed ratio/fixed interval schedule
 locomotor activity
 pentobarbital
 secobarbital
 variable interval schedule
- Stereotypy
 α_2 -adrenergic antagonists, 155
 amphetamine, 155
 atropine, 985
 clonidine, 985
 drug interactions, 985
 hotplate test, 933
 in vivo, 155
 locomotor activity, 155, 985
 pemoline, 933
 self-injurious behavior, 933
- Stereotypy, apomorphine-induced, 1279
 cyclo(leucyl-glycyl) (cLG)
 dopamine receptors
- haloperidol
 supersensitivity
- Steroidogenesis, 753
 adrenal cortex
 adrenocorticotrophin 1-24 (ACTH (1-24))
 corticosterone synthesis
- Stimulants, 277
 investigatory behavior
 locomotor activity
 multivariate assessment
- Stimulus-produced analgesia, 533
 antinociceptive system
 morphine
 opiate tolerance
- Stimulus control, 227
 lysergic acid diethylamide (LSD)
 pizotyline
 verapamil
- Stimulus properties
 dose-dependent effects, 1207
 drug discrimination, 785, 1207
 metazocine, 785
 5-methoxy-N,N-dimethyltryptamine (5-OMe DMT), 1207
 monkeys, 785
 self-administration, 785
 serotonin antagonists, 1207
- Strain differences
 caffeine, 1271
 circadian rhythm, 333
 hypertension, 317
 lesions, substantia nigra, 317
 locomotor activity, 1271
 open field, 317
 sedation hypnosis, 333
 sleep time, 333
 striatal dopamine content, 317
 theophylline, 1271
- Stress
 adjunctive consumption, 1163
 alcohol, 1163
 analgesia, 1201
 buspirone, 457
 p-chlorophenylalanine (PCPA), 415
 classical conditioning, 1201
 corticosterone secretion, 457
 drinking, 1163
 environmental specific cues, 1201
 extinction, 1163
 habituation, 1201
 lithium, 1163
 morphine, 1201
 prolactin secretion, 457
 shock, 1163
 shock, uncontrollable, 415
 snails, 1201
 tolerance, 1201
- Stress-induced analgesia, 181
 classical conditioning
 tail flick
- Striatal dopamine content, 317
 hypertension
 lesions, substantia nigra
 open field
 strain differences
- Striatal dopamine system, 865
 DOPAC/DA ratio
 dopamine release
 unilateral barpressing
- Striatum, 1095
 dopamine metabolism

- feeding behavior
- ingestion
- nucleus accumbens
- Subdiencephalic rat brain, 347
 - prostaglandin
 - pyrexia
- Subjective ratings, 659
 - human studies
 - marijuana smoking
 - tobacco smoking
- Substance P, 469
 - avoidance learning
 - inhibitory avoidance
- Sucrose, 1001
 - drinking
 - morphine
 - naloxone-precipitated withdrawal
 - physical dependence
- Sucrose concentration, 219
 - anhedonia
 - licking
 - pimozide
- Supersensitivity, 1279
 - cyclo(leucyl-glycyl) (cLG)
 - dopamine receptors
 - haloperidol
 - stereotypy, apomorphine-induced
- Sympathomimetics, 233
 - locomotor behavior
 - opiates
 - psychostimulants
- Synaptic effects, 89
 - cannabidiol
 - cats
 - electrophysiological properties
 - spinal motoneurons
- Tail flick, 181
 - classical conditioning
 - stress-induced analgesia
- Tamoxifen, 497
 - cocaine
 - haloperidol
 - self-administration
 - sex differences
- Tardive dyskinesia
 - acute administration, 897
 - antipsychotic drugs, 897
 - cholinesterase inhibitors, 1217
 - chronic administration, 897
 - perioral behaviors, 1217
 - physostigmine, 1217
 - spontaneous chewing movements, 897
- Temporal analysis, 995
 - conditioned taste aversion
 - duration of action
 - tryptamine
- Testosterone, 823
 - chicks
 - memory
- Δ^9 -Tetrahydrocannabinol (Δ^9 -THC), 827
 - in vitro
 - metabolic interactions
 - phencyclidine (PCP)
 - Ca^{++} -precipitated liver microsomes
- Tetralin analogues, 135
 - drug discrimination
 - 8-hydroxy-2-(di-n-propylamino) tetralin (8-OH DPAT)
 - ketanserin pretreatment
- Tetrodotoxin, 857
 - lordosis disruption
 - midbrain infusions
 - procaine
- Theobromine, 769
 - adenosine receptors
 - hypothermia
 - inbred strains
 - locomotor activity
 - methylxanthines
- Theophylline, 1271
 - caffeine
 - locomotor activity
 - strain differences
- Thermic response shifts, 83
 - conditioned hyperactivity hypothesis
 - drug interactions
- Thermoregulation
 - Ca^{++} -ATPase activity, 549
 - calcium channel antagonists, 555
 - cholinesterase inhibition, 1071
 - clinical chemistry, 1071
 - dihydropyridine receptors, 549
 - drug interactions, 555
 - heat, 1071
 - hyperthermia, 555
 - pyridostigmine, 1071
- 5-Thioglucose, 59
 - 2-deoxyglucose
 - feeding behavior
 - hyperphagia
 - lateral hypothalamus
 - ventromedial hypothalamus
- Time-dependent modulation, 919
 - amphetamine-induced hyperactivity
 - estrogen
- Time estimation, 1185
 - D₂ receptors
 - dopamine
 - internal clock speed
 - neuroleptics
- Timeout from avoidance, 439
 - CGS 8216
 - drug interactions
 - ethanol
 - naltrexone
 - shock avoidance
- Tizanidine, 835
 - antnociception
 - drug comparisons
 - drug interactions
 - morphine
 - tolerance
- Tobacco, 1245
 - carbon monoxide exposure
 - filter vent blocking
 - human studies
 - smoking topography
- Tobacco deprivation, 879
 - electroencephalographic effects
 - human studies, smokers
 - nicotine gum
- Tobacco smoking, 659
 - human studies
 - marijuana smoking
 - subjective ratings
- Tolerance
 - acoustic startle, 1175
 - acute administration, 1195
 - age differences, 359
 - aggression, 1195
 - ambient temperature, 667
- amphetamine, 1175
- analgesia, 1201
- antinociception, 835
- benzodiazepines, 1237
- body temperature, 1293
- l-cathinone, 13
- cats, 359
- chickens, 1237
- chlordiazepoxide, 1237
- chronic administration, 13, 667, 1195
- chronic infusion, 483
- classical conditioning, 1201
- cocaine, 1175
- cross-tolerance, 1175
- diisopropylfluorophosphate (DFP), 1293
- drug administration, 13
- drug comparisons, 835
- drug interactions, 835
- environmental specific cues, 1201
- ethanol, 667
- habituation, 1175, 1201
- heart rate, 1293
- hypothermia, ethanol-induced, 667
- intrathecral injection, 483
- locomotor activity, 1293
- magnesium, 1195
- morphine, 835, 1201
- muscarinic receptors, 1293
- phencyclidine (PCP), 1175
- phencyclidine (PCP) metabolites, 359
- ³H-quinuclidinyl benzilate (³H-QNB) binding, 1293
- respiration rate, 1293
- sensitization, 1175
- snails, 1201
- stress, 1201
- tizanidine, 835
- tonic immobility, 1237
- Tonic immobility
 - benzodiazepines, 1237
 - chickens, 1237
 - chlordiazepoxide, 1237
 - hippocampal 5-HT activity, 781
 - rabbits, 781
 - tolerance, 1237
- Tripeplennamine, 629
 - brain stimulation
 - drug interactions
 - nalbuphine
 - reward threshold
- Tryptamine, 995
 - conditioned taste aversion
 - duration of action
 - temporal analysis
- L-Tryptophan, 849
 - amphetamine self-administration
- Two-bottle choice paradigm, 431
 - benzodiazepines
 - conditioned taste aversion
 - drinking
 - polydipsia
- Two stage administration, 939
 - d-amphetamine
 - simultaneous brightness discrimination
- Type 2 receptors, 1145
 - benzodiazepines
 - convulsions
 - hyperactivity
 - neonates
- Tyrosine hydroxylase activity, 763
 - adrenergic receptors

- dopamine receptors
 marijuana
 perinatal exposure
L-Tyrosine, 1027
 amphetamine self-administration
 brain catecholamines

Ulcer proliferation, 1083
 restraint stress
 voluntary ethanol consumption
Unilateral barpressing, 865
 DOPAC/DA ratio
 dopamine release
 striatal dopamine system
Unrestrained animals, 487
 intracerebral cannula
 rodents, small

