

CURRICULUM VITAE

RAYMOND E. GALINSKY

Date of Birth: January 27, 1948

Citizenship: United States

EDUCATION:

1970 Bachelor of Arts, Biological Sciences, University of California, Berkeley

1975 Doctor of Pharmacy, University of California, San Francisco

PROFESSIONAL RECORD:

1975-1976 Resident, Clinical and Hospital Pharmacy, UCSF Medical Center (ASHP-accredited).

1976 Pharmacist, Committee for the Relief of Guatemala, San Juan Comalapa, Guatemala, C.A.

1976-1977 Community Pharmacist, The Summit Pharmacy, Oakland, California

1977-1978 Research Associate, Department of Pediatrics, University of Pennsylvania,
School of Medicine

1978-1980 Postdoctoral Fellow, Department of Pharmaceutics, University at Buffalo, State Univ. NY

ACADEMIC APPOINTMENTS:

1977-1978 Instructor in Pharmacy, Philadelphia College of Pharmacy and Science

1980-1983 Research Assistant Professor of Pharmaceutics, University at Buffalo, State Univ. NY

1981 Visiting Lecturer, School of Pharmacy, University of Maryland

1983-1990 Assistant Professor of Pharmaceutics, College of Pharmacy, University of Utah

1990-1995 Associate Professor of Pharmaceutics and Pharmaceutical Chemistry

Adjunct Associate Professor of Pharmacology and Toxicology

College of Pharmacy, University of Utah

1995-1997 Associate Professor of Pharmaceutics, School of Pharmacy, Purdue University

Adjunct Associate Professor of Medicine and Pharmacology, Indiana University

School of Medicine

1997 Visiting Scientist, Department of Pharmacology, Mayo Clinic, Rochester, MN

1997-Date Professor of Pharmaceutics, School of Pharmacy, Purdue University

1998-Date Adjunct Professor of Medicine, School of Medicine, Indiana University

SOCIETY MEMBERSHIP

American Association of Pharmaceutical Scientists (AAPS) 1992-1998

Member, PPDM Academic Focus Group, 1992

American Federation for Aging Research

American Society for Pharmacology and Experimental Therapeutics

American Society for Clinical Pharmacology and Therapeutics

Chair, Drug Metabolism Session, 89th Annual Meeting, Nashville, TN

Member, Program Committee, 1993

Member, Government Affairs Committee, 2003

International Society for the Study of Xenobiotics

New York Academy of Sciences

Society for Experimental Biology and Medicine

HONORS AND AWARDS:

Recipient, First Independent Research Support and Transition (FIRST) Award, National
Institute on Aging, NIH, 1987-1992

Co-Author, Outstanding Paper, *Controlled Release Society*, 1992

LICENSURE:

Registered Pharmacist, California, License No. RPH 29820 (1975-DATE)

Diplomate, Applied Pharmacology, American Board of Clinical Pharmacology, 1995.

TEACHING:

University of California, San Francisco (Residency)

Clerkship Preceptor, Clinical Pharmacy "Tropical Medicine and International Health"
1975-76

Lecturer, Clinical Pharmacy 131 "Pharmacotherapeutics"

Lecturer, Nursing 580, "Drug Therapy for Nurses"

Philadelphia College of Pharmacy and Science

Course Master, "Clinical Pharmacokinetics" 1977-1978

University at Buffalo, SUNY

Lecturer, Department of Pharmaceutics "Introduction to Pharmacy", 1981

University of Utah

Course Master, Pharmaceutics "Biopharmaceutics and Pharmacokinetics I", 1984-88

Course Master, Pharmaceutics "Biopharmaceutics and Pharmacokinetics II", 1984-95

Course Master, Pharmaceutics 703, "Ad. Pharmacokinetics and Biopharmaceutics", 1990-91

Lecturer, Clinical Pharmacy 605, "Applied Clinical Pharmacokinetics", 1984-88

Lecturer, Biochemical Pharmacology and Toxicology 661, "Introduction to Toxicology", 1988-92

Lecturer, Family and Preventive Medicine 713, "Advanced Biostatistics", 1987-88

Lecturer, School of Medicine, Pharmacology and Toxicology 702, "Principles of Pharmacology"
1988-1992

Lecturer, Clinical Pharmacy 535, "Drug Information", 1986-88

Lecturer, Pharmacology and Toxicology 601, "Pharmacodynamics and Pharmacological
Basis of Therapeutics", 1987-91

