

CURRICULUM VITAE

Satu M. Somani, Ph.D.

PERSONAL

Date of Birth: March 14, 1937, Naturalized Citizen of U.S.A. 1979.

Deceased: October 29, 2002

EDUCATION

B.Sc., Osmania University, Hyderabad, India, Chemistry and Biology, 1956

B.Sc. (Honors), Poona University, Poona, India, Chemistry, 1958

M. Sc., Poona University, Poona, India, Biochemistry, 1959

M.S., Duquesne University, School of Pharmacy, Pittsburgh, PA., Pharmaceutical Chemistry/Pharmacy, 1964

Ph.D., Liverpool University, Department of Pharmacology and Therapeutics, Liverpool, England, Pharmacology, 1969

PROFESSIONAL EXPERIENCE

1982-2002	Professor of Pharmacology/Toxicology, Southern Illinois University School of Medicine
1974-1982	Associate Professor of Pharmacology/Toxicology, Southern Illinois University School of Medicine
1971-1974	Assistant Professor of Pharmacology, University of Pittsburgh School of Medicine, Member of Graduate Faculty
1970-1971	Instructor, Department of Pharmacology, School of Medicine, University of Pittsburgh
1969-1970	NIH Training Grant Research Fellow in Clinical Pharmacology, Department of Medicine, School of Medicine, University of Pittsburgh
1967-1969	Ellis T. Davies Research Fellow, University of Liverpool, Department of Pharmacology and General Therapeutics, Liverpool, England
1964-1966	Scientist, Biomedical Department, Nuclear Science and Engineering corporation, Pittsburgh, Pennsylvania
1964	Research Assistant, University of Pittsburgh, Graduate School of Public Health, Department of Biochemistry and Nutrition
1962-1964	Graduate Assistant, School of Pharmacy, Duquesne University, Pittsburgh, Pennsylvania
1960-1961	Lecturer, Chemistry Department, Vivek Vardhini College, Hyderabad, India
1959-1960	Research Fellow, Regional Research Laboratory, Hyderabad, A.P., India

TEACHING EXPERIENCE

Teaching Interests and Specialties: Biochemical Pharmacology/Toxicology/Antibiotics/ Anticancer agents

Participation in Graduate Courses at SIU

Pharmacology 550a,b-Principles of Pharmacology: Includes drug absorption, distribution, metabolism, excretion and pharmacokinetics; drug-drug interaction; general toxicology; antibiotics and anticancer agents.

Pharmacology 551 - Methods in Pharmacology

Pharmacology 555 - Cardiovascular Pharmacology (Free Radicals)

Pharmacology 574 – Neuropharmacology (Neurodegenerative diseases; alcohol)

Pharmacology 565 - Principles of Toxicology

Pharmacology 590 - Readings in Current Pharmacological Topics

Pharmacology 500 - Pharmacology Seminar

Development, Delivery and Evaluation of Teaching Material for Medical Students at SIU

Antibiotics, Pharmacokinetics of Antibiotics, Antifungal, Antimalarial, Antiviral, Antibacterial, Antiparasitic Agents

Cancer Chemotherapeutic Agents

Toxicology

Drug-Drug Interactions, Adverse Drug Reactions

Anticoagulants, Antianemics, Radioisotopes as Drugs and Diagnostic Aids

Other Biochemical pharmacology Related Topics

Lectures to Neurology Residents

Drug Disposition and Pharmacokinetics of Anticonvulsants
Drug-Drug Interactions of Anticonvulsants
Pharmacokinetics and Pharmacodynamics of Anticholinesterases
Advanced therapeutic course: lectures on Antibiotics and HIV.

