*provisional: Registration of a presenting author implies the payment of the registration fees using either members (membership fee + registration fee) or nonmembers (registration fee only) rates. Please note that abstracts and research articles will not be published by AIP without proper registration payment.

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FINAL PROGRAM

5th BioNanoTox and Applications Research Conference

“BioNanoTox and Toxicity: using Technology to Advance Discovery”

Little Rock, Arkansas
November, 2010
SCIENTIFIC PROGRAM


Dates: November 3-5th, 2010

Wednesday, November 3rd, 2010

3:00PM – 5:00PM  Check-in at the Peabody Little Rock Hotel, Little Rock

SCIENTIFIC PROGRAM, Thursday, November 4th, 2010

8:00AM – 9:00AM  REGISTRATION, POSTERS SET UP, AND CONTINENTAL BREAKFAST

9:00AM – 9:15AM  Welcome and Introductory Remarks
Olga Tarasenko, MD, PhD, Founder and Chair
Parimal Chowdhury, PhD, Co-Chair

9:15AM – 9:30AM  Guest of Honor
Opening Remarks by Paul Howard, PhD, Associate Director
*National Center for Toxicological Research, Food and Drug Administration, Jefferson, Arkansas, United States.*

Plenary Session I: Nanotechnology, Benefits, Risk Factors, and Applications; Nanoparticles and Their Biological Applications (part 1)

9:30AM – 10:45AM  Session Chairs:
Rahul Mehta, PhD, Professor, Physics and Astronomy, University of Central Arkansas, Conway, Arkansas, United States.

Mark Rice, Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

   *Yongbin Zhang¹, Yvonne Jones¹, Barbara Miller¹, Jyotshnabala Kanungo², Merle Paulie³, Syed F. Ali³, William Salminen¹, Xi Yang³, Alexandru Biris⁴, Yang Xu⁴, and Paul Howard¹. 1-Office of Scientific Coordination, 2-Division of Neurotoxicology; 3-Division of Systems Biology National Center for Toxicological Research, Jefferson, Arkansas, United States; 4-Nanotechnology Center, University of Arkansas at Little Rock, Arkansas, Little Rock, United States.*

2. “Screening of Enzyme Biomarker for Nanotoxicity of Zinc Oxide in Fish”.
   *Periasamy Subramanian¹, G. Bupesh³, and C. Amutha²
   1-Department of Animal Science, Bharathidasan University Tiruchirappalli, Tamil Nadu, India, 2-Department of Animal Behavior and Physiology, Madurai Kamaraj University, Madurai. Tamil Nadu, India.*

3. “Application of Biodegradable Nanoparticles in Liver Targeting of Tacrolimus.” Nagia. N. Affifi ³, Ola. A. Heikal ², Rasha S. Hanafi ³, and
10:00AM – 10:15AM  Salma N. Tammam 1. 1-Pharmaceutical Technology, 2-Pharmacology and Toxicology, 3-Pharmaceutical Chemistry Departments, German University in Cairo (GUC), Cairo, Egypt.

4. “Neuronal Networks on the Nano Alumina Templates.”
Asiful Islam, Zheng Ma, and Latika Menon. Northeastern University, Boston, Massachusetts, United States.

10:15AM – 10:30AM

5. “Effect of Silver Nanoparticles (AgNPs) upon the Smooth Muscle of Rat Trachea. Role of Nitric Oxide.”
Carmen González 1; Salazar-García S1; Martínez-Cuevas PP,1 Ramírez-Lee MA1, Jiménez Badillo SE1, Jurado Manzano BB1; Rosas-Hernández H1, and Ali FA1. 1-Autonomous University of San Luis Potosí, Faculty of Chemistry Sciences, San Luis Potosí, Mexico. 2-Neurochemistry Laboratory, Division of Neurotoxicology, National Center for Toxicological Research, Jefferson, Arkansas, United States.

10:45AM – 11:00AM  COFFEE BREAK

POSTER SESSION & POSTER COMPETITION

Plenary Session II:
11:00AM – 12:00PM  Session Chair:
Parimal Chowdhury, PhD, Co-Chair, Professor, Department of Physiology and Biophysics, University of Arkansas for Medical Sciences Arkansas, United States.