Valproic acid, 929
 delayed-matching-to-sample
 drug interactions
 phenobarbital
 phenytoin
 pigeons
Variable interval schedule
 drug interactions, 149
 fixed ratio/fixed interval schedule, 375
imipramine, 149
 locomotor activity, 375
 methadone, 149
 pentobarbital, 375
 pigeons, 149
 secobarbital, 375
 stereoisomers, 375
Vasopressin
 barrel rotation, 583
 consolidation, 1125
 lesions, kainic acid, 583
 memory effects, time related, 1125

 nicotine, 583
 passive avoidance behavior, 1125
 prostration, 583
 retrieval, 1125
 vasopressin analogues, 1125
 vestibular cerebellum, 583
Vasopressin analogues, 1125
 consolidation
 memory effects, time related
 passive avoidance behavior
 retrieval
 vasopressin
Vasopressin-like peptides, 797
 ethanol tolerance
 limbic structures
 serotonin synthesis
Ventral tegmental area, 959
 circling, opiate-induced
 dopaminergic system
 opiate receptors
Ventromedial hypothalamus, 59
 2-deoxy-D-glucose
 feeding behavior
 hyperphagia
 lateral hypothalamus
Verapamil, 227
 lysergic acid diethylamide (LSD)
 pizatiline
 stimulus control
Vestibular cerebellum, 583
 barrel rotation
 lesions, kainic acid
 nicotine
 prostration
 vasopressin
Voltammetric recording, 325
 in vivo
 nafion-coated electrodes
Voluntary ethanol consumption, 1083
 restraint stress
 ulcer proliferation
- Water**, 1159
 adjunctive consumption
 alcohol
 drinking
 extinction
 lithium
Water balance, 77
 drinking
 opioid agonists
Water deprivation, 1153
 2-deoxy-D-glucose
 glucoprivation
 hypophagia
 liquid diet
Water maze, 141
 brain iron-deficiency
 learning
Water reinforcement, 1231
 anhedonia
 haloperidol
 partial reinforcement extinction effect
 reward omission, periodic
Withdrawal, precipitated, 1263
 morphine
 reinforcement threshold
 response rate
 self-stimulation
 withdrawal, spontaneous
Withdrawal, spontaneous, 1263
 morphine
 reinforcement threshold
 response rate
 self-stimulation
 withdrawal, precipitated
Working memory, 633
 delayed response
 discrimination
 response bias
 scopolamine

AUTHOR INDEX

- Abed, W. T., 949
 Abiru, T., 463
 Abla, K. A., 1271
 Abood, L. G., 583, 589
 Addington, S., 989
 Akiyoshi, J., 805
 Allweis, C., 979
 Alpern, H. P., 333, 1077
 Alvarado, M. C., 487
 Amalric, M., 233
 Anderson, D., 415
 Andersson, U., 897
 Andrew, R. J., 823
 Anisman, H., 29
 Apfelbaum, M., 681, 913
 Armstrong, D. E., 561
 Aronstam, R. S., 985
 Avery, D. D., 7
 Ayhan, I. H., 215
 Azar, A. P., 381

 Baigts, F., 681
 Balster, R. L., 785
 Bapna, J. S., 59

 Bardo, M. T., 1101
 Barnett, G., 365
 Barrett, J., 1089
 Barrett, J. E., 371
 Bartles, R. R., 1153
 Bassett, J. R., 753
 Bayn, P., 681
 Beaman, C. M., 697
 Beaton, J. M., 1191
 Beckstead, J. W., 1237
 Benedikt, R. A., 889
 Benedito, M. A. C., 223
 Bengelloun, W. A., 903
 Bennett, E. L., 487
 Benowitz, N. L., 1181
 Ben-Shahar, O., 939
 Berge, O.-G., 883
 Bergman, J., 973
 Bethea, C. L., 457
 Betouille, D., 913
 Birbeck, K.-A., 747
 Blackburn, J. R., 1095
 Blundell, J. E., 123
 Bodnar, R. J., 171

 Bolger, G. T., 45, 51
 Bolin, J., 1107
 Bondesson, U., 897
 Bowen, D. J., 1131
 Bowman, R. E., 1117
 Brady, J. V., 577
 Bray, G. A., 733
 Braz, S., 223
 Breese, G. R., 63
 Bridges, R. S., 1007
 Brne, T., 1107
 Brown, R., 107
 Browne, R. G., 1051
 Buscalfusco, J. J., 985
 Buchanan, G. D., 527
 Buchanan, S. L., 423
 Burks, T. F., 77
 Burton, C. K., 599
 Burton, M. J., 23, 711
 Bushnell, P. J., 161

 Callahan, M. F., 641
 Cam, G. R., 753
 Camarena, M. L., 1217

 Camp, C. H., 813, 1231
 Cannon, D. J., 117
 Cao, W., 769, 1271
 Carney, J. M., 769, 1271
 Carnoy, P., 503
 Carr, G. D., 17
 Carr, L. A., 763
 Carson, J., 521
 Castellano, C., 181
 Chamberlain, J., 95
 Chandra, D., 59
 Chapin, J. K., 607
 Chernichovsky, D., 979
 Cho, C. H., 775
 Church, W. H., 865
 Chute, S., 129
 Clark, W. G., 481
 Cleary, J., 149
 Coenen, A. M. L., 329
 Coffey, P. J., 711
 Collins, A. C., 1293
 Cooper, S. J., 99, 341
 Cordoba, F., 71
 Coscina, D. V., 401

