

Luma Akil, Ph.D.



Dr. Luma Akil, for the past five years, has worked as a Scientific Technician working at the Bioinformatics and Biostatistical Core (BBC), an NIH consulting facility at Jackson State University - Center for Environmental Health. Through the BBC, she provides consulting services, such as experimental design and data analysis support to faculty, research associates and graduate students. She also conduct trainings and workshops on various software packages such as SAS, SPSS, SYSTAT, Decision Tools, NeuroShell and others.

Dr. Akil received her doctoral degree in Environmental Science in 2013 and Master's degree in Environmental Science/Molecular Toxicology at Jackson State University (2009), and a Bachelor of Science in Biology from the University of Memphis (2001).

Dr. Akil's research is focused on environmental effects on human health, food safety, obesity and global disease epidemic.

Stella Anyangwe, MD, Ph.D.



Prof. Stella Anyangwe, is an Epidemiologist and Global Health Expert, and an Honorary Professor at the School of Health Systems and Public Health, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa. She lectures on Disaster Risk Management, Neglected Tropical Diseases and Social Determinants of Health. She also supervises PhD candidates on various Global Health issues.

Prof Anyangwe retired from the World Health Organization in April 2013, after 17 years of service to the Organization, and now serves WHO as Consultant in different fields.

From 1996 till April 2013, Prof. Anyangwe served WHO in various capacities. For 13 years (1998-2011) she was WHO Country Representative in four countries in the African Region (Seychelles, Mali, Zambia and South Africa), with major responsibilities being the coordination of WHO's technical support to those Member States. Her last assignment in WHO, from January 2012 till April 2013, was as the African Regional Adviser for Disaster Preparedness and Response. Before going international,

Prof Anyangwe was Senior Lecturer in Epidemiology and Community Medicine in the Faculty of Medicine of the University of Yaounde, in Cameroon. Prior to obtaining her MPH (1985) and PhD (1990) degrees in Epidemiology at Tulane University, New Orleans, She was also a practicing physician (MD) and resident nephrologist in Cameroon.

Prof. Anyangwe has presented and published several scientific papers on a variety of global health issues, including HIV/AIDS and TB, human resources for health, the attainment of the MDGs by developing countries, geophagia, and primary health care.

Anthony E. Archibong, Ph.D.



Dr. Archibong received a Ph.D. from Oregon State University, in the area of Reproductive Endocrinology. He conducted his post-doctoral researches in the Department of Animal Science, NC State University, in Embryo Physiology and at the Oregon National Primate Research Center, in Gamete Science. He is currently an Associate Professor and Director of: 1). Endocrine Core laboratory; 2) Graduate Studies, Department of Physiology at Meharry Medical College. He is also an American Board of Bioanalysis (ABB) Certified Andrologist.

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 pre-implantation embryo development; and preservation of fertility using stem cell technology. He is currently a reviewer for *Biology of Reproduction*, *Fertility Sterility*, *Asian Journal of Andrology*, *Toxicology Letters* and *Andrologia*. He served two terms in the UDSA Animal Reproduction Study Section and on the Minority Affairs Committee of the Society for the Study of Reproduction for 14 years, a committee saddled with the responsibility of mentoring and encouraging Minority Students to take up profession in Biomedical Sciences.

Dr. Archibong holds a fertility patent (Bombesin-like peptides and their receptor antagonists for fertility and contraception) and one pending patent for an apparatus for harvesting highly motile human spermatozoa from semen. His work in reproductive biology/toxicology is well published in reputable peer reviewed scientific journals.

Zikri Arslan, Ph.D.



Dr. Zikri Arslan is an Associate Professor of Analytical and Environmental Chemistry (Dept. of Chemistry), and a joint faculty member at the Environmental Science PhD program at Jackson State University, Jackson, Mississippi. He received his PhD in 2000 from the University of Massachusetts at Amherst, MA in analytical chemistry with an emphasis on applied plasma source mass spectrometry for environmental analysis.

In summer of 2000, Dr. Arslan received a post-doctoral research award from the National Research Council (NRC) to work as post-doctoral fellow at NOAA/NEFSC Howard Marine Sciences Laboratory in Sandy Hook, NJ between 2000 and 2002 under supervision of Dr. Anthony J. Paulson. Later, he continued his post-doctoral research as an assistant research scientist (2002-2003) at the University of Maryland, Chesapeake Biological Laboratory under supervision of Dr. Dave Secor researching on micromilling protocols for identification of bluefin tuna stocks using otoliths.

Dr. Arslan's research focuses on the chemistry and instrumental analysis of trace elements, heavy metals (specifically arsenic, cadmium, mercury and lead) and nanoparticles from environmental and biological samples (water, soil, fish) with an emphasis to understand the pathways of accumulation, transport and their impact on environment and human life. Solid phase extraction methods using microorganism (yeast and bacteria) and chelating materials are developed for separation and detection of elemental species and nanoparticles. Particular interest is given to understanding the impact of engineered nanomaterials, including quantum dots and metals oxides on biological systems using animal models and aquatic species (fish, algae and artemia). He has published numerous papers in peer-reviewed journals and given presentations in national and international conferences.

Michael Aschner, Ph.D.



Dr. Michael Aschner serves as the Harold and Muriel Block Chair in Molecular Pharmacology at Albert Einstein College of Medicine. He served on numerous toxicology panels (Institute of Medicine, US Environmental Protection Agency, Center for Disease Control), and is a member of the Neurotoxicology and Alcohol study section (NIH). Research in our lab focuses on the following topics: (1) Modulation of *C. elegans* genes (*aat*, *skn-1*, *daf-16*) that are homologous to mammalian regulators of MeHg uptake and cellular resistance will modify dopaminergic neurodegeneration in response to MeHg exposure. (2) Under conditions of MeHg-induced oxidative stress, Nrf2 (a master regulator of antioxidant responses) coordinates the upregulation of cytoprotective genes that combat MeHg-induced oxidative injury, and that genetic and biochemical changes that negatively impact upon Nrf2 function increase MeHg's neurotoxicity. (3) PARK2, a strong PD genetic risk factor, alters neuronal vulnerability to modifiers of cellular Mn status, particularly at the level of mitochondrial dysfunction and oxidative stress.

Dr. Aschner's studies are designed to (1) shed novel mechanistic insight into metal-induced neurodegeneration; (2) identify targets for genetic or pharmacologic modulation of neurodegenerative disorders; (3) increase knowledge of the pathway involved in oxidative stress; (4) develop improved research models for human disease using knowledge of environmental sciences.

Mehmet Ates, Ph.D.



Dr. Mehmet Ates is an Associate Professor at the Department of Bioengineering at Tunceli University (Turkey). He is also wise-chair of the Department. He has received his bachelor's degree in agricultural engineering from Ankara University in 1999. He received his master's (2002) and doctorate (2008) degrees in aquaculture from Ankara University in Turkey. He worked also as a post-doctoral research associate in NIH-RCMI program at Department of Chemistry and Biochemistry at Jackson State University between 2010 and 2013.

Dr. Ates's main area of research is mainly focus on the environmental issues related nanotoxicity using animal models and aquatic species, with an emphasis to understand the pathways of accumulation, transport and their impact on environment and human life.

Dr. Ates's research concentrated on elucidating the relationship between the physical and chemical properties (e.g. size, shape, surface chemistry, composition, and aggregation) of nano-size materials with induction of toxic biological response. He has presented and published several scientific papers, abstracts, and conference proceedings in various scientific journals. He has served as a Principal Investigator on a variety of externally funded research grants from government. He is a member of several professional organizations including scientific society.

Márcio Ribeiro Barbosa, MD, Ph.D.



Dr. Márcio Ribeiro Barbosa is a Plastic Surgeon who serves as Surgeon and Researcher in three hospitals in the Sao Paulo state. After obtaining his MD, he became a Resident Doctor from 1993 to 1996, in General Surgery at the Hospital of Clinics in the College of Medicine, University of São Paulo, doing a lot of scientific works in surgery and plastic surgery. From 1996 to 1999 he became a Plastic Surgeon, and was recognized as Specialist by the Brazilian Society of Plastic Surgery in 2000.

