

CURRICULUM VITAE

NAME: Lewis S. Seiden

BORN: August 1, 1934, Chicago, Illinois

MARRIED: Anne Maxwell Seiden, M.D.

CHILDREN: Alex D.
Effie J.
Samuel C.

EDUCATION: B.A., University of Chicago 1956 - Liberal Arts
B.S., University of Chicago 1958 - Biology
Ph.D., University of Chicago 1962 - Biopsychology

SCHOLARSHIPS AND FELLOWSHIPS: Full tuition scholarships 1953-1956
University of Chicago
Baskind Fellow 1957-1959, University of Chicago
USPHS Predoctoral Fellow 1959-1962
University of Chicago. Sponsor: Dr. Howard F. Hunt
USPHS Postdoctoral Fellow 1962-1963
University of Goteborg, Goteborg, Sweden
Sponsor: Dr. Arvid Carlsson

USPHS Postdoctoral Fellow 1964-1965
Stanford University, Stanford, California
Sponsor: Dr. Keith Killam
USPHS Career Development Award 1967-1979

EMPLOYMENT: Research and Teaching Assistant 1959-1961
University of Chicago, Department of Psychology.

Research Associate 1963-1964
University of Chicago, Department of Pharmacology.

Instructor in Pharmacology and Psychiatry, 1965.
University of Chicago.

Department of Pharmacological and Physiological Sciences, University of Chicago:

Assistant Professor, July 1967 - 1972
Associate Professor, July 1972 - 1977
Professor, July, 1977

SEIDEN, Lewis S.

**SOCIETIES,
MEMBERSHIPS AND
HONORS:**

Sigma Xi

New York Academy of Sciences

**American Psychological Association (Fellow)
Divisions: Experimental Analysis of Behavior,
Psychopharmacology.**

**American Society for Pharmacology and
Experimental Therapeutics.**

**CINP (Collegium Internationale
Neuro-Psychopharmacologicum)**

**University of Goteborg, Faculty of Medicine,
Goteborg, Sweden. Invited to be a special
examiner on a thesis in Behavioral
Pharmacology, 1972.**

**Member of the Editorial Advisory Board and
Specific Field Editor for the Journal of
Pharmacology and Experimental Therapeutics.
Editor in Neuropharmacology.**

**Regional Editor, Pharmacology, Biochemistry
and Behavior.**

**Editorial Board, Psychopharmacology Communications
Advisory Board, Journal of Neural Transmission**

**Society for Neuroscience
Grass Foundation Traveling Scientist Program**

**Research Scientist Development Award
Research Scientist Award
Alcohol, Drug Abuse and Mental Health Administration
Public Health Service, Department of Health,
Education and Welfare.**

**Merit Review Board in Neurobiology
Veterans Administration, Washington, D.C.**

**Research Scientist Development Review Committee
Appointment: June 30, 1979 - June 30, 1982**

American College of Neuropharmacology

SEIDEN, Lewis S.

National Institute of Environmental Health Sciences, Board of Scientific Counselors, 1983.

Who's Who in America, 43rd Edition, 1983.
American Men and Women in Science.

Neuropsychology Research Review Subcommittee of the Basic Psychopharmacology and Neuropsychology Research Review Committee, 7/1/83-6/30/87.

Life Sciences Working Group, 1982-1983.
National Aeronautics and Space Administration (NASA). National Academy of Sciences

National Institutes of Drug Abuse: Neuroscience Technical Review, September, 1984. Invited Speaker: Effects of methamphetamine administration on the central nervous system and monoaminergic neurons.

National Institutes of Mental Health, Division of Extramural Research Programs, October, 1984. Invited Research Seminar: Frontiers of Mental Health Research. Neurotoxicity of Methamphetamine.

