Department of Pharmacology & Toxicology

2006 Annual Report

University of Louisville

School of Medicine

Department of Pharmacology and Toxicology-2006

TABLE OF CONTENTS

I. DEPARTMENT HIGHLIGHTS

The Department of Pharmacology and Toxicology advanced in all areas of education, research, and service as outlined in the 2006 annual report. Much of the details are provided in the individual faculty reports from each of the salaried faculty members. Notable achievements were the appointment of five new faculty members (two with primary appointments, two with joint appointments, and one with an associate appointment), the development of ten new courses, the revision of our graduate programs to improve flexibility, five faculty promotions and the receipt of a many prestigious awards by faculty, staff, and students. Faculty awards included the top teaching and research awards available at the University of Louisville, including career awards to Professors Bill Pierce, Mike Williams and Len Waite. Under the leadership of Professor Mike Williams, the medical pharmacology course continues to receive acclaim as one of the best if not the best course in the medical school curriculum by students and faculty, Further details are described below.

NEW COURSES

- PhTx 625 – Scientific Writing
- PhTx 651- Neonatal Pharmacology
- PhTx 652 – Geriatric Pharmacology
- PhTx 655 – Neuropharmacology
- PhTx 656 – Cardiovascular and Renal Pharmacology
- PhTx 657 – Selective Toxicity and Chemotherapy
- PhTx 672 – Research Methods in Pharmacology & Toxicology I
- PhTx 673 – Research Methods in Pharmacology & Toxicology II
- PhTx 674 – Research Methods in Pharmacology & Toxicology III
- PhTx 675 – Research Methods in Pharmacology & Toxicology IV

CURRICULAR AND POLICY CHANGES

Revisions were made in the graduate program requirements to facilitate a broader selection of courses that can be optimized to individual students.
Revisions were also made in the Departmental SIBUP (Salary Increase Based Upon Performance) document.

FACULTY APPOINTMENTS

- **Keith R. Davis, PhD** was appointed Professor of Pharmacology and Toxicology. Dr. Davis received his PhD in Molecular, Cellular and Developmental Biology from the University of Colorado in 1985. Following postdoctoral training at the University of Georgia, he was appointed Research Fellow at the Massachusetts General Hospital and Harvard Medical School from 1986-1989. He was appointed assistant professor and promoted to associate professor with tenure at Ohio State University from 1989-1999 and also served as Director of Ohio State

University's Plant Biotechnology Center from 1997 -1999. In 1999, Dr. Davis was recruited to serve as Manager and then Director of the Plant Research Department at Paradigm Genetics, Inc. From 2002-2005, he served as Vice President for its successor company Agricultural Biotechnology and for the last year served as Executive Consultant. During this period, he also served as adjunct professor at North Carolina State University. Dr. Davis was recruited to the James Graham Brown Cancer Center to serve as Director of the Owensboro Cancer Research Program, a satellite of the Brown Cancer Center.

- **Kenneth E. Palmer, PhD w**as appointed Associate Professor of Pharmacology and Toxicology. Dr. Palmer received his PhD in Microbiology from the University of Cape Town in 1997. Following postdoctoral training at Cornell University, he was appointed Senior Scientist (1998-2003) followed by promotion to Director of Vaccine Research (2003-2006) at Large Scale Biology Corporation. Dr. Palmer was recruited to the James Graham Brown Cancer Center to serve as a member of the Owensboro Cancer Research Program, a satellite of the Brown Cancer Center.

- **Chi Li, PhD** was appointed Assistant Professor of Pharmacology and Toxicology (joint appointment). Dr. Li received his M.A. and Ph.D in Biological Sciences from Columbia University. He received further postdoctoral research training at the University of Chicago and the University of Pennsylvania Cancer Center. He was recruited to the University of Louisville as Assistant Professor in the James Graham Brown Cancer Center and the Department of Medicine (Division of Hematology/Oncology). Dr. Li is one of the junior principal investigators on the NIH COBRE grant in molecular targets awarded to the Cancer Center.

- **Brian (Binks) W. Wattenberg, PhD** was appointed Associate Professor of Pharmacology and Toxicology (joint appointment). Dr. Wattenberg received his PhD in Biological Chemistry from Washington University in 1981. Following postdoctoral training at Stanford University, he was appointed Research Scientist (1986-1992) followed by promotion to Senior Research Scientist (1992-1995) at the Upjohn Company. Dr. Wattenberg served as Senior Research Officer and Associate Member/Head-Molecular Cell Biology at the Hanson Centre for Cancer Research (1996-2002). In 2002, he was recruited to the University of Louisville as Associate Professor in the James Graham Brown Cancer Center and the Department of Medicine (Division of Hematology/Oncology).

- **David A. Scott, PhD**. was appointedAssociate faculty in pharmacology and toxicology. Dr. Scott received his PhD in Microbiology and Immunology from McGill University in Montreal. He continued with postdoctoral training at the Queen's University of Belfast and as a Wellcome Trust Fellow at Kings College in London. He previously served as a Scientist at the Manitoba Institute for Child Health and as Assistant Professor of Oral Biology and Dental Diagnostic & Surgical Sciences at the University of Manitoba. In 2004, Dr. Scott was recruited

to the University of Louisville as Associate Professor of Peridontics, Endodontics, & Dental Hygiene in the School of Dentistry.

FACULTY PROMOTIONS

- **Gavin Arteel** to Associate Professor with tenure
- **Shirish Barve** to Professor
- **Haribabbu Bodduluri** to Professor
- **Jan Sullivan** to Professor
- **Wolfgang Zacharias** to Professor

FACULTY DEPARTURES

- **Nicholas Delomere, PhD**, Professor of Opthalmology and Visual Sciences with joint appointment as Professor of Pharmacology and Toxicology left to accept the position as Professor and Chair, Department of Physiology, University of Arizona School of Medicine.

