#### Mohammed Ali, Ph.D.



**Dr. Mohammed Ali** is currently an Assistant Professor at the Department of Technology at Jackson State University, Jackson, Mississippi. Dr. Ali earned the Doctor of Philosophy in Applied Science from the University of Arkansas at Little Rock; M. S. in Computer Science from Oklahoma City University, Oklahoma; M. B. A in Management of Technology from Asian Institute of Technology, Bangkok, Thailand; and B. S. in Mechanical Engineering from Chittagong University of Engineering and Technology, Bangladesh. He has eight peer reviewed journal publications and eighteen conference proceedings in his credit. Dr. Ali's research includes Occupational and Environmental Epidemiology; Toxicology; Computation in Biomedical Engineering;

Computational Biology; Genome Technology; Computational Fluid Dynamics; Bioengineered Drug Design and Non-invasive Delivery; Simulation of Respiratory Drug Delivery; Pharmaceutics; Pharmaceutical Technology; Modeling and Simulation of Lung Airways Deposition; Respiratory Drug Aerosol Generation, Sampling, Characterization, Classification and Delivery; Teaching AutoCAD to the Underrepresented Middle-high-college Students and Teachers; Attracting Minorities in Engineering Education; Data Mining on Student's College Performance and Retention; Continuing Education and Outreach; Science, Technology, Engineering and Mathematics Education.

# Yerramilli Anjaneyulu, Ph.D.



**Dr. Yerramilli Anjaneyulu** is presently working as Visiting Professor in Environmental Science and Chemistry at Jackson State University, Jackson, Mississippi and coordinating the activities of Trent Lott Geospatial & Visualization Research Center (TLGVRC) in e-Center as its Director. He is involved as Lead investigator for the NOAA sponsored program on" Atmospheric dispersion Modeling for Gulf Coast" and a DoD sponsored program on "High-Performance Computational Methods for Novel Materials-Computationally Designed Molecularly Imprinted Polymers as Poisonous Gas Sensors." He received his PhD in Environmental Chemistry in 1973, from Andhra University, Waltair, India. From 1972 to 90, he worked in

various capacities in the faculty of Chemistry at Andhra University and Nagarjuna University in India.

Dr. Anjaneyulu worked as a Visiting Scientist of British Council at University of Stratheclyde, Glasgow, UK from 1984 to 1986. He received advanced training in the application of Remote Sensing and GIS for Natural Resource Management from NRSA Hyderabad, India. From 1990-2002, he worked as a Professor and Head in Centre for Environment, J.N.T.University India when principally responsible for the development of Center for Environment and its academic programs. As a Principal Investigator he executed a number of Research and Development projects sponsored by various governments of India's funding agencies on Geospatial Information Systems, Environmental Impact Assessment, Air pollution modeling monitoring, Sensor development Hazardous waste treatment Hydrogen production Technologies and Nanomaterials. He had 33 years of teaching experience at Post Graduate level and published more than 130 Research Publications in various National and International journals and guided 33 PhD's, Authored 8 books on environmental Technologies and Chemistry from 2002 Jan-2005 October worked as Director of Institute of Science and Technology, JNTU. In 2003 he was invited by Swedish Academy of Sciences in 2002 to nominate a suitable scientist from India for consideration for the award of Nobel Prize in Chemistry and received BEST TEACHER award from Government of A.P INDIA.

# Anthony E. Archibong, Ph.D.



**Dr. Anthony E. Archibong** received a Ph.D. from Oregon State University, in the area of Reproductive Endocrinology and conducted post-doctoral research in the Department of Animal Science, North Carolina State University, Raleigh, in Embryo Physiology. He subsequently conducted another post-doctoral research at the Oregon National Primate Research Center, in Gamete Science. Dr. Archibong is currently an Associate Professor and Director of the Core Endocrine Laboratory in the Department of Obstetrics and Gynecology at Meharry Medical College and a visiting Scholar in the Department of Cell and Developmental Biology at Vanderbilt University.

Dr. Archibong's expertise is in mammalian reproductive biology and the molecular mechanism(s) of environmental influence on reproductive function. He is particularly interested in the adverse effects of environmental pollutants on the hormones that regulate male and female gonadal function, gamete interaction and preimplantation embryo development. He served on the editorial boards, of Biology of Reproduction, Archives of Andrology and Advances in Reproduction and had served as a reviewer for Journal of Animal Science. He is currently on the editorial board of Andrology Update and a reviewer for the Biology of Reproduction, Theriogenology, Fertility Sterility, Journal of Endocrinology and Asian Journal of Andrology. He has served two terms in the UDSA Animal Reproduction Study Panel. Dr. Archibong has authored 27 peer-reviewed manuscripts, a book chapter and more than 62 abstracts in the area of reproductive biology/reproductive toxicology. He has been able to maintain continuous extramural funding for his research from federal and private sources, including a minority supplement from NIH to study sperm function in fertilization events. Dr. Archibong has served as a mentored/preceptor to Ph.D. graduate students and has supervised 11 medical students in research whose data presentations have won both Institutional and National awards.

# Hector Rubio Arias, Ph.D.



**Dr. Hector Rubio Arias** obtained his PhD program at New Mexico State University in 1989. He is a full time researcher in the National Research Institute for Forestry, Agriculture and Animal Production (INIFAP) in Mexico. In addition, Dr. Rubio is a middle time professor in the Autonomous University of Chihuahua. He has written three books and has about 40 publications in different journals. Presently, he is carrying out a research project to determine the level of contamination of the Rio Conchos located in the state of Chihuahua, Mexico. Most of the water of this river goes to the United States as part of the agreement between the United States and Mexico signed in 1944. Dr. Rubio belongs to the National Researchers

System of CONACYT-Mexico and is participating as a member of the biosecurity experts of the CONABIO-Mexico.

#### Cynthia Banks, M.S.



Ms. Cynthia J. Banks has been a U.S. Army Engineer Research and Development Center team member for over 12 years. She is currently working as a Research Biologist in the Environmental Laboratory. She received her B.S. and M.S. degrees in Biology (Environmental Science) and Hazardous Materials Management from Jackson State University. Ms. Banks has the unique opportunity to work on research projects that fall into two broad categories: 1) Large, comprehensive *Programs*, and 2) Comparatively specific, *Reimbursable* studies that are mainly conducted for Corps of Engineers District offices and usually apply to particular geographic areas. As part of the Contaminant Bioavailability and Toxicology Team, her primary research focus is to determine the effects of

environmental contaminants within individuals, populations, and systems of populations within biological systems, and to interpret the significance of those effects. She assesses outwardly observable (lethality, growth, reproduction, etc.) toxic effects of contaminants within exposed organisms.

#### Maria Begonia, Ph.D.



**Dr. Maria Begonia** is a tenured Professor in the Department of Biology, and an Instruction and Research Faculty in the Environmental Science Ph.D. Program in the College of Science, Engineering and Technology at Jackson State University (JSU).

Dr. Begonia received her B.S. degree (major: Microbiology) from the University of the Philippines at Los Banos; M.S. degree (major: Microbiology/minor: Botany) from Mississippi State University (MSU) in Starkville, MS; and a Ph.D. degree (major: Soil Microbiology/minor: Plant Pathology) from the University of Missouri at Columbia (UMC). She conducted her postdoctoral associate studies both at UMC and MSU.

Dr. Begonia has been affiliated with JSU since 1993. Prior to joining JSU, she was affiliated with the University of the Philippines at Los Banos, Mississippi State University and the University of Missouri at Columbia. She is a recipient of the JSU Faculty Research Award in 2006. In addition to her teaching, research and service functions at JSU, she has been serving as an Associate Editor and Editorial Board Member of the Journal of the Mississippi Academy of Sciences since 2002. She has served as Director, Chair and Vice Chair of the Agriculture and Plant Division, Chair and Co-Chair of the Membership Committee, and Member of the Awards and Resolutions Committee of the Mississippi Academy of Sciences (MAS). She also has served as a Business Manager of the Philippine Society for Microbiology. She has been serving as an external reviewer for the journals Environmental and Experimental Botany, Applied Soil Ecology, Environmental Science and Technology, Journal of Environmental Engineering, and the Journal of the Mississippi Academy of Sciences. She also has reviewed a Biology laboratory manual and several Biology book chapters. She also has served for three years (2003-2005) as an invited panelist in the Microbiology, Neuroscience and Anatomy Division as well as the Plant and Animal Science Division of the Graduate Research and Fellowship Program of the National Science Foundation in Washington, D.C. She has authored and/or co-authored several scientific publications including peer-reviewed manuscripts and abstracts. She is a member of several professional organizations including the American Society for Microbiology, National Science Teachers Association, Mississippi Academy of Sciences, Philippine Society for Microbiology (as a Life Member), and Sigma Xi-the Scientific Research Society.