PUBLICATIONS

- Seiden, L.S. and Westley, J.: Partial purification of monoamine oxidase from rat brain. Biochem. Biophys. Acta. 58:363-364, 1962.
- Seiden, L.S. and Westley, J.: Mechanisms of iproniazid inhibition of brain monoamine oxidase. Arch. Int. Pharmacodyn. 146(1-2):145-162, 1963
- Seiden, L.S. and Carlsson, A.: Temporary and partial antagonism by L-Dopa of reserpine-induced suppression of a conditioned avoidance response. Psychopharmacologia 4:418-423, 1963.
- Seiden, L.S. and Carlsson, A.: Brain and heart catecholamine levels after L-Dopa administration in reserpine treated mice: Correlation with the conditioned avoidance response. Psychopharmacologia 5:178-181, 1964.
- Seiden, L.S. and Hanson, L.C.F.: Reversal of the reserpine-induced suppression of the conditioned avoidance response in the cat by L-Dopa. Psychopharmacologia 6:239-244, 1964.
- Seiden, L.S. and Thieme, G. and Anderson, A.: A simplified apparatus for the reliable delivery of shock. Am. J. Physiol. 77:652-653, 1964.
- Killam, K.F., Killam, E.K., and Seiden, L.S.: The interaction of injected reserpine and dihydroxyphenylalanine or d-amphetamine on electrophysiological and behavioral responses in a conditioned approach situation in the cat. Japanese J. of Neurochem. 4:1965, Supplement.
- Heller, A., Seiden, L.S., Porcher, W. and Moore, R.Y.: 5-Hydroxytryptophan decarboxylase in rat brain: Effect of hypothalamic lesions. Science 147:887-888, 1965.
- Heller, A., Seiden, L.S., and Moore, R.Y.: Regional effects of lateral hypothalamic lesions on brain norepinephrine in the cat. Int. J. Neuropharmacol. 5:91-101, 1966.
- Heller, A., Seiden, L.S., Porcher, W. and Moore, R.Y.: Regional effects of lateral hypothalamic lesions on 5-hydroxytryptophan decarboxylase in the cat brain. J. Neurochem. 13:967-974, 1966.
- Schoenfeld, R. and Seiden, L.S.: Alpha-methyl-tyrosine effects on a fixed ratio schedule of reinforcement. J. Pharm. Pharmac. 19:771-772, 1967.

- Seiden, L.S. and Peterson, D.D.: Reversal of the reserpine-induced suppression of the conditioned avoidance response by L-Dopa: Correlation of behavioral and biochemical differences in two strains of mice. J. Pharmacol. Exp. Ther. 159:422-428, 1968.
- Seiden, L.S. and Peterson, D.D.: Blockade of L-Dopa reversal of the reserpine-induced CAR suppression by disulfiram. J. Pharmacol. Exp. Ther. 163:84-90, 1968.
- Krantz, K. and Seiden, L.S.: Effects of diethylthiocarbamate on the conditioned avoidance response in the rat. J. Pharm. Pharmacol. 20:166-167, 1968.
- Seiden, L.S.: Comparison of the effects of water satiation and L-Dopa treatment on the IRT distribution in rats. Am. Psychologist 23:887, 1967.
- Seiden, L.S., Schoenfeld, R., and Domizi, D.: A system for the recording and analysis of interresponse time data using an AM tape recorder and digital computer. J. Exp. Anal. Behav. 12:289-292, 1969.
- Schoenfeld, R. and Seiden, L.S.: Effect of alpha methyl tyrosine on operant behavior and brain catecholamine levels. J. Pharmacol. Exp. Ther. 167:319-327, 1969.
- Uretsky, N. and Seiden, L.S.: Effect of alpha-methyl Dopa on the reserpine-induced suppression of motor activity and the conditioned avoidance response. J. Pharmacol. Exp. Ther. 168:153-162, 1969.
- Chase, P.A., Seiden, L.S. and Moore, R.Y.: Behavioral and neuroendocrine responses to light mediated by separate visual pathways in the rat. Physiol. and Behav. 4:949-965, 1969.
- Boggan, W.O. and Seiden, L.S.: Dopa reversal of reserpine enhancement of audiogenic seizure susceptibility in mice. Physiol. and Behav. 6:851-853, 1971.
- Seiden, L.S. and Martin, T.W., Jr.: Potentiation of effects of L-Dopa on conditioned avoidance behavior by inhibition of extracerebral dopa decarboxylase. Physiol. and Behav. 6:453-458, 1971.
- Campbell, A.B., Brown, R.M. and Seiden, L.S.: A selective effect of p-chlorophenylalanine on fixed ratio responding. Physiol. and Behav. 7:853-857, 1971.
- Lewy, A.J. and Seiden, L.S.: Operant behavior changes norepinephrine metabolism in the rat brain. Science 175:454-456, 1972.

