

***Sunday, September 13, 2009***

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12:30 - 4:30 PM      **Pre-Symposium Workshop on the NIH-National  
Library of Medicine Web Resources for  
Environmental Health Research**      *Jackson State University  
JAP Science Building  
Room-118*

5:00 - 7:00 PM      **Registration  
Meet and Greet**      *Marriott Hotel,  
Downtown Jackson, MS, USA*

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***Monday, September 14, 2009***

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7:30 - 8:45 AM      **Registration and Continental Breakfast**      **Mezzanine**

8:45 - 9:30 AM      **WELCOME AND OPENING REMARKS**      **Windsor I**  
*(Dr. Paul Tchounwou – Symposium Chair)*

***Dr. Ronald Mason Jr.***

*President, Jackson State University (JSU), Jackson, MS, USA*

*Principal Investigator,*

*NIH-RCMI Center for Environmental Health, JSU, USA*

***Honorable Haley Barbour***

*Governor, State of Mississippi, USA*

***Honorable Harvey Johnson***

*Mayor, City of Jackson, MS, USA*

***Dr. Felix Okojie***

*Vice President for Research Development and Federal Relations, and*

*Interim Vice President for Academic Affairs & Student Life,*

*Jackson State University, Jackson, MS, USA*

***Dr. Mark G. Hardy***

*Dean, College of Science, Engineering & Technology,*

*Jackson State University, Jackson, MS, USA*

9:30 - 10:50 AM **PLENARY SESSION I-A: ENVIRONMENTAL TOXICOLOGY AND HEALTH RISK ASSESSMENT**

**Chairpersons: Dr. Aage Haugen<sup>1</sup> and Mr. Shelton Swanier<sup>2</sup>**

<sup>1</sup>*Research Director, Professor and Head, Section of Toxicology, National Institute of Occupational Health, P.O. Box 8149 Dep, N-0033 Oslo, Norway*

<sup>2</sup>*Assistant Dean, Office of Strategic Initiatives and Operations, College of Science, Engineering & Technology, JSU, Jackson, MS, USA*

9:30 **Insoluble NI Compounds Induce Chromosomal Aberrations, Gene Amplification/Gene Silencing, Global Disruption of Gene Expression, and Morphological/Neoplastic Transformation of 10T1/2 Mouse Embryo Cells**  
**Dr. Joseph R. Landolph**

*Cancer Research Laboratory, USC/Norris Comprehensive Cancer Center, and Depts. of Molecular Microbiology/Immunology and Pathology, Keck School of Medicine, University of Southern California, Los Angeles, California, 90033, USA.*

9:50 **The Protective Mechanism of Plants Immunomodulators in Cadmium-Induced Toxicity *In Vivo***

**Dr. Alina Smalinskiene**

*Laboratory of Molecular Cardiology, Institute of Cardiology, Kaunas University of Medicine, Sukileliu str. 17 LT-50009, Kaunas, Lithuania*

10:10 **Flavomannin-6,6'-Dimethylether from *Tricholoma Equestre*: Purification and Mechanisms of Action in Human Cells Lines**

**Dr. Edmond E. Creppy**

*Toxicology Department, University of Bordeaux 2, 146, Rue Le'oSaignat 33076 Bordeaux – France*

10:30 **Studies of Reactive Oxygen Species Including “Singlet Oxygen” as a Therapeutic and Disinfecting Agent**

**Dr. Alexander Greer**

*Department of Chemistry and Graduate Center, City University of New York, Brooklyn College, 2900 Bedford Avenue, Brooklyn, New York 11210*

10:50 - 11:00 AM



**11:00- 12:20 AM**      **PLENARY SESSION I-B: ENVIRONMENTAL TOXICOLOGY AND HEALTH RISK ASSESSMENT**

**Chairpersons: Dr. Robert Whalin<sup>1</sup> and Dr. Monica M.B. Paoliello<sup>2</sup>**

*<sup>1</sup>Associate Dean, College of Science, Engineering, and Technology, Jackson State University, Jackson, Mississippi, USA*

