CURRICULUM VITAE
I. Glenn Sipes, Ph.D.
April 2015

BIRTHDATE: ***BIRTH PLACE:***

July 26, 1942 Natrona Heights, Allegheny County, Pennsylvania

EDUCATION:

June 1965 B.S. in Pharmacy, University of Cincinnati, Cincinnati, Ohio

November 1969 Ph.D. in Pharmacology, University of Pittsburgh, Pittsburgh, Pennsylvania

Dissertation: Studies on the Pharmacology and Peripheral Mechanism of Fenfluramine Hcl
Dissertation Director: Joseph P. Buckley, Ph.D.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

2011-present ***Professor and Head Emeritus***

1993-2011 Professor and Head, Department of Pharmacology, College of Medicine, University of Arizona; Professor, Department of Pharmacology and Toxicology and Anesthesiology, Tucson, Arizona

1990-2001 Director, Center for Toxicology, University of Arizona, Tucson, Arizona

1994-2000 Director, Southwest Environmental Health Sciences Center, University of Arizona, Tucson, Arizona

1982-2001 Professor and Head, Department of Pharmacology and Toxicology, College of Pharmacy and Professor of Pharmacology and Anesthesiology, College of Medicine, University of Arizona, Tucson, Arizona

1978-1982 Associate Professor of Pharmacology and Toxicology, College of Pharmacy and Associate Professor of Pharmacology and Anesthesiology, College of Medicine, University of Arizona, Tucson, Arizona

1975-1978 Assistant Professor of Toxicology, University of Arizona, Tucson, Arizona; Assistant Professor of Pharmacology and Anesthesiology, College of Medicine, University of Arizona, Tucson, Arizona

1973-1975	Assistant Professor of Pharmacology, University of Arizona, Tucson, Arizona, Visiting Scientist, Hoffmann - La Roche (Fellow)
1971-1973	College of General Studies Special Lecturer, George Washington University, Washington, D.C. (Off-campus lecturer on drug abuse of military personnel, law enforcement officers, clergy, nurses)
1971-1973	Senior Staff Fellow, National Heart, Lung and Blood Institute, National Institutes of Health **JR Gillette, advisor**
1969-1971	Staff Fellow, National Heart, Lung and Blood Institute, National Institutes of Health **BB Brodie, advisor**

MAJOR FIELD:

Major emphasis in teaching and research is in the areas of biochemical pharmacology and biotoxicology.

Biochemical Pharmacology:

- Identification of drug metabolites excreted by animals and man
- Pharmacokinetics of drug disposition
- Factors affecting drug metabolism
- In vitro systems for species comparison of drug metabolism

Toxicology:

- Mechanisms of chemical-induced tissue injury with specific interest in chemical induced liver injury. Current research activities include:
- Bioactivation of halogenated hydrocarbons and the role of reactive metabolites in liver injury
- Role of Kupffer cells in the initiation and progression of liver injury
- Reproductive toxicology mechanism(s) by which vinylcyclohexene and related compounds produce ovarian toxicity, reproductive failure and ovarian carcinogenesis.

EDITORIAL DUTIES:

Life Sciences
Associate Editor, 1973 to 2006
J. Biochemical Toxicology
Editorial Board Member, 1985 to 1992.
Environmental Toxin Reviews
Editorial Board Member, 1984 to 1990.
Quality Assurance Journal
Editorial Board Member, 1990 to 1999.
Editorial Board, 1981-1984

Reviewer for:

Journal of Pharmacology and Experimental Therapeutics
Carcinogenesis
Chemico-Biol. Interactions
Drug Metabolism and Disposition
Hepatology
Biochemical Pharmacology
Toxicology and Applied Pharmacology
Editorial Board, 1981-1984
Associate Editor, 1984-1985
Editor, 1985 to 1992
Methods in Toxicology
Editorial Advisory Board Member for Academic Press, Inc., 1990
Annual Review of Pharmacology and Toxicology
Editorial Committee 1992-1997
***Comprehensive Toxicology*, Elsevier Science LTD.**
Editor-in-Chief: Pergamon, 1995 to 2000, a 12 volume reference series
Toxicology and Ecotoxicology News/Reviews
Editorial Board, 1997-2000
Current Protocols in Toxicology
Associate Editor, 1998 to 2003
Biological Reactive Intermediates V: Basic Mechanistic Research in Toxicology and Human Risk Assessment. Advances in Experimental Medicine and Biology
Editor:, Volume 387. Eds. R. Snyder, J.J. Kocsis, I.G. Sipes, G.F. Kalf, D.J. Jollow, H. Greim, T.J. Monks and C.M. Witmer, Plenum Press, New York, 1996
Molecular Interventions
Editorial Advisory Board Member for ASPET, 2000
Biological Reactive Intermediates IV. Chemical and Biological Mechanisms in Susceptibility to and Prevention of Environmental Diseases
Editor:, Eds. P.M. Dansette, R. Snyder, M. Delaforge, G.G. Gibson, H. Greim, D.J. Jollow, T. J. Monk and I.G. Sipes, Kluwer Academic/Plenum Publishers, New York, 2001

SOCIETY MEMBERSHIPS AND OFFICES HELD:

Foundation for Advanced Education in the Sciences (sponsored by NIH Alumni)
American Society of Pharmacology and Experimental Therapeutics (ASPET)
Editorial Advisory Board Member on Molecular Interventions, 2000
Councilor, 1998-2001
Society of Toxicology
Membership Committee, 1982-1985
Secretary, 1985-1987
Councilor, 1987-1989
Vice-President Elect, 1991
Vice-President, 1992
President, 1993
Board of Publications, 1985-1990
Commission - TOX 90s

Burroughs Wellcome Toxicology Scholar Advisory Committee (1991-1993)
Section on Mechanisms - Society of Toxicology
Secretary-Treasurer, 1982-1984
Vice President, 1984-1985
President, 1985-1986
Councilor, 1986
Western Pharmacology Society
Society for Experimental Biology and Medicine
International Union of Pharmacology (IUPHAR) Section on Toxicology
Program Committee Member for IUPHAR, 2002
International Union of Toxicology (IUTOX)
Councilor 1988 to present; Nominating Committee 1992-1995
President 1998-2001
International Society for the Study of Xenobiotics
Charter Member
Councilor 1992-1995
American Association for Cancer Research
Association of University Anesthetists
American Association for the Study of Liver Diseases
American Association for the Advancement of Science
Elected, Member-at-large - Pharmaceutical Sciences Section 1992-1995
Chair of Pharmaceutical Science Section 1997-1998
Association for Medical School Pharmacology
Councilor

FELLOWSHIPS/TRAVEL GRANTS:

NIH Predoctoral Fellowship (1965-1969)
NIH Staff Fellowship (1969-1973)
Recipient: ASPET Travel Grant to Sixth, Seventh International Congresses of Pharmacology; Helsinki, 1975, Paris, 1978
Research Fellowship, Japanese Society for the Promotion of Science (April 1, 1980 to March 31, 1981)

HONORS:

Cum Laude, University of Cincinnati
Rho Chi (elected 1964)
Sigma Xi (elected 1967)
American Men and Women of Science
Burroughs Wellcome Toxicology Scholar Award, 1985-1990. Includes $250,000 award for program and career development.
Fellow - American Association for the Advancement of Sciences (elected 1987).
Burroughs Wellcome Visiting Professor - Northeast Louisiana University, April 1993
President - Society of Toxicology 1993-1994
President - International Union of Toxicology 1998-2001
Fellow - Academy of Toxicological Sciences (elected, 2000); President 2008-09.