Dr. Barbosa's professional experience includes: Oncoplastic Surgery in Institute of Cancer Arnaldo Vieira de Carvalho (1996), Female Oncoplastic Reconstruction Surgery in Female Hospital Perola Byington (1999), Infants and Pediatric Plastic Surgery in Pediatric Hospital Jesus Boy (1999) and Burns Unit of Hospital Tatuapé (1998) and Hospital of Clinics of College of Medicine of University of São Paulo (1994).

Dr. Barbosa was an assistant doctor in Plastic Surgery and a professor of residents in plastic surgery in Hospital Heliópolis from 2000 to 2002. He also took some post-graduate courses in research and various study fields thus obtaining post-graduation degrees in the following fields: Medicine of Sports (Federal University of São Paulo State - 1997); Acupuncture (Title of Especialization in Acupuncture - 2000); Nutrology (Hospital Portuguese Beneficent with Title of Nutrology - 2007); Politics, Management and Strategy (War Superior School Association - 2008); and Chemistry (Lavras Federal University - 2012).

Dr. Barbosa currently serves as coordinator of Institute of Study and Research of Hospital Cruz Azul of São Paulo, Brazil, and works in research and bioethics. He is the Chief Plastic Surgeon in Hospital SBC, Emergency Clinic in Hospital Cruz Azul of São Paulo, and researches in CAM eggs models with nanocarriers, and treatment of waste water and its effluents.

Gerard Bastian, MD, Ph.D.



Dr. Gérard Bastian is currently a visiting research specialist at the University of New Orleans in Louisiana (USA). Before, he was head of the Oncopharmacology laboratory which is part of the Pharmacology department at the Pitié-Salpêtrière hospital in Paris.

Dr. Bastian is involved in translational research starting from testing new chemicals for their potential antitumor activity against human tumor cell lines, testing by Flow cytometry the effect of such compounds on the cell cycle, the apoptosis induction and measuring the uptake and efflux inside the cells, nucleus and DNA.

Dr. Bastian is also involved in clinical trial in Oncology studying the pharmacokinetics of new drugs during phase I and Phase II trial with a special focus on drug interactions. He is an expert at the French Agency of health (ANSM) where he reviews part of the new clinical trials in Oncology that take place in France.

Vincent Bond, Ph.D.



Dr Vincent C. Bond is a Professor and Acting Chair of Microbiology, Biochemistry, and Immunology, Morehouse School of Medicine. He has studied HIV pathogenesis for 25 years serving as editor and reviewer for several leading virological journals, authoring/co-authoring over 150 scientific communications. These communications include: abstracts, six patent applications, eight granted patents, and 52 publications, 31 of which are articles in peer-reviewed journals focused on aspects of HIV pathogenesis research.

Dr. Bond received his B.S., M.S., and Ph.D. at the Pennsylvania State University in Viral Genetics, and subsequently, did a postdoctoral fellowship at the California Institute of Technology (Caltech). His research team at Morehouse School of Medicine (MSM) has developed evidence that exosomes significantly contribute to immune activation, bystander CD4 T cell depletion, and HIV propagation via bystander cell activation during HIV infection. They have shown this to occur through release of exosomes from HIV-infected cells that induce apoptosis in bystander uninfected CD4+ T cells. In HIV infected, viremic patients, exosomes circulating in the plasma were found to be enriched for a host of pro-inflammatory cytokines which induce immune activation in naive and central memory CD4 and CD8 T cells, one of the hallmarks of HIV infection, and well established as one of the strongest predictors of HIV disease progression. This work has uniquely positioned his group to decipher the triggering mechanisms underlying HIV disease. It has also led to potential new targets for AIDS therapy, as well as a potential therapeutic antagonist against those targets.

Finally, out of this research his group has developed expertise in a microvesicle research, including isolation and analysis of the same. This expertise has been leveraged into development of a Microvesicle Lab at MSM, a unique resource, which MSM and outside researchers requiring assistance in studying microvesicles role in aspects of their own research can use. During that time he has also served as the Program Director and then the PI of the MSM RCMI G12 Program, and has been an active participant in the RCMI Translational Research Network (RTRN) activities, including Co-Chair of the HIV/AIDS cluster, Chair of the Protocol Review Subcommittee, and member of the RTRN Steering Committee. Finally, he has developed a wealth of experience in mentoring individuals at all stages of academic development.

Gloria M. Calaf, Ph.D.



Dr. Gloria Calaf is a full professor and Director of Instituto de Alta Investigación, Tarapacá University in Arica, Chile and Adjunct Research Scientist at Columbia University Medical Center of New York. She received her MS and PhD degrees in Biological Sciences at Michigan State University, East Lansing Michigan. After completing her PhD research, she joined University of Chile in Chile, then Michigan Cancer Foundation in Detroit, Fox Chase Cancer Center in Philadelphia, PA and afterwards Columbia University in New York. Her research interest is in Environmental and Hormonal carcinogenesis, developing *in vitro* and *in vivo* breast cancer models to understand initiation promotion and prevention of breast cancer by the effects of either pesticides or radiation in presence of hormones.

Dr. Calaf has identified several genes associated with such processes, and among them *c-Ha-ras*, a pivotal one in the transformation process by the effect of environmental substances. Her current research project is focused on drug resistance and genomic instability in breast carcinogenesis. She has published 130 research papers in peer reviewed journals and has presented her research in several conferences, symposiums and

workshops. She was a member of the Halifax project “Getting to know cancer to assess the carcinogenic potential of low dose exposures to chemical mixtures in the environment; and also by International Agency for Cancer Research (IARC) to participate in the Monograph Volume 112: to evaluate the carcinogenic risk to humans of organophosphate insecticides and herbicides: as malathion, parathion, and others.

Dr. Calaf is a member of American Association for Cancer Research, Tissue Culture Association, New York Academy of Sciences, International Association for Breast Cancer Research, among others. She has served as a reviewer for many peer-reviewed journals as well as Chilean grants. She is currently in charge of the Biology of Cancer laboratory at Tarapacá University in Arica, Chile and she has held several grants from American and Chilean institutions.

Edmond E. Creppy, Ph.D.



Dr. Edmond E. Creppy has been a Professor of Toxicology since 1989; First Class University Professor since 1996. He is a Pharmacist, Chemist and Dr Sc in Toxicology (1978) University Louis Pasteur of Strasbourg, Institute of Molecular and Cellular Biology, CNRS, (France). He is an honorary member of EUROTOX, Honorary President of the French Society of Toxicology; and Laureate of The National Academy of Medicine; Registered European Expert Toxicologist. Member of the International Experts' Order.

Dr. Creppy's field of interest include: Pathways of Natural substances in our Environment and prevention of their Toxicity. He is author of more than 250 international publications in journals including BBRC, BBA, FEBS Letters, Phytochemistry, Tetrahedron Lett. Mutation Research, American Journal of Kidney Diseases, Brain Researches, New England Journal of Medicine. He is a member of the following scientific societies; Boards and Committees including IUTOX, EUROTOX, SOT (American Society, 1994), BST (British), African Society for Toxicological Sciences. Member of the editorial board and reviewer of Toxicology, Human and Experimental Toxicology, Archives of Toxicology; Toxicology and Applied Pharmacology, Life Sciences, BBA, FEBS Letters, Food Additives and Contaminants, Food and Chemical Toxicology, Toxicological Sciences, Toxicology Letters, etc. He is also a member of several board of Experts and Advisors at both national and international levels and a consultant for toxicological problems for both regulatory and experimental affairs.

Himangshu S. Das, Ph.D.



Dr. Himangshu Das is a tenured Associate Professor at the Dept. Of Civil & Environmental Engineering, Jackson State University. He has 15 years' experience in *high performance computing* and *data integration* in coastal and hydro environmental studies and design. His modeling experience includes surge modeling, sediment transport, coastal zone transport including inlet, and surf zone dynamics. He has conducted numerous hydrodynamic and morphodynamic studies in river and tidally and wind dominated coastal regions along the Atlantic, Pacific, and Gulf coasts. These works require expertise in complex data integration in

physical oceanography, beach dynamics, coastal and estuary processes, sediment dynamics and water quality.

