William Slikker, Jr., Ph.D.

Current Position

Director
National Center for Toxicological Research
Food and Drug Administration
3900 NCTR Road
Jefferson, AR 72079-9502
Office Phone: 870-543-7517
Blackberry: 501-779-0774
Fax: 870-543-7576
E-mail: william.slikker@fda.hhs.gov

Educational Background

1978 University of California, Davis, California
Major: Pharmacology & Toxicology – Ph.D.

1974 University of California, Santa Barbara, California
Major: Biological Sciences (Biochemistry & Endocrinology) – M.A.

1972 University of California, Santa Barbara, California
Major: Biology – B.A.

Professional Experience

Oct 2006–present	Director, National Center for Toxicological Research/Food and Drug Administration; Jefferson, Arkansas
Jan-Oct 2006	Acting Director, National Center for Toxicological Research/Food and Drug Administration; Jefferson, Arkansas
2005 – 2006	Deputy Center Director for Research, National Center for Toxicological Research/Food and Drug Administration; Jefferson, Arkansas
1996 – 2005	Senior Biomedical Research Service (SBRS) position, Director, Division of Neurotoxicology, National Center for Toxicological Research/Food and Drug Administration; Jefferson, Arkansas
1993 – 2005	Director, Division of Neurotoxicology, National Center for Toxicological Research/Food and Drug Administration; Jefferson, Arkansas
1992 – 1993	Acting Director, Division of Neurotoxicology, National Center for Toxicological Research; Jefferson, Arkansas
1990 – 1991	Acting Director, Division of Reproductive and Developmental Toxicology, National Center for Toxicological Research; Jefferson, Arkansas
2004 – present	Adjunct Professor, Department of Applied Science, University of Arkansas; Little Rock, Arkansas

1989 – 2000	Adjunct Professor, Department of Pharmaceutical Sciences, University of Tennessee; Memphis, Tennessee
1989 – present	Adjunct Professor, Department of Pharmacology and Interdisciplinary Toxicology, and Department of Pediatrics, University of Arkansas for Medical Sciences; Little Rock, Arkansas
1989	Postdoctoral Training, Institute of Toxicology and Embryopharmacology, Free University; Berlin, Germany
1987 – 1992	Supervisory Pharmacologist (GM-15), Chief, Pharmacodynamics Branch, Division of Reproductive and Developmental Toxicology, National Center for Toxicological Research; Jefferson, Arkansas
1986 – 1989	Adjunct Associate Professor, Department of Pharmacology, School of Pharmacy, University of Mississippi; University, Mississippi
1985 – 1989	Adjunct Associate Professor, Department of Pharmacology and Interdisciplinary Toxicology, University of Arkansas for Medical Sciences; Little Rock, Arkansas
1984 – 1987	Supervisory Pharmacologist (GM-14), Chief, Pharmacodynamics Branch, Division of Reproductive and Developmental Toxicology, National Center for Toxicological Research; Jefferson, Arkansas
1983 – 1989	Adjunct Associate Professor, Department of Medicinal Chemistry, Center for the Health Sciences, University of Tennessee; Memphis, Tennessee
1982 – 1984	Supervisory Pharmacologist (GS-13), Pharmacodynamics Branch, Teratogenesis Research Division, National Center for Toxicological Research; Jefferson, Arkansas
1980 – 1990	Chief, Pharmacodynamics Branch, Teratogenesis Research Division, National Center for Toxicological Research; Jefferson, Arkansas
1980 – 1985	Adjunct Assistant Professor, Department of Pharmacology and Interdisciplinary Toxicology, University of Arkansas for Medical Sciences; Little Rock, Arkansas
1979 – 1980	Acting Branch Chief (GS-12), Pharmacodynamics Branch, Teratogenesis Research Division, National Center for Toxicological Research; Jefferson, Arkansas
1979 – 1982	Research Pharmacologist (GS-12), Pharmacodynamics Branch, Teratogenesis Research Division, National Center for Toxicological Research; Jefferson, Arkansas
1978 – 1979	Junior Staff Fellow (GS-11), Drug Research and Evaluation Program and Perinatal Research Program, DHEW/PHS/FDA/NCTR
1974 – 1977	Staff Research Associate, Pharmacology, University of California; Davis, California

Additional Training

2016 Management and Leadership Training
2016 Annual FDA Computer Security Awareness Training (online)
2016 FDA Annual Records Management Training (online)
2015 Annual FDA Computer Security Awareness Training (online)
2015 Records Management Training (online)
2015 CGE Travel Training (online)
2015 Whistleblower Protection Training for All FDA Managers and Supervisors
2015 OAGS Outreach and Training – Executive Session
2015 Insider Awareness Training
2014 Office of Human Resources (OHR) Supervisory Training
2014 Utilizing Subject Matter Experts in the Hiring Process
2014 Annual FDA Computer Security Awareness Training (online)
2014 Government Charge Card Training (online)
2014 80-Day Hiring Model (webinar training)
2013 Annual FDA Computer Security Awareness Training (online)
2013 Lab Training on New OSHA Hazard Communication Standard
2013 Ethics Training for Supervisors (webinar)
2013 Ethics Training – Financial Interests (conference call)
2013 Family & Medical Leave Act Webinar
2013 Ethics Training – Conflict of Interest (by webinar)
2012 Annual FDA Computer Security Awareness Training (online)
2012 EEO Training for Supervisors, NCTR Campus; Jefferson, AR
2012 Notification and Federal Employee Anti-discrimination and Retaliation (NO FEAR) Act Annual online Training Course
2012 Online IACUC Training
2012 Annual Lab Safety Refresher Training
2011 Annual FDA Computer Security Awareness Training (online)
2011 Human Resources Training for Supervisors
2010 New Consolidated Bargaining Agreement Training
2010 Accelerated Hiring Process Training
2010 EEO Compliance Training for Managers and Supervisors
2010 GLP Webinar Training: Effective Documentation & Study Reconstructibility
2010 Notification and Federal Employee Anti-discrimination and Retaliation (NO FEAR) Act Annual Training Course
2010 Consolidated Bargaining Agreement Training
2010 Annual FDA Ethics Training
2010 Annual FDA Computer Security Awareness Training (online)
2010 Records Management Training (online)
2010 FDA: Hiring People with Targeted Disabilities Training, “2% by 2010”
2009 GLP & Human Subject Protection Refresher Training
2009 Training: GLP Amendments, Deviations and Unforeseen Circumstances: The Good, The Bad and The Ugly
2008 EEO Compliance Training for Managers and Supervisors
2008 Refresher Training: GLP regulations, NCTR Laboratory Operating Procedures (LOPs), and Human Subject Protection (HSP)
2007 NCTR Annual Safety & Security Refresher Training for Laboratory Workers
2007 EEO Compliance Training
2006 Computer System Validation in a GLP Environment
2006 Annual Ethics Training

2006 Performance Management Appraisal Program Supervisor Training
2005 EEO Compliance Training
2005 GLP Refresher Course
2005 Array Track Training
2004 GLP Training for NCTR Investigators
2004 Working with the IACUC
2004 Annual Ethics Training
2003 Computer Security Awareness Training (online)
2001 Managing Employee Discipline and Performance
1999 Labor Relations for Supervisors
1998 Microsoft Office 97
1997 How to Identify, Eliminate and Prevent a Hostile Environment
1997 Women's History Month - Attendance at the Seminar by Dr. Olga Skorapa
1996 Institutional Animal Care and Use Committee Workshop, "Meeting the Information Requirements of the Animal Welfare Act"
1995 AIDS in the Federal Workforce
1995 Science Internship Mentor Orientation
1995 EEO Critical Element Requirements
1995 Annual Ethics Briefing (Outside Activities)
1994 Complaint Prevention & Resolution Training
1994 Sexual Harassment Training
1994 The Manager as Coach
1994 Stress & Conflict Management
1994 Disability Awareness Lecture
1993 Supervisory Training: FDA Training Series for Interpersonal Skills, "Managing Change"
1993 Ethics Training
1993 Supervisory Training: Laying the Foundations for a High Performance Team
1992 Animal Care and Use Committee (ACUC) Training
1991 Safety Training
1991 Conflict of Interest and Ethics Training
1990 5.0 WordPerfect Training Course
1989 EEO; Sexual Harassment Prevention Seminar
1986 Introduction to PCs and Lotus 1-2-3 Training Course
1986 Good Laboratory Practices Training Course
1983 Supervision and Group Performance Course
1983 Sexual Harassment Prevention Seminar
1982 EEO for Supervisors and Managers Course
1979 Project Officer's Management Course

Membership in Professional or Honorary Societies

- American Society for Pharmacology and Experimental Therapeutics (Admission requirements)
- International Society for the Study of Xenobiotics (Charter member - 1989)
- South Central Chapter of the Society of Toxicology (Charter member)
- Teratology Society (Admission requirements)
- Society of Toxicology (Admission requirements)
- Western Pharmacology Society (1984-1989)
- Society for Neuroscience, Arkansas Chapter
- Society for Neuroscience (1980-2010)

- MidSouth Computational Biology and Bioinformatics Society (Co-founder)
- Academy of Toxicological Sciences (Invited member)

Honors and Awards

2015 Received the 2015 Josef Warkany Lecturer Award from **The Teratology Society** – This peer-nominated award recognizes a scientist who has significantly contributed to the field of teratology over his/her career.

2014 Selected by the Awards Committee of **The Toxicology Forum** to receive the George H. Scott Memorial Award – This award, which is named after an early member who helped guide the development of The Toxicology Forum, honors an individual in the field of toxicology who has demonstrated an outstanding role in developing and applying the science of toxicology.

2013 Received recognition award as co-founder of the MidSouth Bioinformatics and Computational Biology Society at its 10th Anniversary Annual Conference; Columbia, MO; April 5-6, 2013

2011 FDA Group Recognition Award – Outstanding Intercenter Science Collaboration as a member of the Pediatric Anesthesia Safety Initiative (PASI) Team; for developing and launching an unprecedented strategic partnership and several scientific studies addressing issues regarding the safety of anesthetics and sedatives in children

2011 FDA Certificate of Appreciation – For substantial contributions to the FDA Commissioner's Fellowship Program

2010 FDA Group Recognition Award (Agency Cross-cutting) – As a member of the Commissioner's Fellows Scientific Seminar Program Planning Group; for their exemplary contributions in developing and executing the inaugural FDA Commissioner's Fellows Scientific seminar series that provided information on emerging challenges affecting each Center/Office

2009 FDA Career Service Award – For 30 years of government service

2009 FDA Scientific Achievement Award – Received as a member of the SAFEKIDS Initiative Team; for developing the framework for multi-phased, multi-year scientific initiative to assess the effects of anesthetics and sedatives on the developing human brain

2009 FDA Scientific Achievement Award – Received as a member of the Inter-Center Working Group on Pediatric Anesthetics; for outstanding collaboration in addressing the critical safety concern: neurotoxicity in juvenile animals exposed to anesthetic agents and the implications for the pediatric patient population

2008 FDA Leveraging Collaboration Award – Received as a member of the FDA MicroArray Quality Control (MAQC) Project Committee; for exceptional intercenter scientific collaboration in helping improve microarray technology and foster its proper applications in discovery, development and review of FDA-regulated products

2008 FDA Group Recognition Award – Received as a member of the Pediatric Anesthesia Research Group; for exhibiting superior teamwork and collaboration to attain important FDA goals concerning an increased understanding of the potential neurotoxicity used in pediatric anesthesia

2007 FDA Scientific Achievement Award – Received as a member of the FDA MicroArray Quality Control (MAQC) Project Committee; for exceptional intercenter scientific collaboration in working toward consensus on the generation, analysis, and application of microarray data in the discovery, development, and review of FDA-regulated products

2007 FDA Commissioner's Special Citation – Received as a member of the FDA Pandemic Influenza Preparedness Task Force; for outstanding leadership in developing the FDA Pandemic Influenza Preparedness Strategic Plan and in advancing the Nation's preparedness for an influenza pandemic

2006 Certificate of Appreciation from the NCI/FDA Interagency Oncology Task Force – For outstanding contributions as part of the Bioinformatics Subcommittee that has made significant progress to develop and implement strategies for NCI and FDA that foster increased productivity and provide electronic information resources that enable both organizations to conduct business more effectively

2006 Food and Drug Administration Cash Award

2005 NCTR Cash Award for outstanding efforts in developing and seeking external funding in support of toxicological studies for the anesthetic ketamine

2004 Food and Drug Administration Certificate of Appreciation for Outstanding contributions toward the "Calories Count" report of the FDA Obesity Working Group

2003 Food and Drug Administration Certificate of Appreciation from Center for Drug Evaluation and Research Seminar Program for "Safety Assessment Approaches for Application during Perinatal Development"

2003 NCTR Cash Award for continued support and development of the research agenda for the FDA Obesity Task Force

2003 Food and Drug Administration's Group Recognition Award – Received as a member of the Ketamine Neurotoxicity Investigative Group; for valuable contributions in the evaluation of the neurotoxic potential of ketamine in neonates and development and execution of *in vivo* protocols for confirmatory investigations

2002 Team Award, CFSAN organizing subcommittee and breakout session teams for the 2002 FDA Science Forum, for outstanding performance, collegiality, and dedication in organizing and executing CFSAN's contributions to the 2002 FDA Science Forum

2000 NCTR Cash Award for special service for extraordinary effort and dedication by continuously sharing scientific expertise as a mentor and providing an opportunity for developing students to experience research at the NCTR

1999 NCTR Cash Award for special service for outstanding leadership and professional contributions as the Director, Division of Neurotoxicology

1998 NCTR Cash Award in recognition of continuing excellence of performance and professional contributions as the Director, Division of Neurotoxicology/NCTR

1998 NCTR Cash Award for highly effective teamwork in organizing and conducting the meeting of the South Central Chapter of the Society of Toxicology and for demonstrating pride and congeniality as well as competence

1998 NCTR Cash Award for excellence in service to the Center as an SBRS member

1997 NCTR Cash Award for creativity in developing partnering relationships, especially with ASTRA Pharmaceuticals

1997 Group Recognition award as a member of NCTR 25th Anniversary Committee

1997 NCTR Cash Award for Leadership in inter-center communication, especially as it relates to a FDA-wide neurotoxicology effort

1997 NCTR Cash Award for Leadership – Influencing/guiding others toward achieving organizational goals

1994 Outstanding Performance Rating, Employee Performance Management System, NCTR/FDA

1993 Certificate of Appreciation for exceptional managerial efforts and scientific insight in encouraging and emphasizing the FDA Commissioner's collaborative research directives

1990 Top Five Supervisors Award, NCTR/Federal Women's Program (FWP)

1990 Travel Award for ASPET to attend the XIth International Congress of Pharmacology; Amsterdam, Netherlands

1987 Travel Award from ASPET to Attend the Xth International Congress of Pharmacology; Sydney, Australia

1985 Outstanding Young Men of America; Who's Who in Frontier Science and Technology

1981 FDA Quality Step Increase

1979 FDA Cash Award for outstanding achievement in the study of estrogen metabolism

FDA Special Assignments and Advisory Activities

2014 Member of the European Food Safety Authority (EFSA) International Scientific Conference Advisory Committee

2013 - present Co-Chair, Global Coalition for Regulatory Science Research Executive Committee

2011 Member of the FDA Innovation Initiative Team

2011 Member of the FDA Performance Review Board (PRB)

2010	Member, NIH/FDA Council on Regulatory Science
2010	Co-Chair, FDA Chemical and Environmental Science Council (CESC)
2010	FDA Science & Innovation Strategic Advisory Council (SISAC)
2009 - present	Member of the FDA Executive Resources Board
2009 - present	Member, National Academies of Science Standing Committee on Use of Emerging Science for Environmental Health Decisions – Government Liaison Group
2009	FDA/NCTR Representative on the National Toxicology Program Executive Committee
2007 - present	Member, IARS/FDA/SmartTots (formerly known as SafeKids) Steering Committee to assess safety of anesthetics and sedatives in young children
2007 - present	Member of the FDA Policy Council
2006 - 2007	Member of the FDA Executive Resources Board
2006 - present	Member of the FDA Management Council
2006	Overview briefing of NCTR to the FDA/Office of Management & Budget (by Pictel from NCTR)
2006	Member of the FDA Interdisciplinary Pharmacogenomic Review Group (IPRG)
2006 - present	Member of the FDA Critical Path Steering Committee
2006	Member of the FDA Science Synergy Working Group
2004	NCTR representative to FDA for the CFSAN/NCTR White Paper “Opportunities for Progress on the Pathway to Healthier Consumers, Addressing Critical FDA-Related Food and Nutrition Research Needs”
2003	NCTR representative to the FDA Obesity Task Force
2001 - 2007	FDA Liaison to the Society of Toxicology
2001 - 2006	Member, FDA Senior Biomedical Research Service (SBRS) Committee
2001 - 2005	Invited Science Advisory Committee Member for CIIT Center for Health Research
2001 - 2003	Invited Planning Committee Member for the International Life Sciences Institute (ILSI)/EPA Workshop to Develop a Framework for Assessing Children’s Health Risks

2000	Invited participant at the NIOSH/NIEHS/EPA/CMA and UAW sponsored workshop on “Future Research for Improving Risk Assessment Methods”, Aspen, CO
2000	Invited panel member to the Environmental Protection Agency Workshop to Peer Review the Benchmark Dose Technical Guidance Document, Washington, DC
1999 - 2000	Member, FDA's Senior Science Council
1999 - 2000	Member, FDA's FY 2002 Strategic Planning and Budget Subcommittee on Premarket Strategy
1999 - 2000	Committee Member, Health and Environmental Sciences Institute, International Life Sciences Institute, Developmental and Reproductive Toxicology Technical Committee's Behavioral Testing Project Committee; Washington, DC
1999 - 2000	Principal Investigator – Established an Interagency Agreement with EPA to develop a biologically based dose-response model for food-borne pesticides. The purpose of this 2-3 year, $250,000 agreement, is to establish and validate a biologically-based dose-response model to enhance the quantitative risk assessment of foodborne pesticides of FDA relevance
1999	Invited panel member at the Environmental Protection Agency Peer Review Workshop, "ORD Strategy for Research on Environmental Risk to Children" in Washington, DC
1999	Invited participant at the Workshop on "Harmonization of Cancer and Non-Cancer Risk Assessment,” Contemporary Concepts in Toxicology, Society of Toxicology Annual Meeting in Arlington, VA
1999	Member of the World Health Organization (WHO)/International Agency for Research on Cancer (IARC), Monographs on the Evaluation of Carcinogenic Risks to Humans, "IARC Working Group on Some Pharmaceutical Agents" (including four HIV therapeutics); Lyon, France
1998 - 1999	Member, FDA's FY 2001 Planning and Budget Subcommittee on Standards Development
1997 - 2000	Co-chair, Interagency Committee on Neurotoxicology (ICON)
1997	Chair, Discussion Group #3, Optimizing and leveraging FDA resources to enhance flexibility in problem solving, FDA Forum on Regulatory Sciences
1995	NCTR/FDA representative at the EPA/ILSI Working Group on Human Variability; Washington, DC
1995	Member, FDA Employee Performance Management System Focus Group, Office of Personnel Management
1995	Chair, NCTR Research Scientists Peer Review
1994	Co-Chair, NCTR Research Scientists Peer Review

1994 - 2005	NCTR/FDA representative and Steering Committee member to the FDA Neurotoxicity Working Group
1993	NCTR/FDA representative for the Annual Research Planning meeting of ORA/Seafood Products Research Center, Seattle District
1993	FDA invited Panel member for Neurotoxicology: International Life Sciences Institute/FDA sponsored Workshop to review the FDA Red Book II; Washington, DC
1991 - 1996	Principal Investigator – Established an Interagency Agreement with NIEHS/NTP to develop animal models to assess the potential neurotoxicity of HIV/AIDS therapeutics agents (ddC, ddI, AZT, etc.). The purpose of this 6-year, $2.8 million agreement was to establish and validate rodent and nonhuman primate models to assess HIV therapeutics and to identify mechanisms of and preventions for potential neurotoxicity.
1991 - 1994	FDA representative for the Working Party on Neurotoxicology, Subcommittee on Risk Assessment Federal Coordinating Council on Science, Engineering and Technology and co-author of Principles of Neurotoxicity Risk Assessment
1991	NCTR/FDA representative for the Workshop: Criteria for Judging Relative Toxicity of Chemicals from Developmental Toxicity Data, NIEHS
1991	NCTR/FDA representative for the Workshop on Health Effects of Manganese in the Environment, U.S. EPA
1990 - 1991	Originator of Memorandum of Understanding between U.S. EPA and NCTR/FDA on neurotoxicity risk assessment procedures
1989 - 2000	Member, Steering Committee, Interagency Committee on Neurotoxicology (ICON). Co-organizer of this government-wide committee focused on coordinating research and regulatory efforts in the field of neurotoxicology.
1989	NCTR Scientific Coordinator for the "Arrangement for the Joint Research on Pharmacokinetics and Drug Metabolism" between the Korea (Advanced) Institute of Science and Technology and NCTR
1989	FDA/NCTR invited representative to chair a working group on "Coordination of Federal Research Programs" and participate in a workshop on Federal Interagency Coordination of Neurotoxicology Research and Regulatory Programs co-sponsored by the Congressional Office of Technology Assessment (OTA) and the U.S. EPA
1988 - 1990	NCTR representative for the National Toxicology Program Board of Scientific Counselors, Developmental and Reproductive Toxicology Programs Review Subcommittee
1988 - 1990	NCTR/FDA representative to the Task Force of Environmental Cancer and Heart and Lung Disease sponsored workshop on The Effects of Pesticides on Human Health, "Neurotoxic Effects of Pesticides" Subcommittee

1987	Committee member, administrative review of applications for grants and cooperative agreements submitted to Agency for Toxic Substances and Disease Registry
1987	NCTR representative (alternate) on interagency workgroup for the proposed Comprehensive Assessment Information Rule, Office of Pesticides and Toxic Substances
1987	NCTR Awards Committee Member
1987	Chair of the Subcommittee on Personnel Issues of the Committee on Administrative Planning
1987	Co-organizer of Risk Assessment Workshop on Reproductive and Developmental Toxicology and co-leader of a workgroup on the risk assessment of THC
1987	Member, NCTR-UAMS Institutional Coordinating Committee
1986 - 1988	Member of FDA Commissioner's Action Plan Phase II Committee on enhancing scientific excellence within FDA
1986	Chair, NCTR Research Scientist Peer Review
1985	Co-chair, NCTR Research Scientist Peer Review
1984 - 1990	Principal Investigator for an Interagency Agreement between the National Institute for Drug Abuse and NCTR, "Neuropathology and Behavioral Toxicology of Chronic Delta-9-THC and Marijuana Exposure in the Nonhuman Primate." This $3 million, 8-year study required the recruitment of 3 Ph.D. level and 2 technical-level employees and 5 expert consultants. The resources required for this project, including a new $1 million inhalation and Primate Research Facility, has provided the necessary support for many related studies and expanded the scientific capabilities of the NCTR.
1981	Invited participant in the Interagency Regulatory Liaison Group (IRLG) Workshop on Reproductive Toxicity Risk Assessment, Pharmacokinetics Group (September 21-23, 1981). The publication from this workshop defined the state-of-the-art in reproductive toxicity risk assessment.
1979 - 1988	Member of the Project Advisory Group for Contract: Synthesis of Unlabeled, Stable Isotope, and Radioisotope Labeled Compounds, NCTR, RFP No. 222-83-2011(P)
1979 - 1981	Member of the Project Advisory Group for Contract: Comparative Hormonal Potency of Estrogens in the Rhesus Monkey, Bureau of Foods, #223-78-2230
1979	As a member of a three-man team, the incumbent was requested by the Bureau of Veterinary Medicine to present available research data concerning the estrogens as a class. At this meeting in Rockville, Maryland, it was the incumbent's responsibility to present pharmacokinetic and metabolic data

generated by his research team. The incumbent addressed the metabolism of DES, estradiol, and ethynylestradiol in the adult and pregnant monkey and in the mouse. The information presented was used by the Bureau of Veterinary Medicine to aid in the impending decision to regulate estradiol benzoate.

1978 The incumbent, as a member of a two-man team, was invited to give a presentation to the Bureau of Drugs in Rockville, MD. The talk was titled: "Transplacental pharmacokinetics and metabolism and diethylstilbestrol and estradiol in the rhesus monkey." The purpose of the presentation was to expose the Bureau of Drugs to the research capabilities and interests of the NCTR scientific staff. A similar presentation was made at the FDA Policy Board Meeting at the NCTR in 1978.

Offices, Committee Assignments, or Special Assignments in Professional and Honorary Societies, Advisory Boards, and Commissions

2014 Member of the Arkansas Reproductive Health Monitoring System's Advisory Commission; Arkansas Children's Hospital Research Institute; Little Rock, AR

2013 – present Member of the Data Science Advisory Board of the Emerging Analytics Center at the University of Arkansas at Little Rock

2012 – 2013 President, Society of Toxicology

2011 – 2012 Vice President, Society of Toxicology

2010 – 2011 Vice President-Elect, Society of Toxicology

2010 – present Member, Editorial Board, CNS & Neurological Disorders-Drug Targets

2009 – present Associate Editor, *American Journal of Neuroprotection & Neuroregeneration* (AJNN)

2007 – 2009 Treasurer and Chair, Finance Committee, Society of Toxicology (5/1/07 – 4/30/09)

2006 – 2007 President, Academy of Toxicological Sciences

2006 – 2007 Treasurer-elect, Society of Toxicology

2005 – 2008 Member, Editorial Board, *Reproductive Toxicology*

2004 – 2006 Chair, Membership Committee, Society of Toxicology

2004 – 2006 President, MidSouth Computational Biology and Bioinformatics Society

2004 – 2005 President, Arkansas Chapter of the Society for Neuroscience

2003 – 2006 Elected Member, Membership Committee, Society of Toxicology

2002 – 2008 Editorial Board Member, *Experimental Biology and Medicine*

2002 – 2003	President, Teratology Society
2001 – 2006	Member, FDA Senior Biomedical Research Service (SBRS) Credentials Committee
2001 – 2002	Vice President, Teratology Society
2001 – 2002	Member, U.S. EPA Food Quality Protection Act Science Review Board
2000 – 2003	Member, Program Committee, American Society for Pharmacology and Experimental Therapeutics
2000 – 2001	President, Arkansas Chapter of the Society for Neuroscience
1999 – present	Associate Editor, *Toxicological Sciences*, Society of Toxicology
1999 – 2000	Vice-President, Society for Neuroscience, Arkansas Chapter
1998 – 2000	Chairman, Publication Committee, Teratology Society
1997 – 2000	Member, Continuing Education Committee, Society of Toxicology
1997 – 2000	Member, Editorial Board, *Reproductive Toxicology*
1996 – 2000	Member, Editorial Board, *Neurotoxicology and Teratology*
1996 – 1999	Member, Task Force on Improving the Scientific Basis for Risk Assessment, Society of Toxicology
1995 – 1998	Section Editor and Member Publication Board, *Teratology*
1995 – 1998	Councilor, Teratology Society
1995 – 1996	President, Neurotoxicology Specialty Section, Society of Toxicology
1994 – present	Associate Editor: *NeuroToxicology*
1994 – 1995	Vice-President, Neurotoxicology Specialty Section, Society of Toxicology
1993 – 1996	Chair, Executive Committee, Section on Developmental Pharmacology, American Society of Pharmacology and Experimental Therapeutics
1992 – 2000	Member, Publication Committee, Teratology Society
1992 – 1994	Chair, Student Affairs Committee, Teratology Society
1992	Symposium Co-Organizer "Cocaine Pharmacokinetics during Pregnancy: Relationship to Fetal Exposure and Developmental Toxicity," Federation of American Societies for Experimental Biology

1992	Workshop Co-Organizer, "Toxicokinetic Studies of Pregnant Animals in Safety Evaluation," Teratology Society
1991 – 1994	Member, Student Affairs Committee, Teratology Society
1991	Symposium Organizer, "Neurobehavioral Effects of Developmental Cocaine Exposure: Clinical and Experimental Findings," Neurobehavioral Teratology Society
1991	Symposium Organizer, "The Role of Glucocorticoids in Normal and Abnormal Developmental," American Society of Pharmacology and Experimental Therapeutics
1990 – 1996	Member, Executive Committee, Section on Developmental Pharmacology, American Society of Pharmacology and Experimental Therapeutics
1990 – 1991	Chair, Nominations Committee, Teratology Society
1990	Member, Organizing Committee for the Annual Meeting of the South Central Chapter of the Society of Toxicology
1989 – 1990	Member, Nominations Committee, Teratology Society
1988 – 1989	President, South Central Chapter of the Society of Toxicology
1987 – 1988	Vice President, South Central Chapter of the Society of Toxicology
1987	Symposium Organizer and Chair, The Influence of Chemical Disposition on Developmental Toxicity, Teratology Society
1985 – 1987	Secretary/Treasurer, South Central Chapter of the Society of Toxicology
1985	Session Chair, American Society of Pharmacology and Experimental Therapeutics Meetings
1985	Session Chair, Trophoblast Conference
1983	Session Chair, Teratology Society Meetings
1982 – 1983	Member of Program Committee, South Central Chapter of Society of Toxicology

Outside Professional Advisory and Consulting Activities:

2014 – present	Member of the Arkansas Reproductive Health Monitoring System's (ARHMS) Advisory Commission
2006 – present	Member of the Historically Black College or University – Undergraduate Program (HBCU-UP) External Advisory Committee at Philander Smith College; Little Rock, AR
2006 – present	Board Member, Arkansas Biosciences Institute

2005	Co-Chair of the Society of Toxicology Symposium, “Systems Biology: Approaches and Applications to Toxicology;” New Orleans, LA; March 10, 2005
2004	Served as member of the Tobacco-Related Disease Research Program General Biomedical Sciences Study Section; San Francisco, CA; April 30, 2004
2004	Co-chair, Society of Toxicology Workshop, Systems Biology: A New Venue for Exploring Mechanisms of Developmental Toxicity; Baltimore, MD
2003	Co-chair, Society of Toxicology Workshop, Dose Dependent Transitions in Mechanisms of Toxicity; Salt Lake City, UT
2003	Organizer, Chair, and Speaker – American Society for Pharmacology ad Experimental Therapeutics (ASPET) Annual meeting: Symposium entitled "Developmental Neurotoxicity Induced by NMDA Antagonists/GABA Agonists;" San Diego, CA; April 2003
2003 – 2005	Member, International Life Sciences Institute (ILSI), Mode of Action Human Relevance Workgroup; Washington, DC
2003	Invited to serve as a full member of the California Tobacco-Related Disease Research Program (TRDRP) Study Section, University of California, Oakland, CA; April 2003
2003	Reviewer for EPA National Health and Environmental Effects Research Laboratory (NHEERL) Human Health Research Implementation Plan; Research Triangle Park, NC
2001 – 2005	Served as member of the Science Advisory Committee (SAC) Joint Review of the CIIT Centers for Health Research (CIIT) Research Program; Research Triangle Park, NC
2001 – 2004	Co-chair ILSI Committee, “Dose-dependent Transitions in Mechanisms of Toxicity”
2000 – 2002	Member, Search Committee for Director, Neurotoxicology Division, Environmental Protection Agency; Research Triangle Park, NC
1997 – 1999	Member, Committee on Faculty, University of Arkansas for Medical Sciences; Little Rock, AR
1995	Reviewer for EPA's Grants for Research Program under "Human Health Risk Assessment" topic
1995	Reviewer for The Johns Hopkins Center for Alternatives to Animal Testing, Grant Application
1990 – 1992	Member, Executive Council of the Division of Toxicology, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences; Little Rock, AR

1990 Member, Promotions and Tenure Committee, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences; Little Rock, AR

1990 Reviewer for RFA-89-HD-10 "The Role of the Placenta in Transmission and Treatment of HIV Infection in the Newborn," National Institute of Child Health and Human Development (NICHD)

1990 Reviewer of Investigator's report "Effects of methanol vapors on human function," Health Effects Institute

1989 – 1995 Member, Editorial Board, *Fundamental and Applied Toxicology*

1988 – 1990 Member, Drug and Alcohol Abuse Coordinating Committee, University of Arkansas for Medical Sciences; Little Rock, AR

1987 Consultant and team leader on nonhuman primate placental transfer studies to Dr. Andrew Hendrickx, Director; California Primate Research Center; University of California; Davis, CA

1987 Reviewer for National Institutes of Health (NIH) Toxicology Study Section and March of Dimes grants (*ad hoc*)

1984 – 1985 Member, Curriculum Committee, Department of Pharmacology, University of Arkansas for Medical Sciences; Little Rock, AR

1983 – 1985 Chair, Curriculum Committee, Interdisciplinary Toxicology Division, University of Arkansas for Medical Sciences; Little Rock, AR

1980 – 1984 Research Council Member, University of Arkansas for Medical Sciences; Little Rock, AR

Other Significant Information

- The incumbent has participated in several Peer Review Systems at the NCTR. The incumbent regularly reviews manuscripts and protocols. These activities are important in maintaining a high quality research at the NCTR.

- The incumbent has coordinated and assisted in the direction of sixteen predoctoral Fellows. The graduate students, Felix Adatsi, Hudson Bates, Harry William Broening, III, Helen Cunny, Phil Goad, Dan Kelly, Robert Kwarta, Oh-Seung Kwon, Gail McClure, John Lipscomb, David Plowchalk, Linda Raitano, Jon Rowland, Steve Schmid, Mary Alice Smith Chris Stewart, and Alex Xu have since earned their doctorate and are employed in the field of toxicology and/or clinical medicine. The integration of their thesis work with the goals of the Division of Neurotoxicology and the accomplishment of their research projects was the responsibility of the incumbent. With proper motivation and guidance, these students produced top quality research of considerable value to the NCTR/FDA and in turn, became well trained toxicologists.

- Over twenty postdoctoral fellows have been directly or indirectly supervised by the incumbent including: Drs. Zbigniew Binienda, John Bowyer, Amy Cada, David Cawthon, Sherry Ferguson, Katherine Flynn, Keri Hopkins, Syed Imam, Malak Kolta, John Meredith, Tucker Patterson, Linda Roberts, Jennifer Sandberg, Gene Schulze, Larry Schmued, Jennifer Schnellmann, John Tor-Agbidye, Jon Popke, Cheng Wang, Lulu Xu, Zengjun Xu, and Jamal El Yazal.

- While the incumbent served as Director, Division of Neurotoxicology, he was responsible for direct supervision of eight Ph.D. level scientists (2 SBRS, 3 GS-15, 2 GS-14, and 1 GS-12) and one program support specialist; with overall administrative responsibility for over 30 government employees, visiting scientists, and guest workers within the Division.

- The incumbent envisioned and established, first the Neurotoxicology Program, and later, the Division of Neurotoxicology at NCTR/FDA in 1992. Over a twelve-year period, he recruited all seven senior staff whose combined efforts with other scientists within the division at NCTR, FDA, and outside institutions resulted in approximately 40 publications per year. The majority of those publications are in quality, peer-reviewed journals. The NCTR Scientific Advisory Board (SAB) has twice reviewed the division and, on both occasions, the results have been very positive as indicated by the January, 1998, SAB Subcommittee summary statement: "We agree with the opinion stated in the previous review of the Division of Neurotoxicology, conducted on January 7-8, 1993, that the Division is a valuable resource to both the scientific and regulatory missions of the FDA. There is no question that the development of drugs and devices and the provision of a safe food supply will continue to be confronted by issues of neurotoxicity and that the FDA is well-served by maintaining a strong Division of Neurotoxicology at NCTR. Further, the Division as it currently exists is a unique resource with capabilities that are not duplicated elsewhere."

- The incumbent has employed a variety of leveraging techniques to support FDA-relevant research at the NCTR/FDA. Sources of extramural funding have included other government agencies – IAGs with NIDA, NIEHS, EPA, NICHD and industry (CRADAs).

- Referee for *The Journal of American College of Toxicology, Toxicology and Applied Pharmacology, Drug Metabolism and Disposition, Life Sciences, Biochemical Pharmacology, Teratology, Molecular Pharmacology, Chemco-Biological Interactions, Reproductive Toxicology, Fundamental and Applied Toxicology, Journal of Pharmacology and Experimental Therapeutics, Journal of Obstetrics and Gynecology,* and *Journal of Neurochemistry.*

Teaching Service

Course Instruction (University of Arkansas for Medical Sciences):

2000-2002	Dissertation Research
1986-1997	Dissertation Research
1994-1995	Alcohol and Drug Dependency
1989-2001	Toxicology for Graduate Studies, 5063
1985	Pharmacology for Graduate Students (Distribution and Pharmacokinetics)
1985	Pharmacology/Toxicology, 5033 General Principles (Distribution)
1980-81	Medical School Pharmacology (Drug Metabolism)
1980	Toxicology (Reproductive Toxicology)

Course Instruction (University of Mississippi):

1990 Methods in Toxicology (Pharmacology 679)

Special Invitations

1. Invited presentation on "Analytical Methods for Estrogenic Agents" at the 4th Annual Spring Workshop and Exposition of the Association of Official Analytical Chemists; San Francisco, CA; May 1979.

2. Invited presentation on "Transplacental Pharmacokinetics and Metabolism of Natural and Synthetic Estrogens in the Rhesus Monkey" at the Gordon Research Conferences, Toxicology and Safety Evaluations; Meriden, NH; August 1979.

3. Invited presentation on "Placental Transfer and Metabolism of Estradiol-17B, Ethynylestradiol and Diethylstilbestrol in *Macaca mulatta*" at the Northwest Center for Medical Education, School of Medicine, Indiana University; Gary, IN; December 1979.

4. Invited presentation of "Pharmacokinetic Factors that Influence the Delivery of Natural and Synthetic Estrogens to the Subhuman Primate Fetus" at the Department of Pharmacology, University of Kentucky, Lexington, KY; 1980.

5. Invited presentation on "The Cholestatic Activity of Glucuronide Conjugates of Estrogens" at the Gordon Research Conferences, Drug Metabolism; Plymouth, NH; 1981.

6. Invited presentation on "A New Class of Cholestatic Agents: The D-Ring Steroid Glucuronide Conjugates" at the Department of Pharmacology, University of Groningen, The Netherlands; 1982.

7. Invited presentation on "The Estrogens: Placental Transfer and Metabolism" at the California Primate Research Center; Davis, CA; 1982.

8. Invited presentation on "Developmental Neurotoxicology: Effects of Trimethyltin and Methylmercury" at the Dartmouth Medical School; Lebanon, NH; 1983.

9. Invited presentation on "The Rhesus Monkey as a Model for Biomedical Research" at the Veterans Administration Hospital; White River Junction, VT; December 1983.

10. Invited presentation on "Placental Transfer and Metabolism of Synthetic and Natural Steroid Hormones" at the Grand Rounds of the Obstetrics and Gynecology Department, University of Arkansas for Medical Sciences; Little Rock, AR; 1984.

11. Invited presentation on "Placental Transfer and Metabolism of Glucocorticoids in the Rhesus Monkey" at the Gulf-South Regional Society of Toxicology Meeting; Galveston, TX; 1984.

12. Invited to co-author a review article titled "Steroid D-Ring Glucuronides: A New Class of Cholestatic Agents" for *Trends in Pharmaceutical Sciences (TIPS),* 6:256-259, 1985.

13. Invited to organize and co-chair a symposium titled "Developmental Neuropharmacology/ Toxicology" for the Western Pharmacological Society; Lake Tahoe, CA; 1985.

14. Invited presentation on "Developmental Toxicology" at the Industrial Research Institute, NCTR Spotlight; Jefferson, AR; 1985.

15. Invited presentation on "Metabolism and Pharmacokinetics of Selected Naturally Occurring and Synthetic Estrogens and Glucocorticoids in the Pregnant Rhesus Monkey" at the International Workshop Symposium, Pharmacokinetics in Teratogenesis, West Berlin; September 1985.

16. Invited presentation on "Development Neurotoxicology" at the Department of Pharmacology and Interdisciplinary Toxicology, University of Arkansas for Medical Sciences; Little Rock, AR; 1985.

17. Invited presentation on "Disposition of Various Steroids During Fetal Development" at the Department of Pharmacology, St. Mary's Hospital Medical School, University of London, London; 1985.

18. Invited presentation on "Metabolism of Antihistamines" at the National Toxicology Program Science Workshop Chemical Class Studies; Research Triangle Park, NC; 1985.

19. Invited presentation on "Pharmacokinetics of Delta-9-THC and Marijuana Smoke in the Rhesus Monkey" at the Department of Pharmacology, University of Mississippi; University, MS; 1986.

20. Invited presentation on "Transplacental Pharmacokinetics and Metabolism of Drugs and Endogenous Hormones" at the American Pharmaceutical Association Annual Meeting; San Francisco, CA; 1986.

21. Invited presentation on "The Placental Interface" Lecture for the Teratology Education Course, Teratology Society; Boston, MA; 1986.

22. Invited presentation on "Improving Risk Assessment for Chemicals Affecting the Developing Central Nervous System" at the Second Conference on Current Concerns on Toxicity; Millbrae, CA; 1986.

23. Invited presentation on "The Role of the Placenta in the Disposition and Developmental Toxicity of Estrogens" at the Teratology Society; Palm Springs, CA; 1987.

24. Invited Organizer and Chair of "The Influence of Chemical Disposition on Developmental Toxicity" Symposium of the Teratology Society; Palm Springs, CA; 1987.

25. Invited presentation on "Placental Transfer" at the Pharmacology Division, Genetech, Inc.; South San Francisco, CA; 1987.

26. Invited presentation on "Risk Assessment of Developmental Neurotoxicants" at the EPA; Las Vegas, NV; 1987.

27. Invited presentation on "Effects of Chronic Marijuana Smoke Exposure on Cognitive Function in the Rhesus Monkey: Experimental Design and Initial Findings" at the 5th International Neurotoxicology Conference; Little Rock, AR; 1987.

28. Invited presentation on "MDMA: Ecstasy or Anti-5HT" at the University of Arkansas for Medical Sciences; Little Rock, AR; 1988.