*<sup>2</sup>President of Brazilian Society of Toxicology & Professor, Departamento de Patologia, Análises Clínicas e Toxicológicas, Universidade Estadual de Londrina, Brazil*

**11:00**                      **MDR/MXR Induction by Manganese Exposure: Health Implications Due to Acquired Resistance not induced by Pharmaceuticals**

***Dr. Tapan Chakrabarti***

*Environmental Biotechnology Division, National Environmental Engineering Research Institute (NEERI), Nehru Marg, Nagpur- 440020*

**11:20**                      **Differential Metabolism of the Environmental Toxicant, Benzo(A)Pyrene by Subcellular Fractions of Human Ovary**

***Dr. Aramandla Ramesh***

*Department of Cancer Biology, Meharry Medical College, Nashville, TN 37208, USA*

**11:40**                      **Relevance of Metals in the Initiation of Cardiovascular Diseases**

***Dr. David Bernhard***

*Cardiothoracic Surgery, Vienna General Hospital, Vienna, AUSTRIA*

**12:00**                      **Agro-Pesticides Use in Cameroon and their Effect on Male Reproductive Function: A Case Study in Djutitsa**

***Dr. Paul F. Moundipa***

*Laboratory of Molecular Toxicology and Pharmacology, Department of Biochemistry, University of Yaounde I, Cameroon*

**12:20 - 2:00 PM**

***Luncheon***



**Introduction of Luncheon Speaker**

***Dr. Mark Hardy***

*Dean, College of Science, Engineering & Technology, Jackson State University, Jackson, MS, USA*

**“Honorary Biomedical Sciences and Health Information Lecture Series”**

**Influence of Environmental Exposure on Health Disparities**

***Dr. Bailus Walker***

*Professor of Environmental and Occupational Medicine, Department of Environmental and Occupational Medicine, Howard University College of Medicine, Washington, DC, USA*

2:00 - 3:40 PM **PLENARY SESSION II: NANOSCIENCE, NANOTECHNOLOGY AND NANOTOXICOLOGY**

**Chairpersons: Dr. Quinton William<sup>1</sup> and Dr. Danuta Leszczynska<sup>2</sup>**

<sup>1</sup>*Chair, Department of Physics, Atmospheric Science and Geoscience, CSET, JSU, Jackson, MS USA*

<sup>2</sup>*Professor of Civil and Environmental Engineering, College of Science, Engineering and Technology, JSU, Jackson, MS, USA*

2:00 **Nanomaterials Based NSET Optical Ruler for Environmental Toxin Sensing: Promises and Challenges**  
**Dr. Paresh Chandra Ray**  
*Department of Chemistry, Jackson State University, Jackson, MS 39217-0168, USA*

2:20 **Application of Nanoliposomes and Nanoparticles in Rhenium-Platinum Antitumor System**  
**Dr. Natalia Shtemenko**  
*Department of Biophysics and Biochemistry, Dniepropetrovsk National University, 72 Gagarin avenue, 49050 Dniepropetrovsk, Ukraine*

2:40 **Application of QSAR Technique to Prediction of Properties and Activities for Selected Nanomaterials**  
**Dr. Bakhtiyor Rasulev**  
*Department of Civil and Environmental Engineering, Interdisciplinary Center for Nanotoxicity, College of Science, Engineering and Technology, Jackson State University, Jackson, Mississippi 39217, USA*

3:00 **Soot Generated during Metallofullerene Nanomaterial Synthesis Adversely Affects Terrestrial Invertebrates in a pH-Dependent Manner**  
**Ms. Cynthia Banks**  
*U.S. Army Engineer Research and Development Center, 3909 Halls Ferry Road, Vicksburg, Mississippi, USA*

3:20 **Comparative Clastogenicity Study of Functionalized and Non-Functionalized Multi-Walled Carbon Nanotube in Bone Marrow Cells of Switch-Webster Mice**  
**Dr. Anita Patlolla**  
*Molecular Toxicology Research Laboratory, NIH RCMI-Center for Environmental Health, Jackson State University, Jackson, Mississippi, USA*