Distinguished Alumni, University of Cincinnati, 1998.
Distinguished Alumni, University of Pittsburgh 2007.
Ambassador, Mid Atlantic Section, Society of Toxicology, 2007.
Distinguished Service Award as President of The Academy of Toxicological Sciences, 2009.
Distinguished Scientist Award from the American College of Toxicology, 2011
Mildred S Chrisitan Career Achievement Award from The Academy of Toxicological Sciences 2015

STUDY SECTIONS, ADVISORY BOARDS, CONSULTANTSHIPS:

Advisory Board for the Toxicology Research and Training Center in the Department of Sciences of John Jay College of Criminal Justice, 1987-1991
NIH Study Sections:
Toxicology Study Section 1980-84; Chairman 1983-84; ad hoc member 1986;
Ad Hoc Study Section (Chairman) - Hematology, 1986
Site Visit - University of Texas, Austin, 1985
Toxicology Training Grant Review, University of Rochester, 1987
National Advisory Environmental Health Sciences Council, 1996-1999.
NAS/NRC Committee on Comparative Toxicology of Naturally Occurring Carcinogens, Washington, D.C.
U.S.-Mexico Workshop on Environmental Health, March 26-28, 1995.
National Research Council/National Academy of Sciences
Board on Environmental Studies and Toxicology, 1987-1991
Committee on Toxicology, 1987-1990
External Peer Reviewer for NIEHS Intramural Collaborative Programs
EPA Peer Review Panel on Specific Toxicology of Chemicals Identified in Drinking Water. On-site review, Cincinnati, Ohio, April 5-8, 1983.
External Reviewer - National Health Research and Development Program, Health and Welfare Department, Canada
Life Systems - Consultant for Justice Department and EPA
Chronic Hazard Advisory Panel on DEHP, U.S. Consumer Product Safety Commission, 1985
State of Nebraska Review Panel for Cancer and Smoking Disease Grants Program, 1985, 1986, 1987
External Reviewer - Departments of Pharmacology and Department of Biochemical Pharmacology and Toxicology, University of Utah
External Reviewer - Graduate Program in Toxicology, Rutgers University, New Jersey
Scientific Advisory Panels, Procter and Gamble, Inc. 1986, 1988, 1998
American Cyanamide: Lederle-Medical Development Advisory Board, 1988-1989
Technical Resources, Inc. - Document Review for ATSDR - Trichloroethylene
The Upjohn Company Scientific Advisory Board, 1989-1991
External Advisory Board Institute Chemical Toxicology, Wayne State University, 1988-1991
Eastern Research Group - Consultant, 1990
External Reviewer, Environmental and Occupational Health Sciences Institute, Rutgers University, New Jersey

Arizona Department of Environmental Quality and Human Health Toxic's Peer Review Committee, July 1,1989 to June 30, 1990
Merck, Sharpe, and Dohme - Safety Assessment Advisory Committee, 1990-1995
Science Advisory Board for Superfund Basic Research Initiative, University of Washington, 1990-present
Liver Advisory Panel - Norwich Eaton Company, 1991-1994
Panel for "Technologies for Testing and Review of Chemicals in Commerce", U.S. Congress Office of Technology Assessment, 1995-present
Connecticut United for Research Excellence, Inc. National Advisory Council, July 1995-1998
Dow Corning Corp., Siloxane Science Advisory Board, December 1, 1994-2002.
The KEVRIC Company, Consultant, November 1994-2002.
Research Institute for Fragrance Materials, Inc., Expert Panel, 1996-present; Chair 2005-present
Searle Scientific Advisory Group, 1993-1996
Schering-Plough Research Institute, Consultant, 1999-2002
Technical Advisor - World Health Organization/FAO Joint Expert Committee on Food Additives, 1999-present
American Plastics Council, January 2001-2006
Procter & Gamble, Human Safety Community of Practice Summit, Keynote Address Toxicology: Choosing the Appropriate Model Asking the Right Questions, February, 2001
University of Kentucky, Toxicology Program Review, April, 2001
USEPA – External Reviewer, Environmental Toxicology Division 2004; 2007

FDA Generally Recognized As Safe (GRAS) – Panel Member:

Burdock Group

- Status of MLCT-Oil as a Food Ingredient
- Status of Cocoa Shell Powder as a Food Ingredient
- Status of Optimism® (Mehtylsulfonylmethane) as a Food Ingredient
- Status of SE5-OH as a Food Ingredient
- Status of Polyglycoplex® as a Food Ingredient
- Status of Rebaudioside A as a Food Ingredient
- Status of a Citrus Fiber Product as a Food Ingredient

Status of Hydroxytyrolol as a Food Ingredient
Status of TA-65 as a Food Ingredient
Status of Caffeine as a Food Ingredient in Energy Drinks-Monster

Cargill Incorporated

- Evaluation of Regiana as a General Purpose Sweetening Agent
- Evaluation of Glucohydrate

CANTOX

- Evaluation of Fenugreek Galactomannan

Evaluation of Rebaudioside A

INTERTEK

Evaluation of Steviol Glycosides from S. cerevisiae
Evaluation of Polysorbate 65 as an Emulsifer in Gum and Mints
Evaluation of BHA and BHA for Use as Antioxidants in Supplements

Evaluation of Taurine for Use in Enhanced Water Beverages
Evaluation of Polysorbates 20 and 80 as Emulsifiers in Supplements
Evaluation of L-Arginine as GRAS as Ingredient in Energy Drinks

RESEARCH SUPPORT:

$30,000 - Hoffmann-LaRoche 1973-1975.
Studies on the metabolism and pharmacokinetics of bumetanide.
Status: Completed

$1,000 - American Cancer Society 1974-1975.
Effects of Polychlorinated Biphenyls on the Metabolism and Covalent Binding of Dimethylnitrosamine.
Status: Completed.

$35,000 - Hoffmann-LaRoche 1975-1976.
Studies on the metabolism and covalent binding of hepatotoxins and hepatocarcinogens to tissue macromolecules.
Status: Completed.

$5,500 - Hoffmann-LaRoche 1975-1976.
Studies on the metabolism and disposition of ^{14}C-bumetanide; a potent new diuretic.
Status: Completed.

$1,800 - American Cancer Society 1976-1977.
Role of lipoperoxidation in chemical carcinogenesis.
Status: Completed.

$124,853 - National Institute of Arthritis and Metabolic Diseases, NIH.
Studies of inhalation anesthetic hepatotoxicity. Principal Investigator: Burnell R. Brown, Jr., M.D., Ph.D., Co-Investigator: I. Glenn Sipes, Ph.D., 06/011/76 - 05/31/79.
Status: Completed.

$194,355 - NIH-NIEHS.
Extrapolation of PCB deposition. Principal Investigator: I. Glenn Sipes, Ph.D., 04/20/77 - 06/30/78.
Status: Completed.

$64,906 - NIH-NIEHS.
Continuation for extrapolation of PCB deposition. Principal Investigator: I. Glenn Sipes, Ph.D., 10/20/78 - 10/19/79.
Status: Completed.

$189,410 - National Cancer Institute, NIH.
Activation and binding of organohalogen carcinogens. Principal Investigator: I. Glenn Sipes, Ph.D., 09/01/77 - 08/31/80.

Status: Completed.

$124,256 - Department of the Navy.
Oxygen toxicity and lung collagenous protein. Principal Investigators: I. Glenn Sipes, Ph.D. and Klaus Brendel, Ph.D.
Status: 09/01/77 - 02/28/81.
Status: Completed.

$129,970 - NIH-NIAMD.
Studies of inhalation anesthetic hepatotoxicity. Co-Investigator: I. Glenn Sipes, Ph.D., Principal Investigator: B.R. Brown, Jr., M.D., Ph.D., 07/01/79 - 06/30/82
Status: Completed.

$717,180 - NIH-NIEHS.
Pharmacokinetics of xenobiotics. Principal Investigator: I. Glenn Sipes, Ph.D., Co-Investigator: Dean E. Carter, Ph.D. 8/18/78 - 9/14/83.
Status: Completed.

$100,697 - T32-ES07091.
Graduate Training Program in Environmental Toxicology. Principal Investigator: I. Glenn Sipes, Ph.D. 7/1/83 - 6/30/84.
Status: Completed.

$281,523 - CR-811903-01-1. Environmental Protection Agency.
Pharmacokinetics of Disinfection By-products. Principal Investigator: I. Glenn Sipes, Ph.D., Co-investigator: Dean E. Carter, Ph.D. 11/19/84 - 11/18/87.
Status: Completed.

$1,363,244 - N01-ES35031.
Studies on Chemical Disposition in Mammals. Principal Investigator: I. Glenn Sipes, Ph.D., Co-Investigator: Dean E. Carter, Ph.D. 9/14/83-9/14/88.
Status: Completed.

$629,812 - T32-ES07091
Graduate Training Program in Environmental Toxicology. Principal Investigator: I. Glenn Sipes, Ph.D. 7/1/84 - 6/30/93. Status: Completed.

$499,320 - CR-812557-01-0. Environmental Protection Agency.
Investigations into a mechanistic approach to predicting interactions between drinking water pollutants. Principal Investigator: I. Glenn Sipes, Ph.D.
Status: Completed.

$300,000 - NIEHS RO1-ES-03438.
Animal Models of Alcohol-related Cancers. Principal Investigator: I. Glenn Sipes, Ph.D., Co-Investigator: Siraj Mufti. 2/1/85-1/31/89.
Status: Completed.