29. Invited to co-chair a session at the International Symposium, Developmental Biology and Toxicology in Nonhuman Primates, and invited presentations: "Ontogeny of Hepatic Drug Metabolizing Enzymes in the Rhesus Monkey: Comparison of *In Vitro* and *In Vivo* Conditions" and "Steroid Metabolism by the Perfused Rhesus Monkey and Human Placenta: A Comparative Study" in Freie Universitat, Berlin; 1988.

30. Invited Chair of a session on Methods of Evaluating Toxicity and invited presentation "Risk Assessment of Potential Neurotoxicants: Are the Current Methods Adequate?" at the Fourth Conference on Current Concerns on Toxicity and Waste Management; Millbrae, CA; 1988.

31. Invited to Co-chair a session and present "Neurochemical and Behavioral Effects of Orally Administered MDMA: Comparison of the Rodent and Nonhuman Primate" at the Sixth International Neurotoxicology Conference, Drug Abuse and Brain Development; North Little Rock, AR; 1988.

32. Invited presentation on "Placental Metabolism of Steroids in the Human and Nonhuman Primate" at Grosser Horsaal, Universitats-Frauenklinik und, Kantonales Frauenspital Bern; Bern, Switzerland; 1988.

33. Invited presentation on "Chronic Marijuana Smoke Exposure in Rhesus Monkeys: Behavioral and Neuropathological Effects" at the American Medical Society on Alcoholism and Other Drug Dependencies; Atlanta, GA; 1989.

34. Invited presentation on "Placental Transfer of Psychoactive Agents in the Nonhuman Primate" for the Behavioral Teratology Society Symposium "Use of Nonhuman Primates in Behavioral Teratology," Behavioral Teratology Meetings; Richmond, VA; 1989.

35. Invited Co-organizer of The Seventh International Neurotoxicology Conference, Neurotoxicology and Risk Assessment; Chair for session: Neurobiologic Basis of Neurotoxicity; presentation on "Quantitative Risk Assessment of Neurotoxicants;" Little Rock, AR; 1989.

36. Invited presentation on "The Risk Assessment Process: Application to Neurotoxicants" at the Korean Institute of Science and Technology; Seoul, Korea; 1989.

37. Invited presentation on "Placental Transfer of Chemicals in the Nonhuman Primate" at the Alternative Fuels Workshop, Health Effects Institute; Boston, MA; 1989.

38. Invited presentation on "Phenytoin Pharmacokinetics in the Pregnant Rodent: Relationship to Developmental Toxicity and Thyroid Function" at the Symposium "Pharmacokinetic Studies toward Mechanisms in Drug Teratogenesis," European Teratology Society; Budapest, Hungary; 1989.

39. Invited presentation on "Biological Model for Neurotoxicity Risk Assessment" at the Bioenvironmental Hazard on Human Health Symposium, The Chinese University of Hong Kong, Hong Kong and at the International Symposium on Chemical Toxicity and Risk Assessment, Korean Institute of Science and Technology; Seoul, Korea; 1990.

40. Invited Co-organizer of The Eighth International Neurotoxicology Conference, Role of Toxicants in Neurological Disorders and Session Chair of Session IV "Modulators of Neurotoxicity;" Little Rock, AR; 1990.

41. Invited presentation on "Risk Assessment of Neurotoxicants" at the Interagency Committee on Neurotoxicology Meeting; Washington, DC; 1990.

42. Invited presentation on "Research on Placental-Drug Interactions" at the Division of AIDS, NIAID-sponsored Workshop on the Role of Placenta in HIV Infection & Therapy; Nantucket, MA; 1990.

43. Invited Work Group Expert at the U.S. EPA/NIEHS-sponsored Workshop on Health Effects of Manganese; Research Triangle Park, NC; 1991.

44. Invited Group Discussion Leader at the NIEHS-sponsored Workshop on Criteria for Judging Relative Toxicity of Chemicals from Developmental Toxicity Data; Research Triangle Park, NC; 1991.

45. Invited presentation on "Risk Assessment of Psychoactive Agents" for Grand Rounds Series, Department of Psychiatry and Behavioral Sciences, University of Arkansas for Medical Sciences; Little Rock, AR; 1991.

46. Invited book chapter, "Risk Assessment for Neurotoxicants," by D. Gaylor and W. Slikker, Jr. in *Neurotoxicology* (eds. H. Tilson and C. Mitchell), Raven Press, 1991.

47. Invited presentation, "Assessing Risk for Neurotoxicants," Sigma Xi, University of Arkansas for Medical Sciences; Little Rock, AR; 1991.

48. Invited organizer of the Neurobehavioral Teratology Society Symposium on "Neurobehavioral Effects of Developmental Cocaine Exposure: Clinical and Experimental Finding," and presentation "Prenatal Cocaine Exposure in the Monkey: Preliminary Findings from Transplacental Pharmacokinetic and Postnatal Assessment Studies;" Boca Raton, FL; 1991.

49. Invited organizer of American Society for Pharmacology and Experimental Therapeutics/FASEB Symposium "The Role of Glucocorticoids in Normal and Abnormal Development" and presentation of "Placental Transfer and Metabolism of Endogenous and Synthetic Glucocorticoids" at the ASPET Meeting; San Diego, CA; 1991.

50. Invited presentation, "Neurotoxicity Assessment Techniques for Anti-HIV Therapeutics: Preliminary Data from ddC Exposure in the Monkey," at Frontiers in HIV Therapy; San Diego, CA; 1991.

51. Invited book chapter, "Behavioral, Neurochemical and Neurohistological Effects of Chronic Marijuana Smoke Exposure in the Nonhuman Primate," in Volume 4, *Biochemistry and Physiology of Substance Abuse* (eds., L. Murphy and A. Bartke), CRC Press, 1992.

52. Invited Co-organizer of American Society for Pharmacology and Experimental Therapeutics/FASEB Symposium "Cocaine Pharmacokinetics during Pregnancy: Relationship to Fetal Exposure and Developmental Toxicity," FASEB Meeting; Anaheim, CA; 1992.

53. Invited Workshop Co-organizer, "Toxicokinetic Studies of Pregnant Animals in Safety Evaluation," at the Teratology Society Annual Meeting; Boca Raton, FL; 1992.

54. Invited Workshop Co-organizer, "Anti-HIV Therapy and the Placenta," at the 12th Rochester Trophoblast Conference; Rochester, NY; 1992.

55. Invited Conference Co-organizer, "Principles of Developmental Neurotoxicology," at the Tenth International Neurotoxicology Conference; Little Rock, AR; 1992.

56. Invited Symposium Organizer, "Cocaine and Developmental Neurotoxicology" at the Eleventh International Neurotoxicology Conference; Little Rock, AR; 1993.

57. Invited Section Editor for the Developmental Neurotoxicology Section of the *Principles of Neurotoxicology*, Vol. I. (L. Chang, ed.), Marcel Dekker, Inc.; 1994.

58. Invited lecturer in the American Chemical Society Short Course on Chemical Mechanisms in Toxicology, "Mechanisms of Neurotoxicity;" Washington, DC; 1993.

59. Invited lecturer in the American Chemical Society Short Course on Pharmacokinetics and Risk Assessment, "Risk Assessment for Neurological Effects;" Washington, DC; 1994.

60. Invited symposium organizer, "Developmental Pharmacology and Toxicology of Anti-HIV Therapeutic Agents," at the American Society for Pharmacology and Experimental Therapeutics; Anaheim, CA; 1994.

61. Co-organizer for the Twelfth International Neurotoxicology Conference on "Neurotoxicity of Mercury: Indicators and Effects of Low-Level Exposure" and Chair for "Risk Assessment: Issues and Recommendations" in Hot Springs, AR; 1994.

62. Invited book chapter on "Placental Metabolism and Transfer: Role in Developmental Toxicology," *Developmental Toxicology*, 2nd edition (eds., C.A. Kimmel and J. Buelke-Sam) Raven Press, 1994.

63. Co-organizer for the Second International Conference on Neuroprotective Agents and presenter of "Risk Assessment Strategies for Neuroprotective Agents" in Lake George, NY; 1994.

64. Invited lecturer in the American Chemical Society Short Course on Pharmacokinetics and Risk Assessment, "Risk Assessment for Neurological Effects," in Washington, DC; 1995.

65. Invited lecturer in the American Chemical Society Short Course on Chemical Mechanisms in Toxicology, "Mechanisms of Neurotoxicity," Atlanta, GA; 1995.

66. Invited Co-editor of the book *Neurotoxicology: Approaches and Methods*, Academic Press, 1995.

67. Symposium organizer for "Biologically-Based, Quantitative Risk Assessment of Neurotoxicants" and presenter of "Quantitation Risk Assessment of Neurotoxicants with the use of Continuous Data" at the Society of Toxicology Annual Meeting; Baltimore, MD; 1995.

68. Co-organizer for the symposium "Neurotoxicology of Metals in Developing Brain," Experimental Biology ’95; Atlanta, GA; 1995.

69. Invited organizer and chair for the Society of Toxicology Symposium "Biologically-Based, Quantitative Risk Assessment of Neurotoxicants;" Baltimore, MD; 1995.

70. Invited panel member in the scientific review of the Environmental Health Sciences Center, University of Rochester; Rochester, NY; 1996.

71. Invited lecture, "Risk Assessment for Neurological Effects," American Chemical Society Short Course; Washington, DC; 1996.

72. Invited presentation and discussant at the FDA/NIMH Mini-Symposium; Washington, DC; March 1996.

73. Invited platform presentation, "The 3 Rs - Where are We? Updates on Alternatives," Edgewood Arsenal, Aberdeen, MD; 1996.

74. Invited presentation, "Neurotoxicology," ORISE/NCTR Summer Student Program, NCTR; Jefferson, AR; 1996.

75. Invited presentation at the Toxicology Forum, "Neurotoxicology-Risk Assessment: FDA Position," Given Biomedical Institute; Aspen, CO; 1996.

76. Co-organizer/presenter "Strategies for Safety Assessment of Neuroprotective Agents" at Third International Conference on Neuroprotective Agents; Varenna, Italy; 1996.

77. Invited platform presentation, "The Influence of Variability on a Quantitative Risk Assessment Procedure for Continuous Neurotoxicity Data," Society of Risk Analysis Annual Meeting; New Orleans, LA; 1996.

78. Invited presentation, "Mechanisms of Neurotoxicity," First International Workshop on Basic Mechanisms in Toxicology and Their Application to Risk Assessment; San Paulo, Brazil; 1997.

79. Co-chair of the Workshop, "Neurotrophic Factors," Society of Toxicology; Cincinnati, OH; 1997.

80. Invited lecture, "Mechanisms of Neurotoxicity," Chemical Mechanisms in Toxicology Meeting/American Chemical Society Short Course; Washington, DC; 1997.

81. Invited presentation, "Developmental Neurotoxicity of Inhaled Methanol: A Quantitative, Dose-Response Risk Assessment Model," International Conference on Volatile Organic Compounds in the Environment, Risk Assessment and Neurotoxicity; Pavia, Italy; 1997.

82. Invited presentation "Domoic Acid Induced Neurotoxicity: What is the Risk?" at Duke University Integrated Toxicology Program's Symposium, Environmental Toxicology of Marine Pathogens, Duke University; Chapel Hill, NC; 1997.

83. Invited book chapter on "The Developing Nervous System" for *Comprehensive Toxicology: Volume 11, Nervous System and Behavioral Toxicity,* (eds., K. Reuhl and H. Lowndes), Elsevier Science LTD.; 1997.

84. Invited book chapter on "Risk Assessment of Occupational Neurotoxicants" for *Occupational Neurotoxicology,* (eds., Manzo and Costa), CRC Press, Inc.; 1998.

85. Invited presentation, "Mechanisms of Neurotoxicity," University of Texas Medical Branch at Galveston, TX; 1998.

86. Invited workshop presentation, "Recent approaches to Measuring Target-Tissue Concentrations in Neurotoxicological Studies," Society of Toxicology Annual Meeting; Seattle, WA; 1998.

87. Invited session co-chair and presentation, "Biologically-based Dose-Response Model for Neurotoxicity Risk Assessment," VIII International Congress of Toxicology; Paris, France; 1998.

88. Invited presentation, "Current and Future Approaches to Neurotoxicity Risk Assessment," International Life Sciences Institute Annual Meeting; St. Petersburg, FL; 1998.

89. Invited lecture, "Pharmacokinetics and Risk Assessment," American Chemical Society Short Course; Boston, MA; 1998.

90. Co-organizer for the "Fourth International Conference on Neuroprotective Agents;" Annapolis, MD; 1998.

91. Invited presentation, "Neurotoxicology: The Multidisciplinary Field of the Future," Arkansas Chapter of the Society for Neuroscience, NCTR; Jefferson, AR; 1998.

92. Invited seminar, "Mechanism's of Neurotoxicity," University of Michigan School of Public Health; Ann Arbor, MI; 1999.

93. Invited lecture, "Chemical Mechanisms in Toxicology," American Chemical Society Short Course; San Francisco, CA; 1999.

94. Invited seminar, "Mechanism's of Neurotoxicity," Johns Hopkins University; Baltimore, MD; 1999.

95. Invited judge at the International Science and Engineering Fair; Philadelphia, PA; 1999.

96. Co-chair for the Teratology Society Meeting Symposium, "HIV Infection during Pregnancy," and presenter of "Potential Toxicities of HIV Therapeutics in the Developing Infant," Keystone, CO; 1999.

97. Invited lecture, "Mechanism's of Neurotoxicity," American Chemical Society Short Course, Chemical Mechanisms in Toxicology; New Orleans, LA; 1999.

98. Invited review of "MDMA" for *2nd Edition, Experimental and Clinical Neurotoxicology,* (eds., Spencer, Schaumburg and Ludolph), Williams and Wilkins, 2000.

99. Invited co-chair and organizer of 14th Rochester Trophoblast Conference Workshop Session I: "Perinatal Infections: HIV and Co-Infections in the Placenta and Therapeutic Interventions;" Rochester, NY; 2000.

100. Invited symposium speaker "Gender- Based Differences in a Multigeneration Study of Genistein in Rats" for the American College of Toxicology Annual Meeting; San Diego, CA; 2000.

101. Invited co-chair of the Alternative Toxicological Methods for the New Millennium: Science and Application Conference Symposium, "Neurotoxicology (Molecular Biomarkers, Transgenics and Imaging Technologies);" Washington, DC; 2000.

102. Invited presentation, "Risk Assessment for Neurotoxicants from Food and Drugs," Congress of the Collegium Internationale Neuro-Psychopharmacologicum; Brussels, Belgium; July 2000.

103. Invited presentation, "Mechanisms of Neurotoxicity," University of Oklahoma, November 2001.

104. Invited presentation, "Discontinuous Dose-Response curves: Mechanistic Explanations and Risk Assessment Impact," National Capital Area Chapter of the Society of Toxicology; Washington, DC; May 2002.

105. Invited presentation, "Pharmacokinetic/Pharmacodynamic enzymes and receptors: What's known in pediatrics (infancy, childhood and adolescents), and adults: an overview" at the FDA Science Forum; February 2002.

106. Invited presentation, "Placental Transfer of Glucocorticoids: Not All Glucocorticoids are Created Equal," International Federation of Placenta Association's 8th Meeting; Melbourne, Australia; October 2002.

107. Invited presentation "Mechanisms of Neurotoxicity" at the University of Auckland; Auckland, New Zealand; October 2002.

108. Invited seminar speaker "Mechanisms of Neurotoxicity and Opportunities for Neuroprotection" at the Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences; Little Rock, AR; November 2002.

109. Invited presentation "Neuroimaging as a New Approach to Neurotoxicology" at the 20th Annual International Neurotoxicology Conference; Little Rock, AR; November 2002.

110. Invited Co-organizer and presenter, Symposium on Childhood Obesity: Origins in Pregnancy and Impact on Children's Health, Teratology Meeting; Philadelphia, PA; June 2003.

111. Invited presenter of Sunrise Mini-course, "The Placenta and Developmental Toxicity/Teratogenicity," at the Teratology Meeting; Philadelphia, PA; June 2003.

112. Invited Co-chair, "Molecular Mechanisms of Oxidative Injury," Society of Toxicology Annual Meeting; Salt Lake City, UT; March 2003.

113. Invited lecture, “Mechanisms of Neurotoxicity,” American Chemical Society Meeting; Philadelphia, PA; November 6-7, 2003.

114. Invited presentation, “Safety Assessment Approaches for Application during the Perinatal Development,” Center for Drug Evaluation and Research; Washington, DC; December 3, 2003.

115. Invited presentation “Neurotoxicity: Impact on Children’s Health and Assessment Approaches” at the Society for Risk Analysis 23rd Annual Meeting; Baltimore, MD; December 7-10, 2003.

116. Invited presentation “The Fetal Programming Hypothesis: Possible Role in Childhood Obesity” at the 21st International Neurotoxiocology Conference; Honolulu, Hawaii; February 10-14, 2004.

117. Invited presentation “Biomarkers for Neurodevelopmental Toxicity” at the International Conference on Biomarkers for Toxicology and Molecular Epidemiology: New Tools for 21st Century Problems; Atlanta, GA; March 15-17, 2004.

118. Invited presentation “Basic Neurotoxicology Overview: From Genes to Cognition” at the Society of Toxicology Annual Meeting, Continuing Education Course; Baltimore, MD; March 20-25, 2004.

119. Invited presentation “Neuroimaging as a New Approach to Preclinical Neurotoxicology and Neuropharmacology” at the American Society for Pharmacology and Experimental Therapeutics; Washington, DC; April 2004.

120. Invited presentation “NeuroImaging: New Approaches for Drug Discovery and Safety Assessment (PET/MRI)” at the Sixth Annual International Conference on Drug Metabolism/Applied Pharmacokinetics; University of Wisconsin-Madison, School of Pharmacy; Madison, WI; Sept 13-17, 2004.

121. Invited presentation “Neuroimaging: New Approaches for Neurotoxicology” at the FDA Science Forum; Washington, DC; May 18-19, 2004.

122. Invited presentation “Defining Long-term Biological Research Needs on Obesity for FDA’s Regulatory Mission” as the Introductory Presentation: FDA Research Activities Related to Obesity at the FDA Science Forum; Washington, DC; May 18-19, 2004.

123. Invited lecturer “Developmental Neurotoxicology: Approached for Risk Assessment” at the Henry Stewart Annual “Latest Thinking of Reproductive, Developmental and Endocrine Toxicity Studies” Conference; Washington, DC; June 16-17, 2004.

124. Invited speaker “Metabolism and Drug Transporters in the Placenta” at the Teratology Society’s 44th Annual Meeting; Vancouver, British Columbia, Canada; June 26-July 1, 2004.

125. Invited presentation “Functional Imaging” at the Safety Pharmacology Society’s 4th Annual Meeting; Covington, KY; September 27-29, 2004.

126. Invited presentation at NIH Workshop – National Institute of Child Health and Human Development, “Extrapolation of Non-clinical Models of Pediatric Clinical Studies: Setting the Research Agenda, Neurology: Rodent and Primate Models of Neurotoxicity;” Rockville, MD; October 28, 2004.

127. Invited presentation “Developmental Neurotoxicity: Assessment Approaches Based on Gene Expression” at the 32nd Conference of the European Teratology Society; Thessaloniki, Greece; September 19-22, 2004.

128. Invited presentation “Expectations of CNS Safety Pharmacology Screening” in the Pharmaceutic Educational Associates course “CNS Safety Pharmacology: Approaching a Universal Standard for the Assessment of Neurobehavioral Effects in Drug Development;” Washington, DC; April 11-12, 2005.

129. Invited presentation "Developmental Effects of Anesthetic Agents: A Systems Biology Approach" at Duke University; Durham, NC; January 28, 2005.

130. Invited presentation “Understanding the Role of Polymorphisms and Gene Expression in Drug Addiction: A Systems Biology Approach” at the NIEHS/NIAAA/NIH meeting “Chemical Intolerance and Addiction: A Shared Etiology?” – Research Triangle Park, NC; September 19-20, 2005.

131. Invited presentation, “Developmental Neurotoxicity of Anesthetic Agents: Application of a Systems Biology Approach” and Recipient of the Dr. Zaffarano Toxicology Lecture Speaker Award; Iowa State; Toxicology Seminar; 2005.

132. Invited presentation “PBPK/PD Models for Developmental Neurotoxicology: Risk Assessment Starategies and Research Recommendation” at the International Neurotoxicology Conference; Research Triangle Park, NC; September 11-14, 2005.

133. Invited Presentation “Survey of Guidance on Pediatric Safety Evaluation: From Prelinical Models to Bedside” at the North American International Society for the Study of Xenobiotics/Japanese Society for the Study of Xenobiotics (ISSX/JSSX); Maui, Hawaii; October 23-27, 2005.

134. Invited presentation “Goals and Progress toward Personalized Medicine and Nutrition” at the Dean’s Research Forum; University of Arkansas for Medical Sciences; Little Rock, AR; January 24, 2006.

135. Invited presentation “Mechanisms of Neurotoxicity” at the American Chemical Society Meeting, San Francisco, CA; May 5, 2006.

136. Invited presentation **“**Anesthetic Agents: Risk of Exposure during Development” at the University of Michigan Annual Toxicology Symposium; Ann Arbor, MI; March 23-24, 2006.

137. Invited presentation “Effect Transitions in Dose Response/Low Dose Extrapolation” at the Toxicology & Risk Assessment Conference; Cincinnati, OH; April 25, 2006.

138. Invited presentation, “A Systems Biology Approach to Developmental Neurotoxicology: Anesthetic Effects in the Rodent and Nonhuman Primate,” Predictive Models for Drug Safety Assessment, National Institutes of Health; Bethesda, MD; August 15-16, 2006.

139. Invited presentation “Anesthetic-induced Neurodegeneration during Development” at the 34th Annual Society for Neurosurgery Anesthesia & Critical Care; Chicago, IL; October 13, 2006.

140. Invited presentation “Assessment of anesthetics in animal models during development”at the NIH Conference/PPRU Network Steering Committee; Dallas, TX; October 19, 2006.

141. Invited seminar “A Systems Biology Approach to Developmental Neurotoxicology: Anesthetic Effects in the Rodent and Nonhuman Primate” at Howard University College of Medicine; Washington, DC; November 15, 2006.

142. Invited presentation “A Systems Biology Approach to Developmental Neurotoxicology: Anesthetic Effects in the Rodent and Nonhuman Primate” at the International Conference on Food Contaminants and Neurodevelopmental Disorders; Valencia, Spain and Hannover, Germany; December 1-9, 2006.

143. Invited presentation “Opening Remarks and Overview: Accomplishments of MCBIOS” and also served as Session Chair of Bioinformatics I at the MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Meeting; New Orleans, LA; February 1-4, 2007.

144. Invited presentation “Pathways to Personalized Medicine” at Uppsala University; Uppsala, Sweden; March 12, 2007.

145. Invited keynote lecture “Protective Approaches against Anesthetic-induced Neurodegeneration during Development“ at the Fourth Annual Meeting of the Global College of Neuroprotection & Neuroregeneration; Garmisch-PartenKirchen, Germany; March 14-16, 2007.

146. Invited symposium presentation “Disruption of brain cell replication and neurotransmitter systems during development leading to cognitive dysfunction: Developmental neurotoxicity of nicotine” at the 46th Annual Meeting Society of Toxicology; Charlotte, NC; March 23-28, 2007.

147. Invited presentation “Ketamine Effects on the Developing Nervous System” at the FDA Anesthetic and Life Support Drugs Advisory Committee Meeting; Rockville, MD; March 29, 2007.

148. Invited presentation “Anesthetic Induced Neurodegeneration during Development” at Brigham and Women’s Hospital/Harvard Medical School (Grand Rounds); Boston, MA; April 3, 2007.

149. Keynote Address “The Role of the National Center for Toxicological Research (NCTR) within the Regulatory Environment” presented to the Southwestern Association of Toxicologists; Little Rock, AR; April 20, 2007.

150. Invited presentation “The Role of the National Center for Toxicological Research (NCTR) within the Regulatory Environment” at the 2007 Toxicology and Risk Assessment Conference (TRAC); Cincinnati, OH; April 23-24, 2007.

151. Invited presentation “Mechanisms of Neurotoxicity” at the American Chemical Society Mechanisms of Toxicology Course; San Francisco, CA; May 4, 2007.

152. Invited symposium presentation “Brain cell death induced by a combination of inhalation anesthetics in the developing rat and protection from this effect by L-Carnitine” at the 47th Annual Meeting of the Teratology Society; Pittsburgh, PA; June 23-29, 2007.

153. Invited symposium organization and presentation “Developmental Stage and Duration of Anesthesia: Impact on Anesthetic-Induced Neurotoxicity in the Developing Monkey” at the Toxicology Forum; Aspen, CO; July 8-12, 2007.

154. Invited keynote address at the 1st International Conference on Toxicogenomics Integrated with Environmental Sciences (TIES); Raleigh, NC; October 25, 2007.

155. Invited presentation, “The Use of Nonhuman Primates in Toxicology,” CDER, Education Committee of the PTCC; FDA White Oak Facility; Silver Spring, MD; October 31, 2007.

156. Invited presentation at the 2008 International Anesthesia Research Society Annual Clinical and Scientific Meeting; San Francisco, CA; May 1-2, 2008.

157. Invited presentation and Chair, “Nutrition and Food Safety: Pre-Conception to Adolescence Symposium; The Teratology Society Annual Meeting; Monterey, CA; June 29-July 2, 2008.

158. Invited presentation at the 2008 Summer Tox Forum; Aspen, CO; July 6-10, 2008.

159. Invited presentation at the 2008 Aspen Cancer Conference; Aspen, CO; July 20-22, 2008.

160. Invited seminar at Duke University; Durham, NC; September 5, 2008.

161. Invited presentation at the 9th International Neuroprotective Conference; Woods Hole, MA; September 7-11, 2008.

162. Invited presentation at the FDA/DIA Critical Path Initiative Workshop; Bethesda, MD; September 15-16, 2008.

163. Invited keynote address, South Central Chapter Society of Toxicology; Little Rock and Jefferson, AR; September 18-19, 2008.

164. Invited presentation at the 29th Annual Meeting of the American College of Toxicology; Tucson, AZ; November 9-12, 2008.

165. Invited presentation at the 2008 Neuroscience Conference; Washington, DC; November 15-17, 2008.

166. Requested by Dr. Janet Larkin, NIH, to serve as Chair for the NIH Center for Scientific Review, Special Emphasis Panel, for scientific review of applications submitted to the Center for Scientific Review, NIH; December 8, 2008.

167. Presentation to the 2nd Inter-Agency Computational Toxicology Colloquium; Jefferson, AR; December 10-11, 2008.

168. Invited member of the Government Liaison Group for the NAS Standing Committee on Use of Emerging Science for Environmental Health Decisions; Washington, DC; 2009-present.

169. Invited to serve on the Uniformed Services University Center for Neuroscience and Regenerative Medicines Technical Review Panel; Bethesda, MD; April 17, 2009.

170. Invited to serve on the WHO DDT Draft Hazard Assessment Document Review; Geneva, Switzerland; June 1-5, 2009.

171. Invited Speaker at the Symposium on Metabolism of Food and Drugs by Intestinal Microflora; Seoul, Korea; October 19-22-2009.

172. Invited Speaker at the Argentina Society of Pharmacology; Rosario, Argentina; November 22-26, 2009.

173. Invited presentation at the Contemporary Concepts in Toxicology Workshop, "PPTOXII: Role of Environmental Stressors in the Developmental Origins of Disease;" Miami Beach, FL; December 7-10, 2009.

174. Invited speaker at the 7th Global College of Neuroprotection and Neuroregeneration Conference; Uppsala, Sweden; February 28-March 3, 2010.

175. Plenary speaker at the International Anesthesia Research Society/SAFEKIDS Conference; Honolulu, Hawaii; March 20-23, 2010.

176. Keynote speaker at the First Bio-X International Translational Medicine Symposium; Shanghai, China; May 20-25, 2010.

177. Invited Speaker at the Second International Workshop on Anesthetic Neurotoxicity and Mechanisms of Anesthesia Conference; Toronto, Canada; June 14-16, 2010.

178. IUTOX 2010 Congress: XII International Congress of Toxicology; Barcelona, Spain; July 19-23, 2010.

179. Invited speaker at the 60th Anniversary Celebration of the Chinese FDA and a joint workshop of the Chinese National Center for Safety Evaluation of Drugs, NICPBP and the International Life Sciences Institute (ILSI)/Health and Environmental Sciences Institute (HESI); Beijing, China; September 25-27, 2010.

180. Invited speaker at the Northern California Society of Toxicology Regional Chapter; University of California at Berkeley; Berkeley, CA; April 13, 2011.

181. Invited speaker at the 30th Anniversary MASOT; Rutgers University, New Jersey; May 19, 2011.

182. Invited presentation on Regulatory Science at the Institute of Pharmacology and Toxicology, Université Paris Descartes, September 1-2, 2011.

183. Invited speaker, Fifty for the Future, Little Rock Chamber of Commerce; Little Rock, AR; December 1, 2011.

184. Invited keynote seminar speaker at the 3rd Toxicogenomics Integrated with Environmental Sciences (TES) International Conference; University of North Carolina at Chapel Hill, North Carolina; September 15-16, 2011.

185. Invited speaker at the Annual Meeting of the MidSouth Computational Biology and Bioinformatics Society; Oxford, MS; February 17-18, 2012.

186. Plenary Talk and Session Chair; HESI/ILSI Workshop – In Vitro Gene Tox; Washington, D.C., April 24-25, 2012.

187. Welcome address to 2012 summer students at NCTR; Jefferson, AR; May 29, 2012.

188. Presentation to the Arkansas Economic Development Commission as part of their Technology Committee meeting; Little Rock, AR; June 7, 2012.

189. Plenary Speaker at the British Journal of Anaesthesis (BJA) Special Workshop on Anesthesia, Neurotoxicity and Neuroplasticity; Salzburg, Austria; June 14-15, 2012.

190. Keynote Lecture at the Ohio Valley Society of Toxicology Meeting; Columbus, OH; September 28, 2012.

191. Keynote speech at the SOT Contemporary Concepts in Toxicology – Future Tox: Building the Road for 21st Century Toxicology and Risk Assessment Practices; Arlington, VA; October 18-19, 2012.

192. Welcome address at the South Central Regional Chapter of the Society of Toxicology; Little Rock, AR; November 1-2, 2012.

193. Served as a panel member at the inaugural Health and Environmental Sciences Institute (HESI) Combining Interdisciplinary & Translational Expertise (CITE) workshop titled "Towards New Science for Public Health" held December 6-7, 2013, in Arlington, VA. This panel discussion focused on the incentives and hurdles in translating basic science innovations to public health applications. Presented the FDA Global Summits on Regulatory Science Research (GSRS11 and GSRS12) as an example of a successful approach to build a global coalition to aid in the translation of scientific research into enhanced public health outcomes.

194. 38th Annual Winter Meeting of the Toxicology Forum; Washington, DC; January 29-31, 2013. Chair of Session III: Non-Monotonic Dose Response: Exploration of Concept and Implications. Chair and Presentation in Session IV: Role of Academia in Providing Training in Regulatory Sciences.

195. Presentation: Capacity of NCTR to evaluate drugs to treat rare diseases; NIH/CDER Task Force Meeting; White Oak; Silver Spring, MD; February 26, 2013.

196. Remarks at the Risk Assessment Specialty Section Meeting – The Great Debate; 52nd Annual Meeting of the Society of Toxicology; San Antonio, TX; March 12, 2013.

197. Presentation at the MCBIOS X Meeting; Columbia, MO; April 5-6, 2013.

198. Presentation at the Center for Tobacco Products; Rockville, MD; May 30, 2013.

199. Patrticipated in the Kick-off event of the new Emerging Analytics Center at the University of Arkansas at Little Rock as a member of the Data Science Advisory Board; Little Rock, AR; June 3, 2013.

200. Presentation at the 40th Annual Meeting of the Japanese Society of Toxicology; Japan; June 17-19, 2013.

201. Presentation at the Teratology Society Annual Meeting; Tucson, AZ; June 22-26, 2013.

202. Presentation at the XIII International Congress of Toxicology; Coex, Seoul, Korea; June 30-July 3, 2013.

203. Presentation at the Annual Summer Tox Forum; Aspen, CO; July 8-9, 2013.

204. Opening comments at the annual NCTR Women's Health Research Day; Jefferson, AR; August 16, 2013.

205. Presentation at the Board Meeting of the Arkansas Research Alliance; Little Rock, AR; August 29, 2013.

206. Presentation to the Boston Area Pharmacological Tox. Group; Cambridge, MA; October 25, 2013.

207. Introduced the keynote speaker at the 2014 Black History Seminar at NCTR; Jefferson, AR; February 20, 2014.

208. Presentation at the IANR VII and 1st SCSI with 11th GCNN & 2nd IFNR Conference; Mumbai, India; February 27-March 1, 2014.

209. Invited Keynote Speaker at the 39th Annual Summer Meeting of the Toxicology Forum; Aspen, CO; July 7-9, 2014.

210. Invited Keynote Speaker at the International Society of Cellular Therapy (ISCT), Buenos Aires, Argentina; September 25-26, 2014.

211. Invited Speaker/Lecturer (Joseh Warkany Lecturer Award) at the 55th Annual Meeting of the Teratology Society, Montreal, Québec, June 27-July 2, 2015.

212. Invited Workshop Chair at the European Food Safety Authority's 2nd Conference - Shaping the Future of Food Safety Together, Milan, Italy, October 14-16, 2015.

213. Invited Keynote Speaker at the 7th National Congress of Toxicology (VII-China Society of Toxicology (CSOT), Wuhan, China, October 25-28, 2015.

214. Invited Speaker at the 40th Annual Winter Meeting of the Toxicology Forum, Washington, DC, February 8-10, 2016.

215. Invited Speaker at MCBIOS XIII, Memphis, Tennessee, March 3-5, 2016.

216. Invited Speaker at the Society of Toxicology 55th Annual Meeting and ToxExpo, New Orleans, Louisiana, March 13-17, 2016.

217. Presentation at the British Journal Academy (BJA) Anesthetic and Neuroplasticity Conference, London, England, May 25-27, 2016.

218. Invited Speaker at the 42nd Annual Summer Meeting of the Toxicology Forum, Salt Lake City, Utah, July 24-27, 2016.

219. Co-Organizer and Presentation at the 13th International Conference on Neuroprotective Agents (ICNA), Bizkaia, Spain, September 18-21, 2016.

220. Invited Speaker at the Environmental Mutagenesis and Genomics Society Annual Meeting, Kansas City, Missouri, September 24-28, 2016.

221. Invited Speaker at the VCR Distinguished Lecture Series, The University of Tennessee Health Science Center, Memphis, Tennessee, October 20, 2016.

Participation in National Scientific Meetings, Technical Conferences, Workshops, Seminars

1975 Attended and presented a platform presentation at the American Society of Pharmacology and Experimental Therapeutics (ASPET); Davis, CA, National Scientific Meeting. Presentation: "Characterization of EEG effects produced by the interaction of secobarbital with psychomotor stimulants using spectral analysis techniques."

1976 Attended and presented a platform presentation at the Proceedings Western Pharmacological Society, Regional Scientific Meeting; San Francisco, CA. Presentation: "Comparisons of the effects following acute and chronic administration of lithium chloride in *Macaca mulatta*."

1976 Attended and presented a poster at the FASEB, National Scientific Meeting; Anaheim, CA. Presentation: "Responses of normal and isolate monkeys to d-amphetamine, cocaine, chlorpromazine and diazepam."

1977 Attended and presented a poster at the Society for Neuroscience National Scientific Meeting; Anaheim, CA. Presentation: "Discriminative effects of cocaine in the rhesus monkey."

1978 Attended and presented a platform presentation at the ASPET National Scientific Meeting; Houston, TX. Presentation: "Comparison of the transplacental pharmacokinetics of diethylstilbestrol (DES), diethylstilbestrol monoglucuronide (DESG) and estradiol-17B (E2) in the rhesus monkey".

1979 Attended and presented a poster at the Society of Toxicology National Scientific Meeting; New Orleans, LA. Presentation: "Application of high pressure liquid chromatography (HPLC) to characterize diethylstilbestrol (DES) metabolites in the *Macaca mulatta.*"

1979 Attended and presented a poster at the Endocrine Society, Anaheim, CA; National Scientific Meeting. Presentation: "Comparison of the placental transfer of some synthetic and natural estrogens in subhuman primates."

1980 Attended and presented a poster at the Gordon Research Conference; Holderness, NH. Presentation: "Drug Metabolism Cholestatic Activity of the 17-glucuronide of estradiol-17B in the rat."

1980 Attended and presented a poster at the Society of Teratology; Portsmouth, NH. Presentation: "Distribution and metabolism of triamcinolone acetonide (TAC) and cortisol (C) in the rhesus monkey fetomaternal unit."

1980 Attended and presented a platform presentation at the ASPET Meeting; Rochester, MI. Presentation: "Transplacental pharmacokinetic comparison of diethylstilbestrol (DES) and estradiol-17B (E2) in the rhesus monkey."

1981 Attended and presented a poster at the Society of Teratology; Palo Alto, CA. Presentation: "Two dose comparison of the transplacental pharmacokinetics of triamcinolone acetonide (TAC) and cortisol (C) in the rhesus monkey."

1981 Attended and presented a platform presentation at the ASPET Meeting; Calgary, Canada. Presentation: "Ethanol elimination in the rhesus monkey: Comparison of mother, fetus and neonate."

1982 Attended and presented a paper at the Stowe School Symposium on Drug Metabolism; Buckingham, England. Presentation: "The metabolism of 17a-ethynylestradiol-17B in the nonhuman primate."

1982 Attended and presented a poster at the Gordon Research Conference, Drug Metabolism; Holderness, NH. Presentation: "Transplacental pharmacokinetics and metabolism of 17a-ethynylestradiol-17b and estradiol in the rhesus monkey."

1983 Attended and presented a poster at the Transactions of the American Society for Neurochemistry; Honolulu, HI. Presentation: "Neurotransmitter ontogeny in the rat: effects of prenatal methylmercury."

1983 Attended and presented a platform presentation at the Teratology Society, Atlantic City, NJ. Presentation: "Pharmacokinetics of doxylamine (Bendectin(r)) in the rhesus monkey."

1984 Attended and presented a platform presentation at the Teratology Society; Boca Raton, FL. Presentation: "Metabolic pathways of ^{14}C-doxylamine succinate (Bendectin(r)) in the rhesus monkey."

1984 Attended and presented a poster at the FASEB; St. Louis, MO. Presentation: "Regional neurochemical alterations produced by Trimethyltin (TMT) in the mouse."

1984 Attended and presented a platform presentation at the Society of Toxicology, Atlanta, GA. Presentation: "Metabolism of ^{14}C labeled doxylamine succinate (Bendectin®) in the rhesus monkey."

1984 Attended and presented a poster at the International Society for the Study of Xenobiotics, Palm Beach, FL. Presentation: "Changes in estrogen metabolism after chronic oral contraceptive (OC) administration in the rhesus monkey."

1985 Attended and presented a poster at the Teratology Society; Calloway Gardens, GA. Presentation: "Transplacental pharmacokinetics of doxylamine succinate in the late-term rhesus monkey."

1985 Attended and presented a platform presentation at the American Society for Pharmacology and Experimental Therapeutics; Boston, MA. Presentation: "Evidence for the dose-dependent elimination of doxylamine succinate in the monkey and rat."

1985 Attended and presented a platform presentation at the European Teratology Society; Rostock, East Germany. Presentation: "The correlation of early postnatal behavioral and neurochemical alterations in rats prenatally exposed to reserpine."

1985 Attended and presented a poster at the 10th Rochester Trophoblast Conference; Rochester, NY. Presentation: "Transplacental metabolism of dexamethasone and cortisol in the late gestational age rhesus monkey (*Macaca mulatta*)."

1986 Attended and presented a platform presentation at the American Pharmaceutical Association Annual Meeting; San Francisco, CA. Presentation: "Transplacental pharmacokinetics and metabolism of drugs and endogenous hormones."

1986 Attended and presented a platform presentation at the Teratology Society; Boston, MA. Presentation: "Inhibition of the conversion of estradiol (E_2) to estrone (E_1) by 16-methylene E_2 in the perfused monkey placenta."

1987 Attended and presented a platform presentation at the Society of Neuroscience; Washington, DC. Presentation: "Methylenedioxymethamphetamine (MDMA) produces long lasting alterations in the serotonergic system of rat brain."

1987 Attended and presented a paper at the American Society for Pharmacology and Experimental Therapeutics; Honolulu, HI. Presentation: "Neurochemical and neurohistological alterations produced by orally administered methylenedioxymethamphetamine (MDMA)."

1987 Attended and presented a platform presentation at the Marijuana Symposium; Melbourne, Australia. Presentation: "Placental transfer and fetal disposition of delta-9-tetra-hydrocannabinol (THC) during late pregnancy in the rhesus monkey."

1987 Attended and presented a platform presentation at the Tenth International Congress of Pharmacology; Sydney, Australia. Presentation: "Enhancement of the potency of estradiol (E_2) by the 17B-hydroxysteroid dehydrogenase (17HSD) inhibitor, 16-methylene E_2 (ME_2), *in vivo.*"

1987 Attended and presented a platform presentation at the Marijuana Symposium; Melbourne, Australia. Presentation: "Effect of chronic delta-9-tetrahydrocannabinol on pyramidal neuron size and synaptic density in rat hippocampus."

1988 Attended and presented a poster at the Society of Toxicology; Dallas, TX. Presentation: "Persistent reduction of brain serotonin (5-HT) by MDMA in the rhesus monkey."

1988 Attended and presented a platform presentation at the Society for Neuroscience; Toronto, Canada. Presentation: "Assessment of complex behavior in the rhesus monkey: Effects of chronic marijuana smoke exposure."

1988 Attended and chaired a session on Methods of Evaluating Toxicity at the Fourth Conference on Current Concerns on Toxicity and Waste Management; Millbrae, CA. Presentation: "Risk assessment of potential neurotoxicants: Are the current methods adequate?"

1988 Attended and co-chaired a session at the Sixth International Neurotoxicology Conference, Drug Abuse and Brain Development; North Little Rock, AR. Presentation: "Neurochemical and behavioral effects of orally administered MDMA: Comparison of the rodent and nonhuman primate."

