# CURRICULUM VITAE

# Stephen M. Roberts, Ph.D.

	Center for Environmental & Human Toxicology University of Florida Box 110885 Bldg. 471, Mowry Road Gainesville, Florida 32611-0885 (352) 294-4514 FAX: (352) 392-4707 e-mail: smroberts@ufl.edu
ACADEMIC APPOINTMENTS	Director, Center for Environmental & Human Toxicology (1995- present) Professor, (1999-present); Associate Professor (1993-1999); Assistant Professor (1990 - 1993) Department of Physiological Sciences, College of Veterinary Medicine (1990 – present); Department of Pharmacology & Therapeutics, College of Medicine (1990 – present); Department of Environmental and Global Health, College of Public Health and Health Professions (2009 – present) University of Florida, Gainesville, FL
	Assistant Professor of Toxicology (1986 - 1989) Department of Pharmacology and Interdisciplinary Toxicology College of Medicine University of Arkansas for Medical Sciences, Little Rock, AR
	Assistant Professor of Pharmacology & Toxicology (1980 - 1986) Adjunct Asst. Prof. of Pharmacology & Toxicology (1986 - 1989) Division of Pharmacology & Medicinal Chemistry College of Pharmacy University of Cincinnati Medical Center, Cincinnati, OH
EDUCATION AND TRAINING	B.S. Pharmacy (1973), College of Pharmacy, Oregon State University, Corvallis, OR
	Ph.D. (1977), Department of Pharmacology, College of Medicine, University of Utah, Salt Lake City, UT
	NIH Post-doctoral Fellow (1977-1980), Department of Pharmaceutics, School of Pharmacy, State University of New York at Buffalo, Amherst, NY
PROFESSIONAL	Fellow, Academy of Toxicological Sciences, 2007 – present.
RECOGNITION	University of Florida Research Foundation Professorship, 2001
	Pfizer Award for Research Excellence, University of Florida College of Veterinary Medicine, 1998

PROFESSIONAL	Society of Toxicology
SOCIETY MEMBERSHIP	Society for Risk Analysis
	American Society for Pharmacology and Experimental Therapeutics

FEDERAL ADVISORY COMMITTEE SERVICE	Member, Chemical Assessment Advisory Committee, Science Advisory Board, U.S. Environmental Protection Agency, 2012 – present.
	Member, Science Advisory Board (Chartered), U.S. Environmental Protection Agency, 2006 – 2013
	Chair, Technical Reports Peer Review Panel, National Toxicology Program, U.S. Department of Health and Human Services, January, 2012.
	Member, Science Advisory Board, National Center for Toxicological Research, U.S. Food and Drug Administration, 2006 – 2010
	Permanent Panel Member, FIFRA Scientific Advisory Panel, U.S. Environmental Protection Agency, 1999 – 2005; Chair, 2002 – 2005
	Member, Board of Scientific Counselors, National Toxicology Program, U.S. Department of Health and Human Services, 2002 – 2005
	Chair, Nanotechnology Working Group, National Toxicology Program, U.S. Department of Health and Human Services, 2005 – 2006.
PROFESSIONAL	Associate Editor, Nanotoxicology (2009 – present)
JOURNAL SERVICE	Associate Editor for Debates/Commentaries, <i>Human and Ecological Risk Assessment</i> , 1997-2004.
	Editorial Advisory Board: • <i>Toxicology and Applied Toxicology</i> , 1997- present • <i>Nanotoxicology</i> , 2006- present • <i>Human and Ecological Risk Assessment</i> , 2004 – 2013 • <i>Dose-Response</i> , 2003 – 2012
	Reviewer for: Toxicology and Applied Pharmacology, Journal of Pharmacology & Experimental Therapeutics, Biochemical Pharmacology, Journal of Pharmaceutics, Life Sciences, Drug Metabolism and Disposition, Cells Stress and Chaperones, Environmental Science and Technology, Human and Ecological Risk Assessment, Toxicology Letters, Journal of Toxicology and Environmental Health, Proceedings of the Society for Experimental Biology and Medicine, Toxicological Sciences, Risk Analysis, Hepatology, and International Journal of Cancer, Journal of Hazardous Materials, Chemosphere, European Child and Adolescent Psychiatry, Nature Nanotechnology, Regulatory Toxicology and Pharmacology, Medical Science Monitor, Archives of Medicine, Clinical and Experimental Pharmacology and Physiology.
OTHER PROFESSIONAL ACTIVITIES	Chair, Interdisciplinary Toxicology Graduate Committee, University of Florida, 1992- present
	Faculty Advisory Council, School of Natural Resources and the Environment, 2004 – present
	Member, Committee on the Review of the Styrene Assessment in the National Toxicology Program 12 <sup>th</sup> Report on Carcinogens, National Research Council, 2013 – present
	Member, Advisory Panel, Food Additives Project, Pew Charitable Trusts, 2010-present
	Secretary-Treasurer, Nanotoxicology Specialty Section, Society of Toxicology, 2009 – 2010
	Core Faculty, Masters of Science in Clinical Investigation, University of Florida College of Medicine, 1999 – 2009