Dr. Das has comprehensive experience on the development and application of data oriented models in 1, 2, & 3-dimensions using MATLAB, UNIX, FORTRAN, & VB. He has applied those in the multidisciplinary fields of water resources and coastal engineering. He has authored or coauthored more 25 technical publications on data integration and application in coastal and near-shore processes and ocean engineering.

Jimmy T. Efird, Ph.D.



Dr. Jimmy T. Efird received his Ph.D. in Epidemiology from Stanford University School of Medicine. He is Director of Epidemiology and Outcomes Research for the East Carolina Heart Institute, Brody School of Medicine.

Dr. Efird also serves as Assistant Director of the Center for Health Disparities and as an Epidemiologist/Statistician for the College of Nursing, East Carolina University. He has over 190 publications in scientific journals and technical proceedings (Citations=5,870; h-index=38; i10-index=70). His research interests include chronic diseases and cancers of the CNS, lung, and breast.

Dr. Efird is Editor-in-Chief of Cancer Informatics and Specialty Chief Editor of Frontiers in Epidemiology.

Astrid Engel, Ph.D.



Dr. Astrid Engel heads a laboratory which focuses on the impact of mobile element activity on human health, in particular the human transposable elements (TEs), L1 and Alu elements. Dr. Engel's lab uses both computational and wet bench approaches to study the human retroelements their impact on the human genome and their contribution to genetic damage leading to disease states such as cancer. One of her goals is to investigate the mechanism by which transposable elements contribute to disease.

Dr. Engel is interested in investigating how environmental factors, such as heavy metal exposure, contribute to TE-mediated genomic mutations and their association with cellular transformation and carcinogenesis.

Ebenezer Olatunde Farombi, Ph.D.



Dr. Ebenezer Olatunde Farombi is a Full Professor of Biochemistry in the Department of Biochemistry, Faculty of Basic Medical Sciences, College of Medicine, University of Ibadan, Nigeria. He holds a B Sc., M.Sc. and Ph.D Degrees in Biochemistry from the University of Ibadan. He had Postdoctoral training at the University of Liverpool, UK and also at the Institute of Food Safety and Toxicology, Denmark. He is currently leads the University of Ibadan Biotechnology "Center of Excellence" project.

Professor Farombi's research interests are on *Molecular Toxicology, Chemical carcinogenesis, gastrointestinal pathology, Cellular oxidative stress mechanisms, Antioxidant pharmacology, Pharmaceutical indications of nutraceuticals as prophylactic agents, Nutrigenomics as well as Natural product Biotechnology.*

Professor Farombi has to his credit 130 scientific papers in international peer reviewed journals, 12 chapters in books and over 50 conference proceedings. He has edited a book titled "Nutritional Antioxidants in Cancer and Degenerative Diseases" with contributors from Nigeria, Cameroon, USA, Mauritius, South Africa, Japan and Denmark.

Professor Farombi has supervised over 80 BSc, 115 MSc and 15 PhD students. A Fellow of the Royal Society of Chemistry (Cambridge, UK), Professor Farombi is on the Editorial board of many international journals. He is presently the Editor-in-Chief of Toxicology Report the official journal of the West African Society of Toxicology (WASOT) and Chairman Editorial Board -Archives of Basic and Applied Medicine.

Solomon Garner, Jr., Ph.D.



Dr. Solomon Garner, Jr. is currently the Director of the RTRN Data Coordinating Center (DCC) Research Resources and Research Networking (R³N) division. He collaborates with each RCMI's site personnel to help strengthen the number of investigators participating collaboratively within the consortium. These efforts support the finding and sharing of research resources and researcher expertise. He is responsible for all RCMI 18-sites core facility personnel tool usage training needed to inventory research resource types supported by the eagle-i ontology.

Under Dr. Garner's leadership, RCMI-sites have shared over 19,000 previously invisible resources. His skills as resource discovery scientist have been honed at Jackson State University as the former Resource Navigator to the eagle-i Consortium "Resource Discovery: Networking Resources Across America" award #U24 RR 029825 from the National Center for Research Resources, part of the NIH. As part of the three-core eagle-i Consortium member institutions, Harvard University, Oregon Health and Sciences University, his work has contributed to the infrastructure, software and ontology builds not excluding its implementation at over 29 institutions usage of eagle-i online and offline.

Dr. Garner has the expertise in research resource discovery and interdisciplinary translational science research & development. He has had much success gathering information, implementing systems' use and training researchers to utilize these systems. Two examples of his activities are the implementation of the eagle-i Resource Discovery System and Profiles Researcher Networking Software/System to the RCMI Translational Research Network (RTRN) consortium member institutions (18-sites).

Dr. Garner's prior expertise were honed within: 1) Business Development & Management 2) Pharmaceutical and Biomedical Sciences Research and Development 3) Technology Transfer and 3) Implementation. He is a scientist with broad training and experience within medicinal chemistry; pharmaceutical and biomedical sciences; and management. His development skills were nurtured at The University of Georgia, College of Pharmacy, Department of Pharmaceutical and Biomedical Sciences. As a result, he earned US Patents developed a currently marketed over-the-counter pharmaceutical product and co-founded a startup company.

Amit Kr Gorai, Ph.D.



Dr. Amit K. Gorai is an Assistant Professor in Department of Mining Engineering, National Institute of Technology, Rourkela, Odisha, India. He graduated in Mining Engineering in the year of 2000 from Bengal Engineering College (Presently, IEST, Shibpur), Howrah. In 2002, he obtained the degree Master of Engineering from the same university. Soon after his M.E degree, he joined Central Mining Research Institute (CMRI), Dhanbad as a Project Fellow in 2002. After serving a few months at CMRI, he joined the Centre of Mining Environment at Indian School of Mines, Dhanbad as a Junior Research Fellow in an R & D Project, sponsored by Department of Mines, Government of India in 2002.

Dr. Gorai obtained his doctorate degree in Environmental Science & Engineering from Indian School of Mines University, Dhanbad in the year of 2007. After completion of PhD work, he joined in the Department of Mining Engineering, BIT Sindri as a Part-time Lecturer and continued till Aug. 2007. Thereafter, he joined in Environmental Science & Engineering Group at BIT Mesra, Ranchi and served for 7 years (Sept., 2007 - Dec., 2014).

INVITED SPEAKERS & ORAL PRESENTERS

In 2013, Dr. Gorai received a Raman post-doctoral research award from the University Grants Commission (UGC), New Delhi to work as post-doctoral fellow for 1 year at Jackson State University, MS, USA under Indo-US exchange scheme. Dr. Gorai also received Young Scientist Research Grant in 2012 from the Department of Science and Technology, New Delhi, India. In the same year, Dr. Gorai received a Young Researcher Bursary Award from World Meteorological Organization, Geneva for presenting a paper in 8th International Conference on Air Quality 2012.

Dr. Gorai's research focuses on the air quality monitoring, assessment, and modelling with an emphasis to understand the impact on human health. He has published numerous papers in peer-reviewed journals and given presentations at national and international conferences.

Fengxiang X. Han, Ph.D.



Dr. Fengxiang X. Han is currently Associate Professor of Environmental Chemistry in Department of Chemistry and Biochemistry at Jackson State University. His research interests cover a wide range of environmental sciences, including environmental chemistry and biogeochemistry of trace elements, heavy metals and radionuclides, pollution and remediation, environmental toxicology, environmental assessment and monitoring, environmental radiochemistry, carbon sequestration and global warming.

Currently Dr. Han teaches Environmental Chemistry, Nuclear Chemistry, Nuclear Waste Chemistry and Safety, Advanced Analytical Chemistry, and General Chemistry. He supervises both master and Ph.D. graduate students. He has published more than 75 refereed journal papers. He also published a book entitled "Biogeochemistry of Trace Elements in Global Arid Environments" by Springer.

Currently Dr. Han is in the editorial boards of Water Air and Soil Pollution (Springer), Soil and Sediment Contamination (Taylor and Francis), and chief-in-editor of Journal of Bioremediation and Biodegradation.

Ernest Izevbigie, Ph.D.