3:40 - 3:50PM



**Mezzanine**

3:50 - 5:30 PM **PLENARY SESSION III: NATURAL RESOURCES DAMAGE ASSESSMENT AND MANAGEMENT** Windsor I

**Chairpersons: Dr. Hector Rubio-Arias<sup>1</sup> and Dr. Loretta Moore<sup>2</sup>**

<sup>1</sup>*Professor-Researcher, Faculty of Zootechnics, Autonomous University of Chihuahua, Mexico*

<sup>2</sup>*Professor and Chair, Department of Computer Science, College of Science, Engineering and Technology, JSU, Jackson, MS, USA*

3:50 **Wetlands Assimilation of Treated domestic Sewage for Ecological Restoration and Storm Surge Protection-Public Health Aspects**

***Dr. Andrew J. Englande Jr.***

*Tulane University, Department of Environmental Health Sciences, School of Public Health & Tropical Medicine, 1440 Canal St, New Orleans, LA 70112, USA*

4:10 **Simulation of Atmospheric Dispersion Characteristics for Ozone and Particulate Matter over the Mississippi Gulf Coast Region during Contrasting Months of May and October**

***Dr. Anjaneyulu Yerramilli***

*Trent Lott geospatial Visualization Research Centre, Jackson State University, 1230 Raymond Road, Jackson, MS 39204, USA*

4:30 **Detecting and Removing Depleted Uranium Munitions Contamination in Soil**

***Dr. John Furey***

*Environmental Laboratory, U.S. Army Engineer Research and Development Center, 3909 Halls Ferry Road, Vicksburg Mississippi, USA 39180-6199*

4:50 **Emissions of Atmospheric Pollutants from Fires and Air Quality Forecasting Based on Real-Time Satellite Data**

***Dr. Wei Min Hao***

*U.S. Forest Service, RMRS Fire Sciences Laboratory, Missoula, Montana, USA*

5:10 **Transport and Fate of Zinc Present in Soil, Ground Water and Plants in the Areas Surrounding the Zinc Smelter**

***Dr. N. Someswara Rao***

*Analytical Chemistry Laboratories, Dept. of Inorganic and Analytical Chemistry, Andhra University, Visakhapatnam-530 003, India*

5:30 - 7:00 PM **POSTER SESSION A – STUDENTS**

**Windsor II**

7:00 - 9:30 PM ***Reception by Invitation***



***University Club, Downtown Jackson,  
Jackson, MS, USA (Entertainment and Heavy Hors d'oeuvres)***

**Tuesday, September 15, 2009**

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- 7:30 – 8:30 AM      **Registration and Continental Breakfast**
- 8:40 – 10:20 AM    **PLENARY SESSION IV-A: NEW FRONTIERS IN ENVIRONMENTAL HEALTH RESEARCH**      **Windsor I**  
**Chairpersons: Dr. J. R. Landolph<sup>1</sup> and Dr. Edmond Creppy<sup>2</sup>**  
*<sup>1</sup>Associate Professor, Department of Pharmacology/Pharmaceutical Sciences, School of Pharmacy, University of Southern California, Los Angeles, California, USA*  
*<sup>2</sup>Professor and Director of Toxicology Laboratory, University Bordeaux 2, 146, rue Léo Saignat 33076 Bordeaux, France*
- 8:40                    **L1 Elements as a Source of Environmentally Sensitive Genetic Instability**  
**Dr. Prescott Deininger**  
*Tulane University Cancer Center & Department of Epidemiology, Tulane University, New Orleans, Louisiana, USA*
- 9:00                    **The Receptor for Environmental Poly-Aromatic Hydrocarbons Mediates Human Breast Cancer Progression**  
**Dr. Sakina Eltom**  
*Department of Cancer Biology, Meharry Medical College, Nashville, TN, USA*
- 9:20                    **Oral Cancer: Indian Public Health Scenario & Tissue/Serum Markers**  
**Dr. Sunali Khanna**  
*Department of Oral Medicine & Radiology, Nair Hospital Dental College, Mumbai, 400008 India*
- 9:40                    **Role of Mitochondrial Transcription Factor a (*Mtfa*) in Arsenic-Induced Cell Proliferation and DNA Damage in Human Prostate Epithelial Cells**  
**Dr. Kamalshwar P. Singh**  
*The Institute of Environmental and Human Health (TIEHH), Texas Tech University, Lubbock, TX 79409*
- 10:00                   **The Toxicity of Heavy Metals and Chelation Safeguard of Herbal Medicinal Products**  
**Dr. Nijole Savickiene**  
*Department of Pharmacognosy, Kaunas University of Medicine, A. Mickeviciaus str.9, LT-44307 Kaunas, Lithuania*