#### Jorge L. Ble-Castillo, Ph.D.



**Dr. Jorge Luis Ble-Castillo** is a Professor of Biochemistry in the Juarez Autonomous University of Tabasco and a Clinical Researcher at the General Hospital 46 of the Mexican Institute for Social Security. He received his undergraduate training in Clinical Biochemistry at National Autonomous University of Mexico and the Ph. D. degree in Medicine Research of the Superior Medicine School, National Polytechnic Institute. He participates in the teaching of biochemistry to medical and graduate students. His research interests are in the areas of biomedical research with special emphasis on oxidative stress, antioxidants, and metabolism alterations in chronic diseases. His current research involves investigations on the effects of banana resistant starch on rodents with diabetes and in patients with obesity and diabetes. Additional interests include the study of metabolic alterations including oxidative stress in patients with

obesity, metabolic syndrome and type 2 diabetes.

#### Rena G. Boss-Victoria, Ph.D.



**Dr Rena Boss-Victoria** is a certified advanced practice nurse, a public health practitioner, leader, researcher, mentor, author and respected educator in the field of public health and nursing. Her educational background consists of a Post-doctorate Fellowship at Alabama State University School of Public Health - Birmingham in Unintentional Injuries and Intentional Injury/ Violence Behavior Risk Reduction, a Doctorate and Masters of Public Health from the University Of Texas Health Science Center School Of Public Health at Houston (UTHSC-H), a Masters of Science in Community Health and Trauma Nursing from Texas Women's University and a BS in nursing from St. Thomas University School of Nursing. At Morgan State University's Public Health Program from 1999 to 2005, she was Director of the MSU Center for HIV Prevention, Evaluation, Policy and Research. Rena's leadership as Associate Professor, Principal Investigator and Project Director for the New Minority Male Health and Youth

HIV Risk Profile, Prevention and Care Integration Development Program (Baltimore site) funded by the Office of Minority Health (DHHS) advanced participatory action research in this most vital area. Additionally she served as tenured Associate Professor/Undergraduate Senior Coordinator for Nursing and tenured Associate Professor /Graduate Program Coordinator for Health Education, College of Nursing and College of Education at Prairie View A & M University of the Texas A &M University Systems (1985-1999). Currently she is faculty in the School of Professional Studies Department of Nursing for graduate and undergraduate nursing programs, and senior public health program consultant with the Minority Male Health Program at Bowie State University. Rena is extensively involved with community-focused prevention work throughout Baltimore and Maryland State on the elimination of the HIV/AIDS crisis and other health disparities, including the tragedy of violence. Her work has included serving as Baltimore's Lead Consultant for the Institute for Social Justice, Criminal Justice and Disease Prevention in directing the Community Symposium, sponsored by U.S. Department of Education (2001). In addition, she served as Co-Chair and one of the major editors of the Final Report to the Baltimore City Council Commission on HIV and AIDS Prevention and Treatment (2002) which resulted in the declaration of a state of emergency in Baltimore to address and immediately mobilize local, regional, and national resources from the public and private sector for HIV/AIDS. Dr. Boss-Victoria was appointed as the Project Coordinator of the 2004 Baltimore City Rapid Assessment, Response and Evaluation (RARE) project (www.baltimorecitycouncil.com) to highlight needs for HIV Prevention among Urban Youth and the address of the inter-related risk factors of violence and poverty. Recently, Rena's work has expanded to include international HIV Prevention Programs, specifically in Tunis, Tunisia as lead consultant for the African Development Bank in the planning and development of a Workplace HIV Prevention Policy (2007) and the Living Well and Working Well Program. But most recently, as Lead Public Consultant for the New Minority Male Health Consortium at Bowie State University, she has designed and developed the Program Planning Model for Prince George County Department of Corrections Health and Wellness Initiative (2007), presented to the Office of Minority Health, U.S. Department of Health and Human Services to support continued funding FY2008.

#### José A. Centeno, Ph.D.



**Dr. José A. Centeno** is a Senior Supervisory Research Scientist and Chief of the Division of Biophysical Toxicology at the Department of Environmental and Infectious Disease Sciences, U.S. Armed Forces Institute of Pathology (AFIP) in Washington D.C. He is also the Director of the *International Tissue and Tumor Repository on Chronic Arseniasis*, the Registry on Uranium and Depleted Uranium, and the International Registry on Medical Geology. Dr. Centeno received his BS and MS in chemistry from the University of Puerto Rico at Mayagüez in 1979 and 1981, respectively; and a Ph.D. in Physical Chemistry from Michigan State University in 1987.

Dr. Centeno has presented over 250 invited seminars and lectures, and published over 85 manuscripts, book chapters (6), reports, monographs, and research abstracts on various topics of trace elements, metals and metalloids,

medical geology, environmental toxicology, biomedical research and environmental health issues. He has served on the organizing and scientific committees of several international conferences, including as General Chairman of the 6<sup>th</sup> International Symposium in Metal Ions in Biology and Medicine (ISMIBM) (May 7-10, 2000), and co-chairman of the 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> ISMIBM (2002, 2004 & 2006). He has served on several international environmental and human health committees including the International Agency for Research on Cancer, the U.S. TOSCA-Interagency Testing Committee, the International Working Group on Medical Geology, the National Research Council Committee on Research Priorities for Earth Science and Public Health, and the U.S. Department of Defense Working Group on Biomonitoring. Since 2005, he has served as Officer for the International Union of Geological Sciences and its Commission on Geoscience for Environmental Management (IUGS-GEM). He serves on the Editorial Board of five scientific journals, as associate editor of the book on Essentials of Medical Geology (2005), as associate editor of the book Metal Contaminants in New Zealand (2005), and as founding member and co-chairman of the International Medical Geology Association. He was recently elected as a Fellow of the Royal Society of Chemistry, London, UK.

Dr. Centeno holds adjunct faculty professorships at major universities and medical institutions including the George Washington University-School of Public Health, Turabo University, Jackson State University, and Hope University-Medical School. He is the recipient of the 2005 Jackson State University Research and Sponsored Programs Excellence Award, the 1996 and 2003 Superior Civilian Service Award from the Department of the Army, the 1999 Distinguish Alumni Award on Science from the University of Puerto Rico-Mayaguez, Guest Professorship Award from China University of Mining and Technology (2002), Distinguished Professor Award from Turabo University in Puerto Rico (2003), the William Evans Visiting Fellow from University of Otago, School of Medicine in Wellington, New Zealand (2004). He serves on the External Advisory Board for several university programs including the NSF Model Institutions of Excellence (MIE) Program at Universidad Metropolitana-PR, US Presidential Advisory Board on Health, Science and Engineering for Ana G. Mendez University System, NIH Research Centers for Minority Institutions (RCMI) Program at Jackson State University, as Chairman of the NIH "URGREAT-MBRS-RISE" Program for Universidad del Este in Puerto Rico, and as Chairman of the NSF Science and Technology Access to Research and Graduate Education (STARGE) program for Jackson State University. Over the last decade, he has focused attention on environmental toxicology, environmental pathology, medical geology, and health effects of trace elements, metals and metalloids, and has conducted research and teaching training activities on medical geology in over 30 countries.

# Edmond E. Creppy, Ph.D.

**Dr. Edmond E. Creppy** has been a Professor of Toxicology since 1989; First Class University Professor since 1996, University Bordeaux; Assistant Professor and senior Assistant Professor, Associate Professor and Research Director from 1975 to 1989, University of Strasbourg Louis Pasteur Institute of Molecular and Cellular Biology, CNRS, Strasbourg. He has received numerous degrees and awards during his luscious career.

Dr. Creppy's work experience and professional responsibilities include: Head of the Department of Toxicology and Applied Hygiene (consisting of a staff of 15 people), University of Bordeaux, Faculty of Pharmacy, 146 Rue Léo Saignat, 33076 Bordeaux (France).

Dr. Creppy is also a member of the following scientific societies, boards and committees: All International Societies of Toxicology including European Society of Toxicology (1987); EUROTOX (1989) and SOT (American Society, 1994); the editorial board and reviewer of the journal Toxicology (from 1991 to 1996 and since 2000) and of the journal Human and Experimental Toxicology (since 1994), and the journal *Archives of Toxicology* from June 1998; *Toxicology and Applied Pharmacology, Life Sciences, BBA*, etc.; several advisory boards at both national and international levels and consultant for Toxicology.