- Boggan, W.O. and Seiden, L.S.: 5-Hydroxytryptophan reversal of reserpine enhancement of audiogenic seizure susceptibility in mice. Physiol. and Behav. 10:9-12, 1973.
- Campbell, J.C. and Seiden, L.S.: Performance influence on the development of tolerance to amphetamine. Pharm. Biochem. Behav. 1:703-708, 1973.
- Campbell, A.B. and Seiden, L.S.: The effect of relative and absolute reinforcement magnitude on operant responding. Physiol. and Behav. 12:843-849, 1974.
- MacPhail, R.C. and Seiden, L.S.: Time-course for the effects of cocaine on water-reinforced fixed-ratio responding in rats. Psychopharmacologia (Berlin) 44:1-4, 1975.
- Brown, R.M. and Seiden, L.S.: Interresponse time changes as a function of water deprivation and amphetamine. J. Pharmacol. Exp. Ther. 193:701-712, 1975.
- Seiden, L.S.: The role of catecholamines in the action of drugs affecting behavior. Pharmac. Ther. 2:155-165, 1976.
- Seiden, L.S., Fischman, M.W. and Schuster, C.R.: Long term methamphetamine-induced changes in brain catecholamines in tolerant rhesus monkeys. Drugs and Alcohol Dependence, Vol. 1, #3, 215-219, 1976.
- MacPhail, R.C. and Seiden, L.S.: Effects of intermittent and repeated administration of d-amphetamine on restricted water intake in rats. J. Pharmacol. Exp. Ther. 197:303-310, 1976.
- Pearl, R. and Seiden, L.S.: The existence of tolerance to and cross tolerance between d-amphetamine and methylphenidate for their effects on milk consumption and on differential-reinforcement-of-low-rate performance. J. Pharmacol. Exp. Ther. 198:635-647, 1977.
- Albert, L.H., Emmett-Oglesby, M.W. and Seiden, L.S.: Effects of schedules of reinforcement on brain catecholamine metabolism in the rat. Pharmacol. Biochem. and Behav. 6:481-486, 1977.
- Emmett-Oglesby, M.W., Lewy, A.J., Albert, L.H. and Seiden, L.S.: Role of lever responding and water reinforcement in altering catecholamine metabolism. J. Pharmacol. Exp. Ther. 204:405-415, 1978.
- Seiden, L.S., Andressen, J. and MacPhail, R.C.: Methylphenidate and d-amphetamine: Effects and interactions with alpha-methyltyrosine and tetrabenazine on DRL performance in rats. Pharmacol. Biochem. and Behav. 10:577-584, 1979.

- Pearl, R.G. and Seiden, L.S.: α -Amphetamine-induced increase in catecholamine synthesis in the corpus striatum of the rat: persistence of the effect after tolerance. J. Neural Transmission 44:21-28, 1979.
- Wagner, G.C., Schuster, C.R. and Seiden, L.S.: Methamphetamine induced changes in brain catecholamines in rats and guinea pigs. Drug and Alcohol Dependence 4:435-439, 1979.
- Johanson, C.E., Aigner, T.A., Seiden, L.S. and Schuster, C.R.: The effects of methamphetamine on fine motor control in rhesus monkeys. Pharm. Biochem. and Behav. 11:273-278, 1979.
- Erinoff, L., MacPhail, R., Heller, A. and Seiden, L.S.: Age dependent effects of 6-hydroxydopamine on locomotor activity in the rat. Brain Research 164:195-205, 1979.
- Heffner, T.G. and Seiden, L.S.: The effect of depletion of brain dopamine by 6-hydroxydopamine on tolerance to the anorexic effect of α -amphetamine and fenfluramine in rats. J. Pharmacol. Exp. Ther. 208:134-143, 1979.
- McGuire, P.S. and Seiden, L.S.: The effects of tricyclic antidepressants on a differential-reinforcement-of-low-rates schedule in rats. J. Pharmacol. Exp. Ther. 214:635-641, 1980.
- McGuire, P.S. and Seiden, L.S.: Differential effects of imipramine in rats as a function of DRL schedule value. Pharmacol. Biochem. and Behav. 13:691-694, 1980.
- Wagner, G.C., Ricaurte, G.A., Seiden, L.S., Schuster, C.R., Miller, F.E., Westley, J.: Long-lasting depletions of striatal dopamine and loss of dopamine uptake sites following repeated administration of methamphetamine. Brain Research 181:151-160, 1980.
- Wagner, G.C., Ricaurte, G.A., Johanson, C., Seiden, L.S., and Schuster, C.R.: Amphetamine induces caudate dopamine depletion. Neurology 30:547-550, 1980.
- Heffner, T.G., Hartman, J.A., and Seiden, L.S.: Feeding increases dopamine metabolism in the rat brain. Science 208:1168-1170, 1980.
- Heffner, T.G. and Seiden, L.S.: Synthesis of ^3H -catecholamines from ^3H -tyrosine in brain regions of rats during the performance of operant behavior. Brain Research 183:403-419, 1980.
- Levine, T.E., McGuire, P.S., Heffner, T.G., and Seiden, L.S.: DRL performance in 6-hydroxydopamine-treated rats. Pharmacol. Biochem. and Behav. 12:287-291, 1980.

