

## CURRICULUM VITAE

Robert Numan  
223 Arroyo Grande Way  
Los Gatos, CA 95032  
(408) 358-3092

Department of Psychology  
Santa Clara University  
Santa Clara, CA 95053  
(408) 554-4347

### EDUCATION

Ph.D. University of Tennessee, 1972, Department of Psychology  
B.S. Brooklyn College, 1968, Department of Biology

### PROFESSIONAL EXPERIENCE

Professor, Department of Psychology, Santa Clara University, 1991-present.  
Professor and Department Chair, Department of Psychology, Santa Clara University,  
1991-1996, 2010-2013.  
Associate Professor, Department of Psychology, Santa Clara University, 1982-1991.  
Assistant Professor, Department of Psychology, Santa Clara University, 1976-1982.  
Postdoctoral Fellow, Departments of Pharmacology and Psychology, University of  
Rhode Island, 1974-1976.  
Postdoctoral Fellow, Worcester Foundation of Experimental Biology, Shrewsbury, MA,  
1972-1974.

### TEACHING EXPERIENCE

Introductory Psychology  
Physiological Psychology and Laboratory  
Experimental Psychology and Laboratory  
Comparative Animal Behavior  
Seminar in Neuroscience (or Advanced Topics in Neuroscience)  
Biology of Aging  
Psychopharmacology  
Human Neuropsychology  
Foundations of Behavioral Neuroscience with Laboratory

### UNIVERSITY COMMITTEES AT SANTA CLARA

Library Coordinator, Department of Psychology (1976-1990)  
University Activities Committee, 1979-1981 (Chair, 1980)  
Committee on Care and Use of Animal Subjects, 1980-2003 (Chair, 1980-1990; Acting  
Chair, Spring 1995; Chair, 1999-2003)  
Director: Psychobiology concentration in Psychology, 1980-2013  
Committee on Interdisciplinary Studies, 1981  
Treasurer, Society for Sigma Xi, Santa Clara Club, 1982-1984  
Committee on Research, 1983-1986, 2000-2003 (Chair, 2000-2001)

Faculty Affairs Board, 1984-1987, 1988-1991  
College Rank and Tenure Committee, 1984-1986, (Chair, 1985); 1987-1990, 1992-1993,  
1996  
Subcommittee on Social Sciences Curriculum, 1985  
College of Science Grievance Committee, 1989-1992 (Chair, 1990); 2000-2003  
University Rank and Tenure Committee, 1994-1996 (Chair, 1995); 2005-2008 (Chair,  
2008)  
Faculty Senate Council Representative, 1996-2000, 2010-2015  
University Coordinating Committee, 2003-2005 (Chair, 2003-2004), 2015-2016  
WASC Teaching-Scholar Committee, 2007-2010 (Chair, 2010)  
University Budget Council, 2014  
Faculty Senate President, 2015-2016

#### MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

Society for Neuroscience, elected 1978

#### FEDERAL GRANTS AND AWARDS

Research Grant, National Institute on Alcohol Abuse and Alcoholism: Intravenous Model  
of Alcoholism for the Rat. Direct costs: \$146,195, 1982-1985.  
Research Grant, National Institute on Alcohol Abuse and Alcoholism: Model of  
Alcoholism in Rat Using Intravenous Infusion. Direct costs: \$4,966, 1977-1978.  
NIH Postdoctoral Training Award, Worcester Foundation for Experimental Biology,  
1972-1974.  
USPHS Predoctoral Training Award, University of Tennessee, 1968-1970.

#### SANTA CLARA UNIVERSITY GRANTS AND AWARDS

College of Sciences, Faculty Research Award, \$3,200, 1980.  
Presidential Faculty Research Award, \$2,500, 1981.  
University Equipment Grant, \$4,522, 1984.  
Sciences Advisory Board Grant, \$2,000, 1986.  
Presidential Research Grant, \$2,900, 1988.  
Technology Upgrade Equipment Grant, \$10,000, 1995.  
University Research Grant, \$8,959, 1999.  
Thomas Terry Research Grant, \$3,905, 2002.  
Professor Joseph Bayma Scholarship Award, College of Arts and Sciences, 2005

#### PUBLICATIONS

Lubar, J. F., Brener, J. M., Deagle, J. H., Numan, R., and Clemens, W. J. (1970). Effects  
of septal lesions on detection threshold and unconditioned response to shock.  
*Physiology and Behavior*, 5, 459-463.  
Lubar, J. F. and Numan, R. (1973). Behavioral and physiological studies of septal  
function and related medial cortical structures. *Behavioral Biology*, 8, 1-25.