Plenary talk “Toxicity of Novel Nanoparticles for CT Imaging” by Ananth V. Annapragada, PhD, Robert H. Graham Professor, University of Texas Houston, School of Biomedical Informatics, Houston, Texas, United States.

12:00PM – 1:00PM  LUNCH

Plenary Session III:
1:00PM – 2:00PM  POSTER SESSION & POSTER COMPETITION

Plenary Session IV:
2:00PM – 2:45PM  Session Chairs:
Alexei Basnakian, MD, PhD, DSc1,2 Associate Professor, 1DNA Damage and Toxicology Core, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, and 2Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, United States.

Chuck Ufondu, Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

1. “Synthesis and Evaluation of Complexes if Zinc (II) with Derivatives of Cysteine and Penicillamine as Potential Cytoprotective Agents.”
Jace D. Everette1, Richard B. Walker1, Ali U. Shaikh2, and Brian Berry2. 1-University of Arkansas at Pine Bluff, Pine Bluff, Arkansas, United States; 2-University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

2. “Serum Peptide Changes in Chickens with Metabolic Skeletal
2:15PM – 2:30PM  Problems Associated with Lameness.”
Komal S. Rasaputra1,2, Rohana Liyanage3, Ron Okimoto4, Jackson O. Lay, Jr.3, and Narayan C. Rath2. 1-Department of Poultry Science, PPPSU, Fayetteville, Arkansas, United States; 2-Agricultural Research Service/ USDA, Fayetteville, Arkansas, United States; 3-State Wide Mass Spectrometry Facility, University of Arkansas, Fayetteville, Arkansas, United States, 4-Cobb-Vantress Co, Siloam Springs, Arkansas, United States.


2:45PM – 3:00PM  COFFEE BREAK

Plenary Session V: Toxicogenomics, Toxicogenetics, and Diagnostics (part 1)

3:00PM – 4:00PM  Session Chairs:
Michael E. Soulsby, PhD, Professor, Department of Physiology and Biophysics, University of Arkansas for Medical Sciences Arkansas, United States.

Taneicie Sabb, Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.


2. “Expression of Na-H Exchanger-8 Isoform is Suppressed in Experimental Colitis in Adult Rat: Lack of Reversibility by Dexamethasone.”
Islam Khan and Amna Al-Shamali. Department of Biochemistry, Faculty of Medicine, Kuwait University, Kuwait.

3. “Glycoconjugates as Mediators of Nitric Oxide Production.”
Mohamed Lahiani1, Lee Soderberg2, and Olga Tarasenko1. 1- Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2- Department of Microbiology and Immunology, University of Arkansas for Medical Science, Little Rock, Arkansas, United States.

4. “Colorectal Cancer Cells and Apoptosis: Utilizing Cell Culturing Techniques to Explore Inositol and Etoposide Induced Apoptosis as a Colon Cancer Treatment Therapy.”
Evelyn E. James1 and Nawab Ali2. 1- Fair High School, Arkansas, United States; 2- Graduate Institute of Technology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.
Plenary Session VI: Markers and Modulators of Cell and Tissue Injury Responses to Toxic Injuries (part 1)

4:00PM – 4:45PM

Session Chairs:
Islam Khan, PhD, Professor, Department of Biochemistry, Faculty of Medicine, Kuwait University, Kuwait.

Mohamed Lahiani, BS, Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

Ryne Ramaker1,2, Jacquelyn Zimmerman2, Frederico P. Costa3, Ivan Brezovich4, Michael Pennison5, Devin Absher5, Richard Myers5, Alexandre Barbault6, Niels Kuster7, and Boris Pasche2.
1-Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-Department of Hematology / Oncology, Department of Medicine, University of Alabama at Birmingham and UAB Comprehensive Cancer Center, Birmingham, Alabama, United States; 3-Department of Transplantation and Liver Surgery, Hospital das Clínicas, University of São Paulo, Brazil, 4-Department of Radiation Oncology, University of Alabama at Birmingham, Birmingham, Alabama, United States; 5-HudsonAlpha Institute for Biotechnology, Huntsville, Alabama, United States, 6-Rue de Verdun 20, Colmar, France, 7-IT"IS Foundation, Swiss Federal Institute of Technology, Zurich, Switzerland.