1988 Attended and presented at Grosser Horsaal, Universitats Frauenklinik und, Kantonales Frauenspital Bern, Switzerland. Presentation: "Placental metabolism of steroids in the human and nonhuman primate."

1989 Attended and presented at the American Medical Society on Alcoholism and Other Drug Dependencies Meeting; Atlanta, GA. Presentation: "Chronic marijuana smoke exposure in rhesus monkeys: Behavioral and neuropathological effects."

1989 Attended and presented at the Behavioral Teratology Society Symposium of the Behavioral Teratology Meetings. Presentation: "Placental transfer of psychoactive agents in the nonhuman primate."

1990 Attended and presented a poster presentation at the Teratology Society Meeting; Victoria, BC, Canada. Presentation: "Disposition and metabolism of chronically administered retinol in the monkey."

1990 Attended and presented a review session on "Research on placenta-drug interactions" at the Role of Placenta in HIV Infection and Treatment Meeting; Nantucket, MA.

1990 Co-organizer, Annual Meeting of the South Central Chapter of the Society of Toxicology; NCTR; Jefferson, AR.

1991 Co-organizer of the "International Conference on Neuroprotective Agents: Experimental and Clinical Findings;" Rockland, ME.

1992 Workshop Co-organizer, Teratology Society; "Toxicokinetic Studies of Pregnant Animals in Safety Evaluation;" Boca Raton, FL.

1992 Workshop Co-organizer, 12th Rochester Trophoblast Conference, "Anti-HIV Therapy and the Placenta;" Rochester, NY.

1993 Participated in the Workshop on “Benchmark Dose Methodology” sponsored by EPA and Risk Science Institute.

1994 Session Co-chair for “Risk Assessment: Issues and Recommendations, Neurotoxicity of Mercury: Indicators and Effects of Low-Level Exposure,” Twelfth International Neurotoxicology Conference; Hot Springs, AR.

1994 Co-organizer of the Second International Conference on Neuroprotective Agents; Lake George, NY.

1994 Attended and presented a poster at the FDA Science Forum on Regulatory Sciences; Washington, DC. Presentation: "Domoic acid neurotoxicity in cynomolgus monkeys: Effects of dose on hippocampal neuronal and terminal degeneration."

1994 Attended and presented a poster at the FDA Science Forum on Regulatory Sciences; Washington, DC. Presentation: "Domoic acid (DOM) pharmacokinetics in the monkey: correlation with neuropathological effects."

1995 Attended and presented a poster at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, MD; "Quantitative risk assessment of neurotoxicants with the use of continuous data."

1995 Attended and presented a poster at the 1995 Annual Meeting of the Teratology Society; Newport Beach, CA; "Developmental effects of the mycotoxin, fumonisin B1 (FB1), in the rat nervous system."

1997 Attended and presented a poster at the Society of Neuroscience Annual Meeting, "High dose, short-course treatment with methylenedioxymethamphetamine (MDMA) but not dexfenfluramine (DFEN) alters subsequent behavioral sensitivity to both drugs in rhesus monkeys."

1997 Attended and presented a poster at the FDA Forum on Regulatory Sciences; Washington, DC; "Short-course, high dose, treatment with methylenedioxymethamphetamine (MDMA) but not dexfenfluramine (DFEN) alters subsequent behavioral sensitivity to both drugs in rhesus monkeys."

1999 Attended and presented at the 17th Annual International Neurotoxicology Conference; Little Rock, AR; "Developmental Neurotoxicology of Therapeutics: Survey of Novel Recent Findings."

2000 Co-chair of the International Conference on Neurotoxicity Session, “Hot Topics/Current Issues;” Colorado Springs, CO.

2001 Co-chair of the Society of Toxicology Innovations in Applied Toxicology Workshop, “Applications of Noninvasive Imaging in Toxicology;” San Francisco, CA.

2001 Attended and presented a poster at the 2001 Annual Meeting of the American Society of Pharmacology and Experimental Therapeutics, “Three-Dimensional Quantitative Structure-Activity Relationship (QSAR) of Organophosphorus Compounds;” Orlando, FL.

2002 Co-organizer, Sixth International Conference on Neuroprotective Agents; September 15-19, 2002; Hilton Head, SC.

2003 Attended and presented poster titled, “Dose Dependent Transitions in Mechanisms of Toxicity;” 2003 ILSI Annual Meeting; Miami, FL.

2003 Co-chair of workshop titled, “Dose-Dependent Transitions in Mechanisms of Toxicity;” ILSI; Washington, DC.

2003 Attended and presented at FDA 2003 Science Forum “Protecting America’s Health, Assessment of Neurotoxicity: Application of Neuroimaging Techniques;” Washington, DC.

2004 Invited lecture, “Mechanisms of Neurotoxicity;” American Chemical Society Short Course; Chemical Mechanisms in Toxicology; San Francisco, CA.

2005 Co-organizer, Seventh International Conference on Neuroprotective Agents; November 14-19, 2004; Monterey, CA.

2005 Attended and presented poster at the 2005 Annual Meeting of the Society for Neuroscience; Washington, DC.

2006 Society of Toxicology Co-chair and presentation, "Obesity: Developmental Origins and Environmental Influences," SOT Annual Meeting; March 2006; San Diego, CA.

2006 Attended and presented poster at the 2006 Annual Teratology Meeting, "Protective Effect of Midazolam on Ketamine-Induced Neurotoxicity in Rat Forebrain Culture;" June 2006; Tucson, AZ.

2006 Co-organizer, International Conference on Neuroprotective Agents; September 14-20, 2006; Mackinac Island, MI.

2007 Attended 46th Annual Meeting of the Society of Toxicology; Presentation – "Disruption of Brain Cell Replication and Neurotransmitter Systems during Development Leading to Cognitive Dysfunction: Developmental Neurotoxicity of Nicotine;" March 25-29, 2007; Charlotte, NC.

2007 Attended and presented invited keynote lecture, "Protective Approaches against Anesthetic-induced Neurodegeneration during Development," at The Fourth Annual Meeting of the Global College of Neuroprotection & Neuroregeneration; March 14-16, 2007; Garmisch-PartenKirchen, Germany.

2007 Attended and presented invited symposium presentation, "Disruption of brain cell replication and neurotransmitter systems during development leading to cognitive dysfunction: Developmental neurotoxicity of nicotine;" 46th Annual Meeting Society of Toxicology; March 23-28, 2007; Charlotte, NC.

2007 Presented Keynote Address, "The Role of the National Center for Toxicological Research (NCTR) within the Regulatory Environment;" Southwestern Association of Toxicologists; April 20, 2007; Little Rock, AR.

2007 Invited presentation, "The Role of the National Center for Toxicological Research (NCTR) within the Regulatory Environment;" 2007 Toxicology and Risk Assessment Conference (TRAC); April 23-24, 2007; Cincinnati, OH.

2007 Invited presentation, "Mechanisms of Neurotoxicity;" American Chemical Society Mechanisms of Toxicology Course; May 4, 2007; San Francisco, CA.

2007 Invited symposium presentation, "Brain cell death induced by a combination of inhalation anesthetics in the developing rat and protection from this effect by L-Carnitine;" at the 47th Annual Meeting of the Teratology Society; June 23-29, 2007; Pittsburgh, PA.

2007 Invited symposium organization and presentation, "Developmental Stage and Duration of Anesthesia: Impact on Anesthetic-Induced Neurotoxicity in the Developing Monkey;" at The Toxicology Forum; July 8-12, 2007; Aspen, CO.

2007 Invited keynote address at the 1st International Conference on Toxicogenomics Integrated with Environmental Sciences (TIES); October 25, 2007; Raleigh, NC.

2008 Invited presentation at the 2008 International Anesthesia Research Society Annual Clinical and Scientific Meeting; May 1-2, 2008; San Francisco, CA.

2008 Invited presentation and Chair, "Nutrition and Food Safety: Pre-Conception to Adolescence Symposium;" at The Teratology Society Annual Meeting; June 29 – July 2, 2008; Monterey, CA.

2008 Invited presentation, 2008 Summer Tox Forum; July 6-10, 2008; Aspen, CO.

2008 Invited presentation, 2008 Aspen Cancer Conference; July 20-22, 2008; Aspen, CO.

2008 Invited presentation, 9th International Neuroprotective Conference; September 7-11, 2008; Woods Hole, MA.

2008 Invited presentation, FDA/DIA Critical Path Initiative Workshop; September 15-16, 2008; Bethesda, MD.

2008 Invited keynote address, South Central Chapter Society of Toxicology; September 18-19, 2008; Little Rock and Jefferson, AR.

2008 Co-Chair of the Workshop Session – Do Anesthetics Induce Neuroapoptosis in Humans; Basic and Translational Approaches? Presentation: Occurrence and Prevention of Anesthetic-induced Brain Cell Death during Development at the 25th International Neurotoxicology Conference; October 13-14, 2008; Rochester, NY.

2008 Presentation "Pharmacological Effects of Methylphenidate in the Developing Primate" at the Environmental Mutagen Society Annual Meeting; October 17-22, 2008; Puerto Rico.

2008 Invited presentation "Bio-imaging: New Approaches for Safety Assessment and Toxicology" at the 29th Annual Meeting of the American College of Toxicology; November 9-12, 2008; Tucson, AZ.

2008 Invited presentation, 2008 Neuroscience Conference; November 15-17, 2008; Washington, DC.

2009 Presentation, 2nd Inter-Agency Computational Toxicology Colloquium; December 10-11, 2008; Jefferson, AR.

2009 Presentation "Anesthetic-induced brain injury during development: Non-invasive assessments and strategies for prevention" at the Second Joint Congress of GCNN and SSNN: 6th Global Conference on Neuroprotection and Neuroregeneration (GCNN) – 5th Congress of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN); March 1-4, 2009; Vienna, Austria.

2009 Presentations at the 48th Annual Meeting of the Society of Toxicology, March 13-19, 2009; Baltimore, MD.
- Co-chair of Symposia Session: Nitrative and Oxidative Stress in Toxicology and Disease
- Co-chair of Workshop Session: Low-Dose Non-Linearity: What can Emerging Technologies Tell Us
- Co-Chair of Informational Session: Novel Translational Safety Biomarkers and Safety First at the FDA

2010 Nutritional Phenotype Database Workshop; January 20, 2010; NCTR, Jefferson, AR.

2010 35th Annual Winter Tox Forum; February 1-4, 2010; Washington, DC.

2010 Chair of the Infrastructure Session at the MCBIOS Annual Conference; February 18-20, 2010; Arkansas State University; Jonesboro, AR.

2010 NAS Committee on Emerging Science for Environmental Health; February 25-26, 2010; Washington, DC.

2010 49th Annual Meeting of the Society of Toxicology; Speaker at the Meet the Director Session; March 5-11, 2010; Salt Lake City, UT.

2010 Introductory Presentation at the Arkansas Biosciences Institute/NCTR/FDA Joint Workshop on Stem Cells; April 13, 2010; Little Rock, AR

2010 Presentation at the Health and Environmental Sciences Institute (HESI) Annual Meeting; May 13, 2010; Reston, VA.

2010 Presentation at the 2nd International Workshop on Anesthesia Neurotoxicology; June 14-16, 2010; Toronto, Canada.

2010 Presentation and Chair, Bio-imaging Course at the 50th Annual Teratology Society Meeting; June 26-30, 2010; Louisville, KY.

2010 Welcome address at the NCTR Women's Health Research Workshop; September 2, 2010; Little Rock, AR.

2010 Presentation at the 10th International Conference on Neuroprotective Agents; September 19-22, 2010; Asilomar Conference Grounds; Pacific Grove, CA.

2010 Welcome address at the Hepatotoxicity Workshop; September 30, 2010; Little Rock, AR.

2010 Speaker at the CompTox V Colloquium; November 19, 2010; Atlanta, GA.

2010 Invited seminar speaker at the University of Arkansas for Medical Sciences; December 7, 2010; Little Rock, AR.

2010 NCTR Center-Specific Training Presentation to FDA Fellows; December 15, 2010; White Oak Facility; Silver Spring, MD.

2011 NCTR/Center for Biologics Evaluation and Research (CBER) Workshop; January 20, 2011; Jefferson, AR.

2011 NCTR/Center for Tobacco Products (CTP) Workshop; February 8-9, 2011; Jefferson and Little Rock, AR.

2011 50th Annual Meeting of the Society of Toxicology; March 5-10, 2011; Washington, DC.
- Vice President Elect
- Co-Chair, Scientific Program Committee
- Co-Chair, Issues Session: What It Means to be Global
- Expert Panel Member, Association of Scientists of Indian Origin (ASIO)

2011 Invited speaker at the MidSouth Computational Biology and Bioinformatics Society (MCBIOS) 2011 Meeting; April 1-2, 2011; College Station, TX.

2011 Invited speaker at the Arkansas Nanomedicine and Health Meeting; April 8, 2011; Petit Jean, AR.

2011 51st Annual Meeting of the Teratology Society; Coronado, CA; June 25-29, 2011.

2011 Co-moderator of session on general anesthetics at the 3rd International Drug Abuse Research Society (IDARS) Meeting in Istanbul, Turkey; August 23-26, 2011.

2011 Invited Co-Chair, SOT/EUROTOX Debate Scientific Session, 47th Congress of the European Societies of Toxicology (EUROTOX); August 28-31, 2011; Paris, France

2011 Invited keynote address at the South Central & Gulf Coast Chapters of the Society of Toxicology (SCC-SOT) Joint Regional Meeting; New Orleans, LA; October 27-29, 2011.

2011 Invited seminar speaker; Battelle; Columbus, OH; December 6, 2011.

2012 Center for Tobacco Products/NCTR Workshop; Rockville, MD; January 10, 2012.

2012 Speaker at the NCTR-specific Lecture Series for the Commissioner's Fellows; White Oak Facility; Silver Spring, MD; February 7, 2012.

2012 Invited Session Chair, 9th Annual MidSouth Computational Biology and Bioinformatics Society Conference; University of Mississippi; Oxford, MS; February 17-18, 2012.

2012 NCTR Strategic Planning Meeting; Jefferson, AR; February 21-22, 2012.

2012 NIEHS BPA Grantee Meeting; Jefferson, AR; March 1, 2012.

2012 51st Annual Meeting of the Society of Toxicology; San Francisco, CA; March 11-15, 2012:
- Vice President
- Symposium Co-Chair – Toxic Cell Death: Signaling Pathways, Cross-Talk, and High-Throughput Analysis
- Workshop Session – Nonclinical and Clinical Applications of Translational Organ-Based Imaging
- Co-Author on seven posters

2012 Food Safety Conference; Jefferson, AR; April 11, 2012.

2012 Invited speaker; NAS Emerging Science Workshop, “Individual Variability: Biological Factors that Underlie Individual Susceptibility to Environmental Stressors and Their Implications for Decision-Making;” NAS Keck Center; Washington, DC; April 18-19, 2012.

2012 Plenary Speaker at the workshop titled ‘Genetic Toxicology: Opportunities to Integrate New Approaches’ at the ILSI Health and Environmental Sciences Institute’s (HESI) Project Committee on the Relevance and Follow-Up of Positive Results in *In Vitro* Genetic Toxicity (IVGT) Testing; Silver Spring, MD; April 24-25, 2012.

2012 Presented keynote address on pediatric anesthetics at the International Association of Neurorestoratology and 9th Global College of Neuroprotection & Neurogeneration Conference with the 4th International Spinal Cord Injury Treatment & Trial Symposium; Xian, China; May 4-7, 2012.

2012 Presented keynote address at the 2012 Global Summit on Regulatory Science–Modernizing Toxicology. This conference provided a forum for government, industry, and academic scientists from ten countries to discuss innovative technologies and partnerships to enhance translation of basic science into regulatory applications within the global context. The international event was hosted by NCTR, the FDA Office of International Programs, Zhejiang University, and the Chinese Academy of Engineering in Hangzhou, China, on May 9-11, 2012.

2012 Met with FDA staff in the Beijing FDA Office and reviewed strategy to use the Global Summits on Regulatory Science as a foundation for capacity building for regulatory science in multiple countries. Also visited Tianjin Medical School and sFDA to discuss progress on the International Student Exchange Program and global support of Regulatory Science. Beijing, China; May 14-15, 2012.

2012 Presented abstract, “Assessment of Developmental Exposure to Pediatric Anesthetics Using MicroPET Imaging,” at the 52nd Annual Meeting of the Teratology Society; Baltimore, MD; June 23-27, 2012.

2012 SmartTots Scientific Working Group; White Oak Campus; Silver Spring, MD; September 10, 2012.

2012 Keynote Lecture at the Ohio Valley Society of Toxicology Meeting; Columbus, OH; September 28, 2012.

2012 Session Chair and presentation concerning the safe use of pediatric anesthetics at the International Conference on Neuroprotective Agents; Wendake; Quebec City, Canada; September 30-October 3, 2012.

2013 Session Chair and two presentations: 1) Role of Academia in Providing Training in Regulatory Sciences; 2) Non-Monotonic Dose Response; Winter Tox Forum; January 29-31, 2013; Washington, DC.

2013 52nd Annual Meeting of the Society of Toxicology; San Antonio, TX; March 9-13, 2013:

- President – Served as Chair of several meetings, host of several functions, provided introduction for several speakers.

2013 MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Annual Meeting; Columbia, MO; April 5-6, 2013.

2013 Co-Chair at the Global Coalition for Regulatory Science Research held in Jefferson, AR, September 10, 2013.

2013 Co-Organizer and Program Planner for the Global Summit on Regulatory Science – Nanotechnology, Jefferson, AR, September 10, 2013 and Little Rock, AR, September 11, 2013.

2013 Participated in activities as member of the Data Science Board, Emerging Analytics Center; University of Arkansas at Little Rock, Little Rock, AR; November 8-9, 2013.

2013 Arkansas Obesity Symposium; Little Rock, AR; December 11, 2013.

2014 Presentation at the MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Annual Meeting; Stillwater, OK; March 7-8, 2014.

2014 53rd Annual Meeting of the Society of Toxicology & Council Meeting; Poster Presentation; Phoenix, AZ; March 22-27, 2014.

2014 Invited Keynote Speaker at the Drug Discovery and Development Colloquium 2014, UAMS, Little Rock, AR, June 20-21, 2014.

2014 Invited Keynote Speaker at the 39th Annual Summer Meeting of The Toxicology Forum; Aspen, CO; July 7-9, 2014.

2014 Co-Chair of the Global Coalition for Regulatory Science Research (GCRSR) Executive Committee Meeting held August 20, 2014, in Montreal, Canada.

2014 Co-Organizer and Program Planner of the Global Summit on Regulatory Science – Regulatory Genomics and Beyond (GSRS14) held August 21-22, 2014, in Montreal, Canada.

2014 Officer and Co-Organizer of the International Conference on Neuroprotective Agents (ICNA), Charlottesville, VA, September 28-October 1, 2014.

2014 Invited to make the presentation entitled, ”Use of stem cells to assess safety and protection pathways for anesthetic agents during development”, at the International Society of Cellular Therapy, South Central America Regional Meeting, October 9-11, 2014 in Buenos Aires, Argentina.

2015 Invited Cardiovascular Science Seminar Speaker at the Cardiovascular Institute, Stanford University, Stanford, CA, April 14, 2015.

2015 Invited Seminar Series Speaker at the Neuroscience Institute, University of Tennessee Health Science Center, Memphis, TN., April 28, 2015.

2015 Met with Key Officials at the Chinese Food and Drug Administration, Beijing, China, to foster organizational capacity building for regulatory science and expand the Global Coalition for Regulation Science (GCRSR) Executive Committee Membership in China.

2015 Co-Chair of the Global Coalition for Regulatory Science Research (GCRSR) Executive Committee Meeting, October 12, 2015, October Parma, Italy.

2015 Co-Organizer and Program Planner for the Global Summit on Regulatory Science - Regulatory Bioinformatics (GSRS15), October 12-13, 2015, Parma, Italy

2015 Invited to present the keynote address entitled, "World Impact of 3D Cell Models and Microphysiological Systems on Drug and Chemical Safety Assessment", on October 27, 2015 at the 7th National Congress of Toxicology in Wuhan, China.

2016 Chair of the Global Coalition for Regulatory Science Research (GCRSR) Executive Committee Meeting, September 6, 2016, Bethesda, MD.

2016 Co-Organizer of the Global Summit on Regulatory Science (GSRS16) - Nanotechnology Standards and Applications, held September 7-9, 2016, on the National Institute of Health campus in Bethesda, MD.

2016 Officer, Co-Organizer, and presenter at the International Conference on Neuroprotective Agents (ICNA), Bilbao, Spain, September 18-21, 2016. Presentation: "Anesthetic-Induced Developmental Neurotoxicity in Animal Models that Suggest Potential Clinical Neuroprotective Approaches"

2017 Moderated session, "A Search for Biomarkers of Neurotoxicity: A Practical Approach" 2017 Toxicology Forum 41st Annual Winter Meeting, Washington, DC, February 6-8, 2017

Publications

1. Brocco MJ, **Slikker W Jr** and Killam KF Jr. Characterization of EEG effects following acute and chronic administration of lithium chloride in *Macaca mulatta*. Proc West Pharmacol Soc. 19:428-431, 1976 (Society Proceedings).

2. Holmes WH and **Slikker W Jr**. Some properties of the labeled material excreted by intact and adeohypophysectomized ducts (*Anas platyrhynchos*) given single doses of labeled corticosterone. Gen Comp Endocrinol. 29(1):128-140, May 1976.

3. Killam KF Jr, **Slikker W Jr**, Brocco MJ and Gehrmann JE. Correlation of behavioral and EEG effects during interaction studies with secobarbital and psychomotor stimulants. Proc West Pharmacol Soc. 19:432-434, 1976 (Society Proceedings).

4. **Slikker W Jr**, Brocco MJ and Killam KF Jr. Comparison of the effects following acute and chronic administration of lithium chloride in *Macaca mulatta*. Proc West Pharmacol Soc. 19:424-427, 1976 (Society Proceedings).

5. **Slikker W Jr** and KF Killam Jr. Studies on central functional equivalence. III: Classification of several psychomotor stimulants and anorectic agents. Current Medical Research and Opinion 6(1):135-148, 1979 (Symposium Proceedings).

6. Hadd HE, **Slikker W Jr**, and Helton ED. The synthesis and characterization of the glucopyranosiduronic acids of 17 alpa-ethynylestradiol-17 beta. J Steroid Biochem. 13(9):1107-1114, Sept 1980.

7. Hill DE, **Slikker W Jr**, Helton ED, Lipe GW, Newport GD, Sziszak TJ, and Bailey JR. Transplacental pharmacokinetics and metabolism of diethylstilbestrol and estradiol-17B in the pregnant rhesus monkey. J Clin Endocrinol Metab. 50(5):811-818, May 1980.

8. Newport GD, SK Headley, JP Freeman, and **W Slikker Jr**. Separation of diethylstilbestrol and derivatives in biological fluids and tissues by high-pressure liquid chromatography. J Liquid Chromatog. 3(7)1053-1070, 1980.

9. Meyers M, **Slikker W**, Pascoe G, and Vore M. Characterization of cholestasis induced by estradiol-17B-D glucuronide in the rat. J Pharmacol Exp Ther. 214(1):87-93, Jul 1980.

10. Meyers M, **Slikker W**, and Vore M. Steroid D-ring glucuronides: characterization of a new class of cholestatic agents in the rat. J Pharmacol Exp Ther. 218:63-73, Jul 1981.

11. Raitano LA, **Slikker W Jr**, Hill DE, Hadd HE, Cairns T, and Helton ED. Ethynyl cleavage of 17a-ethynyl-estradiol in the rhesus monkey. Drug Metab Dispos. 9(2):129-134, Mar-Apr 1981.

12. **Slikker W Jr**, Lipe GW, and Newport GD. High-performance liquid chromatographic analysis of estradiol-17B and metabolites in biological media. J Chromatogr. 224:(2):205-219, 1981.

13. Althaus ZR, Rowland JR, Freeman JP, and **Slikker W Jr**. Separation of some natural and synthetic corticosteroids in biological fluids by high-performance liquid chromatography. J Chromatogr. 227(1):11-23, Jan 8 1982.

14. **Slikker W Jr**, Hill DE, and Young JF. Comparison of the transplacental pharmacokinetics of estradiol-17B and diethylstilbestrol in the subhuman primate. J Pharmacol Exp Ther. 221(1):173-182, Apr 1982.

15. Goad PT, Hill DE, **Slikker W Jr**, and Gaylor DW. The effect of dietary fortification on blood ethanol concentrations, caloric consumption, and weight gain during ethanol consumption in mice. Drug Nutrient Interactions 1:213-228, 1982.

16. **Slikker W Jr**, Newport GD, Hill DE, and Bailey JR. Placental transfer of synthetic and endogenous estrogen conjugates in the rhesus monkey (*Macaca mulatta*). Amer J Primatol. 2:385-399, 1982.

17. **Slikker W Jr**, Bailey JR, Newport GD, Lipe GW, and Hill DE. Placental transfer and metabolism of 17a-ethynylestradiol 17B and estradiol-17B in the rhesus monkey. J Pharmacol Exp Ther. 223(2):483-489, Nov 1982.

18. **Slikker W Jr**, Althaus ZR, Rowland JM, Hill DE, and Hendrickx AG. Comparison of the transplacental pharmacokinetics of cortisol and triamcinolone acetonide in the rhesus monkey. J Pharmacol Exp Ther. 223(2):368-374, Nov 1982.

19. Ali SF, Cranmer JM, Goad PT, **Slikker W Jr**, Harbison RD, and Cranmer MF. Trimethyltin induced changes of neurotransmitter levels and brain receptor binding in the mouse. Neurotoxicology 4(1):29-36, Spring 1983.

20. Hadd HE, **Slikker W Jr**, Miller DW, Helton ED, Duax WL, Strong PD, and Swenson DC. Synthesis and characterization of the anomeric pair of 17B-glucuronides of ethynylestradiol. J Steroid Biochem. 18(1):81-87, Jan 1983.

21. Hill, DE, **Slikker W Jr**, Goad PT, Bailey JR, Sziszak TJ, and Hendrickx AG. Maternal, fetal, and neonatal elimination of ethanol in nonhuman primates. Dev Pharmacol Ther. 6(4):259-268, 1983.

22. Kimmel GL, Harmon JR, and **Slikker W Jr**. Characterization of estrogen binding in uterine cytosol from the fetal rhesus monkey. Teratog Carcinog and Mutagen. 3(4):355-365, 1983.

23. Leakey JE, Althaus ZR, Bailey JR, and **Slikker W Jr**. UDP-Glucuronyltransferase activity exhibits two developmental groups in liver from fetal rhesus monkeys. Biochem J. 214(3):1007-1009, Sep 15 1983.

24. Rowland JM, Althaus ZR, **Slikker W Jr**, and Hendrickx AG. Distribution and metabolism of triamcinolone acetonide in the rat embryomaternal unit during a teratogenically sensitive period. Toxicol Appl Pharmacol. 67(1):70-77, Jan 1983.

25. Rowland JM, Althaus ZR, **Slikker W Jr**, and Hendrickx AG. Comparative distribution and metabolism of triamcinolone acetonide and cortisol in the rat embryomaternal unit. Teratology 27(3):333-341, Jun 1983.

26. Schmid SE, Au WY, Hill DE, Kadlubar FF, and **Slikker W Jr**. Cytochrome P-450 oxidation of the 17a-ethynyl group of synthetic steroids: D-homoannulation or enzyme inactivation. Drug Metab Dispos. 11(6):531-536, Nov-Dec 1983.

27. **Slikker W Jr**, Vore M, Bailey JR, Meyers M, and Montgomery C. Hepatotoxic effects of estradiol-17B-D-glucuronide in the rat and monkey. J Pharmacol Exp Ther. 225(1):138-143, Apr 1983.

28. Vore M, Hadd H, and **Slikker W Jr**. Ethynylestradiol-17B D-ring glucuronide conjugates are potent cholestatic agents in the rat. Life Sci. 32(26):2989-2993, Jun 27 1983.

29. Buelke-Sam J, Kimmel GL, Webb PJ, **Slikker W Jr**, Newport GD, Nelson CJ, and Kimmel CA. Postnatal toxicity following prenatal reserpine exposure in rats: effects of dose and dosing schedule. Fundam Appl Toxicol. 4(6):983-991, Dec 1984.

30. Goad PT, Hill DE, **Slikker W Jr**, Kimmel CA, and Gaylor DW. The role of maternal diet in the developmental toxicology of ethanol. Toxicol Appl Pharmacol. 73(2):256-267, Apr 1984.

31. Holder CL, Thompson HC Jr, and **Slikker W Jr**. Trace level determination of doxylamine in nonhuman primate plasma and urine by GC/NPD and HPLC. J Anal Toxicol. 8(1):46-50, Jan-Feb 1984.

32. **Slikker W Jr**, Althaus ZR, Rowland JM, Hendrickx AG, and Hill DE. Comparison of the metabolism of cortisol and triamcinolone acetonide in the early, mid and late gestational age rhesus monkey (*Macaca mulatta*). Dev Pharmacol Ther. 7(5):319-333, 1984.

33. **Slikker W Jr**, Brocco MJ, and Killam KF Jr. Reinstatement of responding maintained by cocaine and thiamylal. J Pharmacol Exp Ther. 228(1):43-52, Jan 1984.

34. **Slikker W Jr**, Lipe GW, Sziszak TJ, and Bailey JR. Changes in estrogen metabolism after chronic oral contraceptive administration in the rhesus monkey. Drug Metab Dispos. 12(2):148-153, Mar-Apr 1984.

35. Brown KS, DeSesso JM, Hassell J, Klein NW, Rowland JM, Steffek AJ, Carlton BD, Grabowski C, **Slikker W Jr**, and Walsh D. Comments on "Teratogen Update: Bendectin". Teratology 31:431, 1985.

36. Holder CL, Korfmacher WA, **Slikker W Jr**, Thompson HC Jr, and Gosnell AB. Mass spectral characterization of doxylamine and its rhesus monkey urinary metabolites. Biomed Mass Spectrom. 12(4):151-158, Apr 1985.

37. Korfmacher W, Holder C, Cerniglia C, Miller DW, Hansen EB Jr, Lambert KJ, Gosnell AB, **Slikker W Jr**, Rushing LG, and Thompson HC Jr. Desorption chemical ionization mass spectrometry of nine antihistamines and some of their metabolites. Spectros. Int. J. 4:181-192, 1985.

38. Kwarta RF Jr, Kimmel CA, Kimmel GL, and **Slikker W Jr**. Identification of the cellular retinoic acid binding protein (cRABP) within the embryonic mouse (CD-1) limb bud. Teratology 32(1):103-111, Aug 1985.

39. Leakey JE, Althaus ZR, Bailey JR, and **Slikker W Jr**. Dexamethasone increases UDP-glucuronyltransferase activity towards bilirubin, estradiol and testosterone in feotal liver from rhesus monkey during late gestation. Biochem J. 225(1):183-188, Jan 1985.

40. **Slikker W Jr**, Ali SF, Lipscomb J, and Denton R. Time course alterations in tremor and muscarinic receptor binding produced by trimethyltin. Proc West Pharmacol Soc. 28:139-142, 1985.

41. **Slikker W Jr** and Paule MG. Symposium Overview: Developmental Neuropharmacology/Neurotoxicology. Proc West Pharmacol Soc. 28:309-310, 1985.

42. Vore M and **Slikker W Jr**. Steroid D-ring Glucuronides: A New Class of Cholestatic Agents. Trends in Pharmaceutical Sciences 6(6):256-259, 1985.

43. Ali SF, Buelke-Sam J, Newport GD, and **Slikker W Jr**. Early neurobehavioral and neurochemical alterations in rats prenatally exposed to imipramine. Neurotoxicology 7(2):365-380, Summer 1986.

44. Ali SF, Buelke-Sam J, and **Slikker W Jr**. Prenatal reserpine exposure in rats decreases caudate nucleus dopamine receptor binding in female offspring. Toxicol Lett. 31(3):195-201, Jun 1986.

45. Ali SF, **Slikker W Jr**, Newport GD, and Goad PT. Cholinergic and monoaminergic alterations in the mouse central nervous system following acute trimethyltin exposure. Acta Pharmacol Toxicol (Copenh). 59(3):179-188, Sep 1986.

46. Althaus ZR, Bailey JR, Leakey JE, and **Slikker W Jr**. Transplacental metabolism of dexamethasone and cortisol in the late gestational age rhesus monkey (*Macaca mulatta*). Dev Pharmacol Ther. 9(5):332-349, 1986.

47. Horning MG, **Slikker W Jr**, Young JF, Kimmel CA, and Kimmel GL. Report of the IRLG workgroup on the role of pharmacokinetics in reproductive and developmental toxicology. Environ Health Perspect. 66:205-209, 1986.

48. Jurek A., Althaus ZA, **Slikker W Jr**, and Helton ED. Chronic effects of diethylstilbestrol on estrogen metabolism in the mouse. J Environ Pathol Toxicol Oncol. 7(1-2): 197-209, Sep-Dec 1986.

49. Leakey JE, Althaus ZR, Bailey JR, and **Slikker W Jr**. Dexamethasone induces hepatic cytochrome P-450 content and increases certain monooxygenase activities in rhesus monkey fetuses. Biochem Pharmacol. 35(8):1389-1391, Apr 15 1986.

50. Lipscomb JC, Paule MG, and **Slikker W Jr**. Fetomaternal kinetics of ^{14}C-trimethyltin. Neurotoxicology 7(2):581-590, Summer 1986.

51. Paule MG, Reuhl K, Chen JJ, Ali SF, and **Slikker W Jr**. Developmental toxicology of trimethyltin in the rat. Toxicol Appl Pharmacol. 84(2):412-417, Jun 1986.

52. Rushing L, Gosnell A, Holder C, Korfmacher W, and **Slikker W**. Separation and detection of doxylamine and its rhesus monkey urinary metabolites by high resolution gas chromatography utilizing nitrogen/phosphorus detection. J High Resol Chromatag Chromatog Comm 9:435-440, 1986.

53. **Slikker W Jr**, Holder CL, Lipe GW, Korfmacher WA, Thompson HC Jr, and Bailey JR. Metabolism of ^{14}C-labeled doxylamine succinate (Bendectin(r)) in the rhesus monkey (*Macaca mulatta*). J Anal Toxicol. 10(3):87-92, May-Jun 1986.

54. Ali SF, Newport GD, **Slikker W Jr**, and Bondy SC. Effect of trimethyltin on ornithine decarboxylase in various regions of the mouse brain. Toxicol Lett. 36(1):67-72, Mar 1987.

55. Bailey JR, Cunny HC, Paule MG, and **Slikker W Jr**. Fetal disposition of delta-9-tetrahydrocannabinol (THC) during late pregnancy in the rhesus monkey. Toxicol Appl. Pharmacol. 90(2):315-321, Sep 1987.

56. Evans EB, Seifen E, Kennedy RH, Kafiluddi R, Paule MG, Scallet AC, Ali SF, and **Slikker W Jr**. Effects of chronic delta-9-THC treatment on cardiac beta-adrenoceptors in rats. Pharmacol Biochem Behav. 28(2):171-174, Oct 1987.

57. Holder CL, Korfmacher WA, Rushing LG, Thompson HC Jr, **Slikker W Jr**, and Gosnell AB. Formation of artifactual metabolites of doxylamine following acid hydrolysis. J Chromatogr. 419:113-122, Aug 7 1987.

58. Holder CL, Thompson HC Jr, Gosnell AB, Siitonen PH, Korfmacher WA, Cerniglia CE, Miller DW, Casciano DA, and **Slikker W Jr**. Metabolism of doxylamine succinate in Fischer 344 rats. Part II. Nonconjugated urinary and fecal metabolites. J Anal Toxicol. 11(3):113-121, May-Jun 1987.

59. Kelly DW and **Slikker W Jr**. The metabolism and pharmacokinetics of ^{14}C-pyrilamine maleate in the rat. Drug Metab Dispos. 15(4):460-465, Jul-Aug 1987. NOTE: Listed as The metabolism and elimination of pyrilamine maleate in the rat

60. Paule MG, Bailey JR, Fogle CM, Gillam MP, **Slikker W Jr**, and Brown RM. Plasma distribution of delta-9-tetrahydrocannabinol (THC) in the rhesus monkey after marijuana smoke exposure. Proc. West. Pharmacol. Soc. 30:397-399, 1987.

61. Scallet AC, Uemura E, Andrews A, Ali SF, McMillan DE, Paule MG, Brown RM, and **Slikker W Jr**. Morphological effects of chronic delta-9-tetrahydrocannabinol (THC) in rat hippocampus. Brain Res. 436:193-198, 1987.

62. **Slikker W Jr**. The role of metabolism in the testing of developmental toxicants. Reg. Toxicol. Pharmacol. 7:390-413, 1987.

63. **Slikker W Jr**. Disposition of selected naturally occurring and synthetic steroids in the pregnant rhesus monkey. In: Pharmacokinetics in Teratogenesis, (Eds. N. Nau and W. Scott), CRC Press Inc., Boca Raton, Florida, 1987, pp. 149-176.

64. **Slikker W Jr**, Bailey JR, Lipe GW, Althaus ZR, and Leakey JEA. Placental steroid dehydrogenase: Assessment with a non-human primate *in situ* placental perfusion model. Trophoblast Res. 2:467-479, 1987.

65. **Slikker W Jr**, Bailey JR, Holder CL, and Lipe GW. Transplacental disposition of doxylamine succinate in the late-term rhesus monkey. In: Pharmacokinetics in Teratogenesis (Eds., H. Nau and W. Scott) CRC Press Inc., Boca Raton, Florida, 1987, pp. 193-202.

66. **Slikker W Jr**, Scallet AC, Buelke-Sam J, Paule MG, Ali,SF, Cunny HC, and Bailey JR. Improving risk assessment for chemicals affecting the developing central nervous system. J. Proc. Second Conference on Current Concerns on Toxicity, pp. 69-96, 1987.

67. Ali SF, Ahmad G, **Slikker W Jr**, and Bondy SC. Gestational exposure to phencyclidine (PCP) in rats decreases PCP binding sites in term fetal brain. Int. J. Dev. Neurosci. 6(6):547-552, 1988.

68. Ali SF, Holson RR, Pizzi WJ, Newport GD, and **Slikker W Jr**. Neurochemical evaluation of rats prenatally exposed to the adrenergic agonists clonidine and lofexidine. Neurotoxicology 9:551-558, 1988.

69. Hikal AH, Lipe GW, Newport GD, **Slikker W Jr**, Scallet AC, and Ali SF. Determination of amino acids in different regions of the rat brain: Application to the acute effects of tetrahydrocannabinol (THC) and trimethyltin (TMT). Life Sci. 42(20):2029-2035, 1988.

70. McDonald ZA, **Slikker W Jr**, Fu PP, Bailey JR, Lipe GW, and Unruh, L.E. Enhancement of estradiol potency by the 17B-hydroxysteroid dehydrogenase inhibitor, 16-methylene E_2 *in vivo*. J. Pharmacol. Exp. Therap. 244(2):428-431, 1988.

71. Paule MG, Bailey JR, and **Slikker W Jr**. The influence of anesthesia, pregnancy and sex on the plasma disposition of delta-9-tetrahydrocannabinol and 11-nor-9-carboxy-delta-9-tetrahydrocannabinol in the rhesus monkey. Australian Natl. Campaign Against Drug Abuse Monograph Series 7:315-320, 1988.

72. Paule MG, Bailey JR, **Slikker W Jr**, and Brown RM. Estimation of plasma delta-9-tetrahydrocannabinol (THC) levels by carboxyhemoglobin measurement in rhesus monkeys after exposure to marijuana smoke from cigarettes of known THC content. Australian Natl. Campaign Against Drug Abuse Monograph Series 7:259-262, 1988.

73. Paule MG, Schulze GE, and **Slikker W Jr**. Complex brain function in monkeys as a baseline for studying the effects of exogenous compounds. Neurotoxicology 9:463-470, 1988.

74. Scallet AC, Lipe GW, Ali SF, Holson RR, Frith CH, and **Slikker W Jr**. Neuropathological evaluation by combined immunohistochemistry and degeneration-specific methods: application to methylenedioxymethamphetamine. Neurotoxicology 9:529-538, 1988.

75. Schulze GE, McMillan DE, Bailey JR, Scallet AC, Ali SF, **Slikker W Jr**, and Paule MG. Acute effects of delta-9-tetrahydrocannabinol (THC) in rhesus monkeys as measured by performance in a battery of cognitive function tests. J. Pharmacol. Exp. Ther. 245:178-186, 1988.

76. **Slikker W Jr**, Ali SF, Scallet AC, Frith CH, and Newport GD. Neurochemical and neurohistological alterations in the rat and monkey produced by orally administered methylenedioxymethamphetamine (MDMA). Toxicol. Appl. Pharmacol. 94:448-457, 1988.

77. **Slikker W Jr**, Bailey JR, and Leakey JEA. Ontogeny of hepatic drug metabolizing enzymes in the rhesus monkey: Comparison of *in vitro* and *in vivo* conditions. In Nonhuman Primates - Developmental Biology and Toxicology of Nonhuman Primates, Diether Neubert, Hans-Joachim Merker and Andrew Hendrickx, eds., Berlin, pp. 413-426, 1988.

78. **Slikker W Jr**, Cunny HC, Bailey JR, and Paule MG. Placental transfer and fetal disposition of delta-9-tetrahydrocannabinol (THC) during late pregnancy in the rhesus monkey. Australian National Campaign Against Drug Abuse Monograph Series 7:97-102, 1988.

79. **Slikker W Jr**, Scallet AC, Uemura E, Andrews A, Ali SF, McMillan DE, Paule MG, and Brown RM. Effect of chronic delta-9-tetrahydrocannabinol on pyramidal neuron size and synaptic density in rat hippocampus. Australian National Campaign Against Drug Abuse Monograph Series 7:377-382, 1988.

80. **Slikker William Jr**, Thomford Peter J, Smith Mary Alice, Duhart Helen M, Bailey John R, and Mattison Donald R. Steroid metabolism by the perfused rhesus monkey and human placenta: A comparative study. In: Nonhuman Primates - Developmental Biology and Toxicology of Nonhuman Primates, Diether Neubert, Hans-Joachim Merker and Andrew Hendrickx, eds., Berlin, pp. 339-352, 1988.