Since 1977, Dr. Creppy has been the author of more than 220 international publications including Toxicology journals, FEBS Letters, BBRC, BBA, Phytochemistry, Tetrahedron Lett. Mutation Research, American Journal of Kidney Diseases, Brain Researches, and New England Journal of Medicine.

# Prescott Deininger, Ph.D.



**Dr. Prescott Deininger** currently holds the Marguerite Main Zimmerman Chair in Basic Cancer Research as a Professor of Epidemiology at the Tulane School of Public Health and Tropical Medicine and is the Interim Director of the Tulane Cancer Center. Dr. Deininger has been an executive editor for Analytical Biochemistry since 1990, and serves on the editorial boards of several international journals, as well as numerous grant review boards. He also serves on the National Institute of Environmental Health Sciences Board of Scientific Counselors for the National Toxicology Program.

Dr. Deininger was a graduate student with Dr. Carl Schmid at the University of California, Davis. He completed his dissertation entitled 'Sequence Organization of the Human Genome' in 1978. He carried out several years of postdoctoral training with Dr. Theodore Friedmann at the University of

California, San Diego, followed by a year as a NATO fellow with Dr. Frederic Sanger at the MRC in Cambridge, England. Among his accomplishments during those years, he completed the sequence of the polyoma virus genome, he developed random shearing of DNA for shotgun DNA sequencing, initiated the EBV sequencing project, and isolated and analyzed the first clones of Alu repeats from the human genome. In 1981, he took a faculty position in the Department of Biochemistry and Molecular Biology at LSU Health Sciences Center, New Orleans. He advanced to the level of Professor before moving to his position at Tulane University. In 1990, he developed the first dominant negative mutants while on sabbatical as an ACS Distinguished Fellow with Dr. Charles Stiles at the Dana Farber Cancer Institute. Dr. Deininger's laboratory continues to be one of the major laboratories studying the role of mammalian mobile elements in creating genetic instability leading to disease.

# Tandabany C. Dinadayalane, Ph.D.



**Dr. Tandabany C. Dinadayalane** received his Ph.D. degree in 2005, from Pondicherry University, India, working with Dr. G. Narahari Sastry. He has been working as a research associate and post-doctoral research associate in Prof. Jerzy Leszczynski's group since 2004. He published 32 papers in highly reputed peer-reviewed journals and 2 book chapters. He presented posters and delivered talks in several conferences. He worked in the area of fragments of fullerenes called buckybowls, explored the structures and inversion dynamics of various buckybowls, and looked to obtain a pattern to control the curvature of buckybowls. He also worked in the area of pericyclic reactions, particularly Diels-Alder and other cycloaddition

reactions using quantum chemical calculations. He explored the potential energy surfaces of small organic molecules and focused to identify novel structures and their synthetic feasibilities.

Dr. Dinadayalane current research interests include investigations of structures and reactivities of different single-walled carbon nanotubes, designing of organic receptors for metal ion recognition and different types of weak non-bonding interactions.

# Kim Dowling, Ph.D.



**Dr. Kim Dowling** did her undergraduate studies in geology at the University of New South Wales (Australia), specializing in economic ecology. After working in Western Australia, she moved to North Queensland to complete a PhD entitled "The discrimination of goldbearing and barren quartz in North Queensland vein deposits" (looking at ways of finding gold by chemically examining quartz in a variety of ways). After her PhD at James Cook University, she then travelled to Papua New Guinea to teach and learn at the University of Papua New Guinea. Apart from the great cultural experience, working or visiting places like Ok Tedi, Misima and Lihir were highlights.

Kim returned to Australia to undertake research jointly at the University of Melbourne and University of Adelaide relating to meteorite impacts and geochemistry. She became interested in environmental matters and completed a graduate qualification in Environmental Management at Deakin University.

Kim has been at the University of Ballarat for some years now and enjoys teaching in the small and friendly environment and pursuing a better environment. She heads up the Arsenic Research Group and has recently been made Head of the School of Science and Engineering.

#### Jesse Edwards, Ph.D.



**Dr. Jesse Edwards** a native of Randallstown, Maryland received his bachelor's degree in Chemistry from Morehouse College with honors. He went on to become the first African American to earn a Ph.D. degree in Theoretical Chemistry from Michigan State University. At that time he was the only African American to earn a Ph.D. in Theoretical Chemistry in the United States. In fact, Dr. Edwards was only the second African American to earn a doctorate degree in Chemistry from Michigan State University over a 26 year period.

While at Michigan State University, Dr. Edwards served as Merit Teaching Assistant and as Instructor for the Charles Drew Teaching Assistance in Chemistry (TAC) Program. This program received recognition from the National Science Foundation for its work with underrepresented students in the Science Technology Engineering and Mathematics (STEM) fields. Among the

many activities that he pursued was his participation in the Student Affiliate Chapter of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), and the American Chemical Society (ACS). During his time at Michigan State the student ACS chapter received recognition as an outstanding chapter by the ACS. He served as President of the student chapter of NOBCChE for many years running many programs including a speaker series and tutoring laboratory. One significant achievement attributed to Dr. Edwards and fellow students within NOBCChE was a record number of African American graduates from the Chemistry department.

Dr. Edwards completed his doctoral work under the direction of Dr. James Harrison studying the electronic structure and geometry of small transition metal containing molecules bonded to main group elements. He was then selected as a College of Natural Science Competitive Affirmative Action Postdoctoral Fellow where he worked with Dr. Piotr Piecuch in the area of Multireference Configuration Interaction studies on the harpooning reaction of Ca-----HCl. Also, Dr. Edwards served as a Visiting Instructor before leaving Michigan State for a position as an Assistant Professor of Chemistry at Florida A&M University in Tallahassee, Florida.

While at Florida A&M University the focus of Dr. Edwards' research has changed to larger systems and expanded to include the use of Molecular Dynamics methods in drug discovery, modeling and protein dynamics. Much of these efforts in this area have been fostered by a strong collaboration with Dr. Adrian Roitberg of the Quantum Theory Project at the University of Florida. He continues to work with students at Florida A&M introducing many of them to research. He has mentored 3 graduate students to Masters' degrees, and over 35 students with their research presentations or posters. Many of his students both graduate and undergraduate have earned distinctions at national, regional and local competitions such as the Annual Biomedical Research Conference for Minority Students and the Florida-Georgia Louis Stokes for Minority Participation Expo.

In 2005 he was selected by NOBCChE as the Henry C. McBay Outstanding Teacher. Dr. Edwards maintains his research while teaching sometimes 5 different courses in a semester; publishing 9 scientific journal and proceedings articles, and serving as a Principal Investigator or Co-Principal Investigator for several grants including the Army High Performance Computing Research Center, the USDA Center of Excellence, NIH RCMI program and many others.

Recently Dr. Edwards completed a sabbatical leave at University of California at Santa Barbara (UCSB) Materials Research Laboratory (MRL) where he worked with Dr. Craig Hawker, Director of the MRL, developing collaborative research programs between Florida A&M and UCSB. Dr. Edwards currently serves on the Technical Advisory Board of Ubiquitous Technologies, Inc.. He also is an active volunteer within his community.

#### Sakina Eltom, Ph.D.



**Dr. Sakina Eltom** is an Associate Professor in the Department of Cancer Biology at Meharry Medical College in Nashville, TN. Her education includes a professional degree in Veterinary Medicine where she was trained in large animal medicine and surgery in University of Khartoum in Sudan, with further training in University of Liverpool, England and Veterinary School of Hannover, Germany. Dr. Eltom went on to earn a Masters of Science and a Ph.D. in Pharmacology from Cornell University in Ithaca NY. Her postdoctoral research experience includes training in chemical carcinogenesis at the McArdle Laboratory for Cancer Research, and training in environmental and molecular toxicology at the University of Wisconsin-Madison. She held numerous academic positions at Cornell University and University of Wisconsin-Madison. She also ventured in the biotechnology world, where she held a Senior Scientist position in Paracelsian Inc., an IPO Biotech Company in Upstate NY. Before joining

the faculty at Meharry, she was an Assistant Scientist in the Department of Pharmacology at the University of Wisconsin Medical School in Madison.