$60,000 - March of Dimes.
Ovarian Failure Induced by Environmental and Occupational Chemicals. Principal Investigator: I. Glenn Sipes, Ph.D. 1/1/90-12/31/91.
Status: Completed.

$110,000 - Procter and Gamble.
For studies on the toxicity and efficacy of new diphosphenates.

Status: Completed.

$250,000 - Burroughs Wellcome
1985 Toxicology Scholar Award Recipient. 9/1/85-8/31/90.
Status: Completed.

$1,490,501 - N01-ES55112 NIEHS.
Methods development to assess human metabolism of chemical xenobiotics, Principal Investigator: I. Glenn Sipes, Ph.D., Co-Investigators: Klaus Brendel and A. Jay Gandolfi. 9/30/85-8/31/90.
Status: Completed.

$1,768,953 - N01-ES85230.
Studies of Chemical Disposition in Mammals. Principal Investigator: I. Glenn Sipes, Ph.D., Co-Investigators: Michael Mayersohn, Ph.D., A. Jay Gandolfi, Ph.D., and Klaus Brendel, Ph.D. 9/15/93 - 9/14/98.
Status: Completed.

$100,000 - Basic Acrylic Monomers.
Investigations into the disposition and metabolism of acrylic acid. Principal Investigator: I. Glenn Sipes, Ph.D. 1/1/90-12/31/91.
Status: Completed.

$544,044 - Project III - Alcohol: Immunomodulation and Disease Pathogenesis - Program Project.
Principal Investigator: D. Earnest; Co-investigator, I. Glenn Sipes, Ph.D. 9/30/88-9/29/93.
Status: Completed.

$174,000 - NIEHS Post-doctoral Fellowships.
Sponsor for Drs. Richard Dart, David Steup, Stephen Hooser and Rhonda Rosengren.
Status: Completed.

$2,731,045 - N01-ES35367.
Studies of Chemical Disposition in Mammals. Principal Investigator: I. Glenn Sipes, Ph.D., Co-Investigator: Michael Mayersohn. 9/15/98-9/15/03.
Status: Completed.

$36,000 - Center for Alternatives to Animal Research.
Development of co-cultures of hepatocytes and Kupffer cells. 2/1/92-1/31/94.
Status: Completed.

$51,304 - F31-DK08717
Minority Predoctoral Fellowship for Dwayne Hill.
Status: Completed.

$568,649 - R01-ES06095.
Kupffer Cell Modulation of Chemical-induced Liver Injury. Principal Investigator: I. Glenn Sipes, Ph.D. 8/1/92-7/31/96.
Status: Completed.

$4,394,505 - P30-ES06694
Southwest Environmental Health Sciences Center, Environmental Health Sciences Core Center Grant. Principal Investigator: I. Glenn Sipes, Ph.D. 4/01/94-03/31/99.
Status: Completed.

$26,105 - American Petroleum Institute.

Assessment of Liver Macrophage Function During Subchronic Feeding of Mineral Hydrocarbons in Two Strains of Rats. 3/1/96 - 6/30/99.
Status: Completed.

$23,934 - American Petroleum Institute.
Pilot Pharmacokinetic Studies on Mineral Hydrocarbons (MHC). 4/21/98 - 1/31/2000.
Status: Completed

$880,677 - T32-ES07091
Graduate Training Program in Environmental Toxicology. Principal Investigator: changed to Daniel C. Liebler, Ph.D. (07/01/00). 7/1/94-6/30/00.
Status: Completed.

$50,000 - Chemical Manufacturers Association
Reproductive Toxicology Program. Principal Investigator: I. Glenn Sipes, Ph.D. 9/01/94.
Status: Completed.

$106,965 - T35-ES07297
Short Term Research Training for Minority Students. Principal Investigator: I. Glenn Sipes, Ph.D. 4/01/95-3/31/00.
Status: Completed.

$233,339 - The Society of the Plastics Industry, Inc.
In Vitro Metabolism of Bisphenol A (BPA): Age and Species Differences. 8/01/98-6/30/05.
Status: Complete

$6,217,375 - P30-ES06694.
Southwest Environmental Health Sciences Center, Environmental Sciences Core Center Grant. 4/1/99 - 3/31/2003. Principal Investigator changed to Serrine Lau, Ph.D. 3/31/05.
Status: Current.

$871,987 - R01-ES08979.
Environmental Epoxides - Mechanisms of Ovotoxicity. Co-Investigator: I. Glenn Sipes, Ph.D., Principal Investigator: Patricia B. Hoyer, Ph.D. 2/1/99 - 1/31/2003.
Status: Completed.

$708,568 - R01 ES09246.
Signaling Pathways in Chemical-Induced Ovotoxicity. Co-Investigator: I. Glenn Sipes, Ph.D., Principal Investigator: Patricia B. Hoyer, Ph.D. 8/1/99 - 7/31/2003.
Status: Complete.

$3,785,648 – N01-ES45529
Studies of Chemical Disposition in Mammals.
Principal Investigator: I. Glenn Sipes, Ph.D. 10/1/04-9/30/10.

$1,075,000 - R01 ES09246.
Signaling Pathways in Chemical-Induced Ovotoxicity. Co-Investigator: I. Glenn Sipes, Ph.D., Principal Investigator: Patricia B. Hoyer, Ph.D. 8/1/99 - 7/31/2003.

$40,000 -Daiichi Asubio Pharma, Japan, Drug Development, 2006

$756,250 - Signaling Pathways in Chemical-Induced Ovotoxicity. Co Investigator: NIEHS, I. Glenn Sipes, Ph.D., Principal Investigator: Patricia B. Hoyer, Ph.D. 07/01/09-06/30/11.

TEACHING RESPONSIBILITIES:

Previous Teaching

Toxicology 602 - Class coordinator and major instructor (14-22 hrs of lecture) for this graduate level one semester course on organ and cellular toxicity, 1975 to 2003. Average enrollment has been 18-25 graduate students. Course consists of 15 two-hour lectures, 2 three-hour examinations and one final examination.

Toxicology 602 b: Coordinator of this 1 unit laboratory course which emphasizes the appropriate use of animals in research. Eight-ten laboratory sessions of 3-5 hr. 1975-1985.

Toxicology 596 a: Advanced Toxicology Seminar. Coordinated this one-hour seminar series presented in the Fall semesters of 1976-77, 1977-78, 1978-79, 1979-80, 1981-82, and 1982-83.

Pharmacology 436: Principles of Pharmacology and Drug Metabolism, 5-8 hours of lectures on biotransformation of drugs.

Pharmacology 420: Case Studies in Pharmacology. A one unit case oriented discussion group. Wrote one case and facilitated four other cases.

Pharmacology 471 a and b: Principles of Pharmacology for Pharmacy students. 15-20 hours of lecture per year on biotransformation, dose response, anesthetics, antianginal agents, antihypertensives, congestive heart failure.

Pharmacology 472: Pharmacology for Nurses, 6-8 hours of lecture per year on general anesthetics, and local anesthetics, antihypertensives.

Pharmacology 501: The Pharmacological Basis of Therapeutics for second year medical students College of Medicine, Department of Pharmacology. Lectures are on drug metabolism and factors affecting drug disposition.

Pharmacology 550: Drug Disposition and Metabolism. This is a two-unit graduate course offered yearly by the College of Medicine, Department of Pharmacology. Average enrollment is 16 graduate students. In the past coordinated the course and/or shared one-fourth of the lectures.

Pharmacology 474 - Clinical Toxicology - One to three lectures per year and for third year pharmacy students.

Pharmacology 472 a and b - (Applied Pharmacology): "General Principles; Anti-infective Drugs; and Antineoplastic Drugs", September 24-25, 1982, Yuma Regional Medical Center, Yuma, Arizona; and Sierra Vista, October 8, 1988.

Current Teaching

ArizonaMed: facilitator for DMH-CBI, 2007 to present.
substitute facilitator for CPR-CBI, 2008-present.