81. Smith MA, Thomford PJ, Mattison DR, and **Slikker W Jr**. Transport and metabolism of dexamethasone in the dually perfused human placenta. Reprod. Toxicol. 2:37-43, 1988.

82. Ali SF, Ahmad G, **Slikker W Jr**, and Bondy SC. Effects of gestational exposure to phencyclidine: Distribution and neurochemical alterations in maternal and fetal brain, Neurotoxicology 10:383-392, 1989.

83. Ali SF, Newport GD, Scallet AC, Gee KW, Paule MG, Brown RM, and **Slikker W Jr**. Effects of chronic delta-9-tetrahydrocannabinol (THC) administration on neurotransmitter concentrations and receptor binding in rat brain. Neurotoxicology 10:491-500, 1989.

84. Ali SF, Scallet AC, Newport GD, Lipe GW, Holson RR, and **Slikker W Jr**. Persistent neurochemical and structural changes in rat brain after oral administration of MDMA. Res. Comm. Subst. Abuse 10:225-235, 1989.

85. Buelke-Sam J, Ali SF, Kimmel GL, **Slikker W Jr**, and Newport GD. Postnatal function following prenatal reserpine exposure in rats. Neurobehavioral toxicity. Neurotoxicol. Teratol. 11:515-522, 1989.

86. Gollamudi R, Ali SF, Lipe G, Newport G, Webb P, Lopez M, Leakey J, and **Slikker W Jr**. Influence of inducers and inhibitors on the metabolism *in vitro* and neurochemical effects *in vivo*, of MDMA. Neurotoxicology 10:455-466, 1989.

87. Holson RR, Ali SF, Scallet AC, **Slikker W Jr**, and Paule MG. Benzodiazepine-like behavioral effects following withdrawal from chronic delta-9-tetrahydrocannabinol administration in rats. Neurotoxicology 10:605-620, 1989.

88. Lay JO Jr, Getek TA, Kelly DW, **Slikker W Jr**, and Korfmacher WA. Fast-atom bombardment and thermo spray mass spectrometry for the characterization of two glucuronide metabolites of methapyrilene. Rap. Comm. Mass Spectro. 3(3):72-75, 1989.

89. Lipscomb JC, Paule MG, and **Slikker W Jr**. The disposition of ^{14}C-trimethyltin in the pregnant rat and fetus. Neurotoxicol. Teratol. 11(2):185-191, 1989.

90. Prasanna HR, Nakamura KD, Ali SF, Lu MH, **Slikker W Jr**, and Hart RW. Altered hepatic microsomal function and elevated protooncogene expression as residual effects in rats exposed to delta-9-tetrahydrocannabinol. Biochem. Biophys. Res. Comm. 160(1):217-221, 1989.

91. Roberts LG, Luck W, Holder CL, Scott WJ, Nau H, and **Slikker W Jr**. Embryo-maternal distribution of basic compounds in the CD-1 mouse: Doxylamine and nicotine. Toxicol. Appl. Pharmacol. 97:134-140, 1989.

92. Rowland JM, **Slikker W Jr**, Holder CL, Denton R, Prahalada S, Young JF, and Hendrickx AG. Pharma-cokinetics of doxylamine given as Bendectin(r) in the pregnant monkey and baboon. Reprod. Toxicol. 3(3):197-202, 1989.

93. Scallet AC, McKay D, Bailey J, Ali SF, Paule MG, **Slikker W Jr**, and Rayford P. Meal-induced increase in plasma gastrin immunoreactivity in rhesus monkeys. Am. J. Primatol. 18:315-319, 1989.

94. Schulze GE, **Slikker W Jr**, and Paule MG. Multiple behavioral effects of diazepam in rhesus monkeys. Pharmacol. Biochem. Behav. 34:29-35, 1989.

95. Sheehan D, Young JF, **Slikker W Jr**, Gaylor D, and Mattison D. Workshop on Risk Assessment in Reproductive and Developmental Toxicology: Addressing the Assumptions and Identifying the Research Needs. Reg. Toxicol. Pharmacol. 10:110-122, 1989.

96. **Slikker W Jr**, Holder CL, Lipe GW, Bailey JR, and Young JF. Pharmacokinetics of Doxylamine, a Component of Bendectin, in the Rhesus Monkey. Reprod. Toxicol. 3(3):187-196, 1989.

97. **Slikker W Jr**, Holson RR, Ali SF, Kolt, MG, Paule MG, Scallet AC, McMillan DE, Bailey JR, Hong JS, and Scalzo FM. Behavioral and neurochemical effects of orally administered MDMA in the rodent and nonhuman primate. Neurotoxicology 10:529-542, 1989.

98. Ali SF, Newport GD, Bailey JR, and **Slikker W Jr**. Oral administration of MDMA produces selective serotonergic neurotoxicity in rodent and nonhuman primates. SAAS Bull. Biochem. Biotech. 3:48-53, 1990.

99. Ali SF, Jairaj K, Newport GD, Lipe GW, and **Slikker W Jr**. Thallium intoxication produces neurochemical alterations in rat brain. Neurotoxicology 11:381-390, 1990.

100. Allen RR, **Slikker W Jr**, and Paule MG. Repeated measures designs in behavioral toxicology: application to chronic marijuana smoke exposure. Neurotoxicol. Teratol.12(5):441-448, 1990.

101. Eckhoff C, **Slikker W Jr**, Wittfoht W, and Nau H. Characterization of oxidized and glucuronidated metabolites of retinol in monkey plasma by thermospray liquid chromatography/mass spectrometry. Biomed. Environ. Mass Spectro. 19:428-433, 1990.

102. Ecobichon D, Davies JE, Doull J, Ehrich M, Joy R, McMillan D, MacPhail R, Reiter LW, **Slikker W Jr**, and Tilson H. Neurotoxic effects of pesticides. In: The Effects of Pesticides on Human Health, S.R. Baker and C.F. Wilkinson, eds., Princeton Scientific Publishing Co., Princeton, pp. 136-181, 1990.

103. Gaylor DE and **Slikker W Jr**. Risk assessment for neurotoxic effects. Neurotoxicology 11:211-218, 1990.

104. Holder CL, Korfmacher WA, Thompson HC Jr, Gosnell AB, and **Slikker W Jr**. Analysis of doxylamine and related compounds by chemical ionization mass spectrometry. In: Analytical Methods in Forensic Chemistry, M. Ho, ed., Ellis Horwood Limited West Sussex, England, pp. 65-85, 1990.

105. Holder CL, Siitonen PH, **Slikker W Jr**, Branscomb CJ, Korfmacher WA, Thompson HC, Cerniglia CE, Gosnell AB, and Lay JO Jr. Metabolism of doxylamine succinate in Fischer 344 rats Part III: Conjugated urinary and fecal metabolites. J. Anal. Toxicol. 14:247-251, 1990.

106. Kelly DW, Holder CL, Korfmacher WA, and **Slikker W Jr**. Plasma elimination and urinary excretion of methapyrilene in the rat. Drug. Metab. Dispo. 18(6):1018-1024, 1990.

107. **Slikker W Jr** and Gaylor DW. Biologically-based dose-response model for neurotoxicity risk assessment. Korean J. Toxicol., 6(2):205-213, 1990.

108. Bowyer JF, Scallet AC, Holson RR, Lipe GW, **Slikker W Jr**, and Ali SF. Interactions of MK-801 with glutamate-, glutamine- and methamphetamine-evoked release of [^{3}H] dopamine from striatal slices. J. Pharmacol. Exp. Ther. 257(1):262-270, 1991.

109. Cabral GA, Stinnet AL, Bailey JR, Ali SF, Paule MG, Scallet AC, and **Slikker W Jr**. Chronic marijuana smoke alters alveolar macrophage morphology and protein expression. Pharmacol Biochem Behav. 40(3):643-649, Nov 1991.

110. Cossum PA, Hill DE, Bailey JR, Anderson JH, and **Slikker W Jr**. Transplacental passage of a human relaxin administered to rhesus monkeys. J. Endocrinol. 130:339-345, 1991.

111. Creech Kraft J, Bailey JR, Roberts LG, Fischer B, Nau H, and **Slikker W Jr**. Distribution and metabolism of 13-cis and all-trans-retinoic acid in the cynomolgus monkey: A comparison to one human case study with 13-cis-retinoic acid. Drug Metab. Disp. 19:317-324, 1991.

112. Eckhoff C, Bailey JR, Collins MD, **Slikker W Jr**, and Nau H. Influence of dose and pharmaceutical formulation of vitamin A on plasma levels of retinyl esters and retinol and metabolic generation of retinoic acid compounds and beta-glucuronides in the cynomolgus monkey. Toxicol. Appl. Pharmacol. 111:116-127, 1991.

113. Fligiel SE, Beals TF, Tashkin DP, Paule MG, Scallet AC, Ali SF, Bailey JR, and **Slikker W Jr**. Marijuana exposure and pulmonary alterations in primates. Pharmacol Biochem Behav. 40(3):637-642, Nov 1991.

114. Gough B, Ali SF, **Slikker W Jr**, and Holson RR. Acute effects of 3,4-methylenedioxymethamphetamine (MDMA) on monoamines in rat caudate. Pharmacol. Biochem. Behav. 39(3):619-623, Jul 1991.

115. Lipe GW, Ali SF, Newport GD, Scallet AC, and **Slikker W Jr**. Effect of trimethyltin on amino acid concentrations in different regions of the mouse brain. Pharmacol. Toxicol. 68(6):450-455, Jun 1991.

116. Roberts LG, Laborde JB, and **Slikker W Jr**. Phenytoin teratogenicity and midgestational pharmacokinetics in mice. Teratology 44(5):497-505, Nov 1991.

117. **Slikker W Jr**. Biomarkers of neurotoxicity: An overview. Biomed. Environ. Sci. 4:192-196, 1991

118. **Slikker W Jr**, Paule MG, Ali SF, Scallet AC, and Bailey JR. Chronic marijuana smoke exposure in the rhesus monkey I. Plasma cannabinoid and blood carboxyhemoglobin concentrations and clinical chemistry parameters. Fund. Appl. Toxicol. 17:321-334, 1991.

119. St Omer VE, Ali SF, Holson RR, Duhart HM, Scalzo FM, and **Slikker W Jr**. Behavioral and neurochemical effects of prenatal methylenedioxymethamphetamine (MDMA) exposure in rats. Neurotoxicol Teratol. 13(1):13-20, Jan-Feb1991.

120. Westlake TM, Howlett AC, Ali SF, Paule MG, Scallet AC, and **Slikker W Jr**. Chronic exposure to delta-9-tetrahydrocannabinol fails to irreversibly alter brain cannabinoid receptors. Brain Res. 544(1):145-149, Mar 1991.

121. Bowyer JF, Tank AW, Newport GD, **Slikker W Jr**, Ali SF, and Holson RR. The influence of environmental temperature on the transient effects of methamphetamine on dopamine levels and dopamine release in rat striatum. J Pharmacol Exp Ther. 260(2):817-824, Feb 1992.

122. Collins MD, Eckhoff C, **Slikker W**, Bailey JR, and Nau H. Quantitative plasma disposition of retinol and retinyl esters following high-dose oral vitamin A administration in the cynomolgus monkey. Fundam Appl Toxicol. 19(1):109-116, Jul 1992.

123. Gaylor D and **Slikker W Jr**. Risk assessment of neurotoxicants. Neurotoxicology, Eds. Hugh Tilson and Clifford Mitchell, Raven Press, Ltd., New York, 1992, pp. 331-343.

124. Kelly DW, Holder CL, Korfmacher WA, Getek TA, Lay JO Jr, Casciano DA, Shaddock JG, Duhart HM, and **Slikker W Jr**. Metabolism of methapyrilene by Fischer-344 rat and $B_6C_3F_1$ mouse hepatocytes. Xenobiotica 22(12):1367-1381, Dec 1992.

125. Paule MG, Allen RR, Bailey JR, Scallet AC, Ali SF, Brown RM, and **Slikker W Jr**. Chronic marijuana smoke exposure in the rhesus monkey II: Effects on progressive ratio and conditioned position responding. J. Pharmacol Exp Ther. 260(1):210-222, Jan 1992.

126. Scallet AC and **Slikker W Jr**. Biomarkers of developmental neurotoxicity. In: Neubert, D., Kavlock, R.J., Merker, H-H., and Klein, J., Eds., Springer Verlag, Berlin, Heidelberg, pp. 63-78, 1992.

127. Scallet AC, **Slikker W Jr**, Ali SF, Bowyer JF, Holson RR, Lipe GW, Lipscomb JC, Rountree RL, Stewart CW, and Matthews JC. Age and dietary factors in hippocampal sensitivity to trimethyltin. Annals of the N.Y.Acad Sci. 648:340-342, May 1992.

128. **Slikker W Jr**, Paule MG, Ali SF, Scallet, AC, and Bailey JR. Behavioral, neurochemical and neurohistological effects and chronic marijuana smoke exposure in the nonhuman primate. In: Marijuana/Cannabinoids: Neurobiology and Neurophysiology, L. L. Murphy and A. Bartke, Eds., CRC Press, pp. 219-273, 1992.

129. Talaska G, Schamer M, Bailey JR, Ali SF, Scallet AC, **Slikker W Jr**, and Paule MG. No increase in carcinogen-DNA adducts in the lungs of monkeys exposed chronically to marijuana smoke. Toxicol Lett. 63(3):321-332, Dec 1992.

130. Ali SF, Holson RR, Newport GD, **Slikker W Jr**, and Bowyer JF. Development of dopamine and N-methyl-D-aspartate systems in rat brain: the effect of prenatal phencyclidine exposure. Brain Res Dev Brain Res. 73(1):25-33, May 1993.

131. Ali SF, Newport GD, Scallet AC, Binienda Z, Ferguson SA, Bailey JR, Paule MG, and **Slikker W Jr**. Oral administration of 3,4- methylenedioxymethamphetamine (MDMA) produces selective serotonergic neurotoxicity in the nonhuman primate. Neurotoxicol Teratol. 15(2):91-96, Mar-Apr 1993.

132. Binienda Z, Bailey JR, Duhart HM, S**likker W Jr**, and Paule MG. Transplacental pharmacokinetics and maternal/fetal plasma concentrations of cocaine in pregnant macaques near term. Drug Metab Dispos. 21(2):364-368, Mar-Apr 1993.

133. Binienda Z, Fogle CM, **Slikker W Jr**, and Ali SF. Acute effects of perinatal hypoxic insult on concentrations of dopamine, serotonin and metabolites in fetal monkey brain. I. J. Develop. Neurosci. 11:755-764, 1993.

134. Bowyer JF, Gough B, **Slikker W Jr**, Lipe GW, Newport GD, and Holson RR. Effects of a cold environment or age on methamphetamine-induced dopamine release in the caudate-putamen of female rats. Pharmacol Biochem Behav. 44(1):87-98, Jan 1993.

135. Duhart HM, Fogle CM, Gillam MP, Bailey JR, **Slikker W Jr**, and Paule MG. Pharmacokinetics of cocaine in chronically or acutely exposed rhesus monkeys. Reprod. Toxicol. 7:429-437, 1993.

136. Reiter LW, Tilson HA, Dougherty J, Harry GJ, Jones CJ, McMaster S, **Slikker W Jr**, and Sobotka TJ. Draft Report: Principles of Neurotoxicity Risk Assessment, Fed. Reg. 58(148):41556-41599, 1993.

137. Scallet AC, Binienda Z, Caputo F, Hall S, Paule MG, Rountree RL, Schmued L, Sobotka T, and **Slikker W Jr**. Domoic acid-treated cynomolgus monkeys (M. fascicularis): Effects of dose on hippocampal neuronal and terminal degeneration. Brain Res. 627:307-313, 1993.

138. Schmued L, Beltramino C, and **Slikker W Jr**. Intracranial injection of Fluoro-Gold results in degeneration of local but not retrogradely labeled neurons. Brain Res. 626(1-2):71-77, Oct 29 1993.

139. Lambert JS and **Slikker W Jr**. Anti-HIV therapy and the placenta workshop. Trophoblast Res. 8:97-103, 1994.

140. **Slikker W Jr**. Developmental neurotoxicology overview. In: Principles of Neurotoxicology, L. Chang, Ed., pp. 657-658, Marcel Dekker, Inc., New York, 1994.

141. Ali SF, David SN, Newport GD, Cadet JL, and **Slikker W Jr**. MPTP-induced oxidative stress and neurotoxicity are age-dependent: Evidence from measures of reactive oxygen species and striatal dopamine levels. Synapse 18:27-34, 1994.

142. Ali SF, Newport GD, Holson RR, **Slikker W Jr**, and Bowyer JF. Low environmental temperatures or pharmacologic agents which produce hypothermia decreases methamphetamine neurotoxicity in mice. Brain Res. 658:33-38, 1994.

143. Binienda Z, Rountree RL, Taylor NR, **Slikker W Jr**, and Scallet AC. The effects of reduced perfusion and reperfusion on C-fos and protein immunohistochemistry in gestational day 21 rat brains. Proceedings of NY Academy Sciences 723:457-461, 1994.

144. Bowyer JF, Davies DL, Schmued L, Broening HW, Newport GD, **Slikker W Jr**, and Holson RR. Further studies of the role of hyperthermia in methamphetamine neurotoxicity. J. Pharmacol. Exp. Ther. 268(3):1571-1580, 1994.

145. Chung BC, Kim DH, Jung BH, Eom K, **Slikker W Jr**, and Park J. Identification of urinary metabolites of pyrilamine after oral administration to man. Xenobiotica 24(5):451-459, 1994.

146. Gaylor D and **Slikker W Jr**. Modeling for risk assessment of neurotoxic effects. Risk Analysis 14(3):333-338, 1994.

147. Gaylor D and **Slikker W Jr**. Estimation of risk for neurotoxicants. Proc. Air Waste Management Assoc., Sec RA-116.01, pp. 1-6, 1994.

148. Holder CL, **Slikker W Jr**, and Thompson HC. Comparison of the metabolism and elimination of pyrilamine maleate in Fischer 344 rats, B6C3F1 mice and female rhesus monkeys. Comparative Biochemistry and Physiology 107C(1):159-164, 1994.

149. Sandberg JA, Eckhoff C, Nau H, and **Slikker W Jr**. Pharmacokinetics of 13-cis-, all trans-, 13-cis-4-oxo- and all-trans-r-oxo retinoic acid after intravenous administration in the cynomolgus monkeys. Drug. Metab. Disp. 22(1):154-160, 1994.

150. **Slikker W Jr**. Principles of developmental neurotoxicology, Neurotoxicology 15(1):11-16, 1994.

151. **Slikker W Jr**. Placental transfer and pharmacokinetics of developmental Neurotoxicants. In *Principles of Neurotoxicology*, L. Chang, Ed., Marcel Dekker, Inc., New York, pp. 659-680, 1994.

152. **Slikker W Jr** and Miller RK. Placental metabolism and transfer-role in developmental toxicology. In *Developmental Toxicology*, Second Edition, Eds. Carole A. Kimmel and Judy Buelke-Sam, Raven Press, New York, pp. 245-286, 1994.

153. Taylor LD, Binienda Z, Schmued L, and **Slikker W Jr**. The effect of dideoxycytidine (ddC) on the lymphocyte subpopulations in nonhuman primates. Fund. Appl. Toxicol. 23:434-438, 1994.

154. Broening HW, Bacon L, and **Slikker W Jr**. Age modulates the long-term but not the acute effects of the serotonergic neurotoxin 3,4-methylenedioxymethamphetamine. J. Pharmacol. Exp. Ther. 271(1):285-293, 1994.

155. Kim S, **Slikker W Jr**, Binienda Z, Gargas ML, and Andersen ME. Development of a physiologically based pharmacokinetic (PBPK) model for 2,4-dichlorophenoxyacetic acid (2,4-D) dosimetry in discrete areas of the brain following a single intraperitoneal or intravenous dose. Neurotox. Teratol. 17:111-120, 1994.

156. Reiter LW, Tilson HA, Dougherty J, Harry GJ, Jones CJ, McMaster S, **Slikker W Jr**, and Sobotka TJ. Final Report: Principles of Neurotoxicity Risk Assessment. Fed. Reg. 59(158):42360-42404, 1994.

157. Ali SF, Duhart HM, Newport GD, Lipe GW, and **Slikker W Jr**. Manganese-induced reactive oxygen species: Comparison between Mn^{+2} and Mn^{+3}. Neurodegeneration 4:329-334, 1995.

158. Ali SF and **Slikker W Jr**. Basic biochemical approaches in neurotoxicology: Assessment of neurotransmitters and neuroreceptors. In *Neurotoxicology: Approaches and Methods* (Eds., L.W. Chang and W. Slikker, Jr.). Academic Press, Orlando, Florida, pp. 385-398, 1995.

159. Binienda Z, Frederick DL, Ferguson SA, Rountree RL, Paule MG, Schmued L, Ali SF, **Slikker W Jr**, and Scallet AC. The effects of perinatal hypoxia on the behavioral, neurochemical, and neurohistological toxicity of the metabolic inhibitor 3-nitropropionic acid. Metabolic Brain Diseases 10(4):269-282, 1995.

160. Bowyer JF, Clausing P, Gough B, **Slikker W Jr**, and Holson RR. Nitric oxide regulation of methamphetamine-induced dopamine release in caudate/putamen. Brain Res. 699:62-70, 1995.

161. Broening HW, Bowyer JF, and **Slikker W Jr**. Age dependent sensitivity of rats to the long-term effects of the serotonergic neurotoxicant (+)-3,4-methylenedioxymethamphetamine (MDMA) correlates with the magnitude of MDMA-induced hyperthermia. J. Pharmacol. Exp. Ther. 275(1):325-333, 1995.

162. Chetty SC, Hussain S, **Slikker W Jr**, and Ali SF. Effects of phencyclidine on nitric oxide synthase activity in different regions of rat brain. Res. Comm. Subst. Abuse 16:105-114, 1995.

163. Clausing P, Gough B, Holson RR, **Slikker W Jr**, and Bowyer JF. Amphetamine levels in brain microdialysates, brain tissue and plasma after doses that produce either behavioral or neurotoxic effects. J. Pharmacol. Exp. Ther. 274:614-621, 1995.

164. Fredrick DL, Ali SF, **Slikker W Jr**, Gillam M, Allen RR, and Paule MG. Behavioral and neurochemical effects of chronic methylenedioxymethamphetamine (MDMA) treatment in rhesus monkeys. Neurotox. Teratol. 17:531-543, 1995.

165. Hussain S, **Slikker W Jr**, and Ali SF. Age-related changes in antioxidant enzymes, superoxide dismutase, catalase, glutathione peroxidase and glutathione in different regions of mouse brain. International J. Develop. Neurosci. 13:811-817, 1995.

166. Sandberg JA and **Slikker W Jr**. Developmental pharmacology and toxicology of anti-HIV therapeutic agents. FASEB J. 9:1157-1163, 1995.

167. Sandberg JA, Binienda Z, Lipe G, Rose LM, Parker WB, Ali SF, and **Slikker W Jr**. Placental transfer and fetal disposition of 2',3,-dideoxycytidine (ddC) and 2'3'-dideoxyinosine (ddI) in the rhesus monkey. Drug Metab. Dispo. 23:881-884, 1995.

168. Scallet AC, Binienda Z, Holder CL, Sandberg JA, Schmued LC, and **Slikker W Jr**. Domoic acid-treated cynomolgus monkeys: effects and pathogenesis. In Molecular Approaches to Food Safety, M. Eklund, J. Richards, and K. Mise, Eds., Alaken Press, Ft. Collins, CO, pp. 403-415, 1995.

169. Schmued LC, Scallet AC, and **Slikker W Jr**. Domoic acid-induced neuronal degeneration in the primate forebrain revealed by degeneration specific histochemistry. Brain Research 695:64-70, 1995.

170. **Slikker W Jr**. Neurochemical and biomolecular approaches: Introductory overview. In Neurotoxicology: Approaches and Methods, Chang and Slikker, Eds., Academic Press, pp. 383-384, 1995.

171. **Slikker W Jr** and Gaylor D. Concepts on quantitative risk assessment of neurotoxicants. In Neurotoxicology: Approaches and Methods, Chang and Slikker, Eds., Academic Press, Chapter 51, pp. 771-776, 1995.

172. **Slikker W Jr**, Paule MG, and Broening HW. Role of Serotonergic Systems in Behavioral Toxicity. In Neurotoxicology: Approaches and Methods, Chang and Slikker, Eds., Academic Press, Chapter 19, pp. 371-380, 1995.

173. **Slikker W Jr** and Gaylor D. Risk assessment strategies for neuroprotective agents. Proc., 2nd Int'l. Conf. on Neuroprotective Agents, NY Academy of Sciences, Trembly and Slikker, Eds., 765:198-208, 1995.

174. Sobrian SK, Ali SF, **Slikker W Jr**, and Holson RR. Interactive effects of prenatal cocaine and nicotine exposure on maternal toxicity, postnatal development and behavior in the rat. Molecular Neurobiol. 11:121-143, 1995.

175. Soliman EF, **Slikker W Jr**, and Ali SF. Manganese-induced oxidative stress as measured by a fluorescent probe: An *in vitro* study. Neurosci. Res. Commun. 17:185-193, 1995.

176. Ali SF, Newport GD, **Slikker W Jr**, Rothman RB, and Baumann MH. Neuroendocrine and neurochemical effects of acute ibogaine administration in the rat. Brain Res. 737:215-220, 1996.

177. Binienda Z, Holson RR, Chen FX, Oriaku E, Kim CS, Flynn T, **Slikker W Jr**, Paule MG, Feuers RJ, and Ferguson SA. Effects of ischemia-hypoxia induced by interruption of uterine blood flow on fetal rat brain and liver enzyme activities and offspring behavior. Int. J. Dev. Neurosci. 14:399-408, 1996.

178. Binienda Z, Sandberg JA, **Slikker W Jr**, and Ali SF. Alterations in electro- encephalographic signals and monoamine concentrations in the rat brain following cocaine and methamphetamine treatment. Ann. N.Y. Acad Sci. 801:394-400, 1996.

179. Bowyer JF, Clausing P, Schmued L, Davies DL, Binienda Z, Scallet AC, and **Slikker W Jr**. Parenterally administered 3-nitropropionic acid and amphetamine can combine to produce damage to terminals and cell bodies in the striatum. Brain Res. 712:221-229, 1996.

180. Clausing P, Bloom D, Newport GD, Holson RR, **Slikker W Jr**, and Bowyer JF. Individual differences in dopamine release but not rotational behavior correlate with extracellular amphetamine levels in caudate putamen in unlesioned rats. Psychopharmacology 127:187-194, 1996.

181. Fogle CM, Duhart HM, Gillam MP, **Slikker W Jr**, and Paule MG. Pharmacokinetic parameters for cocaine in near term rhesus monkeys treated chronically with escalating doses. J. Toxicol. Environ. Hlth. 49:350-351, 1996.

182. Hussain S, **Slikker W Jr**, and Ali SF. Role of metallothionine and other antioxidants in scavenging superoxide radicals and their possible role in neurodegeneration. Neurochem. Int. 29:145-152, 1996.

183. Sandberg JA, Duhart HM, Lipe G, Binienda Z, **Slikker W Jr**, and Kim CS. Distribution of 2,4-dichlorophenoxyacetic acid (2,4-D) in maternal and fetal rabbits. J. Toxicol. Environ. Health 49:497-509, 1996.

184. Schmued L, Albertson C, Andrews A, Sandberg J, Nickols J, and **Slikker W Jr**. Evaluation of brain and nerve pathology in rats chronically dosed with ddl or Isoniazid. Neurotox. and Teratol. 18:555-563, 1996.

185. **Slikker W Jr**, Crump, KS, Andersen ME, and Bellinger D. Biologically-based, quantitative risk assessment of neurotoxicants. Fund. Appl. Toxicol. 29:18-30, 1996.

186. Sobotka TJ, Ekelman KB, **Slikker W Jr**, Raffaele K, and Hattan DG. Food and Drug Administration Proposed Guidelines for Neurotoxicological Testing of Food Chemicals. NeuroToxicology 17(3-4):825-836, 1996.

187. Ferguson SA, St. Omer VEV, Kwon OS, Holson RR, Houston RJ, Rottinghaus GE, and **Slikker W Jr**. Prenatal fumonisin (FB1) treatment in rats results in minimal maternal or offspring toxicity. Neurotoxicology 18:561-570, 1997.

188. Hashemi R, Choobineh F, **Slikker W**, and Paule MG. On integration of modified rough sets and fuzzy logic in classification. Proceedings of the Third International Joint Conference on Information Sciences, Research Triangle Park, NC, March, 1997, pp 255-258.

189. Hussain S, Lipe GW, **Slikker W Jr**, and Ali SF. The effects of chronic exposure to manganese on antioxidant enzymes in different regions of rat brain. Neurosci. Res. Commun. 21:135-143, 1997.

190. Hashemi R, Choobineh F, Al-Masyabi W, Evans B, **Slikker W**, and Paule MG. Comparison of the two hybrid rough-fuzzy approaches for classification. The International Association for Mathematics and Computers in Simulation (IMACS '97) World Congress Volume 4, Berlin, Germany, pp 653-657, August 1997.

191. Kwon OS, Schmued LC, and **Slikker W.** Fumonisin B1 in developing rats alters brain sphiganine levels and myelination, NeuroTox. 18(2):571-580, 1997.

192. Hashemi R, Choobineh F, **Slikker W,** and Paule MG. A diagnostic system based on a multi-decision approximate rules model. Proceedings 1997 ACM International Symposium on Applied Computing, pp. 20-24, 1997 and Newsletter of ACM SIGBIO, pp. 10-15, 1997.

193. Kwon OS, Sandberg JA, and **Slikker W Jr**. Effects of fumonisin B_1 treatment on blood-brain barrier transfer in developing rats. Neurotox. and Teratology 19(2):151-155, 1997.

194. Morris P, Binienda Z, Gillam MP, Klein J, McMartin K, Koren G, Duhart HM, **Slikker W Jr**, and Paule MG. The effect of chronic cocaine exposure throughout pregnancy on mother and baby outcomes in the rhesus monkey. Neurotoxicol. Teratol. 19:47-57, 1997.

195. Patterson TA, Binienda ZK, Lipe GW, Gillam MP, **Slikker W Jr**, and Sandberg JA. Transplacental pharmacokinetics and fetal distribution of azidothymidine, its glucuronide, and phosphorylated metabolites in late-term rhesus macaques after maternal infusion. Drug Metab. and Disp. 25(4):453-459, 1997.

196. Schmued LC, Albertson C, and **Slikker W Jr**. Fluoro-Jade: a novel fluorochrome for the sensitive and reliable histochemical localization of neuronal degeneration. Brain Res. 751:37-46, 1997.

197. **Slikker W Jr** and Gaylor DW. Developmental neurotoxicity of inhaled methanol: A quantitative, dose-response risk assessment model. In: Advances in Occupational Medicine and Rehabilitation. 3(3):191-197, 1997.

198. **Slikker W Jr** and Sobotka TJ. Current and future approaches to neurotoxicity risk assessment. Neuroprotective Agents, Ann. NY Acad. Sci. 825:406-418, 1997.

199. Stewart C, Bowyer JF, and **Slikker W Jr**. Elevated environmental temperatures can induce hyperthermia during d-fenfluramine exposure and enhance 5HT depletion in the brain. J. Pharmacol. Exp. Ther. 283(3):1144-1150, 1997.

200. Benoit B, Morris P, McMartin KI, Klein J, Duhart HM, Gillam MP, Binienda Z, Paule MG, **Slikker W Jr**, and Koren G. Transplacental pharmacokinetics of cocaine and benzoylecgonine in plasma and hair of rhesus monkeys. Reprod. Tox. 12(5):517-523, 1998.

201. Binienda Z, Beaudoin MA, Thorn BT, Prapurna DR, Johnson JR, Fogle CM, **Slikker W Jr**, and Ali SF. Alteration in electroencephalogram and monoamine concentrations in rat brain following ibogaine treatment. Ann N.Y. Acad. Sci. 844:265-273, 1998.

202. Binienda ZK, Simmons CE, Hussain SM, **Slikker W Jr**, and Ali SF. Effect of acute exposure of 3-nitropropionic acid on activities of endogenous antioxidants in the rat brain. Neuroscience Letters 251:173-176, 1998.

203. Hashemi R, Choobineh F, Tyler A, **Slikker W**, and Paule MG. Analysis of reducts in information systems, In: The 1998 World Automation Congress (WAC '98), Anchorage, Alaska, pp 137-142, 1998.

204. Kwon O, Newport GD, and **Slikker W**. Quantitative analysis of free sphingoid bases in the brain and spinal cord tissues by high-performance liquid chromatography with a fluorescence detection. Journal of Chromatography B 720:9-14, 1998.

205. Hashemi RR, Terry MS, Tyler AA, **Slikker W Jr**, and Paule MG. The development of profiles for children with attention deficit disorder and monkeys: a neural network approach. Newsletter of ACM SIGBIO, January, pp. 7-11, 1998.

206. Broening HW and **Slikker W Jr**. Ontogeny of neurotransmitters: Monoamines. *Handbook of Developmental Neurotoxicology*, (eds. W. Slikker and L. Chang), Academic Press, pp. 245-256, 1998.

207. Hashemi RR, Danley JM, Tyler AA, **Slikker W**, and Paule MG. The quality of information granulation: Kohonen self-organizing map vs. neighborhood systems. Proceedings of the 4th Joint Conference on Information Sciences, Research Triangle Park, NC, pp. 294-297,1998.

208. Frederick DL, Ali SF, Gillam MP, Gossett J, **Slikker W Jr**, and Paule MG. Acute effects of dexfenfluramine (D-FEN) and methylenedioxymethamphetamine (MDMA) before and after short-course, high-dose treatment. Ann. N.Y. Acad. Sci. 844:183-190, 1998.

209. Hashemi R, Danley J, Bolan B, Tyler A, **Slikker W**, and Paule M. Information granulation and super rules, Proceedings of the Fourth International Joint Conference on Information Sciences, Research Triangle Park, NC, pp. 383-386, October 1998.

210. **Slikker W Jr** and Gaylor DW. Quantitative models of risk assessment for developmental neurotoxicants. *Handbook of Developmental Neurotoxicology*, Academic Press, pp. 727-732, 1998.

211. **Slikker W Jr** and Paule MG. Risk assessment of neurotoxicants. Proceedings of the World Automation Congress (WAC '98), Anchorage, Alaska, pp. 88-89, May 1998.

212. **Slikker W**, Scallet A, and Gaylor DW. Biologically-based dose-response model for neurotoxicity risk assessment. Toxicology Letters 102-103:429-433, 1998.

213. **Slikker W Jr** and Keenan F. Toxicokinetics and bioavailability of manganese: Session II summary and research needs. NeuroToxicology 19(3):475-478, 1998.

214. Stewart CW, Scalzo FM, Valentine J, Duhart HM, Holson RR, Ali SF, and **Slikker W Jr**. Mechanism of postnatal alterations from gestational cocaine exposure. Life Sciences 63:2015-2022, 1998.

215. Hashemi RR, **Slikker W**, and Paule MG. Profiling through Kohonen self-organizing map: The effect of birth weight on the performance measures of an operant test battery. Proceedings of the ANNIE'99 Smart Engineering System Design: Neural Networks, Fuzzy Logic, Evolutionary Programming, Complex Systems and Data Mining. (Eds , C.H. Dagli, A.L. Buczak, J. Ghosh, M. J. Embrechts and O. Ersoy) St. Louis, MO, pp. 941-946., November 1999.

216. Hussain S, Hass B, **Slikker W Jr**, and Ali SF. Reduced levels of catalase activity potentiate MPP+ toxicity: Comparison between MN9D cells and CHO cells. Toxicol. Letters 104:49-56, 1999.

217. Imam SZ, Crow JP, Islam F, **Slikker W**, and Ali SF. Methamphetamine generates peroxynitrite and produce dopaminergic neurotoxicity in mice: protective effects of peroxynitrite scavenger FeTMPyP. Brain Research 837(1-2):15-21, 1999.

218. Imam SZ, Newport GD, Islam F, **Slikker W Jr**, and Ali SF. Selenium, an antioxidant, protects against methamphetamine-induced dopaminergic neurotoxicity. Brain Res. 818:575-578, 1999.

219. Lipe GW, Duhart HL, Newport GD, **Slikker W Jr**, and Ali SF. Effects of manganese on the concentration of amino acids in different regions of the rat brain. J. Environ. Sci. & Health 34:119-132, 1999.

220. Schmued LC and **Slikker W**. Black-gold: A simple, high resolution histochemical label for normal and pathological myelin in brain tissue sections. Brain Research 837(1-2):289-297, 1999.

221. Schmued L, **Slikker W Jr**, Clausing P, and Bowyer JF. *d*-Fenfluramine produces neuronal degeneration in localized regions of the cortex, thalamus, and cerebellum of the rat. Toxicol. Sci. 48:100-106, 1999.

222. Stewart CW and **Slikker W**. Hyperthermia-enhanced serotonin (5-HT) depletion resulting from d-fenfluramine exposure is preventable. Life Sciences 65:1531-1536, 1999.

223. Stewart CW and **Slikker W**. Hyperthermia-enhanced serotonin (5-HT) depletion resulting from d-Fenfluarmine (d-Fen) exposure does not evoke a glial-cell response in the central nervous system of rats. Brain Research 839:279-282, 1999.

224. Yu X, Imam SZ, Newport G D, **Slikker W Jr**, and Ali SF. Ibogaine blocked methamphetamine-induced and induction of heat shock protein in mice. Brain Res. 823:213-216, 1999.

225. **Slikker W**, Youdim M, Palmer E, Hall E, Williams C, and Trembly B. The future of neuroprotection. Annals of the New York Academy of Sciences, (Eds. B. Trembly and W. Slikker, Jr.), pp 529-533, 1999.

226. Poirier M, Patterson TA, **Slikker W,** and Olivero O. Incorporation of 3'-azido-3'deoxythymidine (AZT) into fetal DNA, and fetal tissue distribution of drug, after infusion of pregnant late-term rhesus macaques with a human-equivalent AZT dose. Journal of Acquired Deficiency Syndromes 22:477-483, 1999.

227. Patterson TA, Schmued LC, Sandberg JA, and **Slikker W**. Temporal development of 2',3'-dideoxyinosine-(DDI) induced peripheral myelinopathy. Neurotoxicology and Teratology 22:429-434, 2000.

228. Wang GJ, Schmued LC, Andrews AM, Scallet AC, **Slikker W Jr**, and Binienda Z. Systemic administration of domoic acid-induced spinal cord lesions in neonatal rats. The Journal of Spinal Cord Medicine 23:31-39, 2000.

229. Binienda Z, Beaudoin MA, Thorn BT, Sadovova NV, Skinner RD, **Slikker W Jr**, and Ali SF. Application of electrophysiological method to study interactions between ibogaine and cocaine. Annals New York Academy of Sciences 914:387-393, Sept 2000.

230. Bowyer JF, Newport GD, **Slikker W Jr**, Gough B, Ferguson SA, and Tor-Agbidye J. An evaluation of l-ephedrine neurotoxicity with respect to hyperthermia and caudate/putamen microdialysate levels of ephedrine, dopamine, serotonin, and glutamate. Toxicol. Sci. 55:133-142, 2000.

231. Kwon O-S, **Slikker W Jr,** and Davies DL. Biochemical and morphological effects of fumonisin B_1 on primary cultures of rat cerebrum. Neurotoxicology and Teratology 22:565-572, 2000.

232. **Slikker W Jr**, Olivero OA, Patterson TA, and Poirier MC. Potential toxicities of HIV therapeutics in the developing infant. Teratology 61:397-398, 2000.

233. Patterson TA, Binienda ZK, Newport GD, Lipe GW, Gillam MP, **Slikker W Jr,** and Sandberg JA. Transplacental pharmacokinetics and fetal distribution of 2',3'-didehydro-3'-deoxythymidine (d4T) and its metabolites in late-term rhesus macaques. Teratology 62:93-99, 2000.

234. **Slikker W Jr**, Beck BD, Cory-Slechta DA, Paule MG, Anger WK, and Bellinger D. Cognitive Tests: Interpretation for Neurotoxicity? (Workshop Summary) Toxicol. Sci. 58:222-234, 2000.

235. Imam SZ, Newport GD, Itzhak Y, Cadet JL, Islam F, **Slikker W Jr**, and Ali SF. Peroxynitrite plays a role in methamphetamine-induced dopaminergic neurotoxicity: evidence from mice lacking neuronal nitric oxide synthase gene or overexpressing copper-zinc superoxide dismutase. J Neurochemistry 76:745-749, 2000.

236. Imam SZ, Islam F, Itzhak Y, **Slikker W Jr**, and Ali SF. Prevention of dopaminergic neurotoxicity by targeting nitric oxide and peroxynitrite: Implications for the prevention of methamphetamine-induced neurotoxic damage. New York Academy of Sciences 914:157-171, 2000.

237. Williams CJ, Soliman MRI, Duhart HM, **Slikker W Jr,** and Ali SF. Methylcyclopentadienyl manganese tricarbonyl-induced reactive oxygen species in different regions of rat brain: An *in vitro* study. Research Communications in Pharmacology & Toxicology 5(1&2): 23-36, 2000.

238. Xu Z, Chang LW, **Slikker W Jr,** Ali SF, Rountree RL, and Scallet AC. A dose-response study of ibogaine-induced neuropathology in the rat cerebellum. Toxicol. Sci. 57(1):95-101, 2000.

239. **Slikker W Jr** and Paule MG. Cognitive tests: Interpretation for neurotoxicity*?* Proc. WAC/IFMIP Congress, 11:179-194, 2000.

240. Anderson V, Carneiro M, Bulterys M, Douglas G, Polliotti B, and **Slikker W Jr**. HIV in pregnancy. Perinatal infections: HIV and co-infections in the placenta and therapeutic interventions – A Workshop Report. Placenta (2001) Suppl A., Trophoblast Research 15: S34-S37.

241. **Slikker W**. Risk assessment and neurotoxicology: Neurotoxicology in current protocols in toxicology. Current Protocols in Toxicology, Eds. M.D. Maines, L. G. Costa, E Hodgson, D.J. Reed, S Sassa, G Sipes, John Wiley & Sons, Inc, NY, 2001.