- Couch, L., 117
 Crabbe, J. C., 289
 Crawley, J. N., 45
 Cunnane, S. C., 1285
 Dai, S., 1001
 Dalton, J. C. H., 497
 DaVanzo, J. P., 95
 Dawson, R. G., 1089
 de Belleroche, J. S., 943
 Deckel, A. W., 297
 DE Jong, W., 317
 DeLeon-Jones, F. A., 1279
 Deupree, D., 77
 De Wied, D., 1125
 D'Onofrio, G., 651
 Duka, T., 595
 Durel, L. A., 371
 Durivage, M. E., 155
 Edwards, E., 415
 Eldred, N. L., 449
 El Mestikawy, S., 1
 Enginar, N., 953
 Ettenberg, A., 791, 813, 1231
 Eury, S. E., 1131
 Evans, K. R., 1149
 Exley, R. J., 989
 Falcon, R., 913
 Farabollini, F., 781
 Fasmer, O. B., 883
 Feldon, J., 939
 Fibiger, H. C., 1095
 Fields, J. Z., 1279
 Filart, R., 381
 File, S. E., 1145
 Fishbein, W., 1253
 Fishman, M. W., 577
 Fletcher, P. J., 23, 995
 Foltin, R. W., 577
 Fowler, S. C., 219, 615, 791
 Francesconi, R., 1071
 Franklin, S. R., 925
 Fudala, P. J., 1041
 Fumeron, F., 681
 Funahashi, M., 1035
 Furukawa, T., 463
 Gaffori, O. J. W., 1125
 Galizio, M., 439
 Gallup, G. G., Jr., 1237
 Garcia-Valdez, K., 1195
 Gardiner, I. M., 943
 Geis, L. S., 1027
 Geyer, M. A., 277
 Gianutsos, G., 129
 Gibbs, M. E., 823
 Giesecke, Jr., A. H., 481
 Giuditta, A., 651
 Glavin, G. B., 1083
 Glennon, R. A., 135, 1207
 Glick, S. D., 1021
 Glick, Z., 491
 Glowa, J. R., 973
 Goeders, N. E., 191
 Gonzalez, L. P., 1279
 Gori, G. B., 1181
 Gorzalka, B. B., 111
 Gramling, S. E., 219, 615
 Grassi, S., 583, 589
 Grecksch, G., 1137
 Griffiths, R. R., 659
 Grondin, L., 903
 Grunberg, N. E., 1131
 Güngör, M., 953
 Gunne, L. M., 897
 Hahn, B., 29
 Hall, A., 1083
 Hamilton, M. H., 943
 Hamon, M., 1
 Hara, C., 757
 Hardwick, W. C., 117
 Harlan, R. E., 857
 Hashimoto, H., 411
 Hatipoğlu, I., 953
 Hawkins, C., 1153
 Heise, G. A., 633
 Hempel, A. G., 989
 Henault, M. A., 297
 Henn, F. A., 415
 Henningfield, J. E., 659, 879
 Hepler, D. J., 293
 Herberg, L. J., 943
 Herning, R. I., 879
 Hitunen, A. J., 393
 Hines, G., 1159, 1163
 Hirst, M., 543, 1201
 Hizal, A., 953
 Ho, I. K., 599
 Hole, K., 883
 Hollingsworth, E., 933
 Hook, R., 843
 Horrobin, D. F., 1285
 Hoskins, B., 599
 Howard-Butcher, S., 359
 Hruby, V., 77
 Hsiao, S., 77
 Huang, Y.-S., 1285
 Hubbard, R., 1071
 Hughey, D., 521
 Hunter, G. A., 697
 Husain, S., 827
 Huston, J. P., 469
 Hydén, H., 651
 Ingram, D. K., 673
 Iwamoto, E. T., 1041
 Izewasser, S. E., 1195
 Jacobson, W., 527
 Jähkel, M., 41
 Jakubovic, A., 1095
 Järbe, T. U. C., 393
 Jarvis, M. J., 727
 Jhanwar-Uniyal, M., 381
 Johansson, P., 897
 Johnson, J., 415
 Jones, B., 889
 Jork, R., 1137
 Justice, A., 263
 Justice, J. B., Jr., 865
 Kalant, H., 667, 797
 Kamatchi, G. L., 59
 Kameyama, T., 567, 835
 Kamimura, H., 411
 Kamiya, H., 463
 Kantak, K. M., 1195
 Kaplan, E., 843
 Karas, C. A., 929
 Karler, R., 89
 Kastin, A. J., 757, 1303
 Katz, N. L., 1107
 Kavaliers, M., 543, 1201
 Kempf, E., 1211
 Khanna, J. M., 667
 Kimura, H., 1035
 Kinsley, C. H., 1007
 Kirkham, T. C., 123, 341
 Klimek, V., 329
 Knudson, K., 1223
 Kohda, H., 1035
 Kokkinidis, L., 1175
 Koo, M. W. L., 775
 Koob, G. F., 233
 Kornetsky, C., 629
 Koyuncuoğlu, H., 953
 Kozawa, T., 567
 Kozlowski, M. R., 1051
 Kramer, E., 171
 Krantz, D. S., 371
 Ktorza, A., 681
 Kulkosky, P. J., 1067
 LaCerra, M. M., 791
 Ladowsky, R. L., 269
 Lakhdar-Ghazal, N., 903
 Lamé, M. W., 827
 Lander, N., 393
 Lasoñ, W., 967
 Le, A. D., 667
 Leccese, A. P., 849
 Lee, J. M., 1279
 Leibowitz, S. F., 381, 1223
 Lerer, B. E., 293
 Leung, C. M. K., 1001
 Leva, N., 1071
 Levin, E. D., 1117
 Levine, M. S., 359
 Li, T.-K., 1013
 Liao, R.-M., 615
 Licko, V., 365
 Lieber, P., 1279
 Lipton, J. M., 481
 Liu, W.-F., 1191
 Livesey, D. J., 1089
 Livesey, P. J., 1089
 Livosky, M., 7
 Lodi, L., 781
 Logan, L., 769
 LoLordo, V. M., 561
 Lorens, S. A., 457
 Lukas, S. E., 889
 Lumeng, L., 1013
 Lupien, J. R., 733
 Lupo, C., 781
 Luttinger, D., 155
 Lynch, C. J., 1181
 Lyness, W. H., 849, 1027
 McCallister, L. W., 481
 McConaughay, M. M., 95
 McCown, T. J., 63
 McEvoy, P. M., 35
 McIntyre, T. D., 333, 1077
 McKinney, J., 1153
 McMillan, D. E., 117, 209
 Maier, D. M., 703
 Maiti, A., 583, 589
 Majed, N. H., 967
 Malin, D. H., 989
 Martin, P., 1
 Martin, W. R., 843
 Masten, V. L., 277
 Mastropaoilo, J., 201
 Masur, J., 739
 Matsuno, K., 835
 Matthew, C., 1071
 Matthies, H., 1137
 Mattingly, B. A., 693
 May, E. L., 785
 Mechoulam, R., 393
 Meck, W. H., 1185
 Mehta, A. K., 1059
 Mendelson, J. H., 889
 Mendelson, S. D., 111
 Menna, T., 651
 Meyerson, L. R., 1279
 Michael, R. P., 919, 1263
 Mintz, M., 1307
 Moerschbaecher, J. M., 201
 Mogilnicka, E., 329, 743
 Mokler, D. J., 717
 Molloy, A. G., 249, 985
 Monaghan, E. P., 573
 Montogomery, A. M. J., 23, 711
 Marato, G. S., 739
 Mori, T., 411
 Morozova, A. S., 533
 Mosberg, H. I., 77
 Moss, D. E., 1217
 Mostofsky, D. I., 141
 Mueller, D., 325, 933
 Muir, J. L., 107
 Muñoz-Blanco, J., 71
 Nabeshima, T., 567, 835
 Nader, M., 149
 Nagayama, H., 805
 Nakajima, T., 411
 Nakao, J., 411
 Napier, T. C., 63
 Nassif-Caudarella, S., 1211
 Neill, D. B., 865
 Neisewander, J. L., 1101
 Nemeth-Coslett, R., 659
 Ng, K. T., 823
 Nichols, N. F., 255
 Nobrega, J. N., 401
 Noto, T., 411
 Numan, R., 1111
 O'Boyle, K. M., 249
 Oehler, J., 41
 Ogle, C. W., 775, 1001
 O'Keefe, M. K., 659
 Oliverio, A., 181
 Olorundare, O. E., 347, 353
 Olton, D., 521
 Ono, N., 463
 Oshiro, A., 491
 Ossenkopp, K.-P., 269
 Palaoglu, Ö., 215
 Papadakos, P., 1223
 Papasava, C., 623
 Papasava, M., 623
 Parker, K. M., 1271
 Patterson, T. A., 487
 Paul, S. M., 45
 Pavone, F., 181
 Pease, V., 1071
 Perone, M., 439
 Perrone Capano, C., 651
 Peters, D. A. V., 873

- Pettit, H., 933
Pfaff, D. W., 857
Pfister, H. P., 107
Phillips, A. G., 1095
Picker, M., 929
Pickworth, W. B., 879
Pillai, N. P., 549, 555
Pires, M. L. N., 739
Pisa, M., 689
Pohorecky, L. A., 703
Poling, A., 929
Popplewell, D. A., 711
Porreca, F., 77
Poshivalov, V. P., 515
Post, C., 883
Powell, D. A., 423
Przewlocka, B., 329, 967
Przewlocki, R., 967
Pugh, M. T., 249

Rabillon, B., 681
Rafferty, M. F., 45, 51
Rager, D. R., 1237
Raigoza, V. P., 1067
Randich, A., 641
Ravard, S., 503
Reader, T. A., 903
Rech, R. H., 717
Reichert-Hunter, G. L., 697
Reid, L. D., 697
Rennert, O. M., 769, 1271
Reyes, E., 1217
Rhea, K., 1153
Rhodes, D. H., 1153
Rice, K. C., 51
Rigby, P., 673
Riley, E. P., 1021
Ritzmann, R. F., 1279
Rizkalla, S. W., 681
Roache, J. D., 431
Roberts, D. C. S., 497
Robinson, R. G., 263
Rockman, G. E., 1083
Rodriguez, L. A., 1217
Rosecrans, J. A., 1207
Rosenweig, M. R., 487
Ross, D. H., 549, 555
Rothfeld, J. M., 857

Rudy, T. A., 347, 353
Rush, D. K., 145
Russo, P. V., 277

Sabol, K. E., 865
Saito, R., 463
Sakai, D. H., 487
Sanberg, P. R., 231, 297
Sanchez, M. R., 1067
Sanger, D. J., 537
Schaefer, G. J., 1263
Schechter, M. D., 13, 337
Schlemmer, R. F., Jr., 1107
Schmidt, J., 41
Schnur, P., 1067
Schreur, P. J. K. D., 255
Scoles, M. T., 1169
Seale, T. W., 769, 1271
Sethy, V. H., 925
Seyrig, J. A., 913
Shahid Salles, K., 583, 589
Sherman, L. C., 717
Shikata, I., 1035
Shiromani, P. J., 1253
Shivers, B. D., 857
Shor-Posner, G., 381
Shulz, D., 979
Siegel, S., 1169
Simon, P., 1, 503
Singer, G., 623
Skolnick, P., 45, 51
Slifer, B. L., 785
Sloan, J. W., 843
Smith, D. G., 849, 1027
Smith, F. L., 849, 1027
Smith, J. E., 191
Smolen, A., 1293
Smolen, T. N., 1293
Sod-Moriah, U., 491
Sorensen, S. M., 607
Soubrie, Ph., 1, 503
Souza, M. L. O., 739
Spangler, E. L., 673
Speisky, M. B., 797
Spencer, B. A., 439
Spencer, R. L., 77
Sperber, E. S., 171
Spickett, T. J., 1089

Spielmann, D., 681
Spoerlein, M. T., 959
Stähle, L., 473
Steece, K. A., 1279
Stephens, D. N., 595
Stevens, C. W., 483
Stitzer, M. L., 1245
Stoudt, K. W., 717
Sugimoto, A., 835
Sunal, R., 511
Sutherland, C., 269
Sweeney, J., 521
Swerdlow, N. R., 233
Szechtmann, H., 689
Szewczak, M. R., 959

Talanian, R. V., 697
Tang, A. H., 925
Taukulis, H. K., 83
Thiebot, M. H., 1
Thompson, D. M., 185, 201
Thompson, T., 149, 365
Ticku, M. K., 1059
Tobo, M., 805
Tomaz, C., 469
Tomer, R., 1307
Tonatti, C., 651
Treit, D., 561
Troncone, L. R. P., 223
Tufik, S., 223
Turano, P., 415
Turkanis, S. A., 89