Dr. Professor Izevbigie received his Ph.D. degree in Growth Biology/ Biochemistry from Michigan State University, East Lansing, Michigan in 1996. He received his MS degree from the University of Tennessee, Knoxville, Tennessee, and BS degree with *distinction* from Tennessee State University, Nashville, Tennessee, and U.S.A in 1988 and 1986 respectively. He completed a Postdoctoral Fellowship Program in Biochemistry/ Cancer Biology at the National Institute of Craniofacial and Dental Research (NIDCR) /NIH, Bethesda, Maryland, USA from 1996-1998. He joined the Jackson State University (JSU) Biology Faculty in 1999 and was made full Professor of Biology/Biochemistry in JSU in 2009, and served in that capacity until 2011 when he returned to his home state (Edo State) to serve as Deputy Vice Chancellor

(now Vice Chancellor) of Benson Idahosa University, Benin City.

Professor Izevbigie's research group was the first to demonstrate and report anti-cancer activities of aqueous VA extracts that culminated in the issuance of two U.S. patents titled "Phytochemotherapy for Cancer" in 2004 and 2005:1. A novel Phytochemotherapy for cancer (U.S. Patent #6,713, 098), March 2004. 2. A novel Phytochemotherapy (Edotides) (U.S. Patent# 6,849,604), February 2005.

After more than 12 years of *Vernonia amygdalina* anti-cancer/ pharmacognosy research, botanical pharmacological formulations under the trade name of edoTIDE™, were developed by Prof. Izevbigie and his team, and licensed to a biotechnology company. These formulations (with health benefits) are now commercially-available in the U.S. and other parts of the globe. In Nigeria for example, the National Agency for Food and Drug Administration and Control (NAFDAC) has approved (NAFDAC Reg. no: A7-0902L) the use of edoTIDE™ botanical formulation for some health benefits. 101 top-world scientists, esteemed innovators were awarded the distinction of NAI Charter Fellow in Tampa, Florida, USA on February 22, 2013. Included in the Charter class of 2012 are 8 Nobel Laureates, 2 Fellows of the Royal Society, 12 President of Research Universities and Non-Profit Research Institutes, 50 Members of the National Academies (NAS, NAE, IOM), 11 inductees of the National Inventors Hall of Fame, 3 recipients of the National Medal of Technology and Innovation, and others. The 101 scientists and inventors were inducted as the 2012 NAI Charter Fellows during the inauguration ceremony conducted by the U.S. Patent Commissioner, Dr. Margaret Focarino from USPTO in 2013, in Tampa, Florida, U.S.A. The 113th U.S Congress (2013-2014), through its Congressional Record, commends the 101 fellows.

Sunali Khanna, Ph.D.



Dr. Sunali Khanna is an eminent educationist who is serving as a faculty member of the Maharashtra University of Health Sciences, India. She teaches and also undertakes research in the areas of oral medicine, maxillofacial radiology and oral cancer at Nair Hospital Dental College, Mumbai, a premiere institute in India. During the earlier years she won academic distinctions and was recognized by the International College of Dentists. She became the first candidate to qualify the Diplomate of National Board Examination in Oral Medicine & Radiology. She has worked extensively towards the health care of elderly & marginalized sections of society. She has been conferred membership of the National Academy of Medical

Sciences, India.

Being a keen environmental health scientist and activist, Dr. Khanna's research highlights importance of such issues in the public sphere. She was the Convener of International Conference Green Health on Environmental Health Research at Mumbai in February 2015. It focused on integrating public concerns and precautionary principles into federal and regional policies in the health sector. She has conducted surveys on Tobacco related diseases and cessation practices. She has co-authored HIV/AIDS manual for health professionals in association with Mumbai District AIDS Control Society. She has participated as resource person/panelist in health awareness programs on the National Television. She is recipient of University Teacher's Research award for the year 2013-14. She is the President Elect of Asian Academy of Oral & Maxillofacial Radiology. Her biography features in Marquis Who's Who in the World (Medicine & Healthcare) 7th Edition 2009. She has authored over 55 publications as 1st author in indexed National and International Journals and contributed chapters in books. She is appointed on the editorial board of four International journals and reviewed for 32 journals. She was on the expert panel of University Grants Commission of the federal government, which regulates and promotes higher education throughout the country.

Dr. Khanna has made distinguished/plenary/paper presentations at 42 National and 36 International conferences across the globe. She has published 57 papers in reputed national (34) and international (23) journals. She has contributed chapters in textbooks of Cancer prevention (Trafford), Oral Radiology (Elsevier), Pediatric Dentistry & Oral & Maxillofacial Surgery. She is also on the Editorial board of esteemed National and overseas journals.

Ranjani W. Kulawardhana, Ph.D.



Dr. Ranjani Kulawardhana is an Assistant Professor of Environmental Sciences (Department of Biology) at Jackson State University. Dr. Kulawardhana received her PhD in Ecosystem Science and Management from Texas A&M University, USA; MSc (Special) in Integrated Water Resources Management from Postgraduate Institute of Agriculture; and BSc (Special) in Agriculture from the University of Peradeniya, Sri Lanka.

A recipient of the National Research Council of Sri Lanka's Presidential Award in Scientific Research, Dr. Kulawardhana investigates remote sensing and GIS applications for the study of environmental issues relating to wetland and marine ecology, terrestrial carbon cycle, climate and land use change in natural and managed ecosystems; as well as for the study of environmental health issues with relevance to the environment.

Over the recent past, Dr. Kulawardhana has been actively involved in various international collaborations and multi-disciplinary research programs. Her research findings have been published very frequently in high rank peer review journals including Remote Sensing of Environment, Estuarine Coastal and Shelf Sciences, and International Journal of Remote Sensing, where she also serves as an invited paper reviewer. She has given presentations at numerous international scientific conferences and also has published in conference proceedings. In recognizing her very high academic and research achievements she was awarded two prestigious fellowships including Tom Slick Senior Graduate Fellowship from the Texas A&M University and Schlumberger Faculty for Future Fellowship from the Schlumberger Inc., USA.

Sanjay Kumar, Ph.D.



Dr. Sanjay Kumar is Postdoctoral Research Associate at Molecular Toxicology Research Laboratory in the College of Science, Engineering & Technology, Jackson State University. He received his PhD in 2007 from Jawaharlal Nehru University (JNU), New Delhi, India in biochemistry and molecular biology with an emphasis on molecular mechanism of free heme toxicity in malaria parasite.

Dr. Kumar worked during graduation at premier research institute, Central Drug Research Institute (CDRI) with different prominent research scientists and published eight international publications in reputed scientific journals. He was recipient of Junior and Senior Research Fellowship Award from Council of Scientific and Indian Research (CSIR), India.

Dr. Kumar is currently serving as an editorial board member of Green Earth Research Foundation (GERF) Bulletin of Biosciences and active reviewer of Circulation Research, Open Journal of Medicine and Integrative Physiology (OJMIP) and Environmental Toxicology. He is a life member of Indian Society of Parasitology (ISP), associate member of American Association of Cancer Research (AACR) and American Physiological Society. He has presented their research finding in many National and International conferences / symposium in USA and abroad.

Dr. Kumar's research is related to anti-malarial drugs designing, DNA vaccine development, cardiovascular complications (metabolic syndrome), restenosis and leukemia cancer biology. In United States, they focus mainly identification of role of TRPC channels in metabolic syndrome and neurite outgrowth in mammals using ion channels kinetics and advanced imaging techniques. In restenosis, Dr. Kumar's research groups used diverse array of molecular biological and cell signaling tools to identification of signaling mechanisms involved in smooth muscle cells migration, proliferation and neointima formation

through balloon injury-induced rat carotid artery as an *in vivo* model. He is currently working to identify molecular mechanism of ant leukemic role of arsenic trioxide and cisplatin in human leukemia (HL-60) (*in vitro*) as well *in vivo* mice model of acute promyelocytic leukemia (APL).

Currently, Dr. Kumar research specially focuses on identification of role of arsenic trioxide & Cisplatin on growth inhibition, cell cycle modulation, cell death (apoptosis) and signaling mechanisms involved in APL leukemia cell death.

Joseph R. Landolph Jr., Ph.D.



