Peter P. Rowell, Ph.D.

Professor and Vice Chair, Department of Pharmacology and Toxicology
University of Louisville School of Medicine
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EDUCATION AND TRAINING

B.A., 1968; Stetson University, DeLand. Florida Major: Psychology; Minor: Chemistry	1964 - 1968
Ph.D. (with honors), 1975; Department of Pharmacology and Therapeutics University of Florida School of Medicine	1971 - 1975
Postdoctoral Research Associate, Department of Pharmacology Vanderbilt University School of Medicine	1975 - 1977

MILITARY SERVICE

Lieutenant, U.S. Army	
HQ Company Commander, Field Hospital, Ft. Meade, MD	1969 - 1970
Platoon Leader, 502nd Infantry Battalion, 101st Airborne Division, Vietnam Decorations: Bronze Star, Combat Medical Badge, Air Medal	1970 - 1971
Honorable discharge, 1971	

ACADEMIC APPOINTMENTS

Assistant Professor, Department of Pharmacology and Toxicology University of Louisville School of Medicine	1977 - 1983
Associate Appointment, Department of Psychology University of Louisville College of Arts and Sciences	1980 - 1986
Associate Professor (with tenure) University of Louisville School of Medicine	1983 - 1992
Visiting Professor, Department of Biochemistry University of Bath, England	1/1989 - 8/1989
Visiting Professor, Department of Psychiatry and Neurosciences University of South Florida College of Medicine	2/2012 - 8/2012
Professor of Pharmacology and Toxicology University of Louisville School of Medicine	1992 - Present

ORGANIZATIONAL AND COMMITTEE LEADERSHIP

Associate Dean for Research - School of Medicine	2004 - 2011
Chairman: Research Louisville Committee	2006 - 2011
Chairman: LCME Accreditation Workgroups, Academic Environment/Library & IT	2004
Chairman: School of Medicine Promotion, Appointment and Tenure Committee	2000 - 2001
Chairman: Merit Criteria and Economic Welfare Committee	1992 - 1995
Cofounder and President: Louisville Chapter for Neuroscience	1991 - 1992
Chairman: Faculty Subcommittee, School of Medicine LCME Accreditation	1990
Chairman: School of Medicine Computer Committee	1987 - 1988
President: University of Louisville Chapter of Sigma Xi	1985 - 1987
Chairman: Am. Soc. Pharmacol. Exp. Therap. (ASPET) Educational Affairs Committee	1986 - 1987

PROFESSIONAL AFFILIATIONS

American Society for Pharmacology and Experimental Therapeutics
Society for Neuroscience
American Society for Neurochemistry
International Society for Neurochemistry
International Brain Research Organization
Society for Research on Nicotine and Tobacco (charter member)
Southeastern Pharmacology Society
Kentucky Academy of Science
Sigma Xi
Louisville Chapter of Neuroscience (cofounder)

ACADEMIC RECOGNITION AND FELLOWSHIPS

Nominee for Provost’s Award for Exemplary Advising, 2003
School of Medicine designee, Outstanding Scholarship, Research & Creative Activity Award, 2001
Fogarty Senior International Fellowship Award, 1989
N.I.H. Postdoctoral Fellowship award, Vanderbilt University, 1975 - 1977
Doctoral Degree with Honors, University of Florida, 1975
Who's Who in Science
National Psychology Honorary
National Mathematics Honorary

TEACHING

Course Director and lecturer, Neuropharmacology, PHTX-655	2006 - present
Section Director, Medical Pharmacology, PHTX-850	1979 - present
Neuropharmacology, Medical Pharmacology, PHTX-850	1977 - present
Neuropharmacology, Dental Pharmacology, BMSC-807	1977 - 2010
Dental Board Review, BMSC-861	1999 - 2010
Advanced Nursing Pharmacology, PHTX-650	1999 - 2010
Methods in Pharmacology and Toxicology, PHTX-673	1987 - 2003
Codirector, Biochemical Neuropharmacology	1979 - 1996
Lecturer, Biochemistry of Brain Function	1982 - 1994

SERVICE ACTIVITIES

Department of Pharmacology and Toxicology

Vice Chair, Director of Graduate Program	2009 - present
Chair, Departmental SIBUP/Grievance Committee	1997 - present
Director, Radioisotope core laboratory	1997 - 2010
Departmental Graduate Program Committee	1985 - 2004, 2007
Chair, Departmental Committee on Joint Faculty Appointments	1982, 1988

