

# EMERGING ISSUES IN NEUROTOXICOLOGY

November 18 – 21, 2002 • The Peabody Hotel • Little Rock, Arkansas

## BIOGRAPHIES OF INVITED SPEAKERS

### **WILLIAM ATCHISON, PHD (2002)**

Dr. William D. Atchison, Ph.D. is Professor of Pharmacology and Toxicology and of Neuroscience at Michigan State University. Dr. Atchison was formerly Director of the Neuroscience Program in the College of Osteopathic Medicine at MSU. Dr. Atchison received all his degrees at the University of Wisconsin- Madison, and postdoctoral training in Pharmacology at Northwestern University School of Medicine. He has served on numerous NIH-sponsored study sections, most recently completing assignment as Regular Member on the Alcohol-Toxicology Panel 3 Study Section. Dr. Atchison's research interests focus on mechanisms of neurotoxicity- particularly for diseases or chemicals which disrupt neurotransmission.

### **JAMES L. BACON**

Mr. James L. Bacon dedicated 42 years of federal service to the U.S. Army becoming the premier expert in Army's chemical biological matters. Mr. Bacon served 17 years as the Civilian Executive at Pine Bluff Arsenal presiding over critical programs such as the destruction of the Army's BZ inventory (3-quinuclidinyl benzilate less than lethal hallucinogenic) and the \$550 million Binary (chemical weapons) Program. Progressing to the Congressional appointed Senior Executive Service, Mr. Bacon became the nation's Program Manager for Chemical Demilitarization. He was responsible for the \$24 billion program chartered with the destruction of the entire United States stockpile of chemical weapons and the acquisition of these facilities needed to protect public health and the environment. Retired from Army civilian service in 2002, Mr. Bacon presides today as the Chairman of the Governor's task force for acquisition of the DoD Vaccine Production Facility. Mr. Bacon earned his Bachelor's degree in Mechanical Engineering from the university of Arkansas at Fayetteville.

### **STEVEN BRADBURY, PHD (2002)**

Dr. Steven P. Bradbury is Division Director of the Mid-Continent Ecology Division in Duluth, Minnesota. Dr. Bradbury received his PhD in Toxicology and Entomology in 1985 from Iowa State University. His research interests include toxic mechanisms, xenobiotic metabolism, computational toxicology, and ecological risk assessment. He is an internationally recognized authority on the use of SAR and QSAR approaches in risk assessment and is playing a lead role in the development of a research program on computational toxicology in the Office of Research and Development at the US EPA.

### **RICHARD A.CANADY, PHD**

Dr. Canady received a PhD in physiology and neurophysiology from Rockefeller University in 1986. Throughout his career he has developed both cancer and non-cancer dose-response and safety risk assessments for many major contaminants for environmental and food-borne exposures. Dr. Canady is a board certified toxicologist with over 15 years experience teaching and practicing risk assessment, who has both lead and participated in WHO/FAO committees developing exposure and safety risk assessments and consultations for major food contaminants, including mycotoxins, dioxins, and most recently acrylamide. For

FDA and previously for the Agency for Toxic Substances and Disease Registry Dr. Canady frequently worked on safety risk evaluations for sensitive situations where the information was evolving, there was considerable public awareness of the evaluations, and where uncertainty assessment was an essential aspect of decision support. Dr. Canady is the technical lead for the development of FDA's plan for acrylamide, and is actively involved in data needs assessments feeding into that plan through various government, public, and technical meetings.

### **DANIEL A.CASCIANO, PHD (2002)**

Dr. Casciano received a Ph.D. degree in Cell Biology from Purdue University and was a postdoctoral fellow in Biochemistry at the University of Tennessee Biomedical Division at the Oak Ridge National Laboratories. He joined the Food and Drug Administration, Division of Mutagenesis Research, National Center for Toxicological Research in 1973. During his tenure at the National Center for Toxicological Research, he has held the positions of Director, Program on Mutagenesis; Director, Division of Mutagenesis Research; Director, Division of Genetic Toxicology; Director, Division of Genetic and Reproductive Toxicology; Deputy Director for Research; and Acting Director and Director. Dr. Casciano is an Adjunct Professor in the Departments of Pharmacology and Toxicology and Biochemistry and Molecular Biology, University of Arkansas for Medical Sciences. He is also a member of the editorial board of the journal *Environmental and Molecular Mutagenesis*, and is Associate Editor of *Cancer Epidemiology, Biomarkers and Prevention*. He also served as Associate Editor of *Teratogenesis, Carcinogenesis and Mutagenesis*.

