

2007 WV-INBRE SUMMER RESEARCH SYMPOSIUM

ABSTRACT TITLES/AUTHORS AND POSTER BOARD NUMBERS

Posters presented by the WV-INBRE Participants

- 1) **The Effect of Oxidized Linoleic Acid on Adiponectin Gene Expression.**
Somaiah K. Ahmed, Nalini Santanam
- 2) **Variations in the Genetic Coding Sequence of AGP and its Effect on the Binding Rate of Docetaxel in the Blood Plasma of Prostate Cancer Patients.**
Kristina Bacon, Jing Jie Yu, Terry McManhus, William Petros.
- 3) **Differential activation of bone marrow-derived macrophages from mouse strains susceptible to Pseudomonas aeruginosa aerosol infection.**
Tesfaye Belay, Kari R. Wilson, Hongwei D. Yu
- 4) **Role of Inflammation in Fatty Acid-Induced Vascular Changes.** Crystal Bennett, Kan Huang, Jessica Frankel, Ravi Viradia, William McCumbee, Elsa Mangiarua
- 5) **Juxtacellular Labeling Cells of the Superior Paraolivary Nucleus of the Rat.** Ashley Berardi, Richard Felix, Albert Berrebi
- 6) **Mitochondrial Defects in Cells Expressing Mutant SOD1 Protein.**
Stephanie Boblett, Michael R. Gunther
- 7) **Examination of in vitro Homocysteine Exposure to Stromal Cells.** Zach Brewer, Sarah Dodson
- 8) **Particulate Matter Exposure and Microvascular Responsiveness to Adenosine.**
Joshua C. Briscoe, Timothy R. Nurkiewicz
- 9) **Molecular Dynamics Study of 4 and 4' Substituents of Diphenylsulfone in the Presence of Piroxicam in the active site of Cytochrome CYP 2C9.**
Jason D. Brown, Brittney Shook, Jarrett S. Aguilar
- 10) **Protective effect of S-Adenosyl-L-Methionine (SAME) on Acetaminophen (APAP) Mediated Oxidative Stress assessed by Western Blot.** Dustin Buchanan, J. Mike Brown, Monica Valentovic
- 11) **Gene Expression of Fusion Protein AFAP-ant-GST in BL-21 Bacteria.**
Alan T. Casciola, Barbara M. Fenner, Robert D. Shurina

- 12) Creation of pGEX Vectors that express Wild-type and Mutant AFAP Fusion Proteins.** Wilhelm L. Castellon, Barbara M. Fenner, Robert D. Shurina
- 13) Signal Transduction Pathway Involved in the Regulation of Glucose-6-Phosphate Dehydrogenase.** DoBin Choi, Alison B. Kohan, Indrani Talukdar, Lisa M. Salati
- 14) The immune response to T-independent and T-dependent antigens is enhanced by the pesticide 3,4- dichloropropionanilide.** Gina M Cottrill, Mike R Miller, Keith D Salazar, Rosana Schafer
- 15) Antioxidant and Antibacterial Activity of Euphorbia Maculata and Euphorbia Corollata.** Darrell Crick, Darla Wise, Daniel Puckett, Joshua Deaton, Jennifer Gills, Shelley Drake, Crystal Mooney, Terry Price
- 16) Flavonoids and Vitamin E Sensitize the Anticancer Effect of Cisplatin in the OVCAR-3 Ovarian Cancer Cells.** Matthew K. Daddysman, Sarah M. King, Bing-Hua Jiang, Haitao Luo, Yi Charlie Chen
- 17) Molecular Dynamics of Dapsone Analogs and Distance Correlation to Flurbiprofen Activation in Cytochrome P450 2C9.** Eric M. Danhart, Zachary R. Hartman, Monica R. Lee, Jarrett S. Aguilar
- 18) Analysis of Apoptosis in Human Umbilical Vein Cells Exposed to Homocysteine.** Holly DeBolt, Bonnie Freeman, Alyssa Childers, Adam Hamrick, Jess Cunnick, Sarah Dodson, Mark Flood
- 19) The Acute Effects of a High Fat Diet on Nitric Oxide Production in Lean Zucker Rats.** Jessica Frankel, Kan Huang, Crystal Bennett, Ravi Viradia, Elsa Mangiarua, William McCumbee
- 20) Influence Of Cytoskeletal Disruption On Stretched Vascular Smooth Muscle Cells.** Stacie Franson, Gary Wright, Ava Dykes, Robert Harris
- 21) Does Estradiol (E2) Act in the Arcuate Nucleus (ARC) to Inhibit Luteinizing Hormone (LH) Pulse Frequency in Anestrous Ewes?** Stephanie N. Geer and Heather J. Billings
- 22) Effects of Cadmium Chloride (CdCl₂) on the Murine Stromal Cell line S17.** Michael A. Hager, Kathleen Brundage,
- 23) Effects of Transfected PKC- α Catalytic Fragment on Tet-Off Regulated Madin-Darby Kidney Epithelial Cell Line.** A. Hajiran, B.M. Fenner, R. D. Shurina,