2. “Transcriptome Analysis Gene Expression Profiles in Kidneys of Rats Treated with Aristolochic Acid.”
Tao Chen and Zhiguang Li. Division of Genetic and Molecular Toxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States.

3. “Study of F1/F0-ATPase Mitochondrial Catalytic Activities in Mexican Patients with Alzheimer Disease.”
Evelia Cano Martinez1, Patricia M. Gallegos Arreola2, Raul A. Trbojevich3, Miguel A. Macias Islas4, and Gabriel G. Ortiz5.
1-Biology and Cell Molecular Laboratory, Los Lagos Center University, Guadalajara University, Jalisco, Mexico; 2-Genetic Molecular Laboratory, CIBO-IMSS, Jalisco, Mexico; 3-Division of Biochemical Toxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States; 4-Development and Age Laboratory, CIBO-IMSS, Jalisco, Mexico; 5-Neurology Department. HE-CMNO, IMSS, Jalisco, Mexico.

5:00PM – 5:30PM
Business meeting

Moderators:
Alexei Basnakian, MD, PhD, DSc1,2 Associate Professor, 1DNA Damage and Toxicology Core, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, and 2Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, United States; Rahul Mehta, PhD, Professor, Physics and Astronomy, University of Central Arkansas, Conway, Arkansas, United States; Parimal Chowdhury, PhD,
All members and volunteers are welcome!

Talk and help plan:
   A) BioNanoTox International Bi-monthly Journal
   B) the 6th BioNanoTox, November 11-12th, 2011
   C) the 7th BioNanoTox, 2012

6:00PM – 7:00PM   RECEPTION   (Lower Level of Pinnacle Room, Peabody Hotel)

6:00PM – 6:30PM   “Guitar & Keyboard Performance” by Rolf Groesbeck and Daniel
                  Vazquez, University of Arkansas at Little Rock, Little Rock, Arkansas,
                  United States.

6:30PM – 6:40PM   Opening Remarks by Michael A. Gealt, PhD, Dean
                  College of Science and Mathematics, University of Arkansas at Little Rock,
                  Little Rock, Arkansas, United States.

6:40PM – 7:00PM   Remarks and Awards by Patrick J. Pellicane, PhD, Vice Provost for
                  Research and Dean of the Graduate School
                  University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

7:00PM – 8:00PM   DINNER   (Lower Level of Pinnacle Room, Peabody Hotel)
SCIENTIFIC PROGRAM, Friday, November 5th, 2010

8:00AM – 9:05AM REGISTRATION, POSTERS VIEWING, AND CONTINENTAL BREAKFAST
Welcome and Introductory Remarks

9:10AM – 9:15AM Parimal Chowdhury, PhD, Co-Chair

Plenary Session VII: Nanotechnology, Benefits, Risk Factors, and Applications: Nanoparticles and Their Biological Applications (part 2)

9:15AM – 10:30AM Session Chairs:
Islam Khan, PhD, Professor, Department of Biochemistry, Faculty of Medicine, Kuwait University, Kuwait.
Chuck Ufondu, Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

1. “Evaluation of Genotoxicity of Titanium Dioxide Nanoparticles using the Ames Test and In Vitro Comet Assay.”
   Robert S. Woodruff¹, Jian Yan², Margie Y. Jones², Fumiya Watanabe, Alexandru Biris³ and Tao Chen³. 1-Division of Microbiology, Arkansas Regional Laboratory, US Food and Drug Administration, Jefferson, Arkansas, United States; 2-Division of Genetic and Molecular Toxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States; 3-Nanotechnology Facility, National Center for Toxicological Research, US Food and Drug Administration, Arkansas, United States; 4-Nanotechnology Center, Applied Science Department, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

9:15AM – 9:30AM

   Grant W. Wangila¹, Nicholas Braman², KeiSharr Eldridge¹, Richard B. Walker¹, and Alexei G. Basnakian². 1-University of Arkansas at Pine Bluff, Pine Bluff, Arkansas, United States; 2-University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States.