Participation in Continuing Medical Education for Practicing Physicians

Pharmacology of Antibiotics
Basics of Drug-Drug Interactions
Drug Metabolism and Disposition
Use of Drug Serum Levels in Clinical Practice
Pesticides Toxicity

Organized Workshops on PBLC at J. N. Medical College, Aligarh Muslim University, Aligarh, and at All India Institute of Medical Sciences, New-Delhi, India from November 10-18, 1997. Six of our PBLC students and Dean and myself participated in the workshops. This was the first International workshop on PBLC in India and was attended by more than 70 faculty members from many medical colleges. SIU thus introduced PBLC to Indian Medical Curriculum.

Organized Workshop on PBLC at Osmania Medical College, Hyderabad, India from January 21st to January 25th, 1999. Dean Carl Getto, Dr. Earl Loschen, Dr. Patricia Hopkins and Ms. Kristin Herman MS IV year student, Dr. and Dr. (Mrs.) Singhal and myself acted as tutors.

Served on masters and Ph.D. committees and worked as supervisor of doctoral and postdoctoral candidates and visiting faculty.

Graduate Students Supervisor

Angela Tin, M.S.
Ann Boyer, M.S.
Gary Kamermori, Ph.D.
Ron Hetzler, Ph.D.
Radhika Ravi, Ph.D.
Eric Schlorff M.S.
Ramesh Jagannathan, M.S.

Post-doctoral Supervisor

Zuzur Kaka, Ph.D.
Bill Glave, Ph.D.
Latha Unni, Ph.D.
Marta Hallak, Ph.D.
Abdul Khalique, Ph.D.
S. N. Dube, Ph.D.
S. R. Babu, Ph.D.
Abdul Rashid, Ph.D.
S. B. Maggirwar, Ph.D.
Kazim Husain, Ph.D.
Satya Vellu Reddy Ph.D.
Asha Thota, M.D.

UNIVERSITY SERVICE

Departmental Committees

Department of Medical Sciences

- Committee Considering Cross-appointments to Medical sciences (1975)
- Committee on Bio-Hazards, Medical Sciences, School of Medicine (1975-76)
- Member, Scientific Research Committee, SIU School of Medicine (this committee finally became CRC) (1976)

Department of Pharmacology

- Research Committee (1979, 1980, 1982-Chairman)
- Tenure and Promotion Committee (1979-Present)
- Search Committee for Assistant Professor of Pharmacology (1979)
- Medical Education Committee (Co-Coordinator Sequence II, 1981-82 and Coordinator Sequence II, 1982-83)
- Seminar Coordinator (1981-82, 1984-85)
- Graduate Program Committee (Chairman Elect 1989-90, Chairman 1990-91, 1991-92)
- Coordinator: problem based learning curriculum (1992-1995)
- Co-coordinator: Sophomore curriculum (1993-1994)
- Coordinator, Sophomore curriculum (1994-1995)
- Coordinator, Graduate Program (1997-1999, 2001-2002)

School of Medicine Committees

- Acting Radiological Control Officer, SIU School of Medicine, Springfield, Illinois (1975-77)
- Radiological Control Committee, SIU, School of Medicine was established to apply for radioisotope licensure for the Springfield campus. Charter member and Chairman of this committee which prepared the document and administered the program (1977-1983)
- Admissions Committee (1980-84)
- Institutional Review Committee for Accreditation, Dr. Ronald Keeney, Chairman (1976)
- Sequence II Committee (1981-82, 1982-83), coordinator, 1982-83
- Energy Committee
- Member, Review Committee for Department of Obstetrics and Gynecology
- Member, Tenure and Promotion Committee
- Institutional Review Committee for Accreditation: Member, Graduate Education, Medical Education and Continuing Education Committee (1985)
- Director, Graduate Program in Pharmacology (1989-1992)
- Member, Sophomore problem based learning curriculum committee (1992-1994)
- Member, Sophomore curriculum committee (1994-1995)
- Member, International Advisory committee (1995-1999)
- Member, Committee on Clerkships and electives (1995-99)
- Member, Central Research Committee (1993-continue)
- Member, Admissions Committee (1998-continue)
- Member, Research Policy Committee (1998-continue)