UNIVERSITY, COLLEGE, DEPARTMENTAL COMMITTEES:

Toxicology Curriculum Development Committee
Toxicology Admissions Committee, 1977-1982
Phase III Subcommittee - Medical School 1975-1978
Interviewer of Medical School Applicants: 1975-1980; 2005 to present
Toxicology Program Committee, 1975-1982
Participant Member, Cancer Center - Arizona Health Sciences Center
Safety Liaison Officer, Department of Anesthesiology 1976-1982
Temporary Building Management Committee - College of Medicine, Chairman 1978-1982
Search Committees for:
- Department of Pharmacology faculty member, College of Medicine, 1979
- Head, Division of Community and Environmental Health, 1989
- Faculty member, Department of Entomology, 1990
- Director Basic Science Research, Cancer Center, 1990
- Vice Dean of Graduate College and Assistant Vice President of Research, 1990 (Chair)
- Head, Department of Pharmaceutical Sciences, 1991 (Chair)
- Head, Department of Pharmacy Practice, 1991 (Chair)
- Head, Department of Nutrition and Food Science, 1991
- Head, Department of Pharmacology, College of Medicine, 1991
- Head, Arizona Cancer Center, 1999
- Head, Arizona Liver Center, 1999
- Manager, Radiation Control, 1999

Graduate Committee - Program in Pharmacology and Toxicology, 1982-2001 (Chairman, 1982-1989)

Self Study Committee - College of Pharmacy - 1982-83; 1989-90
Executive Committee - College of Pharmacy - 1982 to 2001
Ad Hoc Promotion and Tenure Committee - College of Pharmacy - 1983
Promotion and Tenure Committee, Department of Pharmacology, College of Medicine
Biological Sciences Council – 1988-1992 to present
Committee of Biological Sciences Department Heads - 1988 to present; Chair, 1990-1991
Review Committee - Head of Exercise and Sports Science - 1990-1991
Dean's Council - College of Medicine - 1993 to present
Faculty Compensation ad hoc Committee, 2005
Faculty Rewards ad hoc committee, 2005
Evaluation of Faculty in Center Committee, 2009

NATIONAL AND INTERNATIONAL COMMITTEES:

Liaison Committee Society of Toxicology - ASPET 1980-1981
ASPET - Committee on Environmental Toxicology 1981-1983
ASPET - Committee for B.B. Brodie Award in Drug Metabolism
Expert Panel Member - for Rehabilitation of the Love Canal Emergency Declaration Area - Sponsored by EPA, CDC and New York Department of Health, 1985-1986; 1998 to present
Organizer - 4th International Symposium on Biological Reactive Intermediates, Tucson, AZ, Jan. 13-17, 1990.
Organizer - 5th North American Meeting of the International Society for the Study of Xenobiotics. Tucson, AZ, October 17-23, 1991.
Organizing Committees - International Symposia of Biological Reactive Intermediates, 1980,1985, 1990, 1995, 2000.
NAS/NRC Committee on Comparative Toxicology of Natural Carcinogens
Member of Organizing Committee, Sixth International Symposium on Biological Reactive Intermediates (BRI-VI), Paris, France, July 16-20, 2000.

DISSERTATION AND POSTDOCTORAL MAJOR ADVISOR:

M.S. in Toxicology: Director and Major Advisor

Thomas Podolsky	Kathleen Cater	Elizabeth Sikorski
Marguerite Slocumb	Mary Jo Miller	Lhanoo Gunawardhana
Steve Haag	Thomas Ziegler	Sanjeev Thohan
Thomas L. Evans	Ronald MacFarland	Lisa Parola
Mark LaFranconi	Richard Lind	Deborah Douds
Bruce Ryerson	Frank Plescia	Latresa Billings
Richard Jee	Sally Masters	Jason Halladay
Barbara Larcom	Robert Nenad	Jacob Pritchett
John MacDonald	Deborah Douds	Robert Kuester
Janine Eisenphar	Debra Randall	Cathy Sweet
Gary Bignami	Tamra Goodrow	Golriz Rad

Ph.D. in Pharmacology & Toxicology: Director and Major Advisor

Steven Halladay--co-director with Dean E. Carter (present position: Associate Medical Director, Syntex Laboratories, Palo Alto, California)

Michael L. Cunningham--director (present position: Staff Fellow, NIEHS, Research Triangle Park, NC)
Russell White--director (present position: Chevron Environmental Health Ctr., Richmond, CA)
Carl Potter--co-director (former position: Health Effects Research Laboratory, US EPA, Cincinnati, OH) deceased
Matthew Miller--co-director (present position: Professor and Chair, Department of Pharmaceutical and Biomedical Sciences, South Carolina College of Pharmacy)
Ricky G. Schnellmann--director (present position: Professor, Division of Toxicology, University of Arkansas Medical Sciences, Little Rock, AR)
John MacDonald--director (present position: MGI Pharmaceuticals Inc., Minneapolis, MN)
David Duignan--co-director (present position: Associate Research Fellow, Pfizer Inc., Groton, CT)
Thomas Petry--director, (present position: The Upjohn Company, Pathology and Toxicol. Res. Unit., Kalamazoo, MI)
Eric Stine—deceased (former position: Toxicologist, Chevron Env. Hlth. Ctr., Richmond, CA)
Alaa El Sisi--director: (present position: Faculty, University of Tanta, Egypt)
Bill Smith--director: (present position: Senior Toxicologist, The Procter and Gamble Co.)
Greg Weber--director: (present position: Scientist, Div. of Drug Metabolism, The Upjohn Co.)

Scott Mobley--director: (present position: Toxicologist, Tomen Agro, Inc.)
David Dutton – Co-director, (present position: Pfizer, Groton, CT)
Lhanoo Gunawardhana--director: (present position: Abbott Labs, Abbott Park, IL)
Kevin Salyers—deceased (former position: Scientific Director, Amgen Pharmaceuticals)
Dwayne Hill--director: (present position: Postdoc, Michigan State University, E. Lansing, MI)
John-Michael Sauer--director: (present position: Senior Pharmacologist, Eland Pharmaceuticals, San Francisco, CA)
Drew Badger--director: (present position: Senior Director, Toxicology and Regulatory Affairs, Amira Pharmaceuticals, San Diego, CA)
Julie Doerr-Stevens--director: (present position: Molecular Biosystems, Inc., San Diego, CA)
Thomas Ziegler--director: (present position: U.S. Geological Survey, Denver, CO)
Susan Fontaine--director: (present position: Research Scientist, In-Vitro Technologies, San Diego, CA)
Jennifer Burkey--director: (present position: Research Scientist, Eli Lilly & Co., Indianapolis, IN)
Ellen Cannady-- director: (present position: Research Scientist, Eli Lilly & Co, Indianapolis, IN)
Husam Younis-- director: (present position: Research Scientist, Pfizer Pharmaceuticals, La Jolla, CA)
Jason Halladay-- director: (present position: Research Scientist, Genetech,

San Francisco, CA)
Robert Kuester–director: (present position: Research Associate, University of Arizona)
Yaofeng Cheng, Postdoctoral Research Scientist, Novartis
Weixi Kong, current student
Gabriel Knudsen, current student

Research Associates and Post-Doctoral Fellows

Ramadasan Kuttan, Ph.D. -- Research Associate, 10/01/77 - 06/30/79 (present position - Faculty member, Amala Cancer Research Centre; Trichur, India)
Richard Maiorino, Ph.D. -- Postdoctoral fellow, 10/01/77 - 12/31/81 (present position - Research Associate, Dept. of Molecular & Cellular Biology, University of Arizona, Tucson, AZ)
Louis J. Zimmer, Ph.D. -- Postdoctoral fellow, 10/01/78 - 09/01/79 (present position - Private practice, Psychologist, 312 Stonecrest, Rockwall, Texas 75087)
David Sundheimer, M.D., Ph.D. -- Postdoctoral fellow, 07/01/80 - 05/15/81 (present position - Physician, Tucson, Arizona)
Robert Volp, Ph.D. -- Postdoctoral fellow, 03/01/81 - 10/01/82 (present position - Associate Professor, Dept. of Chemistry, Murray State University, Murray, Kentucky)
David Wiersma, Ph.D. -- Postdoctoral fellow, 01/01/81 - 12/31/84 (present position - Associate for Tech. Transfer, Research Corporation of America, Tucson, AZ)
Siraj Mufti, Ph.D. -- Associate Research Scientist, 1989-1995 (present position - Chaplin, Department of Corrections, Phoenix, AZ)
David Eigenberg, Ph.D. -- Postdoctoral fellow, 10/15/82 - 04/30/84 (present position - Corporate Toxicologist, Mobay Corp., Stilwell, KS)
Donna McMillan, Ph.D. -- Postdoctoral fellow, 04/01/86 -0 3/31/88 (present position - Procter and Gamble Co., Hlth. and Personal Care Div., Cincinnati, OH)
Genevieve Krack, Ph.D. -- Visiting Scientist from Catholic University of Louvain, Brussels, Belgium, 09/01/84 - 08/30/85
John Barr, Ph.D. -- Visiting Scientist, 02/01/85 - 07/13/90 (current position - Senior Scientist, Cortech, Denver, CO)
Alan Weir, Ph.D. -- Visiting Scientist, 04/01/86 - 04/01/88 (current position - Toxicologist, Smith Kline Beecham, Brussels, Belgium)
David Steup, Ph.D. -- Postdoctoral fellow, 07/01/88 - 06/30/91 (current position - Toxicologist, Equiva Services, LLC, Houston, TX)
Steven Winter, Ph.D. -- Assistant Research Scientist, Tucson, AZ, 02/23/87 - 12/20/92 (current position - Toxicologist, Pfizer Pharmaceutical Co., Groton, CT)
Stephen B. Hooser, D.V.M., Ph.D. -- Postdoctoral fellow, 5/01/89 - 4/02/93 (current position - Assistant Professor, Animal Disease Diagnostic Laboratory, Purdue University, West Lafayette, IN)
Rhonda Rosengren, Ph.D. -- Postdoctoral fellow, 07/01/91 - 01/31/94 (current position - University of Otago Medical School, Dunedin, New Zealand)