OTHER PROFESSIONAL ACTIVITIES (continued)	Executive Committee, Masters in Public Health Program, University of Florida College of Public Health and Health Professions, 2004 – 2008
х <i>г</i>	Chair, Medical-Scientific Advisory Board, University of Florida Tissue Bank, 1996-1998
	Member, Committee on the Bioavailability of Contaminants in Soils and Sediments, National Research Council, 2000 – 2003
	Chair, Florida Risk-Based Priority Council, 1995 - 1996
	Member of Placement Committee, Society of Toxicology, 1993-1995
	Member, Oral Bioavailability Scientific Review Committee, Department of Environmental Quality, State of Michigan, 2002-2003.
	Chairman or Co-Chairman for scientific sessions at the annual meeting of the Society of Toxicology: "Reactive Intermediates" (1991), "Chemical Interactions and Mixtures" (1992), "Glutathione: Modulator of Toxicity" (1993), "Response of the Liver to Toxic Agents" (1994), "Reactive Intermediates" (1998), "Metals Toxicology" (2006).
	Grant Review: Safety and Occupational Health Study Section, NIOSH, 1988; USEPA ORD Exploratory Research Program - Human Health, 1998; Fogarty International Center, NIH, 2001; Air Force Office of Sponsored Research, 2004; NIH Special Emphasis Panel, Nanomedicine Development Centers, 2005, 2006.
EXTRAMURAL GRANTS AND CONTRACTS, BASIC RESEARCH AND TRAINING	National Institute for Environmental Health Sciences, R01 ES05216 Stress and Environmental Chemical Hazards. 1/1/89 - 12/31/93; \$431,593 total direct costs. Role: Co-Investigator (R. James, P.I.)
	National Institute on Drug Abuse, R01 DA06601 Substance Abuse Potentiation of Cocaine Hepatotoxicity. 9/30/89 - 8/15/92; \$85,964 total direct costs. 8/15/92 - 8/14/95; \$214,139 total direct costs (Renewal) 8/01/95 - 6/30/98; \$304,133 total direct costs. (Renewal) Role: Principal Investigator
	National Institute on Drug Abuse, R01 DA06893 Methamphetamine Potentiated Hepatotoxicity. 9/30/91 - 8/31/94; \$228,334 total direct costs. Role: Principal Investigator
	National Institute for Environmental Health Sciences, R01 ES07213 <i>Heat Shock in Toxicity Assays</i> 8/1/94 - 7/31/97; \$470,323 total direct costs. 12/01/98 – 11/30/01; \$584,404 total direct costs (Renewal) Role: Co-Principal Investigator
	National Institute on Drug Abuse, F32 DA05565 NRSA for Sandra Rousseau, D.V.M. 12/31/93 - 12/31/96; \$104,400 total direct costs. Role: Sponsor
	National Institute for Environmental Health Sciences, P42 ES07375 Health Effects of Chlorinated Compounds 05/01/95 - 03/31/00; \$2,616,685 total direct costs. 04/01/00 – 03/31/05; \$8,891,632 total direct costs (Renewal) Role: Program Project Co-Principal Investigator