- **Daniel Sessler, MD,** Professor and Chair of Anesthesiology with joint appointment as Professor of Pharmacology and Toxicology left to accept a position at the Cleveland Clinic. His faculty status was changed from joint appointment to adjunct appointment.

ADMINISTRATIVE APPOINTMENTS

- **Jason Chesney, MD, PhD** was appointed Associate Director for Translational Research, James Graham Brown Cancer Center.

- **Craig McClain, MD** was appointed Director, Louisville Institute for Clinical and Translational Sciences

- **William Pierce Jr., PhD** was appointed Special Assistant to the UofL Provost for strategic planning.

FACULTY AWARDS AND HONORS

- **Aruni Bhatnagar, PhD,** was selected as the School of Medicine nominee for Outstanding Scholarship, Research and Creative Activity-Basic and Applied Sciences.

- **Paul Epstein, PhD** was appointed as Distinguished University Scholar, University of Louisville.

- **David Hein, PhD was** reappointed as Distinguished University Scholar, University of Louisville and appointed as Visiting Professor at Universite' Paris 7- Denis Diderot, Paris, France.

- **Harrell Hurst, PhD** received the Health Sciences Center Award for Technology Innovations in Curriculum. His project title was: Excel pharmacokinetic simulations.

- **James Kang, PhD** was selected as a semi- finalist for an NIH Pioneer Award.

- **Craig McClain, MD** received the GI Fellow Teaching Award, University of Louisville School of Medicine. He was appointed as Distinguished University Scholar, University of Louisville. He was selected as the School of Medicine nominee for Outstanding Scholarship, Research, and Creative Activity- Career Achievement.

- **William Pierce Jr. PhD** received the University of Louisville President's Distinguished Faculty Award for Outstanding Scholarship, Research, and Creative Activity – Career Achievement

- **Len Waite, PhD** received the Outstanding Teaching Award from the UofL School of Dentistry.

- **Mike Williams, MD, PhD** received the Golden Apple Award for teaching, University of Louisville School of Medicine, sophomore class and the Master Educator Award, *Distinguished Educator*, University of Louisville School of Medicine.

STAFF AWARDS

- **Sharon Carpenter** received the UofL Outstanding Staff Performance Award.
- **Ned Smith** received the UofL Outstanding Staff Performance Award.

GRADUATE STUDENT AWARDS

Alex Carrasquer received an IUPHAR 2006 Travel Award to present his work in Beijing, China at the 15th World Congress of Pharmacology (IUPHAR-2006)..

Kristin Metry had her abstract selected for platform presentation at annual meeting of the Society of Toxicology.

Steven Reeves received three awards:
- Houchen's Award;
- Dean's Citation Award
- KC Huang Outstanding Graduate Student

Frazier Taylor received two awards**:**
- Society of Toxicology Metals Specialty Section, 2nd Place Graduate Student Poster
- Ohio Valley Society of Toxicology, 1st Place Graduate Student Oral Presentation

Janet Zang received three awards:

- Abstract selected for platform presentations at annual SOT meeting
- Blue Ribbon for Risk Assessment Speciality Section, SOT meeting
- Dean's Citation Award

POSTDOCTORAL AWARDS

- **Juliane Beier** was selected for a travel award for the 2006 AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES meeting.

II. MISSION STATEMENT

The Department of Pharmacology and Toxicology is committed to academic excellence and to the attainment of regional, national, and international recognition for the quality of its educational, research, and service activities. Guided by the University of Louisville Challenge for Excellence to become a preeminent metropolitan research university, the Department Strategic Plan focuses on five broad objectives:

- Provide instruction in pharmacology and toxicology of the highest quality for the education and preparation of medical, dental, nursing, and other health care professional students. Emphasis will be placed on the fundamental principles necessary for life-long learning and the essential knowledge required for rational, effective, and safe use of drug therapy.

- Advance biomedical knowledge through active contribution to high quality research and other scholarly activities, particularly in pharmacology and toxicology and other areas of focus within the University of Louisville *Challenge for Excellence.*

- Provide high quality research and educational experiences in pharmacology and toxicology for the education and training of future biomedical scientists who can provide and advance biomedical education, research, and service.

- Provide instruction of the highest quality in pharmacology and toxicology that is appropriate for students at the undergraduate, graduate, and postgraduate levels.

- Provide high quality service to the School of Medicine, the Health Sciences Center, the University, the people of Louisville and the surrounding region, the Commonwealth of Kentucky, professional organizations, the nation, and the world.

III. PHOTOS OF PRIMARY FACULTY

Gavin E. Arteel
Associate Professor
gearte01 at gwise.louisville.edu www.uofl.edu/~gearte01

Research Interests: Mechanisms of oxidative stress; mechanisms of alcohol-induced hepatitis, pancreatitis, and hepatocellular carcinoma.

Frederick W. Benz
Professor
benz at louisville.edu
www.louisville.edu./~fwbenz01

Research Interests: Biochemical pharmacology and toxicology; biochemical mechanisms of drug action and toxicity.

Jian Cai
Assistant Professor
j0cai001 at gwise.louisville.edu

Research Interests: Application of mass spectrometry in biomedical research. Drug and metabolite identification and quantification. Protein identification and post-translational modification. Hemoglobin adducts as biomarkers of chemical exposure and pathogenesis.