School of Medicine

Search Committee for the Dean – School of Medicine	2006
LCME Medical School Accreditation Task Force, Steering Committee	1997 - 1998, 2004 - 2005
LCME Accreditation Workgroups, Academic Environment/Library & IT	2004
Recruitment Committee, Integrated Programs in Biomedical Sciences	2000 - 2003
School of Medicine Promotion, Appointment & Tenure Committee	1998 - 2004
Chair review committee, Dept. Psychiatry & Behavioral Sciences	2003
Family and Community Medicine Chair Search Committee	2002 - 2003
Interdisciplinary Curriculum Committee	2001 - 2002
Medical Student Advisor	1982 - 1999
School of Medicine Committee on Aging	1983 - 1998
Committee on Merit Criteria and Economic Welfare	1984 - 1988, 1991 - 1995
H.S.C. Committee on Interactive Video	1987 - 1989
School of Medicine Computer Committee	1986 - 1990
Committee on Chair Reviews	1993 - 1995
Review Committee, Graduate Program in Microbiology	1997 - 1998
Faculty Subcommittee, LCME Accreditation	1990
Committee for the Restructuring of Epidemiology & Biostatistics	1988

Service to the University

University Scholars and Distinguished Scholars Review Committee	2002 - 2011
Board of Trustees Special Committee to Review University Governance	2008 - 2009
Research!Louisville Committee chairman	2006 - 2011
University Animal Welfare Task Force	2005 - present
Institutional Animal Care and Use Committee (IACUC)	2007 - 2008
Graduate School Transition Team	2007 - 2008
President's Distinguished Faculty Awards Committee	2007, 2009, 2011

President's Outstanding Scholarship, Research, Creative Activity Award Committee	2006
University Research Advisory Council	2000 - 2005
Chair, Ad-hoc Committee on Classified Research	2003 - 2004
Provost's Committee for Uniform Personnel Review Documents	2000 - 2001
Chair, Ad-hoc Committee on Ownership of Data	2001
Secretary/Treasurer, Society for Neuroscience	1994 - 1999
Presidential Advisory Committee on Academic Computing	1990 - 1993
University Computer Board	1980 - 1983
Resources Allocation Committee	1980 - 1983
Codirector, Neuropsychopharmacology Program	1980 - 1981
Neurosciences Advisory Committee	1980 - 1981
Telecommunications Research Advisory Committee	1989 - 1993
Sigma Xi Planning Committee	1990 - 1994

Service to the Community

Idea Festival® Planning Committee	2006 - 2011
City Commissioner, City of Ten Broeck, Kentucky	1991 - 2002
Judge, Public School Science Exposition	12 years, 1979 - 1991
Membership Committee, Louisville Science Center	1992 - 1997
Science-by-Mail program, Museum of History & Science	1989 - 1992
Faculty Advisor, Univ. of Louisville Pi Kappa Phi fraternity	1981 - 1990

Service to the Profession (State/National)

University of Louisville Delegate, U.S. Pharmacopeia	1980 - present
Secretary/Treasurer, Southeastern Pharmacology Society	2000 - 2004
Technical Advisory Comm., Ky. Tobacco and Health Research Inst.	1983 - 1994
ASPET Educational Affairs Committee	1985 - 1987
Computer Assisted Teaching System (CATS) Development Comm.	1978 - 1984
Kentucky Drug Formulary Review Committee	1978 - 1982
Planning Committee, Joint National Meeting ASPET/SOT	1982

GRANT REVIEW COMMITTEES

National Academy of Sciences, Research Assoc. Program review committee	2003 - 2006
N.I.H. reviewer, B/START R03 program	2003
The Wellcome Trust grant review	1999
Jewish Hospital Foundation Scientific Affairs Committee	1994 - 2001
Kentucky Tobacco and Health Research Institute	1983 - 1994
Research Committee, South Central Bell Telecommunications Research Center	1989 - 1993
American Heart Association, Ky Affiliate	1983, 1989