EXTRAMURAL GRANTS AND CONTRACTS, BASIC RESEARCH AND TRAINING (continued)	Florida Department of Environmental Protection Arsenic Bioavailability in a Primate Model 08/04/98 – 12/01/00; \$250,000 total costs Role: Principal Investigator
	National Institutes of Health Research Experience for Veterinary Medical Students 07/03/03 – 04/30/06; \$292,140 Role: Co-Investigator
	Exponent Oral Bioavailability of Arsenic from Soil in Primates 07/16/01 – 06/30/04; \$120,420 direct costs Role: Principal Investigator
	U.S. Air Force <i>Dermal Penetration of Nanoscale High Energetic Materials</i> 07/03 – 03/04; \$25,000 total costs Role: Principal Investigator
	National Cancer Institute, R01 CA903489 Prevention of Chemotherapy-Induced Hair Loss 07/01/03 – 06/30/07; \$600,750 Role: Co-Principal Investigator
	HSF Pharmaceuticals <i>Construction of a Recombinant HSV Vector</i> 05/01/07 – 04/30/08: \$12,500 Role: Principal Investigator
	U.S. Environmental Protection Agency Assessment of Arsenic Bioavailability from Soil in Cynomolgus Monkeys 11/01/07 – 05/30/09; \$196,750 total costs. Role: Principal Investigator
	State of Florida, Centers of Excellence <i>Center for Nanobiosensors</i> 07/07 – 06/11; \$4,200,000 total direct costs Role: Principal Investigator of Biocompatibility Project
	Gulf Power Assessment of Arsenic Bioavailability from Soil in Non-Human Primates 09/01/10 – 12/31/13; \$160,000 total costs Role: Principal Investigator
	HSF Pharmaceuticals Evaluation of Heat/Heat-and Heat-Activated, Oncolytic Virus-Based Tumor Vaccines 06/30/10 – 06/30/13; \$25,000 total costs Role: Principal Investigator
	Strategic Environmental Research and Development Program, DoD PAH Interactions with Soil and Effects on Bioaccessibility and Bioavailability to Humans 10/01/10 – 09/30/13: \$300,000 subcontract Role: Subcontract Principal Investigator

	NIEHS Seafood Hydrocarbon Residues and Coastal Community Health Risks 07/01/11-06/30/2016; \$6,546,000 Role: Project 3 Co-PI
EXTRAMURAL GRANTS AND CONTRACTS, APPLIED TOXICOLOGY & RISK ASSESSMENT	Florida Department of Environmental Protection, WM-530 <i>Toxicology Support Services</i> 10/1/93 - 9/30/95; \$230,000 total costs. Role: Contract Co-Manager
	Florida Center for Solid and Hazardous Waste Management Review of Available Methodologies for Evaluating the Potential Human Health and Environmental Impacts of a Hazardous Waste Incinerator. 7/1/94 - 11/30/95; \$42,671 total direct costs. Role: Project Manager
	Florida Department of Environmental Protection <i>Toxicology Support Services</i> 11/14/95 - 9/30/97 (WM-617); \$340,000 total costs 11/21/97 - 9/7/00 (WM-696); \$462,800 total costs 8/31/00 - 6/30/02 (HW-447); \$460,000 total costs 9/5/02 - 6/30/04 (HW-492); \$520,000 total costs 7/1/04 - 6/30/10 (HW-520); \$1,415,200 total costs 7/1/04 - 6/30/10 (HW-521); \$509,600 total costs 7/1/10 - 6/30/11 (HW-548); \$285, 400 total costs 7/1/10 - 6/30/11 (HW-548); \$285, 400 total costs 7/1/11 - 6/30/12 (HW-548); \$282,000 total costs 7/1/11 - 6/30/12 (HW-548); \$282,000 total costs 7/1/12 - 6/30/13 (HW-548); \$176,000 total costs 7/1/12 - 6/30/13 (HW-549); \$77,000 total costs Role: Contract Manager
	Florida Department of Environmental Protection Fixed Laboratory Response Capability for the Florida Department of Environmental Protection, Bureau of Laboratories 09/10/08 – 06/09/09; \$76,992 Role: Contract Manager
	Florida Department of Environmental Protection <i>Development of ERLN Health and Safety Plan and Training</i> 06/19/09 – 06/30/10; \$25,000 Role: Contract Manager
	Florida Department of Health Environmental Toxicology Consulting Services in Support of Mission 432, ESF8, Deep Water Horizon 07/09/10 – 09/30/10; \$51,064 Role: Contract Co-Manager