Wei Zheng, Ph.D. -- Postdoctoral fellow, 07/01/91 - 07/30/93 (current position - School of Public Health, Division of Environmental Sciences, New York City, NY)
Lhanoo Gunawardhana, Ph.D. -- 11/1/92 - 12/20/93 (current position - TAP Pharmaceuticals, Deerfield, IL)
Usha Pillai, Ph.D. -- Postdoctoral fellow, 07/01/93 - 10/01/95 (current position - Research Scientist, Pfizer Pharmaceutical Co., Groton, CT)
John-Michael Sauer, Ph.D. -- Postdoctoral fellow, 02/01/96 -10/24/97 (current position - Senior Pharmacologist, Eli Lilly & Co., Indianapolis, IN)
Niel Hoglen, Ph.D. -- Postdoctoral fellow, 11/01/93 - 11/01/98 (Current position - Research Scientist II, Idun Pharmaceuticals, Inc., La Jolla, CA)
Jing Qi Bao -- Visiting Scientist from Shanghai Second Medical University, 10/31/94 - 07/01/98 (current position - Research Scientist, Eli Lilly & Co., Indianapolis, IN)
Kazuyuki Kitamura, DVM -- Visiting Scientist from Tanabe Seiyaku Co., Ltd., Osaka, Japan, 10/01/94 - 09/30/95
Hironobu Ishiyama, Ph.D. -- Visiting Scientist from Otsuka Pharmaceutical Co., Inc., Japan, 1997-1999 (current position - Research Scientist, Otsuka Pharmaceutical Co., Inc., Japan)
Aniko Solyom, Ph.D.- Assistant Research Scientist, 1999-2006
Simone Höehle, Ph.D.-Technical Expert, Germany, 2007
Yoshiyuki Igawa, Ph.D.-Visiting Sci. from Daiichi Asubio Pharma, Japan, 2007
Robert Kuester, Ph.D. – Research Associate, University of Arizona, 2006-present

Served on the MS or PhD Advisory Committees for over 100 students representing 8 different degree programs

PROFESSIONAL ACTIVITIES AND RECOGNITION OTHER THAN ACADEMIC:

- Laboratory of Chemical Pharmacology, National Heart, Lung and Blood Institute, National Institutes of Health. Studies on the Peripheral Mechanism of Action of Fenfluramine, March 3, 1969.
- University of Pittsburgh, Department of Pharmacology. Mechanism of Drug Induced Liver Injury, April 1973.
- University of California, Medical Center, San Francisco, Department of Pharmacology. Biotransformation of Xenobiotics: Correlation with Tissue Damage, January 1975.
- University of California, Medical Center at Los Angeles, Department of Pharmacology. Metabolism and Binding of Xenobiotics and Their Relationship to Tissue Injury, June 1976.
- 12th Annual Southwest Safety Congress, Tucson, Arizona. Toxicity of Inhalation Anesthetics and Related Compounds, March 14-16, 1977.
- Medicine 596e - Occupational and Environmental Health Seminar: June 7, 1977
- University of Bonn, Medizinische Klinik and Department of Anaesthesiologie, Bonn, West Germany. Bioactivation and Covalent Binding of Halothane as Vectors in Halothane Hepatotoxicity, September 8, 1977.

- Karolinska Institute, Department of Clinical Pharmacology, Huddinge, Stockholm, Sweden. Bioactivation of Halothane: Correlation with Hepatotoxicity, September 28, 1977.
- Stanford University and Veterans Hospital, Department of Anesthesiology. Bioactivation of Halothane: Correlation with Hepatotoxicity, November 1977.
- Annual Meeting, Association of University Anesthetists, Tucson, Arizona. Biotransformation and Covalent Binding of Anesthetics and Hepatotoxicity, April 13-15, 1978.
- Department of Hematology/Oncology, University of Arizona, Bioactivation and Interaction of Chemical Carcinogens with DNA and Other Tissue Constituents, May 30, 1978
- St. Mary's Hospital and the University of London, London, England. Animal Models of Halothane Hepatotoxicity, July 6, 1978.
- Clinical Research Center: Division of Anaesthesia of the Medical Research Council, Northwick Park Hospital, Harrow, England. Bioactivation of Halothane: Its Role in Halothane Hepatotoxicity, July 7, 1978.
- Drug Metabolism Section: Imperial Chemical Industries (MacClesfield, UK). Animal Models of Halothane Hepatotoxicity, July 11, 1978.
- University of Arizona, College of Pharmacy Seminar, Tucson, Arizona. Studies of Halothane Hepatotoxicity, November 15, 1978.
- Southwest Desert Symposium in Anesthesiology, Tucson, Arizona. Lecture I - Structure and Function of the Cell; Lecture II - Search for Animal Models to Explain Inhalation Anesthetic Toxicity, February 2-4, 1979.
- Arizona Center for Occupational Safety and Health, Tucson, Arizona. Nursing Update: Occupational Carcinogenesis, Mutagenesis. Feb. 11-14, 1980.
- Duke University. Bioactivation of Halothane: Correlation with Hepatotoxicity, April 30, 1980.
- Chemical Industries Institute for Toxicology. Bioactivation of Halothane: Correlation with Hepatotoxicity, May 1, 1980.
- National Institute of Environmental Health Sciences Research, Triangle Park, NC. Studies on the In Vitro Biotransformation of PCBs, May 2, 1980.
- Laboratory Chemical Pharmacology, NHLBI/NIH Bethesda, Maryland. Halothane: Biotransformation and Hepatotoxicity, April 25, 1980.
- University of California at Santa Barbara. Species Variation in the Distribution and Metabolism of PCBs, January 9, 1981.
- University of Minnesota. Halothane Associated Liver Injury: Role of Biotransformation, May 19, 1981.
- Medical College of Wisconsin. Halothane Associated Liver Injury: Role of Biotransformation, May 20, 1981.
- Invited Lecturer - Lectures on: Factors Affecting the Disposition of PCBs and on Hepatotoxicity of Halogenated Agents: Halothane, Chloroform, Carbon Tetrachloride. University of Pittsburgh, Department of Pharmacology and Toxicology, Pittsburgh, PA, June 25 and 29, 1981.
- Visiting Professor, Department of Anesthesiology, University of Hiroshima, Japan, July 12-20, 1981. Lectures on: Halothane Hepatotoxicity and on Factors Affecting the Metabolism of Anesthetics.
- Division of Laboratories, New York Department of Health, Albany. Disposition of PCBs; Studies in Dogs, Monkeys and Man, August 27, 1981.
- Invited Lecturer - Basic Pharmacology I, Pharmacodynamics, University of California, Santa Barbara, October 2,5,7 and 9, 1981.