- Numan, R. and Lubar, J. F. (1974). Role of the prereal gyrus and the septal area in response modulation in the cat. *Neuropsychologia*, 12, 219-234.
- Numan, R., Seifert, A. R., and Lubar, J. F. (1975). Effects of medio-cortical frontal lesions on DRL performance in the rat. *Physiological Psychology*, 3, 390-394.
- Numan, R., Smith, N., and Lal, H. (1975). A versatile procedure for rapid induction of narcotic addiction in the rat utilizing intravenous injections. *Physiological Psychology*, 3, 261-262.
- Numan, R., Smith, N., and Lal, H. (1975). Reduction of morphine withdrawal body shakes by a conditional stimulus in the rat. *Psychopharmacology Communications*, 1, 295-303.
- Miksic, S., Smith, N., Numan., and Lal, H. (1975). Acquisition and extinction of a conditioned hyperthermic response to a tone paired with morphine administration. *Neuropsychobiology*, 1, 277-283.
- Lal, H. and Numan, R., (1976). Blockade of morphine withdrawal body shakes by haloperidol. *Life Sciences*, 18, 163-168.
- Numan, R., Banerjee, U., Smith, N. and Lal, H. (1976). Secondary reinforcement property of a stimulus paired with morphine administration in the rat. *Pharmacology Biochemistry and Behavior*, 5, 395-399.
- Lal, H., Miksic, S., Drawbaugh, R., Numan, R., and Smith, N. (1976). Alleviation of narcotic withdrawal syndrome by conditional stimuli. *Pavlovian Journal*, 11, 251-262.
- Lal, H., Kaplan, L., Numan, R., and Valentino, D. (1977). Acquisition and extinction of operant responding for intravenous injections of Fentanyl in the rat. *Communications in Psychopharmacology*, 1, 207-212.
- Numan, R. and Gilroy, A. M. (1978). Induction of physical dependence upon ethanol in rats using intravenous infusion. *Pharmacology Biochemistry and Behavior*, 9, 279-282.
- Numan, R. (1978). Cortical-limbic mechanisms and response control: A theoretical review. *Physiological Psychology*, 6, 445-470.
- Numan, R. and Grant, K. A. (1980). Lateral, but not medial, frontal lesions impair fixed ratio performance in rats. *Physiology and Behavior*, 24, 625-627.
- Lal, H., Numan, R., and Smith, N. (1980). Naloxone antagonism of morphine-withdrawal body shakes by an auditory conditional stimulus. In E. Way (Ed.), *Endogenous and exogenous opiate agonists and antagonists*. New York: Pergamon Press, pp. 447-450.
- Numan, R. (1981). Multiple exposures to ethanol facilitate intravenous self-administration of ethanol by rats. *Pharmacology Biochemistry and Behavior*, 15, 101-108.
- Numan, R. and Lal, H. (1981). Effect of morphine on rectal temperature after acute and chronic treatment in the rat. *Progress in Neuro-Psychopharmacology*, 5, 363-371.
- Numan, R., Ward, C. and Clark, J. (1982). Septal lesions and active avoidance performance in rats: Effects of differential intrabox cues. *Physiology and Behavior*, 29, 489-493.
- Numan, R. and Naparzewska, A. M. (1984). Comparison of two intravenous infusion schedules for inducing physical dependence upon ethanol in rats. *Alcohol*, 1, 9-17.

- Numan, R., Naparzewska, A. M., and Adler, C. M. (1984). Absence of reinforcement with low dose intravenous ethanol self-administration in rats. *Pharmacology Biochemistry and Behavior*, 21, 609-615.
- Numan, R. (1986). Effects of Pavlovian conditioning on the ethanol withdrawal syndrome in rats. *Pharmacology Biochemistry and Behavior*, 25, 1111-1115.
- Numan, R. and Quaranta Jr., J. R. (1990). Effects of medial septal lesions on operant delayed alternation in rats. *Brain Research*, 531, 232-241.
- Numan, R. (1991). Medial septal lesions impair performance on a preoperatively acquired delayed alternation task in rats. *Brain Research Bulletin*, 26, 449-453.
- Numan, R., and D. Klis (1992). Effects of medial septal lesions on an operant delayed go/no-go discrimination in rats. *Brain Research Bulletin*, 29, 643-650.
- Numan, R., Feloney, M.P., Pham, K.H., and Tieber, L.M. (1995). Effects of medial septal lesions on an operant go/no-go delayed response alternation task in rats. *Physiology and Behavior*, 58, 1263-1271.
- Numan, R. (ed.) (2000). *The Behavioral Neuroscience of the Septal Region*. Springer-Verlag, New York.
- Numan, R. (2000). Septal modulation of the working memory for voluntary behavior. In: R. Numan (ed.) *The Behavioral Neuroscience of the Septal Region*, pp. 298-326, Springer-Verlag, New York.
- Numan, R., Ouimette, A.S., Holloway, K.A., and Curry, C.E. (2004). Effects of medial septal lesions on action-outcome associations in rats under conditions of delayed reinforcement. *Behavioral Neuroscience*, 118, 1240-1252.
- Dreher, D. E., Feldman, D. B., and Numan, R. (2014). Controlling parents survey: Measuring the influence of parental control on personal development in college students. *College Student Affairs Journal*, 32, 97-111.
- Numan, R. (2015). A prefrontal-hippocampal comparator for goal-directed behavior: The intentional self and episodic memory. *Frontiers in Behavioral Neuroscience*. 9:323. doi: 10.3389/fnbeh.2015.00323.