9:30AM – 9:45AM

Plenary Session VIII: Bridging the Gap Between Biology, Chemistry, Nanotechnology, Medicine, and Toxicology (part 2)

9:45AM – 10:30AM Session Chairs:
Nawab Ali, PhD, Research Associate Professor, Graduate Institute of Technology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.
Casey Pavan, BS, Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

   Souzan Eassa¹, Chhanda Bose², Pierre Alusta³, and Olga Tarasenko¹. 1- Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 3-Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, United States; 3-Bioinformatics Program, University of Arkansas at Little Rock, University of Arkansas for Medical Sciences,
2. “Continuous Non-Destructive Monitoring of Cell Health using Impedance Based Interdigitated Electrode Structured Sensors.”

10:30AM – 11:00AM COFFEE BREAK, POSTERS VIEWING

11:00AM – 11:15AM 3. “Human Carcinogen Atristolochic Acid Induces Dysregulated microRNA Expression in Rat Kidneys.”
   Zhiguang Li and Tao Chen. Division of Genetic and Molecular Toxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States.

   Brian R.A. Tomassetti and John F. Vetelino. Department of Electrical Engineering, Laboratory of Surface Science and Technology, University of Maine, Maine, United States.

11:30AM – 11:45AM 5. “Oxidative Kidney Injury Induced by Rhabdomyolysis and Cytoprotective Effects of Zn-RibCys in Mice.”
   Mariam Khan,2,2 Alena Savenka,2 Nicholas Braman2, Dolapo T. Odeniyi2,3, Grant Wangila4, Richard B. Walker4, Alexei G. Basnakan2,5
   1-University of Central Arkansas, 2-DNA Damage and Toxicology Core, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, 3-University of Arkansas at Little Rock; 4-University of Arkansas in Pine Bluff; and 5-Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, United States.

11:45AM – 12:00AM 6. “Disinfection of Preexisting Contamination of Bacillus cereus on Stainless Steel when using Glycoconjugate Solution.”
   Casey Pavan and Olga Tarasenko. Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

12:00PM – 1:00PM LUNCH, POSTERS VIEWING

Plenary Session IX: Session Chair:
Pierre Alusta, MS, Center for Innovative Technologies, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States.

1:00PM – 2:00PM Plenary talk “The Biology of Neurotoxicity: using Technology to Advance Discovery” by Merle G. Paule, PhD, Professor, Director of Neurotoxicology Division, National Center for Toxicological Research, Jefferson, United States.

Plenary Session X: Session VI: New Computer Technologies and Bioinformatics Applications for Biology, Chemistry, Nanotechnology, and Medicine
2:00PM – 3:45PM  
**Session Chairs:**  
Mani Chidambaram, PhD, *Division of Biochemical Toxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States.*  
Casey Pavan, BS, *Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.*

   **Marico Howe**¹ and Daniel Berleant². 1-Bioinformatics Program; 2-Department of Information Science, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

2:00PM – 2:15PM

2. “The Information Quality (IQ) Graduate Program.”  
   **John Talburt** and Ahmed Abuhalimeh. Informational Quality Program, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

2:15PM – 2:30PM

   **Shraddha Thakkar**¹,², Rosa. I. Sanchez², C. Bhuvaneswaran³, and Cesar M. Compadre². 1-Bioinformatics Program, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-Department of Pharmaceutical Sciences, and 3-Biochemistry and Molecular Biology Department, University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States.

2:30PM – 2:45PM

4. COFFEE BREAK, POSTERS VIEWING

2:45PM – 3:45PM

4. “How People Perceive the Accuracy of Information.”  
   **Ahmed Abuhalimeh**¹, M. Eduard Tudoreanu², and Erich A. Peterson³. 1-Informational Quality (IQ) Program; 2- Information Science Department; 3- Applied Science Department, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

