

LEONARD W. HAMILTON
School of Arts and Sciences
Department of Psychology
Rutgers University

Mailing address:

Professor Leonard W. Hamilton, Ph.D.
 Department of Psychology
 Rutgers - The State University of NJ
 53 Avenue E
 Piscataway, NJ 08854-8040

Phone (732) 445-2576
 Fax.....(732) 445-0036
 E-mail.....lwh@rutgers.edu
 Home page..... www.rci.rutgers.edu/~lwh
 Home phone.....(908) 604-2174
 Home fax.....(908) 604-9583

EDUCATION

- 1965-68 Ph.D., University of Chicago (Biopsychology)
 1961-65 B.S. with Honors, University of Iowa (Psychology)

PROFESSIONAL EXPERIENCE

- 2006 Distinguished Contributor to Undergraduate Education
 1999-03 Director of University College Honors Program
 1999- Director of Advising in Psychology
 1979- Professor of Psychology, Rutgers University
 1994 Faculty Academic Study Program [on leave, Fall Semester]
 1988-91 Vice Chair for Undergraduate Psychology, Rutgers
 1979-80 Faculty Academic Study Program [on leave]
 1976-79 Chair, Rutgers College Psychology
 1973-76 Psychobiology Area Coordinator, Rutgers Graduate School
 1972-79 Associate Professor of Psychology, Rutgers University
 1969-71 Member of Advisory Board, Office of Dean of Instruction
 1968-72 Assistant Professor of Psychology, Rutgers University
 1967-68 Teaching Assistant, University of Chicago
 1965-68 NDEA Title IV Fellow, University of Chicago
 1964-65 Research Assistant, University of Iowa

TEACHING EXPERIENCE

Undergraduate

Introductory Psychology
 Behavioral Pharmacology
 Drugs and Human Behavior
 Learning and Behavior
 Conditioning and Learning
 Research Methods in Psychology
 Principles of Psychobiology
 Physiological Psychology
 Learning and Motivation
 Senior Research Sponsor
 Honors Sem: Stress Management
 Honors Sem: Data Presentation and Analysis
 Honors Sem: Broken Brains
 UC Elena Buchanan Transition Program
 Gateway General Psychology

First-Year Seminar (SAS)
 Neuropsychology

Graduate

Principles of Psychobiology for Clinical Psychologists
 Nervous System and Behavior
 Research Instrumentation and Equipment Design
 Surgical Techniques
 Seminar in Neurophysiology & Neuropharmacology
 Seminar in Limbic System Anatomy
 Research and Readings Courses
 BASIC Programming for Research

RESEARCH AND THEORETICAL INTERESTS

Animal Models of Brain Damage and Recovery Processes
Instructional Techniques for Students at Risk
Brain Mechanisms of Behavioral Inhibition
Interaction Between Hunger and Thirst
Ontogeny of Behavioral Systems
Depression and Stress Disorders
Brain Mechanisms and Memory
Health Issues

RESEARCH GRANTS

Principal Investigator

Biological Sciences Support Grant, 1968-69
USPHS Small Grant, 1968-69
Summer Research Fellowship, 1969
USPHS Research Grant, 1969-72
Rutgers Research Council, 1969-70
Biological Sciences Support Grant, 1969-70
Rutgers Research Council, 1972-73; Co-PI Flaherty
Biological Sciences Support Grant, 1971-72
Rutgers Research Council, 1972-73
Biological Sciences Support Grant, 1972-73
USPHS Small Grant, 1975-76
Busch Fund Grant, 1975-76
Nutrition Foundation Grant, 1977-79
USPHS Small Grant, 1979-80
Busch Fund Grant, 1980-81
AACU: Health Issues in the Curriculum at Rutgers University, 1999

Project Director

Teaching Improvement Program for Graduate Assistants
NSF Matching Funds to establish Advanced Graduate Experimental Laboratory in Psychology
NSF Matching Funds to improve undergraduate laboratory instruction
Rutgers instructional grant (teaching improvement program)
ACIC Grant to improve registration process for undergraduate research
ACIC Grant to undergraduate instructional computers

MEMBERSHIP

American Association for the Advancement of Science (1968-2000)
American Association of University Professors
Massachusetts Society for Medical Research
Eastern Psychological Association
American Psychological Society (1975-2002)
Society for Neurosciences (1975-2002)
Psychonomic Society (1975-2002)
Society of Sigma Xi (1968-2002)