Dr. Joseph R. Landolph, Jr., received a Ph.D. in Biophysical Chemistry from Univ. Calif. at Berkeley in Berkeley, Calif., (1976) under Prof. Melvin Calvin (Nobel Laureate). For his Ph.D., he studied metabolism of BaP and BaP-induced cytotoxicity and morphological transformation in cultured mouse liver epithelial cells and Balb/c 3T3 mouse fibroblasts. He performed postdoctoral study in chemical mutagenesis, morphological/neoplastic cell transformation, and carcinogenesis at USC/Norris Comprehensive Cancer Center under Prof. Charles Heidelberger (member, U. S. Nat'l. Academy of Sciences) from 1977 to 1980.

Dr. Landolph is currently Assoc. Prof. of Molecular Microbiology/Immunology and Pathology in the Keck School of Medicine, Assoc. Professor of Molecular Pharmacology in the School of Pharmacy, and a Member of USC/Norris Comprehensive Cancer Center at USC. His research interests/activities include studies of the genetic toxicology/carcinogenicity of carcinogenic nickel (Ni), chromium, and arsenic compounds and P.A.H.s. His laboratory studies the ability of carcinogenic Ni and chromium compounds to induce morphological/neoplastic transformation of 10T1/2 mouse embryo cells, and expression of oncogenes/inactivation of expression of tumor suppressor genes and de-regulation of global gene expression, in Ni-transformed cell lines.

Dr. Landolph is an expert in chemically induced mutation and morphological/neoplastic transformation in murine/human fibroblasts. He has served as a grant reviewer for U. S. E.P.A.'s Health Effects Panel, for NIEHS, and as a member of the Chemical Pathology and Al-Tox-4 Study Sections of NIH. He has authored 66 scientific publications, given 192 invited scientific lectures, trained 97 B.S. students, 26 M.S. students, 13 Ph.D. students, and 31 postdoctoral fellows, and hosted 10 faculty and 4 high school teachers on sabbaticals.

Marek Lankosz, Ph.D.



Dr. Marek Lankosz is a professor at the Faculty of Physics and Applied Computer Science at the AGH-University of Science and Technology, Krakow, Poland. He is a Head of the Chair of Medical Physics and Biophysics. His scientific activity has mainly focused on XRF microanalysis, x-ray absorption micro-spectroscopy, infrared micro-spectroscopy.

Dr. Lankosz's latest research interest includes application of synchrotron radiation in biological and medical research in relation to morbidities, with focus on tumour, Parkinson disease and Amyotrophic lateral sclerosis. The results of his studies were published in numerous articles.

Dr. Lankosz is lecturing on basic physics, nuclear physics, X-ray physics, dosimetry and medical physics, and conducted joint research with the Atominstitut of the Vienna University of Technology, the National Institute of Standards and Technology, Gaithersburg, USA, the European Synchrotron Radiation Facilities in Grenoble, France, DESY Photon Science, Hamburg, and IAEA, the International Atomic Energy Agency in Vienna, Austria. He has also been assigned numerous missions as an X-ray expert for IAEA.

Dora N. Mbanya, MD, Ph.D.

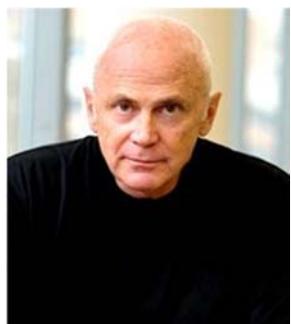


Dr. Dora Mbanya is Professor of Haematology in the Faculty of Medicine and Biomedical Sciences, University of Yaoundé I, Cameroon and Head of Department in the said structure. She is also Consultant Haematologist in the Yaoundé University Teaching Hospital, where she currently heads the Haematology and Transfusion Service.

Dr. Mbanya has published several papers in scientific journals both at national and international levels and co-authored books in her field of interest (Transfusion Medicine and HIV/AIDS-related issues). She serves as Editor in Transfusion Medicine and Health Science & Disease, and is on the Expert Panel of the World Health Organization for Transfusion Medicine..

Dr. Mbanya is a member of various professional societies including the British Society of Haematology, the International Society of Blood Transfusion and the African Society of Blood Transfusion. She heads the Cameroon Branch of the Society for Women and AIDS in Africa. She is married with four children.

John A. McLachlan, Ph.D.



Dr. John A. McLachlan, received his undergraduate degree from the Johns Hopkins University where he was also co-captain of the varsity football team. He is currently the Celia Scott Weatherhead and Albert J. Weatherhead, III Distinguished Chair in Environmental Studies as well as holding joint Professorships in the Departments of Pharmacology and Ecology and Evolutionary Biology at Tulane University. From 1995 to 2012. Prior to coming to Tulane, he was Scientific Director at the National Institute of Environmental Health Sciences, NIH.

While at NIEHS, Professor McLachlan developed the conceptual framework thirty years ago for what is now called Endocrine Disrupting Chemicals. He has published over 200 peer-reviewed papers and sixty review articles dealing with the environment and the reproductive system and, in the process, helped introduce the concept of epigenetics to environmental research and thinking.

At Tulane, Dr. McLachlan's commitment to "use-inspired research" led him to explore community-based issues that could be approached in trans-disciplinary ways. A highlight of this effort was the use of the Mississippi River as an overarching metaphor for research and teaching. Faculty from the humanities, performing arts, natural sciences, social sciences came together around the ideas related to urban centers in river deltas. A highlight of this effort was the planning and design of RiverSphere, a research and cultural center located on seven acres of riverfront in the center of New Orleans.

In September 2005, Dr McLachlan confronted the aftermath of Hurricane Katrina by establishing the NSFfunded Katrina Environmental Research and Restoration Network to coordinate research and restoration and, since 2009, has been co-principal investigator on a multi-disciplinary NSF grant, entitled, The "New Normal": The Impact of Trauma on Urban Ecological and Social Diversity which studies how cities and communities function in the context of their natural ecosystems to gain a better understanding of resilience, recovery, and sustainability. His current research focuses on using the principles of hormone signaling to understand how factors as diverse as trauma, stress, heavy metals and environmental chemicals exert their adverse effects on human health. He emphasizes differentiating systems such as stem cells for his studies and thinking. His work, teaching and thinking is summarized on his web site, e.hormone.tulane.edu.

Howard W. Mielke, Ph.D.



Dr. Howard W. Mielke is currently a Professor in the Department of Pharmacology, Tulane School of Medicine. He is also an Adjunct Professor at Jackson State University. He earned his undergraduate degree in biology, chemistry and geography at Macalester College in St. Paul in 1963 and then joined the Peace Corps for a teaching program in Malawi, Africa. He received his MS in biology and his Ph.D. in geography at the Rackham School of Graduate Studies of the University of Michigan. He began research in urban geochemistry in 1971 while teaching at the University of California, Los Angeles, and continued his research at the University of Maryland, Baltimore County, Macalester College in Minnesota, the Center for Regional and Urban Affairs of the University of Minnesota, and most recently New Orleans. His Baltimore study is recognized as pioneering research and highlighted the need to prevent urban accumulation of toxins and to remove lead from gasoline.

In 2004 he undertook a pilot project for a Housing and Urban Development Lead Technical Study to Xavier University entitled "Re-Cover New Orleans" whereby clean soils were brought into severely contaminated communities of New Orleans to reduce the potential for childhood exposure to lead and other residues that had accumulated in the soil. After Hurricane Katrina he was invited to join the faculty of Tulane University. His publications have international impact because they inform the scientific basis for proactive prevention of metal exposure. He has published numerous articles on the topic of metal residue accumulation and children's health in many cities.

Specifically, his research influenced policy for the removal of lead from gasoline, supported revised lead laws in New Orleans, Michigan, Canada, Mexico, Peru, the European Union, as well as a soil intervention program in Norway.

Dr. Mielke is a full member of the Society of Toxicology, on the Editorial Board of the Society of Environmental Geochemistry and Health, and member of the American Chemical Society. In addition to research interests, he is an avid traveler, camper, photographer, and sings tenor with the Symphony Chorus of New Orleans.

Alexandra C. Miller, Ph.D.



Dr. Alexandra C. Miller is currently a senior scientist and principal investigator at the U.S. Armed Forces Radiobiology Research Institute and an Assistant Professor in the Department of Radiation Biology at the Uniformed Services University of the Health Sciences in Bethesda, MD. She received her Bachelor of Science in Chemistry from the University of Maryland, College Park, MD, and her Doctorate in Radiation Biology and Experimental Pathology from Roswell Park Memorial Cancer Institute Division at the State University of NY, Buffalo, NY.