Ungerstedt, U., 473
Unterwald, E. M., 629
Urban, J. H., 457

Vaccarino, F. J., 233, 1149
Valdman, A. V., 515
Van de Kar, L. D., 457
van den Buuse, M., 317
van Luijtelaar, E. L. J. M., 329
Veeraragavan, K., 59
Veldhuis, H. D., 317
Velley, L., 1211
Versteeg, D. H. G., 317
Vickers, G. J., 497

Zabik, J. E., 431
Zacharko, R. M., 29
Zacny, J. P., 1245
Zadina, J. E., 1303
Zimmerberg, B., 1021
Zvartau, E. E., 533

CONTENTS

Articles

The lesion of serotonergic neurons does not prevent antidepressant-induced reversal of escape failures produced by inescapable shocks in rats.	
SOUBRIE, P., P. MARTIN, S. EL MESTIKAWY, M. H. THIEBOT, P. SIMON and M. HAMON	1
Peripheral injections of bombesin and cholecystokinin affect dietary self-selection in rats.	
AVERY, D. D. and M. LIVOSKY	7
Induction of and recovery from tolerance to the discriminative stimulus properties of <i>L</i>-cathinone.	
SCHECHTER, M. D.	13
Contributions of dopamine terminal areas to amphetamine-induced anorexia and adipisia.	
CARR, G. D. and N. M. WHITE	17
Behavioural and pharmacological investigations of 5-HT hypophagia and hyperdipsia.	
MONTGOMERY, A. M. J., P. J. FLETCHER and M. J. BURTON	23
Alterations of amphetamine elicited perseveration and locomotor excitation following acute and repeated stressor application.	
HAHN, B., R. M. ZACHARKO and H. ANISMAN	29
Sodium pentobarbital-induced cross-tolerance to ethanol is learned in the rat.	
WENGER, J. R., P. M. McEVOY and S. C. WOODS	35
Altered neurobiological responses to acute immobilization in social-isolated mice.	
OEHLER, J., M. JÄHKEL and J. SCHMIDT	41
Effects of calcium antagonists on phencyclidine behaviors.	
BOLGER, G. T., M. F. RAFFERTY, J. N. CRAWLEY, S. M. PAUL and P. SKOLNICK	45
Acylicating phencyclidines irreversibly enhance brain calcium antagonist binding.	
BOLGER, G. T., M. F. RAFFERTY, B. A. WEISSMAN, K. C. RICE and P. SKOLNICK	51
Antagonism of acute feeding response to 2-deoxyglucose and 5-thioglucose by GABA antagonists: The relative role of ventromedial and lateral hypothalamus.	
LENIN KAMATCHI, G., K. VEERARAGAVAN, DINESH CHANDRA and J. S. BAPNA	59
Effects of chronic electrode implantation on dopaminergic neurons <i>in vivo</i>.	
McCOWN, T. J., T. C. NAPIER and G. R. BREESE	63

VOLUME INDEX

Differential distribution of neurotransmitter amino acids from the limbic system of aggressive and non-aggressive bull strains.	71
MUÑOZ-BLANCO, J., B. YUSTA and F. CORDOBA	71
Centrally-administered opioid selective agonists inhibit drinking in the rat.	
SPENCER, R. L., D. DEUPREE, S. HSIAO, H. I. MOSBERG, V. HRUBY, T. F. BURKS and F. PORRECA	77
Conditional shifts in thermic responses to sequentially paired drugs and the "conditional hyperactivity" hypothesis.	
TAUKULIS, H. K.	83
Cannabidiol-caused depression of spinal motoneuron responses in cats.	
TURKANIS, S. A. and R. KARLER	89
Influence of environment on GABA receptors in muricidal rats.	
DAVANZO, J. P., J. CHAMBERLAIN and M. M. McCONNAUGHEY	95
Midazolam-induced hyperphagia and FG 7142-induced anorexia: Behavioural characteristics in the rat.	
COOPER, S. J. and R. E. YERBURY	99
A possible role for oxytocin in the response to a psychological stressor.	
MUIR, J. L., R. BROWN and H. P. PFISTER	107
Harmine reverses the inhibition of lordosis by the 5-HT₂ antagonists pirenperone and ketanserin in the female rat.	
MENDELSON, S. D. and B. B. GORZALKA	111
Relationship of plasma phencyclidine levels to phencyclidine discrimination in the pigeon.	
McMILLAN, D. E., W. C. HARDWICK, D. J. CANNON and L. COUCH	117
Effect of naloxone and naltrexone on the development of satiation measured in the runway: Comparisons with d-amphetamine and d-fenfluramine.	
KIRKHAM, T. C. and J. E. BLUNDELL	123
Pharmacological changes induced by repeated exposure to phenylethylamine.	
GIANUTSOS, G. and S. CHUTE	129
Discriminative stimulus properties of the 5-HT_{1A} agonist 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH DPAT).	
GLENNON, R. A.	135
Brain iron-deficiency causes reduced learning capacity in rats.	
YEHUDA, S., M. E. H. YOUDIM and D. I. MOSTOFSKY	141
Shuttlebox Sidman avoidance in rhesus monkeys: Day of week and amphetamine effects.	
RUSH, D. K.	145
Effects of imipramine on responding reduced by methadone.	
CLEARY, J., M. NADER and T. THOMPSON	149
Alpha₂-adrenergic antagonists effect on amphetamine-induced behaviors.	
LUTTINGER, D. and M. E. DURIVAGE	155
Differential effects of amphetamine and related compounds on locomotor activity and metabolic rate in mice.	
BUSHNELL, P. J.	161

VOLUME INDEX

Effects of muscarinic receptor antagonism upon two forms of stress-induced analgesia.	
SPERBER, E. S., E. KRAMER and R. J. BODNAR	171
Transfer of conditioning of stress-induced analgesia.	
OLIVERIO, A., C. CASTELLANO and F. PAVONE	181
Nicotine can attenuate the disruptive effects of phencyclidine on repeated acquisition in monkeys.	
THOMPSON, D. M. and P. J. WINSAUER	185
Reinforcing properties of cocaine in the medial prefrontal cortex: Primary action on presynaptic dopaminergic terminals.	
GOEDERS, N. E. and J. E. SMITH	191
Repeated acquisition and delayed performance as a baseline to assess drug effects on retention in monkeys.	
THOMPSON, D. M., J. MASTROPAOLO, P. J. WINSAUER and J. M. MOERSCHBAECHER	201

Brief Communications

Quantitative analysis of naloxone antagonism of the discriminative stimulus properties of morphine in the pigeon.	
WEISSINGER, W. D. and D. E. McMILLAN	209
The possible role of benzodiazepine receptors in morphine analgesia.	
PALAOĞLU, Ö. and I. H. AYHAN	215
Some effects of pimozide and of shifts in sucrose concentration on lick rate, duration, and interlick interval.	
GRAMLING, S. E. and S. C. FOWLER	219
REM sleep deprivation induces a decrease in norepinephrine-stimulated ^3H-cyclic AMP accumulation in slices from rat brain.	
TRONCONE, L. R. P., S. BRAZ, M. A. C. BENEDITO and S. TUFIK	223
Verapamil does not antagonize LSD-induced stimulus control.	
WINTER, J. C.	227

Meeting Report

Proceedings of a Satellite Symposium to the 15th Annual Meeting of the Society for Neuroscience	229
--	-----

Introduction

Locomotor behavior: Neuropharmacological substrates of motor activation.	
SANBERG, P. R.	231

The neural substrates for the motor-activating properties of psychostimulants: A review of recent findings.	
SWERDLOW, N. R., F. J. VACCARINO, M. AMALRIC and G. F. KOOB	233

VOLUME INDEX

Locomotor behaviors in response to new selective D-1 and D-2 dopamine receptor agonists, and the influence of selective antagonists.	
MOLLOY, A. G., K. M. O'BOYLE, M. T. PUGH and J. L. WADDINGTON	249
Two automated locomotor activity tests for dopamine autoreceptor agonists.	
SCHREUR, P. J. K. D. and N. F. NICHOLS	255
Mechanisms of lateralized hyperactivity following focal brain injury in the rat.	
ROBINSON, R. G. and A. JUSTICE	263
Motor activity changes and conditioned taste aversions induced by administration of scopolamine in rats: Role of the area postrema.	
OSSENKOPP, K.-P., C. SUTHERLAND and R. L. LADOWSKY	269
Multivariate assessment of locomotor behavior: Pharmacological and behavioral analyses.	
GEYER, M. A., P. V. RUSSO and V. L. MASTEN	277
Genetic differences in locomotor activation in mice.	
CRABBE, J. C.	289
The effect of magnocellular basal forebrain lesions on circadian locomotor activity in the rat.	
HEPLER, D. J. and B. E. LERER	293
Locomotor hyperactivity:	
Effects of multiple striatal transplants in an animal model of Huntington's disease.	
SANBERG, P. R., M. A. HENAUT and A. W. DECKEL	297
Ninety-Fourth Annual Convention of the American Psychological Association	
Abstracts	301
Author's Correction	315