- Department of Biological Sciences, University of California, Santa Barbara. Seminar: Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane, October 5, 1981.
- Food and Drug Administration, Washington, D.C. Seminar: Halothane Associated Liver Injury: Role of Biotransformation, October 21, 1981.
- Department of Pharmacology and Toxicology, University of Mississippi. Seminar: Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane, December 17, 1981.
- Cancer Biology Retreat - Development of Animal Models for Hepatocarcinogenesis, Tucson, Arizona, May 1981.
- Trichloroethylene Toxicity Workshop on Water. League of Women Voters, Tucson, Arizona, January 16, 1982.
- Invited Lecturer - Lecture on Chemical Toxicity on Biological Tissues. The Southern Arizona Section of the American Chemical Society, The University of Arizona, Pima Community College, February 6, 1982.
- Department of Pharmacology, Southern Illinois College of Medicine. Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane, March 1, 1982.
- Department of Pharmacology, University of Illinois College of Medicine. Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane, March 2, 1982.
- College Graduate Studies, Jefferson Medical College. Development of Animal Models for Anesthetic Induced Liver Injury, March 29, 1982.
- Smith, Kline and French, Pathology/Toxicology Division. Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane, April 29, 1982.
- NIOSH Course No. 549 - (Applied Industrial Hygiene): Environmental and Occupational Carcinogenesis, September 27-October 1, 1982 at Alamos Resort Hotel, Scottsdale, Arizona
- Environmental Toxicology Center, University of Wisconsin. Lecture I: Hepatotoxicity of Drugs and Environmental Chemicals and Lecture II: Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane and Pyrrolizidine Alkaloids, November 2,3, 1982.
- University of Arizona, College of Medicine, The Dean's Clinical Rounds. Cimetidine - The King of Drugs (Should it be?), November 16, 1982.
- Smith, Kline and French Distinguished Lecture in Toxicology, University of Kansas Medical School. Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane and Pyrrolizidine Alkaloids, January 10-12, 1983.
- Inhalation Toxicology Research Institute, Lovelace Biomedical and Environmental Research Institute, Albuquerque, New Mexico. Genotoxicity of Environmental Compounds: Studies on DNA Damage Produced by 1,2-Dibromoethane and Pyrrolizidine Alkaloids, May 17-18, 1984.
- Rutgers University. Genotoxicity of Environmental Compounds: Studies with 1,2-Dibromoethane and Pyrrolizidine Alkaloids, October 10, 1984.
- Hoffmann LaRoche, Division of Toxicology. Comparative Metabolism of PCBs: Studies with Human Liver Microsomes, October 11, 1984.
- Philadelphia College of Pharmacy and Science: In Vitro Approaches to Human Drug Metabolism, September 10, 1985.
- University of Michigan, Ann Arbor, MI: Development of In Vitro Systems to Study Chemical Biotransformation and Tissue Injury, January 22, 1986.

- Mayo Clinic, Division of Developmental Oncology Research, Rochester, MN: DNA Damage by Environmental Compounds: Studies with 1,2-Dibromoethane and Pyrrolizidine Alkaloids, May 23, 1986.
- Program in Pharmacology, University of California - Santa Barbara, CA: Species Variation In Drug Metabolism, April 10-11, 1986.
- Department of Pathology, University of Nebraska Medical Center, Omaha, NE: Liver Tissue Explants: A Tool For Studying Chemical Biotransformation and Tissue Injury, April 29-30, 1986.
- Environmental Toxicology Symposium, University of Nebraska, Omaha, NE: Genotoxicity of Environmental Compounds, May 1, 1986.
- Department of Pharmacology, University of Bern, Switzerland: Liver Tissue Explants: A Tool For Studying Chemical Biotransformation and Tissue Injury, June 2, 1986.
- Institute for Toxicology, University of Zurich, Switzerland: Liver Tissue Explants: A Tool For Studying Chemical Biotransformation and Tissue Injury, June 3, 1986.
- Monsanto, St. Louis, MO: Liver Tissue Explants: A Tool For Studying Chemical Biotransformation and Tissue Injury, June 16-17, 1986.
- Institute of Environmental Medicine, New York University Medical Center: Liver Tissue Explants: A Tool For Studying Chemical Biotransformation and Tissue Injury, October 15, 1986.
- American Health Foundation, Naylor Dana Foundation, Valhalla, NY: Liver Tissue Explants: A Tool For Studying Chemical Biotransformation and Tissue Injury, October 16, 1986.
- Duke University Toxicology Program, Durham, NC: Role of Oxygen Radicals in Chemical-Induced Liver Injury, November 17, 1986.
- Procter and Gamble Co., Cincinnati, OH: Mechanisms of Interactive Hepatotoxicity, March 30, 1987.
- Program in Pharmacology, U.C. Santa Barbara: Mechanisms of Interactive Chemical Hepatotoxicity, January 1988.
- National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina: Methods Development For <u>In Vitro</u> Human Metabolism of Chemicals, September 7, 1988.
- 18th Conference on Toxicology, Dayton, OH: Studies on the Synergistic Hepatotoxicity of Carbon Tetrachloride and Chloroform or Trichloroethylene in Male F-344 Rats, November 1-3, 1988.
- Wayne State University, Department of Pharmacology and Institute for Chemical Toxicology, Mechanisms of Interactive Chemical Hepatotoxicity, November 9, 1988.
- Wayne State University, Workshop on Industrial Hygiene. Lectures on Chemical Biotransformation and Mechanisms of Liver Injury - September 13-15, 1989.
- University of Toledo, College of Pharmacy. Seminar: Mechanisms of Interactive Hepatotoxicity; and Professional Student Lecture: Career Opportunities in Pharmacology and Toxicology, April 3, 4, 1989.
- University of Cincinnati, Kettering Laboratory, Visiting Professor. Seminar: Mechanisms of Interactive Hepatotoxicity, April 5, 1989.
- University of California - Santa Barbara, Department of Biological Sciences, Visiting Professor, April 23 - May 1, 1989:
- Four lectures on drug metabolism

- Scientific Seminar: Ovarian Toxicity Produced by Environmental Chemicals
- Professional Seminar - Career Opportunities in Pharmacology and Toxicology
- Society of Toxicology, 1990 Burroughs Wellcome Toxicology Scholar Lecture: Mechanisms of Interactive Hepatotoxicity, February 15, 1990.
- University of California - Davis, Visiting Professor. Program in Environmental Toxicology - Seminar: Ovarian Toxicity Produced by Environmental Chemicals, March 7, 1990.
- University of California - Riverside, Department of Entomology, Visiting Professor. Seminar: Mechanisms of Interactive Hepatotoxicity, May 31, 1990.
- Virginia Polytechnic Institute and State University, Department of Biology, Visiting Professor. Seminar: Mechanisms of Interactive Hepatotoxicity: How One Chemical Influences the Toxicity of Another, November 1, 1990.
- University of Georgia, College of Pharmacy, Issues Facing Pharmacy Education, December 17, 1990.
- University of Washington, Department of Environmental Health - Seminar: Mechanisms of Interactive Hepatotoxicity: How One Chemical Influences the Toxicity of Another, January 17, 1991.
- University of Arizona, Department of Physiology - Seminar: Mechanisms of Interactive Hepatotoxicity, October 11, 1991
- Eastern Maine Medical Center - Seminar: Interactive Hepatotoxicity: How One Chemical Influences the Toxicity of Another, October 18, 1991.
- University of Maine - Seminar: Chemical Manufacturers Association: Reproductive Toxicity of 4-vinylcyclohexene, November 17, 1991.
- University of Arizona, Department of Pathology - Seminar: Role of Kupffer Cells in Chemically Induced Liver Injury, December 3, 1992.
- University of Wageningen - Seminar: Role of Kupffer Cells in Chemical Induced Liver Injury, Wageningen, The Netherlands, August 28, 1992.
- Phoenix Chapter - Arizona Hydrological Society - Seminar: New Directions in Toxicological Risk Assessment, March 9, 1993.
- Environmental Protection Agency, Reproductive Toxicology Branch - Seminar: Ovarian Toxicity of 4-vinylcyclohexene and Related Compounds, April 21, 1993.
- Northeast Louisiana University, Monroe, LA - Burroughs Wellcome Visiting Professor - Two Seminars and three lectures, April 28-May 1, 1993.
- Conference on the U.S. Food and Drug Administration's Toxicological Principles for the Safety Assessment of Direct Food Additives and Color Additives Used in Food - Redbook II - Seminar: Metabolism/Pharmacokinetics, Arlington, Virginia, December 16, 1993.
- Colorado State University, Fort Collins - Seminar: Ovarian Toxicity of Environmental Chemicals, April 24, 1995.
- Indiana University, Indianapolis, IN - Seminar: Interactive Toxicology: How One Chemical Influences the Toxicity of Another, November 3, 1995.
- University of St. Louis, MO - Seminar: The Liver As a Target for Chemical-Chemical Interactions, November 14, 1995.
- University of Michigan, Ann Arbor - Two Seminars: Ovarian Toxicity of Environmental and Occupational Chemicals, and Interactive Toxicology: How One Chemical Influences the Toxicity of Another, April 25-26, 1996.
- University of Southern Colorado, Pueblo - Seminar: Opportunities in Environmental Toxicology, April 5, 1996.