Dr. Casciano has published extensively in peer-reviewed journals. He has research interest in animal, cellular and molecular toxicology and is an advocate of the use of DNA and RNA-based techniques in understanding mechanisms of toxicity in animal models and in humans. He has a high interest in promoting the use of DNA microarrays and proteomics in the field of toxicology.

**CHARLES, H. CECIL**  
*to be supplied*

### **ARION CHATZIOANNOU, PHD**

Dr. Arion Chatzioannou received his Ph.D. degree in Biomedical Physics from the University of California at Los Angeles. He currently is with the faculty at the Department of Medical & Molecular Pharmacology UCLA School of Medicine and a member of the Crump Institute for Molecular Imaging. He also is the Director of the small animal imaging facility at the Department of Molecular & Medical Pharmacology. Dr. Chatzioannou has been instrumental in the development of the microPET technology that has allowed the application of Positron Emission Tomography (PET) for in-vivo imaging of small animal models. His current research interests are in the development of instrumentation and technology for dedicated small animal imaging systems, including x-ray micro computed tomography, microPET and optical imaging.

## **DEBORAH A. CORY-SLECHTA, PHD**

Dr. Deborah A. Cory-Slechta is Chair of the Department of Environmental Medicine as well as Director of the NIEHS Environmental Health Sciences Center at the University of Rochester Medical School. She is also Co-Director of the Interdepartmental Graduate Program in Neuroscience and served previously as Acting Chair of the Department of Neurobiology and Anatomy. She received her PhD degree in 1977 in Psychology with minors in Pharmacology. She subsequently became a staff fellow of the National Center for Toxicological Research 1977-1979. This was followed by positions as postdoctoral fellow and Research Associate at the University of Rochester. She was then appointed Assistant Professor and rose to Professor. She serves as Associated Editor on three international journals as well as on numerous additional editorial boards. In addition, Dr. Cory-Slechta has served on a range of advisory committees and consultantships for the NIH, EPA, FDA and the National Academy of Sciences. She currently serves on the Advisory Council of the National Institute for Environmental Health Sciences of the NIH. She has served on study sections of the NIH, EPA and the U.S. Army. Dr. Cory-Slechta has authored over 80 papers and chapters devoted to developmental environmental neurotoxicology, particularly of low-level lead exposure.

## **MARK H. ELLISMAN, PHD**

*PhD, University of Colorado, Boulder, 1976* in Molecular, Cellular and Developmental Biology. Has received numerous awards including a Jacob Javits award from the NIH and the Creativity Award from the National Science Foundation; a Founding Fellow of the American Institute of Biomedical Engineering; UCSD teaching and lecturing awards that include the Department of Neurosciences Award for Outstanding Teaching, 1987, 1992 and in 2001 and the UCSD University lecturer in BioMedicine; Interdisciplinary coordinator for the National Partnership for Advanced Computing Infrastructure (NPACI) and leader for the Neuroscience thrust for the NPACI, which involves integration of brain research and advanced computing and communications technologies; Director for the NIH Biomedical Informatics Research Network to provide a framework for multiscale imaging infrastructure linking the major neuroimaging centers in the US.

Research interests include development and application of advanced imaging technologies to obtain new information about cell structure and function. Now directs the National Center for Microscopy and Imaging Research (NCMIR), and internationally acclaimed technology development center and research resource established by the National Institute of Health (NIH). Scientific contributions include work on basic molecular and cellular mechanisms of the nervous system and development of advanced technologies in microscopy and computational biology. Pioneer in the development of three dimensional light and electron microscopy and combined application of these image acquisition tools and computational technologies to achieve greater understanding of the structure and function of the nervous system. Research group was the first to introduce the idea of "Telemicroscopy" by demonstrating the network-enabled remote use and sharing of a high energy electron microscope in 1992 and then developed practical systems now in use by researchers in the US and abroad