CONTENTS

Articles

Substantia nigra lesions attenuate the development of hypertension and behavioural hyperreactivity in Spontaneously Hypertensive Rats.	
VAN DEN BUUSE, M., H. D. VELDHUIS, D. H. G. VERSTEEG and W. DE JONG	317
 <i>In vivo voltammetric recording with nafion-coated carbon paste electrodes:</i>	
Additional evidence that AA release is monitored.	
MUELLER, K.	325
 Effects of REM sleep deprivation on central α_1 - and β -adrenoceptors in rat brain.	
MOGILNICA, E., B. PRZEWŁOCKA, E. L. J. M. VAN LUIJTELAAR, V. KLIMEK and A. M. L. COENEN	329
 Sedative-hypnotic anomalies related to dose of pentobarbital in long-sleep and short-sleep selectively-bred mice.	
ALPERN, H. P. and T. D. MCINTYRE	333
 Dopaminergic mediation of a behavioral effect of <i>l</i> -cathinone.	
SCHECHTER, M. D.	337
 CGS 8216, a novel anorectic agent, selectively reduces saccharin solution consumption in the rat.	
KIRKHAM, T. C. and S. J. COOPER	341
 Examination of the subdiencephalic rat brain for sites mediating PGE ₁ -induced pyrexia.	
OLORUNDARE, O. E. and T. A. RUDY	347
 Studies on the pyrexic effect of PGE ₁ injected into the region of the cochlear nuclei.	
OLORUNDARE, O. E. and T. A. RUDY	353
 Behavioral effects of phencyclidine and some of its metabolites in developing cats.	
LEVINE, M. S. and S. HOWARD-BUTCHER	359
 Asynchronies of diphenhydramine plasma-performance relationships.	
LICKO, V., T. THOMPSON and G. BARNETT	365
 The antianxiety effect of beta-blockers on punished responding.	
DUREL, L. A., D. S. KRANTZ and J. E. BARRETT	371
 Behavioral effects of the isomers of pentobarbital and secobarbital in mice and rats.	
WENGER, G. R.	375
 Destruction of noradrenergic innervation to the paraventricular nucleus: Deficits in food intake, macronutrient selection and compensatory eating after food deprivation.	
SHOR-POSNER, G., A. P. AZAR, M. JHANWAR-UNIYAL, R. FILART and S. F. LEIBOWITZ	381
 Cannabimimetic activity (Δ^1 -THC cue) of cannabidiol monomethyl ether and two stereoisomeric hexahydrocannabinols in rats and pigeons.	
JARBE, T. U. C., A. J. HILTUNEN, N. LANDER and R. MECHOULAM	393

Dopamine-norepinephrine interactions in the development of hyperphagia and obesity following medial hypothalamic lesions.	401
NOBREGA, J. N. and D. V. COSCINA	401
The effect of L-erythro-dihydroxyphenylserine injected into the lateral ventricle and the hypothalamus on the locomotor activity.	411
NOTO, T., H. HASHIMOTO, J. NAKAO, H. KAMIMURA, T. MORI and T. NAKAJIMA	411
Neurochemical and behavioral consequences of mild, uncontrollable shock: Effects of PCPA.	415
EDWARDS, E., J. JOHNSON, D. ANDERSON, P. TURANO and F. A. HENN	415
Autonomic changes elicited by chemical stimulation of mediodorsal nucleus of the thalamus.	423
POWELL, D. A. and S. L. BUCHANAN	423
Effects of benzodiazepines on taste aversions in a two-bottle choice paradigm.	431
ROACHE, J. D. and J. E. ZABIK	431
Variable interval schedules of timeout from avoidance: Effects of ethanol, naltrexone, and CGS 8216.	439
GALIZIO, M., M. PERONE and B. A. SPENCER	439
Maternal social stress disrupts reproduction of hamsters drinking high-calorie fluids.	449
WISE, D. A. and N. L. ELDRED	449
Effect of the anxiolytic drug buspirone on prolactin and corticosterone secretion in stressed and unstressed rats.	457
URBAN, J. H., L. D. VAN DE KAR, S. A. LORENS and C. L. BETHEA ...	457
Possible involvement of prostaglandins in cataleptic behavior in rats.	463
ONO, N., R. SAITO, T. ABIRU, H. KAMIYA and T. FURUKAWA	463
Facilitation of conditioned inhibitory avoidance by post-trial peripheral injection of substance P.	469
TOMAS, C. and J. P. HUSTON	469
Effects of neuroleptic drugs on the inhibition of exploratory behaviour induced by a low dose of apomorphine: Implications for the identity of dopamine receptors.	473
STÅHLE, L. and U. UNGERSTEDT	473
 Brief Communications	
The rabbit ear-withdrawal test: A new analgesiometric procedure.	481
MC CALLISTER, L. W., J. M. LIPTON, A. H. GIESECKE, JR. and W. G. CLARK	481
Simple catheter preparation for permitting bolus intrathecal administration during chronic intrathecal infusion.	483
YAKSH, T. L. and C. W. STEVENS	483
An economically constructed and durable intracerebral cannula system for small rodents.	487
PATTERSON, T. A., M. C. ALVARADO, D. H. SAKAI, M. R. ROSENZWEIG and E. L. BENNETT	487
Effects of acarbose in rats are influenced by the type of dietary starch.	491
GLICK, Z., A. OSHIRO and U. SOD-MORIAH	491

CONTENTS

Articles

Increased self-administration of cocaine following haloperidol: Sex-dependent effects of the antiestrogen tamoxifen.	DALTON, J. C. H., G. J. VICKERS and D. C. S. ROBERTS	497
Behavioral deficits induced by low doses of apomorphine in rats: Evidence for a motivational and cognitive dysfunction which discriminates among neuroleptic drugs.	CARNOY, P., S. RAVARD, B. WEMERMAN, Ph. SOUBRIE and P. SIMON	503
Influence of naloxone on H₂-receptor blocker drugs effects in the "behavioral despair" test.	SUNAL, R.	511
Pharmacological analysis of antidepressant drug effects.	VALDMAN, A. V. and V. P. POSHIVALOV	515
Cholinergic function and memory: Extensive inhibition of choline acetyltransferase fails to impair radial maze performance in rats.	WENK, G., J. SWEENEY, D. HUGHEY, J. CARSON and D. OLTON	521
Brain opioid receptors in the hibernating bat, <i>Myotis lucifugus</i>: Modification by low temperature and comparison with rat, mouse and hamster.	WILKINSON, M., G. D. BUCHANAN, W. JACOBSON and E. V. YOUNGLAI	527
Stimulation-produced analgesia under repeated morphine treatment in rats.	MOROZOVA, A. S. and E. E. ZVARTAU	533
Investigation of the actions of the benzodiazepine antagonists Ro 15-1788 and CGS 8216 using the schedule-controlled behavior of rats.	SANGER, D. J.	537
Food hoarding and ingestion in the deer mouse, <i>Peromyscus maniculatus</i>: Selective responses to mu and kappa opiate agonists.	KAVALIERS, M. and M. HIRST	543
Activation of dihydropyridine receptors differentially regulates temperature responses in rat.	PILLAI, N. P. and D. H. ROSS	549
Opiate receptor mediated hyperthermic responses in rat following Ca⁺⁺ channel antagonists.	PILLAI, N. P. and D. H. ROSS	555
The effects of diazepam on "fear" reactions in rats are modulated by environmental constraints on the rat's defensive repertoire.	TREIT, D., V. M. LOLORDO and D. E. ARMSTRONG	561
The antagonistic effects of naloxone on cycloheximide and anisomycin-induced amnesia.	KAMEYAMA, T., T. NABESHIMA and T. KOZAWA	567