TEACHING	<i>General Toxicology</i> (VME 6602). A graduate-level course covering the general principles of toxicology and mechanisms by which toxic effects are produced in target organs and tissues. 3 gr. credit course. (1991- present)
	<i>Toxic Substances</i> (VME 6605). A graduate-level course covering signs and symptoms, diagnosis and clinical management, and mechanisms of toxicity of major classes of toxicants. 3 gr. credit course. (2000 – present)
	Human Health Risk Assessment (VME 6607). A graduate-level course dealing with the fundamental concepts, techniques, and issues associated with human health and ecological risk assessment. 3 gr. credit course. (1997- present)
	<i>Advanced Toxicology</i> (VME 6603). A graduate-level course providing a survey of the health effects of each of the major classes of toxicants. Course coordinator. 3 gr. credit course. (1992-1998).
	Issues in the Responsible Conduct of Research (VME 6767). A graduate- level course addressing laws, policies, guidelines and principles concerning the conduct of research in an ethical manner. Course coordinator. 1 gr. credit course (1994 - 2002).
	Also, lectures on principles of toxicology to medical students in <i>Phase B Pharmacology</i> (BMS 5404), physician assistant students in <i>Pharmacotherapeutics for PAs</i> (PAS3023), pharmacology graduate students in <i>Principles of Pharmacology</i> (GMS 7593), and law students in <i>Environmental Issues</i> (LAW 6477).

Student	Role/Degree/Date
Georgia Hinkley	supervisory professor, Ph.D. current
Matthieu Miller	supervisory professor, Ph.D. current
Kevin Kirchner	supervisory professor, Ph.D. student
Fei Wang	supervisory professor, Ph.D. awarded 2005
J. Keith Tolson	supervisory professor, Ph.D. awarded 2004
William Salminen	supervisory professor, Ph.D. awarded 1997
MaryLynn Cook	supervisory professor, Ph.D. awarded 1996
Greg Hanley, D.V.M.	co-supervisory professor, Ph.D. awarded 1998
Michele Mautino, D.V.M.	supervisory professor, Ph.D. awarded 1993
Nicholas P. Skoulis	supervisory professor, Ph.D. awarded 1988
Hank F. Simmons, M.D.	supervisory professor, Ph.D. awarded 1988
Robert A. Budinsky	supervisory professor, Ph.D. awarded 1986
Ed McCray	supervisory professor, M.S. awarded 1989
Candice Lavelle	dissertation committee, Ph.D. current
Ahmed Alalaiwe	dissertation committee, Ph.D current
Erica Anderson	dissertation committee, Ph.D. current
Paul Carpinone	dissertation committee, Ph.D. awarded 2012
Charles Jenkins	dissertation committee, Ph.D. awarded 2012
Ramona Smith-Burrell	dissertation committee, Ph.D. awarded 2012
Kerry Seibein	dissertation committee, Ph.D. awarded 2011
Debamitra Dutta	dissertation committee, Ph.D. awarded 2009
Scott Wasdo	dissertation committee, Ph.D. awarded 2005
Heath Rauschenberger	dissertation committee, Ph.D. awarded 2004