SPECIAL UNIVERSITY SERVICE

Member of Core Committee for Graduate School of Education project to redevelop teacher education program (1988-1990)
Faculty Sponsor of Demarest Hall special-interest residence: Psychology and Behavior. 1989-91.
Faculty Sponsor of Psi Chi National Honor Society in Psychology. 1990-91.
Director of University College Honors Program (1988-1990)
Member of Honors Committee (1988 to present.)
Director and Instructor for Gateway Psychology Program, a special program of instruction for students at risk in General Psychology. 1988-91.
Volunteer instructor for the University College Transition Program (since its inception in 1990), a special bridge program of instruction for adult students planning a return to college.
Search Committee for University College Dean 1994-95.
Member, Psychology Advising Committee (with special emphasis on University College)
Co-Principal Investigator (with Godfrey Roberts): HIV and Health Issues at Rutgers University.
American Association of Colleges and Universities, March, 1998 and ongoing.
Invited presentation, *Approaches for Teaching Large Lectures*, Second Annual Rutgers University Teaching Conference.
FAS Psychology Curriculum Committee (1998-present)
FAS Psychology Computer Needs Committee (1998-1999)
University College Representative to New Brunswick Faculty Council (S'99-Present)
Teaching Subcommittee for New Brunswick Faculty Council (S'99-S'2001)
Chair, Teaching Subcommittee for New Brunswick Faculty Council (JUL'00-JUL-2002)
University College Advisory Board to Post-Baccalaureate Pre-Med Program (S'99-S'2000)
Communication and Health Issues Research Group--SCILS (S'99-S'2002)
Member, Search Committee for University College Dean of Students (JUL'00-JUL'01)
Task Force on Academic Support (New Brunswick Faculty Council) (JAN'01-JAN'02)

CONT'D

Director of University College Honors Program (JUL'00-JUL2004)
Faculty Council Member (1997-2002)
Keynote Address, UC Honors Program Reception, MAR2003 *Send in the Clones: But the Brains May Have Ideas of Their Own*
Director of Undergraduate Advising in Psychology (F'99-Present)
FAS Psychology Curriculum Committee (F'99-Present)
Faculty Teaching Evaluation Committee (2003-Present)
FAS Psychology representative to IT Faculty Liaison Committee (2005-Present)
SAS Academic Standing Committee (Chair) (2006)
SAS Psychology By-Laws Committee (Chair) (2007-2008)

COMMUNITY SERVICE

The Ghost of Christmas Past and Other Illusions. Unitarian Church of Tallahassee, FL. JAN 1987.
Brain and Behavior. Millington Elementary School, Millington, NJ. After-School Program, Spring, 1990.
Brain and Behavior. Millington Elementary School, Millington, NJ. After-School Program, Spring, 1992.
After-School Programs in Brain and Behavior, Long Hill Township Elementary and Middle Schools (1993).
Science Fair Judge, Long Hill Township Central School, Annually since 1993-2000.
Volunteer for AAAS Scientist Pen Pal in association with the NJ Museum of Science; Liberty Park, NJ. (1990-2000)
Mentor Scientist; National Science Teachers Association and National Science Foundation's *Dragonfly* project. (1997-1999)
Long Hill Township Representative, New Jersey Department of Environmental Protection's Great Swamp Watershed Advisory Committee (1990-1993)
Member, Long Hill Township Environmental Commission (1996-1997); Vice-Chair 1997.
Member, Long Hill Township Open Space Advisory Committee (1997).
Long Hill Township Representative to Ten Towns Great Swamp Committee (an inter-municipal organization); Member 1995-2005; Vice-Chair (1997-2002); Chair (2002-2005)
Trustee, Great Swamp Watershed Association (1992-1996)

Science and Technology Advisor, Great Swamp Watershed Association (1996-present)

Member of Executive Committee, Friends of Long Hill Township (1994-2004); Secretary (1997-2000)

Representative to NJDEP's Watershed Management Area 6.

Founding Trustee, Black Brook Restoration, Preservation & Protection League (1994).

Consultant to Global Learning. Secondary education workshop to develop a *New Jersey Curriculum on a Sustainable Environment*.

Invited Address, *The Myth of the Ratables*, to the Pequest-Paulinskill Watershed Association. Spring '95.

Invited Address, *Ratables and Open Space*, conference on the Future Development of Northeast, New Jersey, Paulinskill, NJ.

Invited Address, *The Natural and Economic Benefits of Open Space*, Association of New Jersey Environmental Commissions. Berkeley Heights, NJ, November '96.

Invited Address, *The Natural and Economic Benefits of Open Space*, Association of New Jersey Environmental Commissions. South Plainfield, March '98.

Invited Address, *The Economic Benefits of Greenways*, Middlesex County Urban Forestry Program and NJDEP, New Brunswick, October '98.