VOLUME INDEX

Naltrexone blocks the effects of prenatal stress on sexual behavior differentiation in male rats.	
WARD, O. B., E. P. MONAGHAN and I. L. WARD	573
Behavioral analysis of marijuana effects on food intake in humans.	
FOLTIN, R. W., J. V. BRADY and M. W. FISCHMAN	577
Barrel rotation and prostration by vasopressin and nicotine in the vestibular cerebellum.	
MAITI, A., K. SHAHID SALLES, S. GRASSI and L. G. ABOOD	583
Behavior and receptor changes after kainate lesioning of nodular cerebellum.	
MAITI, A., K. SHAHID SALLES, S. GRASSI and L. G. ABOOD	589
Potentiation of the propunishment, but not the convulsant action of the β-carboline DMCM by naltrexone.	
DUKA, T. and D. N. STEPHENS	595
Differences in morphine-induced antinociception and locomotor activity in mature adult and aged mice.	
HOSKINS, B., C. K. BURTON and I. K. HO	599
Acute ethanol effects on sensory responses of single units in the somatosensory cortex of rats during different behavioral states.	
CHAPIN, J. K., S. M. SORENSEN and D. J. WOODWARD	607
Effects of pimozide on emitted force, duration and rate of operant response maintained at low and high levels of required force.	
FOWLER, S. C., S. E. GRAMLING and R.-M. LIAO	615
Intravenous self-administration of phentermine in food-deprived rats: Effects of abrupt refeeding and saline substitution.	
PAPASAVA, M., G. SINGER and C. PAPASAVA	623
Effects of nalbuphine alone and in combination with tripeleannamine on rewarding brain stimulation thresholds in the rat.	
UNTERWALD, E. M. and C. KORNETSKY	629
Effects of scopolamine on components of delayed response performance in the rat.	
VISCARDI, A. P. and G. A. HEISE	633
[D-Ala²]-Methionine enkephalinamide (DALA): Characterization of antinociceptive, cardiovascular, and autonomic nervous system actions in conscious and pentobarbital-anesthetized rats.	
RANDICH, A. and M. F. CALLAHAN	641
Synthesis of rat brain DNA during acquisition of an appetitive task.	
GIUDITTA, A., C. PERRONE CAPANO, G. D'ONOFRIO, C. TONIATTI, T. MENNA and H. HYDÉN	651
Effects of marijuana smoking on subjective ratings and tobacco smoking.	
NEMETH-COSLETT, R., J. E. HENNINGFIELD, M. K. O'KEEFFE and R. R. GRIFFITHS	659
Influence of ambient temperature on the development and maintenance of tolerance to ethanol-induced hypothermia.	
LE, A. D., H. KALANT and J. M. KHANNA	667
Scopolamine impairs learning performance of rats in a 14-unit T-maze.	
SPANGLER, E. L., P. RIGBY and D. K. INGRAM	673

PHARMACOLOGY BIOCHEMISTRY & BEHAVIOR

Comparative effects of several simple carbohydrates on erythrocyte insulin receptors in obese subjects.	
RIZKALLA, S. W., F. BAIGTS, F. FUMERON, B. RABILLON, P. BAYN, A. KTORZA, D. SPEILMANN and M. APFELBAUM	681
 Brief Communications	
Postural asymmetry and lateralized rotation in normal rats administered apomorphine.	
SZECHTMAN, H. and M. PISA	689
The effects of apomorphine on leverpress shock escape learning in rats.	
MATTINGLY, B. A.	693
Naloxone's effects on intake of sequentially presented fluids.	
TALANIAN, R. V., G. A. HUNTER, C. M. BEAMAN, G. L. REICHERT- HUNTER and L. D. REID	697

CONTENTS

Articles

The effect of ethanol and sex on radial arm maze performance in rats.	
MAIER, D. M. and L. A. POHORECKY	703
A behavioural and pharmacological examination of phenylethylamine-induced anorexia and hyperactivity—Comparisons with amphetamine.	
POPPLEWELL, D. A., P. J. COFFEY, A. M. J. MONTGOMERY and M. J. BURTON	711
The effects of intracranial administration of hallucinogens on operant behavior in the rat. I. Lysergic acid diethylamide.	
MOKLER, D. J., K. W. STOUDT, L. C. SHERMAN and R. H. RECH	717
Effects of nicotine on finger tapping rate in non-smokers.	
WEST, R. J. and M. J. JARVIS	727
Effect of mazindol, d-amphetamine and diethylpropion on purine nucleotide binding to brown adipose tissue.	
LUPIEN, J. R. and G. A. BRAY	733
Hypoglycemia and hypothermia induced by ethanol: Antagonism by indomethacin.	
MORATO, G. S., M. L. O. SOUZA, M. L. N. PIRES and J. MASUR	739
Increase in β- and α_1-adrenoceptor binding sites in the rat brain and in the α_1-adrenoceptor functional sensitivity after the DSP-4-induced noradrenergic denervation.	
MOGILNICKA, E.	743
Effects of chlordiazepoxide and sodium valproate in two tests of spatial behaviour.	
WILLNER, P. and K.-A. BIRBECK	747
Effect of (1–24)adrenocorticotrophin stimulation on the rate of corticosterone synthesis by the rat adrenal cortex.	
CAM, G. R. and J. R. BASSETT	753
Biphasic effects of MIF-1 and Tyr-MIF-1 on apomorphine-induced stereotypy in rats.	
HARA, C. and A. J. KASTIN	757
Changes in brain catecholamine mechanisms following perinatal exposure to marihuana.	
WALTERS, D. E. and L. A. CARR	763
Differential antagonism of the behavioral depressant and hypothermic effects of 5'-(N-ethylcarboxamide) adenosine by theobromine.	
CARNEY, J. M., W. CAO, L. LOGAN, O. M. RENNERT and T. W. SEALE	769
Effects of cold-restraint stress on gastric ulceration and motility in rats.	
KOO, M. W. L., C. H. CHO and C. W. OGLE	775

VOLUME INDEX

Interaction of tonic immobility and dexamethasone in the modulation of hippocampal 5-HT activity in rabbits.	781
FARABOLINI, F., L. LODI and C. LUPO	
Reinforcing and phencyclidine-like stimulus properties of enantiomers of metazocine.	785
SLIFER, B. L., R. L. BALSTER and E. L. MAY	
Effects of haloperidol on the biophysical characteristics of operant responding: Implications for motor and reinforcement processes.	791
FOWLER, S. C., M. M. LACERRA and A. ETTENBERG	
Vasopressin-like peptides retain ethanol tolerance in the absence of changes in serotonin synthesis in limbic structures.	797
SPEISKY, M. B. and H. KALANT	
Action of chronically administered antidepressants on the serotonergic postsynapse in a model of depression.	805
NAGAYAMA, H., J. AKIYOSHI and M. TOBO	
Haloperidol induces a partial reinforcement extinction effect in rats: Implications for a dopamine involvement in food reward.	813
ETTENBERG, A. and C. H. CAMP	
Effect of testosterone on intermediate memory in day-old chicks.	823
GIBBS, M. E., K. T. NG and R. J. ANDREW	
Metabolic interactions of phencyclidine (PCP) and Δ^9-tetrahydrocannabinol (THC) in the rat.	827
LAMÉ, M. W. and S. HUSAIN	
Comparison of tizanidine and morphine with regard to tolerance-developing ability to antinociceptive action.	835
NABESHIMA, T., S. YAMADA, A. SUGIMOTO, K. MATSUNO and T. KAMEYAMA	
Fourth ventricle effects of nicotine, 2-methylpiperidine and cytisine in dogs.	843
MARTIN, W. R., J. W. SLOAN, R. HOOK, E. KAPLAN and C. WASH	
Dietary tryptophan supplements attenuate amphetamine self-administration in the rat.	849
SMITH, F. L., D. S. L. YU, D. G. SMITH, A. P. LECCESSE and W. H. LYNESS	
Reversible disruption of lordosis via midbrain infusions of procaine and tetrodotoxin.	857
ROTHFELD, J. M., R. E. HARLAN, B. D. SHIVERS and D. W. PFAFF	
Striatal dopamine activity and unilateral barpressing in rats.	865
CHURCH, W. H., K. E. SABOL, J. B. JUSTICE, JR. and D. B. NEILL	
Prenatal stress increases the behavioral response to serotonin agonists and alters open field behavior in the rat.	873
PETERS, D. A. V.	
Electroencephalographic effects of nicotine chewing gum in humans.	879
PICKWORTH, W. B., R. I. HERNING and J. E. HENNINGFIELD	
Effects of the putative 5-HT_{1A} receptor agonist 8-OH-2-(di-n-propylamino)tetralin on nociceptive sensitivity in mice.	883
FASMER, O. B., O.-G. BERGE, C. POST and K. HOLE	

VOLUME INDEX

EEG alpha activity increases during transient episodes of ethanol-induced euphoria.	
LUKAS, S. E., J. H. MENDELSON, R. A. BENEDIKT and B. JONES	889
Spontaneous chewing movements in rats during acute and chronic antipsychotic drug administration.	
GUNNE, L. M., U. ANDERSSON, U. BONDESSON and P. JOHANSSON ...	897
Alpha-adrenoceptors and monoamine contents in the cerebral cortex of the rodent <i>Jaculus orientalis</i>: Effects of acute cold exposure.	
LAKHDAR-GHAZAL, N., L. GRONDIN, W. A. BENGELLOUN and T. A. READER	903
Effects of a chronic administration of two benzodiazepines on food intake in rats given a highly palatable diet.	
SEYRIG, J. A., R. FALCOU, D. BETOULLE and M. APFELBAUM	913
Time-dependent modulation by estrogen of amphetamine-induced hyperactivity in male rats.	
WEST, C. H. K. and R. P. MICHAEL	919

Brief Communications

Amnesia produced by intracerebroventricular injections of hemicholinium-3 in mice was prevented by pretreatment with piracetam-like compounds.	
FRANKLIN, S. R., V. H. SETHY and A. H. TANG	925
Effects of phenobarbital in combination with phenytoin or valproic acid on the delayed-matching-to-sample performance of pigeons.	
KARAS, C. A., M. PICKER and A. POLING	929

*CONTENTS***Articles****Repeated pemoline produces self-injurious behavior in adult and weanling rats.**

MUELLER, K., E. HOLLINGSWORTH and H. PETTIT 933

Simultaneous brightness discrimination and reversal:**The effects of amphetamine administration in the two stages.**

WEINER, I., J. FELDON and O. BEN-SHAHAR 939

Stimulatory effect of N-methyl aspartate on locomotor activity and transmitter release from rat nucleus accumbens.