## GRADUATE STUDENTS

Michele McGarry	dissertation committee, Ph.D. awarded 2001
Chris Bowman	dissertation committee, Ph.D. awarded 2001
Zhen Lou	dissertation committee, Ph.D. awarded 2001
Luke Utley	dissertation committee, Ph.D. awarded 2001
Steve Davis	dissertation committee, Ph.D. awarded 2000
Marisol Sepulveda, D.V.M.	dissertation committee, Ph.D. awarded 2000
Rachel Cornett	dissertation committee, Ph.D. awarded 2000
Susan Loerzel	dissertation committee, Ph.D. awarded 1999
Peter LaPuma	dissertation committee, Ph.D. awarded 1998
Zeen Tong	dissertation committee, Ph.D. awarded 1996
Scott Masten	dissertation committee, Ph.D awarded 1998
Mary Alice Smith	dissertation committee, Ph.D. awarded 1990
Neil Pumford	dissertation committee, Ph.D. awarded 1989
Brent D. Kerger	dissertation committee, Ph.D. awarded 1988
Glenn C. Millner	dissertation committee, Ph.D. awarded 1988
M. Ann Clevenger	dissertation committee, Ph.D. awarded 1987
David Stong	dissertation committee, Ph.D. awarded 1984
Gabriel Shook	thesis committee, M.S. awarded 2011
Alex McNally	thesis committee, MS. awarded 2004
Kristen Henson, D.V.M.	thesis committee, M.S. awarded 2000
Nicole Ushakoff Jurczyk	thesis committee, M.S. awarded 1993
Lisa Barfield	thesis committee, M.S. awarded 1990
Scott Miselnicky	thesis committee, M.S. awarded 1987
Art Wesselman	thesis committee, M.S. awarded 1986
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### POSTDOCTORAL FELLOWS in BASIC RESEARCH

Name, Dates	Dates:	
Florence Ndikum-Moffor, Ph.D.	1996-1999	
Scott Wasdo, Ph.D.	2006 - 2008	
Fei Wang, Ph.D.	2006	

## POSTDOCTORAL FELLOWS in RISK ASSESSMENT

Name, Dates	Dates:
Chris Borgert, Ph.D.	1992- 1994
Robert DeMott	1993-1995
Lisa Tonner-Navarro, Ph.D.	1996-1998
N. Christine Halmes, Ph.D.	1997-1999
Christopher Saranko, Ph.D.	1998- 2000
Kristen Jordan, Ph.D.	2000- 2001
Hugo Ochoa, D.V.M., Ph.D.	2000- 2003
Bernard Gadagbui, Ph.D.	2001-2003
Shukla Roy, Ph.D.	2001-2004
Gary Barbee, Ph.D.	2004
Jessica Noggle, Ph.D.	2005
Leah Stuchal, Ph.D.	2005- 2008
Kendra Goff, Ph.D.	2007 -2008
Michael Miyittah, Ph.D.	2009 – 2010
Roxana Weil	2012 -present

#### PUBLISHED MANUSCRIPTS:

- 1. Roberts SM, Franklin MR, Snyder EW, and Beck EC: Effects of chronic oral methadone on hepatic microsomal drug metabolism in monkeys. Toxicol. Appl. Pharmacol. 42: 607-612, 1977.
- 2. McCloskey KL, Garriot JC, and Roberts SM: Quinine concentrations in blood following the consumption of gin and tonic preparations in a social setting. J. Analytical Tox. 2:110-112, 1978.
- 3. Soles C, Giacomini KM, Roberts SM, and Giacomini JC: A convenient method for repetitive blood sampling in the dog. J. Pharmacol. Methods 1:259-261, 1978.
- 4. Roberts SM and Franklin MR: Modification of hepatic microsomal oxidative drug metabolism in rats by the opiate maintenance drugs acetylmethadol, propoxyphene, and methadone. Life Sci. 25: 845-852, 1979.
- 5. Roberts SM and Levy G: Pharmacokinetic studies of propoxyphene IV: Effect of renal failure on systemic clearance in rats. J. Pharm. Sci. 69:363-364, 1980.
- 6. Giacomini KM, Roberts SM, and Levy G: Evaluation of methods for producing renal dysfunction in rats. J. Pharm. Sci. 70:117-121, 1981.
- 7. Pond SM, Kaysen GA, Menke DJ, Galinsky RE, Roberts SM and Levy G: Massive intoxication with acetaminophen and proposyphene: Unexpected survival and unusual pharmacokinetics of acetaminophen. Clin. Tox. 19:1-16, 1982.
- 8. James RC, Roberts SM, and Harbison RD: The perturbation of hepatic glutathione by  $\alpha_2$ -adrenergic agonists. Fund. Appl. Tox. 3:303-308, 1983.
- 9. Roberts SM, Budinsky RA, Adams LE,, Litwin A, and Hess EV: Procainamide acetylation in strains of rat and mouse. Drug Metab. Dispos. 13:517-519, 1985.
- 10. Budinsky RA, Roberts SM, Coats EA, Adams LE, and Hess EV: The formation of procainamide hydroxylamine by rat and human microsomes. Drug Metab. Dispos. 15:37-43, 1987.
- 11. Roberts SM, Grund VR, James RC, and Harbison RD: Histamine and hepatic glutathione in the mouse. Life Sci. 40:2103-2110, 1987
- 12. James RC, Schiefer MA, Roberts SM, and Harbison RD: Antagonism of cocaine-induced hepatotoxicity by the  $\alpha$ -adrenergic antagonists phentolamine and yohimbine. J. Pharmacol. Exp. Ther. 242:726-732, 1987.
- 13. Roberts SM, Skoulis NP, and James RC: A centrally-mediated effect of morphine to diminish hepatocellular glutathione. Biochem. Pharmacol. 36:3001-3005, 1987.
- 14. Roberts SM, James RC, Simmons HF, and Harbison RD: Alcohol and cocaine-induced liver injury. Alcohol Health & Res. World 11:20-25, 1987.
- 15. Kerger BD, James RC, and Roberts SM: An assay for phentolamine using high performance liquid chromatography with electrochemical detection. Anal. Biochem. 170:145-151, 1988
- 16. Smith AC, Roberts SM, Berman LM, Harbison RD, and James RC: Effects of piperonyl butoxide on halothane hepatotoxicity and metabolism in the hyperthyroid rat. Toxicology 50:95-105, 1988.