Invited Address, *The Benefits of Open Space*, Monmouth County Preservation Fund, February '99.

Invited Address, *Open Space and the Myth of the Ratables*, Bethlehem Township Preservation Association, February '99.

Invited Address, *Stormwater--The Silent Peril*, Morristown Garden Club, January, '00.

Workshop, *Preserving Open Space*, Phillipsburg Riverview Organization.

Member, Resource Group for Great Swamp National Wildlife Refuge Visitors Center, FEB'98 to JUN'99

Workshop, *Valuation of our Natural Resources*. Upper Raritan Watershed Association. AUG'02.

Lecture/demonstration (with C. R. Timmons and Dunwishin's Hilda Rumpole), Olfaction and Trailing Abilities in Bloodhounds. Liberty Science Center, National Sense of Smell Day, 1996.

Keynote Address, Morris County Children's Consortium Workshop, *Environmental Influences on the Developing Brain*, October, 2003.

Keynote Address, Ten Towns Committee's Tenth Anniversary Meeting, *Sustainable Stewardship*, June 2005.

Long Hill Township Environmental Commission, Chair (2006-present)

Long Hill Township Planning Board, Member (2006-present)

Long Hill Township Sewer Ban Committee (2006)

Keynote Address, Mountain Island Lake Symposium, Belmont, NC (MAR 2006), *The Challenges and Benefits of Regional Approaches to Stormwater Management*.

Keynote Address, Friends of Great Swamp National Wildlife Refuge 2007 Annual Meeting, *Sustainable Stewardship*, December 2007.

Panel Moderator, Morris County Green Table, *Economic Benefits of Open Space*, January, 2008.

Statistical and planning consultant to several environmental groups.

PUBLISHED PAPERS

- Hamilton, L. W., McCleary, R. A., & Grossman, S. P. Behavioral effects of cholinergic septal blockade in the cat. *Journal of Comparative and Physiological Psychology*, 1968, 66, 563-568.
- Hamilton, L. W., & Grossman, S. P. Behavioral changes following disruption of central cholinergic pathways. *Journal of Comparative and Physiological Psychology*, 1969, 69, 76-82.
- Hamilton, L. W. Active avoidance impairment following septal lesions in cats. *Journal of Comparative and Physiological Psychology*, 1969, 69, 420-431.
- Hamilton, L. W., Kelsey, J. E., & Grossman, S. P. Variations in behavioral inhibition following different septal lesions in rats. *Journal of Comparative and Physiological Psychology*, 1970, 70, 79-86.
- Hamilton, L. W. Behavioral changes following unilateral and bilateral septal lesions in rats. *Physiology and Behavior*, 1970, 5, 855-859.
- Hamilton, L. W., & Flaherty, C. F. Behavioral patterns associated with drinking in normal and septal rats. *Journal of Comparative and Physiological Psychology*, 1971, 76, 165-174.
- Flaherty, C. F., & Hamilton, L. W. Responsivity to decreasing sucrose concentrations following septal lesions in the rat. *Physiology and Behavior*, 1971, 6, 431-437.
- Feigley, D. A., & Hamilton, L. W. Response to novel environments following septal lesions or cholinergic blockade in rats. *Journal of Comparative and Physiological Psychology*, 1971, 76, 496-504.
- Hamilton, L. W. Starvation induced by sucrose ingestion in the rat: partial protection by septal lesions. *Journal of Comparative and Physiological Psychology*, 1971, 77, 59-69.
- Hamilton, L. W. Intrabox and extrabox cues in avoidance responding: effects of septal lesions. *Journal of Comparative and Physiological Psychology*, 1972, 78, 268-273.
- Feigley, D. A., Parsons, P. J., Hamilton, L. W., & Spear, N. E. Development of habituation to a novel environment in the rat. *Journal of Comparative and Physiological Psychology*, 1972, 79, 443-453.
- Weisman, R. N., & Hamilton, L. W. Two-way avoidance responding following VMH lesions: effects of varying shock intensity. *Physiology and Behavior*, 1972, 9, 243-246.
- Weisman, R. N., Hamilton, L. W., & Carlton, P. L. Increased conditioned gustatory aversion following VMH lesions. *Physiology and Behavior*, 1972, 9, 801-804.
- Hamilton, L. W., Worsham, E., & Capobianco, S. A spring-loaded carrier for transection of fornix and other large fiber tracts. *Physiology and Behavior*, 1972, 10, 157-159.
- Hamilton, L. W., & Flaherty, C. F. Interactive effects of food and water deprivation in the rat. *Learning and Motivation*, 1973, 4, 148-162.