Dr. Eltom's research is investigating the molecular mechanisms of carcinogenesis induced by exposure to environmental poly aromatic hydrocarbons (PAH). The major emphasis is on characterizing the role of the aryl hydrocarbon receptor in the development and progression of breast carcinoma. Another research area in her laboratory is investigating the role of environmental endocrine disruptors in breast cancer of premenopausal women and how the gene-environment interaction contributes as a risk factor to the high incidence of breast cancer in pre-menopausal African American women.

In addition to research, Dr. Eltom has a vast interest in graduate education, contributing as a trainer for Ph.D. students in biomedical sciences, and she currently serves as a director of graduate studies in pharmacology.

# John S. Furey, Ph.D.



**Dr. John S. Furey** is a multidisciplinary scientist specializing in data acquisition and analysis. As a contractor with the US Army Engineer Research and Development Center in Vicksburg for the past dozen years, he is pleased to be tasked with support of projects of national security concern and very wide-ranging scope. Much of his work has been directed to field and laboratory method development for characterizing the environmental effects of military operations.

Dr. Furey's research interests include the fate and effects of organic and elemental contaminants, innovative instrumentation, data fusion, and algorithm development. Current projects for the Environmental

Laboratory involve support of microbiologists, organic chemists, and geneticists investigating the degradation of military compounds in the environment. These investigations typically involve difficult mixtures affected by processes of living microbial communities in complex matrices like soil.

#### Konsuela Glass, Ph.D.



**Dr. Konsuela Yvette Glass** obtained her Ph.D. in Environmental Sciences Jackson State University. She obtained her B.S. degree in biology from Grambling State University in 1992 and her M.S. degree in Environmental Health in 1996 from Mississippi Valley State University.

Dr. Glass worked at the Mississippi Department of Health for seven years as a Public Health Environmentalist. Some of her duties included protecting the public against unsafe and unhealthy environmental practices and conditions, consulting with municipal and county officials concerning air, water, solid waste, and wastewater dilemmas, and assisting with the

surveillance of West Nile Virus by reporting dead birds of all kinds and eliminating places where mosquitoes breed. She has also worked as an adjunct instructor at Mississippi Valley State University instructing students on the basic principles of sanitation with application to food borne diseases, water and wastewater treatment, solid waste management and vector control.

Dr. Glass was under the mentorship of Dr. Paul B. Tchounwou, Associate Dean of the College. In collaboration with others, they have published papers on Environmental Toxicology and Health Effects Associated with Dinitrotoluene Exposure in the Reviews on Environmental Health **2003** and on the Cytotoxicity and Expression of *c-fos*, HSP70, and GADD45/153 Proteins in Human Liver Carcinoma (HepG<sub>2</sub>) Cells Exposed to Dinitrotoluenes in the *Int. J. Envirorn. Research Public Health* **2005**.

Dr. Glass has volunteered her time as a judge for the Greenwood Public School System Science Fair for the last four years, as a judge for the Mississippi Science and Engineering Fair Region II for the past three years, and as a judge for the Mississippi Science Engineering State Fair this past spring.

# Dwayne Hill, Ph.D.



**Dr. Dwayne A. Hill** is currently an Associate Professor at Morgan State University, Baltimore Maryland, in the School of Computer, Mathematical, and Natural Sciences. Dr. Hill received a Bachelor of Science Degree in Biology from Lincoln University, Pennsylvania. He obtained a Masters Degree in Pharmacology and Toxicology from West Virginia University. He then earned a Doctor of Philosophy Degree in Pharmacology and Toxicology from the University of Arizona. Dr. Hill is a member of several national organizations including the American Society of Cell Biology, American Association for the Advancement of Science (AAAS), American Association of Immunologists (AAI), Society of Toxicology (SOT), American Chemical Society (ACS).

Dr. Hill's research interests have focused on the involvement of immune effectors in chemically-induced tissue injury, mechanisms of inflammatory cell-mediated cytotoxicity, role of organic extracts in preventing cellular toxicity, effects of environmental pollutants on immune cell function and the development of biosensor technology for toxicological applications. Recently, the Hill Laboratory has initiated studies to develop cyanine biosensors that would label specific transformed cell populations (TCP) and signal immune effectors to respond to the labeled TCPs. His research has been supported by grants from the National Institutes of Health (NIH), National Institute of Environmental Health Sciences (NIEHS), National Science Foundation (NSF) and Department of Energy (DOE).

# Huey-Min Hwang, Ph.D.



**Dr. Hwang** is a tenured Professor and the Director of Environmental Science Master Program in the Department of Biology of Jackson State University. Dr. Hwang received his Ph.D. in Microbiology from the University of Georgia in Athens, Georgia in 1985 and conducted his postdoctoral associate studies there as well in 1986-1989. He obtained his Bachelor of Science in Biology from the National Taiwan Normal University in Taipei, Taiwan in 1975.

Dr. Hwang has been affiliated with Jackson State University since January 1990. He was awarded the Jackson State University Outstanding Faculty Honoree of the Higher Education Appreciation Day Working for Academic

Excellence (HEADWAE) Program in 2002. He has been serving as a member of the Environmental Toxicology Task Force of the Institutes of Higher Learning of Mississippi State since June 1996. He served as a section editor of Hazardous Waste Remediation for the journal Quintessence<sup>©</sup> in years 1994-1996. He has been serving as a guest member of the editorial board of the Environmental Chemistry section of the journal Chemosphere and as an external reviewer for the journals Environmental Toxicology and Chemistry, Bulletin of Environmental Contamination and Toxicology, International Journal of Molecular Sciences, Environmental Toxicology, Journal of Photochemistry and Photobiology B: Biology, International Journal of Pharmaceutics, and Environmental Science & Technology. He has authored or co-authored over sixty publications in peer reviewed journals/books. He is a member of several professional organizations including the American Society for Microbiology, the Society of Environmental Toxicology and Chemistry and Environmental Mutagen Society.

# Raphael Isokpehi, Ph.D.



**Dr. Raphael D. Isokpehi** received his Ph.D. degree in Medical Microbiology from University of Lagos, Nigeria in 2000. He received research training at the Institute of Environmental Health and Animal Hygiene, University of Hohenheim, Germany as well as the Division of Infectious Diseases, Vanderbilt University, TN, USA. He was a Claude Harris Leon Foundation Postdoctoral Fellow at the South African National Bioinformatics Institute (SANBI) from 2001 to 2004. In the summer of 2004, he was an Ellison Foundation Global Infectious Disease Research Scholar at the Marine Biological Laboratory, Woods Hole, Massachusetts. Since September 2004, he has been an Assistant Professor in the Department of Biology, Jackson State University. His research interests are in biological data mining and integration; gene expression data analysis, text mining and pathogen bioinformatics. He served as first Chair (2006/2007) of the Steering

Committee, Mississippi Computational Biology Consortium (MCBC). He actively supervises undergraduate and graduate students. He organizes bioinformatics and computational biology training workshops at Jackson State University (JSU) and has served on international committees for selecting students for bioinformatics training workshops and travel awards. He is the local liaison for collaboration between the Department of Biology at JSU and Pittsburgh Supercomputing Center's National Resource for Biomedical Supercomputing. He is a co-Lead of the RCMI Translational Research Network (RTRN) Bioinformatics & Computational Biology Working Group.

In February 2008, Dr. Isokpehi was elected to Board of Directors of the MidSouth Computational Biology and Bioinformatics Society (MCBIOS). He serves on the Scientific Program Committee for the 2009 American Medical Informatics Association's Summit on Translational Bioinformatics.

#### Lisa M. Kamendulis, Ph.D.



**Dr. Lisa M. Kamendulis** is currently an Assistant Professor in the Department of Pharmacology and Toxicology at Indiana University School of Medicine. After completing her undergraduate degree in Biology from the University of Massachusetts at Amherst, Dr. Kamendulis received her Ph.D. Toxicology from the University of New Mexico in 1994, where she studied mechanisms of hepatotoxicity, specifically focusing on the induction of apoptosis. Following her Ph.D. work, Dr. Kamendulis completed post-doctoral studies within the Departments of Pathology and Biochemistry at Indiana University School of Medicine, and then acquired additional training as an Assistant Scientist in the laboratory of Dr. James Klaunig at Indiana University. During that time she developed her current research area, which focuses on examining mechanisms by which environmental agents and therapeutic drugs elicit liver cancer. Her

studies use both *in vivo* and *in vitro* rodent models to examine the role of oxidative stress in modulating growth regulatory signaling networks and gene expression elicited by nongenotoxic carcinogens. Research is also directed at examining the role of the Kupffer cell, the resident macrophage in the liver, on the tumor promotion stage of the carcinogenesis process. Information from these studies may ultimately lead to novel disease prevention/intervention strategies and will provide the framework to assess the relative human risk from exposure to environmental toxicants. She has published over 40 peer-reviewed manuscripts, and book chapters.