**G. JEAN HARRY**  
*to be supplied*

## **COLONEL MARK R. HENSCHIED**

*Commander, Pine Bluff Arsenal*

Colonel Mark R. Henschied assumed command of Pine Bluff Arsenal on 3 August 2001. The two years prior, he served as the Deputy Chief of the System Applications Division in the

Technology Development Directorate, Defense Threat Reduction Agency. He was commissioned as a Regular Army Chemical Corps Officer in 1978 following completion of a Bachelor of Science degree in Biology and designation as a Distinguished Military Graduate from Idaho State University. He is a graduate of the Chemical Officer Basic and Advanced Courses, the Naval College of Command and Staff, and the Industrial College of the Armed Forces. He is a recipient of Master of Science degrees in Radiological Sciences from the University of Washington, and National Resource Strategy from the National Defense University, and a Master of Arts degree in National Security and Strategic Studies from the Naval War College. Upon completion of graduate studies at the University of Washington in 1987, he was assigned to the U.S. Army Chemical School where he served as an instructor in the Radiological Division, and Executive Officer, 84<sup>th</sup> Chemical Battalion. Other assignments include Commander, Tooele Army Depot in Utah; Division Chemical Officer for the 10<sup>th</sup> Mountain Div, Ft Drum, NY; and Executive Officer to the Director of Space and Special Weapons and later the Deputy Director for Strategy, Plans and Policy in the Office of the Deputy Chief of Staff for Operations and Plans at the Pentagon.

## **SANDRA W. JACOBSON, PHD**

Sandra W. Jacobson is Professor in the Department of Psychiatry and Behavioral Neurosciences in the Wayne State University School of Medicine. She received her Ph.D. in Personality and Developmental Psychology at Harvard University. Her research program has focused on the effects of neurotoxic agents, including environmental contaminants, alcohol, and cocaine, on cognitive and behavioral development in infants and children. This research has included studies in Northern Quebec, Greenland, Taiwan, Israel, and South Africa.

**LAWLER, CINDY**  
*to be supplied*

**LOPACHIN, RANDY**  
*to be supplied*

## **SUSAN MAKRIS, MS**

Susan Makris received her undergraduate degree in genetics from the University of Wisconsin, and her MS in Environmental Toxicology from American University in Washington, DC. She gained practical experience in developmental and reproductive toxicology at several contract laboratories from 1974 through 1991. Since 1991, Dr. Makris has been a toxicologist with the Environmental Protection Agency (EPA), Office of Pesticide Programs (OPP), evaluating hazard and risk characterization for numerous pesticides, participating as a member of Health Effects Division (HED) peer review committees, and focusing in particular on issues relevant to the assessment of developmental and reproductive toxicity. Since the Food Quality Protection Act (FQPA) was passed in 1996, she has been involved in OPP and Agency-wide deliberations on the application of the 10X FQPA safety factor for infants and children. She is a member of the EPA interoffice 10X Task Force and the OPP 10X Policy Working Group, and has presented OPP policy documents to the FIFRA Scientific Advisory Panel. Susan has been involved since 1992 with EPA guideline revision and harmonization efforts; she chaired the interoffice/ interagency working group that developed recommendations for revisions to the developmental and reproductive toxicology testing guidelines for studies conducted under FIFRA and TSCA. She continues to participate in similar and related activities, currently focusing on issues specific to the developmental neurotoxicity testing guideline.

## **BARBARA MCELGUNN, RN**

Barbara McElgunn is Health Policy Officer for the Learning Disabilities association of Canada (LDAC); and has served on the Research Committee of the Learning Disabilities Association of America since 1980. She represented LDAA at US Environmental Protection Agency scientific workshops on developmental neurotoxicity testing; pesticides; and PCBs; and was an invited participant to the first national conference on children's environmental health and policy issues in Washington, 1994; took part in two expert workgroups developing the OECD Neurotoxicity Test Guideline, and has been a participant in numerous Canadian science/research/policy workshops on children's environmental health issues. She serves on the Pest Management Advisory Council in Canada, and on the Advisory Council of the Canadian Institute of Child Health. Her work includes collaboration with numerous environmental and health organizations in the US and Canada on issues and programs of environmental Health policy, prevention surveillance and public awareness. She has prepared numerous briefs and position papers to the federal government and parliamentary committees, to the Senate hearing on MMT; has authored or co-authored journal, and other articles on children's exposures, research and risks to development. Barbara graduated in nursing from the Royal Victoria Hospital in Montreal and obtained a post-graduate specialty in neurosurgical and neurological nursing from the Montreal Neurological Institute.