## CONFERENCE PRESENTATIONS AND ABSTRACTS

- Effect of morphine on rectal temperature after acute and chronic treatment in the rat. Paper presented at the *New England Pharmacology Meeting*, Farmington, Connecticut, 1975.
- Reduction of morphine-withdrawal body shakes by a conditional stimulus in the rat. Paper presented at the *Behavioral Pharmacology Meeting*, Princeton, New Jersey, 1975.
- Induction of physical dependence upon ethanol in rats using intravenous infusion. Paper presented at the *8<sup>th</sup> Annual Meeting of the Society for Neuroscience*, St. Louis, Missouri, 1978 (abstract published).
- Fixed ratio performance following different frontal lesions in rats. Paper presented at the *87<sup>th</sup> Annual Convention of the American Psychological Association*, New York City, 1979.
- Intravenous self-administration of ethanol maintains physical dependence in rats. Paper presented at the *10<sup>th</sup> Annual Meeting of the Society for Neuroscience*, Cincinnati, Ohio, 1980 (abstract published).

- Effects of septal lesions on cued and non-cued active avoidance. Paper presented at the 89<sup>th</sup> Annual Convention of the American Psychological Association, Los Angeles, California, 1981.
- Comparison of two intravenous infusion schedules for inducing physical dependence upon ethanol in rats. Paper presented at the 68<sup>th</sup> Annual Meeting of the Federation of American Societies for Experimental Biology, St. Louis, Missouri, 1984 (abstract published).
- Absence of reinforcement with low dose intravenous ethanol self-administration in rats. Paper presented at the 14<sup>th</sup> Annual Meeting of the Society for Neuroscience, Anaheim, California, 1984 (abstract published).
- Effects of Pavlovian conditioning on the ethanol withdrawal syndrome. Paper presented at the 94<sup>th</sup> Annual convention of the American Psychological Association, Washington, D.C., 1986 (abstract published).
- Teaching Experimental Psychology. Invited Symposium address at the 68<sup>th</sup> Annual Convention of the Western Psychological Association, Burlingame, CA, 1988.
- Effects of medial septal lesions on operant delayed alternation in rats. Paper presented at the First Annual convention of the American Psychological Society, Alexandria, Virginia, 1989 (abstract published).
- Medial septal lesions impair working-memory on both spatial and non-spatial delayed alternation in rats. Paper presented at the 19<sup>th</sup> Annual Meeting of the Society for Neuroscience, Phoenix, Arizona, 1989 (abstract published).
- Effects of medial septal lesions on an operant delayed go/no-go discrimination in rats. Paper presented at the 21<sup>st</sup> Annual Meeting of the Society for Neuroscience, New Orleans, Louisiana, 1991 (abstract published).
- Effects of medial septal lesions on delayed go/no-go response alternation in rats. Paper presented at the 24<sup>th</sup> Annual Meeting of the Society for Neuroscience, Miami Beach, Florida, 1994 (abstract published).
- The contribution of the medial septum to the functions of the hippocampal system in rats. Paper presented at the 25<sup>th</sup> Annual Meeting of the Society for Neuroscience, San Diego, California, 1995. (abstract published).
- Effects of medial septal lesions on action-outcome associations in rats (with M. J. Spinetta). Paper presented at the 31<sup>st</sup> Annual Meeting of the Society for Neuroscience, San Diego, California, 2001. (Abstract published).
- Effects of medial septal lesions on action-outcome associations in rats under conditions of delayed reinforcement. Paper presented at the 33<sup>rd</sup> Annual Meeting of the Society for Neuroscience, New Orleans, LA, 2003. (Abstract published).

#### PROFESSIONAL SERVICE

Ad Hoc manuscript reviewer for the journals: *Behavioural Brain Research*, *Life Sciences*, *Pharmacology Biochemistry and Behavior*, *Physiology and Behavior*, and *Science*.

Ad Hoc Grant reviewer for: National Science Foundation, Veterans Administration, and the March of Dimes Foundation.