Dr. Kamendulis has served the science of toxicology both locally and nationally by serving as Councilor, and Secretary-Treasurer of the Ohio Valley Society of Toxicology, as a member and chair of the Placement Committee, and Councilor in the Carcinogenesis Specialty Section of the Society of Toxicology.

# Sunali Khanna, Ph.D.



**Dr. Sunali Khanna** is a faculty member of the Maharashtra University of Health Sciences in Mumbai, India. She is one of the youngest dental specialists of India. She has a great interest in clinical and applied research. She guides students and also takes care of patients at the Nair Hospital Dental College. She is devoted to the healthcare of patients particularly the elderly. Her work and expertise has earned appreciation from the Dental Council of India.

Dr. Khanna qualified in the all India merit examination for a B.D.S seat and later for Masters in Dental Surgery. She won academic distinctions and was recognized by the International College of Dentists in 2001. In 2005 she became the first of her class to qualify the D.N.B (Diplomat of National

Boards) examination in Oral Medicine & Radiology. A year later, she was conferred membership to the National Academy of Medical Sciences, New – Delhi. Recently, she has obtained the Post Graduate Diploma in Hospital & Healthcare Management from the Symbiosis International University, Pune. She is presently a member of the Executive Committee of the Indian Academy of Oral Medicine & Radiology. She is also on the Peer Review Board of numerous National and Overseas journals and has been approached by the Saha Institute of Nuclear Physics, Kolkata and Bhabha Atomic Research Centre, Mumbai for collaboration in key projects. She has co-authored book manuals apart from publishing 30 research papers in national and international journals. She has made presentations at several national and international conferences including the World Dental Congress; 3<sup>rd</sup> Asia Pacific Congress of Craniofacial Surgery in the Republic of Maldives; 16<sup>th</sup> International Congress of Dentomaxillofacial Radiology in China; 6<sup>th</sup> International Congress of Orthodontia in Iran; and 10<sup>th</sup> International Symposium on Metal Ions in Biology & Medicine in France.

# Joseph R. Landolph Jr., Ph.D.



**Dr. Joseph R. Landolph, Jr.,** is currently Associate Professor of Molecular Microbiology, Immunology, and Pathology, and a Member of the USC/Norris Comprehensive Cancer Center, in the Keck School of Medicine, and Assoc. Professor of Molecular Pharmacology/Pharmaceutical Sciences, in the School of Pharmacy, with tenure, at University of Southern California (USC) in Los Angeles, California. He received a B. S. degree in Chemistry from Drexel Univ. (Phila., Pa.) in 1971, and a Ph. D. in Chemistry from Univ. of California at Berkeley in 1976 under the late Professor Melvin Calvin. For his Ph. D. thesis, he studied metabolism of the chemical carcinogen, benzo(a)pyrene, and molecular mechanisms of its ability to induce cytotoxicity to mouse liver epithelial cells and

morphological transformation in Balb/c3T3 mouse fibroblasts.

Dr. Landolph is commissioned as a 2<sup>nd</sup> Lieutenant in the U. S. Army through ROTC at Drexel University, and received training in Nuclear/Chemical/Biological Warfare Protection at Ft. Sam Houston, San Antonio, Texas, in 1976 and as a First Lieutenant in the U. S. Army.

Landolph performed postdoctoral study in chemically induced mutagenesis and morphological/neoplastic cell transformation at the USC/Norris Comprehensive Cancer Center at USC under Professor Charles Heidelberger (1977-1980). He was appointed Assistant Professor of Pathology in 1980 and Assoc. Professor of Microbiology, Pathology, and Toxicology in 1987, at USC. His research interests include the genetic toxicology of carcinogenic Ni, Cr, and As compounds and PAH. His laboratory also studies the molecular mechanisms Ni, Cr, As, and PAH-induced morphological and neoplastic transformation of C3H/10T1/2 mouse embryo cells and the cell and molecular biology of cell His laboratory studies the ability of carcinogenic Ni compounds to activate overexpression of oncogenes and inactivate expression of tumor suppressor genes in cells transformed by insoluble carcinogenic Ni compounds (nickel subsulfide, NiS, and green/black NiO).

Dr. Landolph is an expert in chemically induced morphological/neoplastic transformation and mutation in murine and human fibroblasts. He is author/co-author of 55 scientific publications and co-editor of a textbook entitled, "Molecular Carcinogenesis and the Molecular Biology of Cancer. He has held peer-reviewed grant support from U.S. EPA, U. S. NCI, U. S. NIEHS, and Nickel Producers Environmental Research Association (NiPERA).

Dr. Landolph has served as a grant reviewer for U. S. EPA Health Effects Research Panel, for special RFAs for NIEHS, and as an ad hoc member of the Chemical Pathology and Al-Tox-4 Study Sections of NIH. He is a member of the Carcinogen Identification Committee of the Scientific Advisory Committee of the Office of Environmental Health Hazard Assessment of California's EPA (1993-Present); and a member of the Scientific Review Panel for Toxic Air Contaminants of California's EPA (2003-Present). He is also a member of the Drinking Water Committee (2002-2008) and the Human Health Research Strategies Review Committee (2002-2004) of the Science Advisory Board of the U. S. E. P. A., and a member of the Human Health Research Review Subcommittee of the Board of Scientific Counselors of the U. S. EPA (2005-2007).

Dr. Landolph is the recipient of numerous awards, including the Merck Award in Chemistry from Drexel Univ. in 1971, an American Cancer Society Postdoctoral Fellowship (1977-1979), the Edmundson Teaching Award in the Dept. of Pathology at USC (1985), and a Traveling Lectureship Award from U. S. Society of Toxicology (1990).

#### Dora N. Mbanya, M.D., Ph.D.

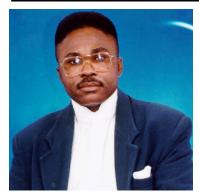


**Dr. Dora Mbanya** is Associate Professor of Haematology in the Faculty of Medicine and Biomedical Sciences in the University of Yaoundé I, Cameroon, and Consultant Haematologist in the University Teaching Hospital in Yaoundé, Cameroon. Her major interest is in Transfusion Medicine and HIV/AIDS-related issues in Sub Saharan Africa. She serves on national and international scientific committees, including the Expert Panel Committee for Blood Transfusion in the World Health Organisation in Geneva, and the Working Party for Transfusion Transmissible Infections of the International Society for Blood Transfusion. She also serves on the Editorial Board of Health Sciences and Disease and is a member of several professional societies. She has worked with the Cameroonian community rendering services through her membership in the Cameroon Medical

Women's Association where she has held several posts in the past. She is currently the National President for the Society for Women and AIDS in Africa (SWAA) in Cameroon, where, as part of her contribution to community services, participates in reaching the community at various levels and positively impacting on their lives.

Dr. Mbanya studied Medicine at the University Center for Health Sciences (CUSS), Yaoundé, Cameroon, is holder of a "Diplôme Universitaire" (DU) in Transfusion Medicine under the University of Abidjan in Côte d'Ivoire and a Ph.D. in Medicine (Haematology) from the University of Newcastle Upon Tyne, UK. She is married with four children.

# Edmund Merem, Ph.D.



**Dr. Edmund Merem** completed his B.A. and M.E.S. at York University, Toronto and then his M.A. at Pontifical Lateran University. Vatican City. He graduated with a Ph.D. from Jackson State University, Mississippi. Dr. Merem has 11 years of experience in Global environmental planning and environmental accounting for oil and gas in Canada and the US, and hydropolitics of the Middle East and Africa. He has written several research monographs and papers that have been published in academic journals and major conference proceedings. His 2<sup>nd</sup> book entitled "Environmental Accounting For Oil and Natural Gas A North American Case Study" is about to be published by Edward Mellen Press. He worked as an

Environmental Analyst in the Environment Bureau of Agriculture and Agric-Food Canada and he also worked briefly as an accounts clerk in the Federal Ministry of National Planning in Lagos Nigeria. He is very fluent in Italian and a number of European and African languages.

Dr. Merem is currently an Associate Professor of Environment and Land Use in the Urban and Regional Planning Department at Jackson State University.