- University of Kansas, Kansas City - Seminar; Ovarian Toxicity of Environmental and Occupational Chemistry, May 28, 1996.
- University of Arizona, Department of Pediatrics - Seminar: Mechanisms of Interactive Hepatotoxicity: How One Chemical Influences the Toxicity of Another, April 15, 1996.
- Association for Medical School Pharmacology, Cancun, Mexico, January 28-31, 1997.
- American Association for the Advancement of Science Annual Meeting, Seattle, Washington, February 13-17, 1997.
- Society of Toxicology Annual Meeting, Cincinnati, Ohio, March 8-13, 1997.
- Third International Symposium on Cell Tissue Injury and Cytoprotection/Organoprotection. Title: "Ovarian Toxicity of 4-Vinylcyclohexene Epoxides", Long Beach, California, February 24-27, 2000.
- Otsuka Pharmaceutical Co., Ltd. Title: "Interactive Toxicology: How One Chemical Influences the Toxicity of Another", Tokushima, Japan, June 26, 2000.
- NACCT Annual Meeting: "IUTOX and the Development of International Activities in Clinical Toxicology", La Paloma, Tucson, AZ, September 13-18, 2000.
- Keck School of Medicine, University of Southern California, Hepatotoxicity, February 27, 2001, "Role of Biotransformation and Quantitative Stress in Chemical Induced Liver Injury".
- Capetown South Africa. "Mechanisms of Interactive Hepatotoxicity", May 11, 2001
- Harvard University."Metabolism of Bisphenol A by Human Hepatocytes", August 1, 2001.
- NIOSH, Atlanta. "Ovarian Toxicity of Occupation Chemicals", September 5, 2001
- University of Pittsburgh, College of Pharmacy, "Toxicological Interactions", April 16, 2002.
- University of Pittsburgh, College of Pharmacy, "Toxicology: Choosing the right model and asking the right question", April 16, 2002.
- University of Pittsburgh, School of Public Health, "Ovarian Toxicity of Environmental and Occupational Chemicals", April 16, 2002.
- Research Institute Fragrance Manufacturers, "Interactive Toxicology", May 21, 2002.
- Washington D.C. "Metabolism of Bisphenol A by Human Liver Preparations", May 22, 2003.
- Santiago, Chile. "Mechanisms of Interactive Hepatotoxicity", September 2, 2002.
- Munich, Germany, Research Institute Fragrance Manufacturers Infox. "Hydrolysis of Esters used as Fragrance Materials", September 19, 2002.
- Yale University, "Ovarian Toxicity of Occupation Chemicals", April 2, 2003.
- Tokyo, Japan. "Hydrolysis of Ester Compounds Used as Fragrance Materials", April 10, 2003
- Toxicology Forum. "Safety Evaluation of Siloxanes", July 15, 2003.
- RIFM Infox Meeting. "Hydrolysis of Esters of Isoeugenol and Eugenol", May 20, 2004.
- Meharry Medical College, Nashville, TN "Ovarian Toxicity of Occupational and Environmental Chemicals" November 6, 2006.

- The 34th Annual Summer Meeting of The Toxicology Forum,"Derivation of an Oral Reference Dose and Equivalent Concentration for Bisphenol A in Potable Water" Panel Discussion. July, 2008.
- International Food Technology (IFT), The GRAS Procedure from an Expert Panelist's View, June 8, 2009.

INTERNATIONAL MEETINGS ATTENDED:

- Fifth International Congress of Pharmacology, San Francisco, July 1972.
- Sixth International Congress of Pharmacology, Helsinki, Finland, July 1975.
- First International Congress of Toxicology, Toronto, Canada, March 1977.
- Seventh International Congress of Pharmacology, Paris, July 1978.
- Second International Congress of Toxicology, Brussels, Belgium, July 6-11, 1980.
- Eighth International Congress of Pharmacology, Tokyo, Japan, July 1981.
- Fifth International Symposium on Microsomes and Drug Oxidations, Tokyo, Japan, July 1981.
- IUPHAR Ninth International Congress of Pharmacology, London, England, July 29-August 3, 1984.
- Sixth International Symposium on Microsomes and Drug Oxidations, Brighton, Sussex, England, August 5-10, 1984.
- IUPHAR Tenth International Congress of Pharmacology, Sydney, Australia, August 23-28, 1987.
- 4th, 5th and 6th International Kupffer Cell Symposium, Titisee, Germany, September 26-30, 1988 (Speaker), Tucson, AZ, August 26-30, 1990; Antwerp, Belgium, August 27-29, 1992.
- 1st, 2nd, 3rd, 4th, 5th International Symposium on Biological Reactive Intermediates, 1975, 1980, 1985, 1990 (Speaker at 2,3,4).
- European Meeting of the International Society for the Study of Xenobiotics, Bologna, Italy, July 6-7, 1993 (Speaker).
- 7th International Symposium on Cells of the Hepatic Sinusoid, Kyoto, Japan, September, 1994.
- 7th Congreso Nacional, National Academy of Medicine, June 6-10, 1994, Mexico.
- Congreso Latinoamericano de Genetica y 30 de Mutagenesis, Carcinogenesis y Teratogenesis Ambiental, Puerto Vallarta, Mexico, September 25-30, 1994.
- US-Mexico Workshop on Environmental Health, Mexico City, Mexico, March 26-28, 1995.
- European Macrophage Study Group, 9th Conference, Amsterdam, October 10-12, 1995.
- 3rd Congress of Toxicology in Developing Countries, Cairo, Egypt, November 20-26, 1995.
- Japanese Society of Toxicology Annual Meeting, Plenary Lecturer, June 26-30, 2000.
- International Union of Toxicology, Cape Town, South Africa, “Role of Biotransformation and Quantitative Stress in Chemical Induced Liver Injury”, May 14-18, 2001.
- 9th International Congress of Toxicology (ICT-IX), Brisbane, Australia, July 8-12, 2001.
- International Union of Toxicology, Santiago, Chile, “Educational and Professional Activities in Toxicology: Role of Toxicology Societies.”, September 30, 2002.

INVITED SYMPOSIA (NATIONAL AND INTERNATIONAL) AND SESSION CHAIRPERSON:

- Science and Man in the Americas. American Association of the Advancement of Science Symposium, Mexico City. Biochemical Mechanism of Tissue Damage by Drugs and Other Organic Compounds, June 1973.
- NIEHS Conference on Comparative Metabolism and Toxicity of Vinyl Chloride Related Compounds. NIH, Bethesda, Maryland, May 2-4, 1977. Bioactivation and Covalent Binding of Halothane to Liver Macromolecules.
- International Conference on In Vivo Aspects of Biotransformation and Toxicity of Industrial and Environmental Xenobiotics, Prague, Czech., September 15-17, 1977. Bioactivation of Halothane: Correlation with Hepatotoxicity.
- Chairman, Session on Biochemical Pharmacology and Toxicology II, Joint Meeting of ASPET and SOT, University of Houston, Houston, Texas, August 13-17, 1978, Session - August 17.
- Chairman, Session on Environmental Toxicology, 1979 Annual Meeting, ASPET, Portland, Oregon, August 19-23, 1979.
- Chairman, Session on Pharmacokinetics, 1980 Annual Meeting Society of Toxicology, Washington, D.C., March 9-13.
- Workshop on Polyhalogenated Biphenyls. Michigan State University, Environmental Toxicology Program and Department of Agriculture. June 30 - July 1, 1980. Metabolism of Polyhalogenated Biphenyls.
- International Symposium on: Drug Reactions and the Liver-Mechanisms and Measures for Control.
- The Royal Society and King's College, London, England, July 3-4, 1980. Halothane: A Direct Hepatotoxin.
- Second International Symposium on Biological Reactive Intermediates, July 14-17, 1980, University of Surrey, Guildford, United Kingdom. Metabolism of Halogenated Anesthetics.
- Gordon Research Conference on Drug Metabolism, July 21-25, 1980. Role of Bioactivation in Anesthetic Induced Hepatotoxicity.
- Speaker, Symposium on "Metabolism and Toxicity of Halogenated Hydrocarbons", ASPET, 1980 Annual Meeting, August 17-21, Rochester, MN.
- Chairman, Session on Halogenated Hydrocarbons, 1981 Annual Meeting, Society of Toxicology, San Diego, March 1-5, 1981.
- Invited Participant - Conference on Drugs and Environmental Toxicants, Pinehurst, NC, March 18-21, 1981.
- FASEB Symposium - "Non-respiratory Functions of the Lung", Isolation and Metabolic Characteristics of Lung Cell Types, April 14, 1981.
- Chairman, Session on Halogenated Hydrocarbons, ASPET/PSC Calgary, August 20, 1981 - Overview - Activation and Toxicities of 1,2-Dibromoethane.
- Canadian Anesthesiology Society, Regional Workshop on Toxicity of Inhalation Anesthetics, November 21, 1981, Calgary, Alberta Canada. Metabolism and Bioactivation of Anesthetics.
- Chairman: Biotransformation/Disposition I; Society of Toxicology Annual Meeting, February 23, 1982.
- Workshop on Toxicity of Inhalation Anesthetics. Winnipeg, Canada, June 1982.