GRANT SUPPORT

Principal Investigator Relationship between fetal and placental development and the teratogenicity of cholinergic agents. University of Louisville Medical Research Committee Amount: $3,130	1977 - 1978
Principal Investigator Effects of nicotine on the development and function of the fetal cholinergic system. Kentucky Tobacco and Health Research Institute Amount: $50,543	1978 - 1980
Principal Investigator Compartmentalization of newly-synthesized acetylcholine in the presynaptic nerve terminal. Smith Kline and French Research Award Amount: $2,500	1979 - 1980
Principal Investigator Effects of cigarette smoking and nicotine on cholinergic and transport systems of the placenta. Kentucky Tobacco and Health Research Institute Amount: $27,398	1980 - 1981
Principal Investigator The effect of chronic nicotine administration on cholinergic function in mouse cerebral cortical synaptosomes. Kentucky Tobacco and Health Research Institute Amount: $159,099	1981 - 1984
Principal Investigator Characterization of the nicotine-induced stimulation of cholinergic and dopaminergic activity in the central nervous system. Kentucky Tobacco and Health Research Institute Amount: $193,328	1984 - 1987
Coinvestigator (J. Passmore, P.I.) Cardiovascular effects of nicotine in hypertension: Effects of nicotine on blood pressure in Dahl-S and DOCA-Salt hypertensive rats. Kentucky Tobacco and Health Research Institute Amount: $21,000	1987 - 1988

Coinvestigator (L.A. Carr, P.I.) Interaction between smoking and brain neurotoxins. Kentucky Tobacco and Health Research Institute Amount: $98,939	1987 - 1990
Principal Investigator Effects of the novel nicotinic agonist, (+)anatoxin-a on dopamine release in the rat striatum. Southern Regional Education Board Grant Amount: $750	1989
Principal Investigator Correlation of neurotransmitter release and nicotinic binding sites in the brain. N.I.H. Senior International Fellowship Amount: $11,278	1988 - 1989
Principal Investigator Effects of nicotine on neurotransmitter release in the brain. University of Louisville Medical Research Committee Amount: $3,000	1990 - 1991
Principal Investigator Effect of nicotine on presynaptic nicotinic receptor function in the brain. Kentucky Tobacco and Health Research Institute Amount: $117,198	1991-1993
Principal Investigator Functional activity of presynaptic nicotinic receptors. N.I.H. (R01) Amount: $409,120	1993 - 1999
Principal Investigator Effect of nicotine on central nicotinic receptors activation and desensitization. Kentucky Tobacco and Health Research Institute Amount: $159,131	1999 - 2001
Coinvestigator (C.S. Roberts, P.I.) The effects of nicotine on alpha-adrenergic receptors in bone arterioles. Fischer-Owen Orthopaedic Trust Fund Amount: $11,328	2002 - 2003
Principal Investigator Functional activity of mesolimbic nicotinic receptors. N.I.H. (R01) Amount: $299,508	1999 - 2003

Coinvestigator (A.R. Caggiula, P.I.) Effects of self-administered versus noncontingent nicotine. N.I.H. (R01) Amount: $819,469	2000 - 2004
Coinvestigator (C.S. Roberts, P.I.) Dose and time dependent effects of nicotine on bone blood flow. Fischer-Owen Orthopaedic Trust Fund Amount: $8,517	2003 - 2006
Coinvestigator (D. Gozal, P.I.) Postnatal brain susceptibility to intermittent hypoxia. N.I.H. (R01) Amount: $1,791,200	2002 - 2006

GRADUATE STUDENT TRAINING

Major Research Advisor

Gary E. Duncan, Ph.D. — Ph.D. 1980
Professor, Department of Psychiatry
University of North Carolina

Steven Leventer, Ph.D. — Ph.D. 1981
Vice President for Clinical Research
Neuroscience at PharmaNet
Princeton, New Jersey

Nancy Muma, Ph.D. — Ph.D. 1985
Professor and Chair
Department of Pharmacology and Toxicology
School of Pharmacy, University of Kansas

Maureen Li, M.D., Ph.D. — Ph.D. 1996
Neurologist, Riverhills Healthcare
Cincinnati, OH

Bradley Brewer, M.D., M.S. — M.S. 2002
(deceased) — M.D. 2007

Graduate Research Committees

Mark Lineberry	Pharmacology and Toxicology	Ph.D. 1979
George Stege	Physiology and Biophysics	M.S. 1979
Harriette Tobias	Pharmacology and Toxicology	Ph.D. 1980
Marge Schweri	Pharmacology and Toxicology	Ph.D. 1980