HAMILTON, M. H., J. S. DE BELLEROCHE, I. M. GARDINER and L. J. HERBERG 943

Differential effects of α -methyl-p-tyrosine and 6-hydroxydopamine on pentylenetetrazol seizures in mice.

ABED, W. T. 949

Brain asparaginase, ACE activity and plasma cortisol level in morphine dependent rats:**Effect of aspartic acid and naloxone.**

KOYUNCUOĞLU, H., M. GÜNGÖR, N. ENGINAR, I. HATIPOĞLU and A. HIZAL 953

Opiate-induced turning in rats after injection into the ventral tegmental area.

SZEWCZAK, M. R. and M. T. SPOERLEIN 959

Involvement of endogenous opioid peptides in fenfluramine anorexia.

MAJEEED, N. H., W. LASOŃ, B. PRZEWŁOCKA and R. PRZEWŁOCKI 967

Suppression of behavior by food pellet-lithium chloride pairings in squirrel monkeys.

BERGMAN, J. and J. R. GLOWA 973

A novel method for quantifying passive-avoidance behavior based on the exponential distribution of step-through latencies.

SHULZ, D., D. CHERNICOVSKY and C. ALLWEIS 979

Selective antagonism by clonidine of the stereotyped and non-stereotyped motor activity elicited by atropine.

MOLLOY, A. G., R. S. ARONSTAM and J. J. BUCCAFUSCO 985

Clonidine reverses the behavioral and respiratory effects of continuous naloxone infusion.

MALIN, D. H., A. G. HEMPEL, R. J. EXLEY and S. ADDINGTON 989

Conditioned taste aversion induced by tryptamine: A temporal analysis.

FLETCHER, P. J. 995

Production of physical dependence in rats by drinking a morphine solution.

LEUNG, C. M. K., C. W. OGLE and S. DAI 1001

Opiate involvement in postpartum aggression in rats.

KINSLEY, C. H. and R. S. BRIDGES 1007

The development of metabolic tolerance in the alcohol-preferring P rats:**Comparison of forced and free-choice drinking of ethanol.**

LUMENG, L. and T.-K. LI 1013

VOLUME INDEX

Differential effects of prenatal exposure to alcohol on activity and circling behavior in rats.	
ZIMMERBERG, B., E. P. RILEY and S. D. GLICK	1021
Tyrosine influence on amphetamine self-administration and brain catecholamines in the rat.	
GEIS, L. S., D. G. SMITH, F. L. SMITH, D. S. L. YU and W. H. LYNESS	1027
Decrease in d-methamphetamine sensitivity in mice due to ethanol: Apparent inhibitory and stimulatory effects of ethanol on d-methamphetamine-induced locomotor activity.	
KOHDA, H., M. FUNAHASHI, I. SHIKATA and H. KIMURA	1035
Further studies on nicotine-induced conditioned place preference in the rat.	
FUDALA, P. J. and E. T. IWAMOTO	1041
Discriminative stimulus properties of phencyclidine (PCP)-related compounds: Correlations with ³H-PCP binding potency measured autoradiographically.	
KOZLOWSKI, M. R., R. G. BROWNE and F. J. VINICK	1051
Comparison of anticonvulsant effect of pentobarbital and phenobarbital against seizures induced by maximal electroshock and picrotoxin in rats.	
MEHTA, A. K. and M. K. TICKU	1059
Cholecystokinin antagonizes morphine induced hypoactivity and hyperactivity in hamsters.	
SCHNUR, P., V. P. RAIGOZA, M. R. SANCHEZ and P. J. KULKOSKY	1067
Oral pyridostigmine administration in rats:	
Effects on thermoregulation, clinical chemistry, and performance in the heat.	
FRANCESCONI, R., R. HUBBARD, C. MATTHEW, N. LEVA, J. YOUNG and V. PEASE	1071
GABAergic drugs can enhance or attenuate chlordiazepoxide-induced sleep time in a heterogeneous strain of mice.	
MCINTYRE, T. D. and H. P. ALPERN	1077
Effects of restraint stress on voluntary ethanol intake and ulcer proliferation in rats.	
ROCKMAN, G. E., A. HALL and G. B. GLAVIN	1083
Lead retention in blood and brain after preweaning low-level lead exposure in the rat.	
LIVESEY, D. J., R. G. DAWSON, P. J. LIVESEY, J. BARRETT and T. J. SPICKETT	1089
Increased dopamine metabolism in the nucleus accumbens and striatum following consumption of a nutritive meal but not a palatable non-nutritive saccharin solution.	
BLACKBURN, J. R., A. G. PHILLIPS, A. JAKUBOVIC and H. C. FIBIGER	1095
Single-trial conditioned place preference using intravenous morphine.	
BARDO, M. T. and J. L. NEISEWANDER	1101
Brief Communications	
Absence of clonidine-induced food intake in hamsters.	
KATZ, N. L., T. BRNE, J. BOLIN and R. F. SCHLEMMER, JR.	1107
Effects of Pavlovian conditioning on the ethanol withdrawal syndrome in rats.	
NUMAN, R.	1111
Effects of the dopamine D-2 receptor agonist, LY 171555, on radial arm maze performance in rats.	
LEVIN, E. D. and R. E. BOWMAN	1117

VOLUME 25 NUMBER 6

DECEMBER 1986

CONTENTS

Editorial	.....	v
Articles		
Time-related memory effects of vasopressin analogues in rats.		
GAFFORI, O. J. W. and D. DE WIED	.....	1125
Nicotine's effects on female rats' body weight: Caloric intake and physical activity.		
BOWEN, D. J., S. E. EURY and N. E. GRUNBERG	.....	1131
Impairment of glycoprotein fucosylation in rat hippocampus and the consequences on memory formation.		
JORK, R., G. GRECKSCH and H. MATTHIES	.....	1137
The effects of benzodiazepines in newborn rats suggest a function for type 2 receptors.		
FILE, S. E. and L. J. WILKS	.....	1145
Intra-nucleus accumbens amphetamine: Dose-dependent effects on food intake.		
EVANS, K. R. and F. J. VACCARINO	.....	1149
Intake of a liquid diet after 2-deoxy-D-glucose injections in rats.		
WATSON, P. J., D. H. RHODES, K. RHEA, J. MCKINNEY, C. HAWKINS and R. R. BARTLES	.....	1153
Lithium effects on adjunctive alcohol consumption. I: Comparison with adjunctive water consumption.		
HINES, G.	.....	1159
Lithium effects on adjunctive alcohol consumption. II: Effects of adding concurrent shock.		
HINES, G.	.....	1163
A potential role of saline trials in morphine-induced place-preference conditioning.		
SCOLES, M. T. and S. SIEGEL	.....	1169
Sensitization to amphetamine and tolerance to cocaine and phencyclidine stimulation in mice.		
KOKKINIDIS, L.	.....	1175
Mouth versus deep airways absorption of nicotine in cigarette smokers.		
GORI, G. B., N. L. BENOWITZ and C. J. LYNCH	.....	1181
Affinity for the D₂ receptor predicts neuroleptic potency in decreasing the speed of an internal clock.		
MECK, W. H.	.....	1185
The schedule dependent effects of 3-quinuclidinyl benzilate on operant behavior in the rat.		
LIU, W.-F. and J. M. BEATON	.....	1191
Stimulant-like effects of magnesium on aggression in mice.		
IZENWASSER, S. E., K. GARCIA-VALDEZ and K. M. KANTAK	.....	1195