- Levine, T.E., Erinoff, L., Dregits, D.P. and Seiden, L.S.: Effects of neonatal and adult 6-hydroxydopamine treatment on random-interval behavior. Pharmacol. Biochem. and Behav. 12:281-285, 1980.
- Ricaurte, G.A., Schuster, C.R., and Seiden, L.S.: Long-term effects of repeated methylamphetamine administration on dopamine and serotonin neurons in the rat brain: A regional study. Brain Research 193:153-163, 1980.
- Heffner, T.G., Hartman, J.A. and Seiden, L.S.: A rapid method for the regional dissection of the rat brain. Pharmacol. Biochem. and Behav. 13:453-456, 1980.
- Lucot, J.B., Wagner, G.C., Schuster, C.R. and Seiden, L.S.: The effects of dopaminergic agents on the locomotor activity of rats after high doses of methylamphetamine. Pharmacol. Biochem. and Behav. 13:409-414, 1980.
- Luttinger, D.A. and Seiden, L.S.: Increased hypothalamic NE metabolism after water deprivation in the rat. Brain Research 208:147-165, 1981.
- Lucot, J.B., Horwitz, J. and Seiden, L.S.: The effects of p-chloroamphetamine administration on locomotor activity and serotonin in neonatal and adult rats. J. Pharmacol. Exp. Ther. 217:738-744, 1981.
- Heffner, T.G., Luttinger, D.A., Hartman, J.A., and Seiden, L.S.: Regional changes in brain catecholamine turnover in the rat during performance on fixed ratio and variable interval schedules of reinforcement. Brain Research 214:215-218, 1981.
- Bittner, S.E., Wagner, G.C., Aigner, T.G. and Seiden, L.S.: Effects of a high-dose treatment of methylamphetamine on caudate dopamine and anorexia in rats. Pharmacol. Biochem. and Behav. 14:481-486, 1981.
- Wagner, G.C., Schuster, C.R. and Seiden, L.S.: Neurochemical consequences following administration of central nervous system stimulants to neonatal rats. Pharmacol. Biochem. and Behav. 14:117-119, 1981.
- Wagner, G.C., Foltin, R.W., Seiden, L.S. and Schuster, C.R.: Dopamine depletion by 6-hydroxydopamine prevents conditioned taste aversion induced by methylamphetamine but not lithium chloride. Pharmacol. Biochem. and Behav. 14:85-88, 1981.
- Wagner, G.C., Lucot, J.B., Schuster, C.R. and Seiden, L.S.: The ontogeny of aggregation-enhanced toxicity. Psychopharmacology 75:92-93, 1981.