Theresa S. Chen
Professor
tschen01 at gwise.louisville.edu

Research Interests: Biochemical toxicology; role of glutathione in aging toxicology; general and specific toxicity of environmental pollutants.

Keith R. Davis
Professor
krdavi16 at gwise.louisville.edu

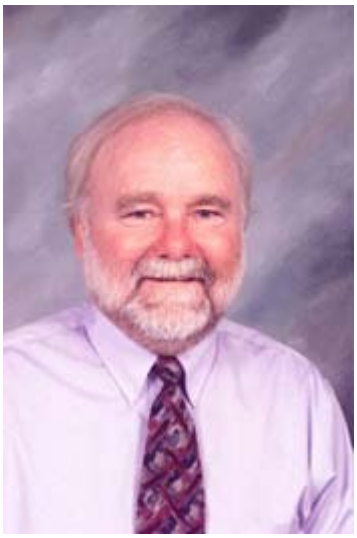
Research Interests: Development of plant-made pharmaceuticals, activation of gene expression by oxidative stress, and the role of innate immunity in cancer initiation and progression.

Ramesh C. Gupta
Professor Agnes Brown Duggan Chair of Oncological Research
rcgupta at louisville.edu

Research Interests: Development and identification of intermediate biomarkers to investigate etiology and prevention of human cancers resulting from both environmental and endogenous exposures.

David W. Hein
Peter K. Knoefel Chair
d.hein at louisville.edu www.louisville.edu/~dwhein01

Research Interests: Molecular pharmacogenetics; molecular epidemiology; functional genomics; genetic predisposition to chemical carcinogenesis and drug toxicity; molecular genetics; environmental toxicology.



Harrell E. Hurst
Professor
h.hurst at louisville.edu www.louisville.edu./~hehurs01/

Research Interests: Analytical toxicology and kinetics with emphasis on qualitative and quantitative techniques, including gas chromatography, high pressure liquid chromatography and GC/mass spectrometry.

La Creis R. Kidd
Assistant Professor and Our Highest Potential Endowed Chair in Cancer Research
lrkidd01 at louisville.edu

Research Interests: Gene-gene and gene-environmental interactions; polymorphic xenobiotic metabolizing enzymes and prostate cancer susceptibility; cancer health disparities.

W. Glenn McGregor
Professor
wgmcgr01 at gwise.louisville.edu

Research Interests: Molecular biology of DNA damage, repair and mutagenesis; molecular mechanisms of mutagenesis induced by model carcinogens; molecular mechanisms of replication of DNA templates containing well-defined site specific damage.

Steven R. Myers
Associate Professor
sr.myers at louisville.edu

Research Interests: Drug metabolism, metabolism of xenobiotics and chemical carcinogens; use of hemoglobin as biomarker in exposure to xenobiotics.

Donald E. Nerland
Professor
denerl01 at gwise.louisville.edu

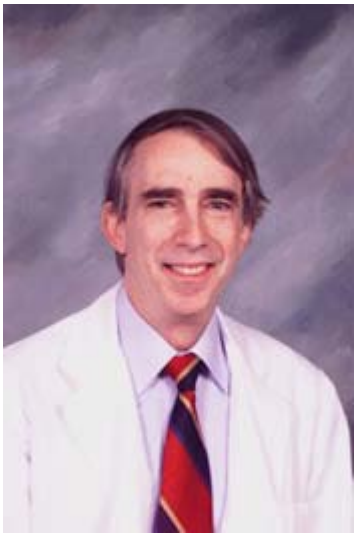
Research Interests: Biochemical toxicology; metabolism of drugs and environmental pollutants.

Kenneth E. Palmer
Associate Professor
kepalm02 at gwise.louisville.edu

Research Interests: Development of vaccines and antiviral proteins to prevent and treat viral diseases that predispose people to development of cancer.

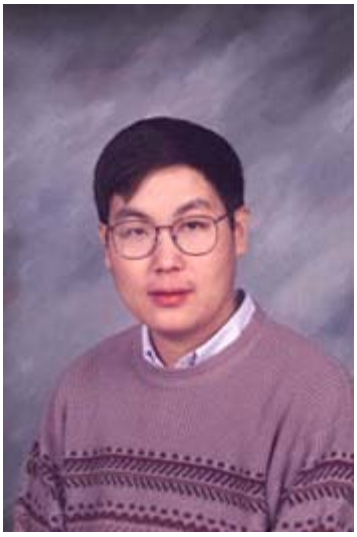
William M. Pierce Jr.
Professor and Vice Chair for Graduate Education
pierce at louisville.edu www.louisville.edu/~wmpier01/

Research Interests: Mechanisms of bone formation and resorption; design of novel drugs for management of osteoporosis; biomolecular mass spectrometry; proteomics in structural biology.



Peter P. Rowell
Professor
rowell at louisville.edu www.louisville.edu/~pprowe01

Research Interests: Neuropharmacology; effect of drugs on brain neurotransmitters and receptors.



Zhao-Hui (Joe) Song
Associate Professor
z0song01 at gwise.louisville.edu

Research Interests: Molecular pharmacology; cloning and functional characterization of novel G protein-coupled receptors; molecular mechanisms of action and structure-function relationships of cannabinoid (marijuana) receptors.

J. Christopher States
Professor
jcstates at louisville.edu www.louisville.edu/~jcstat01/

Research Interests: Molecular biology and molecular genetics of DNA damage and repair in humans; mechanisms of chemoresistance; arsenic toxicity and cell cycle disruption.

Leonard C. Waite
Professor and Vice-Chair for Professional Education
lcwait01 at gwise.louisville.edu

Research Interests: Endocrine pharmacology; mechanism of action of hormones; pharmacological modulation of hormone action; mineral homeostasis.

