

CURRICULUM VITAE

Robert Adron Harris

ADDRESS: Waggoner Center for Alcohol and Addiction Research
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EDUCATION AND EMPLOYMENT HISTORY

1967 B.S. degree in Chemistry, New Mexico State University, graduated with honors
1970 M.S. degree in Chemistry, University of Arizona
1973 Ph.D. degree in Pharmacology, University of North Carolina, Chapel Hill, NC
1973-1976 Postdoctoral Fellow, Department of Pharmacology, University of California, San Francisco, California

PROFESSIONAL POSITIONS

Current Director, Waggoner Center for Alcohol and Addiction Research. Professor of Neurobiology, and Waggoner Chair in Cellular and Molecular Biology, University of Texas at Austin.
1988-1998 Professor of Pharmacology, University of Colorado Health Sciences Center, Research Career Scientist, Denver VA Medical Center
1996-1998 Director, University of Colorado Alcohol Research Center
1992-1998 Scientific Director, Denver VA Alcoholism Research Center
1992-1998 Faculty Member, Institute for Behavioral Genetics, University of Colorado, Boulder
1989-1990 Acting Chairman, Department of Pharmacology, UCHSC
1983-1988 Associate Research Career Scientist, Veterans Administration Medical Center, Denver, Colorado
1983-1988 Associate Professor of Pharmacology, University of Colorado School of Medicine, Denver, Colorado
1981-1983 Associate Professor of Pharmacology, University of Missouri School of Medicine, Columbia, Missouri

- 1979-1983 Research Pharmacologist, Harry S. Truman Memorial Veterans Administration Hospital, Columbia, Missouri
- 1976-1981 Assistant Professor of Pharmacology, University of Missouri School of Medicine, Columbia, Missouri

AWARDS

- Outstanding Freshman Chemistry Student, NMSU, 1964
Neurobiology Trainee, 1971-1973
NIDA Postdoctoral Fellowship, 1974-1976
PMA Foundation Research Starter Grant, 1977-1979
PMA Foundation Faculty Development Award, 1977-1979
National Council on Alcoholism Grant, 1978-1979
Veterans Administration Alcoholism Research Award, 1979
Excellence in Teaching, School of Medicine, Class of 1980
Veterans Administration Associate Research Career Scientist Award, 1983-1988
Veterans Administration Research Career Scientist Award, 1988-2002
NIAAA MERIT Award, 1989-1999
President, Research Society on Alcoholism, 1993-1995
Department of Pharmacology Service Award, 1995
Elected to American College of Neuropsychopharmacology, 1995
Research Society on Alcoholism Distinguished Researcher Award, 1999
Bowles Lectureship Award, 2001
American Society for Information Science & Technology's list of Highly Cited Researchers, 2001
President, International Society for Biomedical Research on Alcoholism, 2002-2006
Jellinek Memorial Award for outstanding contributions to alcoholism research, 2004
Wendy and Stanley Marsh Endowed Lectureship in Pharmacology and Neurochemistry of Substance Abuse/Addiction, 2006
Cited by Thomson Scientific, publications entered the top 1% in the field of Neuroscience and Behavior, 1997-2007
Texas Research Society on Alcoholism A Lifetime Achievement Award, 2008

PROFESSIONAL ORGANIZATIONS

- American Association for the Advancement of Science
American Chemical Society
American College of Neuropsychopharmacology
American Society for Neurochemistry
American Society for Pharmacology and Experimental Therapeutics
Collegium Internationale Neuro-Psychopharmacologicum
International Society for Biomedical Research on Alcoholism
International Society for Neurochemistry
Research Society on Alcoholism
Sigma Xi
Society for Neuroscience

RESEARCH SUPPORT

Previous

National Institute on Drug Abuse Research Fellowship, "Role of Calcium in Narcotic Tolerance and Dependence," DA02785, 7/1/74 - 6/30/76.