242. Kim C, Sandberg JA, **Slikker W Jr,** Binienda ZK, Schlosser PM, and Patterson TA. Quantitative exposure assessment: Application of physiologically-based pharmacokinetic (PBPK) modeling of low-dose, long-term exposures or organic acid toxicant in the brain. Environmental Toxicology and Pharmacology 9(4):153-160, 2001.

243. Imam SZ, El Yazal J, Newport GD, Itzhak Y, Cadet J, **Slikker W Jr**, and Ali SF. Methamphethamine-induced dopaminergic neurotoxicity: Role of peroxynitrite and neuroprotective role of antioxidants and peroxynitrite decomposition catalysts. Annals of New York Academy of Sciences 939:366-380, 2001.

244. **Slikker W Jr**, Scallet AC, Doerge DR, and Ferguson SA. Gender-based differences in rats after chronic dietary exposure to genistein. International Journal of Toxicology 20(3):175-179, 2001.

245. **Slikker W Jr**, Jonas S, Auer RN, Palmer GC, Narahashi T, Youdim MBH, Maynard KI, Carbone KM, and Trembly B. Summary Chapter: Neuroprotection: Past successes and future challenges. Annals of New York Academy of Sciences 939:465-477, 2001.

246. Xu Z, Seidler FJ, Ali SF, **Slikker W Jr**, and Slotkin TA. Fetal and adolescent nicotine administration: Effects on CNS serotonergic systems. Brain Research 914(1-2):166-178, 2001.

247. Imam SZ, Itzhak Y, Cadet JL, Islam F, **Slikker W Jr**, and Ali SF. Methamphetamine-induced alteration in striatal p53 and bcl-2 expressions in mice. Molecular Brain Research 91(1-2): 174-178, 2001.

248. El Yazal J, Rao SN, Mehl A, and **Slikker W Jr**. Prediction of organophosphorus acetylcholinesterase inhibition using three-dimensional quantitative structure-activity relationship (QSAR) methods. Toxicol Sci. 63:223-232, 2001.

249. Imam SZ, Newport GD, Itzhak Y, Cadet J, Islam F, **Slikker W Jr**, and Ali SF. Peroxynitrite plays a role in methamphetamine-induced neurotoxicity dopaminergic neurotoxicity: evidence from mice lacking neuronal nitric oxide synthase gene or overexpressing copper zinc superoxide dismutase. J Neurochem. 76(3):745-749, 2001.

250. Binienda ZK, Pereira F, Alper K, **Slikker W Jr**, and Ali SF. Adaptation to repeated cocaine administration in rats. Annals of the New York Academy of Sciences 965:172-179, 2001.

251. Chetty CS, Reddy GR, Suresh A, Desaiah D, Ali SF, and **Slikker W Jr**. Effects of manganese on inositol polyphosphate receptors and nitric oxide synthase activity in rat brain. International Journal of Toxicology 20(5):275-280, 2001.

252. **Slikker W.** Site-selective action. Cellular and Molecular Mechanisms of Toxin Actions, Vol. 4 Site-Selective Neurotoxicity, Eds. D.S. Lester, **W. Slikker, Jr**., P Lazarovici, pp 16-26, 2002.

253. Von Kreis R, Toschke AM, Koletzki B, and **Slikker W Jr**. Maternal smoking during pregnancy and childhood obesity. Am J Epidemiol. 156(10):954-961, 2002.

254. Haberny KA, Paule MG, Scallet AC, Sistare F, Lester DS, Hanig JP, and **Slikker W Jr**. Ontogeny of the N-methyl-D-Aspartate 9NMDA) receptor system and susceptibility to neurotoxicity. Toxicol Sci. 68(1):9-17, 2002.

255. Toschke AM, Koletzko B, **Slikker W Jr**, Hermann M, and Von Kries R. Childhood obesity is associated with maternal smoking in pregnancy. European Journal of Pediatrics 161(8): 445-448, 2002.

256. Xu Z, Seidler FJ, Cousins MM, **Slikker W Jr**, and Slotkin TA. Adolescent nicotine administration alters serotonin receptors and cell signaling mediated through adenylyl cyclase: Implications for adolescent smoking and the development of depression. Brain Research 951(2):280-292, 2002.

257. Imam SZ, Newport GD, Duhart HM, Islam F, **Slikker W Jr**, and Ali SF. Methamphetamine-induced dopaminergic neurotoxicity and production of peroxynitrite are potentiated in nerve growth factor differentiated pheochromocytoma 12 cells. Annals of the New York Academy of Sciences 965: 204-213. 2002.

258. Gough BJ, Imam SZ, Blough B, **Slikker W Jr**, and Ali SF. Comparative effects of substituted amphetamines (PMA, MDMA and METH) on monoamines in rat caudate. A microdialysis study. Annals of the New York Academy of Sciences 965:410-420, 2002.

259. Toraason M, Andersen M, Bogdanffy MS, Dankovic D, Faustman E, Foster P, Frederick C, Haber L, Kimmel CA, Lewis S, McClellan R, Melnick R, Mirer F, Morgan K, Schaeffer V, Silbergeld E, **Slikker W**, Swenberg J, and Vainio H. Improving Risk Assessment: Toxicological Research. Human and Ecological Risk Assessment 8: 1405-1419, 2002.

260. Xu Z, Seidler FJ, Tate CA, Garcia SJ, **Slikker W Jr**, and Slotkin TA. Sex-selective hippocampal cell damage after adolescent nicotine administration: Effects on neurospecific proteins. Nicotine & Tobacco Research 2003 Dec 5(6):955-960, 2003.

261. Shiverick KT, **Slikker W Jr**, Rogerson SJ, and Miller RK. Drugs and the Placenta – A Workshop Report. Placenta Trophoblast Research, Supplement A, 17:S55-59, 2003.

262. **Slikker W Jr** and Schwetz B. Childhood Obesity: The possible role of maternal smoking and impact on public health. Journal of Children's Health 1:29-40, 2003.

263. **Slikker W Jr** and Sobotka TJ. Neurotoxicology: Molecular Biomarkers, Transgenics, and Imaging Technologies. Alternative Toxicological Methods. Ed Harry Salem and Sidney A. Katz. CRC Press, pp. 329-332, 2003.

264. Middaugh LD, Dow-Edwards D, Li AA, Sandler JD, Seed J, Sheets LP, Shuey DL, **Slikker W Jr**, Weisenburger WP, Wise LD, and Selwyn MR. Neurobehavioral Assessment: A Survey of Use and Value in Safety Assessment Studies. Toxicol Sci. 2003 Dec; 76(2):250-261, 2003.

265. Bowyer JF, Young JF, **Slikker W Jr**, Itzak Y, Mayorga AJ, Newport GD, Ali SF, Frederick DL and Paule MG. Plasma levels of parent compound and metabolites after doses of either *d*-Fenfluramine or *d*-3,4-methylenedioxymethamine (MDMA) that produce long-term serotonergic alterations. NeuroToxicology 24(3):379-390, 2003.

266. LoPachin RM, Jones RC, Patterson TA, **Slikker W Jr**, and Barber DS. Application of proteomics to the study of molecular mechanisms in neurotoxicology. NeuroToxicology 24(6):761-775, 2003.

267. Pogge A and **Slikker W Jr**. Neuroimaging: new approaches for neurotoxicology. NeuroToxicology 25(4):525-531 2003.

268. **Slikker W Jr**, Pogge A, Walker R, Chatziiannou A, Charles C, and Ellisman M. Neuroimaging: Strategies to illuminate environment-disease linkages: Focusing unique needs, tools, challenges and strategies for neurotoxicologists. NeuroToxicology 25(4):501-502, 2004.

269. Xu L, Heinze T, Pogge A, **Slikker W Jr**, and Schmued L. Separation and Characterization of Fluro-Jade B, A selective histochemical stain for neuronal degeneration. Journal of Liquid Chromatography A. 27:1627-1640, 2004.

270. Ginsberg G, **Slikker W Jr**, Bruckner J, and Sonawane B. Assessing risks in children – Incorporating children's toxicokinetics into a risk framework. Environ Health Perspect. 2004 Feb; 112(2):272-283, 2004.

271. Gaylor DW and **Slikker W Jr**. Role of the standard deviation in the estimation of benchmark doses with continuous data. Journal of Risk Analysis 24(6):1683-1687, 2004.

272. Scallet AC, Muskhelishvili L, **Slikker W Jr**, and Kadlubar FF. Cytochrome P450 1B1: A sexually dimorphic estrogen-metabolizing enzyme in the rhesus monkey brain. Journal of Chemical Neuroanatomy 29(1):71-80, 2004.

273. **Slikker W Jr**, Andersen ME, Bogdanffy MS, Bus JS, Cohen SD, Conolly RB, Doerrer NG, Dorman DC, Gaylor DW, Hattis D, Setzer W, Rogers JM, Swenberg J, and Wallace K. Dose-dependent transitions in mechanisms of toxicity. Toxicol Appl Pharmacol. 2004 Dec 15; 201(3):203-225, 2004.

274. **Slikker W Jr,** Andersen ME, Bogdanffy MS, Bus JS, Cohen SD, Conolly RB, Doerrer NG, Dorman DC, Gaylor DW, Hattis D, Setzer W, Rogers JM, Swenberg J, and Wallace K. Dose-dependent transitions in mechanisms of toxicity: CASE STUDIES. Toxicol Appl Pharmacol. 2004 Dec 15; 201(3):226-294, 2004.

275. Scallet AC, Schmued LC, **Slikker W Jr**, Grunberg N, Faustino PD, Davis H, Lester R, Pine PS, Sistare F, and Hanig JP. Developmental neurotoxicity of ketamine: Morphometric confirmation, exposure parameters, and multiple fluorescent labeling of apoptotic neurons. Toxicological Sciences 81(2):364-370, [Epub Jul 14, 2004] Oct 2004.

276. **Slikker W Jr**, Xu Z, and Wang C. Application of a systems biology approach to developmental neurotoxicology reproductive toxicology. Reprod Toxicol. 19(3): 305-319, Jan-Feb 2005.

277. Xu Z, Cawthon DR, McCastlain KA, Duhart HM, Fang H, Newport GD, Patterson TA, **Slikker W Jr,** and Ali SF. Selective alterations of gene expression in mice induced by MPTP. Synapse 55(1):45-51, Jan 2005.

278. Wang C, Sadovova NV, Fu X, Schmued LC, Scallet AC, Hanig JP, and **Slikker W Jr.** The role of N-Methyl-D-aspartate receptor in ketamine-induced apoptosis in rat forebrain culture. Neuroscience 132(4):967-977, 2005.

279. **Slikker W Jr**, Acuff K, Boyes W, Chelonis JJ, Crofton KM, Dearlove GE, Li AA, Moser VC, Newland C, Rossi J, Schantz S, Sette W, Sheets LP, Stanton M, Tyl S, and Sobotka T. Behavioral test methods workshop. Neurotoxicology and Teratology 27(3):417-427, May-Jun 2005.

280. Przybyla-Zawislak BD, Kim C, Ali SF, **Slikker W Jr**, and Binienda ZK. The differential JUNB responses to inhibition of succinate dehydrogenase in rat hippocampus and liver. Neuroscience Letters 381(3):354-357; Jun 24, 2005.

281. Soderblom EJ, Cawthon DR, Duhart HM, Xu Z, **Slikker W**, Ali SF, and Goshe MB. An improved labeling method using phosphoprotein isotope-coded solid-phase tags for neuronal cell applications. International Journal of Neuroprotection and Neuroregeneration 1:91-97, 2005.

282. Cawthon DR, Soderblom EJ, Xu Z, Duhart HM, **Slikker W**, Ali SF, and Goshe MB. Quantitative analysis of phosphoproteins in a Parkinson's disease model using phosphoprotein isotope-coded solid-phase tags. International Journal of Neuroprotection and Neuroregeneration 1:98-106, 2005.

283. Xu Z, Patterson TA, Wren JD, Han T, Shi L, Duhart HM, Ali SF, and **Slikker W**. A microarray study of MPP+-treated PC12 cells: Mechanisms of toxicity (MOT) analysis using bioinformatics tools. BMC Bioinformatics 2nd Annual MCBIOS 6 (Supp 2):S8, July 2005.

284. **Slikker W Jr** and Bowyer JF. Biomarkers of adult and developmental neurotoxicity. Toxicol Appl Pharmacol. 206(2):255-260, Aug 2005.

285. Xu Z, Cawthon D, McCastlain KA, Duhart HM, Newport GD, Fang H, Patterson TA, **Slikker W Jr**, and Ali SF. Selective Alterations of Transcription Factors in MPP+-Induced Neurotoxicity in PC12 Cells. NeuroToxicology 26 (4):729–737, Aug 2005.

286. **Slikker W**, Young JF, Corley RA, Dorman DC, Conolly RB, Knudsen TB, Erstad BL, Luecke R, Faustman E, Timchalk C, and Mattison D. Improving predictive modeling in pediatric drug development: pharmacokinetics, pharmacodynamics and mechanistic modeling. Annals of New York Academy of Sciences 1053:505-518, Aug 2005.

287. **Slikker W**, Xu Z, and Wang C. Systems Biology/Systems Toxicology: Application to Developmental Neurotoxicology/Neuroprotection. Ann. N. Y. Acad. Sci. 1053:309-310; August 2005.

288. **Slikker W**, Xu Z, Levin E, and Slotkin TA. Mode of Action: Disruption of brain cell replication, second messenger and neurotransmitter systems during development leading to cognitive dysfunction. Critical Reviews in Toxicology 35(8-9):703-711, Oct-Nov 2005.

289. Wang C, Sadovova NV, Hotchkiss CE, Fu X, Scallet AC, Patterson TA, Hanig JP, Paule MG, and **Slikker W Jr**. Blockade of N-Methyl-D-Aspartate (NMDA) receptors by ketamine produces loss of postnatal day 3 monkey frontal cortical neurons in culture. Toxicological Sciences 91(1):192-201, [Epub Feb 24, 2006] May 2006.

290. MAQC Consortium: Shi L, Reid L, Jones WD, Shippy R, Warrington JA, Baker SC, Collins PJ, De Longueville F, Kawasaki ES, Lee KY, Luo Y, Sun Y, Willey JC, Setterquist RA, Fischer GM, Tong W, Dragan Y, Dix DJ, Frueh FW, Goodsaid FM, Herman D, Jensen RV, Johnson CD, Lobenhofer EK, Puri RK, Schert U, Thierry-Mieg J, Wang C, Wilson M, Wolber PK, Zhang L, **Slikker W,** Cao X, Chen JJ, Fan X, Fang H, Fuscoe J, Ge W, Guo L, Han T, Harris SC, Hong H, Mei N, Ning B, Patterson TA, Perkins RG, Qian F, Su Z, Sun H, and Wu J. The MicroArray Quality Control (MAQC) Project Shows Inter- and Intraplatform Reproducibility of Gene Expression Measuresments. Nature Biotechnology 24(9):1151-1161, Sept 2006.

291. Wang C, Sadovova N, Duhart HM, Fu X, Zou X, Patterson TA, Binienda ZK, Virmani A, Paule MG, **Slikker W**, and Ali SF. L-Carnitine Protects Neurons from 1-Methyl-4-phenylpyridinium (MPP+)-Induced Neuronal Apoptosis in Rat Forebrain Culture. Neuroscience 144(1):46-55 [Epub Nov 2, 2006] Jan 2007.

292. **Slikker Jr W**, Paule MG, Wright LKM, Patterson TA, and Wang C. Systems Biology Approaches for Toxicology. Journal of Applied Toxicology 27(3): 201-217, May-June 2007.

293. Luecke RH, Pearce BA, Wosilait WD, **Slikker Jr W**, and Young JF. Postnatal growth considerations for PBPK modeling. Journal of Toxicology & Environmental Health, Part A, 70(12):1027-1037, June 2007.

294. Hotchkiss CE, Wang C, and **Slikker W**. The effect of prolonged ketamine exposure on cardiovascular physiology in pregnant and infant rhesus monkeys (*Macaca mulatta*). Journal of the American Association for Laboratory Animal Science 46(6):21-28, Nov 2007.

295. **Slikker W Jr**, Zou X, Hotchkiss CE, Divine RL, Sadovova N, Twaddle NC, Doerge DR, Scallet AC, Patterson TA, Hanig JP, Paule MG, and Wang C. Ketamine-induced neuronal cell death in the perinatal rhesus monkey. Toxicol Sci 98(1):145-158 [Epub Apr 10, 2007] July 2007.

296. Wang C, Paule MG, Wright LKM, Patterson TA, and **Slikker W**. Application of Pharmacogenomics to rodent and non-human primate neuron-plasticity and –toxicity during development. J Pharmacol Exp Ther (Chapter Review) 37/661 (2):1-36, 2007.

297. Zou X, Sadavova NV, Patterson TA, Divine RL, Hotchkiss CE, Ali SF, Hanig JP, Paule MG, **Slikker W Jr,** and Wang C. The Effects of L-Carnitine on the Combination of Inhalation Anesthetic-induced Developmental Neuronal Apoptosis in the Rat Frontal Cortex. Neuroscience 151(4):1053-1065 [Epub Dec 15. 2007] Feb 19, 2008.

298. Jacobson-Kram D, Mattison D, Shelby M, **Slikker W**, Tice R, and Witt K. Letter to the Editor re: Methylphenidate and Chromosome Damage. Cancer Letters 260(1-2):216-218 [Epub Dec 4 2007] Feb 18, 2008.

299. Hotchkiss CE, Bishop ME, Dertinger SD, **Slikker W Jr,** Moore MM, and MacGregor JT. Flow cytometric analysis of micronuclei in peripheral blood reticulocytes IV: an index of chromosomal damage in the rhesus monkey (*Macaca mulatta*). Toxicol Sci 102(2):352-358, [Epub Jan 21, 2008] April 2008.

300. Wang C and **Slikker W Jr**. Strategies and experimental models for evaluating anesthetics: effects on the developing nervous system. Anesth Analg 106(6):1643-1658, June 2008.

301. Wang C, Sadovova N, Patterson TA, Zou X, Fu X, Hanig JP, Paule MG, Ali SF, Zhang X, and **Slikker W Jr**. Protective effects of 7-nitroindazole on ketamine-induced neurotoxicity in rat forebrain culture. Neurotoxicology 29(4):613-620 [Epub Mar 29, 2008] July 2008.

302. Luecke RH, Pearce BA, Wosilait WD, Doerge DR, **Slikker W Jr**, and Young JF. Windows based general PBPK/PD modeling software. Comput Biol Med 38(9):962-978 [Epub July 26, 2008] Sept 2008.

303. Morris SM, Dobrovolsky VN, Shaddock JG, Mittelstaedt RA, Bishop ME, Manjanatha MG, Shelton SD, Doerge DR, Twaddle NC, Chen JJ, Lin CJ, Paule MG, **Slikker W Jr,** Hotchkiss CE, Petibone D, Tucker JD, and Mattison DR. The genetic toxicology of methylphenidate hydrochloride in non-human primates. Mutat Res. 673(1):59-66; [Epub Dec 24, 2008] February 2009.

304. Zou X, Patterson TA, Sadovoa N, Twaddle NC, Doerge DR, Zhang X, Fu X, Hanig JP, Paule, MG, **Slikker W**, and Wang C. Potential Neurotoxicity of Ketamine in the Developing Rat Brain. Toxicological Sciences 108(1):149-158 [Epub Jan 6, 2009] March 2009.

305. Zhang X, Paule MG, Newport GD, Zou X, Sadovova N, Berridge MS, Apana SM, Hanig JP, **Slikker W Jr**, Wang C. A minimally invasive, translational biomarker of ketamine-induced neuronal death in rats: microPET imaging using [^{18}F]-Annexin V. Toxicol Sci. 111(2):355-361; [Epub Jul 28 2009] Oct 2009.

306. Zou X, Patterson TA, Divine RL, Sadovova N, Zhang X, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Prolonged exposure to ketamine increases neurodegeneration in the developing monkey brain. Int J Dev Neuroscience 27(7):727-731 [Epub July 4, 2009] November 2009.

307. Roberts RA, Laskin DL, Smith CV, Robertson FM, Allen EM, Doorn JA, and **Slikker W.** Nitrative and Oxidative Stress in Toxicology and Disease. Toxicol Sci. 112(1):4-16 [Epub Aug 5, 2009] Nov 2009.

308. Manjanatha MG, Shelton SD, Dobrovolsky VN, Shaddock JG, McGarrity LG, Twaddle NW, Moore MM, Mattison DR, **Slikker W Jr**, and Morris SM. Evaluation of mutagenic mode of action in Big Blue mice fed methylphenidate for 24 weeks. Mutat Res. 680(1-2):43-48 [Epub Sept 22, 2009] Nov-Dec 2009.

309. Hines RN, Sargent D, Autrup H, Birnbaum LS, Brent RL, Doerrer NG, Cohen Hubal EA, Juberg DR, Laurent C, Luebke R, Olejniczak K, Portier CJ, and **Slikker W**. Approaches for Assessing Risks to Sensitive Populations: Lessons Learned from Evaluating Risks in the Pediatric Population. Toxicol Sci. 113(1):4-26 [Epub Sep 21, 2009] Jan 2010.

310. **Slikker W Jr**. Book Chapter # 30, A Systems Biology Approach to Assess the Impact of Pesticides on the Nervous System; pgs 793-797. *Hayes Handbook of Pesticide Toxicology*, Third Edition, Elsevier; Editor, Robert Krieger; Jan 2010.

311. Shi Q, Guo L, Patterson TA, Dial S, Li Q, Sadovova N, Zhang X, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Gene expression profiling in the developing rat brain exposed to ketamine. Neuroscience 166(3):852-863 [Epub Jan 18 2010] Mar 13 2010.

312. **Slikker W**, Liu F, Zhang X, Xou X, Patterson T, Paule M, and Wang C. Genomic Response to Perinatal Anesthetic-induced Neuronal Cell Death. Birth Defects Res A Clin Mol Teratol 88(5):379, May 2010.

313. Wang C, Zhang X, Liu F, Paule MG, and **Slikker W Jr**. Anesthetic-induced oxidative stress and potential protection. Scientific World Journal 10:1473-1482, Jul 20 2010.

314. **Slikker W Jr**. Of Genomics and Bioinformatics. Pharmacogenomics Journal 10(4):245-246, Aug 2010.

315. Wang C, Paule MG, Liu F, Zhang X, Patterson TA, and **Slikker W Jr**. Book Chapter, pgs 167-180; Developmental Neuronal Toxicity and the Rhesus Monkey. *Monkeys: Biology, Behavior and Disorders*, Nova Publishers; 2010

316. Trickler WJ, Lantz SM, Murdock RC, Schrand AM, Robinson BL, Newport GD, Schlager JJ, Oldenburg SJ, Paule MG, **Slikker W Jr**, Hussain SM, and Ali SF. Silver Nanoparticle Induced Blood-Brain Barrier Inflammation and Increased Permeability in Primary Rat Brain Microvessel Endothelial Cells. Toxicol Sci 118(1):160-170 [Epub Aug 16 2010] Nov 2010.

317. Paule MG and **Slikker W Jr.** Book Chapter # 9, pgs 157-167, Developmental Neurotoxicology. *Reproductive Toxicology, 3rd Edition*, Informa Healthcare, Sept 2010

318. Zhang X, Paule MG, Newport GD, Sadovova NV, Berridge MS, Apana SM, Kabalka G, Miao W, **Slikker W Jr**, and Wang C. MicroPET Imaging of Ketamine-induced Neuronal Apoptosis with Radiolabeled DFNSH. J Neural Transm. 118(2):203-211 [Epub Oct 21 2010] Feb 2011.

319. Darney S, Fowler B, Grandjean P, Heindel J, Mattison D, and **Slikker W Jr**. Prenatal Programming and Toxicity II (PPTOX II): Role of Environmental Stressors in the Developmental Origins of Disease. Reprod Toxicol 31(3):271 [Epub Oct 28 2010] April 2011.

320. Liu F, Zou X, Sadovova N, Zhang X, Shi L, Guo L, Qian F, Wen Z, Patterson TA, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Changes in gene expression after phencyclidine administration in developing rats: a potential animal model for schizophrenia. International Journal of Developmental Neuroscience 29(3):351-358 [Epub Aug 5, 2010] Special Issue May 2011.

321. Trickler WJ, Lantz SM, Murdock RC, Schrand AM, Robinson BL, Newport GD, Schlager JJ, Oldenburg SJ, Paule MG, **Slikker W Jr**, Hussain SM, and Ali SF. Brain microvessel endothelial cells responses to gold nanoparticles: *In vitro* pro-inflammatory mediators and permeability. Nanotoxicology 5(4):479-492 [Epub Dec 22 2010] Dec 2011.

322. Wang C, Zhang X, Liu F, Paule MG, and **Slikker W**. Book Chapter # 7, pgs 155-172; Alterations in N-methyl-D-aspartate (NMDA) receptor function and potential involvement in anesthetic-induced neurodegeneration. Neurodegeneration: Theory, Disorders and Treatments; Nova Science Publisher, Inc.; Editor: Alexander S. McNeill; 2011.

323. Wang C, Guo L, Patterson TA, and **Slikker W.** Application of Systems Biology in Neurotoxicological Studies during Development. Book Chapter, pgs. 115-123, in Handbook of Systems Toxicology; John Wiley & Sons, Publisher; Editors: Casciano DA and Sahu SC; Jan 2011.

324. **Slikker W Jr**, Zhang X, Liu F, Paule MG, and Wang C. Book Chapter, pgs 5-24; Approaches and Models for Evaluating the Toxic Effects of Anesthetics in the Developing Nervous System. Developmental Neurotoxicology Research – Principles, Models, Techniques, Strategies, and Mechanisms; John Wiley & Sons, Publisher; Jan 2011.

325. Patterson TA, Schnackenberg B, **Slikker W**, and Wang C. Book Chapter, pgs 25-37, Systems Biology Approaches to Neurotoxicity Studies during Development. Developmental Neurotoxicology Research – Principles, Models, Techniques, Strategies, and Mechanisms; John Wiley & Sons; Publisher; Jan 2011.

326. Zhang X, Patterson TA, Paule MG, **Slikker W Jr**, and Wang C. Book Chapter, pgs. 79-93; Neurotoxic Effects of Anesthetics and Potential Protective Agents. Developmental Neurotoxicology Research – Principles, Models, Techniques, Strategies, and Mechanisms; John Wiley & Sons, Publisher; Jan 2011.

327. **Slikker W Jr**, Liu F, Zhang X, Zou X, Patterson TA, Paule MG, and Wang C. Book Chapter, pgs 95-109; Perinatal Rhesus Monkey Models and Anesthetic-Induced Neuronal Cell Death. Developmental Neurotoxicology Research – Principles, Models, Techniques, Strategies, and Mechanisms; John Wiley & Sons, Publisher; Jan 2011.

328. Wang C and **Slikker W Jr**., Book Editors: Developmental Neurotoxicology Research – Principles, Models, Techniques, Strategies, and Mechanisms; John Wiley & Sons, Publisher; Jan 2011.

329. Paule MG, Li M, Allen RR, Liu F, Zou X, Hotchkiss C, Hanig JP, Patterson TA, **Slikker W**, and Wang C. Ketamine anesthesia during the first week of life can cause long-lasting cognitive deficits in rhesus monkeys. Neurotoxicology and Teratology 33(2):220-230, Mar-Apr 2011.

330. Zou X, Liu F, Zhang X, Patterson TA, Callicott J, Liu S, Hanig J, Paule MG, **Slikker W Jr**, and Wang C. Inhalation anesthetic-induced neuronal degeneration in the developing rhesus monkey. Neurotoxicol Teratol. 33(5):592-597; [Epub June 25 2011] Sept-Oct 2011.

331. Mattison D, Plant T, Lin H, Chen H, Chen JJ, Twaddle NC, Doerge DR, **Slikker W**, Patton RE, Hotchkiss CE, Callicott J, Schrader SM, Turner TW, Kesner JS, Vitiello B, Petibone D, and Morris SM. Pubertal delay in male non-human primates (*Macaca mulatta*) treated with methylphenidate. Proceedings of the National Academy of Sciences USA 108(39):16301-16306; Sept 27, 2011.

332. Zhang Y, Xu Y, Li Z, Chen T, Lantz SM, Howard PC, Paule MG, **Slikker W Jr**, Watanabe F, Mustafa T, Biris AS, and Ali SF. Mechanistic Toxicity Evaluation of Uncoated and PEGylated Single-Walled Carbon Nanotubes in Neuronal PC12 Cells. ACS Nano. 5(9):7020-7033 [Epub Sept 7 2011] Sept 27, 2011.

333. **Slikker W Jr**, Miller MA, Valdez ML, and Hamburg MA. Advancing global health through regulatory science research: Summary of the Global Summit on Regulatory Science Research and Innovation. Regulatory Toxicol Pharmacol 62(3):471-473 [Epub Feb 7, 2012] April 2012.

334. Roberts RA, Wallis R, Ren J, Willem van der Laan JW, Sausen PJ, and **Slikker W Jr**. What it means to be global. Toxicol Sci. 127(1):313-314 [Epub Feb 14 2012] May 2012.

335. Trickler WJ, Lantz SM, Schrand AM, Robinson BL, Newport GD, Schlager JJ, Paule MG, **Slikker W**, Biris AS, Hussain SM, and Ali SF. Effects of copper nanoparticles on rat cerebral microvessel endothelial cells. Nanomedicine (Lond) 7(6):835-846 [Epub February 16, 2012] June 2012.

336. Liu F, Guo L, Zhang J, Rainosek SW, Shi L, Patterson TA, Quan-Zhen Ll, Sadovova N, Hanig JP, Paule MG, **Slikker W Jr**, Wang C. Inhalation Anesthesis-Indeuced Neuronal Damage and Gene Expression Changes in Developing Rat Brain. Systems Pharmacology (1): 1-9, 2012.

337. Miller MA, Tong W, Fan X, and **Slikker W**. 2012 Global Summit on Regulatory Science (GSRS-2012) – Modernizing Toxicology. Toxicological Sciences 131(1):9-12, doi:10.1093/toxsci/kfs254 [Epub Aug 24, 2012] January 2013.

338. Liu Z, Fang H, Reagan K, Xu X, Mendrick DL, **Slikker W Jr**, and Tong W. *In silico* drug repositioning – what we need to know. Drug Discov Today 18(3-4):110-115 doi:10.1016/j.drudis.2012.08.005. [Epub Aug 28, 2012] February 2013

339. Liu F, Patterson TA, Sadovova N, Zhang X, Liu S, Zou X, Hanig JP, Paule MG, **Slikker W Jr,** and Wang C. Ketamine-induced neuronal damage and altered N-methyl-D-aspartate (NMDA) receptor function in rat primary forebrain culture. Toxicol Sci. 131(2):548-557 [Epub Oct 11, 2012] Feb 2013.

340. Zhang X, Liu S, Paule MG, Newport GD, Callicott R, Berridge MS, Apana SM, **Slikker W Jr**, and Wang C. Protective effect of acetyl L-carnitine on inhalation anesthetic-induced neuronal damage in the nonhuman primate. Journal of Molecular Pharmaceutics & Organic Process Research, 1:1-7, dx.doi.org/10.4172/jmpopr.1000102, 2013.

341. Zhang X, Newport GD, Paule MG, Liu S, Berridge M, Apana S, Ali SF, **Slikker W Jr**, and Wang C. Quantitative Assessment of Acetyl-carnitine Effects on Anesthetic-induced Neuronal Death Using MicroPET/CT maging. Journal of Drug and Alcohol Research (JDAR), Vol. 2, Article ID 235653, doi:10.4303/jdar/235653, 2013.

342. Liu S, Paule MG, Zhang X, Newport GD, Apana SM, Berridge MS, Patterson TA, Ali SF, **Slikker W Jr**, and Wang C. The Evaluation of Sevoflurane-Induced Apoptotic Neurodegeneration with MicroPET Using [^{18}F]-DFNSH in the Developing Rat Brain. Journal of Drug and Alcohol Research, Vol. 2, Article ID 235679, doi:10.4303/jdar/235679, Feb 2013.

343. Wang C, Liu F, Patterson TA, Paule MG, and **Slikker W Jr.** Preclinical Assessment of Ketamine. CNS Neurosci Ther. 19(6):448-453, doi:10.1111/cns.12079 [Epub ahead of print] June 2013.

344. Imam SZ, Trickler W, Kimura S, Binienda ZK, Paule MG, **Slikker W Jr**, Li S, Clark RA, Ali SF. Neuroprotective efficacy of a new brain-penetrating C-Abl inhibitor in a murine Parkinson's disease model. PLoS One, 8(5):e65129. doi:10.1371/journal.pone.0065129, May 2013.

345. Wang C, Liu F, Patterson TA, Paule MG, and **Slikker W Jr**. Utilization of Neural Stem Cell-Derived Models to Study Anesthesia-Related Toxicty and Protection. Molecular Neurobiology 48(2):302-307 [Epub July 12, 2013] October 2013.

346. **Slikker W Jr**, Zhang X, Paule MG, Newport GD, Liu F, Callicott R, Liu S, Berridge M, Apana SM, and Wang C. MicroPET/CT Imaging of [^{18}F]-FEPPA in the Nonhuman Primate: A Potential Biomarker of Pathogenic Processes Associated with Anesthetic-Induced Neurotoxicity. International Scholarly Research Network; ISRN Anesthesiology, Vol. 2012; Birth Defects Research Part A – Clinical and Molecular Teratology, 97(5):312; SI May 2013.

347. Jevtovic-Todorovic V, Absalom AR, Blomgren K, Brambrink A, Crosby G, Culley DJ, Fiskum G, Giffard RG, Herold KF, Loepke AW, Ma D, Orser BA, Planel E, **Slikker W Jr**, Soriano SG, Stratmann G, Vutskits L, Xie Z, Hemmings HC Jr. Anaesthetic neurotoxicity and neuroplasticity: an expert group report and statement based on the BJA Salzburg Seminar. Br J Anaesth, 111(2):143-151, doi:10.1093/bja/aet177 [Epub May 30, 2013] August 2013.

348. Zhang X, Paule MG, Wang C, and **Slikker W Jr.** Application of microPET imaging approaches in the study of pediatric anesthetic-induced neuronal toxicity. J Appl Toxicol 33(9):861-868, doi:10.1002/jat.2857 [Epub Feb 11, 2013] September 2013.

349. Patterson TA, Wood WG, Andrews RJ, **Slikker W Jr**. Preface – Pathways of neurotoxicity and innovative neuroprotective strategies. Mol Neurobiol 48(2):271-273 [Epub July 26, 2013] October 2013.

350. Trickler WJ, Lantz-McPeak SM, Robinson BL, Paule MG, **Slikker W Jr**, Biris AS, Schlager JJ, Hussain SM, Kanungo J, Gonzalez C, Ali SF. Porcine brain microvessel endothelial cells show pro-inflammatory response to the size and composition of metallic nanoparticles. Drug Metab Rev/ 46(2):224-231, doi: 10.3109/03602532.2013.873450 [Epub Dec 31, 2013] May 2014.

351. Liu F, Rainosek SW, Sadovova N, Fogle CM, Patterson TA, Hanig JP, Paule MG, **Slikker W Jr**, Wang C. Protective effect of acetyl-l-carnitine on propofol-induced toxicity in embryonic neural stem cells. Neurotoxicology 42: 49-57. pii: D0161-813X(14)00055-2. Doi: 10.1016/j.neuro.2014.03.011. [Epub ahead of print] May 2014.

352. **Slikker, W Jr.** Of human-on-a-chip and humans: Considerations for creating and using microphysiological systems. Experimental Biology and Medicine (Mayood, N.J.); DOI: 10.1177/1535370214537754 [Epub July 2014]. Source PUBMED.

353. Yang, X, Morris, SM, Gearhart, JM, Ruark, CD, Paule, MG, **Slikker, W, Jr,** Mattison, DR, Vitiello, B., Twaddle, NC, Doerge, D, Young, JF, Fisher, JW. Development of a Physiologically Based Model to Describe the Pharmacokinetics of Methylphenidate in Juvenile and Adult Humans and Nonhuman Primates. PLoS ONE 9(9):e106101. Doi:10.1371/journal.pone0106101 September 2014.

354. Zeiger, E., Gollapudi, B., Aardema, M.J., Auerbach, S., Boverhof, D., Custer, L., Dedon, P., Honma, M., Ishida, S., Kasinski, A.L., Kim, J.H., Manjanatha, M.G., Marlowe, J., Pfuhler, S., Pogribny, I., **Slikker, W.**, Stankowski, Jr., L.F., Tanir, J.Y., Tice, R., van Bethem, J., White, P., Witt, K.L., Thybaud, V. Opportunities to Integrate New Approaches in Genetic Toxicology: An ILSI-HESI Workshop Report. *Environmental and Molecular Mutagenesis* [28 October 2014. DOI 10.1002/em].

355. Liu, S., Paule, MG, Zhang, X., Newport, GD, Patterson, TP, Apana, SM, Berridge, MS, Maisha, MP, **Slikker, W Jr**, Wang, C. Positron emission tomography with [^{18}F]FLT revealed sevoflurane-induced inhibition of neural progenitor cell expansion *in vivo*. *Frontiers in Neurology*, 5, Section Neurogenomics: Article 234 1-7, doi: 10.3389/fneur.2014.00234 [Epub ahead of print] November 2014.

356. Liu, F, Mahmood, M, Yang, X, Watanabe, F, Biris, AS, Hansen, DK, Inselman, A, Casciano, D, Patterson, TA, Paule, MG, **Slikker, W, Jr,** Wang, C. Effects of Silver Nanoparticles on Human and Rat Embryonic Neural Stem Cells. *Frontiers in Neuroscience* 9(115):1-9, doi: 10.3389.inins.2015.00115; April 08 2015.

357. **Slikker, W, Jr,** Liu, F, Rainosek, SW, Patterson, TP, Sadovova, N, Hanig, JP, Paule, MG, Wang, C. Ketamine-Induced Toxicity in Neurons Differentiated from Neural Stem Cells. *Mol Neurobiol* (2015) 52:959-969; doi: 10.1007/s12035-015-9248-5.

358. Tong, W, Ostroff, S, Blais, B, Silva, P, Dubuc, M, Healy, M, **Slikker, W.** Genomics in the Land of Regulatory Science, *Regulatory Toxicology and Pharmacology*, 72(1), June 2015, 102-106; dx.doi.org/10.1016/j.yrtph.2015.03.008.

359. Liu, F, Rainosek, SW, Frisch-Daiello, JL, Patterson, TP, Paule, MG, **Slikker, W Jr,** Wang, C, Han, X. Potential Adverse Effects of Prolonged Sevoflurane Exposure on Developing Monkey Brain: From Abnormal Lipid Metabolism to Neuronal Damage. *Toxicological Sciences*, (2015) 147(2), 2015, 562-572; doi: 10.1093/toxsci/kfv150 [Epub 2015 ahead of print July 23, 2015].

360. Hong, H, **Slikker, W Jr**. Advancing translation of biomarkers into regulatory science. *Biomark Med*, 2015;9(1): 1043-6; doi: 10.2217/bmm.15.104.

361. Roberts, RA, Aschner, M, Calligaro, D, Guilarte, TR, Hanig, JP, Herr, DW, Hudzik, TJ, Jromin, A, Kallman, MJ, Liachenko, S, Lynch, JJ 3rd, Miller, DB, Moser, VC, O'Callaghan, JP, **Slikker, W Jr**, Paule, MG. Translational Biomarkers of Neurotoxicity: A Health and Environmental Sciences Institute Perpective on the Way Forward. *Toxicological Sciences*, 2015 Dec; 18(2):332-40; doi: 10.1093/toxsci/kfv188.

362. Wang, C, Liu, F, Patterson, TA, Paule, MG, **Slikker, W Jr**. Relationship between ketamine-induced developmental neurotoxicity and NMDA receptor-mediated calcium influx in neural stem cell-derived neurons. *Neurotoxicology*, 2016 April 27. pii: S0161-813X(16)30060-2; doi: 10.1016/j.neuro.2016.04.015.

363. Zhang, X, Liu, S, Newport, GD, Paule, MG, Callicott, R, Thompson, J, Liu, F, Patterson, TA, Berridge, MS, Apana, SM, Brown, CC, Maisha, MP, Hanig, JP, **Slikker, W Jr,** Wang, C. *In Vivo* Monitoring of Sevoflurane-induced Adverse Effects in Neonatal Nonhuman Primates Using Small-animal Positron Emission Tomography. Anesthesiology. 2016 Jul; 125(1):133-46; doi: 10.1097/ALN.0000000000001154.

364. Healy, MJ, Tong, W, Ostroff, S, Eichler, HG, Patak, A, Neuspiel, M, Deluyker, H, **Slikker, W Jr**. *Regulatory Toxicology ang Pharmacology*, 2016 Oct;80:342-7; doi 10.1016/j.yrtph.2016.05.021.

365. Wang C., **Slikker, W Jr**., Editors, Book, Neural Cell Biology. CRC Press Taylor and Francis Group. International Standard Book Number-13:978-1-4987-2600-9 (Hardback).

366. Fang Liu, Tucker A. Patterson, Jingshu Zhang, Merle G. Paule, **Slikker, W Jr**. and Cheng Wang. Book Chapter #1 Neurons-Nerve Cells; pgs. 1-13. Neural Cell Biology, Editors Wang C., **Slikker, W Jr**.; Jan 2017.

367. Cheng Wang, Qi Yin, Shuliang Liu, Xuan Zhang, Fang Liu, Jingshu Zhang, Tucker A. Patterson, Merle G. Paule and **Slikker, W Jr.** Book Chapter # 2 Astrocytes; pgs. 14-25. Neural Cell Biology, Editors Wang C., **Slikker, W Jr**.; Jan 2017.

368. Shuliang Liu, Merle G. Paule, Fang Liu, Qi Yin, Tucker A. Patterson, **Slikker, W Jr**. and Cheng Wang. Book Chapter # 3 Oligodendrocytes [Myelin-related Glial Cells in the Central Nervous System (CNS)]; pgs. 26-43. Neural Cell Biology, Editors Wang C., **Slikker, W Jr**.; Jan 2017.