## **GINA MUCKLE, PHD**

Gina Muckle, PhD in psychology from Laval University. Postdoctoral training under Joseph L. Jacobson and Sandra W. Jacobson from Wayne State University (neurobehavioral teratology) followed by a second postdoctoral training at Laval University with Eric Dewailly (environmental contaminants and public health). Have been developing on two prospective cohort studies of Inuit infants from Northern Quebec (Canada), design to look at the effects of pre and postnatal exposure to PCBs and mercury on physical growth, development and behavior during infancy and childhood.

## **TOSHIO NARAHASHI, PHD**

Dr. Toshio Narahashi, is the John Evans Professor of Pharmacology and Alfred Newton Richards Professor of Pharmacology at Northwestern University School of Medicine in Chicago. Dr. Narahashi is formerly the Chair of Pharmacology at Northwestern University Medical School. For over four decades his laboratory has investigated the molecular mechanisms of numerous drugs, toxins and environmental toxicants, focusing on neurophysiology of ion channels. He has made substantial contributions to the fields of toxicology, pharmacology, neuroscience and physiology- but in particular the area of insecticide neurotoxicology. Narahashi has held faculty positions at the University of Chicago, University of Tokyo, Duke University and Northwestern University. His pioneering work in the 1960's first utilized cellular electrophysiological techniques to demonstrate that the insecticide DDT caused toxicity through interaction with sodium channels in nerve cells. Dr. Narahashi has received numerous awards from scientific societies including the American Chemical Society, the American Society of Pharmacology and Experimental Therapeutics, the Biophysical Society, the Society of Toxicology and the Society for Neuroscience.

## **KENNETH OLDEN, PHD**

Kenneth Olden, Ph.D., was named as the third director of the National Institute of Environmental Health Sciences (NIEHS) and the second director of the National Toxicology Program (NTP) on June 18, 1991. Dr. Olden is a cell biologist and biochemist by training, and has been active in cancer research for almost three

decades. He was director of the Howard University Cancer Center and professor and chairman of the Department of Oncology at Howard University Medical School, before coming to NIEHS. Because of Dr. Olden's outstanding contributions in his field, he was elected to membership in the prestigious Institute of Medicine of the National Academy of Sciences in 1994. Under Dr. Olden's direction, the NIEHS has developed a significant program on the role of the environment in Parkinson's Disease. The NIEHS program focuses on prevention of Parkinson's Disease by funding research to identify environmental triggers, genetic susceptibility as well as defining the biochemical pathways of early disease. Dr. Olden has made research on Parkinson's Disease a top priority within the Institute.

**O'SHAUNESSY, DON**  
*to be supplied*

## **DEBORAH C. RICE, PHD (2002)**

Dr. Deborah Rice received the Ph.D. in toxicology from the University of Rochester and is currently a risk assessor in the area of neurotoxicology with the National Center for Environmental Assessment at the Environmental Protection Agency. She is currently involved in health assessments of PCBs and methylmercury. Dr. Rice previously was a research scientist in the Toxicology Research Division of Health Canada, where she headed a research program focused on characterizing nervous system impairment produced by developmental exposure to the major environmental pollutants PCBs, methylmercury, and lead. Dr. Rice is currently an Associate Editor for the journals *Neurotoxicology*, *Neurotoxicology and Teratology*, and *Environmental Research*. Dr. Rice has authored or co-authored research articles and book chapters in the areas of neurotoxic effects of specific agents, methodological approaches for neurotoxicology research, and risk assessment.