10:20 - 10:35 AM

- 10:35 - 12:15 PM **PLENARY SESSION IV-B: NEW FRONTIERS IN ENVIRONMENTAL HEALTH RESEARCH** Windsor I  
**Chairpersons: Dr. Prescott Deninger<sup>1</sup> and Dr. Marinelle Payton<sup>2</sup>**  
*<sup>1</sup>Zimmernan Chair, Tulane University, Cancer Center, New Orleans, LA*  
*<sup>2</sup>Assistant Dean for Research & Program Development, School of Health Sciences, College of Public Service, JSU, Jackson, MS, USA*
- 10:35 **Epigenetics in Environmental Health**  
**Dr. Karl T. Kelsey**  
*Department of Pathology and Laboratory Medicine, Department of Community Health, Center for Environmental Health and Technology, Brown University, Providence, Rhode Island 02912*
- 10:55 **Sex Differences in the Response to PAH and Risk of Lung Cancer**  
**Dr. Aage Haugen**  
*Section of Toxicology, Department of Chemical and Biological Working Environment, National Institute of Occupational Health, PO Box 8149 Dep, N-0033 Oslo, Norway*
- 11:15 **Hypoxia and Acidosis Independently Regulate Cell Immortality in Cancer Cell**  
**Dr. Karam F. Soliman**  
*RCMI Program, College of Pharmacy and Pharmaceutical science, Florida A&M University*
- 11:35 **An Overview of the Possible Role of Selenium in the Chemoprevention of Carcinogenesis for TNT-Exposed Workers**  
**Dr. Abdelfattah M. Badawi**  
*Center of Excellence for Science and Technology, Alsalam, Ministry of Military Production, Heliopolis P.O. Box 5015, Cairo 11771, Egypt*
- 11:55 **Potential Mechanisms of Action of Water Soluble Garlic Extract (WSGE) in the Management of Acute Promyelocytic Leukemia**  
**Dr. Clement G. Yedjou**  
*Cellomics & Toxicogenomics Research Laboratory, NIH RCMI-Center for Environmental Health, Jackson State University, Jackson, Mississippi, USA*
- 12:15 - 2:00 PM **Luncheon**  Windsor III  
**Introduction of Luncheon Speaker**  
**Ms. Rita Presley**  
*Associate Vice-President for Research and Federal Relations, Jackson State University, Jackson, MS, USA*  
**“Honorary Biomedical Sciences and Health Information Lecture Series”**  
**Strategies for Proteomic Profiling of Cancer Specimens and Plasma in Mouse Models of Human Cancers: Identification of Novel Alternative Splice Isoforms as a New Class of Biomarker Candidates**  
**Dr. Gilbert S. Omenn, MD, PhD**  
*Director, Center for Computational Medicine and Biology & Professor of Internal Medicine, Human Genetics and Public Health. University of Michigan, Ann Arbor, Michigan, USA*
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2:05 – 3:45 PM **PLENARY SESSION V: MEDICAL GEOLOGY AND HUMAN HEALTH**  
**Windsor I**

**Chairpersons: Dr. José A. Centeno<sup>1</sup> and Dr. Nelly Mañay<sup>2</sup>**

<sup>1</sup>*Chief, Division of Biophysical Toxicology, Department of Environmental and Infectious Disease Sciences, AFIP, Washington, DC, USA*