Dr. Miller completed two post-doctoral projects; the first at AFRRRI and the second in the Department of Pathology at the USUHS. She has received the AFRRRI Research Award and awards from the American Society of Therapeutic Radiation Oncology and the Photo-radiation Society and has been nominated for the Radiation Research Society Michael Fry award on three occasions. She is on the faculty of USUHS, New York University School of Medicine, University of Southern Maine, and the University of Paris and is a visiting scientist at the National Cancer Institute Division of Cancer Treatment.

INVITED SPEAKERS & ORAL PRESENTERS

Dr. Miller's research interests include low dose radiation, carcinogenesis, transgenerational genotoxicity, and delayed radiation effects chemoprevention. Current research projects include low dose delayed effects, heavy metal- and radiation- carcinogenicity, radioprotection against internal/external radiation exposure, and biomarkers of exposure. Past research focused on molecular genetics of radiation resistance and photodynamic therapy of cancer.

Dr. Miller has over sixty-eight peer-reviewed publications. She has received extramural funding from the Defense Medical Research and Development Command, Henry M. Jackson Foundation for Medical Research, NASA, the U.S. Army Medical Research and Material Command, and the USAMRMC Congressionally directed medical research program. The author has been the principal investigator for more than fourteen research projects since 1992. She has been an ad hoc member of panels for the NATO Science Organization, World Health Organization, U.S. Army Medical Research Command, U.S. CDMRP, U.S. Agency on International Development Committee, and the U.S. Department of Energy.

Telma Nery, MD, Ph.D.



Dr. Telma Nery has been a medical practitioner for 30 years, and graduated from Universidade Federal Fluminense (UFF), Brazil, with Medical Residence in Preventive and Social Medicine. Her specialization is in Occupational Medicine, Homeopathy, and Health Services Management.

Dr. Nery worked as Sanitarian Doctor in Primary Health Centre and later in the Surveillance State Sanitary Epidemiological Surveillance Center. She has consulted for UNESCO in environmental health areas along with the Ministry of Health of Brazil.

Dr. Nery has served as Occupational Doctor of large corporations in Brazil, with operations in environmental activities, such as Post Office, Sabesp, and Telesp. She coordinated and participated in research and norms in health considering environmental health and occupational health, in particular the National Institute of Social Security.

Dr. Nery has worked in Epidemiological Surveillance Centre since 1992 and since 2010 has been Director of the Division of Disease caused by the environment. She coordinates a team of multidisciplinary health (Doctors, Engineers, and Biologists) that develops in the Epidemiological Surveillance of people exposed to health hazards and environmental events, using guidance, publications, and researches. She also coordinates partnerships for these activities with Universities and Institutions in the area. She is also a Labor Doctor, attending to workers who are engaged with the environment.

Dr. Nery has presented numerous papers at congresses and conferences in the field of Epidemiology and Environmental Health, and coordinates the publication: *Epidemiological Surveillance In Environmental Health*, launched in December 2013.

Felicite Noubissi, Ph.D.



Dr. Felicite Noubissi is Assistant Professor in the Department of Biology and the Research Centers in Minority Institutions at Jackson State University. She received a PhD in Genetics and Molecular Biology from the Center for Cellular and Molecular Biology in Hyderabad-India under a Fellowship of the Third world Academy of Science. She also received a PhD in biochemistry from the University of Yaounde-I in Cameroon.

Dr. Noubissi's research in recent years has been focused on studying the regulation of mRNA turnover and its role in cancer development.

She identified the coding region determinant-binding protein (CRD-BP) as a *bona fide* transcriptional target of Wnt/ β -catenin signaling pathway, and demonstrated that its induction is responsible for a variety of pleiotropic effects of Wnt/ β -catenin signaling in human colorectal cancer cells. She also showed that CRD-BP regulates GLI1, the transcriptional activator of the Hedgehog signaling pathway and therefore demonstrated a novel mechanism by which Wnt signaling pathway stimulates the transcriptional output of Hedgehog signaling. This mode of regulation of GLI1 appears to be important to several functions of Wnt, including survival and proliferation of colorectal cancer cells.

Dr. Noubissi's current research focuses on the investigation of the cellular and molecular mechanisms underlying tumor development with the goal of identifying new therapeutic targets for treatment. This involves: 1. Targeting CRD-BP to overcome resistance of colorectal cancer cells to chemotherapy and, 2. Investigate the role of CRD-BP in basal cell carcinoma development.

Maricica Pacurari, Ph.D.



Dr. Maricica Pacurari is an Assistant Professor of Biology in the Department of Biology at Jackson State University, Jackson, Mississippi. Dr. Pacurari received PhD in 2006 from West Virginia University, Morgantown, West Virginia in cell molecular biology/biochemistry with emphasis on phospholipases A2 enzymes regulation and prostaglandins biosynthesis and their role in carcinogenesis.

Dr. Pacurari post-doctoral training began at School of Medicine, West Virginia University, under supervision of Dr. Guo followed by more training at CDC/NIOSH in the Division of Pulmonary Pathology and Respiratory Disease under the supervision of Dr. Castranova. Later, Dr. Pacurari continued her post-doctoral training at University of Alabama in Birmingham, School of Medicine in the laboratory of Dr. Sussane Oparil to study the role of uremia in endothelial dysfunction and chronic kidney disease.

Dr. Pacurari research is focused on the regulation of inflammation and the role of inflammation in fibrosis, endothelial dysfunction, and lung cancer. Current research is focused on the regulation of small RNA and their role in lung cancer and fibrosis. Also, currently the laboratory is funded, to develop *in vitro* methods to study lung fibrosis. A range of molecular and biochemical methods are employed in the lab firstly in *in vitro* system models, and later in *in vivo* models.

Dr. Pacurari has published in peer-reviewed journals and has given presentations at national scientific conferences. Dr. Pacurari is a member of American Heart Association, Society of Toxicology, and American Thoracic Society, and a reviewer of several peer-reviewed journals including Life Sciences, and Cell Molecular Biology

Monica M. B. Paoliello, Ph.D.



Dr. Monica M. B. 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 (UEL), Parana, Brazil.

Dr. Paoliello has a Ph.D. (2002) in Public Health from State University of Campinas (UNICAMP), Sao Paulo, Brazil. Her research interest is in Toxicology, Epidemiology and Environmental Health. She teaches in the Graduate Program in Public Health, and in the Pharmacy and Medical School, State University of Londrina. She also coordinates the Professional Master's Degree in Toxicology Applied to Health Surveillance at the National Health Surveillance Agency, (ANVISA), Brazil.

Dr. Paoliello was the President of the Brazilian Society of Toxicology (2006-2007). She has been a consultant at the National Health Surveillance Agency (ANVISA) and at Petrobras (Brazilian Oil Company).

Joann Powell, Ph.D.



Dr. Joann Powell received her Ph.D. from Meharry Medical College in biomedical sciences, with an emphasis in pharmacology. She continued her training as a postdoctoral fellow at Emory University School of Medicine and the Winship Cancer Institute in the Department of Hematology and Oncology. She joined Clark Atlanta University's Center for Cancer Research and Therapeutic Development (CCRTD) in 2010 where she also has a joint appointment in the Department of Biological Sciences.

Dr. Powell's research focuses on investigating molecular mechanisms utilized by the aryl hydrocarbon receptor (AhR) to influence cancer cell progression. Her lab is also interested in investigating whether natural compounds that inhibit AhR signaling might be effective therapeutic agents for castrate resistant prostate cancer.

Aramandla Ramesh, Ph.D.



Dr. Aramandla Ramesh is an Associate Professor in the Department of Biochemistry & Cancer Biology at Meharry Medical College in Nashville, TN. Dr. Ramesh earned his first Ph.D. in Marine Microbiology from Annamalai University, India in 1986. He earned his second Ph.D. in Environmental Toxicology from Ehime University, Japan in 1992. His areas of expertise are bioavailability, toxicokinetics, and biotransformation, acute and subchronic toxicity of polycyclic aromatic hydrocarbons (PAHs).