369. Xuan Zhang, Tucker A. Patterson, Merle G. Paule, Cheng Wang and **Slikker, W Jr**. Book Chapter # 4 Schwann Cells; pgs.44-57. Neural Cell Biology, Editors Wang C., **Slikker, W Jr.**; Jan 2017.

Abstracts

1. **Slikker W Jr**. A study of labeled corticosterone metabolites in the duck (Anas platyrhynchos). University of California, Santa Barbara, 1974 (M.A. thesis).

2. **Slikker W Jr**, Riccoboni FA, Gehrmann JE, and Killam KF. Characterization of EEG effects produced by the interaction of secobarbital with psychomotor stimulants using spectral analysis techniques. The Pharmacologist, 17(2):189, 1975.

3. Brocco MJ and **Slikker W Jr**. Responses of normal and isolate monkeys to d-amphetamine, cocaine, chlorpromazine and diazepam. Fed. Proc., 35(3):268; 1976.

4. Loizzo A and **Slikker W Jr**. Combination of EEG spectral analysis and statistical techniques for the characterization of the effects induced by psychomotor stimulants in the monkey. The Pharmacologist, 18:129; 1976.

5. Brocco MJ and **Slikker W Jr**. Effects of chronic lithium treatment on the responses of normal and isolate monkeys to d-amphetamine, cocaine, and chlorpromazine and diazepam. The Pharmacologist, 18(2):197; 1976.

6. **Slikker W Jr** and Killam KF Jr. The effects of chlorpromazine and lithium chloride on cocaine self-administration behavior in the rhesus monkey. The Pharmacologist, 18(2):197; 1976.

7. **Slikker W Jr** and Killam KF Jr. Discriminative effects of cocaine in the rhesus monkey. Soc. Neuro. 3:449; 1977.

8. **Slikker W Jr**. A primate model of drug dependency with cocaine and thiamylal: A psychopharmacological and electrophysiological investigation. University of California, Davis; 1978 (Doctoral Dissertation).

9. **Slikker W Jr**, Hill DE, Helton ED, Sziszak TJ, Newport GD, Lipe GW, and Bailey JR. Comparison of the transplacental pharmacokinetics of diethylstilbestrol (DES), diethylstilbestrol monoglucuronide (DESG) and estradiol-17B (E_2) in the rhesus monkey. The Pharmacologist 20(3):150; 1978.

10. Hadd HE, **Slikker W Jr**, Helton ED, Hill DE, and Raitano LA. The identification of the 17-glucuronide of ethynylestradiol in urine of the rhesus monkey following radioactive ethynylestradiol administration. 61st Annual Meeting of the Endocrine Society; p 213; 1979.

11. Headley SK, **Slikker W Jr**, and Hill DE. HPLC analysis of estradiol-17B (E_2) and diethylstilbestrol (DES) metabolites in fetal monkey tissues. Teratology 19(2):A30, 1979.

12. Raitano LA, **Slikker W Jr**, Hill DE, Sziszak TJ, and Helton ED. Metabolism of 17alpha-ethynyl-estradiol(EE2) in the rhesus monkey. Toxicol. Appl. Pharmacol. (1):A12; 1979.

13. **Slikker W Jr**, Hill DE, Althaus ZR, and Helton ED. Comparison of the placental transfer of some synthetic and natural estrogens in subhuman primates. 61st Annual Meeting of the Endocrine Society, p 149; 1979.

14. **Slikker W Jr**, Newport GD, Hill DE, Lau PY, and Helton ED. Application of high pressure liquid chromatography (HPLC) to characterize diethylstilbestrol (DES) metabolites in the *Macaca mulatta*. Toxicol. Appl. Pharmacol. 48(1):A172; 1979.

15. Goad PT, Hill DE, **Slikker W Jr**, Kimmel CA, and Gaylor DW. The developmental effects of ethanol and the role of maternal nutrition. Teratology 24(1):A54; 1981.

16. Goad PT, **Slikker W Jr**, Kimmel CA, Gaylor DW, and Hill DE. Maternal and fetal toxicity of ethanol: The role of altered nutrition. Clin. Res. 28:A872; 1980.

17. Hadd HE, **Slikker W Jr**, Lipe G, and Newport G. A Species Comparison Study of the Glucuronidation of Ethynylestradiol and Estradiol. The Endocrine Society; 1980.

18. Montgomery CH, Hadd HE, **Slikker W Jr**, and Vore M. Diethyl-stilbestrol-monoglucuronide (DES-G)-induced cholestasis *in vivo* and in the isolated perfused rat liver (IPRL). The Pharmacologist 22(3):243; 1980.

19. Newport GD, S**likker W Jr**, Vore M, Meyers M, and Lipe G. Biliary excretion of two cholestatic agents, estradiol-17B-(B-D-glucuronide) ($E_2$17G) and estriol-16a(B-D-glucuronide) (E3-16G), in the rat. The Pharmacologist 22(3):242; 1980.

20. Rowland JM, Althaus ZR, **Slikker W Jr**, and Hendrickx AG. Comparative distribution of triamcinolone acetonide and cortisol in the rat embryomaternal unit. Teratology 21:A65; 1980.

21. Schedewie H, **Slikker W Jr**, Hill D, Tsang R, Bailey J, and Elders J. Placental Crossover and Fetal tissue Distribution of 1,25$(OH)_2$ Vitamin D In Rhesus Monkey. Pediat. Res. 14:580; 1980.

22. Schmid SE, Au WY, Hill DE, and **Slikker W Jr**. Inactivation of cytochrome P450 following oxidation of the 17alpha-ethynyl group of synthetic steroids. The Pharmacologist 22(3):242; 1980.

23. **Slikker W Jr**, Hill DE, Lipe GW, Newport GD, and Bailey JR. Transplacental pharmacokinetic comparison of diethylstilbestrol (DES) and estradiol-17B (E_2) in the rhesus monkey. The Pharmacologist 22(3):215; 1980.

24. **Slikker W Jr**, Rowland JM, Althaus ZR, Hill DE, and Hendrickx AG. Distribution and metabolism of triamcinolone acetonide (TAC) and cortisol (C) in the rhesus monkey fetomaternal unit. Teratology 21(2):A69; 1980.

25. Althaus ZR, Rowland JM, Freeman JP, and **Slikker W Jr**. Separation of some natural and synthetic corticosteroids in biological fluids and tissues by high-performance liquid chromatography. The Pharmacologist 23(3):188; 1981.

26. Hadd HE and **Slikker W Jr**. Synthesis of the anomeric pair of ethynylestradiol-17-glucuronides by the SnC14 reaction. Amer. Chem. Soc.; 1981.

27. Hadd HE, Vore M, and **Slikker W Jr**. Synthesis of ethynylestradiol 17beta, alpha-D-glucuronide and its biological properties as a cholestatic agent. The Endocrine Society 1981.

28. Hill DE, **Slikker W Jr**, Goad PT, Bailey JR, and Hendrickx AG. Transplacental pharmacokinetic of ethanol in rhesus and cynomolgus monkeys. Teratology 23(2):A41; 1981.

29. Rowland JM, Althaus ZR, **Slikker W Jr**, and Hendrickx AG. Embryonal exposure to triamcinolone acetonide following multiple dose administration. Teratology 23(2):A58; 1981.

30. Rowland J, Althaus Z, **Slikker W Jr**, and Hendrickx A. Dose Independence of the metabolism and distribution of triamcinolone acetonide in the embryomaternal unit of the rat. The Pharmacologist 23(3):189; 1981.

31. **Slikker W Jr**, Althaus ZR, Hill DE, Bailey JR , Rowland JM, and Hendrickx AG. Two dose comparison of the transplacental pharmacokinetics of triamcinolone acetonide (TAC) and cortisol (C) in the rhesus monkey. Teratology 23(2):A63; 1981.

32. **Slikker W Jr**, Goad PT, Bailey JR, and Hill DE. Ethanol elimination in the rhesus monkey: Comparison of mother, fetus and neonate. The Pharmacologist 23(3):202; 1981.

33. Vore M, Hadd H, and **Slikker W Jr**. Induction of cholestasis by the B-glucopyranosiduric acid of a 17a-ethynylestradiol-17B ($EE_2$17B). The Pharmacologist 23(3):197; 1981.

34. Vore M, Hadd H, and **Slikker W Jr**. Induction of cholestasis by D-ring glucuronide conjugates of 17a-ethynylestradion (EE_2). Hepatology 1(5):558; 1981.

35. Young JF and **Slikker W Jr**. Pharmacokinetic considerations of modeling maternal/fetal interactions. Teratology 23:71A; 1981.

36. Goad PT, Hill DE, **Slikker W Jr**, Kimmel C, Young JF, and Gaylor DW. The role of diet in the fetotoxicity, blood levels, and pharmacokinetics of ethanol in mice. So. Soc. Pediat. Res.; 1982.

37. Hill DE, **Slikker W Jr**, Bailey JR, Goad PT, and Hendrickx AG. Ethanol pharmacokinetics in maternal, fetal, and neonatal monkeys. So. Soc. Pediat. Res.; 1982.

38. Hill DE, Sziszak T, Sziszak L, Boughter JM, Chang LW, and **Slikker W Jr**. Impaired brain and body growth following short-term ethanol exposure in neonatal rat pups. So. Soc. Pediat. Res.; 1982.

39. Hill DE, Sziszak TJ, Sziszak LG, Boughter JM, Chang LW, and **Slikker W Jr**. Effect of short-term ethanol exposure on brain and body growth in neonatal rat pups. Teratology 25(2):48A; 1982.

40. Kimmel GL, Harmon JR, and **Slikker W Jr**. Uterine estrogen (E) binding in the fetal rhesus monkey (Rh). Teratology 25(2):55A; 1982.

41. Newport GD and **Slikker W Jr**. Simultaneous separation and quantification of brain neurotransmitters by high performance liquid chromatography combined with electrochemical detection. South Central Chapter of the Society of Toxicology; 1982.

42. **Slikker W Jr**, Bailey JR, Newport GD, and Hill DE. Significance of the metabolic conversion of estradiol-17B(E_2) to estrone (E_1) by the in situ nonhuman primate placenta. Teratology 25(2):76A; 1982.

43. **Slikker W Jr**, Vore M, Bailey JR, and Montgomery C. Reduction of indocyanine green (ICG) plasma elimination by estradiol-17B-D-glucuronide($E_2$17G) in the rat and monkey. The Pharmacologist 24(3):226; 1982.

44. Spadoro JP, Sheehan D, Bailey J, **Slikker W Jr**, Plenefisch JD, and Klein NW. The direct effect of clomiphene citrate on rat embryos in culture. Teratology 25(2):77A; 1982.

45. Buelke-Sam J, Kimmel GL, **Slikker W Jr**, and Kimmel CA. Evaluation of postnatal toxicity following prenatal reserpine (R): Effect of dose and dosing schedule. Teratology 27:35A; 1983.

46. **Slikker W Jr**, Buelke-Sam J, Newport GD, Adams J, and Kimmel CA. Neurotransmitter ontogeny in the rat: effects of prenatal methylmercury. Transactions of the American Society for Neurochemistry 14(1):235; 1983.

47. **Slikker W Jr**, Holder CL, Bailey JR, Young JF, and Thompson H Jr. Pharmacokinetics of doxylamine (Bendectin®) in the rhesus monkey. Teratology 27:77A; 1983.

48. Ali SF, **Slikker W Jr**, and Newport GD. Trimethyltin (TMT) induced alterations of muscarinic receptor binding affinity and monoamine turnover in mouse brain. Proc. Soc. Neuro.; 1984.

49. Ali SF, Buelke-Sam J, **Slikker W Jr**, Newport GD, and Kimmel GL. Early neurochemical alterations in rats prenatally exposed to reserpine. Proc. Soc. Toxicol.; 1984.

50. Althaus ZR, Bailey JR, and **Slikker W Jr**. Metabolism of dexamethasone (DEX) and cortisol (C) in the pregnant rhesus monkey. Teratology 29(2):17A; 1984.

51. Buelke-Sam J, **Slikker W Jr**, Newport GD, Miller DR, Adams J, and Kimmel CA. Neurochemical and behavioral responses to d-amphetamine in the periadolescent rat. International Society for Developmental Psychobiology; 1984.

52. Kwarta RF Jr, Kimmel CA, Kimmel GL, and **Slikker W Jr**. Identification of the cellular retinoic acid binding protein (cRABP) within the embryonic mouse (CD-1) limb bud. Teratology 29(2):17A; 1984.

53. Leakey JEA, Althaus ZR, and **Slikker W Jr**. Dexamethasone induces hepatic cytochrome P-450 and some monooxygenases in rhesus monkey fetuses. Proceedings of the 6th International Symposium on Microsomal and Drug Oxidations; August 1984.

54. Paule MG and **Slikker W Jr**. Developmental toxicity of prenatal trimethyltin chloride (TMT) exposure in the rat. Teratology 29(2):50A; 1984.

55. Rowland JM, **Slikker W Jr**, Holder CL, Denton R, Prahalada S, Young JF, and Hendrickx AG. Pharmacokinetics of doxylamine (Bendectin®) in pregnant macaques. Teratology 29(2):55A; 1984.

56. **Slikker W Jr**, Lipe GW, Holder CL, and Bailey JR. Metabolic pathways of 14C-doxylamine succinate (Bendectin®) in the rhesus monkey. Teratology 29(2):58A; 1984.

57. **Slikker W Jr**, Ali SF, Newport GD, and Goad PT. Regional neurochemical alterations produced by trimethyltin (TMT) in the mouse. Fed. Amer. Soc. Exp. Biol.; 1984.

58. **Slikker W Jr**, Holder CL, Lipe GW, and Bailey JR. Metabolism of ^{14}C-labeled doxylamine succinate (Bendectin®) in the rhesus monkey. Soc. Toxicol.; 1984.

59. **Slikker W Jr**, Lipe GW, Sziszak TJ, and Bailey JR. Changes in estrogen metabolism after chronic oral contraceptive (OC) administration in the rhesus monkey. International Society for the Study of Xenobiotics; 1984.

60. Ali SF, Buelke-Sam J, Newport GD, **Slikker W Jr**, and Harmon JR. Neurochemical alterations in rats prenatally exposed to imipramine. Teratology 31(3):11B; 1985.

61. Ali SF, Buelke-Sam J, **Slikker W Jr**, Newport GD, and Kimmel GL. Prenatal reserpine exposure induces changes in dopamine receptor binding in postnatal rats. 4th International Conference on Neurotoxicology of Selected Chemicals, Little Rock, AR; 1985.

62. Ali SF, Buelke-Sam J, **Slikker W Jr**, Newport GD, and Kimmel GL. Early neurochemical alterations in rats prenatally exposed to reserpine. The Toxicologist 5:(1)199; 1985.

63. Bailey JR, Paule MG, and **Slikker W Jr**. Pharmacokinetics of delta 9-tetrahydrocannabinol (THC) in the later term pregnant rhesus monkeys. Am. J. Primatol. 8 (4): 330, 1985.

64. Cunny H, Paule M, Ali SF, and **Slikker W Jr**. Radioimmunoassay (RIA) of delta-9-tetrahydrocannabinol (THC) and 11-nor-0-COOH-delta-9THC (11 nor) in brain. Pharmacologist 27(3):165; 1985.

65. Kelly DW and **Slikker W Jr**. ^{14}C-labeled pyrilamine maleate in the Fischer-344 rat. Amer. Soc. Pharmacol. Exp. Ther.; 1985.

66. Lipscomb JC, Paule MG, and **Slikker W Jr**. Fetomaternal kinetics of ^{14}C-trimethyltin. International Conference on Neurotoxicology in the Fetus and Child; Little Rock, AR; 1985.

67. Paule MG, Bailey JR, Fogle CM, Gillam MP, and **Slikker W Jr**. Plasma pharmacokinetics of delta-9-tetrahydrocannabinol in the rhesus monkey. Pharmacologist 27(3):166; 1985.

68. Paule MG, Lipscomb JC, and **Slikker W Jr**. Kinetics of ^{14}C-trimethyltin in the rat. The Toxicologist 5:173; 1985.

69. **Slikker W Jr**, Althaus ZR, Leakey JEA, and Bailey JR. Transplacental metabolism of dexamethasone and cortisol in the late gestational age rhesus monkey (*Macaca mulatta*). 10th Rochester Trophoblast Conference; October 1985.

70. **Slikker W Jr**, Bailey JR, Holder CL, and Lipe GL. Transplacental pharmacokinetics of doxylamine succinate in the late-term rhesus monkey. Teratology 31:(3)49A; 1985.

71. **Slikker W Jr**, Buelke-Sam J, Ali SF, Kimmel GL, and Newport GD. The correlation of early postnatal behavioral and neurochemical alterations in rats prenatally exposed to reserpine. European Teratol. Soc.; Rostock, East Germany; 1985.

72. **Slikker W Jr**, Holder CL, Bailey JR, Young JF, and Thompson HC Jr. Pharmacokinetics of doxylamine (Bendectin®) in the rhesus monkey. Teratology 27:77A; 1985.

73. **Slikker W Jr**, Lipe GW, Casciano DA, Holder CL, and Bailey JR. Evidence for the dose-dependent elimination of doxylamine succinate in the monkey and rat. Amer. Soc. Pharmacol. Exp. Ther.; 1985.

74. **Slikker W Jr**. Metabolism and pharmacokinetics of selected naturally occurring and synthetic estrogens and glucocorticoids in the pregnant rhesus monkey. International Symposium/Workshop "Pharmacokinetics in Teratogenesis"; West Berlin, Germany; 1985.

75. Ali SF, Newport GD, Scallet AC, Paule MG, McMillan DE, Brown RM, and **Slikker W Jr**. Effects of chronic delta-9-tetra-hydrocannabinol (THC) on neurotransmitter receptor binding and concentration in different regions of the rat brain. Neurosci. Abs. 12(1):611; 1986.

76. Ali SF, Pizzi W, Holson R, Webb P, Newport GD, and **Slikker W Jr**. Early neurobehavioral and behavioral effects of prenatal exposure to clonidine and lofexidine in the rat. The Toxicologist 6:198; 1986.

77. Bailey JR, Paule MG, Gillam MP, Fogle CM, and **Slikker W Jr**. Influence of sex and pregnancy on the plasma distribution of delta-9-THC and a major metabolite in the monkey. Amer. Soc. Primatol. 10(4):487-488; 1986.

78. Cunny HC, Bailey JR, Paule MG, and **Slikker W Jr**. Fetal disposition of delta-9-tetrahydrocannabinol (THC) during late pregnancy in the rhesus monkey. Teratology 33(3):66C; 1986.

79. Holson RR, Ali SF, Scallet AC, Newport GD, and **Slikker W Jr**. Neurochemical, hormonal and behavioral responses to graded stressors in isolate rats. Neurosci. Abs. 12:1377; 1986.

80. Kwarta RF Jr, **Slikker W Jr**, and Scallet AC. The effects of postnatal exposure to diphenylhydantoin on serum thyroid hormone levels in rat pups. Teratology 33(3):91C; 1986.

81. Lipscomb JC, Paule MG, and **Slikker W Jr**. The fetomaternal disposition of ^{14}C-trimethyltin in the gestational day 12 rat. Teratology 33(3):66C; 1986.

82. Paule MG, Bailey JR, and **Slikker W Jr**. THC plasma distribution in rhesus monkey mother and fetus near term. Proc. NIDA Monograph Series, Committee on Problems of Drug Dependence; 1986.

83. Paule MG, McMillan DE, Scallet AC, Ali SF, and **Slikker W Jr**. The effects of chronic delta-9-tetrahydrocannabinol (THC) on rat performance under a multiple progressive ratio, DRL schedule and on activity in a figure-8 maze. Neurosci. Abs. 12(1):611; 1986.

84. Scallet AC, Uemura E, Andrews A, Ali SF, McMillan DE, Paule MG, Brown RM, and **Slikker W Jr.** Chronic delta-9-tetrahydrocannabinol (THC) reduces pyramidal neuron size and synaptic density in rat hippocampus. Neurosci. Abs. 12(1):611; 1986.

85. **Slikker W Jr**. Transplacental pharmacokinetics and metabolism of drugs and endogenous hormones. Amer. Pharmaceut. Assoc.; 1986.

86. **Slikker W Jr**, Ali SF, Scallet AC, and Frith CH. Methylenedioxymethamphetamine (MDMA) produces long lasting alterations in the serotonergic system of rat brain. Soc. Neuroscience; November 1986.

87. **Slikker W Jr**, Fu PP, Bailey JR, Althaus ZR, and Lipe GW. Inhibition of the conversion of estradiol (E_2) to estrone (E_1) by 16-methylene E_2 in the perfused monkey placenta. Teratology 33(C):78; 1986.

88. Ali SF, Scallet AC, Holson RR, Newport GD, and **Slikker W Jr**. Acute administration of MDMA (Ecstasy): Neurochemical changes persist up to 120 days in rat brain. Soc. Neuroscience; November 1987.

89. Ali SF, **Slikker W Jr**, Scallet AC, and Frith CH. Neurochemical and neuropathological changes produced by methylenedioxymethamphetamine (MDMA) in different regions of rat brain. The International Society of Neurochemistry and American Society of Neurochemistry; Venezuela; 1987.

90. Bailey JR, Paule MG, Fogle CM, Gillam MP, and **Slikker W Jr**. Plasma disposition of delta-9-tetrahydrocannabinol (THC) in rhesus monkeys after the administration of marijuana smoke. Amer. Soc. Primatol.; June 1987.

91. Cunny HC, Leakey J, Bazare J, Webb P, and **Slikker W Jr**. Neonatal dexamethasone (DEX) treatment alters the development of sexually dimorphic hepatic P-450s in the rat. The Toxicologist; March 1987.

92. Holder CL, **Slikker W Jr**, Korfmacher WA, Thompson HC Jr, and Cerniglia C. Comparative studies on the metabolism of doxylamine succinate by male and female Fischer 344 rats. Amer. Chem. Soc.; 1987.

93. Leakey J, Badger T, Bazare J, Cunny H, Elledge J, McDonald Z, Webb P, and **Slikker W Jr**. Surgical stress and total parenteral nutrition (TPN) decreases hepatic drug metabolizing enzyme activities in adult male rats. ISSX; November 1987.

94. Leakey JEA, Cunny HC, Bazare JJ, Webb PJ, McDonald ZR, and **Slikker W Jr.** Glucocorticoid involvement in acute and long term effects of polycyclic aromatic hydrocarbons (PAH) on hepatic enzymes in developing rodents. Teratology; 1987.

95. Lipscomb JC, Leakey JEA, Bazare JJ, Webb PJ, and **Slikker W Jr**. Effect of trimethyltin on rat hepatic GSH transferase activity *in vivo* and *in vitro*. The Toxicologist; 1987.

96. Paule MG, Bailey JR, Fogle CM, Gillam MP, and **Slikker W Jr**. Influence of sex and pregnancy on the plasma distribution of delta-9-THC and a major metabolite in the rhesus monkey. Teratology; 1987.

97. Paule MG, Bailey JR, and **Slikker W Jr**. The influence of anesthesia, pregnancy, and sex on the plasma disposition of delta-9-tetrahydrocannabinol and 1-nor-9-carboxy-delta-9-tetrahydrocannabinol in the rhesus monkey. Marijuana Symposium; Melbourne, Australia; September 1987.

98. Paule MG, Bailey JR, and **Slikker W Jr**. Comparison of radioimmunoassay (RIA) and gas chromatography/mass spectrometry (GC/MS) analysis of delta-9-tetrahydrocannabinol (THC) and a major metabolite in rhesus monkey plasma. Amer. Soc. Pharmacol. Exp. Ther.; Honolulu, Hawaii; August 1987.

99. Paule MG, Bailey JR, **Slikker W Jr**, and Brown RM. Estimation of plasma delta-9-THC (THC) levels by carboxy hemoglobin measurement in rhesus monkey after exposure to marijuana smoke from cigarettes of known THC content. Marijuana Symposium; Melbourne, Australia; September 1987.

100. Paule MG, **Slikker W Jr**, and McMillan DE. Development and use of an automated operant test battery to assess cognitive function in a large group of rhesus monkeys. Neurotoxicology Conference; September 1987.

101. Scallet AC, Ali SF, Holson RR, Lipe GW, and **Slikker W Jr**. Neurohistological effects 120 days after oral ecstasy: Multiple antigen immunohistochemistry and silver degeneration staining. The Society for Neuroscience; November 1987.

102. Scallet AC, McKay D, Bailey JR, Ali SF, Paule MG, and **Slikker W Jr**. Meal-induced increase in plasma gastrin immunoreactivity in the rhesus monkey. Amer. J. Primatol., 12(3):270; June 1987.

103. Schulze GE, McMillan DE, Bailey JR, Scallet AC, Ali SF, **Slikker W Jr**, and Paule MG. Acute effects of THC on cognitive function in rhesus monkeys. Amer. Soc. Pharmacol. Exp. Ther.; Honolulu, Hawaii; August 1987.

104. **Slikker W Jr**, Ali SF, Scallet AC, Frith CH, and Newport GD. Neurochemical and neurohistological alterations produced by orally administered methylenedioxymeth-amphetamine (MDMA). Amer. Soc. Pharmacol. Exp. Ther.; Honolulu, Hawaii; August 1987.

105. **Slikker W Jr**, Cunny HC, Bailey JR, and Paule MG. Placental transfer and fetal disposition of delta-9-tetrahydrocannabinol (THC) during late pregnancy in the rhesus monkey. Marijuana Symposium; Melbourne, Australia; September 1987.

106. **Slikker W Jr**, McDonald ZA, Fu PP, Bailey JR, and Lipe GW. Enhancement of the potency of estradiol (E_2) by the 17B-hydroxysteroid dehydrogenase (17HSD) inhibitor, 16-methylene E_2(ME_2), *in vivo*. Tenth International Congress of Pharmacology; Sydney, Australia; August 1987.

107. **Slikker W Jr,** Scallet AC, Uemura E, Andrews A, Ali SF, McMillan DE, Paule MG, and Brown RM. Effect of chronic delta-9-tetrahydrocannabinol on pyramidal neuron size and synaptic density in rat hippocampus. Marijuana symposium; Melbourne, Australia; September 1987.

108. Smith MA, Thomford PJ, Mattison DR, and **Slikker W Jr**. *In vitro* transport and metabolism of dexamethasone in the dually perfused human placenta. Society for the Study of Reproduction; July 1987.

109. **Slikker W Jr**, Wood E, Ali SF, Scallet AC, Newport GD, Bailey JR, and Kolta MG. Persistent alteration of brain serotonin (5-HT) by MDMA in the rhesus monkey. Toxicologist 8(1):47; 1988.

110. Ali SF, Ahmad G, **Slikker W Jr**, and Bondy SC. Gestational exposure to phencyclidine (PCP) in rat decreases PCP binding sites in fetal brain at term. Teratology 37(5):443; 1988.

111. Ali SF, Newport GD, Scallet AC, Paule MG, and **Slikker W Jr.** Effects of delta-9-tetrahydrocannabinol (THC) on muscarinic cholinergic receptor binding in rat brain. *In vitro* and *in vivo* studies. Neurotoxicology 9(4):680; 1988.

112. Ali SF, Ahmad G, **Slikker W Jr**, and Bondy SC. Effects of gestational exposure to phencyclidine: distribution and neurochemical alterations in maternal and fetal brain. Presented at the 6th International Neurotoxicology Conference: Drug Abuse and Brain Development; Little Rock, Arkansas; October 1988.

113. Ali SF, Sullivan P, Newport GD, Holson RR, and **Slikker W Jr**. Prenatal diazepam (DZ) exposure: Neurochemical and behavioral effects in rat offspring. Presented at the 18th Annual Meeting of the Society for Neuroscience; Toronto, Ontario, Canada; November 1988.

114. Bailey JR, Paule MG, Ali SF, Scallet AC, and **Slikker W Jr**. Effects of chronic marijuana smoke exposure on urinary cortisol (UC) excretion in the rhesus monkey. Pharmacologist 30(3):A115; 1988.

115. Bailey JR, Wood E, Ali SF, Scallet AC, Newport GD, Kolta MG, and **Slikker W Jr.** Methylenedioxymethamphetamine (MDMA) reduces brain serotonin (5-HT) after oral administration in the rhesus monkey. Presented at the 11th Annual Meeting of American Society of Primatologist; New Orleans, Louisiana; June 1988.

116. Cunny HC, **Slikker W Jr**, and Leakey JEA. Age dependent effects of dexamethasone on perinatal serum testosterone concentrations and development of hepatic steroid-metabolism in the male rat. Pharmacologist 30:A17, 1988.

117. Gollamudi R, Ali SF, Kolta M, Lipe G, Webb P, Lopez M, Leakey J, and **Slikker W Jr**. N-Demethylation of MDMA by rat hepatic microsomes: effects of inducers and inhibitors. Presented at the 6th International Neurotoxicology Conference: Drug Abuse and Brain Development; Little Rock, Arkansas; October 1988.

118. Gollamudi R, Lopez M, Leakey JEA, Webb PJ, and **Slikker W Jr**. Metabolism of 3,4-methylenedioxymethamphetamine (MDMA) by rat liver microsomes. Toxicologist 8:200; 1988.

119. Holson RR, Paule MG, Scallet AC, Ali SF, and **Slikker W Jr**. Benzodiazepine-like behavior alterations seen in male rats ten weeks after cessation of chronic delta-9-tetrahydrocannabinol (THC) exposure. Presented at the 6th International Neurotoxicology Conference: Drug Abuse and Brain Development; Little Rock, Arkansas; October 1988.

120. Holson RR, Paule MG, Scallet AC, Ali SF, and **Slikker W Jr**. Benzodiazepine-like behavioral alterations seen in male rats ten weeks after cessation of chronic delta-9-tetrahydrocannabinol (THC) exposure. Neurotoxicology 9(4):681; 1988.

121. Kolta MG, Ali SF, **Slikker W Jr**, Scallet AC, Newport GD, Bailey JR, and Hong JS. Effect of methylenedioxymethamphetamine (MDMA) on central monoamines and opioid peptide systems of the rat and monkey. Presented at the International Narcotic Research Conference; France; July 1988.

122. Leakey JEA, Bazare J Jr, Cunny HC, Webb PJ, **Slikker W Jr**, and Bailey JR. Hepatic monooxygenase activities in the adult rhesus monkey: Comparison with the rat. Toxicologist 8:7; 1988.

123. Leakey JEA, Cunny HC, **Slikker W Jr**, Bazare J Jr, and Webb PJ. Effects of simultaneous administration of dexamethasone and growth hormone on hepatic cytochrome P-450 isozymes in the perinatal rat. Pharmacologist 30:A9; 1988.

124. Paule MG, McMillan DE, Bailey JR, Scallet AC, Ali SF, and **Slikker W Jr**. The effects of chronic marijuana smoke exposure on complex behavior in the rhesus monkey. Pharmacologist 30(3):A115; 1988.

125. Paule MG, Schulze GE, Bailey JR, Scallet AC, Ali SF, and **Slikker W Jr**. Use of an automated system to assess cognitive function in nonhuman primates: Population characteristics and practical applications. XIIIth Congr. Int. Primat. Soc. Abs. Brasilia; IPS Research Conservation; p. 13; 1988.

126. Paule MG, **Slikker W Jr**, and Bailey JR. Automated assessment of cognitive function in nonhuman primates: Population characteristics and potential applications. Am. J. Primatol. 14(4):437; 1988.

127. Paule MG, **Slikker W Jr**, and McMillan DE. Development and use of an automated operant test battery to assess cognitive function in a large group of rhesus monkeys. Neurotoxicology 9(1):135; 1988.

128. Scallet AC, Andrews A, Uemura E, Ali SF, Paule MG, Bailey JR, and **Slikker W Jr**. Neurohistological methods of evaluating toxicity: Application to the effects of delta-9-THC and marijuana smoke. Neurotoxicology 9(4): 679-680; 1988.

129. Schulze GE, McMillan DE, Bailey JR, Scallet AC, Ali SF, **Slikker W Jr**, and Paule MG. Acute effects of marijuana smoke on cognitive function in rhesus monkeys. Neurotoxicology 9(1):136; 1988.

130. **Slikker W Jr**, Holson RR, Ali SF, Paule MG, Scallet AC, Bailey JR, and Kolta MG. Neurochemical and behavioral effects of orally administered MDMA: Comparison of the rodent and nonhuman primate. Neurotoxicology 9(4):682-683; 1988.

131. **Slikker W Jr**, Paule MG, McMillan DE, Bailey JR, Scallet AC, and Ali SF. Assessment of complex behavior in the rhesus monkey: Effects of chronic marijuana smoke exposure. Neurosci. Abst. 14(1):327; 1988.

132. **Slikker W Jr**, Paule MG, Scallet AC, Ali SF, Bailey JR, and Schulze GE. Effects of chronic marijuana smoke exposure on cognitive function in the rhesus monkey: Experimental design and initial findings. Neurotoxicology 9(1):131; 1988.

133. Ali SF, Jairaj K, Lambert CE, Newport GD, Lipe GW, Bondy SC, and **Slikker W Jr**. Thallium intoxication produces neurochemical alterations in rat brain. The Toxicologist 9(1):134; 1989.

134. Ali SF, Newport GD, Bailey JR, and **Slikker W.Jr**. Persistent neurochemical effects of orally administered methylenedioxymethamphetamine (MDMA) in rats and monkeys. Presented at the 12th Biennial Meeting of the International Society for Neurochemistry; Portugal; April, 1989. J. Neurochem. 52(Suppl):S143D; 1989.

135. Ali SF, St. Omer VEV, Duhart H, Holson RR, Scalzo FM, and **Slikker W Jr**. Prenatal exposure to methylenedioxymethamphetamine (MDMA) in the rat: Behavioral and neurochemical effects. Soc. Neurosci., Abstr. 279.2; 1989.

136. Andrews A, Scallet AC, Uemura E, Ali SF, Bailey JR, Paule MG, Brown RM, and **Slikker W Jr**. Ultrastructural evaluation of hippocampus in rhesus monkeys after intravenous delta-9-tetrahydrocannabinol (THC): 90 day study. Proc. 47th Ann. Mtg. Electron Microsc. Am.; pp. 956-957; 1989.

137. Kallman MJ, Jones AB, Ali SF, Scallet AC, Paule MG, and **Slikker W Jr.** Neurobehavioral effects of repetitive marihuana smoke exposure in rats. Neurosci. Abst. 15(2):1351; 1989.

138. Lay JO Jr, Getek TA, Kelly D, **Slikker W Jr**, and Korfmacher WA. Application of FAB and Thermospray Mass Spectrometry to the Identification of Two Glucuronide Metabolites of Methapyrilene. Presented at the 37th ASMS Conference on Mass Spectrometry and Allied Topics; Miami Beach, Florida; May 1989.

139. Paule MG, Bailey JR, Scallet AC, Ali SF, and **Slikker W Jr**. Chronic marijuana (MJ) smoking and urinary cortisol (UC) excretion in the monkey. Proc. West. Pharmacol. Soc. 32:189; 1989.

140. **Slikker W Jr,** Gollamudi R, Ali SF, Kolta K, Lipe G, Webb P, Lopez M, and Leakey J. The effect of metabolic induction and inhibition on methylenedioxymethamphetamine induced neurochemical alterations. FASEB J. 3:A1036; 1989.

141. **Slikker W Jr**, Paule MG, and Bailey JR. Placental transfer of psychoactive agents in the nonhuman primate. Teratology 39(5):501; 1989.

142. St. Omer VEV, Ali SF, Holson RR, Scalzo FM, and **Slikker W Jr**. Behavioral and neurochemical effects of prenatal methylenedioxymethamphetamine (MDMA) exposure. Teratology 39(5):BTS39, 512; 1989.

143. Ali SF, Jairaj K, Newport GD, Lipe GW, and **Slikker W Jr**. Thallium intoxication produces neurochemical alterations in rat brain. Neurotoxicology 11(1):154; 1990.

144. Ali SF, Lee SH, Bowyer JF, and **Slikker W Jr.** Methamphetamine and MPTP produces changes in PCP and NMDA receptor binding in mouse brain. Soc. Neurosci. Abstr. 515.1; 1990.

145. Ali SF, Lipe GW, Newport GD, Scallet AC, and **Slikker W Jr.** Acute administration of trimethyltin (TMT) produces alterations in amino acid concentrations in mouse brain. The Toxicologist 10(1):109; 1990.

146. Ali SF, St. Omer VEV, Duhart H, Holson RR, Scalzo FM, and **Slikker W Jr**. Prenatal exposure to methylenedioxymethamphetamine (MDMA) in the rat: Behavioral and neurochemical effects. Soc. Neurosci., Abstract. 279.2; 1990.

147. Ali SF, St. Omer VEV, Duhart H, Holson RR, Scalzo FM, and **Slikker W Jr**. Prenatal exposure to methylenedioxymethamphetamine (MDMA) produces behavioral but not neurochemical changes in offspring. Neurotoxicology 11(1):146; 1990.

148. Ali SF, Tandon P, Tilson HA, Lipe GW, Newport GD, and **Slikker W Jr.** Intracerebral and oral administration of methylenedioxymethamphetamine (MDMA): Distribution and neurochemical alterations in rat brain. Presented at the XIth International Congress of Pharmacology; Amsterdam; July 1990. Eur. J. Pharmacol. 183:450; 1990.

149. Andrews AM, Wilson SW, Scallet AC, Ali SF, Bailey JR, Paule MG, and **Slikker W Jr**. Evaluation of hippocampus in rhesus monkeys after chronic (1-year) inhalation exposure to marijuana. I. Electron Microscopy; Proc. I.C.E.M. 12:398-399; 1990.

150. Bazare JJ Jr, Cunny HC, Harmon JR, **Slikker W Jr**, and Leakey JEA. Differential effects of dexamethasone on serum testosterone concentrations in the developing male rat. FASEB J. 4:A302; 1990.

151. Bowyer JF, Holson RR, Ali SF, and **Slikker W Jr**. Interactions of MK-801 with glutamate and methamphetamine-evoked 3^{H}-dopamine release from striatal slice. Soc. Neurosci. Abstr. 454.2; 1990.

152. Broening HW III, Newport GD, Ali SF, and **Slikker W Jr**. Behavioral and neurochemical effects of methylenedioxymethamphetamine (MDMA) when administered during late gestation in rat. Teratology 41(5):540; 1990.

153. Gough B, Holson RR, Ali SF, and **Slikker W Jr**. Effect of 3,4-methylenedioxymeth-amphetamine (MDMA) on catecholamines in female rat caudate as measured in extracellular microdialysate and tissue4 homogenate. Soc. Neurosci. Abstr. 432.13; 1990.

154. Harmon JR, Bazare JJ Jr, Webb PJ, Arlotto MP, Bailey JR, **Slikker W Jr**, and Leakey JEA. Differential development of hepatic cytochrome P-450 isozymes in the rhesus monkey *Macaca mulatta*. FASEB J. 4:A873; 1990.

155. Kallman M, Sylianco L, Wilson MC, **Slikker W Jr**, Hikal A, Ali SF, and Holson RR. Ability of diazepam (D2) to block the perinatal neurotoxicity of type I and type II pyrethroid formulations. The Toxicologist 10(1):172, 1990.

156. Kolta MG, Holson RR, Ali SF, and **Slikker W Jr**. Effect of multiple doses of methamphetamine on the rodent brain biogenic amines. The Toxicologist 10(1):113; 1990.

157. Lipscomb JC, Leakey JEA, Bazare JJ Jr, and **Slikker W Jr.** Trimethyltin inhibition of rat glutathione-S-transferase *in vivo*. The Toxicologist 10:298; 1990.

158. Paule MG, Allen RR, Bailey JR, Scallet AC, Ali SF, Brown RM, McMillan DE, and **Slikker W Jr**. The effects of chronic marijuana smoke exposure on conditioned position responding in the rhesus monkey. The Toxicologist 10(1):303; 1990.

159. Scallet AC, Andrews AM, Craven J, Rountree R, Wilson S, Ali SF, Bailey JR, Paule MG, **Slikker W Jr**, and Brown RM. Effects of chronic marijuana smoke on the rhesus monkey (M. mulatta): A regional analysis of hippocampal volume. Neurotoxicology 11(1):148; 1990.

160. Scallet AC, **Slikker W Jr**, Ali SF, Lipscomb JC, and Matthews JC. Aging sensitizes rats to the glial swelling and neurodegeneration produced by trimethyltin (TMT). Society for Exp. Neuropathol.; Atlanta, GA; 1990.

161. Scallet AC, Uemura E, Andrews A, Craven J, Rountree R, Wilson S, Ali SF, Bailey JR, Paule MG, and **Slikker W Jr**. Morphometric neurohistological studies of rhesus monkeys after chronic marijuana smoke (MS) exposure. Neurosci. Abs. 16(2):116; 1990.

162. Wilson SW, Andrews AM, Scallet AC, Ali SF, Bailey JR, Paule MG, and **Slikker W Jr**. Evaluation of hippocampus in rhesus monkeys after chronic (1-year) inhalation exposure to marijuana. II. Morphometric methods. Proc. I.C.E.M. 12:400-401; 1990.

163. Ali SF, Newport GD, Scallet AC, Binienda ZK, Ferguson SA, Bailey JR, Paule MG, and **Slikker W Jr**. Oral administration of MDMA produces selective serotonergic neurotoxicity in the nonhuman primate. Soc. Neurosci. Abst. 505.1; 1991.

164. Ali SF, Newport GD, **Slikker W Jr**, and Bowyer JF. Prenatal exposure to phencyclidine (PCP) in rats enhances the development of glutamate-evoked release of (3H)-dopamine *in vitro*. The Toxicologist 11(1):309; 1991.

165. Ali SF, Newport GD, **Slikker W Jr**, and Bowyer JF. Prenatal exposure to phencyclidine (PCP) in rats produces neurochemical alterations in maternal and fetal brain. Teratology 43(5):NTS34, 493; 1991.

166. Bowyer JF, Tank AW, Newport GD, Ali SF, **Slikker W Jr**, and Holson RR. Presynaptic glutamate (GLU)-evoked dopamine (DA) release is transiently inhibited by methamphetamine (METH) pretreatment. Soc. Neurosci. Abst. 505.6; 1991.