- 24) Keyhole limpet hemocyanin, an immunological adjuvant, inhibits locomotion, feeding, and egg laying in *C. elegans*.** Luke G. Huggins, Linda Vona-Davis
- 25) N-acetyl-L-cysteine (NAC) enhances all-trans retinoic acid (ATRA)-mediated differentiation through modulation of retinoid receptor transcriptional activity.** Virginia E. Hunter, Anne Silvis, Aileen Marcelo, Kelley Kiningham.
- 26) Cloning and recombinant production of *D. melanogaster* and *C. elegans* ERM/merlin.** Amanda Jones, Stephanie Stover, David N. Chambers.
- 27) Expression of VCAM and IL-8 in Human Aortic Endothelial Cells in the Presence of TNF α .** Katie Kacmarik, Cassandra Starkey, Amanda Francis, Robert Kreisberg
- 28) Molecular Dynamics study of naproxen in the presence of 4 and 4' substituents of diphenylsulfone within the active site of Cytochrome P450 2C9.** Megan Kopp, Zach Hartman, Jarrett S. Aguilar
- 29) Caveolin-1 Depletion Blocks Entry of Albumin into Endothelial Cells.** Kelly Koral, Xing-Hui Sun, Jun Liu
- 30) Toll-like Receptor 4 Ligation Upregulates the Expression of Phosphodiesterase in Astrocytes.** Cathern N. Krupinski, Elzbieta Borysiewicz, E.J. Young, Gregory W. Konat
- 31) Regulation of Kruppel-like factor 6 (klf6) tumor-suppressor gene by retinoic acid in human melanocytes and human melanomas.** Christine E. Lansdale, Sarah L. Miles, Richard M. Niles.
- 32) AMBER Post-Molecular Dynamics Binding Energy Analysis of Cytochrome P450 2C9 Correlation with Kinetics Data.** Monica R. Lee, Jarrett S. Aguilar
- 33) Regulation of VE-Cadherin and Beta-Catenin in Ph⁺ Leukemia.** Eric Mark J. Lopez, Heather O'Leary, Laura F. Gibson
- 34) Correlation between peripheral vascular function, markers of inflammation and depression in human subjects.** K. MacGregor, S. Frisbee, A. d'Audiffret, P. Stapleton, J. Frisbee
- 35) Age and estrogen alter endothelial function in cerebral resistance arteries.** Casey McCroskey, Rafael Reyes, Amanda LeBlanc, Lori Kang, Judy Muller-Delp

- 36) Diabetes Induced Oxidative Stress in Mitochondrial Subpopulations.** J. E. McNair, E. R. Dabkowski, C. L. Williamson, J. M. Hollander
- 37) Effect of Ultrafine Titanium Dioxide (TiO₂) Particles on Lung Neurogenic Inflammation.** Hilary Miller, Debbie Pikel, Maret Bernard, Lennie Samsell, Mario Scuri
- 38) Behavioral and Neurochemical Effects of Phosphodiesterase-2 Inhibitors.** Jordan Moran, Anbrin Masood, Lisa Stolinski, Lan Xiao
- 39) Synthesis and Characterization of a C8-Methoxymethylphenylguanine Modified DNA Oligonucleotide to Study B Form to Z Form Transitions in DNA Secondary Structure.** Daniel J. Phillips, Vorasit Vongsutilers, Peter M. Gannett
- 40) The Relationship of Abasic Site Formation to Aryl Hydrazine Carcinogenesis.** Jonathan Proto, Peter M Gannett, Vorasit Vongsutilers
- 41) Mechanistic Aspects of Propanil Nephrotoxicity.** Christopher Racine, Adam Sweeney, Alyssa Kraynie, Sukanya Bakshi, Dianne K. Anestis, Gary O. Rankin
- 42) Several Single Nucleotide Polymorphisms are Correlated with Plasma Homocysteine Levels.** Amanda Reed, Michelle Lindsey, Bonnie Freeman, Mark Flood, Huey M. Lee, Jean Chappell, Bowie Kahle, Gary Wright, Todd Green, Paulette Wehner, Mark Studeny, Elizabeth Murray
- 43) Determination of Plasma Protein Binding Kinetics of Atrasentan, and Interactions of Atrasentan and Docetaxel in vitro.** Sarah Reinhardt, Patrick Callery, William Petros, Islam Younis, Terry McManhus
- 44) REM sleep and short-term spatial memory function in rats.** Kelly Reneau, Danielle Gilmore, Eunyoung Kim, Lawrence Grover
- 45) Metalloproteinase Secretion from Apoptotic Cells within a Tumor Enhances the Invasiveness of the Non-Apoptotic Tumor Cells.** Chris Sedlacek, Alice Magro, Cynthia Cunningham, Albert Magro
- 46) Flavonoids and Vitamin E Sensitize the Anticancer Effect of Cisplatin in the A2780/CP70 Ovarian Cancer Cells.** Sara L. Shultz, Aaron E. Maxwell, Bing-Hua Jiang, Haitao Luo, Yi Charlie Chen
- 47) Progesterone Stimulation of Migration of T47D Human Breast Cancer Cells.** M. Allison Teter, Aaron K. Holley, Michael R. Moore.

48) The Regulation of Inhibitor Proteins of the Wnt/Beta Catenin Signaling Pathway by Retinoic Acid. Clifton Umstead, Lisa Davenport, Ashley Dills, Beverly Delidow

Posters presented by the Summer Undergraduate Research Experience Interns

(abstracts unavailable)

49) Effects of Acetaminophen on Aging Cardiac Muscle and miRNA Expressions. Megan Neal, Eric Blough

50) DNA Purification and Sequencing for Analysis of Cytochrome b Gene of the Blacknose Dose Species Complex (Genus Rhinichthys). Samantha Newberry, Geoff Smith, and Elizabeth Murray

51) Identification of Fluoroquinolone Resistance Genes and Proteins in Staphylococcus aureus. Zachary Tackett, Menashi Cohenford, Thomas Rushton, Elizabeth Murray