- Miller, F.E., Heffner, T.G., Kotake, C., and Seiden, L.S.: Magnitude and duration of hyperactivity following neonatal 6-hydroxydopamine is related to the extent of brain dopamine depletion. Brain Research 229:123-132, 1981.
- O'Donnell, J.M. and Seiden, L.S.: Effects of monoamine oxidase inhibitors on DRL 72-sec performance. Psychopharmacology 78:214-218, 1982.
- Heffner, T.G. and Seiden, L.S.: Possible involvement of serotonergic neurons in the reduction of locomotor hyperactivity caused by amphetamine in neonatal rats depleted of brain dopamine. Brain Research 244:81-90, 1982.
- Wagner, G.C., Preston, K.L., Ricaurte, G.A., Schuster, C.R. and Seiden, L.S.: Neurochemical similarities between d,l-cathinone and d-amphetamine. Drug and Alcohol Dependence 9:279-284, 1982.
- Ricaurte, G.A., Guillery, R.W., Seiden, L.S., Schuster, C.R. and Moore, R.Y.: Dopamine nerve terminal degeneration produced by high doses of methylamphetamine in the rat brain. Brain Research 235:93-103, 1982.
- Finnegan, K.T., Ricaurte, G., Seiden, L.S. and Schuster, C.R.: Altered sensitivity to d-methylamphetamine, apomorphine and haloperidol in rhesus monkeys depleted of caudate dopamine by repeated administration of d-methylamphetamine. Psychopharmacology 77:43-52, 1982.
- O'Donnell, J.M., Rider, D.P., Somani, S and Seiden, L.S.: The effect of repeated desipramine administration on water intake in rats. Psychopharmacology 77(2):129-133, 1982.
- Lucot, J.B. and Seiden, L.S.: Effects of neonatal administration of 5,7-dihydroxytryptamine on locomotor activity. Psychopharmacology 77:114-116, 1982.
- Lucot, J.B. and Seiden, L.S.: The effects of intracerebroventricular administration of 5,6-dihydroxytryptamine to neonatal rats. Brain Research 247:177-180, 1982.
- Lucot, J.B., Wagner, G.C., Schuster, C.R., and Seiden, L.S.: Decreased sensitivity of rat pups to long-lasting dopamine and serotonin depletions produced by methylamphetamine. Brain Research 247:181-183, 1982.
- Miller, F.E., Seiden, L.S.: Locomotor hyperactivity following chronic alpha-methyltyrosine administration in the neonatal rat. Developmental Brain Research 6:91-92, 1983.

- Heffner, T.G. and Seiden, L.S. Impaired acquisition of an operant response in young rats depleted of brain dopamine in neonatal life. Psychopharmacology 79:115-119, 1983.
- Wagner, G.C., Lucot, J.B., Schuster, C.R. and Seiden, L.S.: Alpha-methyltyrosine attenuates and reserpine increases methamphetamine-induced neuronal changes. Brain Research 270:285-288, 1983.
- Ricaurte, G., Seiden, L.S., Schuster, C.R.: Increased dopamine metabolism in the neostriatum of rats lesioned with methylamphetamine. Neuropharmacology, 22:1383-1388, 1983.
- O'Donnell, J.M. and Seiden, L.S.: Differential reinforcement of low rate 72-sec schedule: A potential screen for antidepressant drugs. J. Pharmacol. Exp. Ther. 224:80-88, 1983.
- Heffner, T.G., Heller, A., Miller, F.E., Kotake, C. and Seiden, L.S.: Locomotor hyperactivity in neonatal rats following electrolytic lesions of mesocortical dopamine neurons. Developmental Brain Research 9:29-37, 1983.
- Ricaurte, G.A., Fuller, R.W., Perry, K.W., Seiden, L.S. and Schuster, C.R.: Fluoxetine increases long-lasting neostriatal dopamine depletion after d-methamphetamine and d-amphetamine. Neuropharmacology, 22:1165-1169, 1983.
- Ricaurte, G.A., Guillery, R.W., Seiden, L.S., Schuster, C.R.: Nerve terminal degeneration after a single injection of d-amphetamine in iprindole treated rats: Relation to selective long-lasting dopamine depletion. Brain Research, 291:378-382, 1984.
- Heffner, T.G., Vosmer, G. and Seiden, L.S.: Increased transport of 3,4-dihydroxyphenylacetic acid from brain during performance of operant behavior to the rat. Brain Research, 293:85-91, 1984.
- O'Donnell, J.M. and Seiden, L.S.: Altered effects of desipramine on operant performance after 6-hydroxydopamine-induced depletion of brain dopamine or norepinephrine. J. Pharmacol. Exp. Ther., 229:629-635, 1984.
- Heffner, T.G., Vosmer, G. and Seiden, L.S.: Time-dependent changes in hypothalamic dopamine metabolism during feeding in the rat. Pharmac. Biochem. Behav., 20:947-949, 1984.
- Ricaurte, G.A., Seiden, L.S. and Schuster, C.R.: Further evidence that amphetamines produce long-lasting dopamine neurochemical deficits by destroying dopamine nerve fibers. Brain Research, 303:359-364, 1984.