# Frank Melton, Hon.



**Hon. Frank E. Melton** was elected Mayor of Mississippi's Capital City in a landslide victory on June 10, 2005. His leadership transcends political and geographic boundaries, as is reflected by his appointment to several prominent state boards and commissions by four Mississippi Governors and two Texas Governors.

In his most recent appointment, Melton served as Director of the Mississippi Bureau of Narcotics under Governor Ronnie Musgrove; previously, he was named chairman of the Criminal Justice Task Force under Governor Kirk Fordice; member of the Mississippi Department of Human Services Board of Directors under Governor Ray Mabus; and chairman of the Mississippi Department of Youth Services under Governor Bill Allain; in addition, he

served three terms on the Mississippi State Board of Education and two terms on the Texas Board of Mental Health and Mental Retardation.

For more than two decades, Melton has demonstrated his commitment to Jackson's youth through his passionate efforts to improve their quality of life. He routinely volunteers as a swimming instructor and mentor at the Farish Street YMCA, where he has sponsored summer camps for inner-city youth. He has also served as a volunteer instructor in Business and Mass Communications at Jackson State University, and as a guest lecturer at Tougaloo, Millsaps, Belhaven and Mississippi Colleges.

Mayor Melton has never accepted a per diem or salary for his service to the State of Mississippi. He remains focused upon identifying avenues of progress for the people he serves, without regard to race, special interests or political affiliation. Melton has received numerous accolades for his community involvement, including two honorary Doctor of Humanities degrees and the University of Mississippi's Distinguished Leadership Award. He was also the first African American to receive the Distinguished Alumnus Award from his alma mater, Stephen F. Austin State University.

Mayor Melton served as Chief Executive Officer of WLBT TV-3, Inc. from 1984 to 2002, guiding the NBC affiliate to become the leader in local broadcasting. He currently serves on the national board of directors for the Broadcast Music Industry (BMI) in New York, where he is the Chairman of BMI Performing Rights Committee; and he has previously served on the Liberty Broadcasting Board of Directors, the Wave Board of Directors, the Community Broadcast Group, the NBC Affiliates Board of Directors, and the board of directors for the Metro Jackson United Way and the Chamber of Commerce. Of all his accomplishments, Mayor Melton is most humbled by his ability to help families and youth. He has personally provided college scholarships for more than 150 youth. He and his wife, Dr. Ellen Melton, are the proud parents of a son and daughter, Matthew and Lauren.

#### Willie D. McCullough, Ph.D.



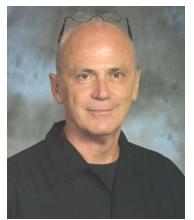
**Dr. Willie D. McCullough** is a graduate of the historically black Prairie View A & M University which is located approximately 45 miles west of Houston. In the summer of 1972, Dr. McCullough received a B.S. degree with a major in biology and a minor in chemistry, and was awarded a four year university fellowship in the fall of 1972 by the Ohio Sts ate University, Columbus, Ohio, to complete his graduate training in developmental biology. He graduated with a Ph.D. degree in 1976, specializing in wound healing, tissue interaction and tissue regeneration. Immediately following his graduate training, Dr. McCullough began a two year post-graduate training program as a post-doctoral fellow in the Department of Surgery at Harvard University College of Medicine and the Shriner's Burns Institute, Boston, Massachusetts. He completed his post-doctoral training in

1978, specializing in the molecular biology of renal hypertrophy and moved to the Washington, D.C. metro area in the fall of 1978 where he accepted an appointment as a member of the cell biology and microscopic anatomy team in the Department of Anatomy at Howard University College of Medicine.

From 1981 - 1997, Dr. McCullough explored several opportunities outside the academic and research arenas. He has worked in the medical industry in the areas of product and medical education, and specialized marketing for clinical pathology laboratories and hospitals (Ortho Diagnostic Systems, Inc., a Johnson and Johnson subsidiary). Dr. McCullough has also served as an operations manager for two companies in the Washington, D.C. metro area.

In 1998, Dr. McCullough joined the staff of the National Center for Research Resources (NCRR), National Institutes of Health (NIH), which has the ninth largest budget of the 27 Institutes/Centers at the NIH. Dr. McCullough is a Health Scientist Administrator in the Division of Research Infrastructure, NCRR and serves as a Program Director and Program Official for several research infrastructure programs. Specifically, he directs the Research Facilities Improvement Program, which includes over 350 facilities improvement projects worth over \$2.2 billion, and the Animal Facilities Improvement Program. Dr. McCullough also serves as a Program Official in the Research Centers in Minority Institutions (RCMI) Program and the Institutional Development Award (IDeA) Program where he manages a portfolio of grant awards including the Jackson State University RCMI award.

# John A. McLachlan, Ph.D.



**Dr. John A. McLachlan** is currently the Celia Scott and Albert J. Weatherhead, III Distinguished Professor of Environmental Studies and Professor of Pharmacology at Tulane University. He is also the Director of the Center for Bioenvironmental Research at Tulane and Xavier Universities. Prior to his work at Tulane, McLachlan was Scientific Director at the National Institute of Environmental Health Sciences, NIH. Professor McLachlan is a pioneer in the study of the effects of estrogens on gene imprinting and fetal development and a long time leader in the field of environmental endocrine disruption research. Since September 2005, Professor McLachlan and his Center for Bioenvironmental Research have confronted the aftermath of Hurricane Katrina by establishing the Katrina Environmental Research and Restoration Network (kerrn.org) to explore

and foster urban resilience and sustainability. Complimentary to KERRN, Dr. McLachlan and his center have established the Sustainable Urban Ecosystem (UrbanEco) Initiative which studies how cities and communities in the context f their natural ecosystems, toward gaining a better understanding of resilience, recovery, and sustainability. It is through UrbanEco, that the CBR is working to help the Holy Cross/Lower Ninth community of New Orleans recover in a sustainable manner post-Katrina.

# Paul F. Moundipa, Ph.D.



**Dr. Paul F. Moundipa** is a Professor of Biochemistry in the Department of Biochemistry, Faculty of Science. He is also heading the Laboratory of Pharmacology and Toxicology. He received his undergraduate training in Biological Sciences at The University of Yaounde I. His postgraduate and Doctorate degrees were also obtained in the same University in Biochemistry. He had been working during his doctorate thesis on plant products with androgenic activities with application in the treatment of male infertility.

Dr. Moundipa participates in the teaching of several courses in biochemistry to graduate, and postgraduate students in biochemistry. His main research interests are in the areas of toxicology and pharmacology. His current research involves investigations on the protein molecules induced by various plant products responsible in the protection of liver cells for application in diagnostic, pharmaceutical, and environmental arenas. Additional interests include the study of human protein molecules altered during occupational exposure of workers in contact to metal, oil, and volatile solvents in Cameroon, for application in Health.

#### Lawrence E. Murr, Ph.D.



**Dr. Lawrence E. Murr** is Mr. & Mrs. MacIntosh Murchison Professor and Chairman of the Department of Metallurgical and Materials Engineering and Ph.D. Program Director in the Materials Research & Technology Institute at The University of Texas at El Paso. Dr. Murr received his B.Sc. in physical science from Albright College, and his B.S.E.E. in electronics, his M.S. in engineering mechanics, and his Ph.D. in solid-state science, all from the Pennsylvania State University.

Dr. Murr has taught at the Pennsylvania State University, the University of Southern California, New Mexico Institute of Mining and Technology, and

the Oregon Graduate Institute of Science and Technology. He was Director of the John D. Sullivan Center for In-Situ Mining Research, President of the New Mexico Tech Research Foundation, and Professor and Head of the Metallurgical and Materials Engineering Department at New Mexico Institute of Mining and Technology. He was a past Chairman of the New Mexico Joint Center for Materials Science and served as Vice President for Academic Affairs and Research and Director of the Office of Academic and Research Programs at the Oregon Graduate Institute, where he was also Professor of Materials Science and Engineering.

Dr. Murr has published 20 books, over 700 scientific and technical articles in a wide range of research areas in materials science and engineering, environmental science and engineering, manufacturing science and engineering, and biological science and engineering. Recent honors include the 2001 Buehler Technical Paper Merit Award for Excellence (IMS), the TMS 2007 Educator Award the 2007 John S. Rinehart Award (a TMS Symposium award), and the 2008 Henry Clifton Sorby Award presented by the International Metallographic Society (IMS) for recognition of lifetime achievement in the field of metallurgy. Professor Murr is also a Fellow of ASM International.