University Committee

- Radiological Control Committee, SIU Carbondale (1974-77)
- Member of "1999 Outstanding Scholar Award Selection Committee"
- Member, Honorary Degree and Distinguished Service Award Committee 1999-continue)

Hospital Committees

- Advisor, Poison Control Center, St. John's Hospital, Springfield
- Radiological Drug Control Committee for Human Use at St. John's Hospital
- Member, Institutional Review Committee, St. John's Hospital, Springfield
- Radiation Safety Committee of School of Medicine and Hospitals at Springfield

PROFESSIONAL ASSOCIATIONS

- American Society for Pharmacology and Experimental Therapeutics (1976-Present)

American Society for Clinical Pharmacology and Therapeutics (1975-1990)
 Society of Toxicology (1973-Present)
 Sigma Xi (1972-76) (1979-Present)
 New York Academy of Science (1965-1980)
 American Association for the Advancement of Science (1972-1992)
 American Chemical Society (1964-Present)
 American Mutagen Society (1978)
 Member, Section on Toxicology, International Union of Pharmacology (1978-Present)
 American Society for Testing and Material (1978-79)
 Indian Pharmacological Society (Life Member)
 American College of Toxicology (1978-1979)
 Indian Academy of Neurosciences (Life Member)
 American College of Sports Medicine (1988-1992)
 Oxygen Society (1996-Present)

Offices Held in Professional Associations

Treasurer: (1979), Chairman Elect (1980), Chairman (1981), Decatur-Springfield Section of American Chemical Society
 President: Toastmaster's Club, 1982
 Chairman Elect and Chairman: Association of Scientists of Indian Origin in America, 1986-87, 1987-88

Referee Service to Scholarly Publications

Journal of Pediatrics (Pharmacology Section)	Developmental Pharmacology and Therapeutics
Science	Biopharmaceutics and Drug Disposition
Life Sciences	Fundamental and Applied Toxicology
International Journal of Neurobiology	Drug Development and Research
Toxicology	Pharmacology & Toxicology
Journal of American Medical Association	The International Journal of Biochemistry and Cell Biology
Cancers Letters	Toxicological Sciences
Neurosciences Letters	

HONORS

Ellis T. Davies Fellowship, University of Liverpool (1967-69)
 Chairman of the Session on "Toxicology" at the 7th International Congress of Pharmacology in Paris, France, July 1978
 Appointed Ph.D. Examiner, Marathwada University, Aurangabad, India, Sept., 1979
 Invited to participate in Symposium "Determinants of Drug Metabolism in the Immature Human" in conjunction with the World Conference on Clinical Pharmacology and Therapeutic held in London, August 3-9, 1980
 Invited to participate in the 6th conference on "Myasthenia Gravis" by New York Academy of Sciences, December 1980
 Program Chairman of Symposium on "Environmental Toxicology, Principles and Policies" sponsored by Decatur/Springfield Section of the American Chemical Society on October 31, 1980 at SIU School of Medicine, Springfield
 Listed in the "American Men and Women of Sciences" since 1974, in Who's Who in the Midwest in 1981, and Frontiers in Science and Technology in 1985
 Outstanding Performance Award for the Chairman of a local chapter of the American Chemical Society
 Invited to chair session at the International Brain Research Organization Symposium in Lucknow, India, February 1984
 Appointed Visiting Professor for two years at Sun Yat Sen University of Medical Sciences, Guangzhou, People's Republic of China
 Elected as Chairman, Association of Scientist of Indian Origin in America, 1988
 Invited by the United Nations Development Program to transfer knowledge/know how through expatriate at various National Research Institutes and Universities in India
 Invited to present "Interaction of Exercise, Drugs and Antioxidant System" in the symposium "Oxygen, Antioxidants and Exercise" at International Congress of Physiological Sciences, St. Petersburg, Russia, June 30-July 5, 1997.
 Invited to give a seminar at Russian Academy of Sciences, Moscow, Russia.
 Advisor & Reviewer: Advisor and reviewer of the progress on research at the International Science and Technology Centre, Moscow, Russia; Dr. D. Giebink, Senior Project Manager, ISTC Project #162 "Biomedical and Analytical Aspects of Chemical Safety of Biosphere," and other two projects.
 Invited by U.S.Congress to testify on "Gulf War Syndrome", April 1997.
 Included in Who's Who in the world.
 Invited to participate in a Research Planning Conference on "The health Impact of Chemical Exposures During the Gulf war" at Centers for Disease Control and Prevention, from February 28 to March 2, 1999.