- Seiden, L.S. and Vosmer, G.: Formation of 6-hydroxydopamine in caudate nucleus of the rat brain after a single large dose of methylamphetamine. Pharmacol. Biochem. and Behav., 21:29-31, 1984.
- Preston, K.L., Wagner, G.C., Seiden, L.S. and Schuster, C.R.: Effects of methamphetamine on atropine induced conditioned gustatory avoidance. Pharmacol. Biochem. and Behav., 20:601-607, 1984.
- Kotake, C., Heffner, T.G., Vosmer, G. and Seiden, L.S.: Determination of dopamine, norepinephrine, serotonin and their major metabolic products in rat brain by reverse-phase ion-pair high performance liquid chromatography with electrochemical detection. Pharmacol. Biochem. and Behav., 22:85-89, 1985.
- Heyman, G.M. and L.S. Seiden: A parametric description of amphetamine's effect on response rate: changes in reinforcement efficacy and response topography. Psychopharmacology, in press, 1984.
- Seiden, L.S., Pachman, S.H., Heffner, T.G., Vosmer, G. and Shaughnessy, R.A.: The effect of water deprivation on locomotor activity in rats treated with 6-hydroxydopamine. Brain Research, In press, 1984.
- Seiden, L.S., Dahms, J.L. and Shaughnessy, R.A.: Behavioral Screen for antidepressants: the effects of drugs and electroconvulsive shock on DRL responding, Psychopharmacology, In press, 1985.
- Klemfuss, H. and Seiden, L.S.: Water deprivation increases hypothalamic norepinephrine metabolism in the rat. In press, Brain Research, 1985.
- Klemfuss, H. and Seiden, L.S.: Hypothalamic catecholamine metabolism is increased by acute water imbalance. Submitted to Pharmacology, Biochemistry and Behavior, 1984.
- O'Donnell, J.M. and Seiden, L.S.: Effect of the experimental antidepressant AHR-9377 on performance during differential reinforcement of low response rate. Submitted to Psychopharmacology, 1984.
- Ricaurte, G.A., Seiden, L.S., and Schuster, C.R.: Hallucinogenic amphetamine selectively destroys brain serotonin nerve terminals: Neurochemical and anatomical evidence. Submitted to Science, 1984.
- Heyman, G.M., Kinzie, D. and Seiden, L.S.: Chlorpromazine and pimozide affect reinforcement efficacy and motor performance: A matching law analysis. Submitted to Pharmacology, Biochemistry and Behavior, 1984.

Preston, K.L., Schuster, C.R. and Seiden, L.S.: The effects of d-methamphetamine, physostigmine, atropine, and mecamlamine on force lever performance before and after the repeated administration of d-methamphetamine in rhesus monkeys. Submitted to Psychopharmacology, 1984.

Kiyoshi, A., Johanson, C.E., Seiden, L.S. and Schuster, C.R.: Sensitivity changes to dopaminergic agents in fine motor control of rhesus monkeys after repeated methamphetamine administration. Submitted to Pharmacology, Biochemistry and Behavior, 1984.

Preston, K.L., Wagner, G.C., Schuster, C.R. and Seiden, L.S.: Long-term effects of repeated methylamphetamine administration on monoamine neurons in the rhesus monkey brain. Submitted to Brain Research, 1984.

Commins, D.L. and Seiden, L.S.: Alpha methyl para tyrosine blocks methamphetamine-induced degeneration in the rat somatosensory cortex. Submitted to Brain Research, 1984.

Seiden, L.S.: Neurochemical toxic effects of psychomotor stimulants. Psychopharmacology Bulletin, in press, 1985.

Seiden, L.S. and Shaughnessy, R.A.: DRL schedule of reinforcement as a screen for potential antidepressants. Psychopharmacology Bulletin, in press, 1985.

Commins, D.L., Axt, K.A. and Seiden, L.S.: A serotonergic neurotoxin is formed in the brain following administration of methylamphetamine. Submitted to Science, 1985.