- 17. Kerger BD, Gandy J, Bucci TJ, Roberts SM, Harbison RD, and James RC: Antagonism of bromobenzene-induced hepatotoxicity by the alpha adrenergic blocking agents, phentolamine and idazoxan. Toxicol. Appl. Pharmacol. 95:12-23, 1988.
- 18. Kerger BD, Roberts SM, Hinson JA, Gandy J, Harbison RD, and James RC: Antagonism of bromobenzene-induced hepatotoxicity by phentolamine: Evidence for a metabolism independent intervention. Toxicol. Appl. Pharmacol. 95:24-31, 1988.
- 19. James RC, Wessinger WD, Roberts SM, Millner GC, and Paule MG: Centrally mediated opioid induced depression of hepatic glutathione: Effects of intracerebroventricular administration of *mu*, *kappa*, *sigma*, and *delta* agonists. Toxicology 51:267-279, 1988.
- 20. Kerger BD, Roberts SM, and James RC: Comparison of human and mouse liver metabolism of bromobenzene and chlorobenzene to 2- and 4-halophenols. Drug Metab. Dispos. 16:672-677, 1988.
- 21. Smith AC, Roberts SM, James RC, Berman LM, and Harbison RD: Comparison of covalent binding from halothane metabolism in hepatic microsomes from phenobarbital-induced and hyperthyroid rats. Xenobiotica 18:991-1001, 1988.
- 22. Kerger BD, Roberts SM, Harbison RD, and James RC: Antagonism of bromobenzene-induced hepatotoxicity by the □-adrenoreceptor blocking agents phentolamine and idazoxan: Role of hypothermia. Toxicol. Appl. Pharmacol. 97:360-369, 1989.
- 23. Skoulis NP, James RC, Harbison RD, and Roberts SM: Depression of hepatic glutathione by opioid analgesic drugs in mice. Toxicol. Appl. Pharmacol. 99:139-147, 1989.
- 24. Roberts SM, Adams LE, Donovan-Brand R, Budinsky RA, Skoulis NP, Zimmer HW, and Hess EV: Procainamide hydroxylamine lymphocyte toxicity -- I. Evidence for participation by hemoglobin. Int. J. Immunopharmacol. 11:419-427, 1989.
- 25. Clevenger MA, Roberts SM, Lattin DL, Harbison RD, and James RC: The pharmacokinetics of 2,2',5,5'-tetrachlorobiphenyl and 3,3',4,4'-tetrachlorobiphenyl and its relationship to toxicity. Toxicol. Appl. Pharmacol. 100:315-327,1989.
- 26. Skoulis NP, James RC, Harbison RD, and Roberts SM: Perturbation of glutathione by a central action of morphine. Toxicology 57:287-302, 1989.
- 27. Adams LE, Sanders CE, Budinsky RA, Donovan-Brand R, Roberts SM, and Hess EV: Immunomodulatory effects of procainamide metabolites: Their implications in drug-related lupus. J. Lab. Clin. Med. 113:482-492, 1989.
- 28. Roberts SM, Pounds JG, and James RC: Cocaine toxicity in cultured rat hepatocytes. Toxicology Letters 50:283-288, 1990.
- 29. Simmons HF, James RC, Harbison RD, and Roberts SM: Depression of glutathione by cold-restraint in mice. Toxicology 61:59-71, 1990.
- Adams LE, Roberts SM, Carter JM, Wheeler JF, Zimmer HW, Donovan-Brand RJ, and Hess EV: Effects of procainamide hydroxylamine on generation of reactive oxygen species by macrophages and production of cytokines. Int. J. Immunopharmacol. 12:809-819, 1990.
- 31. Simmons HF, James RC, Harbison RD, Patel DG, and Roberts SM: Examination of the role of catecholamines in hepatic glutathione suppression by cold-restraint in mice. Toxicology 67:29-40, 1991.