- Monsanto Environmental Health Laboratory Symposium, St. Louis, Missouri, September 14-15, 1983. New Approaches in Toxicity Testing and Their Application to Human Risk Assessment.
- ISSX - First International Symposium on Foreign Compound Metabolism. "Metabolism of Halogenated Hydrocarbons", West Palm Beach, Florida, October 30 - November 4, 1983.
- Academy of Pharmaceutical Sciences, Medicinal Chemistry and Pharmacognosy Section. Miami, Florida, November 14-16, 1983. The Role of Metabolism in the Toxicity of Alkyl Halides.
- International Workshop on Manpower Development and Training in Toxicology and Chemical Safety. Luxembourg, Germany, Nov. 28 - Dec. 2, 1983.
- Symposium on the Toxicity of Fluorinated Volatile Anesthetics, 1984 Society of Toxicology Meeting, invited speaker, "Animal Models of Halothane Associated Liver Injury", Atlanta, Georgia, March 11-16, 1984.
- Stowe School Symposium on Drug Metabolism, 1) "Species Comparison of the Metabolism of PCBs" and 2) "Animal Models of Halothane Hepatotoxicity", Stowe School, Buckingham, England, April 8-11, 1984.
- Third International Conference on Molecular and Cellular Mechanisms of Anaesthesia. Calgary, Alberta Canada, June 13-15, 1984.
- 25th Annual Meeting Society of Toxicology: Mechanisms of Cell Injury, March 1985.
- European Society of Toxicology: Mechanisms of Cell Injury, Harrogate, May 27-29, 1986.
- Third Conference on Biological Reactive Intermediates: "The Role of Glutathione in the Toxicity of Xenobiotic Compounds: Metabolic Activation of 1,2-dibromoethane by Glutathione", College Park, Maryland, June 6-8, 1985.
- Gordon Conference on Drug Metabolism: Session on Biotransformation of Environmental compounds, presentation on: "Metabolism of Halogenated Xenobiotics", July 21-26, 1985.
- Environmental Toxicology Symposium: "Genotoxicity of Environmental Compounds", University of Nebraska, Omaha, Nebraska, April 29-30, 1986.
- Invited Participant - Summer Toxicology Forum, Aspen, CO, July 14-18, 1986. American Chemical Society Meeting: "The Liver: A Target Tissue for Chemical Injury", Denver, Colorado, April 5-10, 1987.
- Meeting of the Committee on Toxicology of the National Academy of Sciences: "In Vitro Systems for Animal Human Extrapolation", Woods Hole Study Center, Massachusetts, July 30-31, 1987.
- American Chemical Society Meeting, Div. Occup. Safety/Health - Symposium organizer and speaker: "Biological Fate of Chemicals", Toronto, June, 1988.
- 4th International Symposium of Biological Reactive Intermediates: Role of reactive oxygen species secreted from activated Kupffer cells in the potentiation of carbon tetrachloride induced liver injury. January 14-17, 1990, Tucson, AZ.
- 4th International Conference on the Combined Effects of Environmental Factors: "Mechanisms of organic solvent interaction: Metabolic factors", Baltimore, Maryland, September 30-October 3, 1990.
- Society for Risk Analysis, Annual Meeting: "Importance of human metabolic data in determining the risk to humans exposed to environmental chemicals", New Orleans, October 7-10, 1990.

- Gulf Coast Regional Chapter of SOT '90: Keynote address: "Toxic Interactions", Austin, Texas, November 15-17, 1990.
- Society of Toxicology: Symposium on "Toxicity of Complex Mixtures - Mechanisms of Toxic Interactions", February 25, 1992.
- Reunion Annuelle De La Societe Canadienne De Fertilite Et D'Andrologie Annual Meeting of the Canadian Fertility and Andrology Society: Symposium on "Ovarian Toxicity of 4-vinylcyclohexene (VCH) and Related Compounds", Kananaskis, Alberta, November 25-28, 1992.
- 5th and 6th International Congress on Toxicology, Brighton, England, July 16-21, 1989. (Councilor and Session Chairperson); Rome, Italy, July 2-5, 1993.
- Experimental Biology - 93: Symposium on: Toxicity of Complex Mixtures - Studies on Retinol Induced Potentiation of Liver Injury. New Orleans, Louisiana, March 28-April 1, 1993.
- Burroughs Wellcome Visiting Professorship - 93: Symposium on: Mechanisms of Interactive Hepatotoxicity. Northeast Louisiana University, Monroe, Louisiana, April 29, 1993.
- Burroughs Wellcome Visiting Professorship - 93: Symposium on: Ovarian Toxicity of 4-Vinylcyclohexene and Related Compounds. Northeast Louisiana University, Monroe, Louisiana, April 30, 1993.
- Arkansas Toxicology Symposium, Drug Metabolism as a Cause of Drug Toxicity - 93. Symposium on: Secondary Mechanisms: Activation of Reticular Endothelial System. The University of Arkansas for Medical Sciences, October 14-15, 1993.
- 7th Congreso Nacional, National Academy of Medicine, June 6-10,1994, Mexico. Title: “The Role of Phagocytic Cells in Chemical-Induced Liver Injury.
- Maine Toxicology Institute, Eastern Maine Medical Center, University of Maine and Mount Desert Island Biological Laboratory. Symposium on: Molecular Mechanisms of Toxicity. Symposium title: Role of Phagocytic Cells in the Progression of Chemical-Induced Tissue Injury, August 3, 1994.
- 3rd De Mutagenesis, Carcinogenesis Y Teratogenesis Ambiental, September 25-30, 1994, Puerto Vallarta, Jalisco, Mexico. Title: “Genetic Differences in the Metabolism and Ovarian Toxicity of 4-Vinylcyclohexene (VCH)”.
- Second Annual HERL Symposium, Research Triangle Park, North Carolina. Symposium on: Alteration of Phagocytic Cell Function: Role in Interactive Toxicity, November 7-10, 1994.
- Western Pharmacology Society, Maui, Hawaii, January 21-25, 1995.
- Association for Medical School Pharmacology, Maui, Hawaii, January 27-29, 1995.
- Environmental Health Summit, Biosphere 2, Oracle, Arizona, June 1-4, 1995.
- Oxidant Stress and Liver Disease, Arlie, Virginia, June 22-24, 1995.
- A Satellite Symposium to the International Congress of Toxicology. Symposium on: Evaluation of Butadiene and Isoprene Health Risks. Seattle, Washington, June 27-29, 1995.
- Association for Medical School Pharmacology, Sea Island, Georgia, February 1-4, 1996.
- International Symposium on Microsome and Drug Interactions, Los Angeles, California, June 21-25, 1996.
- International Society for the Study of Xenobiotics Annual Meeting, San Diego, California, October 19-25, 1996.

- Symposium entitled “Gender Differences in Reproductive Biology and Toxicology”, sponsored by NIEHS, the University of Arizona Center for Toxicology, and the Southwest Environmental Health Sciences Center. Seminar title: “Role of Hepatic Metabolism in VCH-Induced Ovarian Toxicity”, Tucson, AZ, November 9-11, 2000.
- Invited Speaker on *New Directions in Drug-Induced Liver Injury: Mechanisms εt Test Systems.* “Test Systems”, Bethesda, MD, October 17-18, 2000.s
- Symposium entitled “Symposium on Hepatotoxicity”, sponsored by Purdue University and Eli Lilly and Company, Indianapolis, Indiana. Keynote speaker - Seminar title: “Chemical induced liver injury in two strains of rats: A model for studying mechanisms of hepatotoxicity”, November 16, 2000.
- Research Institute for Fragrance Materials, Chair, Symposia on Chemical Respiratory Allergy: Definition, Clinical Observations, and Safety Assessment. London, July 13-14, 2006.
- International Food Technology Congress: GRAS – Overview of the Process from an Expert Panelist’s Perspective, Anaheim, CA, Jun 6, 2009.

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