Pharmaceutical Manufacturers Association Foundation Research Starter Grant, "Narcotic Antagonists: Drug Interactions and Brain Dopamine Systems," 1/1/77 - 12/30/78, \$10,000 (Principal Investigator).

Pharmaceutical Manufacturers Association Foundation Faculty Development Award, "Alcohols, Barbiturates and Cannabinoids: Behavioral and Membrane Effects," 9/1/77 - 8/30/79, \$45,000 (Principal Investigator).

University of Missouri School of Medicine Research Council. "Alcohols, Barbiturates and Cannabinols: Behavioral and Membrane Effects," 10/26/77 - 4/1/78, \$5,000 (Principal Investigator).

National Council on Alcoholism Research Grant, "Alcohol Dependence: Behavior and Membrane Effects," 7/1/78 - 6/30/79, \$17,000 (Principal Investigator).

Veterans Administration Special Emphasis Alcoholism Research Award, "Effects of Alcohol Intoxication and Dependence on Ion Transport and Neurotransmitter Release by Synaptosomes." 1/1/79 - 9/30/82, \$312,872 (Principal Investigator).

National Institute on Drug Abuse (Public Health Service) DA02855. "Brain Membranes in Alcohol, Barbiturate and Opiate Dependence." 7/1/80 – 9/29/83, Total award was \$274,109. (Principal Investigator).

National Institute on Alcohol Abuse and Alcoholism (AA06399). "Brain Membranes in Alcohol and Barbiturate Dependence." 10/1/83 to 9/30/86 and 10/1/86 to 9/30/89. Total award was \$420,000. (Principal Investigator). (Principal Investigator).

National Institute on Alcohol Abuse and Alcoholism (AA09458). "Effects of Ethanol on Gene Expression," 12/1/92-11/30/93. \$9,260.

Dr. Harris was the supervisor of the postdoctoral fellowships awarded to Drs. Andrea M. Allan (1986-87), Laura Daniell (1987-88), Jo Ellen Mayfield (1991-93), John Mihic (Medical Research Council of Canada, 1992-95), and Fernando Valenzuela (1994-96).

Veterans Administration Merit Review Funding. "Neurochemistry of Alcohol and Sedative Dependence." 4/1/95 to 10/31/98. Total award was \$485,000 (Principal Investigator).

Veterans Administration Research Career Scientist award. Provided Dr. Harris's salary. 10/01/88-10/31/98.

Veterans Affairs Research Center. "VA Research Center for Basic and Clinical Studies of Alcoholism." 7/1/96-9/30/98. Dr. Harris was Scientific Director. Total award was \$500,000. Funding for 7/1/97-6/30/98 was \$250,000.

Training Grants: Participating faculty member on NIGMS predoctoral-pharmacology; NIAAA postdoctoral; Neuroscience predoctoral training grant at the University of Colorado.

National Institute on Alcohol Abuse and Alcoholism (AA11428; MD Browning, PI). "GABA and NMDA Receptor Antibodies for Alcohol Research." 9/29/96 to 8/31/99.

National Heart, Lung, and Blood Institute (MH/HL58542; BF Cravatt, PI). "Molecular Studies of the Sleep-Inducing Lipid, Oleamide," 9/30/97-9/29/00.

National Institute on Alcohol Abuse and Alcoholism (P50, AA03527). PI of Component 7. "Genetic Approaches to Neuropharmacology of Ethanol," 12/1/97-11/30/01.