## **LARRY P. SHEETS, PHD**

Dr. Sheets received his PhD in Toxicology from the University of Kansas Medical Center and was a NRC post-doctoral research associate in the Neurotoxicology Division at the U.S. EPA, Health Effects Research Laboratory. At both institutions, his research involved the development and assessment of tests to screen chemicals for neurotoxic potential, in both immature and adult animals. He is a member of the Society of Toxicology and served on the Executive Committees of the Neurotoxicology Specialty Section and the Central States Chapter of SOT. He is also a member of the Behavioral Toxicology Society, the Society for Neuroscience and AAAS and has served on scientific and technical committees including those of the American Industrial Health Council, the Chemical Manufacturer's Association, and the International Life Sciences Institute. At Bayer, he is responsible for all aspects of neurotoxicology that may pertain to Bayer interests worldwide and has been the principal investigator for adult and developmental neurotoxicity studies conducted to support product registrations for Bayer pesticides. His main research interests are sensory tests for neurotoxicity and developmental neurotoxicology.

## **WILLIAM SLIKKER, JR., PHD**

Dr. Slikker is currently Director, Division of Neurotoxicology, National Center for Toxicological Research, FDA, and Adjunct Professor in the Departments of Pediatrics and Pharmacology and Toxicology at the University of Arkansas for Medical Sciences and in the Department of Medicinal Chemistry, University of Tennessee. He received his Ph.D. in Pharmacology and Toxicology; University of California at Davis in 1978 and conducted a Sabbatical Study in 1989 at the Freie Universitat, Berlin. His professional activities include the Teratology Society: Councilor, 1995-1998, Publication Committee Chairperson,

1998-2000 and President, 2002-present; Society of Toxicology: South Central Chapter, President, 1988-1989, Neurotoxicology Specialty Section, President, 1995-1996; American Society of Pharmacology and Experimental Therapeutics: Executive Committee Chairperson for the Developmental Pharmacology Section, 1993-1997 and Program Committee member, 2000-present. He is currently an Associate Editor of *NeuroToxicology*, 1994-present, and *Toxicological Sciences*, 1999-present. His research interests include developmental pharmacology, transplacental pharmacokinetics, neurotoxicology and risk assessment; mechanisms of toxicity and approaches to neuroprotection for substituted amphetamines, excitotoxicants and metabolic inhibitors. He has authored or co-authored over 260 peer-reviewed research articles and book chapters and co-edited the first comprehensive text on Developmental Neurotoxicology.

### **THEODORE A. SLOTKIN, PHD**

Dr. Theodore Slotkin received his Ph.D. in Pharmacology and Toxicology at the University of Rochester and has been on the faculty of Duke University Medical Center for over 30 years. He currently holds full Professorships in three departments: Pharmacology and Cancer Biology, Psychiatry and Behavioral Sciences, and Neurobiology. He is the Director of Graduate Studies for the Integrated Toxicology Training Program and Associate Director of the Undergraduate Concentration in Pharmacology. He has been a member or chair of numerous grant review panels and NIH Consensus Review groups, has served on the National Board of Medical Examiners, and currently is on the editorial boards of the *Journal of Pharmacology and Experimental Therapeutics*, *Brain Research*, and *Brain Research Bulletin*. Dr. Slotkin's research efforts have centered on the cellular and molecular mechanisms that control neuronal development in the fetus, newborn and adolescent, especially the adverse effects of drugs of abuse and environmental contaminants. He is principal author of over 400 research publications and has received numerous awards for his work, including the Alton Ochsner Award Relating Smoking and Health, and both the John J. Abel Award and the Otto Krayer Award from the American Society for Pharmacology and Experimental Therapeutics.