Invited to give seminars at several Universities and research institutions in USA, India, England, Indonesia, Japan during my academic carrier.

RESEARCH

Research Interests and Specialties

Effect of Exercise on Absorption, Distribution, Metabolism, Excretion and Pharmacokinetics drugs in Animal and Man.

Pharmacokinetics and Pharmacodynamics modelling in animal and man.

Toxicology: Environmental Toxicology.

Cisplatin Oto- and Nephrotoxicity Relationship to Antioxidant System.

Age-Related Effect of Exercise on Cardiac Mitochondria and Cytosolic Antioxidant System.

Interaction of exercise, drugs and antioxidant system in tissues.

Sarin and Pyridostigmine Interaction under Physical Stress: Neurotoxic effects in Mice.

Research Grants Received

"Competition of Salicylate and Phenylbutazone, Indomethacin and Cortisol for Binding Sites on Human Serum Albumin." Grant funded by Health Research and Science Foundation, Pittsburgh, PA. Amount \$8,470, 1/71-12/71. Principal Investigator.

"Correlation Studies on Drug Dependence." Funded by NIH, Grant No. MH20121, Amount \$462,604, 9/1/72-2/28/76. Principal Investigator: G. Werner, M.D., Co-investigator: Satu M. Somani, Ph.D. (one of the four).

"Neostigmine Metabolism and Its Relationship to Cholinergic Crises." Funded by Health Research Science Foundation, Pittsburgh, PA. Amount \$13,244 1/73-12/74. Principal Investigator.

"Narcotic Drug Action on Neurobehavioral Correlates." NIH Grant. Funded, Amount \$219,642, 3/1/73-2/28/76. Principle Investigator: G. Werner, M.D., Co-investigator: Satu M. Somani, Ph.D. (one of the four).

"Assessment of Toxic Organic Waste Problems in Illinois". Funded by Amendment No. 2 of Grant No. 100517077 from the U.S. Environmental Protection Agency to the Illinois E.P.A., Contract Received. Amount \$64,000, 11/1/77-9/30/78; \$49,264, 10/1/78-6/30/79; \$23,000, 7/1/79-9/30/79, Principal Investigator.

"Toxicokinetic Studies of 2,4-Dimethylphenol. B. Mutagenicity and Toxicity in the Mixture of Compounds", funded by Central Research Committee, SIU School of Medicine, CRC 17-80-1, 7/1/80-6/30/81, amount \$2,500.

Metabolism of 2,4-Dichlorophenol to Dioxin and Fatty acid Conjugates, funded by Central Research Committee, SIU School of Medicine 7/1/81-6/30/82, amount \$3,600.

U.S. Army; "Mechanism of Action and Pharmacokinetics of Physostigmine in Relation to Acute Intoxication by Organofluorophosphate", Principal Investigator; 30% Effort; \$533,976 (9/1/83-12/31/87).

"Methylxanthine Pharmacokinetics in Relation to Bradycardia and Apnea" (N-12), American Heart Association/Illinois Affiliate; 7/1/82-6/30/84, Principal Investigator, 15% Effort, \$25,000.

"Effect of Furosemide on the Hearing of Newborn Infants", Co-Investigator, The Deafness Research Foundation, New York, NY; 1/184-12/31/84, 1984 DRF Grant, \$10,000, funded.