3:00PM – 3:15PM

5. "Direct Impact Corona Ionization Mass Spectrometry for Bacteria Identification.”  
   **Pierre Alusta**¹,³, Cameron Dorey², Ryan Parker², Dan Buzatu³, Olga Tarasenko¹, Jon Wilkes³, and Jerry Darsey³. 1-Bioinformatics Program, University of Arkansas at Little Rock, University of Arkansas for Medical Research, Little Rock, Arkansas, United States; 2-Department of Chemistry, University of Central Arkansas, Conway, Arkansas, United States; 3-Center for Innovative Technologies, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States; 4-Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 5-Department of Chemistry, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

3:15PM – 3:30PM

6. withdrawn

3:30PM – 3:45PM

**Plenary Session XI:**  
BioNanoTox and Applications: Environmental Sciences, Space Exploration, Plant Biology, and Biotechnology

3:45PM – 5:00PM  
**Session Chairs:**  
Islam Khan, PhD, *Professor, Department of Biochemistry, Faculty of*
1. “Pancreatic Histology and Associated Biochemical Changes in Rats on Hind-limb Suspension fed a 100% Soyprotein Diet.”
   Michael E. Soulsby, Emily Johnson, Nisreen Akel, Rakhi Agarwal, Danna Gaddy, Maxim Dobretsov, Parimal Chowdhury. Department of Physiology and Biophysics, University of Arkansas for Medical Sciences Arkansas, United States.

2. “Glycoconjugate Stimulating a Defense Response in Rice against Bacillus cereus Spores.”
   Taneicie Sabb and Olga Tarasenko. Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.


4. “Metabolic Engineering of Microbial Platforms for the Production of Resveratrol, a Plant Secondary Metabolite.”
   Ronnie Cato Ridley¹, Hong Xu¹, Jing Zhang¹, Yong Xue¹, Stephen C. Grace ², and Qingfang He². ¹- Department of Applied Science, ²- Department of Biology, University of Arkansas Little Rock, Little Rock, Arkansas, United States.

5. Conference Adjournment
LIST OF ACCEPTED POSTERS

1. “Effect of Silver Nanoparticles on Rat Coronary Vessels. Antihypertensive Role”
   Hector Rosas-Hernández 1, Roberto Fudizawa-Ramos 1, Ayala-Macias 1, Diego Martín 1, Sandra Cadena-Mota 1, Syed Ali 2, and Carmen González 2. 1-Autonomous University of San Luis Potosi, Faculty of Chemistry Sciences, San Luis Potosi, Mexico; 2-Neurochemistry Laboratory, Division of Neurotoxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States.

2. “HTC116 Apoptosis Induced by IP6”
   Gupinder Momi 1
   Research Assistant: Samar Hassen 2
   Mentor: Nawab Ali 2
   1-Central High School; 2- University of Arkansas of Little Rock, Little Rock, Arkansas, United States.

   Ryne Ramaker 1, Jacquelyn Zimmerman 2, Frederico P. Costa 3, Ivan Brezovich 4, Michael Pennison 2, Devin Absher 5, Richard Myers 6, Alexandre Barbault 7, Niels Kuster 7, and Boris Pasche 2.
   1-Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-Department of Radiation Oncology, University of Alabama at Birmingham, Birmingham, Alabama, United States; 3-Department of Hematology / Oncology, Department of Medicine, University of Alabama at Birmingham and UAB Comprehensive Cancer Center, Birmingham, Alabama, United States; 4-Department of Transplantation and Liver Surgery, Hospital das Clínicas, University of São Paulo, Brazil; 5-Department of Cancer Biology, University of Alabama at Birmingham, Birmingham, Alabama, United States; 6-Rue de Verdun 20, Colmar, France; 7-IT’IS Foundation, Swiss Federal Institute of Technology, Zurich, Switzerland.

4. “Glycoconjugate Stimulating a Defense Response in Rice against Bacillus cereus Spores”
   Taneicie Sabb 1 and Olga Tarasenko. Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

5. “Coleman Creek Water Quality as Compared to Known Healthy Urban Surface Water”
   Mike Bailey 1†, Darleen Bailey, Souzan Eassa 2, and Carl Stapleton 2.
   1-Science Department, McClellan High School, Little Rock School District, Arkansas, United States; 2-Biology Department, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.
   † deceased, presenter is underlined

6. “Apoptosis in Colorectal Cancer Cells”
   Trae Staggers
   Research Assistant: Samar Hassen 2
   Mentor: Nawab Ali 2
   1-Central High School; 2- University of Arkansas of Little Rock, Little Rock, Arkansas, United States.