Dr. Ramesh's current research laboratory focuses on colon cancer caused by benzo(a)pyrene (BaP), a fat-soluble, widely distributed environmental chemical that belongs to the PAH family of compounds. Studies in his laboratory have shown that exposure of rats and mice to BaP and other PAHs through saturated fat cause induction of cytochrome P450 (CYP) family of enzymes resulting in the formation and distribution of reactive metabolites which stay in target tissues for a longer time and cause enhanced DNA damage. Ongoing research in his laboratory will eventually address

the issue of how environmental factors (exposure to toxicants) and dietary practices (excessive intake of animal meat and fat products tainted with BaP) contribute to colorectal cancer in African Americans (third leading cause of cancer related mortalities) relative to other racial/ethnic groups.

Before joining the faculty at Meharry in 2001, Dr. Ramesh was a research specialist in the Departments of Family & Preventive Medicine, and Pharmacology at Meharry. His earlier research focused on acute and subchronic toxicity of PAHs found in hazardous waste sites that were in close proximity to minority communities. Dr. Ramesh's association with the Meharry Medical College-Vanderbilt University Environmental Health consortium allows him to combine his long standing research experience in classical PAH toxicology and work collaboratively with Vanderbilt colleagues from the Basic Sciences and Community Medicine departments to investigate the interplay between diet and environmental contaminant exposure using state-of-the-art analytical and molecular approaches. As a Robert Wood Johnson Health Policy Associate, his current research is focused on exposure of minority communities to environmental chemicals and health disparities.

Dr. Ramesh has extensively published in environmental chemistry & toxicology (more than 50 peer-reviewed publications, and 6 book chapters). He completed 6 National Institutes of Health (NIH)-funded projects in toxicology & chemical carcinogenesis. Dr. Ramesh served as a consultant to the Common Wealth Foundation, UK, International Development Research Centre, Canada, and Natural Environment Research Council (NERC), UK. He is also serving as a reviewer for research proposals submitted to the NIH, HHS, NSF, EPA, Robert Wood Johnson Foundation, NERC, (UK) and INSERM (France). Dr. Ramesh also serves on the editorial boards of *Toxicology Mechanisms & Methods*, *ISRN Toxicology*, and *Polycyclic Aromatic Compounds*.

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. Ray has published over 100 scientific publications including peer-reviewed manuscripts, book chapters and abstracts. He has presented over 60 seminars, lectures and courses on various topics of Nanoscience and Nanotechnology, Nanomaterial spectroscopy, Nano-Bio technology, nonlinear optics and PDT material.

Over the last decade, Dr. Ray has focused his attention on laser spectroscopy of nano-bio interface, RNA/DNA detection based on nanotechnology, Bacteria detection, Alzheimer's biomarkers detection, cancer detection, molecular level understanding of CVD process, CVD diamond, carbon nanotubes, nano particle synthesis and characterization, alternative energy source based on plasma technology, theoretical understanding of nonlinear optical process and supramolecular hydrogen bonding.

Remata Reddy, Ph.D.



Dr. Remata Reddy, Associate Professor of Meteorology, is responsible for teaching a variety of undergraduate and graduate courses in the Department of Physics and Atmospheric Sciences and Geoscience at Jackson State University. His teaching and research interests include Meteorology/Climatology, Remote Sensing and Satellite Meteorology and Numerical Modeling.

Prior to joining the Jackson State, Dr. Reddy served as a Senior Scientist in Govt. of India to conduct research in the areas including tropical meteorology/climatology. Reddy is associated with NASA, NOAA, DoD and NSF funded projects investigating education and research in meteorology/ climatology.

Dr. Reddy has published numerous papers in the areas of meteorology and climatology. He has participated and presented papers in national and international conferences/meetings. He received B.Sc Degree in Physics from Osmania University, India, M.Sc (Tech) Degree in Applied Geophysics from Andhra University, India, and PhD Degree in Meteorology from Poona University, India.

Hector O. Rubio, Ph.D.



Dr. Hector O. Rubio obtained his PhD program at New Mexico State University in 1989. He is presently retired of the National Research Institute of Forestry, Agriculture and Animal Production (INIFAP-Mexico). At the moment, is a Professor-Researcher in the Animal Science and Ecology of the Autonomous University of Chihuahua, where he is involved in different projects to determine the level of pollution in soils and water resources of Mexico. He was an invited professor at the Advanced Materials Research Center (CIMAV-CONACYT) during the period of 2005 to 2012.

Dr. Rubio has written four books, several book chapters and has about 50 peer-reviewed publications in different journals. He belongs to the National Researcher System of CONACYT-Mexico and he is participating as a member of the bio-security experts of the CONABIO-Mexico.

Dr. Rubio serves on the editorial boards of several journals as well as had served as reviewer of many publications. Dr. Rubio's work expertise includes head of the Department of Agriculture in the State of Chihuahua, Mexico.

Natalia Shtemenko, Ph.D.



Dr. Natalia Shtemenko, a Biochemist, graduated from chemistry department, Dnipropetrovs'k National University (Dnipropetrovsk, Ukraine) in 1976. She worked for Institute of Organic Chemistry, USSR Academy of Sciences 1976-1981, Institute of Biology of Dnipropetrovs'k National University 1981-1996, from 1996 till 2015 she was the Head of the Department of Biophysics and Biochemistry of the Oles Honchar Dnipropetrovs'k National University. Now she is the Professor of the Ukrainian State University of Chemical Technology.

Dr. Shtemenko's research interests are in the areas of anticancer research, application of metal-organic substances in medicine, nano-biotechnology. In recent years she focused on the development of rhenium – platinum antitumor system that in an animal model completely eliminates cancer cells and shows itself as antioxidant and anti-hemolytic – and in elaboration of complex nano-particles for cancer therapy.

Dr. Shtemenko is an active participant of the “NATO Science for Peace and Security Program”, in 2011 she was a co-director of the NATO Advanced Research Workshop (ARW): “*Environmental and Food Security and Safety in Southeast Europe*”, Dnipropetrovs’k, Ukraine. As a Fulbright scholar in 2011-2012 and an invited researcher in 2013 she worked in the Texas A&M University in the Departments of Chemistry and Biochemistry. In 2014 she was a visiting Professor of the Friedrich-Alexander University in Erlangen-Nuremberg, Germany, according to DAAD grant. She is a member of the Ukrainian Biochemical Society; member of the International Society of Inorganic Biochemistry; takes part in the COST Action CM1105.

Kamaleshwar P. Singh, Ph.D.



Dr. Kamaleshwar P. Singh is an Associate Professor in the Department of Environmental Toxicology, and Institute of Environmental and Human Health (TIEHH), Texas Tech University at Lubbock, Texas. He received his PhD degree in Molecular Genetics from University of Delhi, India. He completed postdoctoral training at the University of Alabama at Birmingham as a National Cancer Institute (NCI) postdoctoral training fellow.

Dr. Singh’s research interests are Molecular Toxicology, Environmental Carcinogenesis, Toxicogenomics, and Human Cancer Genomics. His current research is focused on the genetic and epigenetic bases for environmental estrogenic-chemicals and heavy metals-induced human cancers. He has published 35 research articles in peer-reviewed journals and has presented his research in several national and international meetings.

Dr. Singh is a member of American Association of Cancer Research (AACR), American Society of Clinical Oncology (ASCO), and Society of Toxicology (SOT). Dr. Singh has served as a panel member for review of grant applications for federal and private funding agencies and many peer-reviewed journals. Currently, he serves as an editorial board member for *PLoS ONE*, *Bulletin of Environmental Contamination and Toxicology*, *Journal of Environmental Immunology & Toxicology*, and *Journal of Environmental & Analytical Toxicology*.

Xianglin Shi, Ph.D.



Dr. Xianglin Shi’s research focuses on metal toxicity and carcinogenesis, oxidative stress, and cancer prevention using natural compounds. As a prominent scientist and research leader in the field of metal carcinogenesis, he has been an invited seminar speaker throughout the world and has made over 85 presentations at scientific meetings and in academic settings.

Dr. Shi is author or co-author of more than 400 publications. These articles have received more than 14,600 citations. He has served as guest editor for 8 special journal issues and as editor for 2 book series in his field. In addition, he initiated the biennial meeting of Molecular Mechanisms of Metal toxicity and Carcinogenesis in 2000 and has served as the organizer or co-organizer since then. He has also served as a member or chair of various review and advisory committees.