"Effect of Furosemide and Its Metabolites on the Hearing in Newborn Infants", Co-Investigator, Central Research Committee, SIU-SM; 7/1/83-6/30/84, CRC 14-84, \$4,500.

"Effect of Exercise on Glutathione of Heart Mitochondria", Central Research Committee, SIU-SM; 7/1/91-6/30/92, \$4,500.

"Distribution of Physostigmine in Rat", Principal Investigator, Central Research Committee SIU-SM, 7/1/83-6/30/84, CRC 6-84, \$2,450.

"Effect of Exercise on Propranolol Pharmacokinetics in Humans", American Heart Association/Illinois Affiliate, 7/1/86-6/30/88; Co-Principal Investigator, \$29,981.

"Aging of the Brain and Dementia: Early Detection", National Institute of Aging, 12/1/85-11/30/88, Co-investigator, \$249,399.

"The Effects of Exercise on Pharmacokinetics and Pharmacodynamics of Physostigmine in Rats, U.S. Army, Principal Investigator, 30% effort \$373,630 (Nov. 15, 1987 - June 15, 1990).

"Effect of Exercise on Antioxidant System: American Heart Association, Illinois Affiliate, Principle Investigator, 20% Effort, \$40,000, 7/1/91-6/30/93.

"The Possible Cardioprotective Effects of Captopril Against Ischemic Reperfusion Induced Injury in Acute Myocardial Ischemia," Principal Investigator, SIU-SOM, Student Project, \$4,200, 07/02/92-06/30/93.

"Mechanisms of Chemoprotectants in Cisplatin Nephro- and Ototoxicity," Principal Investigator, CRC SIU-SOM, \$5,000, 07/01/92-06/30/93.

"Role of Antioxidant System in Cisplatin Ototoxicity and Treatment by Chemoprotectants," Deafness Research Foundation, \$15,000, 01/01/94-12/31/94.

Interaction of exercise and alcohol on subcellular rat heart antioxidant enzymes. CRC SIU-SOM - \$6,616, July 1, 1994-June 30, 1996.

Interaction of Exercise and Ethanol on Antioxidant System of Rat Heart, CRC, Principal Investigator, 15%, \$4,000. July 31, 1996-June 30, 1997

NIH: Endogenous modulation of ototoxicity of cisplatin, P.I. Leonard P. Rybak, Co-Investigator - S.M. Somani, \$703,661 direct costs 7/1/94-6/30/98.

"Interaction of Exercise and Ethanol/Nicotine on Myocardial Antioxidant System", American Heart Association-Illinois Affiliate, Principal Investigator, 20%, 07/01/97 - 06/30/99, \$49,990.

"Growth and Development of Mammary and Prostrate tumors in vivo by Vitamin E succinate", Excellence in Academic Medicine Award, SIU School of Medicine, Principle Investigator, Dr. Mokenge Malafa; Amount \$71310 from 10/1/97 to 6/30/99, Coinvestigator 5%, (Somani's share \$19,525).

"Sarin and Pyridostigmine Interaction Under Physical Stress: Neurotoxic Effects in mice", United States Army, Principal Investigator, 20%, 10/01/97-08/31/00, \$200,833.

National Organization of Hearing Research Grant: Effect of blood brain barrier disruption on carboplatin-induced hearing loss and protection by lipoic acid. \$10,000, PI Dr. K. Husain. Co-Investigator S. Somani, 1999-00

National Organization of Hearing Research Grant: The effect of D-Methionine on Cochlear Oxidative State with and without Cisplatin Administration. \$10,000, PI: Dr. Kathleen C.M. Campbell., Satu M. Somani Co-Investigator, 1999-00

"Role of Free Radicals in Alteration of Blood-Brain Barrier Permeability Under Physical Stress," SIU-SOM Excellence in Academic Medicine, PI: Satu M. Somani 20% \$44,448 from 10/1/99 to 6/30/01

Pharmacokinetic and Pharmacodynamic Modeling of Pyridostigmine under Physical Stress in Rat and Human. Applying in coordination with USArmy-Medical Research Institute of Chemical Defense, Gulf War Syndrome, \$661,598; PI Satu M. Somani, 20% Effort 10/1/01-9/30/03 (pending).