Walter M. Williams
Professor
wmwill01 at gwise.louisville.edu

Research Interests: Studies of drug elimination (metabolism and excretion).

IV. PHOTOS OF JOINT FACULTY

George R. Aronoff
Professor
gra at louisville.edu

Research Interests: Effects of uremia on drug disposition in humans; drug nephrotoxicity and renal drug metabolism, artificial intelligence.

Shirish Barve
Professor
www.uoflhealthcare.com/digestivehealth/fac_barve.htm

Research Interests: Effects of alcohol on molecular mechanisms of cytokine action, gene expression and liver injury.

Aruni Bhatnagar
Professor
www.louisville.edu/medschool/medicine/cardiology/Bhatnagar.htm

Research Interests: Cardiovascular toxicology; oxidative mechanisms of cardiovascular disease; lipid peroxidation in atherosclerosis; gene expression; secondary complications of diabetes.

Haribabu Bodduluri
Professor
h0bodd01 at gwise.louisville.edu

Research Interests: Signal transduction and chemoreceptors. Role of leukotriene receptors in inflammation and host response.

Jason A. Chesney
Assistant Professor
jasonchesney at louisville.edu

Research Interests: Novel regulators of cancer cell metabolism; identification of emerging viruses and the development of immune-based therapies against widely metastatic cancers.

John W. Eaton
James Graham Brown Professor
eatonredox at aol.com www.bcc.louisville.edu/researchweb/eaton/eaton.html

Research Interests: Biological oxidation/reduction reactions with special emphasis on inflammatory diseases and neoplasia.

Paul N. Epstein
Professor and Carol B. McFerran Chair in Pediatric Diabetes Research
pnepst01 at gwise.louisville.edu

Research Interests: Molecular mechanisms of diabetogenesis. The use of transgenic animals to study genetics and molecular mechanisms in vivo.

Teresa Whei-Mei Fan
Associate Professor
teresa.fan at louisville.edu

Research Interests: Metabolomics, proteomics, ecotoxicology, contaminant bioavailability, transport, biotransformation, and bioremediation.

Richard E. Goldstein
Professor and vonRoenn Family Chair in Surgical Endocrinology
richard.goldstein at louisville.edu

Research Interests: Surgical endocrinology; surgical oncology.

David Gozal
Professor and Director, Kosair Children's Research Institute
d0goza01 at gwise.louisville.edu

Research Interests: Signal transduction mechanisms underlying ventilatory response to hypoxia; neuronal adaptions to intermittent hypoxia: growth factors, intracellular signaling, and genomic implications.

Evelyne Gozal
Associate Professor
e0goza01 at gwise.louisville.edu

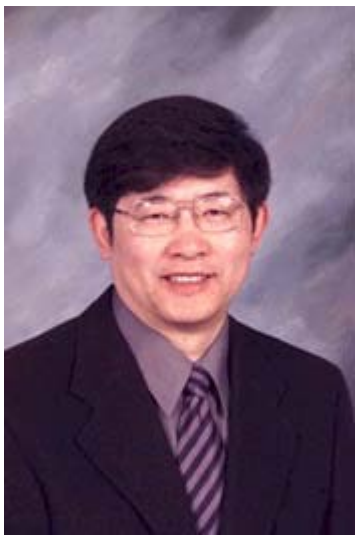
Research Interests: Signal transduction pathways involved in neuronal cell survival and neuronal cell death during hypoxia; cellular mechanisms underlying brain adaptation to chronic and intermittent hypoxia; identification of the kinases and transcription factors activated by hypoxia, leading to gene induction and to adaptation to oxygen deprivation.

Theo Hagg
Professor and Endowed Chair of Neurological Surgery
www.kscirc.org/hagg/Hagg.html

Research Interests: Neurotrophic factor receptors and endogenous stem cells as drug targets to develop repair strategies for neurological disorders, including spinal cord injury.

Michal Hetman
Assistant Professor and Endowed Professor of Molecular Signaling
www.uoflhealthcare.com/digestivehealth/fac_kang.htm

Research Interests: Role of signaling kinases in neuronal repair and demise.

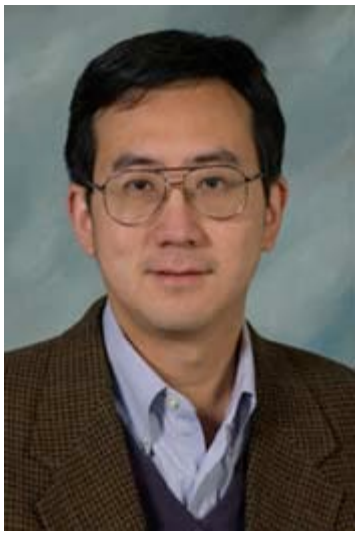


Y. James Kang
Professor
www.uoflhealthcare.com/digestivehealth/fac_kang.htm

Research Interests: Molecular and cardiac toxicology. Transgenic and knock-out animal models to study oxidative injury and antioxident systems in the heart. Biological functions and toxicological significance of metallothionein and glutathione in vivo.

Mary Jayne Kennedy
Assistant Professor
mjkenn07 at louisville.edu

Research Interests: Pediatric clinical pharmacology; pharmacodynamics, pharmacokinetics; pharmacogenetics, and biotransformation.



Chi Li
Assistant Professor
chi.li at louisville.edu

Research Interests: Mechanisms of apoptotic pathways initiated from different intracellular organelles.

Craig J. McClain
Professor
www.uoflhealthcare.com/digestivehealth/fac_mcclain.htm

Research Interests: Role of cytokines in liver injury and other forms of hepatotoxicity, interactions with nutrition and toxicology.