167. Broening HW III, Newport GD, Ali SF, and **Slikker W Jr**. Ontogeny of methylenedioxymethamphetamine (MDMA)-induced neurotoxic sensitivity. Teratology 43(5):p26, 424; 1991.

168. Gough B, Bowyer JF, Ali SF, **Slikker W Jr**, and Holson RR. Effects of ambient temperature and repeated injection of methamphetamine on caudate monoamines as measured by cerebral microdialysis. Soc. Neurosci. Abst. 505.7; 1991.

169. Holson RR, Ali SF, Newport GD, **Slikker W Jr**, and Bowyer JF. The interaction on ambient temperature with repeated methamphetamine (METH) exposure: effects on regional brain monoamines levels in the rat. Soc. Neurosci. Abst. 505.2; 1991.

170. Scallet AC, **Slikker W Jr**, Ali SF, Holson R, Lipe GW, Lipscomb JC, Rountree RL, Stewart CW, and Matthews JC. Aging sensitizes hippocampus to trimethyltin (TMT): Neurohistological, neurobehavioral and neurochemical biomarkers. The Toxicologist 11(1):168; 1991.

171. Valentine J, Scalzo FM, Stewart C, Duhart HM, Wilson C, Ali SF, and **Slikker W Jr**. Preliminary findings with gestational cocaine exposure in the rat. Teratology 43(5):p29, 425; 1991.

172. Ali SF, David S, Newport GD, and **Slikker W Jr**. Age-related susceptibility to MPTP-induced neurotoxicity. The Toxicologist 12(1):323; 1992.

173. **Slikker W Jr**, Lipe GW, Ali SF, Schmued L, Scallet AC, and Binienda Z. Placental transfer and fetal distribution of 3H-ddC in the monkey. Teratology 45(5):458; 1992.

174. Ali SF, Holson RR, Newport GD, **Slikker W Jr**, and Bowyer JF. Methamphetamine toxicity is inhibited by pharmacologic manipulation and reduced environmental temperatures in mice. Presented at the 14th International Society for Neurochemistry Biennial Meeting; Montpelier, France; August 22-27, 1993.

175. Duhart HM, Canales T, **Slikker W Jr**, and Ali SF. Distribution and elimination of 3H-MK801 in plasma, brain and visceral organs of CD mice. Teratology 47(5):NBTS37, 465; 1993.

176. Kwon OS, Bowyer JF, **Slikker W Jr**, and Ali SF. Methylmercury produces dose-dependent inhibition of glutamine synthetase in different regions of the rat brain. The Toxicologist 13(1):171; 1993.

177. Stewart CW, Scalzo FM, Valentine J, Duhart HM, Holson RR, Ali SF, and **Slikker W Jr**. Mechanisms of postnatal alterations from gestational cocaine exposure. The Toxicologist 13(1):212; 1993.

178. Sobrian SK, Hodge K, Webb P, Racey F, Ali S, **Slikker W Jr**, and Holson RR. Evaluation of the interactive effects of prenatal cocaine and nicotine exposure: offspring behavioral effects. Teratology 47(5):NBTS27, 462; 1993.

179. Ali SF, Newport GD, Holson RR, **Slikker W Jr**, and Bowyer JF. Environmental temperature and ion channel modulator decreases methamphetamine neurotoxicity in mice. Presented at the 23rd Annual Meeting of the Society for Neuroscience; Washington, DC; November 7-12, 1993.

180. Binienda Z, Ferguson SA, Racey FD, Taylor NR, **Slikker W Jr**, and Holson RR. The effect of prenatal hypoxic insult on regional brain weight and behavior in rats. Presented at the 23rd Annual Meeting of the Society for Neuroscience; Washington, DC; November 7-12, 1993.

181. Scallet AC, Binienda Z, Caputo FA, Hall S, Paule MG, Rountree RL, Schmued L, Sobotka T, and **Slikker W Jr**. Domoic acid neurotoxicity in cynomolgus monkeys: Effect of dose on hippocampal neuronal axon terminal degeneration. Presented at the 23rd Annual Meeting of the Society for Neuroscience; Washington, DC; November 7-12, 1993.

182. **Slikker W Jr**, Sandberg JA, Holder L, Binienda Z, Caputo FA, Hall S, Paule MG, Rountree RL, Schmued L, Sobotka T, and Scallet AC. Domoic acid (DOM) pharmacokinetics in the monkey: Correlation with neuropathological effects. Presented at the 23rd Annual Meeting of the Society for Neuroscience; Washington, DC; November 7-12, 1993.

183. Ali SF, Newport GD, O'Callaghan JP, **Slikker W Jr**, and Miller DB. Age-related susceptibility to methamphetamine-induced neurotoxicity in mice. Presented at the 1994 Annual Meeting of the Society of Toxicology; Dallas, Texas; March 13-17, 1994.

184. Ali SF, Newport GD, Holson RR, **Slikker W Jr**, and Bowyer JF. Low environmental temperatures or pharmacologic agents that produce hypothermia decrease methamphetamine neurotoxicity in mice. Presented at the FDA Science Forum on Regulatory Sciences; Washington, DC; September 29-30, 1994.

185. Ali SF, Meng X, Newport GD, and **Slikker W Jr**. Pre- and postnatal exposure to methamphetamine produces neurochemical alterations in the rat. Presented at the 1994 Annual Neurobehavioral Teratology and Teratology Society Meetings; Puerto Rico; June 25-30, 1994.

186. Binienda Z, Ali SF, Fogle CM, **Slikker W Jr**, Paule MG, and Ferguson SA. Perinatal hypoxic insult diminishes neurotoxicity of 3-nitropropionic acid (3-NPA) in adult rats. Presented at the 1994 annual meeting of the Society for Neuroscience; Miami Beach, Florida; November 13-18, 1994.

187. Duhart HM, Lipe GW, Sobotka T, **Slikker W Jr**, and Ali SF. Pre- and postnatal exposure to manganese chloride on reactive oxygen species (ROS) in different regions of rat brain. Presented at the 1994 Annual Neurobehavioral Teratology and Teratology Society Meetings; Puerto Rico; June 25-30, 1994.

188. Frederick DL, Ali SF, **Slikker W Jr**, Allen RR, Gillam MP, and Paule MG. Acute effects of methylenedioxymethamphetamine (MDMA) before and after chronic administration on monkey performance in an operant test battery. Presented at the Twelfth International Neurotoxicology Conference; Hot Springs, Arkansas; October 30-November 2, 1994.

189. Rountree RL, Larkin DL, Sobotka TJ, Schmued LC, and Scallet AC. Domoic acid alters the morphometry of GFAP-positive astrocytes. Presented at the Twelfth International Neurotoxicology Conference; Hot Springs, Arkansas; October 30-November 2, 1994.

190. Sandberg JA, Binienda Z, Lipe G, and **Slikker W Jr**. Placental transfer and fetal disposition of dideoxycytidine (ddC) and dideoxyinosine (ddI). Presented at the 1994 Annual Meeting of the Society of Toxicology; Dallas, Texas; March 13-17, 1994.

191. Sandberg JA, Schmued LC, Albertson CM, and **Slikker W Jr**. Neurotoxicity assessment of the anti-HIV therapeutic 2/3/-dideoxyinosine (ddI) in the rat. Presented at the FDA Science Forum on Regulatory Sciences; Washington, DC; September 29-30, 1994.

192. Sandberg JA, Binienda Z, Lipe G, Rose LM, Parker WB, Ali SF, and **Slikker W Jr**. Placental transfer and fetal disposition of 2',3'-dideoxyinosine (ddI) in the rhesus monkey. Presented at the FDA Science Forum on Regulatory Sciences; Washington, DC; September 29-30, 1994.

193. Scallet AC, Andrews A, Binienda Z, Caputo F, Hall, Paule MG, Rountree R, Schmued L, Sobotka T, and **Slikker W Jr**. Hippocampal neuronal and asonal degeneration following domoic acid exposure in cynomolgus monkeys. Presented at the XII International Congress of Neuropathology; Toronto, Ontario, Canada; September 18-23, 1994.

194. Schmued LC, Albertson C, Andrews A, and **Slikker W Jr**. Peripheral neuropathy induced by 2',3'-dideoxyinosine in the rat. Presented at the 1994 Annual Meeting of the Society of Toxicology; Dallas, Texas; March 13-17, 1994.

195. Schmued L, Scallet A, Ali S, and **Slikker W Jr**. Domoic acid induced degeneration within the primate forebrain localized with conventional silver and a novel fluorescent technique. Presented at the 1994 Annual Meeting of the Society of Toxicology; Dallas, Texas; March 13-17, 1994.

196. **Slikker W Jr**, Sandberg JA, Holder L, Binienda Z, Caputo FA, Hall S, Paule MG, Rountree RL, Sobotka T, and Scallet AC. Pharmacokinetics of domoic acid (DOM) in the monkey: Correlation with neuropathological effects. Presented at the 1994 Annual Meeting of the Society of Toxicology; Dallas, Texas; March 13-17, 1994.

197. **Slikker W Jr**, Binienda Z, Caputo, FA, Hall S, Paule MG, Rountree RL, Schmued LC, Sobotka T, and Scallet AC. Domoic acid neurotoxicity in cynomolgus monkeys: Effects of dose on hippocampal neuronal and terminal degeneration. Presented at the FDA Science Forum on Regulatory Sciences; Washington, DC; September 29-30, 1994.

198. **Slikker W Jr**, Sandberg JA, Holder L, Binienda Z, Caputo FA, Paule MG, Rountree RL, Schmued L, Sobotka T, and Scallet AC. Domoic acid (DOM) pharmacokinetics in the monkey: correlation with neuropathological effects. Presented at the FDA Science Forum on Regulatory Sciences; Washington, DC; September 29-30, 1994.

199. Ali SF, Chetty SC, Meng XM, Newport GD, and **Slikker W Jr**. A single injection of ibogaine produces significant changes in nitric oxide synthase (NOS) activity and monoamine concentrations in mouse brain. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

200. Duhart HM, Newport GD, Lipe GW, **Slikker W Jr**, and Ali SF. Manganese-induced reactive oxygen species: Comparison between Mn^{+2} and Mn^{+3}. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

201. Hussain S, **Slikker W Jr**, and Ali SF. Effects of aging on the antioxidant enzymes, superoxide dismutase, catalase, glutathione peroxidase and glutathione in different regions of mouse brain. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

202. Kwon OS, Schmued LC, and **Slikker W Jr**. Fumonisin B1(FB1) increases sphinganine (a precursor of ceramide synthesis) in the brain and spinal cord of developing rats. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

203. **Slikker W Jr**. Biologically-based, quantitative risk assessment of neurotoxicants. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

204. Sandberg JA, Duhart HM, Lipe G, Binienda Z, **Slikker W Jr**, and Kim CS. Disposition of 2,4-dichlorophenoxyacetic acid (2,4-D) in maternal and fetal rabbits. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

205. **Slikker W Jr** and Gaylor DW. Quantitative risk assessment of neurotoxicants with the use of continuous data. Presented at the 1995 Annual Meeting of the Society of Toxicology; Baltimore, Maryland; March 5-9, 1995.

206. Bowyer J, **Slikker W Jr**, Schmued L, and Clausing P. Comparison of the expression of amphetamine (AMPH) neurotoxicity in developing versus adult rats. Presented at the 1995 Annual Meeting of Experimental Biology; Atlanta, Georgia; April 9-13, 1995.

207. Ali SF, Chetty C, Meng XM, Newport GD, and **Slikker W Jr**. A single injection of ibogaine produces significant changes in nitric oxide synthase (NOS) activity and monoamine concentrations in mouse brain. Presented at the 15th International Society for Neurochemistry Biennial Meeting; Niigata City, Japan; June 29-30, 1995.

208. Binienda Z, Sandberg JA, **Slikker W Jr**, and Ali SF. Alterations in electroencephalographic (EEG) signals and monoamine concentrations in the rat brain following cocaine (COC) and methamphetamine (METH) treatment. Presented at the 15th International Society for Neurochemistry Biennial Meeting; Niigata City, Japan; June 29-30, 1995.

209. Scallet AC, Ali SF, Paule MG, and **Slikker W Jr**. Neuromorphometry of behaviorally-tested monkeys after chronic marijuana exposure. Presented at the 15th International Society for Neurochemistry Biennial Meeting; Niigata City, Japan; June 29-30, 1995.

210. Duhart HM, Schmued L, **Slikker W Jr**, and Ali SF. Manganese and iron induced oxidative stress: comparison between different valence states. Presented at the 1995 Annual Meeting of the Neurobehavioral Teratology Society; Newport Beach, CA; June 25-28, 1995.

211. **Slikker W Jr**, Schmued LC, and Kwon OS. Developmental effects of the mycotoxin, fumonisin B1 (FB1), in the rat nervous system. Presented at the 1995 Annual Meeting of the Teratology Society; Newport Beach, CA; June 24-29, 1995.

212. Sandberg J and **Slikker W Jr**. Determination of domoic acid in monkey plasma using a fluorometric HPLC assay. Presented at the 1995 Annual Meeting of the International Congress of Toxicology-VII; Seattle, WA; July 2-6, 1995.

213. Stewart CW, Bowyer JF, and **Slikker W Jr**. Thermogenesis induced by fenfluramine potentiates serotonin (5-HT) depletions. Presented at the 1995 Annual Meeting of the International Congress of Toxicology-VII; Seattle, WA; July 2-6, 1995.

214. Ali SF, Newport GD, **Slikker W Jr**, Rothman RB, and Baumann MH. A single injection of Ibogaine produces significant elevations in corticosterone levels and selective changes in the dopaminergic system in rat brain. Presented at the 25th Annual Meeting of the Society for Neuroscienc; San Diego, CA; November 11-16, 1995.

215. Bowyer JF, **Slikker W Jr**, Schmued L, Binienda Z, Scallet AC, and Clausing P. Intraperitoneal 3-nitropropionic acid (3-NPA) and amphetamine (AMPH) can combine to produce damage to terminals and cell bodies in the striatum and muscle rigidity. Presented at the 25th Annual Meeting of the Society for Neuroscience; San Diego, CA; November 11-16, 1995.

216. Hussain S, **Slikker W Jr**, and Ali SF. *In vitro* studies on antioxidant properties of mellathionein and its possible role in neuroprotection. Presented at the 25th Annual Meeting of the Society for Neuroscience; San Diego, CA; November 11-16, 1995.

217. Kwon OS and **Slikker W Jr**. Effects of fumonisin B1 on blood-brain sphinganine turnover and FB1 toxicokinetics in the developing rat. Presented at the 25th Annual Meeting of the Society for Neuroscience; San Diego, CA; November 11-16, 1995.

218. Patterson TA, Sandberg JA, Schmued LC, Albertson CM, Paule MG, and **Slikker W Jr**. Neurohistological and neurobehavioral assessment of the anti-HIV therapeutic 2,'3'-dideoxyinosine (DDI) in rats. Presented at the 25th Annual Meeting of the Society for Neuroscience; San Diego, CA; November 11-16, 1995.

219. Schmued LC, Scallet AC, Ali S, Binienda Z, Bowyer J, and **Slikker W Jr**. Development and characterization of two histochemical techniques for the respective detection of neuronal myelin degeneration. Presented at the 25th Annual Meeting of the Society for Neuroscience; San Diego, CA; November 11-16, 1995.

220. **Slikker W Jr**, Patterson TA, Sandberg JA, Schmued LC, Albertson CM, and Paule MG. Neurohistological and neurobehavioral assessment of the Anti-HIV therapeutic 2',3'-

dideoxyinosine (ddI) in rats. Presented at the 39th Annual Meeting of the Western Pharmacology Society; Tahoe City, CA; January 27 - February 1, 1996.

221. Fogle CM, Duhart HM, Gillam MP, **Slikker W Jr**, and Paule MG. Pharmacokinetic parameters for cocaine in near term rhesus monkeys treated chronically with escalating doses. J. Toxicol. Environ. Hlth. 49:350-351; 1996.

222. Scallet AC, Morris P, Schmued LC, Rountree RL, Fogle CM, Paule MG, Sandberg J, S**likker W Jr**, Hall S, Johannessen JN, and Sobotka TJ. Domoic acid (DOM): hemi-hippocampal neurodegeneration without behavioral effects. Soc. Neurosc. Abs. 22(3):1908; 1996.

223. Prapurna RD, Johnson JR, Scallet AC, Ali SF, **Slikker W Jr**, and Binienda Z. Metabolic effects of 3-nitropropionic acid treatment in neonatal rat brain. Fund. Appl. Tox. (Suppl.) 30:260; 1996.

224. Patterson TA, Binienda Z, **Slikker W Jr**, and Sandberg JA. The transplacental pharmacokinetics and distribution of azidothymidine (AZT) and its major metabolite, the glucuronide (AZTG), in near-term rhesus macaques. Teratology Society Annual Meeting; 1996.

225. Sandberg JA, Binienda Z, **Slikker W Jr**, and Patterson TA. Fetal distribution of azidothymidine (AZT), its glucuronide (AZTG), and phosphorylated metabolites in near-term rhesus macaques. Teratology Society Annual Meeting; 1996.

226. Prapurna RD, Rountree RL, Scallet AC, **Slikker W Jr**, and Binienda Z. Metabolic effects of 3-nitropropionic acid (3-NPA) in the adult rat brain. Society for Neuroscience, Abstract 745.2; 1996.

227. Schmued L, Scallet A, **Slikker W Jr**, and Binienda Z. Distribution of 3-nitropropionic acid (3-NPA) induced degeneration of myelinated axons and terminals: A combined fluoro-jade AuCl2 study. Society for Neuroscience, Abstract 745.4; 1996.

228. Hussain S, Lipe GW, **Slikker W Jr**, and Ali SF. The effects of manganese on antioxidant enzymes if different regions of rat brain. Fund. Appl. Toxicol. 30:185; 1996.

229. Chetty CS, Lipe GW, Meng X, **Slikker W Jr**, and Ali SF. Effects of manganese on inositolpolyphosphate (InsP) receptors and nitric oxide synthase (NOS) in rat cerebellum. Fund. Appl. Toxicol. 30:186; 1996.

230. Duhart HM, **Slikker W Jr**, and Ali SF. Effects of Cd, Zn and Al on the generation of reactive oxygen species: An *in vitro* study. Fund. Appl. Toxicol. 30:188; 1996.

231. Prapurna RD, Johnson JR, Scallet AC, Ali SF, **Slikker W Jr**, and Binienda Z. Metabolic effects of 3-nitropropionic acid treatment in neonatal rat brain. Fund. Appl. Toxicol. 30:261; 1996.

232. Hussain S, Hass B, **Slikker W Jr**, and Ali SF. Role of metallothionein in MPP+-induced toxicity in CHO cells that over-express metallothionein. Soc. Neurosci. Abstract 748.5; 1996.

233. Duhart HM, Schmued LC, **Slikker W Jr**, Miller DB, and Ali SF. The valence state of manganese and iron quantitatively influences their neurotoxic effects as measured by lipid peroxidation and histological evaluation. Soc. Neurosci. Abstract 751.4; 1996.

234. Fogle CM, Morris P, Woolfolk L, Duhart H, Paule MG, **Slikker W Jr**, and Ali SF. Effects of chronic exposure to manganese on the behavior of rats. Presented at the Fourteenth International Neurotoxicology Conference on Neuroimmunotoxicology; Hot Springs, Arkansas; October 13-16, 1996.

235. **Slikker W Jr**, Gaylor DW, and Scallet AC. The influence of variability on a quantitative risk assessment procedure for continuous neurotoxicity data. Society for Risk Analysis Annual Meeting; December 8-12, 1996.

236. Patterson TA, **Slikker W Jr**, Zielinski WL, Reepmeyer JC, and Sandberg JA. Preliminary behavior and toxicity assessment of thalidomide in the rhesus macaque. Presented at the Society for Neuroscience Annual Meeting; Washington, DC; November 16-21, 1996.

237. Stewart CW, Clausing P, Bowyer JF, and **Slikker W Jr**. Elevations in body temperature that are induced by d-fenfluramine (D-FEN) exposure correlate with decreasing concentrations of serotonin (5-HT). Presented at the Society for Neuroscience Annual Meeting; Washington, DC; November 16-21, 1996.

238. Scallet AC, Morris P, Schmued LC, Rountree RL, Fogle CM, Paule MG, Sandberg JA, **Slikker W Jr**, Hall S, Johannessen JN, and Sobotka TJ. Domoic acid (DOM): Hemi-hippocampal neuropathology without behavioral deficits. Presented at the Society for Neuroscience Annual Meeting; Washington, DC; November 16-21, 1996.

239. Hussain S, Hass B, **Slikker W Jr**, and Ali SF. Reduced levels of catalase activity potentiate MPP+ toxicity: Comparison between MN9D cells and CHO cells. Fund. Appl. Toxicol. 36:297; 1997.

240. Chetty CS, **Slikker W Jr**, and Ali SF. Effects of Zinc and Iron on inositol polyphosphate (InsP) receptors and nitric oxide synthase (NOS) in rat cerebellum. Fund. Appl. Toxicol. 36:299; 1997.

241. Williams CJ, Duhart HM, Soliman MRI, Weaver A, **Slikker W Jr**, and Ali SF. Methcyclopentadienyl manganese tricarbonyl-induced reactive oxygen species in different rat brain regions: an *in vitro* study. Fund. Appl. Toxicol. 36:269; 1997.

242. Fogle CM, Morris P, Woolfolk L, Duhart H, Paule MG, **Slikker W Jr**, and Ali SF. Chronic exposure to manganese levels. Presented at the Fifteenth International Neurotoxicology Conference on Manganese; Little Rock, Arkansas; October 26-29, 1997.

243. Williams CJ, Soliman MR, Duhart H, **Slikker W Jr**, and Ali SF. Reactive oxygen species result from MMT exposure in different regions of rat brain. Presented at the Fifteenth International Neurotoxicology Conference on Manganese; Little Rock, Arkansas; October 26-29, 1997.

244. Lipe GW, Duhart H, Newport GD, **Slikker W Jr**, and Ali SF. Effect of manganese on the concentration of amino acids in regions of the rat brain. Presented at the Fifteenth

International Neurotoxicology Conference on Manganese; Little Rock, Arkansas; October 26-29; 1997.

245. Duhart HL, Hussain S, Hass B, **Slikker W Jr**, and Ali SF. Role of glutathione in MPP+ and HgCl2 in CHO cells. Soc. Neurosci. Abstr.98.18; 1997.

246. **Slikker W Jr**, Frederick DL, Ali SF, Gillam MP, Gossett J, and Paule MG. High dose, short-course treatment with methylenedioxymethamphetamine (MDMA) but not dexfenfluramine (DFEN) alters subsequent behavioral sensitivity to both drugs in rhesus monkeys. Soc. Neurosc. Abs. 23(1):275; 1997.

247. Patterson TA, Binienda Z, **Slikker W Jr**, Newport GD, and Sandberg JA. The transplacental pharmacokinetics and distribution of 2',3'-didehydro-2',3'-dideoxythymidine (d4T) and 2',3'-dideoxycytidine (ddC) in near-term rhesus macaques. Teratology Society Annual Meeting, Abstract; 1997.

248. Taylor MJ and **Slikker W Jr**. The discovery, pharmacology, toxicology, and application of neurotrophic factors in the treatment of human disease. Presented at the Society of Toxicology Annual Meeting; Cincinnati, Ohio; March 9-13, 1997.

249. Bowyer JF, Holson RR, **Slikker W Jr**, and Schmued L. Methamphetamine (METH)-induced neuronal death in specific cortical areas may be a function of dose, age and seizure induction in mice. Presented at the ASPECT 1997; San Diego, California; March 7-11, 1997.

250. Patterson TA, Schmued LC, Sandberg JA, and **Slikker W Jr**. Neurohistological assessment of the anti-HIV therapeutic 2',3'-dideoxyinosine (DDI) in rat sciatic nerve. Presented at the Society for Neuroscience Annual Meeting; New Orleans, Louisiana; October 25-30, 1997.

251. Schmued L, **Slikker W Jr**, and Bowyer JF. Demonstration and localization of d-fenfluramine induced neuronal degeneration in the rat: A fluoro-jade study. Presented at the Society for Neuroscience Annual Meeting; New Orleans, Louisiana; October 25-30, 1997.

252. Sobotka T and **Slikker W Jr**. Inter-Center Neurobiology/Neurotoxicology Working Group. FDA Science Forum; Washington, DC; 1997.

253. **Slikker W Jr**, Frederick DL, Ali SF, Gillam MP, Gossett J, and Paule MG. Short-course, high dose, treatment with methylenedioxymethamphetamine (MDMA) but not dexfenfluramine (DFEN) alters subsequent behavioral sensitivity to both drugs in rhesus monkeys. FDA Forum on Regulatory Sciences; Washington, DC; 1997.

254. Xu AZ, Scallet AC, **Slikker W Jr**, Chang LW, and Ali SF. A dose response study of ibogaine-induced neuropathology in the rat cerebellum. Toxicol. Sci. 42: 111; 1998.

255. Duhart HL, Hussain S, **Slikker W Jr**, and Ali SF. Role of glutathione in MPP+ and mercury chloride in PC-12 cells. Toxicol. Sci. 42: 279; 1998.

256. Patterson TA, Zielinski WL, Reepmeyer JC, Nickols J, Paule MG, and **Slikker W Jr**. Neurotoxicological and behavioral assessment of 2',3'-dideoxycytidine (ddC) and thalidomide (thal) in rhesus monkeys. The Toxicologist 42(1-S):34; 1998.

257. Gough B, **Slikker W Jr**, and Ali SF. Effects of Ibogaine, Noribogaine and Harmaline on the extracellular levels of dopamine and its metabolites in rat striatum. Soc. Neurosci. Abstr. 141.17; 1998.

258. Yu JX, Imam SZ, Newport GD, Scallet AC, Chang LW, **Slikker W Jr**, and Ali SF. Ibogaine blocked methamphetamine-induced hyperthermia but potentiated dopaminergic neurotoxicity in mice. Soc. Neurosci. Abstr.855.7; 1998.

259. Fogle CM, Morris P, Woolfolk L, Duhart H, Paule MG, **Slikker W Jr**, and Ali SF. Chronic exposure to manganese produces behavioral alterations in rats: correlation with monoamine levels. Neurotoxicology 19(3):467; 1998.

260. Ali SF, Duhart HM, Lipe GW, Newport GD, and **Slikker W Jr**. Oxidative stress: A neurochemical mechanism of manganese-induced neurotoxicity. Presented at the International Congress of Toxicology; Paris, France; July 5-9, 1998.

261. Wang GJ, Schmued LC, Andrews A, **Slikker W Jr**, and Binienda Z. Domoic acid induced spinal cord lesions in neonatal rats. Presented at the Society for Neuroscience Annual Meeting; Los Angeles, California; November 7-12, 1998.

262. Tor-Agbidye J, Gough BJ, Ferguson SA, **Slikker W Jr**, and Bowyer JF. Microdialysis levels of ephedrine, dopamine and serotonin (5HT) after doses of d-ephedrine that cause hyperthermia: Why isn't ephedrine neurotoxic like amphetamine? Presented at the Society for Neuroscience Annual Meeting; Los Angeles, California; November 7-12, 1998.

263. Schmued LC, **Slikker W Jr**, and Wang GJ. Fluoro-jade B: A bis homolog of fluoro-jade with improved degenerate neuron staining properties. Presented at the Society for Neuroscience Annual Meeting; Los Angeles, California; November 7-12, 1998.

264. Tor-Agbidye J, **Slikker W Jr**, and Bowyer JF. Effects of multiple doses of d-ephedrine on dopamine, DOPAC and 5-HIAA in brain microdialysate and body temperature. Presented at the Society of Toxicology Annual Meeting; New Orleans, Louisiana; March 14-18, 1998.

265. Imam SZ, Newport GD, Wise CK, Cooney CA, Poirier LA, Islam F, **Slikker W Jr**, and Ali SF. Methamphetamine neurotoxicity: Protective role of selenium and involvement of S-Adenosylmethionine. Presented at the Society of Toxicology Annual Meeting; New Orleans, Louisiana; March 14-18, 1998.

266. Binienda Z, Beaudoin MA, Thorn BT, Sadovova N, Skinner RD, **Slikker W Jr**, and Ali SF. Application of electrophysiological method to study interactions between ibogaine and cocaine. Satellite meeting of the International Society for Neurochemistry and European Society for Neurochemistry, Abstract; 1999.

267. Kim CS, Sandberg JA, **Slikker W Jr**, Binienda Z, Schlosser PM, and Patterson T. Quantitative exposure assessment: Application of physiologically based pharmacokinetic modeling of low-dose, long-term exposure of organic acid toxicant in the brain. Society for Risk Analysis, Abstract; 1999.

268. Xu Z, Mayorga AJ, Fogle CM, Scallet AC, Chang LW, **Slikker W**, and Paule MG. Effects of acute ibogaine administration on the performance of complex operant tasks in rats. The Toxicologist 48(1-S):286; 1999.

269. Imam SZ, Newport GD, Islam F, **Slikker W Jr**, and Ali SF. Methamphetamine-induced toxicity in PC12 cells: Role of nerve growth factor in dopaminergic depletion and free radical production. Presented at the Society for Neuroscience Annual Meeting; Miami Beach, Florida; October 23-28, 1999.

270. **Slikker W Jr**. Developmental Neurotoxicology of therapeutics: Survey of novel recent findings. Presented at the 17th Annual International Neurotoxicology Conference; Little Rock, Arkansas; October 17-20, 1999.

271. Ferguson SA and **Slikker W Jr**. Principles of developmental neurotoxicology. Presented at the 17th Annual International Neurotoxicology Conference; Little Rock, AR; October 17-20, 1999.

272. Fogle CM, Xu Z, Mayorga AJ, Scallet A, Chang LW, **Slikker W Jr**, and Paule MG. Effects of acute ibogaine administration on the performance of complex operant tasks in rats. Presented at the South Central Chapter/Society of Toxicology; Monroe, LA; September 30, 1999.

273. Imam SZ, Islam F, Itzhak Y, **Slikker W Jr**, and Ali SF. Peroxynitrite plays a role in methamphetamine-induced dopaminergic neurotoxicity: Neuroprotective role of nitric oxide synthase inhibitors and peroxynitrite decomposition catalysts. Presented at Fifth International Conference on Neuroprotective Agents; Lake Tahoe, California; September 17-20, 2000.

274. Imam SZ, Newport GD, Islam F, **Slikker W Jr**, and Ali SF. Neuroprotective role of selenium in methamphetamine-induced peroxynitrite generation and dopaminergic neurotoxicity. Presented at Fifth International Conference on Neuroprotective Agents; Lake Tahoe, California; September 17-20, 2000.

275. Ali SF, Imam SZ, Cadet JL, Newport GD, Islam F, **Slikker W Jr**, and Itzhak Y. Role of superoxide, nitric oxide and peroxynitrite in methamphetmaine-induced dopaminergic neurotoxicity in mice. Presented at Teratology Meeting; Palm Beach, Florida; June 24-30, 2000.

276. **Slikker W Jr**, Churchwell ME, Fang J-L, Olivero OA, Patterson TA, Beland FA, Poirier MC, and Doerge DR. Assessment for potential toxicities of HIV therapeutics in the developing infant. Throphblast Conference; Rochester, New York; October 3-6, 2000.

277. Ali SF, Imam SZ, Cadet JL, Newport GD, Islam F, **Slikker W Jr**, and Itzhak Y. Methamphetamine-induced dopaminergic neurotoxicity caused by the generation of peroxynitrite: attenuation of the toxicity in Cu-Zn-SOD OE and nNOS KO mice. Presented at CPDD Conference; Puerto Rico; June 17-20, 2000.

278. Hashemi RR, Tyler AA, Tyler NR, **Slikker W Jr**, and Paule MG. Mining bio-data: The modified rough sets approach. Presented at American Society for Pharmacology and Experimental Therapeutics; Orlando, Florida; March 31-April 4, 2001.

279. Xu A, Seidler FJ, **Slikker W Jr**, Ali SF, and Slotkin TA. Prenatal or adolescent nicotine administration: Effects on CNS serotonin. Society of Toxicology; San Francisco, California; March 25-29, 2001.

280. Ali SF, Newport GD, **Slikker W Jr**, and Imam SZ. Selenium, an antioxidant, protects against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP)-induced peroxynitrite generation in mice. Society of Toxicology; San Francisco, California; March 25-29, 2001.

281. Duhart HM, Imam SZ, Newport GD, **Slikker W Jr**, and Ali SF. Methamphetamine-induced toxicity in PC12 cells: Role of nerve growth factor in dopaminergic depletion and free radical production. Society of Toxicology; San Francisco, California; March 25-29, 2001.

282. Imam SZ, Islam F, Iszhak Y, **Slikker W Jr**, and Ali SF. Peroxynitrite plays a role in methamphetamine-induced dopaminergic neurotoxicity: Neuroprotective role of nitric oxide synthase inhibitors and peroxynitrie decomposition catalysts. Fifth International Conference on Neuroprotective Agents; Lake Tahoe, California; September 17-21, 2000.

283. Imam SZ, Newport GD, Islam F, **Slikker W Jr**, and Ali SF. Neuroprotective role of selenium in methamphetamine-induced peroynitrite generation and dopaminergic neurotoxicity. Fifth International Conference on Neuroprotective Agents; Lake Tahoe, California; September 17-21, 2000.

284. Binienda Z, Thorn BT, **Slikker W Jr**, and Scallet A. Electronencephalographic, behavioral, and C-fos responses to acute domoic acid exposure. Society for Neuroscience; Orlando, Florida; November 2-7, 2002.

285. Ali SF, Oetinger M, Skinner JT, Schmued LC, **Slikker W Jr**, and Imam SZ. Specific caspase III inhibition attenuates meth-induced dopaminergic changes and proapoptotic alterations. Society for Neuroscience; Orlando, Florida; November 2-7, 2002.

286. Imam SZ, Duhart HM, Skinner JT, and **Slikker W Jr**. The molecular insight into cocaine induced dopaminergic damage. A dose dependent alteration in the expression immediate early *genes c-fos*, transcription factor SP-1 and in nuclear factor NF-κβ. Society for Neuroscience; Orlando, Florida; November 2-7, 2002.

287. Scallet AC, Schmued LC, **Slikker W Jr**, Grunberg H, Davis HD, Pine PS, Lester DS, Sistare FD, and Hanig JP. Ketamine-induced apoptosis in neonatal rats: Triple-labeling with DAPI, fluorojade, and caspase-3 antisera. Society for Neuroscience; Orlando, Florida; November 2-7, 2002.

288. **Slikker W Jr**, Duhart H, Gaylor D, and Imam S. Neuroprotection or neurotoxicity: impact of discontinuous dose-response curves on risk assessment. Sixth International Conference on Neuroprotective Conference; Hilton Head, South Carolina; September 15-19, 2002.

289. Imam SZ, Oitinger M, Skinner JT, **Slikker W Jr**, and Ali SF. The role of Caspase III inhibition in methamphetamine-induced alterations in p53 and *bcl*-2 expressions: Correlation with dopaminergic neurotoxicity. Sixth International Conference on Neuroprotective Conference; Hilton Head, South Carolina; September 15-19, 2002.

290. **Slikker W Jr**, Binienda Z, Newport G, Sandberg J, and Patterson T. Dideoxynucleoside HIV Therapeutics: A Comparison of Their Transplacental Pharmacokinetic Properties in a Nonhuman Primate Model, International Federation of Placenta Associations; Melbourne, Australia; 2002.

291. Binienda ZK, Skinner RD, Summage J, Thorn BT, and **Slikker W Jr.** Electronencephalographic response to acute 3-nitropropionic acid (3-npa) exposure. Society of Toxicology; Salt Lake City, Utah; March 9-13, 2003.

292. Duhart HM, Imam SZ, Slikker JT, **Slikker W Jr**, and Ali SF. Cocaine induces a dose dependent alteration in gene expression of apoptotic cascade in PC12 cells. Society of Toxicology; Salt Lake City, Utah; March 9-13, 2003.

293. Ali SF, He Y, Dong Z, Jankovic J, Appel SH, Le W, **Slikker W Jr**, and Imam SZ. Role of nitric oxide in rotenone-induced nigro-striatal injury. Society of Toxicology; Salt Lake City, Utah; March 9-13, 2003.

294. Binienda ZK, Thorn BT, **Slikker W Jr**, and Scallet AC. Electroencephalographic, behavioral, and c-fos responses following acute domoic acid exposure. FDA Science Forum; Washington, DC; April 24-25, 2003.

295. Cawthon D, Oetinger M, Skinner JT, Schmued LC, **Slikker W Jr**, Imam SZ, and Ali SF. Specific Caspase-3 inhibition attenuates methamphetamine-induced dopaminergic changes and proapoptotic alterations. FDA Science Forum; Washington, DC; April 24-25, 2003.

296. Xu ZA, **Slikker W Jr**, Ali SF, Patterson TA, and Slotkin TA. Adolescent nicotine administration: Effects on serotonergic (5HT) systems. FDA Science Forum; Washington, DC; April 24-25, 2003.

297. Xu ZA, Cawthon D, Duhart H, Newport G, **Slikker W Jr**, and Ali SF. A dose-response and time-course study of MPP^+ induced neurotoxicity in PC12 cells. FDA Science Forum; Washington, DC; April 24-25, 2003.

298. Scallet AC, Schmued LC, **Slikker W Jr**, Grundberg N, Faustino PJ, Davis H, Lester D, Sistare F, and Hanig JP. The anesthetic ketamine causes apoptosis in neonatal rat brain: Triple-labeling with DAPI, fluoro-jade B, and a Caspase-3 antiserum. FDA Science Forum; Washington, DC; April 24-25, 2003.

299. Xu L, Heinz T, Pogge A, **Slikker W Jr**, and Schmued L. Chemical characterization of Fluoro-Jade-B, the high affinity marker of neuronal degeneration. FDA Science Forum; Washington, DC; April 24-25, 2003.

300. Xu ZA, Cawthon D, Duhart H, Newport G, Fang H, **Slikker W Jr**, and Ali SF. Transcription factor protein array implicates a complicated mechanism of MPP^+ neurotoxicity in PC12 cells. Society for Neuroscience; New Orleans, Louisiana; November 2003.

301. **Slikker W Jr**, Duhart H, Imam S, and Gaylor DW. Neurotoxicity risk assessment for cocaine: Effect of dose and data variance. Society for Neuroscience; New Orleans, Louisiana; November 2003.

302. Xu L, Heinze T, Stowers C, Howard PC, Pogge A, **Slikker W Jr**, and Schmued L. Separation and Characterization of Fluoro-Jade B, A Selective Histochemical Stain for Neuronal Degeneration. South Central Chapter Society for Toxicology Annual Meeting; Shreveport, LA; October 9-10, 2003.

303. **Slikker W Jr.** Neurotoxicity: Impact on Children's Health and Assessment Approaches. Society for Risk Analysis 23rd Annual Meeting; Baltimore, MD; December 7-10, 2003.

304. **Slikker W Jr.** Biomarkers of Adult and Developmental Neurotoxicity, International Conference on Biomarkers for Toxicology and Molecular Epidemiology: New Tools for 21st Century Problems; Atlanta, GA; March 15-17, 2004.

305. Ali SF, Xu ZA, McCastlain K, Fang H, and **Slikker W Jr**. Protein/DNA arrays indicate selective alterations of transcription factors in MPP^+-induced neurotoxicity in PC12 cells: application of bioinformatics tools in data analysis. Society of Toxicology Annual Meeting; Baltimore, MD; March 21-25, 2004.

306. Xu ZA, McCastlain K, Cawthon D, **Slikker W Jr**, and Ali SF. Real-time RT-PCR monitored selectively alterations of gene expression in mice induced by MPTP. Society of Toxicology Annual Meeting; Baltimore, MD; March 21-25, 2004.

307. Binienda ZK, Summage JL, Dufour S, Virmani A, **Slikker W Jr**, and Schmued LC. Effect of L-carnitine pretreatment against 3-nitropropionic acid (3-NPA) induced neurotoxicity. Society of Toxicology Annual Meeting; Baltimore, MD; March 21-25, 2004.

308. Cawthon DR, Goshe MB, Xu Z, Duhart H, **Slikker W Jr**, and Ali SF. Isolation and Quantitative Analysis of Phosphopeptides in a Neurotoxicity Model using Phosphoprotein Isotope-coded Solid-phase Tags. FDA Science Forum 2004; May 18-19, 2004.

309. Wang C, Sadovova N, Fu X, Scallet A, Hanig J, and **Slikker W.** The role of NMDA receptors in ketamine-induced apoptosis in rat forebrain culture. American Society for Neurochemistry Annual Meeting; New York, NY; August 14-18, 2004.

310. Wang C, Sadovova N, Fu X, Schmued L, Scallet A, Hanig J, and **Slikker W**. Perinatal ketamine induces an increase in NMDA receptor NR1 subunit mRNA, neurotoxicity and acute behavioral alteration. Society for Neuroscience Annual Meeting; San Diego, CA; October 23-27, 2004.

311. Twaddle NC, Doerge DR, Hotchkiss C, Wang C, and **Slikker W.** LC/MS analysis of ketamine and norketamine in serum and tissue. Annual Teratology Society Meeting; St. Pete Beach, FL; June 25-30, 2005.

312. **Slikker W**, Hotchkiss C, Sadovova N, Devine B, Fu X, Scallet A, Hanig J, and Wang C. Comparison of the apoptotic effects of the anesthetic, ketamine, in developing rat and monkey forebrain cultures. Annual Teratology Society Meeting; St. Pete Beach, FL; June 25-30, 2005.

313. Wright LKM, Twaddle N, Branham W, Wang C, Schmued LC, Patterson TA, and Paule MG. Single administration of ketamine produces an inflammatory response in the developing rat brain. Annual Teratology Society Meeting; St. Pete Beach, FL; June 25-30, 2005.

314. **Slikker W**, Wang C, Sadovova N, Fu X, Scallet A, Schmued L, Hanig .**.** Blockade of NMDA receptors by ketamine produces loss of monkey frontal cortical neurons in culture. Society of Toxicology (SOT), 44th Annual Meeting; New Orleans, LA; March 6-10, 2005.