PUBLICATIONS

Books

Satu M. Somani and Finis L. Cavender, Editors. Environmental Toxicology: Principles and Policies, Charles B. Thomas, Publishers, November, 1981.

Satu M. Somani, Editor. Chemical Warfare Agents, Academic Press, San Diego, CA, 443 pp 15BN:0-12-654620-7 (June 1992).

Satu M. Somani, (Ed.) Pharmacology in Exercise and Sports. CRC Press Inc.: Boca Raton, FL. Pp. 1-359, 1996. ISBN 0-8493-8540-7.

Satu M. Somani and James A. Romani, (Eds) Chemical Warfare agents: Low Level Toxicity Nerve Agents, CRC Press, Inc. Boca Raton, FL. Pp. 1-447, January, 2001.

Publications

Somani, S.M., Synthesis of disulphides of ephedrine and its analogs, M.S. Thesis, Duquesne University, Pittsburgh, PA, 1964.

Somani, S.M., Isolation of metabolites of pyridostigmine and neostigmine, Ph.D. Thesis, University of Liverpool, England, 1969.

Somani, S.M., Calvey, T.N., Wright, A. The excretion of hydroxyphenyltrimethylammonium in bile. *Br. J. Pharmacol.* 37: 528P-529P, 1969.

Somani, S.M., Calvey, T.N., and Wright, A., The biliary excretion of trimethyl-¹⁴C-(3-hydroxyphenyl) ammonium iodide and its metabolic products, *Eur. J. Pharmacol.*, 12:109-113, 1970.

Somani, S.M., Roberts, J.B., Thomas, B.H., and Wilson, A., Isolation and characterization of metabolites of neostigmine from rat urine. *Eur. J. Pharmacol.*, 12:114-119, 1970.

Calvey, T.N., Somani, S.M., and Wright A., Differences between the biliary excretion of trimethyl-¹⁴C-(3-hydroxyphenyl) ammonium iodide in Wistar and Gunn rats, *Biochem. J.*, 119:659-663, 1970.

Sapira, J.D., Somani, S.M., Shapiro, A.P., and Scheib, E.T., Some observations concerning mammalian indoxyl metabolism and its relationship to the formation of indigo pigments, *Metabolism*, 20:474-486, 1971.

Somani, S.M., Roberts, J.B., and Wilson, A., Metabolites of pyridostigmine in man, *Clin. Pharmacol. Therap.*, 13:393-399, 1972.

Moskowitz, B., Somani, S.M., and McDonald, R.H., Jr., Salicylate interaction with ¹⁴C-Penicillin and ¹⁴C-Secobarbital binding sites on human serum albumin, *Clin. Toxicology*, 6:247-256, 1973.

Somani, S.M. and Khurana, R.C., Mechanism of estrogen-imipramine interaction, *J. Amer. Med. Assoc.*, 223:560, 1973.

Somani, S.M., Distribution of neostigmine and its metabolites in rat tissues after acute and chronic administration, *Eur. J. Pharmacol.*, 30:336, 1975.

Somani, S.M., Schumacher, D., and McDonald, R.H., Jr., Pharmacokinetics of secobarbital in rabbit, *Arch. Int. Pharmacodyn.*, 215:301-317, 1975.

Somani, S.M. and Anderson, J.H., Hepatic sequestration of neostigmine and metabolites. *Drug Metabolism and Disposition: The biological fate of chemicals*, 3:275-282, 1975.

Somani, S.M. and Anderson, J.H., *In vitro* glucuronidation of 3-hydroxyphenyltrimethyl ammonium by rat liver microsomes, *Drug Metabolism and Disposition*, 5:15-18, 1977.