Raymond David	Pharmacology and Toxicology	Ph.D. 1980
William Pierce	Pharmacology and Toxicology	Ph.D. 1981
David May	Pharmacology and Toxicology	Ph.D. 1981
Michael Lachance	Pharmacology and Toxicology	Ph.D. 1982
Sonia Teller	Pharmacology and Toxicology	Ph.D. 1982
David Jones	Pharmacology and Toxicology	Ph.D. 1983
Adrian Van Bakel	Pharmacology and Toxicology	Ph.D. 1983
Michael McWilliams	Pharmacology and Toxicology	M.S. 1983
Chris Kemper	Pharmacology and Toxicology	Ph.D. 1983
Nancy Muma	Psychology and Behavioral Sciences	M.S. 1983
Louis Bolcsak	Pharmacology and Toxicology	Ph.D. 1983
Jim Blank	Pharmacology and Toxicology	Ph.D. 1985
Don Walters	Pharmacology and Toxicology	Ph.D. 1986
Elizabeth Dunlap	Pharmacology and Toxicology	Ph.D. 1987
Chuck Ashby	Pharmacology and Toxicology	Ph.D. 1987
John Imig	Physiology and Biophysics	Ph.D. 1990
Kathleen King	Pharmacology and Toxicology	Ph.D. 1991
Di Chen	Pharmacology and Toxicology	Ph.D. 1992
Caroline Hurley	Physiology and Biophysics	M.S. 1993
Xiao-Lan Chen	Anatomical Sciences and Neurobiology	Ph.D. 1996
Sue Han	Pharmacology and Toxicology	Ph.D. 1997
Mary Li	Pharmacology and Toxicology	Ph.D. 1997
Qiang Wu	Pharmacology and Toxicology	Ph.D. 1997
Jason Vittitow	Ophthalmology. and Visual Sciences	Ph.D. 1998
John Hennion	Pharmacology and Toxicology	M.S. 2001
Jennifer Miller	Anatomical Sciences and Neurobiology	Ph.D. 2001
Scot Payne	Pharmacology and Toxicology	Ph.D. 2001
Jeremy Feitelson	Physiology and Biophysics	Ph.D. 2002
Chandler Park	Physiology and Biophysics	M.S. 2003
Jianli Li	Anatomical Sciences and Neurobiology	Ph.D. 2003
Laila Elsherif	Pharmacology and Toxicology	Ph.D. 2004
April Hartford	Pharmacology and Toxicology	Ph.D. 2004
Diana Coomes	Anatomical Sciences and Neurobiology	Ph.D. 2004
Stephen Lobo	Physiology and Biophysics	M.S. 2004
Cindy Wang	Pharmacology and Toxicology	M.S. 2004
Susan Motts	Anatomical Sciences and Neurobiology	M.S. 2005
Xiaodong Zhang	Anatomical Sciences and Neurobiology	Ph.D. 2005
Rundong Zhang	Pharmacology and Toxicology	Ph.D. 2006
Miranda Nibane	Pharmacology and Toxicology	Ph.D. 2006
Ramida Chomsung	Anatomical Sciences and Neurobiology	Ph.D. 2007
Brian Sansbury	Physiology and Biophysics	M.S. 2008
Haiyang Wei	Anatomical Sciences and Neurobiology	Ph.D. 2010
Sheila Arnold	Pharmacology and Toxicology	Ph.D. 2011
Benjamine Risner	Pharmacology and Toxicology	M.S. 2011

REFEREED PUBLICATIONS

Rowell, P.P. and Chiou, C.Y. Chemistry and biological activities of N,N-dimethylaminoethyl acrylate, a choline acetyltransferase inhibitor. J. Med. Chem. 25: 300-303, 1976.

Rowell, P.P. and Chiou, C.Y. Inhibition of choline acetyltransferase by tertiary alkylaminoethyl esters. Biochem. Pharmacol. 25: 1093-1099, 1976.

Rowell, P.P. and Chiou, C.Y. Pharmacological studies of N,N-dimethyl-aminoethyl acrylate and N,N-dimethylaminoethyl chloroacetate as inhibitors of choline acetyltransferase in isolated skeletal and smooth muscle preparations. Pharmacology 14: 339-350, 1976.