315. **Slikker W**, Hotchkiss C, Sadovova N, Twaddle N, Doerge D, Divine R, Scallet A, Patterson T, Hanig J, Paule M, and Wang C. Ketamine-induced neurotoxicity in prenatal rhesus monkeys. Society for Neuroscience, 35th Annual Meeting; Washington, DC; November 12-16, 2005.

316. **Slikker W**, Hotchkiss C, Sadovova N, Twaddle N, Doerge D, Divine R, Scallet A, Patterson T, Hanig J, Paule M, and Wang C. Ketamine-induced neurotoxicity in prenatal rhesus monkeys. Arkansas Chapter of Neuroscience Annual Meeting; 2005.

317. Wang C, Sadovova N, Twaddle NC, Doerge DR, Scallet A, Patterson T, Hanig J, Paule M, and **Slikker W.** Relationship between ketamine-induced cell death and ketamine concentrations in rat serum and brain. Society for Neuroscience; 35th Annual Meeting; Washington, DC; November 12-16, 2005.

318. Scallet AC, Divine R, Wang C, Schmued LC, Hotchkiss C, Hanig J, and **Slikker W.** Ketamine-induced neurotoxicity in prenatal rhesus monkeys: distribution of neuronal damage. Society for Neuroscience, 35th Annual Meeting; Washington, DC; November 12-16, 2005.

319. Sadovova N, Zou X, Scallet A, Patterson T, Hanig J, Paule M, **Slikker W**, and Wang C. Potential modest protective effect of midazolam on ketamine-induced apoptosis in rat forebrain culture. Society of Toxicology (SOT); 45th Annual Meeting; San Diego, CA; March 5-9, 2006.

320. Wang C, Sadovova N, Zou CX, Scallet A, Patterson TA, Hanig J, Paule MG, and **Slikker W.** Protective effect of midazolam on ketamine-induced apoptosis in rat forebrain culture. FDA Science Forum; Washington, DC; 2006.

321. **Slikker W**, Sadovova N, Zou CX, Scallet A, Patterson TA, Hanig J, Paule MG, and Wang C. Protective effect of midazolam on ketamine-induced apoptosis in rat forebrain culture. 47th Annual Meeting of the Teratology Society; Tucson, AZ; June 24-29, 2006.

322. Zou X, Divine B, Sadovova N, Scallet AC, Hotchkiss CE, Patterson TA, Hanig JP, Wang C, Paule MG, and **Slikker W Jr**. Ketamine-induced Neurotoxocity in Developing Monkeys: A Histochemical Study. Society for Neuroscience (SFN); 36th Annual Meeting; Atlanta, Georgia; November 14-18, 2006.

323. Wang C, Sadovova N, Ali H, Duhart H, Fu X, Zou X, Patterson T, Binienda Z, Virmani A, Paule M, **Slikker W Jr**, and S Ali. L-Carnitine Protects Neurons from 1-Methyl-4-phenylpyridinium (MPP^+)-Induced Neuronal Apoptosis in Rat Forebrain Culture. Society for Neuroscience, 36th Annual Meeting; Atlanta, Georgia; November 14-18, 2006.

324. Patterson TA, Zou X, Sadovova N, Divine RL, Paule MG, **Slikker W Jr**, and Wang C. A combination of inhalation anesthetics produces apoptosis in the developing rat brain. 8th International Conference on Neuroprotective Agents; Mackinac Island, MI; 2006.

325. Zou X, Sadovova N. Scallet AC, Divine B, Hotchkiss C, Patterson TA, Paule MG, **Slikker W**, and Wang C. Gaseous anesthetic drug combinations induce developmental neuro-apoptosis in the rat frontal cortex. 23rd International Neurotoxicology Conference; Little Rock, AR; 2006.

326. Wang C, Sadovova N, Zou X, Scallet AC, Hotchkiss C, Patterson TA, Hanig J, Paule MG, and **Slikker W**. Ketamine produces oxidative DNA damage and loss of monkey frontal cortical neurons in culture. 23rd International Neurotoxicology Conference; Little Rock, AR; 2006.

327. Sadovova N, Wang C, Patterson TA, Zou X, Fu X, Hanig JP, Paule MG, Ali SF, and **Slikker W Jr.** Protective Effects of 7-Nitroindazole on Ketamine-induced Neurotoxicity in Rat Forebrain Culture. 24th International Neurotoxicology Conference; San Antonio, TX; 2007.

328. Wang C, Sadovova N, Patterson TA, Zou X, Fu X, Hanig JP, Paule MG, Ali SF, and **Slikker W Jr.** Protective Effects of 7-Nitroindazole on Ketamine-induced Neurotoxicity in Rat Forebrain Culture. Society for Neuroscience, 37th Annual Meeting: San Diego, CA; November 3-7, 2007.

329. Zou X, Sadavova N, Patterson TA, Fu X, Divine B, Hotchkiss C, Paule M, **Slikker W**, and Wang C. Ketamine-induced neuronal cell death in the developing rat brain. Society for Neuroscience, 37th Annual Meeting; San Diego, CA; November 3-7, 2007.

330. Zou X, Boctor S, Sadovova N, Ferguson S, Paule MG, **Slikker W**, and Wang C. The Protective Effect of L-Carnitine on Phencyclidine-induced Cortical Apoptosis in Developing Rat**.** First Annual International Drug Abuse Research Society (IDARS) & ISN/ASN Satellite Meeting; Merida, Mexico; 2007.

331. Cheng Wang, Natalya Sadovova, Xiaoju Zou, Sherry Ferguson, Merle Paule, and **William Slikker**. The role of NMDA receptor regulation in phencyclidine (PCP)-induced cortical apoptosis. First Annual Internatinal Drug Abuse Research Society (IDARS) & ISN/ASN Satellite Meeting; Merida, Mexico; 2007.

332. Cheng Wang, Natalya Sadovova, Tucker A. Patterson, Xiaoju Zou, Xin Fu, Joseph P. Hanig, Merle G. Paule, Syed F. Ali, and **William Slikker, Jr**. Protective Effects of 7-Nitroindazole on Ketamine-induced Neurotoxicity in Rat Forebrain Culture. Society for Neuroscience (SFN); 37th Annual Meeting; San Diego, CA; November 3-7, 2007.

333. Paule MG, **Slikker W Jr**, Zou X, Hotchkiss CE, Divine RL, Sadovova N, Twaddle NC, Doerge DR, Scallet AC, Patterson TA, Hanig JP, Wang C. Neurodegeneratin Induced by Ketamine Anesthesia in the Perinatal Rhesus Monkey. International Toxicological Meeting, 2007.

334. **Slikker W Jr**, Zou X, Sadovova N, Patterson TA, Divine RL, Paule MG, Wang C. Brain Cell Death Induced by a Combination of Inhalation Anesthetics in the Developing Rat and Protection from this Effect by L-Carnitine. Teratology Society, 47th Annual Meeting; Pittsburgh, PA, June 23-28, 2007.

335. Wang C, Sadovova N, Zou X, Scallet AC, Hotchkiss C, Patterson TA, Hanig J, Paule MG, and **Slikker W**. Ketamine-induced oxidative stress and DNA repair in monkey frontal cortical culture during development. Society of Toxicology, 46th Annual Meeting; Charlotte, NC; March 25-29, 2007.

336. Wang C, Sadovova N, Patterson TA, Zou X, Zhang X, Hanig JP, Paule MG and **Slikker W**. Effects of Ketamine on Oxidative Stress in Monkey Frontal Cortical Cultures during Development. Society for Neuroscience, 48th Annual Meeting; Washington, DC; November 15-19, 2008.

337. Zou X, Sadovova N, Patterson TA, Paule MG, **Slikker W**, and Wang C. Genotoxicity of Ketamine and Potential Protection of Midazolam in PND-3 Monkey Cortical Culture. Society for Neuroscience, 48th Annual Meeting; Washington, DC; November 15-19, 2008.

338. Zou X, Sadovova N, Patterson TA, Paule MG, **Slikker W**, and Wang C. Genotoxicity of Ketamine and Potential Protection of Midazolam in Neonatal Monkey Cerebral Cortical Culture. South Central Society of Toxicology Regional Meeting; Jefferson, AR; 2008.

339. Sadovova N, Zou X, Paule MG, **Slikker W Jr**, and Wang C. Effects of 7-Nitroindazole and Melatonin on Ketamine-induced Neurotoxicity in Postnatal Day 3 (PND-3) Monkey Frontal Cortical Cultures. South Central Society of Toxicology Regional Meeting; Jefferson, AR; 2008.

340. Zou X, Boctor SY, Sadovova N, Ferguson S, Paule MG, **Slikker W Jr**, and Wang C. The Protective Effect of L-Carnitine on Phencyclidine-induced Cortical Apoptosis in the Developing Rat. Society of Toxicology, 47th Annual Meeting; Seattle, WA; Marcdh 16-20, 2008.

341. Paule MG, Sadovova N, Zou X, Zhang X, **Slikker W**, and Wang C. The role NMDA receptor subunits in phencyclidine (PCP)-induced neuronal apoptosis. Society of Toxicology, 47th Annual Meeting; Seattle, WA; March 16-20, 2008.

342. Wang C, Sadovova N, Patterson TA, Zou X, Zhang X, Hanig J, Paule MG, and **Slikker W**. Effect of GABA agonists on ketamine-induced neurotoxicity in PND-3 monkey frontal cortical cultures. Society of Toxicology, 47th Annual Meeting; Seattle, WA; March 16-20, 2008.

343. Sadovova N, Wang C, Patterson TA, Zou X, Zhang X, Hanig J, Paule MG, and **Slikker W**. Effects of 7-Nitroindazole and Melatonin on Ketamine-induced Neurotoxicity in Postnatal Day 3 (PND-3) Monkey Frontal Cortical Cultures. Society of Toxicology, 47th Annual Meeting; Seattle, WA; March 16-20, 2008.

344. **Slikker W Jr**, Zou X, Sadovova N, Divine B, Patterson TA, Ali SF, Hanig J, Zhang X, Paule MG, and Wang C. Anesthetic-induced brain injury during development: Non-invasive assessments and strategies for prevention. 2nd Joint Congress of GCNN and SSNN; Vienna, Austria; 2009.

345. Zou X, Patterson TA, Divine RL, Sadovova N, Hanig JP, Paule MG, **Slikker W**, and Wang C. Ketamine-induced Neurodegeneration in the Newborn Rhesus Monkey. Society of Toxicologty, 48th Annual Meeting; Baltimore, MD; March 15-19, 2009.

346. Sadovova N, Zou X, Zhang X, Hanig JP, Paule MG, **Slikker W**, and Wang C. Protection from Ketamine-induced DNA Damage in Rat Forebrain Culture by L-Carnitine. Society of Toxicology, 48th Annual Meeting; Baltimore, MD; March 15-19, 2009.

347. Wang C, Sadovova N, Zou X, Zhang X, Hanig JP, Paule MG, and **Slikker W Jr**. Protection Against Ketamine-induced Toxicity by L-Carnitine in Rat Forebrain Culture. Society for Neuroscience, 39th Annual Meeting; Chicago, IL; October 17-21, 2009.

348. Zou X, Patterson TA, Divine BL, Sadovova N, Zhang X, Hanig JP, Paule MG, **Slikker W Jr**, Wang C. Gaseous Anesthetics-induced Neurodegeneration in the Developing Monkey Brain. Society for Neuroscience, 39th Annual Meeting; Chicago, IL; October 17-21, 2009.

349. Zhang X, Newport GD, Zou X, Sadovova N, Patterson TA, Paule MG, **Slikker W Jr**, and Wang C. Quantitative Assessment of [18F]-Annexin V Uptake by Micropet Imaging as a Biomarker of Gaseous Anesthetic-induced Neuronal Death. Society for Neuroscience, 39th Annual Meeting; Chicago, IL; 2009.

350. **Slikker W Jr**, Zou X, Sadovova NV, Divine RL, Patterson TA, Ali SF, Wright LKM, Guo L, Shi Q, Doerge D, Hanig JP, Zhang X, Paule MG, and Wang C. The Impact of Pediatric Anesthetics on the Developing Animal Brain. 7th GCNN Meeting; Stockholm; February 23-March 3, 2010.

351. **Slikker W Jr**, Shi Q, Guo L, Patterson TA, Dial S, Quan L, Sadovova N, Zhang X, Hanig JP, Paule MG, and Wang C. Gene Expression Profiling in the Developing Rat Brain after Exposure to Ketamine. MCBIOS Annual Conference; Jonesboro, AR; February 19-20, 2010.

352. Sadovova N, Zou X, Zhang X, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Protection from Ketamine-induced Toxicity by L-Carnitine in Rat Forebrain Culture. IARS and SAFEKIDS Annual Meeting; Honolulu, Hawaii; March 20-23, 2010.

353. Zhang X, Paule MG, Newport GD, Sadovova N, Berridge MS, Apana SM, Kabalka G, **Slikker W Jr**, and Wang C. MicroPET Imaging of Ketamine-induced Neuronal Death. IARS and SAFEKIDS Annual Meeting; Honolulu, Hawaii; March 20-23, 2010.

354. Liu F, Zou X, Sadovova N, Zhang X, Shi L, Guo L, Qian F, Wen Z, Patterson TA, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Phencyclidine (PCP)-induced changes in gene expression and apoptosis in postnatal rat pups. IARS and SAFEKIDS Annual Meeting; Honolulu, Hawaii; March 20-23, 2010.

355. Wang C, Shi Q, Guo L, Patterson TA, Dial S, Quan L, Sadovova N, Zhang X, Hanig JP, Paule MG, and **Slikker W Jr**. Gene Expression Profiling in the Developing Rat Brain after Exposure to Ketamine. International Anesthesia Research Society (IARS) and SAFEKIDS Annual Meeting; Honolulu, Hawaii; March 20-23, 2010.

356. Wang C, Sadovova N, Zou X, Zhang X, Liu F, Patterson TA, Hanig JP, Paule MG, and **Slikker W Jr**. The Effects of L-Carnitine on Ketamine-induced Neurotoxicity in Rat Forebrain Cultures. SOT Annual Meeting; Salt Lake City, Utah; March 7-11, 2010.

357. Liu F, Sadovova N, Zou X, Zhang X, Shi L, Guo L, Qian F, Wen Z, Patterson TA, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Phencyclidine (PCP) induced cell death and changes in gene expression. SOT Annual Meeting; Salt Lake City, Utah; March 7-11, 2010.

358. Zhang X, Newport GD, Zou X, Sadovova N, Patterson TA, Paule MG, **Slikker W Jr**, and Wang C. MicroPET imaging of [18F]-dansylhydrazone in rat brain; a radioligand for ketamine-induced neuronal death. SOT Annual Meeting; Salt Lake City, Utah; March 7-11, 2010.

359. Sadovova N, Shi Q, Guo L, Patterson TA, Dial S, Li Q, Zhang X, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Gene Expression Profiling in the Developing Rat Brain Exposed to Ketamine. SOT Annual Meeting; Salt Lake City, Utah; March 7-11, 2010.

360. Zou X, Patterson TA, Divine RL, Sadovova N, Zhang X, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Neurodegeneration Induced by Gaseous Anesthetics in the Perinatal Rhesus Monkey. SOT Annual Meeting; Salt Lake City, Utah; March 7-11, 2010.

361. Sadovova N, Liu F, Zhang X, Shi L, Guo L, Qian F, Wen Z, Patterson TA, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Phencyclidine (PCP)-induced changes in gene expression and apoptosis in postnatal rat pups. SOT Annual Meeting; Washington, DC; March 6-11, 2011.

362. Wang C, Shi Q, Guo L, Patterson TA, Dial S, Li Q, Sadovova N, Zhang X, Hanig JP, Paule MG, and **Slikker W Jr**. Changes in Gene Expression Profiling to Prolonged Anesthetic Exposure in the Developing Rat Brain. SOT Annual Meeting; Washington, DC; March 6-11, 2011.

363. Darney S, Fowler B, Grandjean P, Heindel J, Mattison D, and **Slikker W**. Prenatal Programming and Toxicity II (PPTOX II): Role of Environmental Stressors in the Development Origins of Disease. Journal of Developmental Origins of Health and Disease, Vol 2, Issue 01, pp 2-2, February 2011.

364. **Slikker W Jr**, Fang L, Liu S, Zou X, Sadovova NV, Divine RL, Patterson TA, Ali SF, Wright LKM, Guo L, Shi Q, Doerge D, Hanig JP, Zhang X, Paule MG, and Wang C. Ketamine-induced neurotoxicity during development: pathways to toxicity and prevention. 3rd IDARS/ International Society for Neurochemistry Satellite Meeting; Istanbul, Turkey; 2011.

365. Wang C, Fang L, Liu S, Zou X, Sadovova NV, Divine RL, Patterson TA, Ali SF, Wright LKM, Guo L, Shi Q, Doerge D, Hanig JP, Zhang X, Paule MG, **Slikker W Jr**. Developmental Neurotoxicity in Inhalation Anesthetics in Non-human Primate. 3rd IDARS/ International Society for Neurochemistry Satellite Meeting; Istanbul, Turkey; 2011.

366. Paule MG, Lui F, Guo L, Shi L, Zhang J, Sadovova N, Hanig JP, **Slikker W Jr**, and Wang C. Changes in Gene Expression Profile in Response to Inhalatioh Anesthesis in Developing Rat Brain. Society of Neuroscience Annual Meeting, 2011.

367. Sadovova N, Liu F, Paule MG, **Slikker W Jr**, and Wang C. Effect of Midazolam on Developing Brain: In Vitro and In Vivo Studies. SOT Annual Meeting: San Francisco, CA; March 11-15, 2012.

368. Liu F, Guo L, Zhang J, Rainosek S, Shi L, Patterson TA, Li Q, Sadovova N, Hanig JP, Paule MG, **Slikker W Jr**, and Wang C. Inhalational Anesthesis-induced Neuronal Damage and Changes of Gene Expression in Developing Rat Brain. SOT Annual Meeting: San Francisco, CA; March 11-15, 2012.

369. Liu F, Sadovova N, Fogle C, Paule MG, **Slikker W Jr**, and Wang C. Nicotine-induced Toxicity in Rat Embryonic Neural Stem Cells. SfN Annual Meeting, 2012.

370. **Slikker W Jr**, Zhang X, Liu F, Liu S, Zou X, Sadovova NV, Divine RL, Patterson TA, Ali SF, Guo L, Shi Q, Doerge D, Hanig JP, Paule MG, and Wang C. Preclinical models to enhance clinical safety assessment of pediatric anesthetics. BJA Salzburg Workshop on Anaesthetic Neurotoxicity and Neuroplasticity; Salzburg, Austria; June 13-15, 2012.

371. Paule, MG, Zhang X, Newport GD, Liu S, Liu F, Callicott R, Berridge MS, Apana SM, Hanig JP, **Slikker W Jr**, and Wang C. L-Carnitine Attenuates Anesthetic-induced Increases in a Marker of Glial Activation in the Developing Monkey Brain. Annual Meeting of the Neurobehavioral Teratology Society; June 2012.

372. **Slikker W**, Zhang X, Newport GD, Paule MG, Liu F, Berridge MS, Kabalka G, and Wang C. Assessment of Developmental Exposure to Pediatric Anesthetics Using MicroPET Imaging. 52nd Annual Meeting of the Teratology Society; Baltimore, MD; June 23-27, 2012.

373. Slikker W Jr, Zhang X, Liu F, Liu S, Zou X, Sadovova NV, Divine RL, Patterson TA, Ali SF, Guo L, Shi Q, Doerge D, Hanig JP, Paule MG, and Wang C. Mechanistic pathways to enhance the safe use of pediatric anesthetics. International Conference on Neuroprotective Agents; Wendake, Quebec, Canada; September 30-October 3, 2012.

374. Sadovova N, Liu F, Paule MG, **Slikker W Jr**, and Wang C. Ketamine-induced Neuronal Damage and Altered N-methyl-D-aspartate (NMDA) Receptor Function in Rat Primary Forebrain Culture. SOT Annual Meeting; San Antonio, TX; March 4-10, 2013.

375. Paule MG, Liu F, Fogle CM, Sadovova N, **Slikker W Jr**, and Wang C. L-Carnitine Ameliorates Propofol-induced Toxicity in Rat Embryonic Neural Stem Cells. SOT Annual Meeting; San Antonio, TX; March 4-10, 2013.

376. Liu F, Sadovova N, Fogle C, Paule MG, **Slikker W Jr**, and Wang C. Nicotine-induced Toxicity in Rat Embryonic Neural Stem Cells. SOT Annual Meeting; San Antonio, TX; March 4-10, 2013.

377. Wang C, Liu F, Sadovova N, Paule MG, and **Slikker W Jr**. Acetyl-L-Carnitine Ameliorates Anesthetic-induced Neural Stem Cell Damage at Mechanisms and Functions of Non-apoptotic Cell Death. Suzou, China; April 15-19, 2013.

378. Wang C, Liu F, Sadovova N, Fogle C, Paule MG, and **Slikker W Jr**. Potential Protective Effect of Antioxidant Agents on Anesthetic-induced Embryonic Neural Stem Cell Damage. International Anesthesia Research Society Conference; San Diego, CA; May 4-7, 2013.

379. **Slikker W Jr** and Tong W. Advancing Regulatory Science to Enhance Medical Product Development and Public Health. 40th Annual Meeting of the Japanese Society of Toxicology; Chiba, Japan; June 17-19, 2013.

380. **Slikker W Jr**, Zhang X, Paule MG, Newport GD, Liu F, Callicott R, Liu S, Berridge MS, Apana SM, and Wang C. MicroPET/CT Imaging of [18F]-FEPPA in the Nonhuman Primate: A Potential Biomarker of Pathogenic Processes Associated with Anesthetic-Induced Neurotoxicity. 53rd Teratology Society Annual Meeting; Tucson, AZ; June 22-26, 2013.

381. **Slikker W Jr**, Hanig JP, Zhang X, Liachenko S, Paule MG, Newport GD, Liu F, Liu S, Berridge MS, Apana SM, and Wang C. Imaging as an Approach to Define Nervous System Toxicology. The XIII International Congress of Toxicology; Coex, Seoul, Korea; June 30-July 3, 2013.

382. **Slikker W Jr**, Liu F, Sadovova N, Fogle CM, Patterson TA, Paule MG, and Wang C. Use of stem cells to assess safety and protection pathways for anesthetic agents during development. International Association of Neurorestoratology VII Annual Conference, 1st Stem Cell Society of India Annual Conference, 11th Global College of Neuroprotection & Neuroregeneration Annual Conference & 2nd Indian Federation of Neurorehabilitation Annual Conference; Mumbai, India; February 27-March 1, 2014.

383. Liu F, Sadovova NV, Fogle CM, Patterson TA, Paule MG, **Slikker W**, and Wang C. Comparing the neurotoxic effects of propofol and ketamine in rat embryonic neural stem cells. 53rd Annual Society of Toxicology Meeting; Phoenix, AZ; March 23-27, 2014.

384. **Slikker W**, Liu F. Sadovova NV, Liu S, Zhang X, Fogle CM, Patterson TA, Paule MG, and Wang C. Understanding the Mechanism of Anesthetic-induced Developmental Neurotoxicity Provides Pathways to Prevention. 53rd Annual Society of Toxicology Meeting; Phoenix, AZ; March 23-27, 2014.

385. Sadovova NV, Liu F, Fogle CM, Paule MG, **Slikker W**, and Wang C. Propofol adverse effects on neural stem cell differentiation and viability. 53rd Annual Society of Toxicology Meeting; Phoenix, AZ; March 23-27, 2014.

386. **Slikker William Jr**. How does FDA use mechanistic data for regulatory decision making? 4th International Conference on Alternatives for Developmental Neurotoxicity; "DNT4 – Toward Adverse Outcome Pathways and Fit for Purpose Assays for DNT." Conference aims to advance the science of DNT testing for better safety evaluation. Philadelphia, PA; May 12-14, 2014.

387. **Slikker W Jr**, Liu F, Rainosek SW, Sadovova N, Fogle CM, Patterson TA, Hanig JP, Paule MG, and Wang C. Propofol-Induced Toxicity in Embryonic Neural Stem Cells and the Potential Protective Effect of Acetyl-L-Carnitine. 54th Annual Teratology Society Meeting; Bellevue, WA; June 28-July 2, 2014.

388. **Slikker W Jr**, Liu F, Rainosek SW, Sadovova N, Fogle CM, Patterson TA, Hanig JP, Paule MG, and Wang C. The Use of Enbryonic Neural Stem Cells to Study Propofol-Induced Neurotoxicity and the Potential Protective Effect of Acetyl-L-Carnitine. 12th International Conference on Neuroprotective Agents; Charlottesville, VA; September 28-October 1, 2014.

389. **William Slikker, Jr.**, Fang Liu, Shuo W. Rainosek, Tucker A. Patterson, Natalya Sadovova, Joseph P. Haning, Merle G. Paule, Cheng Wang. Ketamine-Induced Toxicity in Neurons Differentiated from Neural Stem Cells. Mol Neurobiol (2015) 52-959-969; DOI 10.1007/s12035-015-9248-5.

390. Emilio Benfenati, Elisabet Berggren, Ellen Fritsche, Thomas Hartung, **William Slikker, Jr,** Horst Spielmann, Emanuela Testai, Raymond R. Tice, Manuela Tiramani, and Remi Villenave. Novel chemical hazard characterization approaches. SPECIAL ISSUE EFSA Journal doi:10.2903/j.efsa.2016.s0506.

391. X. Zhang, G.D. Newport, R. Callicott, S. Liu, J. Thompson, M.S. Berridge, S.M. Apana, **W. Slikker, Jr.,** C. Wang, M.G. Paule. MicroPET/CT assessment of FDG uptake in brain after long-term methylphenidate treatment in nonhuman primates. Neurotoxicology and Teratology. Dx.doi.org/10.1016/j.ntt.2016.06.005; 0892-0362/Published by Elsevier, Inc.

Technical Reports

1. #106, Metabolism of Synthetic Estrogen, 2/83.
2. #223, Transplacental Transfer of Polysaccharide Polyvalent Pneumoccal Vaccine and the Response in Fetal Rhesus Monkeys, 11/81.
3. #224, Chronic Indwelling Catheters in Fetal Rhesus Monkeys, 5/82.

4. #225, Comparison of the Transplacental Pharmacokinetics of Estradiol-17B and Diethylstilbestrol in the Rhesus Monkey, 10/81.
5. #226, The Metabolic Fate of Intralipid in Newborn Premature and Full-Term Rhesus Monkey, 10/81.
6. #227, The Transplacental Transfer of Indomethacin and its Pharmacokinetics in Pregnant Rhesus Monkeys, 7/81.
7. #294, Transplacental Transfer of Vitamin D (VD) Metabolites in Subhuman Primates, 4/81.
8. #307, Comparison of the Transplacental Pharmacokinetics and Metabolism of Synthetic and Natural Glucocorticoids in the Nonhuman Primate (*Macaca mulatta*), 7/83.
9. #310, Transplacental Pharmacokinetics and Metabolism of Corticosteroids in the Rat, 7/82.
10. #313, Developmental Toxicity of Ethanol (Includes NCTR Final Reports #6037 and #6067), 2/83.
11. #324, Development of Analytical Techniques for Use in Investigating the Pharmacodynamic Properties of Methylphenidate in Humans, 11/82.
12. #525, Aging and Dietary Effects on D1 and D2 Dopamine Receptor Binding in the B6C3F1 Mouse, 8/90.
13. #6033, Ethanol Toxicity in Neonatal Rat Brain as Assessed by 2-Deoxyglucose Uptake, 5/82.
14. #6084, Determination of Procainamide Acetylator Phenotype in Two Inbred Mouse Strains, 4/82.
15. #6089, Chronic Indwelling Intraplacental Catheters in the Rhesus Monkey, 8/84.
16. #6095, Methods Development for the Analysis of Catecholamines and Indoleamines with the Use of HPLC with Electrochemical Detection, 1/83.
17. #6126, Pharmacokinetics of Doxylamine (Bendectin) in the Nonhuman Primate, 3/88.
18. #6168, Toxicology of Ethanol in the Neonatal Rat, 8/84.
19. #6190, Comparison of Metabolism and Disposition of Dexamethasone (DEX) and Cortisol in the Pregnant Rhesus Monkey during Late Gestation, 7/86.
20. #6214, Hormonal Control of Drug Metabolizing Enzyme Development in the Rat and Monkey, 08/84.
21. #6230, Neuropathology and Behavioral Toxicology of Chronic Delta-9-THC and Marijuana Exposure in Nonhuman Primate, 9/90.
22. #6230.1, Morphometric studies of the Rat Hippocampus Following Chronic Delta-9-Tetrahydrocannabinol, 4/87.
23. #6230.02, Behavioral Effects of Chronic Marijuana Smoke Exposure in the Nonhuman Primate, 1/90.
24. #6230.03, Neurochemical and Neurohistological Evaluation of Rats Administered Chronic Delta-9-Tetrahydrocannabinol (Addendum to IAG E6230), 9/89.
25. #6230.04, Neuropathological Evaluation of Nonhuman Primates Exposed to Chronic Marijuana Smoke, 1/90.
26. #6241, The Development and Implementation of Sucrose Density Gradient Sedimentation Techniques for the Identification of the Cellular Retinoic Acid Binding Protein in Embryonic Mouse Limb Bud, 11/86.
27. #6265, Effect of Trimethyltin on Regional Neurotransmitter Levels and Receptor Binding in Mouse Brain, 7/86.
28. #6282, Developmental Toxicity of Prenatal Trimethyltin (TMT) Exposure, 8/85.
29. #6305, Pharmacokinetics of 14C-Trimethyltin in the Rat, 2/87.
30. #6315, Neurochemical Evaluation Following Prenatal Reserpine Exposure, 7/87.
31. #6316, Developmental Neurochemical Evaluation Following Prenatal Trimethyltin (TMT) Exposure, 4/86.
32. #6335, Preweaning Behavioral and Neurochemical Evaluation Following Prenatal Imipramine Exposure, 11/87.

33. #6341, Behavioral Teratology of the Alpha-2 Adrenergic Receptor Agonists Clonidine and Lofexidine: Neurochemistry (Addendum to E6339), 3/88.
34. #6356, Plasma Concentrations of Cholecystokinin (CCK) and ß-Endorphin (BE) in Rhesus Monkeys Before and After Feeding, 9/87.
35. #6362, Stress and Catecholamine Systems in the Brain, 7/87.
36. #6372, The Effect of Transplacental Diphenylhydantoin (DPH) Exposure on Fetal Thyroid Function (The interaction of diphenylhydantoin (DPH) with the thyroid system in the developing rat), 11/87.
37. #6385, The Transplacental Pharmacokinetics of Trimethyltin, 8/87.
38. #6405, Effects of MDMA Administration on Brain Neurochemistry, Histology and Immunohistochemistry, 9/87.
39. #6410, Effects of Dexamethasone on the Development of P-450 Isozymes in the Rat Using Testosterone Metabolism as a Biomarker of Toxicity, 3/90.
40. #6412, Estrogenicity of 16-Methylene Estradiol and its Effects on Estradiol Metabolism in the Rat, 9/87.
41. #6417, Comparative Metabolism of Estrogen Using In Situ Placental Perfusion*, In Vitro* Placental Perfusion, *In Vitro* Placental Microsomal Metabolism and Maternal Fetal Metabolism as Models, 10/88.
42. #6426, The Effects of Protein Binding on Salicylate-Induced Teratogenicity in the Rat, 11/89.
43. #6431, Biomarkers for Neurotoxicity, 3/88.
44. #6432, Transport and Metabolism of Dexamethasone (DEX) in the *In Vitro* Perfused Human Placenta, 5/88.
45. #6433 (6446), The Effect of Pre- and Postnatal Phenytoin (PHT) Exposure on the Thyroid Status of the Developing Rat Pup, 11/89.
46. #6437, Comparing the Predictive Sensitivity of Neurological, Hormonal, Behavioral and Immunologic Biomarkers in the Rat Following Circumventricular Organ (CVO) Damage, 9/90.
47. #6446 (6433), Development of Dosing Schedules for Chronic Exposure of Pregnant Rats and Rat Pups to Phenytoin, 11/89.
48. #6447, Effect of Trimethyltin on Rat Hepatic Glutathione Transferases *In Vivo* and *In Vitro*, 10/89.
49. #6449 (496), The Metabolism and Toxicity of Pyrilamine Maleate and Methapyrilene Hydrochloride in Primary Cultures of Rat Hepatocytes, 10/89.
50. #6451, Comparative Effects of Acute Delta-9-Tetrahydrocannabinol and Marijuana Smoke on a Battery of Behavioral Tests in the Rhesus Monkey, 3/88.
51. #6453, Nutrition and Hepatic Isoenzyme Systems: Effects of Fasting, Route of Nutrients Delivery and Specific Nutrient Interaction, 2/88.
52. #6453.1, Nutrition and Hepatic Isoenzyme Systems: Effects of Fasting, Route of Nutrients Delivery and Specific Nutrient Interaction, 2/88.
53. #6456, Biomarkers for Phenytoin-Induced Developmental Toxicity, 9/89.
54. #6468, Effects of MDMA Administration on Brain Neurochemistry, Histology and Immunohistochemistry in the Monkey, 9/88.
55. #6469, Regional Distribution and Metabolism of MDMA in the Rat, 9/89.
56. #6488, Stereospecific and Metabolic Requirements for the Neurochemical Effects of MDMA in the Rat, 9/89.
57. #6490, Effects of Thallium on Dopamine Receptor Binding in Different Regions of the Rat Brain, 9/89.
58. #6500, Amphetamine-Induced Biochemical and Behavioral Alterations in Immature and Young Male and Female Rats, 9/89.
59. #6504, Pharmacokinetics of 13-Cis and All-Trans-Retinoic Acid in the Cynomolgus Monkey, 9/90.

60. #6542, Effect of Trimethyltin (TMT) on Amino Acid Concentrations in Different Regions of the Mouse Brain, 9/90.
61. #6568, Developmental Neurotoxicity of Methylenedioxymethamphetamine (MDMA), 8/90.
62. #6595, Self-Administration of the Volatile Nitrates by the Rhesus Monkey, 9/90.
63. #6596, Pharmacokinetics of Multiple Doses of Vitamin A (Retinol) in the Cynomolgus Monkey, 6/90.
64. #6615, Dietary Protein Alters Glutamate Receptors and Longevity, 4/90.
65. #6639, Prenatal Phencyclidine (PCP) Exposure in the Rat: Effects on Dopamine, PCP and NMDA-Receptor Systems in Offspring, 10/92.
66. #6698, Oxidative Reactive Species Induced Neurotoxicity: Possible Mechanisms of Action of Methamphetamine (METH) and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP), 8/94.
67. #6699, Specific Cocaine Actions Responsible for D2 Supersensitivity During Early Development in Prenatally Cocaine-Exposed Rats, 7/93.
68. #6705, Short- and Long-Term Methamphetamine (METH) Toxicity in the Rat, 11/92.
69. #6725.00.03, Neurotoxicity Assessment of Human Immunodeficiency Virus (HIV) Therapeutics in Nonhuman Primates: Preliminary Studies, 7/93.
70. #6725.05, Anatomical Localization of ddC Within the CNS Following Systemic and Intracranial Administration to the Fetal Monkey and Adult Rat, 9/94.
71. #6725.06, Placental Transfer and Fetal Disposition of 2'3'-dideoxyinosine (ddI) in the Monkey, 12/94.
72. #6745.01 and .03, Ischemic Hypoxia and Fetal Neurotoxicity, 5/94.
73. #6828, Manganese-induced Oxidative Stress by Reactive-Oxygen-Species: Possible Mechanism of Neurotoxicity, 11/94.
74. #6842, Interactive Effects of Prenatal Cocaine and Nicotine Exposure on Maternal Toxicity, Postnatal Development and Behavior in the Rat, 3/94.
75. #6753.00, .01 and .03. Behavioral and Neurochemical Effects of Chronic Methylenedioxymethamphetamine (MDMA) Treatment in Rhesus Monkeys, 5/95.
76. #6814, The Role of Hyperthermia in the Neurotoxicity Produced by Methamphetamine, 8/95.
77. #6821, Age Potentiation of Hippocampal and Nigrostratal Neurotoxicity in Primates, 8/95.
78. #6992, Validation Study of the Physiologically-Based Pharmacokinetic (PBPK) Model for Description of 2,4,-dichlorophenoxyacetic Acid (2,4-D) Dosimetry in the Central Nervous System, 9/95.
79. #6725, Use of Rodent Operant Test Battery (OTB) and Other Tests to Assess Neurobehavioral Toxicity of ddC, 10/95.
80. #6818, Characterization of the Neurohistological Toxicity Associated with Low Dose Exposures to Domoic Acid in the Rat, 10/95.
81. #6869, The Effect of Prenatal Hypoxia on Postnatal Hippocampal Development in the Rat: Behavioral, Neurohistological and Neurochemical Studies, 10/95.
82. #6869.01 and 6869.11, Effects of Ischemia-Hypoxia Induced by Interruption of Uterine Blood Flow on Fetal Rat Liver and Brain Enzyme Activities and Offspring Behavior, 11/95.
83. #6725.70, Neurotoxicity Assessment of Anti-Human Immunodeficiency Virus (HIV) Therapeutics in Nonhuman Primates: Comparison of ddI to Isoiazid, 9/96.
84. #6761.00, Postnatal Ontogeny of Neurotoxicity Susceptibility to Phenylisopropylamine Serotonergic Neurotoxicants, 9/96.
85. #6884.01, Developmental Neurotoxicological Assessment of Fumonisin Toxicosis in Rats, 9/96.
86. #6730, Use of Rodent Operant Test Battery (OTB) to Assess Neurobehavioral Toxicity: Preliminary Studies, 4/96.
87. #6988, Age-Related Changes in Antioxidant Enzymes, Superoxide Dismutase, Catalase, Glutathionie Peroxidase and Glutathione in Different Regions of Mouse Brain, 9/96.

88. #6845.00, Development and Validation of a Method for Screening Potential Neurotoxic Effects of Prenatal Alcohol Exposure Using Autoradiographic Measurement of Cellular Metabolic Markers, 5/97.
89. #6727.00, Age Potentiation of TMT Neurohistological Toxicity in Rats, 10/97.
90. #6829.00, Effect of Manganese on the Concentration of Amino Acids in Different Regions of the Rat Brain, 12/97.
91. #2500.00, Preliminary Assessment of a Method for Screening the Potential Neurotoxic Effects of Anti-HIV Therapeutics Using Autoradiographic Measurement of Cellular Metabolic Markers, 3/98
92. #2501.00, Neurotoxicity Assessment of HIV Therapeutics in Nonhuman Primates, 4/98.
93. #6719.00, Effect of Manganese on the Concentration of Amino Acids in Different Regions of the Rat Brain, 9/98
94. #6903.01, Factors Affecting the Neurotoxicity of Amphetamines and Related Compounds, 9/98.
95. #2501, Placental Transfer and Fetal Distribution of the Human Immunodeficiency Virus (HIV) Therapeutics, 3'-azido-2',3-dideoxythmidine (AZT), 2'3'-dideoxyinosine (ddl), and 2'3'-didcohydro-2',3'-dideoxythymidine (d4T), 3/98.
96. #6903.00, Factors Affecting the Neurotoxicity of Amphetamines and Related Compounds, 8/98.
97. #6887.00, Evaluation of Constitutive and Stress-Induced Levels of Expression of Heat-Shock Proteins in Cu/Zn-Superoxide Dismutase Transgenic Mice, 1/99.
98. #6923.01, 3-nitropropionic Acid (3-NPA) Hypoxia in the Rat: Neurochemical and Neurohistological Studies, 8/99.
99. #6943.00, Behavioral and Neurochemical Effects of Short Course, High Dose Exposure to Methylenedioxymethamphetamine (MDMA) or Dexfenfluramine (d- FEN) in Rhesus Monkeys, 9/99.
100. #6926.01, Implementation of Molecular Biological Techniques for Assessing Changes in Neurogrowth/Neurotrophic Factors after Exposures to Neurotoxicants and other Substances, 4/01.
101. #6992.01, Validation Study of the Physiologically-based Pharmacokinetic (PBPK) Model for Description of Low-dose, Long-term Exposure of 2,4-Dichlorophenoxyacetic Acid (2,4-D) Dosimetry in the Central Nervous System (CNS), 5/01.
102. #7019.01, Experimental Autoimmune Prostatitis: Implications for the Prevention and Treatment of Inflammatory and Neoplastic Disorders of the Prostate Gland, 5/01.
103. #7024.01, Evaluation of the neurotoxic effects and determination of the mechanisms of induction of limbic seizures produced by amphetamine and related compounds, 5/02.
104. #7010.01, Metabolic Correlates of the Neurotixicity Associated with Exposure to the Mitochondrial Inhibitor 3-nitropropionic Acid (3-NPA) in the Rat: The Role of Free Fatty Acids (FFA), 5/02.
105. #6914.01, Validation of the NCTR Rodent Operant Test Battery as an Adjunct to the NCTR Primate Operant Test Battery: Implications for Risk Assessment and the Prediction of Neurobehavioral Toxicity across Species, 8/02.
106. #7013.01, Development and Validation of a Neurohistochemical Test Battery for Resolving the Distribution of Lesions and the Underlying Mechanisms of Action of Neurotoxicants, 8/03.
107. #6983.01, Effects of Ibogaine on Neurotransmitter Systems, Generation of Free Radicals and Nitric Oxide Synthase Activity: Correlation with Neurohistological Evaluations in Mouse and Rat Brain, 8/03.
108. #7038.01, Acute Toxicity of Iron Compounds in Young Mice and Rats, 8/03.
109. #3100.01, Quantitative Procedures for Neurotoxicity Risk Assessment, 11/05.
110. #7140.01, An efficient regulatory method for evaluating chromosomal damage: analysis of micronucleus in different rat strains by flow cytometry.

111. #E07121.01, Evaluation of Novel Genetic Changes and Post-Translational Modification in the Protein Products of Specific Genes in Parkinson's Disease and in Substituted Amphetamine Neurotoxicity Using Quantitative Proteome Analysis in Mice Models and Human Subjects.
112. #E07110.01, E07110.11, E07110.21, E07110.31 – The Role of Mithochondrial Energy Disruption in the Mechanism of Neurotoxicity, Neurophysiology, Neurochemical, and cDNA Approaches.