Kelly M. McMasters
Sam and Lolita Weakley Endowed Professor of Surgical Oncology
kmmcma01 at gwise.louisville.edu

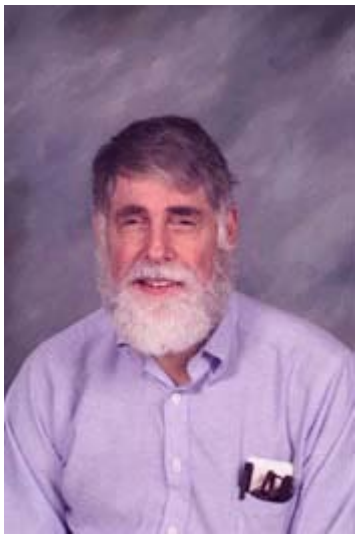
Research Interests: Adenoviral vector cancer gene therapy. Development of vectors that selectively replicate in cancer cells. Mechanisms of E2F-1-induced apoptosis.

Donald M. Miller
James Graham Brown Professor and Director, James Graham Brown Cancer Center
www.uoflhealthcare.org/JGBCancer/Administration/Miller.htm

Research Interests: Molecular and clinical oncology; modulation of oncogene expression; triplex DNA based gene therapy; treatment of melanoma.

M. Michele Pisano
Professor
www.louisville.edu/dental/bbs/pisano.htm

Research Interests: Molecular developmental toxicology; gene-environment interactions in normal and abnormal embryonic development; growth factor directed cellular signal transduction in embryonic cell growth and differentiation.



George C. Rodgers
Professor
gcrodgers at pol.net

Research Interests: Toxicokinetics in drug overdoses and pharmacokinetics in pediatric disease states.

Janice E. Sullivan
Professor
sully at louisville.edu

Research Interests: Clinical pharmacology with a focus on developmental pharmacokinetics and pharmacodynamics.

David J. Tollerud
Professor
djtoll01 at gwise.louisville.edu

Research Interests: Occupational and environmental health; Occupational toxicology; molecular epidemiology.

Yang Wang
Associate Professor
www.louisville.edu/medschool/medicine/cardiology/Wang.htm

Research Interests: Molecular and cellular regulation of genes implicated in hypoxic/ischemic injury and protection in the cardiovascular system.

Brian (Binks) Wattenberg
Associate Professor
browncancercenter.org/research/researcher.aspx?id=1650

Research Interests: Sphingosine-kinase and lipid signaling. Trafficing of tail-anchored proteins.

Hong Ye
Assistant Professor
www.louisville.edu/~h0ye0001/

Research Interests: Research to understand the structure and mechanism of tumorgenesis, with focus on Notch signaling pathway and chromosome DNA damage. X-ray crystallography, in combination with other biochemical and biophysics methods to understand the function of various molecular complexes.

Wolfgang Zacharias
Professor
w0zach01 at gwise.louisville.edu

Research Interests: Ribozymes for gene therapy in rheumatoid arthritis; involvement and roles of cathepsins in oral cancers; gene expression profiling with DNA microarray chip technology.

Wayne S. Zundel
Assistant Professor
wz at bcc.louisville.edu

Research Interests: Molecular oncology.

V. PHOTOS OF ASSOCIATE FACULTY

Lu Cai
Assistant Professor of Medicine

Daniel J. Conklin
Assistant Professor of Medicine (Cardiology)

David A. Scott
Associate Professor of Periodontics, Endodontics & Dental Hygiene

William W. Young, Jr.
Professor of Molecular, Cellular, and Craniofacial Biology

Additional Associate Faculty

- **Brier, Michael E.**, Associate Professor of Medicine
- **Liu, Ye Qi**, Assistant Professor of Pediatrics
- **Schurr, Avital**, Professor of Anesthesiology
- **Stansbury, Kevin H.**, Assistant Professor, Brown Cancer Center
- **Wong, John L.**, Professor of Chemistry

VI. FACULTY LISTINGS

Faculty with Primary Appointments

- **Arteel, Gavin E.**, Associate Professor; Ph.D., Toxicology, University of North Carolina-Chapel Hill (1997).
- **Benz, Frederick W.**, Professor; Ph.D., Pharmacology, University of Iowa (1970).
- **Cai, Jian,** Instructor; Ph.D., Pharmacology and Toxicology, University of Louisville (1999).
- **Chen, Theresa S.**, Professor; Ph.D., Pharmacology, University of Louisville (1971).
- **Davis, Keith R., Professor;** Ph.D., Molecular, Cellular and Developmental Biology, University of Colorado (1985)
- **Gupta, Ramesh**, Professor and Agnes Brown Duggan Chair of Oncological Research; Ph.D. Analytical/Physical Chemistry, University of Roorkee (1972).
- **Hein, David W.**, Peter K. Knoefel Professor and Chair; Ph.D., Pharmacology, University of Michigan (1982).
- **Hurst, Harrell E.**, Professor; Ph.D., Toxicology, University of Kentucky (1978).
- **Kidd, LaCreis R**., Assistant Professor, Ph.D., Toxicology, Massachusetts Institute of Technology (1997).
- **McGregor, W. Glenn**, Professor; M.D., University of Michigan (1976).
- **Myers, Steven R.**, Associate Professor; Ph.D., Pharmacology, University of Kentucky (1986).
- **Nerland, Donald E.**, Professor; Ph.D., Medicinal Chemistry, University of Kansas (1974).
- **Palmer, Kenneth E., Associate Professor;** Ph.D., Microbiology, University of Cape Town (1997)
- **Pierce, William M., Jr.**, Professor and Vice Chair for Graduate Education; Ph.D., Pharmacology and Toxicology, University of Louisville (1981).
- **Rowell, Peter P.**, Professor; Ph.D., Pharmacology and Therapeutics, University of Florida (1975).