BOOKS AND CHAPTERS

- Seiden, L.S.: Neurochemical basis of drug action. Behavioral Analysis of Drug Action, J.A. Harvey (ed.) Scott Foresman and Company, pp. 116-137, 1971.
- Seiden, L.S.: Behavioral methods in pharmacology. Methods in Neurochemistry, R. Fried (ed.) Denker Press, 5:59-114, 1973.
- Seiden, L.S., Brown, R.M. and Lewy, A.J.: Brain catecholamines and conditioned behavior: Mutual interactions. Chemical Modulation of Brain Function, H. Sabelli (ed.) Raven Press, pp. 261-267, 1973.
- Seiden, L.S.: Antimonoaminergic drugs and conditioned behavior. International Encyclopedia of Pharmacology and Therapeutics, O. Hornykiewicz (ed.) Section 25, 1973.
- Seiden, L.S. and Campbell, A.B.: Catecholamines drugs and behavior: mutual interactions. Neuropsychopharmacology of Monoamines and Their Regulatory Enzymes E. Usdin (ed.) Raven Press, Vol. 12, 1973.
- Seiden, L.S. and Dykstra, L.A.: Psychopharmacology: A Biochemical and Behavioral Approach. Van Nostrand Reinhold Company, New York, 1977.
- Seiden, L.S., Erinoff, L., MacPhail, R.C., Heller, A., Miller, F.E.: Age-dependent effects of 6-hydroxydopamine on locomotor activity in rats. In: Catecholamines: Basic and Clinical Frontiers, E. Usdin, I. Kopin, J. Barchas (eds.) Pergamon Press, New York, Vol. II, pp. 1669-1671, 1979.
- Seiden, L.S. and Heffner, T.G.: Alteration of brain catecholamine metabolism by environmental and behavioral events: An explanation of drug-behavior interactions. Presented at the Fifth International Catecholamine Symposium, Goteborg, Sweden, 1983. Alan R. Liss, Inc., New York.
- Fabricant, J.D., Fernstrom, J., Helmreich, R., Sharp, J.C., Seiden, L.S., and Stricker, E.: Working Group Report G: Behavior and Psychopharmacology. The Fabricant Report on Life Sciences Experiments for a Space Station. A compilation of the reports of seven working groups. The University of Texas Medical Branch, Galveston, TX, 1983.
- Seiden, L.S. and O'Donnell, J.M. Effects of antidepressant drugs on DRL behavior. In: Behavioral Pharmacology and Toxicology: Current Status. Edited by Lewis S. Seiden and Robert L. Balster. Alan R. Liss, Publisher, New York. In Press, 1984. New York, 1984.

Seiden, L.S.: Reciprocal effects of drugs, behavior and the environment on brain neurotransmitters: Toward a unified theory of brain and behavior. Presented at The Seventh Symposium on Quantitative Analyses of Behavior at Harvard: Biological Determinants of Reinforcement and Memory, June 8-9, 1984. Lawrence Erlbaum and Associates, Publishers.

Seiden, L.S.: Functional neuropathology: Residual effects of acute methamphetamine administration and behavioral implications. National Institute on Drug Abuse Research Monograph Series. September, 1984.

- Seiden, L.S. and McGuire, P.S.: Comparison of three tricyclic antidepressants on DRL performance in rats. Behavioral Pharmacology Society, Annual Meeting, May, 1977.
- Levine, T.E., Erinoff, L., Heller, A., Seiden, L.S.: Effects of neonatal and adult treatment with 6-HDA on random interval behavior, Soc. for Neuroscience, 1977.
- McGuire, P.S. and Seiden, L.S.: The effects of imipramine on DRL performance in the rat. Midwestern Association for Behavior Analysis, May, 1977.
- Johanson, C.E., Schuster, C.R., Aigner, T. and Seiden, L.S.: Effects of methylamphetamine and haloperidol on fine motor control before and after repeated injections of methylamphetamine. Fed. Proc 37:#3,659, 1978.
- McGuire, P.S. and Seiden, L.S.: Imipramine enhances performance on an operant schedule of reinforcement in the rat. Fed. Proc. 1978.
- Heffner, T.G. and Seiden, L.S.: Brain catecholamine (CA) turnover during performance of operant behavior in the rat. Fed. Proc., 37:618, 1978.
- Heffner, T.G. and Seiden, L.S.: Effect of operant behavior on the regional synthesis of ³H-catecholamines from ³H-tyrosine in the rat brain. Soc. for Neuroscience, 1978.
- Seiden, L.S.: Substance Abuse: Biochemical Aspects, Symposium, American Psychological Association, Toronto, Canada, 1978.
- Seiden, L.S., McGuire, P.S. and Levine, T.E.: Behavioral and molecular actions of psychomotor stimulants, American Psychological Association, 1978.
- Heffner, T.G., Luttinger, D.A., Hartman, J.A., and Seiden, L.S.: Regional changes in central nervous system catecholamine metabolism during performance on fixed ratio or variable interval operant schedules. Soc. for Neuroscience, 5:336, 1979.
- McGuire, P.S. and Seiden, L.S.: Interaction of L-Dopa or 5-HTP and imipramine on schedule performance in the rat. Soc. for Neuroscience, 1979.
- Heffner, T.G., Hartman, J.A. and Seiden, L.S.: Changes in brain DA metabolism during feeding in the rat. Fed. Proc., 1979.
- Wagner, G.C., Aigner, T.G., Seiden, L.S. and Schuster, C.R.: Long-term dopamine depletions and behavioral consequences following treatment with methamphetamine. Fed. Proc., 38-858, 1979.