Bowser, D.V., Teece, R.G., and Somani, S.M., Identification of amino sugars in bacterial lipopolysaccharides by gas chromatography/electron impact and chemical ionization mass spectrometry. *Biomedical Mass Spectrometry*, 5:627-633, 1978.

Tin, A., Somani, S.M., Bada, H.S., and Khanna, N.N., Caffeine, theophylline and theobromine determinations in serum, saliva and spinal fluid, *Analytical Toxicology*, 3:26-29, 1979.

Bada, H.S., Khanna, N.N., Somani, S.M., and Tin, A.A., Interconversion of theophylline and caffeine in newborn infants, *J. Pediatrics*, 94:993-995, 1979.

Khanna, N.N., Bada, H.S., and Somani, S.M., Use of salivary concentrations in the prediction of serum, caffeine and theophylline concentrations in premature infants, *J. Pediatrics*, 96:494-499, 1980.

Somani, S.M., Teece, R.G., and Schaeffer, D.J., Identification of co-carcinogens and promoters from the environment: Industrial effluents and surface waters, *J. Toxicology and Environmental Health*, 6:317-333, 1980.

- Janardan, K.G., Schaeffer, D.J., and Somani, S.M., Efficiencies of liquid-liquid extraction, carbon and XAD-2 absorption in isolating organic compounds from environmental sources, *Bulletin Environmental Contamination and Toxicology*, 24:145-151, 1980.
- Somani, S.M., Khanna, N.N., and Bada, H.S., Caffeine and theophylline: Serum/CSF correlation in premature infants, *J. Pediatrics* 96, 1091-1093, 1980.
- Somani, S.M., Chan, K., Dehghan, A., Calvey, T.N. Kinetics and metabolism of intramuscular neostigmine in myasthenia gravis. *Clin. Pharmacol. Ther.* 28: 64-68, 1980..
- Schaeffer, D.J., Janardan, K.G., Somani, S.M., Easton, D., and Sherman, D., Multivariate statistical methods in toxicology: application to the analysis of outpatient clinical data of diphenylhydantoin and phenobarbital in the treatment of epilepsy, *Toxicol. and Appl. Pharmacol.*, 53:354-364, 1980.
- Somani, S.M., Bajaj, R.A., and Calvey, T.N., Effect of phenobarbitone on the elimination of neostigmine and its metabolites in bile, *Biochem. Pharmac.*, 29:2256-2257, 1980.
- Somani, S.M., Calvey, T.N., Chan, K., and Dehghan, A., Kinetics and metabolism of intramuscular neostigmine in Myasthenia Gravis, *Clin. Pharmac. Thera.*, 28:64-68, 1980.
- Schaeffer, D.J., Tigwell, D.C., Somani, S.M., Glave, W. B., and Janardan, K.G., Efficiencies of liquid-liquid extraction and XAD-4 and XAD-7 resins in collecting organic compounds from a coke plant effluent, *Bulletin Environmental Contamination and Toxicology*, 25:569-573, 1980.
- Somani, S.M., Schaeffer, D.J., and Mack, J.O., Quantifying the toxic and mutagenic activity of complex mixtures using *S. typhimurium*, *J. Toxicol. Environment. Hlth.*, 7:643-653, 1981.
- Somani, S.M. and Khanna, N.N., Methylxanthines in serum, saliva and spinal fluid of premature infants, *Seminars in Perinatology*, 5:346-350, 1981.
- Calvey, T.N., Chan, K., Dehghan, A., Somani, S.M., and Williams, N.E., Plasma concentration and urinary elimination of neostigmine after intramuscular administration to myasthenic patients, 6th Conf. on Myasthenia Gravis, *Annals of New York Acad. of Sci.*, 377:816-817, 1981.
- Khanna, N.N., Somani, S.M., Boyer, A., Miller, J., Chua, C., and Menke, J.A., Cross-validation of serum to saliva relationships of caffeine, theophylline and total methylxanthines in neonates, *Developmental Pharmacology and Therapeutics*, 4:18-27, 1982.
- Kaka, J.S., Somani, S.M., and Schaeffer, D.J., Metabolism and distribution of 2,4-Dimethylpneonal in rat, *Ecotoxicology and Environmental Safety*, 6:35-40, 1982.
- Somani, S.M. and Khalique, A., Distribution and Metabolism of 2,4-Dichlorophenol in Rat, *J. Toxicol. Environment. Hlth.*, 9:889-897, 1982.
- Somani, S.M., Smart, T., and Khalique, A., Metabolism of 2,4-Dichlorophenol by isolated perfused rat liver, *J. Toxicol. Environm. Hlth.*, 13:787-798, 1984.
- Khanna, N.N. and Somani, S.M., Maternal coffee drinking and unusually high concentrations of caffeine in the newborn, *J. Toxicol. Clin. Toxicol.*, 22:473-483, 1985.
- Somani, S.M. and Khalique, A., Physostigmine determination in plasma and brain by HPLC, *J. Analyt. Toxicol.*, 9(2):71-75, 1985.
- Unni, L. and Somani, S.M., Binding of physostigmine to rat and human plasma and crystalline human serum albumin, *Life Sci.*, 37:1389-1396, 1985.
- Boyer, A.W. and Somani, S.M., Pharmacokinetics of biliary excretion of ^3H -physostigmine in rat, *Inter. de Pharm. de Therapie*, 278:180-192, 1985.