Contents continued

Environmental specificity of tolerance to morphine-induced analgesia in a terrestrial snail: Generalization of the behavioral model of tolerance.	1201
KAVALIERS, M. and M. HIRST	1201
Further studies on the dose-dependent stimulus properties of 5-methoxy-N,N-dimethyltryptamine.	
YOUNG, R., J. A. ROSECRANS and R. A. GLENNON	1207
Clonidine-induced sedation is not modified by single or combined neurochemical lesions of the locus coeruleus, the median and dorsal raphe nuclei.	
NASSIF-CAUDARELLA, S., E. KEMPF and L. VELLEY	1211
Perioral behaviors induced by cholinesterase inhibitors: A controversial animal model.	
RODRIGUEZ, L. A., D. E. MOSS, E. REYES and M. L. CAMARENA	1217
Medial hypothalamic serotonin: Effects on deprivation and norepinephrine-induced eating.	
WEISS, G. F., P. PAPADAKOS, K. KNUDSON and S. F. LEIBOWITZ	1223
A partial reinforcement extinction effect in water-reinforced rats intermittently treated with haloperidol.	
ETTENBERG, A. and C. H. CAMP	1231
Chlordiazepoxide and tonic immobility: A paradoxical enhancement.	
RAGER, D. R., G. G. GALLUP, JR. and J. W. BECKSTEAD	1237
Cigarette filter vent blocking: Effects on smoking topography and carbon monoxide exposure.	
ZACNY, J. P., M. L. STITZER and J. E. YINGLING	1245
Continuous pontine cholinergic microinfusion via mini-pump induces sustained alterations in rapid eye movement (REM) sleep.	
SHIROMANI, P. J. and W. FISHBEIN	1253
Changes in response rates and reinforcement thresholds for intracranial self-stimulation during morphine withdrawal.	
SCHAEFER, G. J. and R. P. MICHAEL	1263
Inherent hyporesponsiveness to methylxanthine-induced behavioral changes associated with supersensitivity to 5'-N-ethylcarboxamidoadenosine (NECA).	
SEALE, T. W., K. A. ABLA, W. CAO, K. M. PARKER, O. M. RENNERT and J. M. CARNEY	1271
Radio-frequency analysis of the effect of haloperidol and cyclo(leucyl-glycyl) on apomorphine-induced stereotypy.	
FIELDS, J. Z., L. P. GONZALEZ, L. R. MEYERSON, P. LIEBER, J. M. LEE, K. A. STEECE, F. A. DELEON-JONES and R. F. RITZMANN	1279
Dietary manipulation of ethanol preference in the Syrian Golden hamster.	
CUNNANE, S. C., Y.-S. HUANG and D. F. HORROBIN	1285
Dissociation of decreased numbers of muscarinic receptors from tolerance to DFP.	
SMOLEN, T. N., A. SMOLEN and A. C. COLLINS	1293
Brief Communications	
Interactions of Tyr-MIF-1 at opiate receptor sites.	
ZADINA, J. E. and A. J. KASTIN	1303
Exposure to amphetamine after substantia nigra lesion interferes with the process of behavioral recovery.	
MINTZ, M. and R. TOMER	1307

1987

Prepayment
Required

AVAILABLE SUPPLEMENTS

Price
Postpaid**P1 PHARMACOLOGY BIOCHEMISTRY & BEHAVIOR**

77.1	Volume 3 Supplement 1, 1975	ISBN 0-916086-00-3	176 pages	\$18.50
	Central Neural Control of Eating and Obesity - <i>Edited by Matthew J. Wayner & Yutaka Oomura</i>			
77.2	Volume 5 Supplement 1, 1976	ISBN 0-916086-00-x	192 pages	\$30.00
	The Neuropeptides: Pharmacology, Physiological Substrates and Behavioral Effects - <i>Edited by Curt A. Sandmann, Lyle H. Miller and Abba J. Kastin</i>			
77.6	Volume 11 Supplement 1, 1979	ISBN 0-916086-07-0	56 pages	\$15.00
	Protracted Effects of Perinatal Drug Dependence - <i>Edited by Theo Sonderegger and Emery Zimmermann</i>			
77.14	Volume 13 Supplement 1, 1980	ISBN 0-916086-15-1	312 pages	\$49.25
	Fifth Biennial International Symposium on Alcoholism - <i>Edited by B. Tabakoff and P. L. Hoffman</i>			
77.15	Volume 14 Supplement 1, 1981	ISBN 0-916086-17-8	124 pages	\$20.00
	Psychopharmacology of Aggression and Social Behavior - <i>Edited by K. A. Miczek</i>			
77.18	Volume 17 Supplement 1, 1982	ISBN 0-916086-21-6	60 pages	\$7.50
	Dopamine Receptors and Their Behavioral Correlates - <i>Chairman Samuel Gershon</i>			
77.19	Volume 18 Supplement 1, 1983	ISBN 0-916086-22-4	600 pages	\$125.00
	First Congress of the International Society for Biomedical Research on Alcoholism - <i>Edited by R. G. Thurman and P. L. Hoffman</i>			
77.21	Volume 21 Supplement 1, 1984	ISBN 0-916086-24-0	140 pages	\$30.00
	Alkali Metals: An Update - <i>Edited by F. S. Messiba</i>			

B2 BRAIN RESEARCH BULLETIN

77.4	Volume 4 Supplement 1, 1979	ISBN 0-916086-04-6	108 pages	\$30.00
	The Anatomy of the Brain of the Bottlenose Dolphin (<i>Tursiops truncatus</i>). Rhinic Lobe (Rhinencephalon): The Archicortex - <i>M. S. Jacobs, W. L. McFarland and P. J. Morgane</i>			
77.7	Volume 5 Supplement 1, 1980	ISBN 0-916086-08-9	86 pages	\$18.50
	Experimental Ulcer Produced by Behavioral Factors - <i>Edited by Morton I. Grossman and Donald Novin</i>			
77.8	Volume 5 Supplement 2, 1980	ISBN 0-916086-09-7	946 pages	\$150.00
	GABA Neurotransmission: Current Developments in Physiology and Neurochemistry - <i>Edited by Harbans Lal</i>			
77.9	Volume 5 Supplement 3, 1980	ISBN 0-916086-10-0	108 pages	\$30.00
	The Anatomy of the Brain of the Bottlenose Dolphin (<i>Tursiops truncatus</i>). Surface Configurations of the Telencephalon of the Bottlenose Dolphin with Comparative Anatomical Observations in Four Other Cetacean Species - <i>Peter J. Morgane, Myron S. Jacobs and Willard L. McFarland</i>			
77.10	Volume 5 Supplement 4, 1980	ISBN 0-916086-11-9	206 pages	\$30.00
	Integration of Central and Peripheral Receptors in Hunger and Energy Metabolism - <i>Edited by D. Novin and Y. Domura</i>			
77.11	Volume 5 Supplement 5, 1980	ISBN 0-916086-12-7	55 pages	\$30.00
	A Stereotoxic Atlas of the Rat Olfactory System - <i>Burton M. Slotnick and Steven Hersch</i>			

R3 NEUROSCIENCE AND BIOBEHAVIORAL REVIEWS

77.5	Volume 3 Supplement 1, 1979	ISBN 0-916086-05-4	94 pages	\$30.00
	Blood Supply to the Brain of the Dolphin, <i>Tursiops truncatus</i> . With Comparative Observations on Special Aspects of the Cerebrovascular Supply of Other Vertebrates - <i>W. L. McFarland, M. S. Jacobs and P. J. Morgane</i>			
77.12	Volume 4 Supplement 1, 1980	ISBN 0-916086-13-5	74 pages	\$15.00
	Body Energy Regulation and the Stimulation to Eat - <i>Jacques Le Magnen and His Co-workers</i>			

N5 NEUROBEHAVIORAL TOXICOLOGY (& TERATOLOGY)

77.3	Volume 1 Supplement 1, 1979	ISBN 0-916086-06-2	222 pages	\$37.50
	Test Methods for Definition of Effects of Toxic Substances on Behavior and Neuromotor Function - <i>Edited by I. Geller, W. C. Stebbins and M. J. Wayner</i>			

T9 PEPTIDES

77.13	Volume 1 Supplement 1, 1980	ISBN 0-916086-16-x	256 pages	\$40.25
	Brain Endocrine Interaction: Neuropeptide Development and Aging - <i>Edited by D. E. Scott and J. R. Sladek, Jr.</i>			
77.16	Volume 2 Supplement 1, 1981	ISBN 0-916086-19-4	170 pages	\$35.00
	Second Annual Winter Neuropeptide Conference - <i>Edited by C. A. Sandman and L. H. Miller</i>			
77.17	Volume 2 Supplement 2, 1981	ISBN 0-916086-20-8	308 pages	\$60.00
	The Brain Gut Axis: A New Frontier - <i>Edited by John H. Walsh</i>			
77.20	Volume 5 Supplement 1, 1984	ISBN 0-916086-23-2	288 pages	\$60.00
	Brain-Endocrine Interaction V: The Schmitt Brain Symposium - <i>Edited by Willis K. Paull, David E. Scott and Jerald A. Mitchell</i>			
77.22	Volume 6 Supplement 1, 1985	ISBN 0-916086-25-9	192 pages	\$60.00
	Fifth Annual Winter Neuropeptide Conference - <i>Edited by Lyle H. Miller</i>			
77.23	Volume 6 Supplement 2, 1985	ISBN 0-916086-26-7	194 pages	\$60.00
	Sixth Annual Winter Neuropeptide Conference - <i>Edited by Gail Handelman</i>			
77.24	Volume 6 Supplement 3, 1985		498 pages	\$120.00
	First International Symposium on Nonmammalian Peptides - <i>Edited by Pietro Melchiorri, Lucia Negri and Enrico Solcia</i>			
77.25	Volume 7 Supplement 1, 1986		294 pages	\$75.00
	Second International Symposium VIP & Related Peptides - <i>Edited by Sami I. Said and Dominique Bataille</i>			

ANKHO International Inc
 P.O. Box 380227, San Antonio, Texas 78280 U.S.A.