- Persip G., & Hamilton, L. W. Behavioral effects of serotonin or a blocking agent applied to the septum of the rat. *Pharmacology, Biochemistry, and Behavior*, 1973, 1, 139-147.
- Hamilton, L. W., & Capobianco, S. Consumption of sodium chloride and lithium chloride in normal rats and rats with septal lesions. *Physiological Psychology*, 1973, 1, 213-218.
- Worsham, E., & Hamilton, L. W. Acquisition and retention of avoidance behaviors following septal lesions or scopolamine injection in rats. *Physiological Psychology*, 1973, 1, 219-226.
- Hamilton, L. W., & Katske, F. A. Rapid gastric ulceration in a modified two-way shuttlebox. *Physiological Psychology*, 1973, 1, 188-190.
- Capobianco, S., & Hamilton, L. W. Increased activity following fornix transection in the female rat. *Physiology and Behavior*, 1973, 11, 407-410.
- Schoenfeld, T. A., Hamilton, L. W., & Gandelman, R. Septal damage during the maturation of inhibitory responding: effects on juvenile and adult rats. *Developmental Psychobiology*, 1973, 1, 195-205.
- Flaherty, C. F., Capobianco, S., & Hamilton, L. W. Effects of septal lesions on retention of negative contrast. *Physiology and Behavior*, 1973, 11, 625-631.
- Hamilton, L. W., Capobianco, S., & Worsham, E. Lowered response to postingestive cues following septal lesions in rats. *Journal of Comparative and Physiological Psychology*, 1974, 87, 134-141.
- Schiffman, H. R., & Hamilton, L. W. A simple design for random light displays. *Behavioral Research Methods and Instrumentation*, 1974, 6, 1974.
- Williams, J. M., Hamilton, L. W., & Carlton, P. L. Pharmacological and anatomical dissociation of two types of habituation. *Journal of Comparative and Physiological Psychology*, 1974, 87, 724-732.
- Flaherty, C. F., Hamilton, L. W., & Capobianco, S. Anticipatory responding in rats with septal lesions. *Physiological Psychology*, 1974, 2, 513-518.
- Vom Saal, F., Hamilton, L. W., & Gandelman, R. J. Faster acquisition of an olfactory discrimination following septal lesions in albino rats. *Physiology and Behavior*, 1975, 14, 697-703.
- Williams, J. M., Hamilton, L. W., & Carlton, P. L. Ontogenetic dissociation of two types of habituation. *Journal of Comparative and Physiological Psychology*, 1975, 89, 733-737.
- Hamilton, L. W., & Timmons, C. R. Knife cuts while you wait: a simple and inexpensive procedure for producing knife cuts in freely moving animals. *Physiology and Behavior*, 1976, 16, 101-103.

- Capobianco, S., & Hamilton, L. W. The effects of interruption of different limbic system pathways on different measures of activity. *Physiology and Behavior*, 1976, 17, 65-72.
- Hamilton, L. W., & Timmons, C. R. Sex differences in response to taste and postingestive consequences of sugar solutions. *Physiology and Behavior*, 1976, 17, 221-226.
- Schoenfeld, T. A., & Hamilton, L. W. Multiple factors in short- term behavioral control of protein intake in rats. *Journal of Comparative and Physiological Psychology*, 1976, 91, 1092-1104.
- Miezejeski, C. M., Lamon, S., Collier, G., & Hamilton, L. W. Partitioning of behavioral arousal. *Physiology and Behavior*, 1976, 17, 581-586.
- Miezejeski, C. M., & Hamilton, L. W. Brain-lesion-induced hyperexploration. *Bulletin of the Psychonomic Society*, 10, 343-346.
- Schoenfeld, T. A., & Hamilton, L. W. Secondary changes following brain damage: a theoretical review. *Physiology and Behavior*, 1977, 18, 951-967.
- vom Saal, F., Timmons, C. R., & Hamilton, L. W. Effects of septal lesions on responsiveness to dietary manipulations. *Physiological Psychology*, 1978, 6, 306-313.
- Hamilton, L. W., & Timmons, C. R. Maturation of startle reflex habituation in rats. *Bulletin of the Psychonomic Society*, 1979, 14, 427-430.
- Flaherty, C. F., Powell, G., & Hamilton, L. W. Septal lesion, sex and incentive shift effects on open field behavior of rats. *Physiology and Behavior*, 1979, 22, 903-909.
- Hamilton, L. W., Timmons, C. R., & Lerner, S. M. Caloric consequences of sugar solutions: a failure to obtain gustatory learning. *American Journal of Psychology*, 1980, 93, 387-407.
- Schoenfeld, T. A., & Hamilton, L. W. Disruption of appetite but not hunger or satiety following small lesions of the amygdala of rats. *Journal of Comparative and Physiological Psychology*, 1981, 95, 565-587.
- Hamilton, L. W. Alcoholism: Gene with a Twist? *Contemporary Psychology*, 1992, 37, 642-643.
- Hamilton, L. W. Avoidance Learning. In Magill's *Survey of Social Science: Psychology*, Pasadena, CA: Salem Press. 1993, 375-380.
- Hamilton, L. W. Emotion and Stress. In Magill's *Survey of Social Science: Psychology*, Pasadena, CA: Salem Press. 1993, 941-946.
- Hamilton, L. W. & Timmons, C. R. Psychopharmacology. In *Encyclopedia of Psychology*. London: Routledge Press. 1994, Vol. 1: 133-152.
- Hamilton, L. W. & Timmons, C. R. Psychopharmacology. In *Biological Aspects of Behavior* (D. Kimble & A. M. Colman, Eds), Essex, England: Longman Group Ltd. 1995, 92-110.