Present

- (1) National Institute on Alcohol Abuse and Alcoholism (R01, AA06399, PI). "Brain Membranes in Alcohol and Benzodiazepine Dependence." 9/1/99 to 5/31/09, Funding for current year is \$334,371, direct costs. Renewal Pending.
- (2) National Institute of General Medical Sciences (GM47818). "Brain Receptors Expressed in Xenopus Oocytes," 8/1/94-7/31/09. Program project grant (EI Eger, PI). Principal Investigator of one project. Funding for this project for current year \$205,787 direct costs. Renewal Pending
- (3) National Institute on Alcohol Abuse and Alcoholism (R01, AA12404, PI) "Gene Expression in the Human Alcoholic Brain," 8/01/00-5/31/10. Annual funding for current year is \$392,252 direct costs. (Includes subcontract award of \$190,401).
- (4) National Institute on Alcohol Abuse and Alcoholism (U01, AA13518, PI) "Integrative Neuroscience Initiative on Alcoholism: Array Core." 9/28/01-8/31/2011. \$293,700 annual direct costs.
- (5) National Institute on Alcohol Abuse and Alcoholism (U01, AA13520, Co Investigator) "Integrative Neuroscience Initiative on Alcoholism: Animal Core." 9/28/01-8/31/2011. \$125,000 annual direct costs.
- (6) National Institute of Health (T32 DA 018926-0181, PI) "Predoctoral Training in Interdisciplinary Neuroscience" 08/01/04-07/31/09. \$178,517 annual direct costs.
- (7) National Institute on Alcohol Abuse and Alcoholism (2 R01, AA013378-04A1, Investigator) "Properties of Specific Alcohol Binding Sites" 07/01/06-06/30/10. \$26,667 annual direct costs.

TEACHING AND TRAINING ACTIVITIES

University of Colorado Health Sciences Center (1983-1998)

Medical Pharmacology: Present lectures on local and general anesthesia.

Dental Pharmacology: Present lectures on local and general anesthesia and non-narcotic analgesics.

Graduate Pharmacology: Present lectures on membrane structure, ion channels, receptor expression and teach laboratory on oocyte expression techniques. Course co-director for "Molecular Pharmacology."

University of Texas at Austin (1998-present)

Neuropharmacology of Addiction BIO 365W undergraduate course; BIO 381K graduate course.
Career Development for Neuroscientists BIO 381K; graduate course
Program Director, Predoctoral Training in Interdisciplinary Neuroscience

POSTDOCTORAL FELLOWS/RESEARCH FACULTY, UT

1. Maria Paola Mascia, Ph.D. (1993-2001)
2. Susumu Ueno, M.D., Ph.D. (1997-2000)
3. Yuri Blednov, Ph.D. (1998-present)
4. Joanne Lewohl, Ph.D. (1998-2000)
5. Tomohiro Yamakura, M.D., Ph.D. (1998-2000)
6. Cecilila Borghese, Ph.D. (1998-2001)
7. R. Dayne Mayfield, Ph.D. (2000-2003)
8. Koji Hara, M.D., Ph.D. (2000-2002)
9. Shigemasa Tomioka, D.D.S., Ph.D. (2000-2001)
10. Vania Ferreira, Ph.D. (2000-2001)
11. Gwen Schafer, Ph.D. (2001-2003)
12. Stephen Boehm, Ph.D. (2002-2005)
13. Munehiro Shirashi, M.D. (2002-2004)
14. Igor Ponomarev, Ph.D. (2002-2005)
15. Tsunehisa Namba, M.D., Ph.D. (2003)
16. Junichi Ogata, M.D., Ph.D. (2004-2006)
17. Ingrid Lobo, Ph.D. (2004-2007)
18. Rajani Maiya, Ph.D. (2004-2005)
19. Matthew Reilly, Ph.D. (2004-2008)
20. Diane Gong, Ph.D. (2005-2007)
21. Takafami Hiroshita, M.D., Ph.D. (2006-2008)
22. Patrick Killion, Ph.D. (2008-present)
23. Megan Mulligan, Ph.D. (2008-present)
24. Giorgio Gorini, Ph.D. (2008-present)
25. Wayne Johnson, Ph.D. (2008-present)
26. Rebecca Howard, Ph.D. (2008-present)