Course Master, Pharmaceutics 580 "Applied Clinical Pharmacokinetics", 1985-92

Course Master, Clinical Pharmacy 705, "Clinical Pharmacokinetics", 1989-90

Adjunct Faculty, NIH Training Grant for Pharmacological Sciences, 1987-95

Purdue University

Course Master, Industrial & Physical Pharmacy, "Clinical Pharmacokinetics", 1995-1997

Course Master, Industrial & Physical Pharmacy 575, "Biopharmaceutics and Pharmacokinetics II",
1997-DATE

Course Master, Industrial & Physical Pharmacy 475, "Biopharmaceutics and Pharmacokinetics I",
2003-DATE

Indiana University

Lecturer, Division of Clinical Pharmacology, Department of Medicine, 1995-Date

Adjunct Faculty, NIH Training Grant for Pharmacological Sciences, 1995-Date

GRADUATE STUDIES ADVISOR

Shahzad Bakhtian, Ph.D., 1992, Pharmaceutics, University of Utah

Rebecca B. Raftogianis, Ph.D., 1995, Pharmaceutics, University of Utah

Shilpa Phaterpaker, M.S., 1996, Pharmaceutics, University of Utah

Scott Hostettler, M.Sc., 1997, Industrial & Physical Pharmacy, Purdue University

Andrew A. Shaw, Ph.D., 2000, Industrial & Physical Pharmacy, Purdue University

Amy F. Marple, M.Sc., 2001, Industrial & Physical Pharmacy, Purdue University

MEMBER, GRADUATE THESIS COMMITTEE

Wei Wei Chu, M.S., 1988, Pharmaceutics, University of Utah
 Joseph K. Ritter, Ph.D., 1986, Pharmacology and Toxicology, University of Utah
 J.A. (Bram) Stolk, Ph.D., 1990, Medicinal Chemistry, University of Utah
 Ki Dong Park, Ph.D., 1990, Pharmaceutics, University of Utah
 Wendy Hopson, Ph.D., 1991, Pharmacology and Toxicology, University of Utah
 Brian Fox, Ph.D., 2000 Medicinal Chemistry and Molecular Pharmacology, Purdue University
 Mark Powley, Ph.D., 2001, School of Health Sciences, Purdue University
 Xinzhu Pu, Ph.D., 2004 School of Health Sciences, Purdue University
 Patrick Sheets, M.S., 2003, School of Health Sciences, Purdue University
 Lewis Shi, Ph.D., 2005, School of Health Sciences, Purdue University
 Debanjan Das, Industrial & Physical Pharmacy, Purdue University (current)
 Mingli Ye, Industrial & Physical Pharmacy, Purdue University (current)
 Stephen Carl, Industrial & Physical Pharmacy, Purdue University (current)
 David Lindley, Industrial & Physical Pharmacy, Purdue University (current)

EXTERNAL THESIS REVIEWER

Nuzhat Zaman, Ph.D., 1995, Pharmaceutical Sciences, University of Alberta, Edmonton
 Hwa Jeong Lee, Ph.D., 1998, Pharmaceutics, University at Buffalo, State University of New York
 Chen Yu, M.Phil., Pharmacy, 2000, The Chinese University of Hong Kong
 Jenny Zhang, Ph.D., 2001, Pharmaceutical Sciences, University of Alberta, Edmonton

OTHER SUPERVISED RESEARCH

John P. Pribble, Pharm.D., 1985, Doctor of Pharmacy Thesis Project, University of Utah
 James J. Heusner, Ph.D., Burroughs Wellcome Post-Doctoral Fellow, 1984-1985
 David Klumpe, Pharm.D., 1987, Doctor of Pharmacy Thesis Project, University of Utah
 Barbara Chalasinska, Ph.D., 1986-87, Visiting Assistant Professor of Pharmaceutics, University of Utah, Assistant Professor, Institute of Drug Science, Medical Academy of Warsaw, Poland
 Kristen Flaharty, Pharm.D., ASHP Postdoctoral Fellow, 1989-1990, University of Utah

PUBLICATIONS:

- Galinsky, R.E., Forni, P.J., McGuire, G.G., Tong, T.G., Benowitz, N. and Becker, C.E.: "Post Hoc" and hypoprothombinemia. *Ann. Int. Med.* **83**:286, 1975 (Letter).
- Galinsky, R.E.: Propranolol therapy for hypertension. *N. Engl. J. Med.* **95**:281, 1976 (Letter).
- Pond, S.M., Phillips, M., Benowitz, N.L., Galinsky, R.E., Tong, T.G. and Becker, C.E.: Diazepam kinetics in acute alcohol withdrawal. *Clin. Pharmacol. Ther.* **25**:832-836, 1979.
- Galinsky, R.E., Slattery, J.T. and Levy, G.: Effect of sodium sulfate on acetaminophen elimination by rats. *J. Pharm. Sci.* **68**:803-805, 1979.
- Galinsky, R.E., Roberts, S.M.: Comment on constant blood withdrawal method for obtaining AUC. *Drug Intell. Clin. Pharm.* **13**:781-782, 1979 (Letter).
- Galinsky, R.E. and Levy, G.: Effect of N-acetylcysteine on the pharmacokinetics of acetaminophen in rats. *Life Sci.* **25**:693-700, 1979.
- Galinsky, R.E. and Levy, G.: Dose- and time-dependent elimination of acetaminophen in rats: Pharmacokinetic implications of cosubstrate depletion. *J. Pharmacol. Exp. Ther.* **219**:14-20, 1981.

8. Levy, G., Galinsky, R.E. and Lin, J.H.: Pharmacokinetic consequences and toxicologic implications of endogenous cosubstrate depletion. *Drug Metab. Rev.* **13**:1009-1020, 1982.
9. Pond, S.M., Tong, T.G., Kaysen, G.A., Menke, D.J., Galinsky, R.E., Roberts, S.M. and Levy, G.: Massive intoxication with acetaminophen and propoxyphene: Unexpected survival and unusual pharmacokinetics of acetaminophen. *J. Toxicology* **19**:1-16, 1982.
10. Galinsky, R.E. and Levy, G.: Effect of cimetidine on the pharmacokinetics of acetaminophen in rats. *Int. J. Pharm.* **10**:301-306, 1982.
11. Galinsky, R.E.: Reimbursement for clinical pharmacy services. *Drug Intell. Clin. Pharm.* **17**:293, 1983 (Letter).
12. Galinsky, R.E.: Clinical scientist or pharmacy administrator? *Drug Intell. Clin. Pharm.* **17**:377, 1983 (Letter).
13. Morris, M.E., Galinsky, R.E. and Levy, G.: Depletion of endogenous inorganic sulfate in the mammalian central nervous system by acetaminophen. *J. Pharm. Sci.* **73**:843, 1984.
14. Galinsky, R.E. and Levy, G.: Absorption and metabolism of acetaminophen shortly before parturition. *Drug Intell. Clin. Pharm.* **18**:977-979, 1984.
15. Galinsky, R.E. and Levy, G.: Evaluation of activated charcoal-sodium sulfate combination for inhibition of acetaminophen absorption and repletion of inorganic sulfate. *J. Toxicology* **22**:21-30, 1984.
16. Galinsky, R.E.: Acetaminophen and alcoholism. *J. Clin. Pharmacol.* **25**:57, 1985.
17. Wong, B.K., Galinsky, R.E. and Corcoran, G.B.: Dissociation of increased sulfation from sulfate replenishment and hepatoprotection in acetaminophen-poisoned mice by N-acetylcysteine stereoisomers. *J. Pharm. Sci.* **75**:878-880, 1986.
18. Galinsky, R.E.: Role of glutathione turnover in drug sulfation: Differential effects of diethylmaleate and buthionine sulfoximine on the pharmacokinetics of acetaminophen in the rat. *J. Pharmacol. Exp. Ther.* **236**:133-139, 1986.
19. Galinsky, R.E. and Corcoran, G.B.: Influence of advanced age on the formation and elimination of acetaminophen metabolites by male rats. *Pharmacology (Basel)* **32**:313-318, 1986.
20. Galinsky, R.E., Kane, R.E. and Franklin, M.R.: Effect of aging on drug metabolizing enzymes important in acetaminophen elimination. *J. Pharmacol. Exp. Ther.* **237**:107-113, 1986.
21. Lau, R.J., Emery, M.G. and Galinsky, R.E.: Unexpected accumulation of acyclovir in breast milk with estimation of infant exposure. *Obstet. & Gynecol.* **69**:468-471, 1987.
22. Heusner, J.J., Dukes, G.E., Rollins, D.E., Tolman, K.G. and Galinsky, R.E.: Effect of chronically administered ketoconazole on the elimination of theophylline in man. *Drug Intell. Clin. Pharm.* **21**:414-417, 1987.
23. Corcoran, G.B., Wong, B.K., Shum, L. and Galinsky, R.E.: Acetaminophen sulfation deficit in obese rats overfed an energy-dense cafeteria diet. *Endocrine Res.* **13**:101-121, 1987.