#### Lucersia Nichols, M.S.



Mrs. Lucresia Nichols is Laboratory technologist III with The Mississippi State Department of Health; she also serves as Technical Consultant for the clinical laboratory at Crossroads Clinics located in the Jackson Medical Mall. She earned a Bachelor of Science degree (Microbiology) in 1995 from Mississippi State University and a Masters of Environmental Science degree in 2008 from Jackson State University. She has done oral and poster presentations at national and local conferences in the field of HIV/AIDS.

Mrs. Nichols is a member of Alpha Kappa Alpha Sorority where she currently serves as chapter Secretary. She has also served as chair of the Educational Advancement Foundation and has been a member on various committees dedicated to community service. Mrs. Nichols was nominated as a member for the national registry of Who's Who among Professional Black Women.

#### Valerie Odero-Marah, Ph.D.



**Dr. Valerie Odero-Marah** joined Clark Atlanta University in January 2007 as an assistant professor in the department of biology. She received her bachelor's degree in Biochemistry from the University of Nairobi, Kenya, in 1990. She then obtained her Master's in Molecular Biology in Brussels, Belgium in 1993.

Valerie received her doctoral degree in Molecular Biology from the University of Iowa in 2001. Her postdoctoral work under the mentorship of Dr Leland Chung at Emory University involved establishing an EMT model for human prostate cancer. She found that EMT could be induced in this model by the bone microenvironment,

TGF- $\beta$  and EGF growth factors and Snail transcription factor, and further identified RANKL as a novel EMT marker. She is presently studying the signaling pathways of Snail transcription factor in human prostate cancer and its role in tumor progression and bone turnover.

#### Monica M. Paoliello, Ph.D.



**Dr. Monica M. Paoliello** is an Associate Professor of Toxicology in the Department of Pathology, Clinical and Toxicological Analysis, Center of Health Sciences at the State University of Londrina, Parana, Brazil.

Dr. Paoliello has a Ph.D. (2002) in Public Health from State University of Campinas (UNICAMP), São Paulo. She does research in the area of Toxicology and Environmental Health. She teaches the undergraduate courses (Pharmacy and Biochemistry, and Medical School) and graduate courses (Public Health - master degree) at the State University of Londrina.

Currently Dr. Paoliello is the President of Brazilian Society of Toxicology. She was the Chair of the 13<sup>th</sup> Brazilian Congress of Toxicology (2003) and

President of the Scientific Committee of 14<sup>th</sup> Brazilian Congress of Toxicology (2005). She has been a consultant at the Brazilian Agency of Health Surveillance (ANVISA) and at the Brazilian Oil Company (Petrobrás), as well.

#### Anita K. Patlolla, Ph.D.



**Dr. Anita Patlolla** is currently working as a Research Assistant Professor in the Department of Biology/Env. Sci. Ph.D Program, Jackson State University, Jackson, Mississippi. She received her BS and MS degrees in Genetics from Osmania University, India in 1983 and 1987 respectively; and a Ph.D in Environmental Science [Major concentration: Genetic Toxicology] from Jackson State University in 1997. Dr. Patlolla worked in the area of cerebral vasospasm (STROKE) from 1998 – 2000 as a post-doctoral fellow at University of Mississippi Medical Center, Jackson, Mississippi. During 2002 – 2004, she worked as a post-doctoral fellow in the area of molecular and genetic toxicology at Jackson State University, Jackson, Mississippi.

Dr. Patlolla has published several research papers and chapters in the reputed international peer-reviewed scientific journals and books. She has presented her research findings in several national and international conferences in the form of lectures and posters. Her articles are widely cited by other researchers in the field. Her main areas of research are genetic toxicology and nanotoxicology in animal models. In the year 2007 Dr. Patlolla has received fundings from NIH-EARDA, University Scholar Program-JSU and the most significant one from Air Force Research Laboratory (AFRL) in the area of nanotoxicology. She chaired the "DNA repair and Genotoxicity" session in the 46<sup>th</sup> Annual Meeting of the Society of Toxicology, Mar 25-29, 2007, Charlotte, North Carolina, USA. Dr. Patlolla also received the AACR MSI Faculty Scholar Award for 2007. She is a member of several professional organizations including Society of Toxicology (SOT), Environmental Mutagen Society (EMS), The Society of Environmental Toxicology and Chemistry (SETAC), American Association of Cancer Research (AACR) and European Association of Cancer Research (EARC).

# Aramandla Ramesh, Ph.D.



**Dr. Aramandla Ramesh** is an Assistant Professor in Department of Cancer Biology in Meharry Medical College, located in Nashville, TN. The research in Dr. Ramesh's laboratory focuses on the toxicity and carcinogenesis caused by benzo(a)pyrene (BaP), a lipophilic, widely distributed environmental chemical that belongs to the polycyclic aromatic hydrocarbon (PAH) family of compounds. Their studies have shown that exposure of rats to BaP and other PAHs cause induction of the cytochrome P450 (CYP) family of enzymes resulting in the formation and distribution of reactive metabolites in plasma and target tissues. Dietary exposure of rats to PAHs via saturated fat results in an increased concentration of reactive metabolites, which stay in target tissues for a

longer time and cause enhanced DNA damage. Their hypothesis is that dietary fat contributes to BaP-induced colon carcinogenesis through CYP-mediated metabolic pathways.

Dr. Ramesh's research also focuses on the role of resveratrol, a phytoestrogen in preventing colon cancer development and toxicity caused by BaP.

# Paresh C. Ray, Ph.D.



**Dr. Paresh C. Ray** is a program director of NSF-PREM program, in the Department of Chemistry, Jackson State University, Jackson, Mississippi. Dr. Paresh Ray received his BS in Chemistry from Vidyasagar University, India and MS in Physical Chemistry from Kalyani University, India, in 1989 and 1992, respectively; and a Ph.D. in Physical Chemistry from Indian Institute of Science in 1997. He has been appointed to several positions including as a Research Scientist in Blacklight Power, New Jersey, as a Postdoctoral fellow in the University of Chicago, Illinois and Columbia University, New York.

Dr. Paresh Ray has published over 100 scientific publications including peerreviewed manuscripts, book chapters and abstracts. He has presented over 40 seminars, lectures and courses on various topics of Nanoscience and

Nanotechnology, Nanomaterial spectroscopy, Nano-Bio technology, nonlinear optics and PDT material. He has served as the chairperson in the American Chemical Society national meeting held in Anaheim, CA in fall 2003. Over the last decade, he has focused his attention on laser spectroscopy of nano-bio interface, DNA detection based on nanotechnology, molecular level understanding of CVD process, CVD diamond, carbon nanotubes, nano particle synthesis and characterization, alternative energy source based on plasma technology, plasma spectroscopy, nanoparticle nonlinear optics, atmospheric chemistry, theoretical understanding of nonlinear optical process and supramolecular hydrogen bonding.

# Daniel Sarpong, Ph.D.



**Dr. Daniel Sarpong** has been Director, Senior Biostatistician and Co-Principal Investigator of the Jackson Heart Study Coordinating Center (Jackson State University) since September 2003. He is also a Research Professor of Biostatistics at Jackson State University. Prior to Jackson Heart Study in August 2000, he was a tenured Associate Professor of Biostatistics at Xavier University of Louisiana in the College of Pharmacy. Dr. Sarpong was an Assistant Professor of Mathematics. From 1991 to 1995, while an enthusiastic and energetic educator, Dr. Sarpong was a resident statistician for Health Education Enrichment Resource U.S. Project: AIDS Prevention Program for Teenagers (CDC funded project); research coordinator for Desire Narcotics Research

Center, New Orleans, Louisiana. Project: Cooperative Agreement (National Institute of Drug Abuse funded project) and consulting statistician to The Deep South Center for Environmental Justice of Xavier University, New Orleans Louisiana.

Dr. Sarpong is a member the following professional organizations: American Statistical Association, International Society for Pharmacoeconomics and Outcome Research (ISPOR), American Heart Association, and Society of Clinical Trials. He has published and presented several scientific papers. He has applied biostatistical and research methods to the fields of: cardiovascular disease epidemiology, substance abuse and HIV/AIDS and pharmacoeconomics and outcomes research.