Currently, Dr. Shi is Professor and William A. Marquard Chair; Director of the Center for Research on Environmental Disease; and Associate Dean for Nonclinical Faculty Development, College of Medicine, University of Kentucky.

William A. Toscano Jr., Ph.D.



Dr. William A. Toscano, Jr. came to the University of Minnesota in 1999 as professor and Head of the Division of Environmental Health Sciences, School of Public Health, University of Minnesota.

Dr. Toscano is currently Professor of Toxicology (2014) in the same Division. He also is Visiting Faculty at the Tata Institute of Social Sciences, Mumbai, and Chiba University in Japan. Formerly he was Chair of Environmental Health Sciences, Tulane School of Public Health and Tropical Medicine (1993-1999), and an Associate Professor of Toxicology at the Harvard School of Public Health (1980-1990). He received a Ph.D. in Biochemistry from the University of Illinois, Urbana-Champaign (1978), and was a Postdoctoral fellow in Pharmacology at the University of Washington, School of Medicine, Seattle (1978-1980).

Dr. Toscano is a fellow of the American Association for the Advancement of Science, and has an honorary Doctoral Degree from GEOMEDI University, Tbilisi Georgia, which recognized his work enhancing public health in Georgia.

Nole Tsabang, Ph.D.



Dr. Nole Tsabang is a previous researcher of the Institute of Medical Research and Medicinal Plant Studies (IMPM) and part time lecturer at the Faculty of Medicine and Biomedical Sciences since 6 years and at the Higher Institute of Environmental Science. He also work as an Independent Consultant with NGOs including Heifer International Cameroon, Alpha Technology, Poëry Environmental Sa-Rio Tinton Alcan, Rainbow Environmental Consult-Caminex and Global Water Partnership Central Africa and has been associated with Pr. Paul Bernard Tchounwou and Dr. Clement Yedjou, lecturers of Jackson State University for three years.

Dr. Nole Tsabang has served as principal investigator of many Environmental Impact Assessments (EIA) in the area of flora and vegetation and in many biological studies of forests reserves, ethnobotanical and ethno veterinary surveys. He has written numerous scientific reports for the concerned Institutions and presented or co-presented numerous reports at national and international conferences, including Traditional Medicine day, 4th conference of the Cameroon Forum of Biodiversity (CAFOBIOS), University of Dschang-Cameroon, 13th International Conference on Ethnobiology at Montpellier in France, 10th world conference on animal production at Cape Town, in South-Africa. 2008, 45th Congress of European Society of Toxicology, Rhodes, Greece 2008, 13th International Conference on Ethnobiology at Montpellier in France and 45th Congress of European Society of Toxicology. Rhodes, Greece 2008.

Dr. Nole Tsabang is involved in the publication of five books, four of which are on the ethno veterinary practices and the last on medicinal plants used to treat diabetes. He serves as reviewer for two International journals and for IFS. In addition, he has published articles, submitted manuscripts and have books in writing.

Mohammad N. Uddin, Ph.D.



Dr. Mohammad Nasir Uddin is an Assistant Professor in the Department of Obstetrics and Gynecology at Texas A&M Health Science Center College of Medicine at Scott & White Healthcare.

Dr. Uddin obtained his bachelor's and master's degrees in biochemistry & molecular biology from the University of Dhaka in Bangladesh. He earned his PhD at Gifu University in Japan. He was a recipient of the Japanese Society for Promotion of Science Fellowship for his postdoctoral research. He served intermittently as a faculty member up to an associate professor for 12 years at

University of Dhaka. Besides his primary position at TAMHSC/COM, currently he holds positions as adjunct faculty in the Texas Bioscience Institute and a Staff Scientist at Scott and White Memorial Hospital, Temple, TX.

Dr. Uddin is an accomplished scientist with a research interest in translational medicine. He is currently leading an independent research group consisting of medical students and residents and research associates. His work centers on the pathogenesis of hypertension especially on the pregnancy-induced hypertension, preeclampsia, and the potential role of cardiotoxic steroids in this condition.

Dr. Uddin's published work includes more than 100 peer reviewed articles on a variety of subjects, primarily related to the renin-angiotensin system and preeclampsia. Other areas of publication include diabetes mellitus and the identification and actions of a number of naturally derived substances.

John B. Vincent, Ph.D.



Dr. John B. Vincent received a B.S. in Chemistry and Mathematics from Murray State University and a Ph.D. in Chemistry from Indiana University. He was a NIH postdoctoral fellow at The University of Virginia before joining the faculty of The University of Alabama in 1991, where he is currently Professor of Chemistry. His research interests are in bioinorganic chemistry, with a particular focus on the nutritional biochemistry of chromium(III).

Dr. Vincent is author or co-author of over 130 peer-reviewed publications, over 15 book chapters, 8 books, and 9 patents. According to Web of Science. His publications have been cited over 7,600 times, giving an average of over 60 citations per publication and an H-index of 45. He is currently co-editor-in-chief of *Biological Trace Element Research*.

Momoh A. Yakubu, Ph.D.



Dr. Momoh A. Yakubu obtained his PhD from the University Of Glasgow Department Of Materia Medica Stobhill Gene Hospital, Glasgow Scotland. He had several special training in Neuropharmacology of the Imidazoline Receptor at the University of Glasgow Department of Medicine and Therapeutics; Cellular and Molecular Mechanisms of American Trypanosomiasis: Parasite (*T. Cruzi*) Binding, Infectivity, and Multiplication Rat Heart Myoblast at Michigan State University Department of Molecular Microbiology and Genetics and Neurophysiology of Cerebral Microcirculation, Laboratory for Research in Neonatal Physiology, Brain Injury Research Center, University of Tennessee.

Dr. Yakubu is an Associate Professor in the Department of Environmental and Interdisciplinary Sciences and Coordinator of Graduate Environmental Toxicology Program. He is also a Senior Scientist and Head, of the Vascular Biology Unit of the Center for Cardiovascular Diseases, College of Pharmacy and Health Sciences of Texas Southern University, Houston Texas.

Dr. Yakubu's research interest focuses on the regulation of signaling molecules by pathological and toxicological insults with interest in identifying signaling molecules involved in cerebrovascular dysfunctions following exposure to environmental toxicants, subarachnoid hemorrhage, traumatic brain injury as well as pathology-induced brain dysfunction to serve as molecular neuroprotection and therapeutic targets to stem the consequences of cardiovascular disease that leads to cerebral vasospasm, stroke and neurological dysfunctions. His lab also focuses on interdisciplinary research aimed at investigating biological consequences of exposure to environmental toxicants with an integrated instrumental analysis using GC/MS, HPLC, ICP-MS, NMR, MALDI-TOF.

Yazhou Zhang, Ph.D.



Dr. Yazhou Zhang is Technician/Research Associate at RCMI--Analytical Core Laboratory in the College of Science, Engineering & Technology, Jackson State University. He received his Ph. D. in 2007 from Institute of Chemistry, Chinese Academy of Sciences (ICCAS), Beijing, China in Analytical Chemistry.

After graduation, Dr. Zhang has received post-doctoral award from Max-Planck-Institute for Bioinorganic Chemistry, Mülheim, Germany, where he cooperated with Dr. Helmut Gerner and concentrated his research in photochemistry and photobiology. Since June 2009, Dr. Zhang worked as Research Associate at RCMI. Currently, he is in charge of the chemistry facility in Analytical Core Laboratory.

Dr. Zhang's research focus on photochemistry and analytical chemistry. He is interested in studying the photoactivity of thiopurine prodrugs, as the high risk of skin cancer with the use of these drugs was related to sunlight exposure and Reactive Oxygen Species (ROS). ROS, including singlet oxygen (1O_2), superoxide (O_2^-) and hydroxyl radical, play major role in the photooxidation of DNA and proteins. Besides these, he is expert in organic molecules' identification and structure analysis as well as method development.

Dr. Zhang has published more than thirty papers in peer-reviewed journals. He is a member of several professional organizations including American Chemistry Society (ACS), American Society for Photobiology (ASP), Sigma Xi, etc.