BOOKS

- Hamilton, L. W. *Basic Limbic System Anatomy of the Rat*. Plenum: New York, 1976.
- Flaherty, C. F., Hamilton, L. W., & Gandelman, R. J. *Learning and Memory*. Rand McNally: Chicago, 1977.
- Hamilton, L. W. & Timmons, C. R. *Principles of Behavioral Pharmacology*. Prentice-Hall: Englewood Cliffs, NJ, 1990.
- Timmons, C. R. & Hamilton, L. W. *Drugs, Brains, and Behavior*. (Electronic textbook), www.rci.rutgers.edu/~lwh/drugs/, 1997.
- Hamilton, L. W. (editor) *The Benefits of Open Space*. Great Swamp Watershed Association: Madison, NJ, 1998. (Also published electronically at www.greatswamp.org)
- Timmons, C. R. & Hamilton, L. W. *Test Items for Kalat's Introduction to Psychology*. Pacific Grove, CA: Brooks-Cole. 1999.

PAPERS PRESENTED AT MEETINGS

- Hamilton, L. W. Active avoidance impairment following septal lesions in cats. Midwestern Psychological Association, Chicago IL, 1968.
- Hamilton, L. W., & Grossman, S. P. Behavioral changes following disruption of central cholinergic pathways. Eastern Psychological Association, Atlantic City NJ, 1969.
- Hamilton, L. W. Starvation induced by sucrose ingestion in the rat: partial protection by septal lesions. Eastern Psychological Association, New York NY, 1971.
- Hamilton, L. W. The role of the septum in the regulation of consummatory responding in rats. Society of Neurosciences, Houston TX, 1972.
- Capobianco, S., Worsham, E., & Hamilton, L. W. Behavioral effects of fornix transection in the rat. Eastern Psychological Association, Washington DC, 1973.
- Capobianco, S., & Hamilton, L. W. Increased activity following fornix transection in the rat. American Psychological Association, Montreal CDN, 1973.
- Flaherty, C. F., Capobianco, S., Davy, B., & Hamilton, L. W. Effects of septal lesions on the retention of negative contrast. American Psychological Association, Montreal CDN, 1973.
- Weisman, R. N., & Hamilton, L. W. Effects of VMH lesions on one-way avoidance acquisition. American Psychological Association, New Orleans LA, 1974.
- Capobianco, S., & Hamilton, L. W. Spontaneous activity and limbic system pathways. American Psychological Association, New Orleans LA, 1974.
- Timmons, C. R., & Hamilton, L. W. Interaction of latent inhibition and conditioned suppression: a developmental study. American Psychological Association, Washington DC, 1976.

Hamilton, L. W., & Timmons, C. R. Ontogeny of the habituation of reflex startle responses. Eastern Psychological Association, Boston MA, 1977.

Timmons, C. R. & Hamilton, L. W. Rotation-induced stress and naloxone: Behavioral effects in rats. Eastern Psychological Association, Crystal City VA, 1993.

INVITED COLLOQUIA AND SYMPOSIA

The limbic system and behavioral inhibition. SUNY at Binghamton, 1973.

Sucrose-induced suppression of feeding. Columbia University seminar series, 1975.

Limbic system control of behavioral inhibition. Downstate Medical Center, 1977.

The traditional logic of the lesion experiment: an evaluation. Eastern Psychological Association, Philadelphia, 1979.

The structure-function problem as it applies to animal models of hyperkinesis. Southeastern Psychological Association, Washington, D.C., 1980.

OTHER

The Hound with the Pendulous Ears. (Poetry) *The Bulletin of the American Bloodhound Club.* P. 19. Spring '95.