   Shraddha Thakkar 1, Rosa I. Sanchez 2, C. Bhuvaneswaran 3, and Cesar M. Compade 2.
   1-Bioinformatics Program, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-Department of Pharmaceutical Sciences, and 3 Biochemistry and Molecular Biology Department, University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States.

8. “Glycoconjugates as Mediators of Nitric Oxide Production”
   Mohamed Lahiani 1, Lee Soderberg 2, and Olga Tarasenko 1. 1- Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2- Department of Microbiology and Immunology, University of Arkansas for Medical Science, Little Rock, Arkansas, United States.
   Syed Naseer Shah and Shamim Akhtar Ansari. Genetics and Plant Propagation Division, Tropical 
   Forest Research Institute, Jabalpur, India.

10. “Post-Workshop Assessment of Teachers and Students Attending the Scientific Workshop 
    From Educational to Scientific Perspectives: Sugar Polymers in Biology and Their 
    Applications” 
    Chuck Ufondu¹, Nawab Ali², Carl Stapleton¹, Loria Taylor³, Linda Barker³, and Olga Tarasenko¹. 
    1-Department of Biology; 2-Graduate Institute of Technology; 3-TRIO-ETS Program, University of 
    Arkansas at Little Rock, Little Rock, Arkansas, United States.

11. “Proteomic Changes in Growth Plate Chondrocyte Culture Treated with Thiram” 
    Komal S. Rasaputra¹,², Rohana Liyanage³, Jackson O. Lay, Jr³, Michael F. Slavik², and Narayan 
    C. Rath¹. 1-PPPSRU/Agricultural Research Service/USDA, Fayetteville, Arkansas, United States; 2- 
    Department of Poultry Science, University of Arkansas, Fayetteville, Arkansas, United States; 3- 
    Department of Chemistry and Biochemistry, University of Arkansas, Arkansas, United States.

12. “Glycoconjugates as a Disinfectant for Computer Keyboards” 
    Kelly Foshee¹, Casey Pavan², and Olga Tarasenko². 1-Arkadelphia High School, Arkadelphia, 
    Arkansas, United States; 2-Department of Biology, University of Arkansas at Little Rock, Little Rock, 
    Arkansas, United States.

13. “Application of Biodegradable Nanoparticles in Liver Targeting of Tacrolimus” 
    Nagia N. Affifi¹, Ola A. Heikal², Rasha S. Hanafi³, and Salma N. Tammam¹. 1-Pharmaceutical 
    Technology Department, 2-Pharmacology and Toxicology Department, 3-Pharmaceutical Chemistry 
    Department, German University in Cairo (GUC), Cairo, Egypt.

14. “Growth of Colorectal Cancer Cells and Induction of Apoptosis” 
    Rachel Green¹ and Nawab Ali². 1-McClellan High School, Little Rock School District, Arkansas, 
    United States; 2-Graduate Institute of Technology, University of Arkansas at Little Rock, Little Rock, 
    Arkansas, United States.

15. “Optical Sensor for Measuring American Lobster Vitality” 
    Brian R.A. Tomassetti and John F. Vetelino. Department of Electrical Engineering, Laboratory of 
    Surface Science and Technology, University of Maine, Maine, United States.

16. “Expression of miR-34a was Up-regulated by N-ethyl-N-nitrosourea in Mouse Spleen One Day 
    after the Exposure” 
    David Chen¹ and Zhiguang Li². 1-Little Rock Central High School, Little Rock, Arkansas, United 
    States; 2-Division of Genetic and Molecular Toxicology, National Center for Toxicological Research, 
    US Food and Drug Administration, Jefferson, Arkansas, United States.