- Pachman, S., Heffner, T.G., and Seiden, L.S.: Water-deprivation-induced hyperactivity in rats depleted of brain dopamine by 6-hydroxydopamine. Fed. Proc., 1980.
- Heffner, T.G., Miller, F.E., Kotake, C., Heller, A. and Seiden, L.S.: Transient or permanent hyperactivity following neonatal 6-hydroxydopamine: A function of brain dopamine depletion. Soc. for Neuroscience, 1980.
- Ricaurte, G.A., Guillery, R.W., Seiden, L.S., Schuster, C.R.: Selective neurodegenerative changes in the somatosensory cortex following treatment with methylamphetamine, p-chloroamphetamine but not 6-HDA. Soc. for Neuroscience, 6:(259.7) 764, 1980.
- Ricaurte, G.A., Seiden, L.S., Schuster, C.R.: Indications of increased dopamine turnover in the neostriatum of rats treated three weeks previously with toxic doses of methylamphetamine. Soc. for Neuroscience, 1981.
- Heller, A., Heffner, T., Kotake, C., Miller, F., and Seiden, L.: Locomotor hyperactivity in neonatal rats following lesions of mesocortical dopaminergic neurons. Society for Neuroscience, 1981.
- Heffner, T.G. and Seiden, L.S.: Reduction of locomotor hyperactivity by amphetamine in neonatal rats following lesions of mesocortical dopaminergic neurons. Society for Neuroscience, 1981.
- Klemfuss, H.A. and Seiden, L.S.: Norepinephrine metabolism in medial hypothalamus is increased by acute and chronic dehydration. Society for Neuroscience, 1981.
- O'Donnell, J.M. and Seiden, L.S.: An operant screening procedure for antidepressant drugs. Fed. Proc., 1982.
- Schuster, C.R., Seiden, L.S. and Ricaurte, G.A.: Nerve fiber degeneration in rats administered d-amphetamine in combination with iprindole. Fed. Proc., 1983.
- Ricaurte, G.A., Seiden, L.S. and Schuster C.R.: Selective dopamine nerve fiber destruction after continuous d-methamphetamine. Fed. Proc., 1983.
- Seiden, L.S.: Effects of trazadone, fluoxetine and bupropion on rats responding under a schedule of differential-reinforcement-of-low-rate 72-sec (DRL 72-sec). Fed. Proc. 1983.
- Ellis, S., Seiden, L.S. and Schuster, C.R.: Transitory nature of tolerance to fenfluramine-induced anorexia. Fed. Proc., 1983.

Ricaurte, G.A., Malpas, P., Seiden, L.S. and Schuster, C.R.: Aggregation increases long-lasting serotonin depletion induced by d-methamphetamine. Society for Neuroscience 1983.

Heyman, G.M., Kinzie, D.L. and Seiden, L.S.: Pimozide and chlorpromazine reduce reinforcement efficacy and motor capacity in the rat. Society for Neuroscience, 1983.

Klemfuss, H.A. and Seiden, L.S.: Naloxone reverses hypothalamic catecholamine alterations caused by acute dehydration. Society for Neuroscience, 1983.

Seiden, L.S. and Vosmer, G.: 6-hydroxydopamine is formed from dopamine in vivo after administration of methylamphetamine. Society for Neuroscience, 1984.

Commins, D.L., Seiden, L.S. and Schuster, C.R.: Alpha-methyl-para-tyrosine blocks methamphetamine-induced degeneration in the rat somatosensory cortex. Society for Neuroscience, 1984.

Ricaurte, G.A., Seiden, L.S. and Schuster, C.R.: Hallucinogenic amphetamine selectively destroys brain serotonin nerve terminals. Society for Neuroscience, 1984.