Rowell, P.P. and Chiou, C.Y. In vivo effects of some tertiary aklylamino-ethyl esters with choline acetyltransferase inhibitory properties. Eur. J. Pharmacol. 40: 83-91, 1976.

Ochillo, R., Rowell, P.P. and Sastry, B.V.R. Effects of cooling on the levels of acetylcholine, cholinesterase, choline acetyltransferase and the intramural electrical stimulation on the guinea-pig ileum. Pharmacology 16: 121-130, 1978.

Rowell, P.P., Chaturvedi, A.K. and Sastry, B.V.R. (2-Benzoylethyl) trimethylammonium chloride: A new, selective and stable inhibitor of human placental choline acetyltransferase. J. Pharmacol. Exp. Ther. 205: 624-634, 1978.

Chaturvedi, A.K., Rowell, P.P. and Sastry, B.V.R. Relationships between chemical structure and inhibition of human placental choline acetyl-transferase by keto analogs of acetylcholine. J. Pharm. Sci. 67: 657-660, 1978.

Rowell, P.P. and Sastry, B.V.R. The influence of cholinergic blockade on the uptake of alpha-aminoisobutyric acid by isolated human placental villi. Toxicol. Appl. Pharmacol. 45: 79-93, 1978.

Rowell, P.P. The effects of maternal cigarette smoking on the ability of human placental villi to concentrate alpha-aminoisobutyric acid in vitro. Res. Comm. Subst. Abuse 2: 253-266, 1981.

Rowell, P.P. and Duncan, G.E. The subsynaptosomal distribution and release of [^{3}H]-acetylcholine synthesized by rat cerebral cortical synaptosomes. Neurochem. Research 6: 1259-1276, 1981.

Rowell, P.P. and Sastry, B.V.R. Human placental cholinergic system: depression of the uptake of alpha-aminoisobutyric acid in isolated human placental villi by choline acetyltransferase inhibitors. J. Pharmacol. Exp. Ther. 216: 232-238, 1981.

Chaturvedi, A.K., Rowell, P.P. and Sastry, B.V.R. Relationships between chemical structure and cholinergic activities of furmethides and potentiation of these activities by physostigmine. Pharmacol. Res. Commun. 13: 829-845, 1981.

Leventer, S.M., Rowell P.P. and Clark, M.J. The effect of choline acetyltransferase inhibition on acetylcholine synthesis and release in term human placenta. J. Pharmacol. Exp. Ther. 222: 301-305, 1982.

Rowell, P.P. and Clark, M.J. The effect of chronic oral nicotine administration on fetal weight and placental amino acid accumulation in mice. Toxicol. Appl. Pharmacol. 66: 30-38, 1982.

Rowell, P.P., Hurst, H.E. Marlowe, C. and Bennett, B. Oral administration of nicotine: Its uptake and distribution after chronic administration to mice. J. Pharmacol. Methods 9: 241-253, 1983.

Muma, N.A. and Rowell, P.P. Behavioral effects of long-term choline and lecithin treatment in aged mice. I.R.C.S. Med. Sci. 12: 1090-1091, 1984.

Rowell, P.P. and Winkler, D.L. Nicotinic stimulation of [^{3}H]-acetylcholine release from mouse cerebral cortical synaptosomes. J. Neurochem. 43: 1593-1598, 1984.

Rowell, P.P. and Utterback, N. Scientific literature currency and organization using a microcomputer. Online 8: 18-21, 1984.

Leventer, S.M. and Rowell, P.P. Investigations of the rate-limiting step in the synthesis of acetylcholine by the human placenta. Placenta 5: 261-270, 1984.

Rowell, P.P., Muma, N.A. and Schultz, G.S. Long-term dietary administration of choline and lecithin: Differential effects on central muscarinic receptor binding in aged mice. J. Am. Assoc. Aging, 1985

Muma, N.A. and Rowell, P.P. A sensitive and specific radioenzymatic assay for the simultaneous determination of choline and phosphatidylcholine. J. Neurosci. Meth. 12: 249-257, 1985.

Spatola, A.F., Saneii, H., Edwards, J.V., Bettag, A.L., Anwer, M.K., Rowell, P.P., Browne, B.W., Lahti, R. and von Voigtlander, P. Structure-activity relationships of enkephalins containing serially replaced thiomethylene amide bond surrogates. Life Sci. 38: 1243-1249, 1986.