17. “Optimization of the Analytical Method for Measuring Low Levels of Bisphenol A (BPA) and 
    Ethinylestradiol (Ee2) by Liquid Chromatography/ Electron Spray Ionization Mass 
    Spectrometry (LC/ESI/MS)” 
    Mani Chidambaram, Raul Trbojevich, Kellie Woodling, Thomas Heinze, and Paul Siitonen. Division 
    of Biochemical Toxicology, National Center for Toxicological Research, US Food and Drug 
    Administration, Jefferson, Arkansas, United States.

18. “Colorectal Cancer Cells and Apoptosis: Utilizing Cell Culturing Techniques To Explore 
    Inositol And Etoposide Induced Apoptosis As A Colon Cancer Treatment Therapy” 
    Evelyn E. James¹ and Nawab Ali². 1-Fair High School, Arkansas, United States; 2-Graduate 
    Institute of Technology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.
19. “DICIMS – Controlled Arcing of Bacteria for Rapid, Sensitive, Reproducible Identification via Spectral Pattern Recognition”
   Pierre Alusta1*, Cameron Dorey2, Ryan Parker2, Dan Buzatu3, Jon Wilkes3, and Jerry Darsey4.
   1-Bioinformatics Program, University of Arkansas at Little Rock, University of Arkansas for Medical Research, Little Rock, Arkansas, United States; 2-Department of Chemistry, University of Central Arkansas, Conway, Arkansas, United States; 3-Center for Innovative Technologies, National Center for Toxicological Research, Jefferson, Arkansas, United States; 4-Department of Chemistry, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

20. “Antineoplastic Effects of Turmeric and Curcumin on Pancreatic Cancer Cell Line PANC-1” (*provisional)
   Shree Govindarajan1 and Randy Haun2. 1-Little Rock Central High School, 2-Winthrop Rockefeller Cancer Institute, Little Rock, Arkansas, United States.

   Nirav Patel1, Alec M. Watson1, Rahul Mehta1, Nawab Ali1, Michael Soulsby2, and Parimal Chowdhury2. 1-Department of Physics and Astronomy, University of Central Arkansas, Conway, Arkansas, United States; 2-Department of Physiology and Biophysics, University of Arkansas for Medical Sciences, Arkansas, United States; 3-Graduate Institute of Technology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

22. “Promoter Prediction in Halothiobacillus neapolitanus c2 Based on Stress-Induced Duplex Destabilization”
   Aleksandra Markovets1, Charles Bland, and Abigail S. Newsome. Mississippi Valley State University, Itta Bena, Mississippi, United States.

23. “HTC116 Apoptosis Induced by IP6”
   Raya Ivy1
   Research Assistant: Samar Hassen2
   Mentor: Nawab Ali2
   1- Central High School; 2- University of Arkansas of Little Rock, Little Rock, Arkansas, United States.

24. “Neuronal Networks on the Nano Alumina Templates” (*provisional)
   Asiful Islam1, Zheng Ma, and Latika Menon. Northeastern University, Boston, Massachusetts, United States.

25. “Disinfection of Preexisting Contamination of Bacillus cereus on Stainless Steel when using Glycoconjugate Solution”
   Casey Pavan1 and Olga Tarasenko. Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

   Marico Howe1 and Daniel Berleant2. 1-Bioinformatics Program, University of Arkansas at Little Rock, University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States; 2-Department of Information Science, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

27. “Escherichia Coli: from Life-Threatening Disease to Life-Saving Research”
   Cheyenne Wilson1 and Olga Tarasenko. Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

28. “Chlorophyll a and its Relationship to Phosphorus Concentration in Coleman Creek”
   Bailey West1
   Research Assistant: Souzan Eassa2
   Mentor: Dr. Carl Stapleton2
29. “Molecular Modeling Analysis of the Inhibition of Mitochondrial Cytochrome BC1 Complex Activity by Tocol Derivatives”
   Awantika Singh¹,⁲, K. Sree Kumar², Martin Hauer-Jensen¹, and Cesar M. Compadre¹.
   1-Department of Pharmaceutical Sciences, University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States; 2-Armed Forces Radiobiology Research Institute, Bethesda, Maryland, United States; 3-Bioinformatics Program, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

30. “Method for the Recognition of Toxoplasma Gondii Tachyzoites”
   Souzan Eassa¹, Chanda Bose², Pierre Alusta³,⁴, and Olga Tarasenko¹.
   1-Department of Biology, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, United States; 3-Bioinformatics Program, University of Arkansas at Little Rock, University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States; 4-Center for Innovative Technologies, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States.