### **BOB SONAWANE, PHD**

Bob Sonawane has served as a Chief, EICG, National Center for Environmental Assessment, Washington D.C. since 1995. Dr. Sonawane also served as an Acting Director of the National Center for Environmental Assessment-Washington Division, as well as the Acting Deputy Director of the Environmental Criteria Assessment Office of ORD in Cincinnati, OH. The principal mission of the EICG is to identify and characterize adverse health and ecological effects due to exposure to environmental agents. It involves research to develop and use of methods, models, techniques, conducts of risk assessments and providing guidance in support of regulatory programs of the agency. Dr. Sonawane served as a Branch Chief, Reproductive and Developmental Toxicology from 1990 to 1995 of the Human Health Assessment Group of the Office of Health and Environmental Assessment. He also served as a Reproductive Biologist (1985 to 1990). Prior to joining EPA, Dr. Sonawane also worked at the Food and Drug Administration and as a faculty member at the University of Pennsylvania and the Children's Hospital of Philadelphia (1975-1984). During his academic tenure, Dr. Sonawane received numerous NIH and private grants, and published several papers in peer-reviewed journals. Dr. Sonawane made several presentations to numerous professional meetings related to risk assessment. He served and continues to serve on numerous workgroups, committees, panels, taskforces, etc., within and outside of the Agency, and organized numerous meetings, workshops, and conferences,

both at national and international level. Dr. Sonawane received his Ph.D. degree from the University of Missouri, in 1971 and received postdoctoral training at the National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina (1972-1975). In 1991, Dr. Sonawane received the Agency's "Joseph Seifter Memorial Award in Regulatory Science" for higher commitment to scientific excellence and understanding of the public impact of regulatory science. In 1996, he also received Agency's Bronze Medal for lead (Pb) capacity building in developing countries and in 1998 Silver Medal for Harmonization of Health Effects OPPTS Test Guidelines. He is also a recipient of numerous Special Act Awards for his scientific and management work for the Agency.

### **PAUL STEWART, PHD**

Dr. Paul Stewart received his Ph.D. from the State University of New York at Binghamton, with an emphasis in behavioral toxicology. He is the Coordinator for the Center for Neurobehavioral Effects of Environmental Toxins at the State University of New York in Oswego, NY. He is Co-Director of the Oswego Newborn and Infant Development Project, which is a prospective, longitudinal study designed to investigate the potential relationships between prenatal PCB exposure and cognitive development in children. Dr. Stewart is also involved in animal research investigating the effects of environmental levels of PCBs on cognitive development in rats. He is currently investigating the effects of PCBs on schedule-controlled behavior, short-term memory and attention. Dr. Stewart also serves on the Editorial Board for *NeuroToxicology & Teratology*.

### **JANUSZ B. SUSZKIW, PHD**

Dr. Suszkiw received his Ph.D. degree in Biochemistry from the George Washington University, Washington, DC, and obtained postgraduate training in receptor neurobiology at Cornell University, Ithaca, NY. His current research interests center on the interaction of environmental factors with endogenous mechanisms in neuronal injury/dysfunction during neurodevelopment and in aging-related neurodegenerative disorders. He has been involved in investigations of the cellular and molecular bases of lead neurotoxicity for the past twelve years. Dr. Suszkiw's prior research experience includes work in developmental neurobiology of cholinergic system with G. Pilar at University of Connecticut, Storrs, synaptic neurochemistry with V.P. Whittaker at the Max Planck Institute, Göttingen, Germany, and electrophysiology of septal neurons with J. Barker at the Neurophysiology Laboratory, NINDS/NIH. He served as a reviewer on several NIH Site Visit groups and was a member of NIH ALTOX Study section. He currently serves on the editorial board of *NeuroToxicology*.

### **JIMMIE L. VALENTINE, PHD**

Jimmie L. Valentine, Ph.D. is a holder of B.S. (Biology) – 1962 and B.S. (Chemistry) – 1964 from Centenary College of Louisiana, M.S. (Medicinal Chemistry) – 1966, and Ph.D. (Medicinal Chemistry) – 1968 from The University of Mississippi. In 1963, he was inducted into the honorary chemistry fraternity, Alpha Sigma Chi. Dr. Valentine began his professional career as a research scientist with Mallinckrodt Pharmaceuticals in St. Louis (1968 – 1973). In subsequent years, he has held academic appointments at three different institutions. The University of Missouri – Kansas City, Schools of Pharmacy and Medicine (1973-1978; Assistant Professor of Pharmaceutical Chemistry and Lecturer in Medicine). Oral Roberts University School of Medicine (1978 – 1990; Associate Professor of Pharmacology, Professor of Pharmacology, and Chairman of Pharmacology). University of Arkansas for Medical Sciences – College of Medicine (1990 – present; Professor of Pediatrics and Pharmacology). Dr. Valentine has been actively involved in pharmacological and toxicological research throughout his