GRADUATE STUDENTS, UT

1. Geoff Findlay (1998-2003)
2. Ingrid Lobo (2000-2004)
3. Rajani Maiya (2000-2004)
4. Sangwook Jung (2001-2005)
5. Jianwen Liu (2001-2005)
6. Yamin Li (2004-2005)
7. Angela Ozburn (2004-present)
8. Hongbo Bao (2004-2008)
9. Josip Sobin (2005-2007)
10. Nicole Riherd (2005-present)
11. Sheila Bal (2007-present)
12. Chang Hoon Lee (2007-present)
13. Lindsay McCracken (2007-present)
14. Mandy McCracken (2007-present)
15. Jihyun Park (2007-present)

PREVIOUS POSTDOCTORAL FELLOWS/INSTRUCTORS

1. Brooks H. Rohde, Ph.D. (1980-1982)
2. Mark M. Mitchell, Ph.D. (1981-1983)
3. Andrea M. Allan, Ph.D. (1984-1988)
4. Laura C. Daniell, Ph.D. (1985-1988)
5. Donna Bratton, M.D. (1986-1987)
6. Keith Wafford, Ph.D. (1987-1989)
7. Donald Burnett, Ph.D. (1989-1990)
8. Nancy Leidenheimer, Ph.D. (1989-1992)
9. Enrico Sanna, Ph.D. (1992-1994)
10. Jo Ellen Mayfield, Ph.D. (1990-1995)
11. Tina Machu, Ph.D. (1990-1994)
11. S. John Mihic, Ph.D. (1992-1997)
12. C. Fernando Valenzuela, M.D., Ph.D. (1993-1998)
13. Marilee J. Wick, Ph.D. (1995-1998)
14. Kouichiro Minami, M.D., Ph.D. (1995-1997)
15. Todd Vanderah, Ph.D. (1996-1997)
16. Valerie J. Whatley, Ph.D. (1996)
17. Rita A. Cardoso, M.S. (1997-1998)

GRADUATE STUDENTS, UCHSC

1. Kari J. Buck (1985-1990)
2. Lie-Huey Lin (1988-1992)
3. Ronald L. Klein (1989-1995)
4. Valerie J. Whatley (1990-1996)
5. Elizabeth Gonzales (1997-1999)

VISITING PROFESSORS, UCHSC

1. Hiro-Aki Yamamoto, Ph.D. (1981-1982)
2. J. Pablo Huidobro-Toro, Ph.D. (1985, 1995)
3. Nicolai Avdulov, D.Sc. (1991-1992)
4. Yuri Blednov, D.Sc. (1992, 1995)
5. Edward Lewin, M.D. (1993-1994)

SERVICE

University of Texas at Austin

Waggoner Center for Alcohol and Addiction Research, Director (1999-present)
Institute for Cellular and Molecular Biology Executive Committee (1998-2007)
Institute for Neuroscience, Chairperson of Molecular/Cellular Biology (1998-present)
Mouse Genetic Engineering Facility, Director (1998-present)
Institute for Neuroscience, Executive Committee (2000-present)
Search Committee for Director of Neuroscience (2002-2004)
Research Coalition, Coordinating Committee (2002-2005)

Search Committee for Chairman of Neurobiology (2002-2005)
Selection Committee for Outstanding Thesis Award (2003-2004)
Search Committee for Center for Learning and Memory, Chairman (2004-2006)
Neuroscience Training Grant Executive Committee (2004-present)
Research Coalition, Imaging Center Task Force (2004-present)
Post Tenure Review (2004-present)
Search Committee for Center for Learning and Memory Faculty (2004-present)
Animal Research Center Space Committee (2005-present)
College of Natural Sciences NMS Space Assignments (2005)
Planning Committee for the Texas Institute for Drug and Diagnostics Development (TI-3D) (2005-present)
Animal Resource Center Faculty User Committee (2005-present)
College of Natural Sciences ESB Space Committee (2006-2007)
Search Committee for Director of the Dell Pediatric Research Institute (2006-present)
College of Natural Sciences Promotion and Tenure Committee (2007-present)
Institute for Neuroscience Seminar Committee (2008-2009)
Institute for Neuroscience Executive Committee (2009-present)