24. Galinsky, R.E. and Ward, R.M.: Comment on ambulatory monitoring. *Drug Intell. Clin. Pharm.* **21**:924, 1987 (Letter).
25. Galinsky, R.E., Alexander, D.P. and Franklin, M.R.: Effect of cyclosporine on hepatic oxidative and conjugative activities in rats. *Drug Metab. Dispos.* **15**:731-733, 1987.
26. Galinsky, R.E., Nelson, E.B. and Rollins, D.E.: Pharmacokinetic consequences and toxicologic implications of metyrapone-induced alterations of acetaminophen in man. *Eur. J. Clin. Pharmacol.* **33**:391-396, 1987.
27. Galinsky, R.E. and Chalasinska, B.: Effect of tauroolithocholate on *in vivo* sulfation and glucuronidation of acetaminophen in rats. *Pharm. Res.* **5**:61-64, 1988.
28. Anderson, B.D, Chu, W.W. and Galinsky, R.E.: Reduction of first-pass metabolism of propranolol after oral administration of ester prodrugs. *Int. J. Pharm.* **43**:261-265, 1988.
29. Galinsky, R.E. and Corcoran, G.B.: Suppression of acetaminophen conjugation and of conjugate elimination in the rat by metyrapone, a classical P-450 inhibitor. *Drug Metab. Dispos.* **16**:348-354, 1988.
30. Kane, R.E., Lamott, J., Franklin, M.R. and Galinsky, R.E.: Perinatal cimetidine has no apparent effect on hepatic oxidative or conjugative activities in adult male rat offspring. *Devel. Pharmacol. Ther.* **12**:96-105, 1989.
31. Anderson, B.D., Hoesterey, B.L., Baker, D.C. and Galinsky, R.E.: Uptake kinetics of 2',3'-dideoxyinosine into brain and cerebrospinal fluid of rats - intravenous infusion studies. *J. Pharmacol. Exp. Ther* **253**: 113-118, 1990.
32. Johnson, D.H., Kimura, R.E. and Galinsky, R.E.: A new chronic gastric cannula for feeding ethanol diet to young and old rats. *J. Pharmacol. Methods* **24**: 37-42, 1990.
33. Galinsky, R.E., Johnson, D.H., Kane, R.E. and Franklin, M.R.: Effect of aging on hepatic biotransformation in female Fischer 344 rats: Changes in sulfotransferase activities are consistent with known gender-related changes in pituitary growth hormone secretion in aging animals. *J. Pharmacol. Exp. Ther* **255**:577-583, 1990.
34. Galinsky, R.E., Hoesterey, B.L. and Anderson, B.D.: Brain and cerebrospinal fluid uptake of zidovudine (AZT) in rats after intravenous injection. *Life Sci.* **47**: 781-788, 1990.
35. Galinsky, R.E., Eshima, D., Hansen, L., Greene, J., Dillehay, D. and Taylor, A.: Effect of advanced age on *p*-aminohippurate-induced inhibition of renal tubular secretion in male Fischer 344 rats. *Mech Ageing Develop.* **56**: 209-222, 1990.
36. Anderson, B.D., Hoesterey, B.L., Baker, D.C. and Galinsky, R.E.: Kinetics of ddI in plasma, brain and CSF of rats after administration of ddI and an ester prodrug of ddI. *Annals. N.Y. Acad. Sci.* **616**: 472-474, 1990.
37. Manning, B.W., Franklin, M. R. and Galinsky, R.E.: Drug metabolizing enzyme changes after chronic buthionine sulfoximine exposure modify acetaminophen disposition in rats. *Drug Metab. Dispos.* **19**:498-502, 1991.