- **Song, Zhao-Hui (Joe)**, Associate Professor; Ph.D., Pharmacology, University of Minnesota (1992).

- **States, J. Christopher**, Professor; Ph.D., Molecular Biology and Pathology, Albany Medical College/Union University (1980).

- **Waite, Leonard C**., Professor and Vice Chair for Professional Education; Ph.D., Pharmacology, University of Missouri (1969).

- **Williams, Walter M.**, Professor; Ph.D., Pharmacology, University of Louisville (1970); M.D., University of Louisville (1974).

Faculty with Joint Appointments

- **Aronoff, George R.**, Professor of Medicine, and Pharmacology and Toxicology; M.D., Indiana University (1975).

- **Barve, Shirish,** Professor of Medicine (Gastroenterology), and Pharmacology and Toxicology; Ph.D., Molecular Pathogenesis, University of Kentucky (1990).

- **Bhatnagar, Aruni,** Professor of Medicine (Cardiology), and Pharmacology and Toxicology; Ph.D., Chemistry, University of Kanpur (1985).

- **Bodduluri, Hari,** Professor of Microbiology and Immunology, and Pharmacology and Toxicology; Ph.D., Biochemistry, Indian Institute of Science (1983).

- **Chesney, Jason A.**, Assistant Professor of Medicine (Hematology/Oncology), and Pharmacology and Toxicology; Ph.D., Biomedical Sciences/Immunology, University of Minnesota (1997); M.D., University of Minnesota (1998).

- **Eaton, John W.**, James Graham Brown Professor of Cancer Biology, Department of Medicine, and Professor of Pharmacology and Toxicology; Ph.D., Biological Anthropology and Human Genetics, University of Michigan (1969).

- **Epstein, Paul N.*,** Carol B. McFerran Chair in Pediatric Diabetes Research and Professor of Pediatrics, and Pharmacology and Toxicology; Ph.D., Pharmacology, Baylor College of Medicine (1981).

- **Fan, Teresa**, Associate Professor of Chemistry, and Pharmacology and Toxicology; Ph.D., Biochemistry, University of California-Davis (1983).

- **Goldstein, Richard E.**, Professor of Surgery, and Pharmacology and Toxicology; M.D., Thomas Jefferson University (1982); Ph.D., Molecular Physiology and Biophysics, Vanderbilt University School of Medicine (1994).

- **Gozal, David*,** Children's Hospital Foundation Pediatric Research Chair, Professor of Pediatrics, and Pharmacology and Toxicology; M.D., Hebrew University of Jerusalem, Hadassah Medical School (1979).

- **Gozal, Evelyne*,** Associate Professor of Pediatrics, and Pharmacology and Toxicology; Ph.D., Toxicology, University of Southern California (1997).

- **Hagg, Theo**, Professor and Endowed Chair of Neurological Surgery, and Professor of Pharmacology and Toxicology; M.D., University of Leiden (1985), Ph.D., Neurosciences, University of California-San Diego (1998).

- **Hetman, Michal**, Assistant Professor of Neurological Surgery, and Pharmacology and Toxicology; M.D., Warsaw Medical School (1994); Ph.D., Experimental and Clinical Medicine, Polish Academy of Sciences (1997).

- **Kang, Y. James*,** Professor of Medicine, and Pharmacology and Toxicology; Ph.D., Cell Biology and Zoology, Iowa State University (1989).

- **Kennedy, Mary Jayne**, Assistant Professor of Pediatrics, and Pharmacology and Toxicology; Pharm.D, Medical University of South Carolina (1998).

- **Li, Chi, Assistant Professor of Medicine** (Hematology/Oncology) and **Pharmacology and Toxicology;** Ph.D, Molecular Biology, Columbia University (1998)

- **McClain, Craig J*.,** Professor of Medicine (Gastroenterology), and Pharmacology and Toxicology; M.D., University of Tennessee-Memphis (1972).

- **McMasters, Kelly M.**, Professor of Surgery, and Pharmacology and Toxicology; Ph.D., Cell and Developmental Biology, Rutgers University (1988); M.D., UMDNJ R.W. Johnson Medical School (1989).

- **Miller, Donald M.**, James Graham Brown Professor of Oncology, and Professor of Pharmacology and Toxicology; M.D., Duke University (1973); Ph.D., Biochemistry, Duke University (1973).

- **Pisano, M. Michele**, Professor of Molecular, Cellular and Craniofacial Biology, and Pharmacology and Toxicology; Ph.D., Anatomy, Thomas Jefferson University (1985).

- **Rodgers, George C., Jr.**, Professor of Pediatrics, and Pharmacology and Toxicology; Ph.D., Organic Chemistry, Yale University (1964); M.D., State University of New York (1975).

- **Sullivan, Janice E.**, Professor of Pediatrics, and Pharmacology and Toxicology; M.D., University of Minnesota (1988).

- **Tollerud, David J.,** Professor of Environmental and Occupational Health Sciences and Professor of Pharmacology and Toxicology; M.D., Mayo Medical School (1978); M.P.H., Harvard Medical School (1990).

- **Wang, Yang,** Associate Professor of Pediatrics, and Pharmacology and Toxicology; M.D., Jiangxi Medical College (1982); Ph.D., Physiology, University of Toronto (1993).