University of Colorado Health Sciences Center

Hepatology-Gastroenterology "Center of Excellence" Committee (1984-1985)
Basic Science Departments Review Committee (1984-1985)
Radiation Safety Committee (1984-1989)
Departmental representative to Faculty Senate (1985-1989)
Animal Care and Use Committee (1986-1989)
Telecommunications Committee (1987)
Search Committee, Director of Neuroscience (1990)
BRS Funding Review Committee (1990-1991)
Medical Scientist Training Program, Executive Committee (1990-1991)
Graduate School Committee (1990-1991)
Health Sciences Center Space Committee (1990-1993)
Review Committee for Departments of Biochemistry and Pathology (1991)
Pharmacology Promotions and Tenure Committee (1990-present)
Pharmacology Space Committee (1990-present)
Animal Care and Use Oversight Committee (Member, 1991-present; Chairman, 1991-1994)
Departmental Graduate Training Committee (Member, 1986-present; Chair, 1990-1991 and 1993-1998)
Curriculum and Training Committee, Consolidated Ph.D. Program Project (1997-1998)

Denver VA Medical Center

Search Committee for ACOS - Research (1984)
Space and Resources Committee (1983-1984; 1987-1988)
Research and Development Committee (1984-1987), Chairman (1986-87)
Equipment Committee (1984-1986, 1988-1989)
Animal Care Committee (1990-1992)
Protocol Review Committee (1992-1998)
Alcoholism Research Center, Scientific Director (1992-1998)
Member, Denver VA Schizophrenia Research Center (1994-1998)

National

Member of NIAAA Neuroscience and Behavior review committee (1989-1993)
Member of the Scientific Information Committee of the Research Society on Alcoholism (1985-86)
Member of the Chapters Committee of the Society for Neuroscience (1983-86)
Member, Nathan Eddy Award selection committee for the Committee on Problems of Drug Dependence (1987-1989)
Member, Public Information Committee of the American Society for Pharmacology and Experimental Therapeutics (1986-1989)
Secretary, Research Society on Alcoholism (1989-1991)
Vice President, Research Society on Alcoholism (1991-1993)
President, Research Society on Alcoholism (1993-1995)
VA Research Scientist Evaluation Committee (1994-1997)
Member, Scientific Advisory Board, Portland VA Alcohol Research Center (1991-present)
Member, Scientific Advisory Board, Alcoholic Beverages Medical Research Foundation (1992-1998)
Member, American Society for Pharmacology and Experimental Therapeutics (1994)
Epilepsy Award Selection Committee (1994-1996)
Member, Research Society on Alcoholism Awards Committee (1995-present)
Member, External Scientific Advisory Board, Bowles Center for Alcohol Studies (1996-present)
Member, Board of Directors, International Society for Biomedical Research on Alcoholism (1998-present)
Member, Priorities and Government Affairs Committee to the Board of RSA (2000-2006)
Member, NIH Scientific Review Team (2000-present)
Member, NIAAA Microarray Special Emphasis Panel (2000-2002)
Reviewer, AIBS Congressional Peer Review Panel (2000-2003)
Member, Scientific Advisory Board, Yale University Alcoholism Research Center (2001-2005)
Member, UCHSC Postdoctoral Training Grant Outside Advisory Committee (2001-present)
Member, Program Advisory Committee, Indiana University Alcohol Research Center (2001-present)
Member, ASPET Goodman and Gilman Award in Receptor Pharmacology Committee (2002-2004)
Member, Scientific Advisory Board, Thomas Jefferson University Alcohol Research Center (2002-2004)
Member, Scientific Advisory Board, Howard University Alcohol Research Center (2002-present)
President, International Society for Biomedical Research on Alcoholism (2002-2006)
Chair, ASPET Goodman and Gilman Award in Receptor Pharmacology Committee (2005-2009)
Member, Research Society on Alcoholism Fundraising Committee (2005-present)
Member, ASPET Awards Committee (2006-2008)
Chair, Jellinek Memorial Fund Selection Committee for the 2008 Award (2006-2008)
Member, Scientific Advisory Board, Gallo Clinic and Research Center, UCSF (2006-present)
National Advisory Council, NIH/NIAAA (2007- present)
Chair, International Society for Biomedical Research on Alcoholism, program meeting (2007-2008)
Member, Research Society on Alcoholism 2009 Program Committee
Member, University of Colorado at Denver and HSC, Dept of Pharmacology External Advisory Committee (2008 - present)
Member, Society for Neuroscience Jacob P. Waletzky Award Committee (2009-2011)