Rowell, P.P., Leventer, S.M. and Clark, M.J. The effect of cigarette smoking during pregnancy on the cholinergic system in isolated term human placental tissue. Biol. Reprod. 34: 344-348, 1986.

Muma, N.A. and Rowell, P.P. Brain and serum levels of choline and lecithin resulting from long-term administration. Neurochem. Res. 11: 481-488, 1986.

Rowell, P.P., Carr, L.A. and Garner, A.C. Stimulation of [^{3}H]dopamine release by nicotine in rat nucleus accumbens. J. Neurochem. 49: 1449-1454, 1987.

Rowell, P.P., Wang, M.D. and Xiu, R.J. Effects of anisodamine on electrically-induced contractions of guinea-pig ileum. Med. Sci. Res. 15: 1279-1280, 1987.

Muma, N.A., Rowell, P.P. and Schultz, G.S. Effects of long-term choline and phosphatidylcholine administration on muscarinic receptors ligand binding in aged mouse brain. Neurolog. Res. 10: 130-135, 1988.

Muma, N.A. and Rowell, P.P. Effects of chronic choline and lecithin on mouse hippocampal dendritic spine density. Exp. Aging Res. 14: 137-141, 1988.

Carr, L.A., Rowell, P.P. and Pierce, W.M. Effects of subchronic nicotine administration on central dopaminergic mechanisms in the rat. Neurochem. Res. 14: 511-515, 1989.

Carr, L.A. and Rowell, P.P. Attenuation of 1-methyl-4-phenyl-1,2,3,6,-tetrahydropyridine-induced neurotoxicity by tobacco smoke. Neuropharmacology 29: 311-314, 1990.

Rowell, P.P. and Wonnacott, S. Evidence for functional activity of upregulated nicotine binding sites in rat striatal synaptosomes. J. Neurochem. 55: 2105-2110, 1990.

Rowell, P.P. and Browne, B. Effects of sulfhydryl modification on the activity of the high-affinity choline transporter in rat cortical synaptosomes. Neurochem. Adv. 10: 61-66, 1991.

Carr, L.A., Basham, J.K. and Rowell, P.P. Inhibition of dopamine uptake in striatal synaptosomes by tobacco smoke fractions. Intl. Symposium in Dopamine 1: 99-101, 1991.

Carr, L.A., Basham, K., York, B.K. and Rowell, P.P. Inhibition of uptake of 1-methyl-4-phenylpyridinium ion (MPP^+) and dopamine in striatal synaptosomes by tobacco smoke components. Eur. J. Pharmacol. 215: 285-287, 1992.

Rowell, P.P. and Hillebrand, J.A. Characterization of nicotine-induced desensitization of evoked dopamine release from rat striatal synaptosomes. J. Neurochem. 63: 561-569, 1994.

Rowell, P.P. Nanomolar concentrations of nicotine increase the release of [^{3}H]dopamine from rat striatal synaptosomes. Neurosci. Lett.189: 171-175, 1995.

Rowell, P.P. and Li, M. Dose-response relationship for nicotine-induced upregulation of rat brain nicotinic receptors. J. Neurochem. 68: 1982-1989, 1997.

Rowell, P.P. and Duggan D.S. Long-lasting inactivation of nicotinic receptor function in vitro by treatment with high concentrations of nicotine. Neuropharmacol. 37: 103-111, 1998.

Rowell P.P. and Larson B.T. Ergocryptine and other ergot alkaloids stimulate the release of [^{3}H]dopamine from rat striatal synaptosomes. J. Anim. Sci (Pharmacol.) 77: 1800-1806, 1999.

Walker J.F., Collins L.C., Rowell P.P., Goldsmith J., Moffatt R.J. and Stamford, B.A. The effect of smoking on energy expenditure and plasma catecholamine and nicotine levels during light physical activity. Nicotine and Tobacco Research 1: 365-370, 1999.

Han S., Rowell P.P. and Carr L.A. D_2 autoreceptors are not involved in the down-regulation of the striatal dopamine transporter caused by α-methyl-p-tyrosine. Res. Commun. Molec. Pathol. Pharmacol. 104: 331-338, 1999.

Donny E.C., Caggiula A.R., Rowell P.P., Gharib M.A., Maldovan V., Booth S., Mielke M.M., Hoffman A., and McCallum S. Nicotine self-administration in rats: estrous cycle effects, sex differences and nicotinic receptor binding. Psychopharmacol. 151: 392-405, 2000.