<sup>2</sup>*Professor, Department of Toxicology and Environmental Hygiene, Faculty of Chemistry, University of the Republic, Montevideo, Uruguay*

2:05 **Soil: The Essence of Medical Geology**

**Dr. José A. Centeno**

*Department of Environmental and Infectious Disease Sciences, Armed Forces Institute of Pathology, Washington, DC, USA*

2:25 **Lead Contamination in Uruguay –An Ecohealth Approach**

**Dr. Adriana Cousillas**

*Toxicology & Environmental Hygiene Department, Faculty of Chemistry, University of the Republic of Uruguay*

2:45 **Developing Medical Geology in Uruguay**

**Dr. Nelly Mañay**

*Department of Toxicology and Environmental Hygiene, Faculty of Chemistry, University of the Republic, Montevideo, Uruguay*

3:05 **Levels of Lead in Human Milk: A Systematic Review**

**Dr. Monica B. Paoliello**

*Núcleo de Estudos em Saúde Coletiva, Universidade Estadual de Londrina (UEL), Londrina, PR, Brazil*

3:25 **An Overview of Contamination of the Conchos River in Mexico: Does it Pose a Risk to the Health of Local Residents?**

**Dr. Hector Rubio-Arias**

*Professor-Researcher. College of Zootechnology and Ecology, Autonomous University of Chihuahua. Mexico*



3:45 – 4:00 PM

**Mezzanine**

4:00 – 5:40 PM **PLENARY SESSION VI: EMERGING TOPICS IN COMPUTATIONAL BIOLOGY AND ENVIRONMENTAL MODELING**  
**WINDSOR I**

**Chairpersons: Dr. Karam F. Soliman<sup>1</sup> and Dr. Hongtao Yu<sup>2</sup>**

<sup>1</sup>*Distinguished Professor & Director, RCMI Program, College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, Tallahassee, FL, USA*

<sup>2</sup>*Professor and Chair, Department of Chemistry & Biochemistry, College of Science, Engineering and Technology, Jackson State University, Jackson, Mississippi, USA*

4:00                    **Estimation of Mold Spore Levels using Ground Meteorological and Remote Sensing Data**  
*Dr. Fazlay S. Faruque*  
*University of Mississippi Medical Center, 2500 N. State Street, Jackson, Mississippi 39216, USA*

4:20                    **Meteorological Conditions affecting Airborne Fungal Spore Burst during Winter and Summer 2007-2008 in Central Mississippi**  
*Dr. Martha N. Brackin*  
*University of Mississippi Medical Center, 2500 N. State Street, Jackson, Mississippi 39216, USA*

4:40                    **Using GIS in Ecological Management: Green Assessment of the Impacts of Petroleum Activities in the State of Texas**  
*Dr. Edmund C. Merem*  
*Department of Urban and Regional Planning, Jackson State University, Jackson, MS 39211, USA*

*Department of Advanced Technologies, School of Agriculture and Applied Sciences, Alcorn State University, Lorman, Mississippi, USA*

5:00                    **Estrogen Receptor Co-Peptide Binding Studies Using the MM-PBSA Method**  
*Dr. Jesse Edwards*  
*Department of Chemistry and Quantum Theory Project, University of Florida, Gainesville, FL 32608, USA*

5:20                    **Investigations of Aconitum and Delphinium Alkaloids of Curare-Like Activity: QSAR and Computer Modeling Studies of Alkaloids Binding to AChBP**  
*Dr. M. A. Turabekova*  
*Interdisciplinary Center for Nanotoxicity, College of Science, Engineering and Technology, Jackson State University, Jackson, Mississippi 39217, USA*

5:45 - 7:30 PM            **POSTER SESSION B – FACULTY & PROFESSIONAL SCIENTISTS**

**Windsor II**

8:00 – 11:00 PM        **Symposium Banquet**  
**Introduction of Banquet Speaker**