Editorial Duties

Editor-in-Chief for Alcohol and Drug Research (1986-87)

Editor of the monthly column "Research Update" for The U.S. Journal of Drug and Alcohol Dependence (1984-87)

Member, Editorial Board of Alcoholism: Clinical and Experimental Research (1987-1990)

Member, Editorial Board of Alcohol Health & Research World (1997-2000)

Member, Editorial Board of Journal of Pharmacology and Experimental Therapeutics (1997- present)

Member, Editorial Board of Alcohol (1988-present)

Associate Editor, Alcoholism: Clinical and Experimental Research (1990-present)

Co-Editor, International Review of Neurobiology (1992-present)

Member, Editorial Board of the Journal of Neurochemistry (1993-2007)

Member, Editorial Board of Molecular Pharmacology (1995-present)

Member, Editorial Board of Journal of Biological Chemistry (2003-2008)

Member, Advisory Board of Pharmacological Research (2007-2010)

Member, Editorial Board of Pharmacological Research (2008-present)

PRESS COVERAGE

"Microarrays on the Mind", *The Scientist* 15:16, Feb. 5, 2001.

"So Much for Destiny: Even Thoughts Can Turn Genes 'On' and 'Off'", *Wall Street Journal*, June 21, 2002.

"Why Males Bear Pain Better" and "Morphine and Marijuana", *New Scientist*, 22:00, December 16, 2002.

"GIRKs Cause the Sexes to Feel Pain Differently", *PNAS Online*, December 16, 2002.

"Why a Man's 'Ouch' is different Than a Woman's", *Reuters*, December 20, 2002.

PUBLICATIONS

1. McMillan, D.E., Ford, R.D., Frankenheim, J.M., **Harris, R.A.** and Harris, L.S.: Tolerance to active constituents of marijuana. *Arch. Int. Pharmacodyn.* 198:132-144, 1972.
2. **Harris, R.A.**, Dewey, W.L. and Harris, L.S.: Narcotic antagonists: Annual Report. Thirty-fifth Meeting of the NAS-NRC Committee on Problems of Drug Dependence, Chapel Hill, North Carolina, May, 1973.
3. Kozersky, D., **Harris, R.A.** and Harris, L.S.: Naloxone-precipitated jumping activity in mice following the acute administration of morphine. *Eur. J. Pharmacol.* 26:122-124, 1974.
4. **Harris, R.A.**, Dunn, A. and Harris, L.S.: Effects of acute and chronic morphine administration on the incorporation of (³H)-lysine into mouse brain and liver proteins. *Res. Comm. Chem. Path. Pharmacol.* 9:299-306, 1974.
5. **Harris, R.A.**, Harris, L.S. and Dunn, A.: Effects of morphine on ribonucleic acid and nucleotide metabolism in mouse brain. *J. Pharmacol. Exp. Ther.* 192:280-287, 1975.
6. Loh, H.H., Cho, T.M., Wu, Y.C., **Harris, R.A.** and Way, E.L.: Opiate binding to cerebroside sulfate: A model system for opiate-receptor interaction. *Life Sci.* 16:1811-1818, 1975.
7. **Harris, R.A.**, Iwamoto, E.T., Loh, H.H. and Way, E.L.: Site-dependent analgesia after microinjection of morphine or lanthanum in rat brain. *Proc. West. Pharmacol. Soc.* 18:275-278, 1975.