Rowell P.P., Volk K.A., Li J. and Bickford M.E. Investigations of the cholinergic modulation of GABA release in rat thalamus slices. Neurosci. 116: 447-453, 2003.

Feitelson J.B.A., Rowell P.P., Roberts C.S. and Fleming J.T. Two week nicotine treatment selectively increases bone vascular constriction in response to norepinephrine. J. Orthopaedic Res. 21: 497-502, 2003.

Rowell P.P. and Volk K.A. Nicotinic activation of mesolimbic neurons assessed by rubidium efflux in rat accumbens and ventral tegmentum. NeuroSignals 13: 114-121, 2004.

Donny E.C., Lanza S.T., Balster R.L., Collins L.M., Caggiula A.R. and Rowell P.P. Using growth models to relate acquisition of nicotine self-administration to break point and nicotine receptor binding. Drug and Alcohol Dep. 75: 23-35, 2004.

Marks M.J., Rowell P.P., Cao J.Z., Grady S.R., McCallum S.E. and Collins, A.C. Subsets of acetylcholine-stimulated $^{86}Rb^{+}$ efflux and [^{125}I]epibatidine binding sites in C57BL/6 mouse brain are differentially affected by chronic nicotine treatment. Neuropharmacology 46: 1141-1157, 2004.

Brewer B.G., Roberts A.M. and Rowell P.P. Short-term distribution of nicotine in the rat lung. Drug and Alcohol Dep. 75: 193-198, 2004.

Passmore J.C., Rowell P.P., Joshua I.G., Porter, J.P., Patel D.H. and Falcone J.C. Alpha-1 adrenergic receptor control of renal blood vessels during aging. Canadian J. Physiol. Pharmacol. 83: 335-342, 2005.

Passmore J.C., Joshua I.G., Rowell P.P., Tyagi, S.C. and Falcone J.C. Reduced alpha adrenergic mediated contraction of renal preglomerular blood vessels as a function of gender and aging. J. Cell Biochem. 96: 672-681, 2005.

Row B.W., Kheirandish L., Cheng Y., Rowell P.P. and Gozal D. Impaired special working memory and altered choline acetyltransferase (ChAT) immunoreactivity and nicotinic receptor binding in rats exposed to intermittent hypoxia during sleep. Behavioural Brain Research, 177: 308-314, 2007.

Fleming J.T., Lobo S.A., Park C.H., Roberts C.S., Gordon S.A., Rowell P.P. Nicotine does not reduce blood flow to healthy bones in rats. Am. J. Orthopedics 37: E129-132, 2008.

BOOKS AND BOOK CHAPTERS

Rowell, P.P. Current concepts on the effects of nicotine on neurotransmitter release in the central nervous system. In: *Tobacco Smoking and Nicotine* (Eds: W.R. Martin, G.R. VanLoon, E.T. Iwamoto and L. Davis) Plenum Press, New York, pp 191-208, 1987.

Rowell, P.P and Carr, L.A. Effects of nicotine on the release of dopamine in nucleus accumbens tissue of the rat brain. In: *The Pharmacology of Nicotine* (Eds: Rand M.J. and Thurac K), IRL Press, Oxford, 1988.

Wonnacott, S., Drasdo, A., Sanderson E., and Rowell, P.P. Presynaptic nicotinic receptors and the modulation of neurotransmitter release. In: *Biology of Nicotine Dependence*, (Eds: Bock G. and Marsh J.) CIBA Foundation Symposium, John Wiley and Sons, New York, pp 87-101, 1990.

Rowell P.P. and Carr L.A. *Advances in Nicotine Research; A Century of Progress, 1900-1999*. Xlibris Press, Philadelphia, Pennsylvania, 178 pages, 2001.

Rowell, P.P. Effects of nicotine on dopaminergic neurotransmission. In: *Nicotinic Receptors in the Nervous System* (Ed: Levin E.D.) CRC Press, Boca Raton, Florida, pp 51-80, 2002.

Rowell P.P. and Volk K.A. and Tucker L.M. Characterization and comparison of nicotinic receptor function via rubidium efflux in superfused rat accumbens and ventral tegmental slices. In: *Current Topics in Neurochemistry*, Vol 3, pp 107-114, 2002.

(abstracts, short communications and letters to editor not included)

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