38. Galinsky, R.E. and Nickman, N.A.: Pharmacists and the mandate of pharmaceutical care. *DICP, Annals of Pharmacotherapy*, **21**:431-434, 1991.
39. Galinsky, R.E., Flaharty, K.K., Hoesterey, B.H. and Anderson, B.D.: Probenecid enhances central nervous system uptake of 2',3'-dideoxyinosine by inhibiting cerebrospinal fluid efflux. *J. Pharmacol. Exp. Ther.* **257**:972-978, 1991.
40. Hoesterey, B.L., Galinsky, R.E. and Anderson, B.D.: Dose dependence in the plasma pharmacokinetics and uptake kinetics of 2',3'-dideoxyinosine (ddI) into brain and CSF of rats. *Drug Metab. Dispos.* **19**:907-912, 1991.
41. Anderson, B.D., Galinsky, R.E., Baker, D.C., Chi, S.-C., Hoesterey, B.L., Morgan, M.E., Murakami, K. and Mitsuya, H.: Approaches toward the optimization of CNS uptake of anti-AIDS agents. *J. Controlled Release* **19**: 219-230, 1991.
42. Galinsky, R.E., Manning, B.W. and Franklin, M.R.: Changes in conjugative enzyme activity and acetaminophen disposition in young and senescent male F-344 rats following prolonged exposure to buthionine sulfoximine. *Exp. Gerontol.* **27**: 221-232, 1992.
43. Samlowski, W.E., Park, K.-J., Galinsky, R.E., Ward, J.H. and Schumann, G.B.: Intrathecal administration of interleukin-2 for meningeal carcinomatosis due to malignant melanoma: Sequential evaluation of intracranial pressure, cerebrospinal fluid cytology, and cytokine induction. *J. Immunother.* **13**:49-54, 1993.
44. Bahktian, S., Kimura, R.E. and Galinsky, R.E.: Age-related changes in homeostasis of inorganic sulfate in male F-344 rats *Mech. Ageing Develop.* **66**:257-267, 1993.
45. Edwards, D.J., Altman, H.J. and Galinsky, R.E.: Plasma concentrations of inorganic sulfate in Alzheimer's disease. *Neurology*, **43**: 1837, 1993.
46. Yim, C.-Y., Hibbs, J.B., Jr., McGregor, J.R. Galinsky, R.E. and Samlowski, W.E.: Use of N-acetyl cysteine to increase intracellular glutathione during the induction of antitumor responses by interleukin 2 (IL-2) *J. Immunol.* **152**:5796-5805, 1994.
47. Bonkovsky, H.L., Kane, R.E., Jones, D.P., Galinsky, R.E. and Banner, B.: Acute hepatic and renal toxicity from low doses of acetaminophen in absence of alcohol abuse or malnutrition: Evidence for increased susceptibility to drug toxicity due to cardiopulmonary and renal insufficiency. *Hepatology*, **19**:1141-1148, 1994.
48. Raftogianis, R.B, Franklin, M.R. and Galinsky, R.E.: The depression of hepatic drug conjugation reactions in rats following lipid-free total parenteral nutrition administered via portal vein, *J. Paren. Ent. Nutr.*, **19**:303-309, 1995.
49. Gygi, S.P., Coløn, F., Raftogianis, R.B., Galinsky, R.E., Wilkins, D.G. and Rollins, D.E.: Dose-related distribution of codeine and its metabolites into rat hair. *Drug Metab. Dispos.* **24**:282-287, 1996.
50. Raftogianis, R.B., Franklin, M.R. and Galinsky, R.E.: The effect of lipid-free parenteral

nutrition on hepatic drug conjugation in rats. *J. Pharmacol. Exp. Ther.* **276**:602-608, 1996