8. **Harris, R.A.**, Loh, H.H. and Way, E.L.: Effects of divalent cations, cation chelators and an ionophore on morphine analgesia and tolerance. *J. Pharmacol. Exp. Ther.* 195:488-498, 1975.
9. Loh, H.H., Cho, T.M., Wu, Y.C., **Harris, R.A.** and Way, E.L.: Opiate binding to cerebroside sulfate: A model system for opiate-receptor interaction. In: *The Opiate Narcotics* (A. Goldstein, ed.), Pergamon Press, New York, 1975.
10. **Harris, R.A.**, Iwamoto, E.T., Loh, H.H. and Way, E.L.: Analgetic effects of lanthanum: Cross-tolerance with morphine. *Brain Res.* 100:221-225, 1975.
11. **Harris, R.A.**, Loh, H.H. and Way, E.L.: Antinociceptive effects of lanthanum and cerium in non-tolerant and morphine tolerant-dependent animals. *J. Pharmacol. Exp. Ther.* 196:288-297, 1976.
12. **Harris, R.A.**, Snell, D.B., Loh, H.H. and Way, E.L.: Behavioral interactions of apomorphine, clonidine and naloxone: Possible presynaptic involvement. *Proc. West. Pharmacol. Soc.* 19:448-451, 1976.
13. Yamamoto, H., **Harris, R.A.**, Loh, H.H. and Way, E.L.: Calcium binding to brain membranes: Effects of morphine tolerance. *Proc. West. Pharmacol. Soc.* 19:71-74, 1976.
14. **Harris, R.A.**, Loh, H.H. and Way, E.L.: Alterations in the efficacy of naloxone induced by cyclic adenosine monophosphate and stress. *Eur. J. Pharmacol.* 39:1-10, 1976.
15. **Harris, R.A.**, Yamamoto, H., Loh, H.H. and Way, E.L.: Alterations in brain calcium localization during the development of morphine tolerance and dependence. In: *Opiates and Endogenous Opioid Peptides* (H.W. Kosterlitz, ed.), Elsevier Publishing Co., Amsterdam, pp. 361-368, 1976.
16. **Harris, R.A.**, Yamamoto, H., Loh, H.H. and Way, E.L.: Discrete changes in brain calcium with morphine analgesia, tolerance- dependence, and abstinence. *Life Sci.* 20:501-506, 1977.
17. Loh, H.H., Lee, N.M. and **Harris, R.A.**: Alterations of macromolecule biosynthesis after chronic administration of opiates and ethanol. In: *Alcohol Intoxication and Withdrawal - II: Studies in Alcohol Dependence* (Advances in Experimental Medicine and Biology), vol. 85B, Plenum Press, New York, pp. 65-86, 1977.
18. Yamamoto, H., **Harris, R.A.**, Loh, H.H. and Way, E.L.: Effects of acute and chronic morphine treatments on synaptic ATPase activity. *Life Sci.* 20:1533-1540, 1977.
19. **Harris, R.A.**, Snell, D., Loh, H.H. and Way, E.L.: Behavioral interactions between naloxone and dopamine agonists. *Eur. J. Pharmacol.* 43:243-246, 1977.
20. **Harris, R.A.**, Snell, D.B. and Loh, H.H.: Stereoselective effects of 1-(2,5-dimethoxy-4-methylphenyl)-2-aminopropane (DOM) on schedule-controlled behavior. *Pharmacol. Biochem. Behav.* 7:307-310, 1977.
21. Way, E.L., **Harris, R.A.**, Yamamoto, H., Iwamoto, E.T. and Loh, H.H.: Effect of calcium and lanthanum on morphine analgesia and tolerance. In: *Proceedings of the Tenth CINP*

Congress (P. Deniker, C. Radouco-Thomas and A. Villeneuve, eds.), Pergamon Press, Oxford, pp. 1339-1345, 1977.