# Manoj Shukla, Ph.D.



**Dr. Shukla** is currently working as a Research Professor of Chemistry at the Department of Chemistry, Jackson State University, Jackson, Mississippi. He received his M.S. and Ph.D. degrees in Physics from the Banaras Hindu University, Varanasi, India in 1991 and 1996, respectively. He was Junior Research Fellow, Senior Research Fellow and Research Associate of Council of Scientific and Industrial Research (CSIR) during 1991-1999. In 1996, he won the Indian Science Congress Association (ISCA) Young Scientist Award in Physics. In 1999, he joined as a Post-Doctoral Research Associate with Prof. Jerzy Leszczynski at the Computational Center for Molecular Structure and Interactions, Department of Chemistry, JSU and initiated research on theoretical modeling of UV-induced molecular phenomena on Nucleic Acid fragments.

Dr. Shukla has published over 50 peer reviewed research papers and four book chapters and made more than 50 presentations in different conferences and symposia. He is currently also co-editing a book entitled "Radiation Induced Molecular Phenomena in Nucleic Acid: A Comprehensive Theoretical and Experimental Analysis" under the book series "Challenges and Advances in Computational Chemistry and Physics" published by Springer, Netherlands. His current research interest includes theoretical modeling of Photophysics of DNA fragments, nanomaterials, nanocontacts and nanotoxicology.

#### Karam F. Soliman, Ph.D.



**Dr. Karam F. A. Soliman** is currently a Distinguished Professor and Assistant Dean for Research and Graduate Studies at the Florida A&M University College of Pharmacy and Pharmaceutical Sciences. Dr. Soliman obtained his B.Sc. degree from Cairo University, and he was awarded the M.S. degree and the Ph.D. degree from the University of Georgia in the area of Physiology. Among 100 Historically Black Colleges and Universities (HBCU) in the country, Dr. Soliman ranked the top (number one) as the most Science published faculty member. His publications record includes 121 published research articles, 247 published abstracts, 3 books, 2 US Patents.

Dr. Soliman is also the nation's top trainer of African American holding the Ph.D. degree in Pharmaceutical Sciences. Nationwide, he was the major professor of 30% African American PhD's in Pharmaceutical Sciences since 1988. In addition to his teaching and research and administration duties, Dr. Soliman is the Program Director of NIH multimillion dollar grant to support the FAMU-Pharmacy Research Center in Minority Institution (RCMI). Dr. Soliman is an active member of the American Physiological Society, American Society for Pharmacology and Experimental Therapeutics, Endocrine Society, and the Society for Neuroscience. In 2001, Dr. Soliman was named by Florida A&M University as the FAMUAN of the Century. Dr. Soliman research has been supported by grants from NIH, NASA, Office of Naval Research and Department of Energy. During his tenure at FAMU Dr Soliman was awarded federal grants totaling over \$ 27 million

# William M. Southerland, Ph.D.



**Dr. William M. Southerland** received his undergraduate training in Chemistry at North Carolina State University at Raleigh and the Ph. D. degree in Biochemistry from Duke University. He is currently a Professor of Biochemistry & Molecular Biology at the Howard University College of Medicine in Washington, D. C. His research interests are in the area of computational biology with special emphasis on molecular modeling and molecular dynamics in the design of biomolecules.

Dr. Southerland's current research involves the design of new multitargeted antifolates for the simultaneous inhibition of dihydrofolate reductase, thymidylate synthase, and glycinamide ribonucleotide transformylase in the treatement of cancer. Additional interests include the

design of proteins with increased thermal stability for application in the industrial, environmental, and diagnostic arenas.

#### William A. Suk, Ph.D.



**Dr. William A. Suk** is currently Acting Deputy Director, National Institute of Environmental Health Sciences (NIEHS), an institute of the National Institutes of Health (NIH). He has served in a number of leadership positions at NIEHS. A primary aspect of these positions is the assessment of-current biomedical research and its potential applications in determining adverse effects on human health resulting from exposure to deleterious environmental agents. Dr. Suk has a solid working relationship with the scientific research communities, comprehensive knowledge of public health policy and biomedical science issues, and in depth understanding of technology and information translation, nationally and internationally.

Until recently Dr. Suk served, and had served since its inception, as Director of the NIEHS Superfund Hazardous Substances Basic Research

and Training Program, a program established by Congress as part of the reauthorization of Superfund in 1986. A unique Program, fostering interdisciplinary research approaches to address the problems associated with potentially hazardous environmental exposures. The Program has advanced the science of identifying, assessing, evaluating and remediating hazardous substances, and in so doing, it has enhanced the infrastructure of the environmental health sciences.

Dr. Suk has published extensively on issues linking exposures with disease etiologies and in developing research and prevention strategies to reduce risk to environmentally induced diseases and disorders. He has worked to initiate and implement environmental health and science programs with related policy issues that focus on reducing risk to environmental exposure in Central and Eastern Europe, in South America, as well as along the U.S.-Mexico border, and in Asia, including Central Asia. In addition, Dr. Suk had a three month sabbatical (June-August, 2006) at the Chulabhorn Research Institute, Bangkok, Thailand, focused on science-oriented issues, research needs and capacity-building regionally and internationally.

Dr. Suk is a member of a number of organizations and committees, including, member, roundtable on Environmental Health Sciences, Research, and Medicine of the Institute of Medicine of the National Academy of Sciences; member, International Advisory Board of the Chulabhorn Research Institute, Bangkok, Thailand; co-chaired the World Health Organization Consultation on Scientific Principles and Methodologies for Assessing Health Risks in Children Associated with Chemical Exposures. Dr. Suk has been a member of a number of trans-NIH committees and consortia, most notably the Bioengineering Consortium which is established within the Office of the Director, NIH, to promote and develop the bioengineering activities at NIH. Dr. Suk has assisted in the conceptualization and implementation of research and training programs in exposure biology and in understanding gene-environment.

Dr. Suk has received numerous NIEHS and NIH Director and Merit Awards. He has been honored with the Roy E. Albert Memorial Award for Translational Research in Environmental Health from the University of Cincinnati. He is a recipient of the Department of Health and Human Services Secretary's Award for Distinguished Service for dedicated support for the health and safety of victims of Hurricanes Katrina and Rita along the Gulf Coast. Dr. Suk is a Fellow of the Collegium Ramazzini, the international society of scholars in environmental and occupational health. He has been a National Science Foundation fellow. Dr. Suk received his Ph.D. in microbiology from the George Washington University Medical Center, and his Masters in Public Health in health policy from the University of North Carolina at Chapel Hill.

#### William A. Toscano, Ph.D.



**Dr. Willam A. Toscano** received a Ph.D. in biochemistry from the University of Illinois, Urbana-Champaign in 1978. He was a post-doctoral fellow at the Department of Pharmacology, University of Washington Medical School from 1978-1980. He was on the faculty of toxicology at the Harvard School of Public Health from 1980 – 1989. He was associate professor of toxicology at the University of Minnesota School of Public Health from 1989-1993.

In 1993 he became professor and head of Environmental Health Sciences at the Tulane School of Public Health and Tropical Medicine. In 1999 he returned to the University of Minnesota, School of Public Health where he is professor and head of the Division of Environmental Health Sciences. His

research interests are in the area of environmental signal transduction, environmental systems biology, public health genomics, molecular approaches to risk assessment, and global public health.

#### Bailus Walker, Jr., Ph.D.



**Dr. Bailus Walker, Jr.** is Professor of Environmental and Occupational Medicine Howard University College of Medicine and Chair of the District of Columbia Health Policy Council. From 1988 to 1991, he was Professor of Toxicology at the State University of New York in Albany. In 1991 he was named dean of the public health faculty, University of Oklahoma Health Sciences Center, Oklahoma City.

Dr. Walker has served as commissioner of public health for the Commonwealth of Massachusetts and chairman of the Massachusetts Public Health Council (1983-1988). Earlier (1981 - 1983) he was state director of public health for Michigan. In 1979 - 1981 he was Director of

the Occupational Health Standards, Occupational Safety and Health Administration (OSHA) U.S. Department of Labor.

A past president for the American Public Health Association, Dr. Walker is a distinguished Fellow of both the Royal Society of Health (London, England) and the American College of Epidemiology. Elected to membership in the Institute of Medicine (IOM), National Academy of Sciences (NAS) in 1989, Dr. Walker has served on numerous IOM - NAS study commissions including chairman of the NAS Committee on Toxicology and a member of the Board of Environmental Studies and Toxicology.

A recipient of numerous awards and honors, Dr. Walker is advisor (biodefense laboratories) to the National Institutes of Health and senior science advisor to the National Library of Medicine. He is a graduate of the University of Michigan and holds a Ph.D. (Environmental and Occupational Medicine) from the University of Minnesota in Minneapolis.