- **Wattenberg, Brian (Binks) W. Associate Professor** of Medicine (Hematology/Oncology), and Pharmacology and Toxicology; Ph.D., Biological Chemistry, Washington University (1981)

- **Ye, Hong,** Assistant Professor of Medicine (Hematology/Oncology), and Pharmacology and Toxicology; Ph.D., Biophysics, Keele University (1998).

- **Zacharias, Wolfgang**, Associate Professor of Medicine (Oncology), and Pharmacology and Toxicology; Ph.D., Biochemistry, Philipps-University, Marburg, Germany (1980).

- **Zundel, Wayne S.**, Assistant Professor of Radiation Oncology, and Pharmacology and Toxicology; Ph.D., Cancer Biology, Stanford University (2000).

*Partial salary from Department of Pharmacology and Toxicology

Faculty with Associate Appointments

- **Brier, Michael E.**, Associate Professor of Medicine; Ph.D., Industrial and Physical Pharmacy, Purdue University (1986).

- **Cai, Lu**, Assistant Professor of Medicine; Ph.D., Radiation Biology/Oncology, Norman Bethune University of Medical Sciences (1987).

- **Conklin, Daniel J.**, Assistant Professor of Medicine (Cardiology); Ph.D., University of Notre Dame (1995).

- **Liu, Ye Qi**, Assistant Professor of Pediatrics; M.D., Guangxi Medical University (1983); Ph.D., Pharmacology, Osaka University (1993).

- **Scott, David A,** Associate Professor of Periodontics, Endodontics & Dental Hygiene: Ph.D., Microbiology and Immunology, McGill University (1997)

- **Schurr, Avital**, Professor of Anesthesiology; Ph.D., Biochemical Pharmacology, Ben Gurion University, Beer Sheva, Israel (1977).

- **Stansbury, Kevin H.**, Assistant Professor, Brown Cancer Center; Ph.D. University of Kentucky (1994).

- **Wong, John L.**, Professor of Chemistry; Ph.D., Chemistry, University of California at Berkeley (1966).

- **Young, William W.**, Professor of Molecular, Cellular, and Craniofacial Biology; Ph.D., Pharmacology, Washington University (1975).

Faculty with Emeritus Appointments

- **Carr, Laurence A.**, Professor Emeritus; Ph.D., Michigan StateUniversity (1969).

- **Dagirmanjian, Rose**, Professor Emerita; Ph.D., University of Rochester (1960).

- **Darby, Thomas D.**, Adjunct Professor Emeritus; Ph.D., Medical College of South Carolina (1957).

- **Jarboe, Charles H.**, Professor Emeritus; Ph.D., University of Louisville (1956).

- **Scharff, Thomas G.**, Professor Emeritus; Ph.D., University of Rochester (1956).

- **Waddell, William J.**, Professor and Chair Emeritus; M.D., University of North Carolina (1955).

- **Zimmerman, Thom J.**, Professor Emeritus of Ophthalmology and Visual Sciences, and Pharmacology and Toxicology; Ph.D., Pharmacology, University of Florida (1976); M.D., University of Illinois (1968).

Faculty with Adjunct Appointments

- **Friedman, Marvin A.**, Adjunct Professor of Pharmacology and Toxicology; Ph.D., Massachusetts Institute of Technology (1967).

- **Hayes, A. Wallace**, Adjunct Professor of Pharmacology and Toxicology; Ph.D., Auburn University (1967).

- **Hong, Jun-Yan**, Adjunct Professor of Pharmacology and Toxicology; Ph.D., University of Medicine and Dentistry of New Jersey (1987).

- **Matyunas, Nancy**, Adjunct Instructor of Pharmacology and Toxicology; Pharm.D., University of Utah (1983).

- **Nicholson, John A.**, Adjunct Assistant Professor of Pharmacology and Toxicology; D.M.D., University of Louisville (1979); Ph.D., University of Louisville (1968).

- **Sessler, Daniel I.**, Adjunct Professor of Pharmacology and Toxicology, M.D., Columbia University (1980).

VII. STAFF AND STUDENTS

Research Staff

- **Aiyer, Harini,** Research Assistant
- **Barker, David**, Research Scientist
- **Baumgarten, Sara**, Student Assistant
- **Benford, Marnita**, Laboratory Assistant
- **Burke, Tom**, Research Technologist II
- **Carpenter, Sharon**, Administrative Assistant
- **Chang, Wei-Yuan (Wendy),** Temporary Lab Assistant
- **Doll, Mark**, Research Scientist
- **Duveau, Ilinca**, Lab Research Technician II
- **Greca, Edie**, Business Manager Intermediate III
- **Guo, Luping**, Senior Research Associate
- **Howarth, Ashley L.,** Student Assistant
- **Hollkamp, Judy,** Administrative Assistant
- **Jiang, Guohui**, Senior Research Associate
- **Liu, Marcia,** Senior Research Associate
- **Martini, Ben**, Student Assistant
- **Miller, Heather**, Senior Research Technologist
- **Mukhopadhyay, Suparna,** Research Associate
- **Rice, Jeffrey M.,** Student Assistant
- **Rubin-Teitel, Heddy**, Administrative Assistant
- **Schlierf, Thomas,** Student Assistant
- **Sils, Brian,** Student Assistant
- **Simon, William Evan,** Student Assistant/Temporary Lab Assistant
- **Smith, Ned**, Technical Director Mass Spectrometry Lab
- **Stallons, L. Jay,** Student Assistant
- **States, Gregory,** Temporary Lab Assistant
- **States, Vanessa,** Temporary La Assistant
- **Taylor, Kevin G.,** Research Technician IV
- **Templeton, Tiva**, Research Technologist II
- **Turner, Delano**, Lab Research Technician III
- **Wichman, Gerry-Lynn,** Student Assistant