22. Way, E.L., **Harris, R.A.** and Loh, H.H.: Relationships of calcium to morphine actions. In: Factors Affecting the Actions of Narcotics (M.C. Adler, L. Manera and R. Samin, eds.), Raven Press, New York, pp. 413-422, 1978.
23. **Harris, R.A.**, Snell, D.B. and Loh, H.H.: Effects of *d*-amphetamine monomethoxyamphetamines and hallucinogens on schedule-controlled behavior. *J. Pharmacol. Exp. Ther.* 204:103-117, 1978.
24. Tseng, L.-F., **Harris, R.A.** and Loh, H.H.: Blockade of para-methoxyamphetamine-induced serotonergic effects by chlorimipramine. *J. Pharmacol. Exp. Ther.* 204:27-38, 1978.
25. **Harris, R.A.**, Snell, D.B. and Loh, H.H.: Effects of stimulants, anorectics and related drugs on schedule-controlled behavior. *Psychopharmacology* 56:49-55, 1978.
26. Erickson, C.K., Tyler, T.D. and **Harris, R.A.**: Ethanol: Modification of acute intoxication by divalent cations. *Science* 199:1219-1221, 1978.
27. Iwamoto, E.T., **Harris, R.A.**, Loh, H.H. and Way, E.L.: Antinociceptive responses after microinjection of morphine or lanthanum in discrete rat brain sites. *J. Pharmacol. Exp. Ther.* 206:46-55, 1978.
28. Yamamoto, H., **Harris, R.A.**, Loh, H.H. and Way, E.L.: Effects of acute and chronic morphine treatments on calcium localization and binding in brain. *J. Pharmacol. Exp. Ther.* 205:255-264, 1978.
29. Law, P.Y., **Harris, R.A.**, Loh, H.H. and Way, E.L.: Evidence for the involvement of cerebroside sulfate in opiate receptor binding: Studies with azure A and Jimpy mutant mice. *J. Pharmacol. Exp. Ther.* 207:458-468, 1978.
30. Huidobro-Toro, J.P., **Harris, R.A.**, Loh, H.H. and Way, E.L.: Effects of hypothyroidism on the response of the rat colon to morphine. *Eur. J. Pharmacol.* 52:191-195, 1978.
31. **Harris, R.A.** and Loh, H.H.: Brain sulfatide and non-lipid sulfate metabolism in hypothyroid rats. *Res. Comm. Chem. Path. Pharmacol.* 24:169-179, 1979.
32. **Harris, R.A.**, Wu, Y.-C. and Loh, H.H.: Brain sulfatide and non-lipid sulfate metabolism in leucodystrophic (Jimpy) mice. *Res. Comm. Chem. Path. Pharmacol.* 25:377-387, 1979.
33. **Harris, R.A.**, Snell, D.B. and Loh, H.H.: Effects of chronic *d*-amphetamine treatment on schedule-controlled behavior. *Psychopharmacology* 63:55-61, 1979.
34. Fontaine, R.N., **Harris, R.A.** and Schroeder, F.: Neuronal membrane lipid asymmetry. *Life Sci.* 24: 395-400, 1979.
35. **Harris, R.A.** and Erickson, C.K.: Alteration of ethanol effects by opiate antagonists. In: Currents in Alcoholism, vol. V (M. Galanter, ed.), Grune and Stratton, New York, pp. 17-28, 1979.

36. **Harris, R.A.:** Alteration of alcohol effects by calcium and other inorganic cations. *Pharmacol. Biochem. Behav.* 10:529-534, 1979.
37. **Harris, R.A.,** Krause, W., Goh, E. and Case, J.: Behavioral and biochemical effects of chronic consumption of ethanol by hamsters. *Pharmacol. Biochem. Behav.* 10:343-347, 1979.
38. **Harris, R.A.:** Calcium and magnesium metabolism during ethanol intoxication and withdrawal. In: *Pharmacology of Ethanol* (E. Majchrowicz and E. Noble, eds.), Plenum Press, New York, pp. 27-41, 1979.
39. Snell, D.B. and **Harris, R.A.:** Impairment of avoidance behavior following short-term ingestion of alcohol. *Psychopharmacology* 63:251-257, 1979.
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