*Dr. Ronald Mason Jr.*  
*President, Jackson State University, Jackson, MS, USA*

**“The RCMi Program: A Catalyst for Biomedical and Translational Research”**

*Dr. Sidney McNairy Jr.*  
*Director, Division of Research Infrastructure*  
*Associate Director, National Center for Research Resources, National Institutes of Health, Bethesda, USA*

**Wednesday, September 16, 2009**

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7:30 - 8:40 AM      **Continental Breakfast**      **Mezzanine**

8:45 - 10:25 AM      **PLENARY SESSION VII-A: HEALTH DISPARITIES AND ENVIRONMENTAL SECURITY**      **WINDSOR I**

**Chairpersons: Dr. James Maddirala<sup>1</sup> and Dr. Dora N. Mbanya<sup>2</sup>**

<sup>1</sup>*Associate Vice-President for Academic Affairs and Student Life, Jackson State University, Jackson, MS, USA*

<sup>2</sup>*Professor & Head, Hematology Laboratory, Faculty of Medicine & Biomedical Sciences, University of Yaoundé I, Cameroon*

8:45      **Reproductive Challenges for Female Sickle Cell Patients on Hydroxyurea**  
**Dr. Anthony E. Archibong**  
*Department of Obstetrics and Gynecology, Meharry Medical College, Nashville, TN, USA*

9:10      **Effect of Smoking on Spirometry of African Americans and Caucasians**  
**Dr. Marcy F. Petrini**  
*University of Mississippi Medical Center and G.V. (Sonny) Montgomery VA Medical Center, Jackson, MS, USA*

9:35      **Primary Health Care Re-Visited: Using Social Determinants of Health to Address Health Disparities and Inequities in the African Region**  
**Dr. Stella C.E. Anyangwe**  
*World Health Organization Country Office, 351 Schoeman Street, Pretoria 0126, Republic of South Africa*

10:00      **Chemopreventive Intervention in Chemically-Induced Carcinogenesis in Sub-Saharan Africa**  
**Dr. E. Olatunde Farombi**  
*Drug Metabolism and Toxicology Research Laboratories, Department of Biochemistry College of Medicine, University of Ibadan, Nigeria*



10:25 - 10:40 AM

10:40 - 12:20 AM      **PLENARY SESSION VII-B: HEALTH DISPARITIES AND ENVIRONMENTAL SECURITY**      **WINDSOR I**

**Chairpersons: Dr. Stella Anyangwe<sup>1</sup> and Dr. Mario Azevedo<sup>2</sup>**

<sup>1</sup>*Representative, World Health Organization Country Office, 351 Schoeman Street, Pretoria 0126, Republic of South Africa*

<sup>2</sup>*Interim Dean, College of Public Service, Jackson State University, Jackson, MS, USA*

- 10:40            **Risk Factors for Transmission of HIV in a Hospital Environment: Does Knowledge Equal Implementation?**  
*Dr. Dora N. Mbanya*  
*Faculty of Medicine & Biomedical Sciences, University of Yaoundé I, Cameroon, <sup>2</sup>Centre Hospitalier et Universitaire, Yaoundé, Cameroon*
- 11:05            **Season of Birth and Risk for Adult Gliomas: The Upper Midwest Health Study**  
*Dr. J. T. Efirid*  
*UNCG Center for Health of Vulnerable Populations, 237B McIver Building, Admin. Dr., Greensboro, NC, USA 27402-6170*
- 11:30            **Medical and Economic Model to Assess the Effect of Poor Glycemic Control of Persons with Diabetes Mellitus**  
*Dr. Daniel Sarpong*  
*Jackson State University, Jackson Heart Study, Jackson, Mississippi, USA*
- 11:55            **Effects of Native Banana Resistant Starch on Body Weight and Insulin Resistance in Obese Type 2 Diabetics**  
*Dr. Ble-Castillo JL*  
*Centro de Investigacion, Division Academica de Ciencias dela Salud, Universidad Juarez Autonoma de Tabasco (UJAT), Mexico*

12:30 - 2:30 PM

Luncheon



Windsor III

**(CLOSING REMARKS - RECOGNITIONS)**