- 32. Wheeler JF, Adams L, Mongey A-B, Roberts SM, Heineman WR, and Hess EV: Determination of metabolically-derived nitroprocainamide in the urine of procainamide-dosed humans and rats by liquid chromatography with electrochemical detection. Drug Metab. Dispos. 19:691-695, 1991.
- 33. Roberts SM, Harbison RD, and James RC: Human microsomal *N*-oxidative metabolism of cocaine. Drug Metab. Dispos. 19:1046-1051, 1991.
- 34. Harbison RD, James RC, and Roberts SM: Hepatic glutathione suppression by the α-adrenoreceptor stimulating agents phenylephrine and clonidine. Toxicology 69:279-290, 1991.
- 35. Roberts SM, Harbison RD, Seng JE, and James RC: Potentiation of carbon tetrachloride hepatotoxicity by phenylpropanolamine. Toxicol. Appl. Pharmacol. 111:175-188, 1991.
- 36. Roberts SM, Munson JW, James RC, and Harbison RD: An assay for cocaethylene and other cocaine metabolites in liver using high performance liquid chromatography. Anal. Biochem. 202:256-261, 1992.
- 37. Roth L, Harbison RD, James RC, Tobin T, and Roberts SM: Cocaine hepatotoxicity: Influence of hepatic enzyme inducing and inhibiting agents on the site of necrosis. Hepatology 15:934-940, 1992.
- 38. Roberts SM, Roth L, Harbison RD, and James RC: Cocaethylene hepatotoxicity in mice. Biochem. Pharmacol. 43:1989-1995, 1992.
- 39. James RC, Harbison RD, and Roberts SM: Phenylpropanolamine potentiation of acetaminopheninduced hepatotoxicity: Evidence for a glutathione-dependent mechanism. Toxicol. Appl. Pharmacol. 118:159-168, 1993.
- 40. James RC, Busch H, Tamburro CH, Roberts SM, Schell JG, and Harbison RD: Polychlorinated biphenyl exposure and human disease. J. Occup. Med. 35:136-148, 1993.
- 41. Adams LE, Balakrishnan K, Roberts SM, Belcher R, Mongey A-B, Thomas TJ, and Hess EV: Genetic, immunologic and biotransformation studies of patients on procainamide. Lupus 2:89-98, 1993.
- 42. Roberts SM, Harbison RD, and James RC: Inhibition by ethanol of the metabolism of cocaine to benzoylecgonine and ecgonine methyl ester in mouse and human liver. Drug Metab. Dispos. 21:537-541, 1993.
- 43. Adams LE, Roberts SM, Donovan-Brand R, Zimmer H, and Hess EV: Study of procainamide haptenspecific antibodies in rabbits and humans. Int. J. of Immunopharmacology 15:887-897, 1993.
- 44. Roberts SM, Harbison RD, Roth L, and James RC: Methylphenidate-induced hepatotoxicity in mice and its potentiation by β-adrenergic agonist drugs. Life Sci. 55:269-281, 1994.
- 45. James RC, Roberts SM, and Williams PL: An evaluation of the adequacy of the Threshold Limit Value (TLV) for cyclonite (RDX). Appl. Occup. Environ. Hyg. 9:485-492, 1994.
- 46. Roberts SM, Harbison RD, and James RC: Methamphetamine potentiation of carbon tetrachloride hepatotoxicity in mice. J. Pharmacol. Exp. Ther. 271:1051-1057, 1994.
- 47. Williams CA, Jones HD, Freeman RW, Wernke MJ, Williams PL, Roberts SM, and James RC: The EPC approach to estimating safety from exposure to environmental chemicals. Reg. Toxicol. Pharmacol. 20:259-280, 1994.