career and is the author of 70 primary publications, 10 chapters in books, and co-author of 2 books. He has received the outstanding teacher award, as well as other awards for outstanding contributions to science and medicine. In 2001, he was honored with the Outstanding Clinical Chemist Award given by the Texas Section American Association for Clinical Chemistry (AACC). He has directed toxicology laboratories at all three academic institutions with which he has been associated. He is a Diplomate of the American College of Clinical Pharmacology, Fellow of the American Institute of Chemists, and Diplomate and Fellow of the American College of Forensic Examiners. Dr. Valentine is a past-Chairman of the Texas Section AACC and currently serves on the editorial board of the *AACC Clinical and Forensic Toxicology Newsletter*. For the past four years, Dr. Valentine has been a scientific advisor to the Arkansas Department of Health for their cooperative program with the United States Army to monitor health related aspects associated with demilitarization of chemical warfare agents at the Pine Bluff Arsenal. His laboratory at Arkansas Children's Hospital is currently being funded under the cooperative program with the Army to establish urine assays for metabolites of chemical warfare agents. Dr. Valentine and his wife, Dr. Carrie Valentine (a research microbiologist in the Genetic Toxicology Division at The National Center for Toxicological Research) are the proud parents of 3 children, 3 spouses of children, 3 grandsons, and a granddaughter. Both Drs. Valentine are members of a contemporary Christian singing group, One Voice, and teach an adult Sunday School class, Cornerstone, at St. James United Methodist Church in Little Rock. Among his other accomplishments, Dr. Valentine is an active pilot that holds a Commercial Pilot certificate with an Instrument rating, and is also a Certified Flight Instructor and was the instructor for his wife mentoring her through the Private Pilot certificate.

### **KENT VRANA, PHD**

Dr. Kent Vrana received his BS with honors in Biochemistry at the University of Iowa in 1978, and his Ph.D. in Biochemistry (Pharmacology minor) from Louisiana State University Medical Center in 1983. His post-doctoral training was with Donald D. Brown (in embryology and molecular biology) at the Carnegie Institution of Washington in Baltimore, MD. In 1986, he joined the department of Biochemistry at West Virginia University Health Sciences Center and, in 1991, moved to the Department of Physiology and Pharmacology at Wake Forest University School of Medicine where he rose through the ranks to full professor in 2001. He serves as Director of Graduate Studies for the Ph.D. program in Physiology and Pharmacology, and is Director of the Molecular Biology Core Facility. He is a member of the editorial boards of *BioTechniques*, the *Scientific World Journal*, and the Cambridge Healthtech Institute Genomic Pathways Reports Series and serves on several NIH, VA, and DoD study sections. He is course director for several graduate courses, including University-wide courses/programs in "Laboratory Techniques in Recombinant DNA Technology", "Ethics in Science" and "Introduction to Professional Development." He has mentored over 15 post-doctoral fellows and graduate students, served on over 50 thesis and dissertation committees, and is the Director of an NIAAA-funded pre- and postdoctoral training grant.

### **WALKER, RONALD C.**

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### **LARRY E. WRIGHT**

*Civilian Executive Assistant, Pine Bluff Arsenal*

Mr. Larry E. Wright presides as the Civilian Executive Assistant over Pine Bluff Arsenal, a DoD owned and operated facility with over 1000 government employees, nearly an equal number of contractors, and a \$110 million annual budget. Mr. Wright began

his civilian career with the Army in 1979 and has been engaged in a variety of sensitive ammunition, chemical defense and weapons demilitarization programs. In 1988, he became the Director of the Chemical Agent BZ Demilitarization Program (3-quinuclidinyl benzilate less than lethal hallucinogenic) at Pine Bluff Arsenal and was instrumental in the successful completion of the Arsenal's first full-scale chemical weapons demilitarization program. Mr. Wright has a Bachelor of Science Degree in Chemical Engineering and is a graduate of the Army Management Staff College. Additionally, he is a registered Professional Engineer and author of *Chemical Engineering Quick Reference*, a study guide for the professional engineering examination.