51. Raftogianis, R.B., Franklin, M.R. and Galinsky, R.E.: Effect of total parenteral nutrition containing lipid calories on hepatic drug metabolism in rats. *Drug Metab. Dispos.*, **24**:502-505, 1996
52. Yan L., Galinsky R.E., Bernstein, J.A., Liggett S.B. and Weinshilboum R.M.: Histamine N-methyltransferase pharmacogenetics: Association of a common functional polymorphism with asthma. *Pharmacogenetics* **10**:261-266, 2000
53. Chalasani N., Gorski, J.C., Patel N.H., Hall, S.D. and Galinsky R.E.: Hepatic and intestinal cytochrome P450 3A activity in cirrhosis: Effects of transjugular intrahepatic portosystemic shunts. *Hepatology* **34**:1103-1108, 2001
54. Shaw, A.A., Hall, S.D., Franklin, M.R. and Galinsky, R.E.: The influence of L-glutamine on the depression of hepatic cytochrome P450 activity in male rats caused by total parenteral nutrition. *Drug Metab. Dispos.* **30**:177-182, 2002
55. Pu X., Lee L.S., Galinsky R.E. and Carlson G.P. Evaluation of a rat model versus a physiologically-based extract test for assessing phenanthrene bioavailability from soils *Toxicology Sciences* **79**:10-17, 2004
56. Ward B.A., Morocho A., Kandil A., Galinsky R.E., Flockhart D.A. and Desta Z. Characterization of human cytochrome P450 enzymes catalyzing domperidone N-dealkylation and hydroxylation in vitro. *British Journal of Clinical Pharmacology.* **58**:277-87, 2004
57. Uhing M.R., Beno D.W.A., Jiyamapa-Serna V.A., Chen Y., Galinsky R.E., Hall S.D. and Kimura R.E. The effect of anesthesia and surgery on CYP3A activity in rats, *Drug Metab. Dis.* **32**:1325-30, 2004
58. Morrow J.D., Edeki T.I., El Mouelhi M., Galinsky R.E., Kovelesky R., Noveck R.J. and Preuss C. American Society for Clinical Pharmacology and Therapeutics position statement on dietary supplement safety and regulation. *Clinical Pharmacology & Therapeutics.* **77**:113-22, 2005
59. Pu X., Lee L.S., Galinsky R.E. and Carlson G.P. Bioavailability of 2,3',4,4',5-pentachlorobiphenyl (PCB118) and 2,2',5,5'-tetrachlorobiphenyl (PCB52) from soils using a rat model and a physiologically based extraction test. *Toxicology.* **217**:14-21, 2006
60. Lee S.C., Huh K.M., Lee J., Cho Y.W., Galinsky R.E. and Park K. Hydrotropic polymeric micelles for enhanced paclitaxel solubility: In vitro and in vivo characterization. *Biomacromolecules.* **8**:202-208, 2007.
61. Galinsky R.E., Shaw A.A., Kolwanker D., Franklin, M.R., Huang R., Li L. and Hall S.D. Nuclear receptors mediate the depression of hepatic cytochrome P450 activity in male rats receiving total parenteral nutrition, submitted.

BOOK CHAPTERS

1. Yaffe, S.J. and Galinsky, R.E.: New Drugs for the Treatment of Asthma, in Clinical Therapeutics

- D. Lowenthal and D. Major, Eds., Grune and Stratton, New York, 1978.
2. Galinsky, R.E. and Svensson, C.K.: Basic Pharmacokinetics, in Remington: The Science and Practice of Pharmacy, 19th Edition, 1995, pp. 724-740.
 3. Galinsky, R.E. and Svensson, C.K.: Basic Pharmacokinetics, in Remington: The Science and Practice of Pharmacy, 20th Edition, 2000, pp. 1127-1144.
 4. Galinsky, R.E. and Svensson, C.K.: Basic Pharmacokinetics and Pharmacodynamics, in Remington: The Science and Practice of Pharmacy, 21st Edition 2006, in press.

JOURNAL REVIEWER

Biochemical Pharmacology	Clinical Pharmacology and Therapeutics
Drug Metabolism and Disposition	Hepatology
J. Pharmaceutical Sciences	Molecular Pharmacology
J. Pharmacology and Experimental Therapeutics	Xenobiotica
Pharmaceutical Research	
DICP Annals of Pharmacotherapy	
<i>Editorial Advisory Board 1986-1990</i>	

GRANT REVIEWER

March of Dimes, "Reproductive Hazards in the Workplace" Research Grants Program, 1981-1983
 United States Department of Agriculture, Human Nutrition Grants Program, 1984-1996
 University of Utah Research Committee, 1984-1995
 Research Institute, American College of Clinical Pharmacy, 1987-1988
 Medical Research Council of Canada, 1989-1993
 Neurology B Study Section, N.I.H. 1990-1991
 Special Review Committee, Drug Abuse Treatment Research Centers, NIDA, 1994
 Special Review Committee, Adult AIDS Clinical Trials, NIAID, 1995
 Member, SBIR Study Section, Technology & Applied Sciences (ZRG-7), NIH, 1993-1995
 Member, SBIR Study Section, Chemistry and Related Sciences (ZRG-3), NIH, 1995-1998
 Pharmacology Study Section, NIH, 1996
 Special Review Committee, "Drug Abuse and AIDS Research Core Centers", 2000

ACADEMIC COMMITTEE SERVICE:

University of California, San Francisco

Student Member, School of Pharmacy Library Committee, 1971-73
 Student Member, Clinical Pharmacy Research Committee, 1975-76

Philadelphia College of Pharmacy and Science

Co-Chair, Doctor of Pharmacy Admissions Committee, 1978
 Chair, Pharmacokinetics Research Planning Committee, 1978

University of Utah

Member, University Academic Senate, 1987-88
 Member, University Senate, Personnel and Elections Committee, 1987-88
 Member, Institutional Animal Care and Use Committee 1988-93
 Member, Principal Investigator Committee, 1991-1995
 Member, Radioactive Drug Research Committee, Human Use Subcommittee 1989-92
 Member, Institutional Review Board for Research with Human Subjects

Committee (I.R.B.), 1992-1995

Member, University Research Committee, 1994-95

College of Pharmacy

Member, Doctor of Pharmacy Program Committee, 1985-89

Faculty Advisor, Student APhA, 1984-85

Member, Scholastic Standards Committee, 1988-91

Member, Awards and Financial Aid Committee, 1986-90

Member, Curriculum Committee, 1993-94

Member, Dean's Pharmacy Task Force, 1994-95

Department of Pharmaceutics

Seminar Coordinator, 1983-85

Preliminary Examination Committee 1983-95

Graduate Program Affairs Coordinator 1990-95

Purdue University

Member, Campus Grievance Committee, 1997-99,

Chair, Campus Grievance Committee, 1998-99

Member, Purdue Animal Care and Use Committee, 1999-2003,

Chair, Purdue Animal Care and Use Committee, 2000-01

Member, School of Pharmacy Readmission Committee, 2004-date

Member, School of Pharmacy Admissions Committee, 2005-date

GRANT SUPPORT

NIH, National Institute on Aging Pilot Studies Program Award (N01 AG32104), "Effect of Aging on Drug Sulfation", Principal Investigator, (1984-96)

NIH Research Contract (N01 AI82680) "Targeting Drugs to the Central Nervous System for AIDS Therapy", \$1,110,708; Co-Investigator with Bradley D. Anderson and David C. Baker, (1988-92)

NIH (R29 AG07135), "Ethanol, the Aging Liver and Drug Sulfation" FIRST award
Principal Investigator, \$339,655 (1987-92)

DOE, BNCT Subcontract to E.G.& G., "NMR Methodology for Quantitating Boronated Drug Pharmacokinetics and Distribution in the Canine and Human Brain", \$140,957, Martin P. Schweizer, P.I. (1991-92)

American College of Clinical Pharmacy, "The Effect of Probenecid on Time Course of Dideoxyinosine (ddI) Concentrations in Plasma and on the CSF/Plasma Concentration Ratio in Humans Infected with HIV", \$10,000, Kristen Flaharty, Pharm.D. P.I. (1992)

NIH Research Grant (R01 DK39544), "Bioadhesive Polymers for Treatment of Colon Disease" \$310,245, Jindrich. Kopecek, P.I. (1992-96)

NIH (U01 CA58248), "Use of Sulfhydryl Compounds to Increase IL-2 Activity", \$518,451, Wolfram E. Samlowski, and John B. Hibbs, Jr., P.I. (1992-96)

NIH Research Grant (R01 AI34133), "Enzyme-Based Strategies for CNS Delivery of AIDS Drugs" \$842,086, Bradley D. Anderson, P.I. (1993-97)

NIH Research Grant (R01 GM48433) "TPN, The Aging Liver, and Drug Conjugation",

Principal Investigator \$321,000, (1993-97)

NIH Research Grant (R01 GM50839), "Degradable Hydrogels for Oral Delivery of Calcitonin", \$496,166, Co-Investigator with J. Kopecek, P.I. (1995-99)

NIH Research Grant (R01 AG13178), "Effect of Aging on Drug Bioavailability", \$794,000 Stephen D. Hall, P.I. (1996-2000)

NIH Research Grant (R01 GM65284), "Hydrotrophic Polymers for Oral Delivery of Paclitaxel", \$750,000; Kinam Park, P.I. (2003-06) **active**

NIH Research Grant (R01 GM67044) "Solvent Exchange Methods for Protein Microencapsulation" \$189,000 per annum; Kinam Park, P.I. (2003-06) **active**

NIH Research Grant (R21 DAXXXXX) "Fetal Drug Exposure Alters Adult CYP Activity" \$200,000, Principal Investigator **pending**