- 48. Roberts SM, Harbison RD, Westhouse RA, and James RC: Exacerbation of carbon tetrachlorideinduced liver injury in the rat by methamphetamine. Toxicol. Lett. 76:77-83, 1995.
- 49. Roberts SM, Harbison RD, and James RC: Mechanistic studies on the potentiation of carbon tetrachloride hepatotoxicity by methamphetamine. Toxicology 97:49-57, 1995.
- 50. Roberts SM, Phillips DL, and Tebbett IR: Increased blood and brain cocaine concentrations with ethanol cotreatment in mice. Drug Metab. Dispos 23:664-666, 1995.
- 51. Borgert CJ, Roberts SM, Harbison RD, and James RC: Influence of soil half-life on risk assessment of carcinogens. Reg. Pharmacol. Toxicol. 22:143-151, 1995.
- 52. Salminen WF, Voellmy R, and Roberts SM: Induction of hsp70 in HepG2 cells in response to heptatotoxicants. Toxicol. Appl. Pharmacol. 141:117-123, 1996.
- 53. Roberts SM, DeMott R, and James RC: Adrenergic modulation of hepatotoxicity. Drug Metab. Rev. 29:329-353, 1997.
- 54. Salminen WF, Roberts SM, Fenna M, and Voellmy RM: Heat shock protein induction in murine liver after acute treatment with cocaine. Hepatology 25:1147-1153, 1997.
- 55. Salminen WF, Voellmy RM, and Roberts SM: Differential heat shock protein induction by acetaminophen and a non-hepatotoxic regioisomer, 3'-hydroxyacetanilide, in mouse liver. J. Pharmacol. Exp. Ther. 282:1533-1540, 1997.
- 56. Salminen WF, Voellmy R, and Roberts SM: Protection against hepatotoxicity by a single dose of amphetamine: The potential role of heat shock protein induction. Toxicol. Appl. Pharmacol. 147:247-258, 1997.
- 57. Calabrese EJ, Stanek EJ, James RC, and Roberts SM: Soil ingestion: A concern for acute toxicity in children. Environ. Health Perspect. 105:1354-1358, 1997.
- 58. Ndikum-Moffor FM, Schoeb TR, and Roberts SM: Liver toxicity from norcocaine nitroxide, an N-oxidative metabolite of cocaine. J. Pharmacol. Exp. Ther. 284:413-419, 1998.
- 59. Salminen WF, Roberts SM, Pumford NR, and Hinson JA: Immunochemical comparison of 3'hydroxyacetanilide and acetaminophen binding in mouse liver. Drug Metab. Dispos. 26:267-27, 1998.
- Ndikum-Moffor FM, Munson JW, Bokinkere NK, Brown JL, Richards N, and Roberts SM: Immunochemical detection of hepatic cocaine-protein adducts in mice. Chem. Res. Toxicol. 11:185-192, 1998.
- 61. Tonner-Navarro LE, Phelps JL, Roberts SM, and Teaf CM: Current risk assessment approaches to address petroleum hydrocarbon mixtures in soils. Human Ecol. Risk Assess. 4:721-736, 1998.
- 62. Zou J, Salminen WF, Roberts SM, and Voellmy R: Correlation between stress induction of the hsp response, glutathione oxidation, and heat shock factor activation. Cell Stress & Chaperones 3:130-141, 1998
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