31. “Correlation of Non Fecal Coliform Concentrations with Physiochemical Properties in Coleman Creek”
   Marcus Blanton¹.
   Research Assistant: Souzan Eassa²
   Mentor: Dr. Carl Stapleton²
   1-Central High School; 2- Department of Biology, University of Arkansas of Little Rock, Little Rock, Arkansas, United States.

32. "Kidney DNA Fragmentation during Cold Storage" (*provisional)
   Dolapo T. Odeniyi¹,², Alena Savenka², Eugene O. Apostolov, Sudhir V. Shah²,³, and Alexei G. Basnakian⁴,⁵.
   1-University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-DNA Damage and Toxicology Core, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, 3-Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, United States.

   Kirk Rodgers¹ and Reed Green².
   1-University of Arkansas-Little Rock, Little Rock, Arkansas, United States; 2-United States Geological Survey Arkansas Water Science Center Arkansas, United States.

34. “Exploring Hydrophobic Binding Surfaces using COMFA and Flexible Hydrophobic Ligands”
   Shraddha Thakkar¹,², Rosa. I. Sanchez², C. Bhuvaneswaran³, and Cesar M. Compadre².
   1-Bioinformatics Program, University of Arkansas at Little Rock, Little Rock, Arkansas, United States; 2-Department of Pharmaceutical Sciences, and 3-Biochemistry and Molecular Biology Department, University of Arkansas for Medical Sciences, Little Rock, Arkansas, United States.

35. “Tissue Distribution of Different Sizes of Silver Nanoparticles in Sprague-Dawley Rats”.
   Marta Pogribna¹, J. Nichols¹, C. Cozart¹, P. Siitonen³, N.J. Walker³, and Mary Boudreau¹.
   1-Division of Biochemical Toxicology, National Center for Toxicological Research, US Food and Drug Administration, Jefferson, Arkansas, United States; 2-National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina, United States.

36. “Glycoconjugate Protects Keyboard Keys from Bacterial Spores”
   Tyler Butler¹.
   Research Assistant: Casey Pavan²
   Mentor: Dr. Olga Tarasenko²
   1-Parkview High; 2-University of Arkansas at Little Rock, Little Rock, Arkansas, United States.
37. “Summer Research Experience for High School Students at University of Arkansas at Little Rock” (*provisional) 
Loria Taylor and Linda Barker. TRIO-ETS Program, University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

38. “Chemical Disinfection of B. cereus Spores on Italian Vitreous Glass Tile by Glycoconjugate”
Tirkishmyrat Atakov ¹, Casey Pavan ², and Olga Tarasenko ²
1-LISA Academy –NLR, Little Rock, Arkansas, United States; 2-University of Arkansas at Little Rock, Little Rock, Arkansas, United States.

Mostafavi Mehrnaz¹, Ghanavi Jalaiedin², Parvin Parviz³, Yaghmaei Parichehr¹, and Velayati Ali. 
1-Department of Biophysics, Science and Research Branch, Islamic Azad University, Iran; 2-National Research Institute of Tuberculosis and Lung Diseases, Shahid Beheshti University of Medical Sciences, Iran; 3-Department of Physics and Nuclear Sciences of Amirkabir University of Technology, Iran.

40. “Nanorobots in HIV Diagnosis and Treatment: Scope and Potential” (*provisional) 
Nadella Naresh¹, K. Surendranath ², and KK Pulicherla ³. 1-Department of Mechanical Engineering; 2-Department of Physics; 3-Department of Biotechnology, R.V.R & J. C. College of Engineering, Chowdavaram, India.

41. “How to Kill Bacterial Spores on Your Kitchen Tiles with a Solution of Glycoconjugates”
Bianca Reece
Research Assistant: Casey Pavan²
Mentor: Dr. Olga Tarasenko ²
1-Central High School; 2- University of Arkansas of Little Rock, Little Rock, Arkansas, United States.

http://sites.google.com/site/bntconference/

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