- Somani, S.M. and Boyer, A., Urinary pharmacokinetics of physostigmine in rat, *Eur. J. Drug Metabol. Pharmacokinet.*, 10(4):343-394, 1985.
- Somani, S.M. and Khalique, A., Distribution and pharmacokinetics of physostigmine in rat after i.m. administration, *Fundamental and Appl. Toxicol.*, 6:327-334, 1986.
- Kamimori, G.H., Somani, S.M., Knowlton, R.G., and Perkins, R.M., Effects of obesity and exercise on the pharmacokinetics of caffeine in lean and obese volunteers, *Eur. J. Clin. Pharmacol.*, 31:595-600, 1987.
- Unni, L. and Somani, S.M., Hepatic and muscle clearance of physostigmine in the rat, *Drug Metabolism and Disposition: The Biological Fate of Chemicals*, 14(2):183-189, 1986.
- Somani, S.M., Unni, L.K., and McFadden, D.L., Drug Interaction for plasma protein binding: Physostigmine and other drugs, *Int. J. Clin. Pharmacol. Therap. Toxicol.*, 25:412-416, 1987.
- Giacobini E., Somani, S., McIlhany, M., Downen, M., and Hallak, M., Pharmacokinetics and pharmacodynamics of physostigmine after i.v. administration in beagle dogs, *Neuropharmacology*, 26:831-836, 1987.
- Somani, S.M. and Khalique, A., Pharmacokinetics and pharmacodynamics of physostigmine in rat after i.v. administration, *Drug Metabolism and Disposition: The Biological Fate of Chemicals*, 15:627-633, 1987.
- Somani, S.M., Effect of routes of administration on pharmacokinetics and pharmacodynamics of physostigmine in rat, *Proc. of the Sixth Medical Chemical Defense Bioscience Review*, pp. 715-718, 1987.
- King, B.F. and Somani, S.M., Distribution of physostigmine and metabolites in brain subcellular fractions of the rat, *Life Sci.*, 41:2007-2015, 1987.
- Somani, S.M., Pharmacokinetics and pharmacodynamics of physostigmine in the rat after oral administration, *Biopharmaceutics and Drug Disposition*, 10(2):187-203, 1989.
- Somani, S.M. and Dube, S., *In Vivo* dose and concentration response relationship between physostigmine and cholinesterase activity in RBC and tissues of rat, *Life Sci.*, 44:1907-1915, 1989.
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