Postdoctoral Fellows

- Ali, Yeakub
- Bendaly, Jean
- Beier, Juliane

- He, Fang
- M'Bemba, Meka Prosper
- Neale, Jason
- Qiao, Zhuanhong
- Thaiparambil, J. Thomas
- vonMontfort, Claudia
- Yang, Xiaonan
- Zhao, Shuang

New Graduate Students

- Katie Bourcy
- Elaina Chambers
- Nicole Lavender
- Lori Millner
- Clarisse Muenyi
- Nason Schooler
- Jay Stallons
- Thomas Schlierf

Graduate Students (New students bolded)

Name	**Advisor**
Cherone Anthony	A. Bhatnagar
Sheila (Mullins) Arnold	T. Hagg
Aisha Bagshaw	W. Pierce
Katie Bourcy	S. Barve
Alex Carrasquer	Z-H. Song
Wendy Chang	T. Chen
Eleana Chambers	S. Barve
Molly Davis	G. Arteel
Chad Dumstorf	W.G. McGregor
Emily Esposito	M. Pisano
Agata Habas	M. Hetman
Anwar Husain	D. Hein
Kevyn Merten	Y.J. Kang
Philip Kaiser	G. Arteel
Kristin Metry	D. Hein
Tanvi Jani	S. Barve
Nicole Lavender	L. Kidd
Christell Komguem Kamga	Z-H Song
Shankang Ma	Y.J. Kang
Robert Martin	D. Hein
Stephanie Mathews	S. Barve

Sam McNeely	J.C. States
Mildred Menchu	W. Pierce
Lori Millner	D. Hein
Afsoon Moktar	R. Gupta
Lasharon Mosley	R. Goldstein
Ntsang Miranda Nebane	Z-H. Song
YaFatou Njie	Z-H. Song
Jean Claude Nzimulinda	Z-H. Song
John Philipose	M. Pisano
Stephen Reeves	D. Gozal
Katie Richardson	W Zundel
Erica Rodgers	J.C. States
Gilandra Russell	G. Arteel
Thomas Schlierf	D. Hein
Nason Schooler	J. Eaton
L. Jay Stallons	W.G. McGregor
Frazier Taylor	J.C. States
Joshua Thornburg	J. Chesney
Jason Walraven	D. Hein
Jianxun Wang	P. Epstein
Nick Watson	W.G. McGregor
Christina Weigand	E. Gozal
Steven Xu	T. Fan
Lu Yang	P. Epstein
Janet Zang	D. Hein
Rundong Zhang	Z-H. Song
Susan Zhang	D. Hein
Yang Zhou	Y.J. Kang

VIII. GRADUATES

Pharmacology and Toxicology Graduates

Graduate	Degree	Year	Mentor	Dissertation/Thesis Title
Alex Carrasquer	M.S.	2006	Zhao-Hui (Joe) Song, Ph.D.	The effects of polymorphisms on the function of the CB2 cannabinoid receptor
Afsoon Moktar	M.S.	2006	Ramesh C. Gupta, Ph.D.	Cigarette smoking as a major cofactor in human cervical cancer
Emily Roberts	M.S.	2006	M. Michele Pisano,	Low birth weight-Consequences of maternal tobacco smoke exposure during embryonic and

Esposito			Ph.D.	fetal development
Nstang Miranda Nebane	Ph.D.	2006	Zhao-Hui (Joe) Song, Ph.D.	Structure-activity relationship of the CB1 and CB2 cannabinoid receptors
Yang Zhou	M.S.	2006	Y. James Kang, Ph.D.	Copper inhibition of hydrogen peroxide-induced hypertrophy in H9C2 embryonic rat cardiac cells
Xiaoqiang (Steven) Xu	M.S.	2006	Theresa Whei-Mei Fan, Ph.D.	TrxR SECIS RNA synthesis and biophysical characterization
Rundong (Ray) Zhang	Ph.D.	2006	Zhao-Hui (Joe) Song, Ph.D.	Structure and function of CB2 cannabinoid receptors
Sheila A. Mullins	M.S.	2006	Paul N. Epstein, Ph.D.	Effects of fructose-2,6-bisphosphate on Akt phosporylation and insulin signaling in cardiomyocytes
Joshua M. Thornburg	M.S.	2006	Jason A. Chesney, M.D., Ph.D.	Role of lactate dehydrogenase A (LDH-A) in oncogenic transformation; Revisiting a classic enzyme
Wei (Wendy) Yuan Chang	Ph.D.	2006	Theresa S. Chen, Ph.D.	Mechanism of 4-hydroxynonenal induced toxicity in Jurkat CD4+ T lymphocytes
Katharine S. Richardson	M.S.	2006	Wayne S. Zundel, Ph.D.	Impact of von Hippel-Lindau in regulating ribonuclease activity in renal cell carcinoma
Yu (Janet) Zang	Ph.D.	2006	David W. Hein, Ph.D.	Functional characterization and mechanistic studies on single nucleotide polymorphisms of human N-acetyltransferase 2
Tanvi S. Jani	Ph.D.	2006	Shirish Barve, Ph.D.	Role of methionine adenosyltransferase II (MAT II) and S-adenosylmethionine (SAMe) in survival of CD4+ T lymphocytes: Relevance to immune dysfunction
Stephen R. Reeves	Ph.D.	2006	David Gozal, M.D.	Chronic intermittent hypoxia and respiratory plasticity

IX. PUBLICATIONS (SALARIED FACULTY AND STAFF)

1. **Arif, J. M., C. Dresler, M. L. Clapper, C. G. Gairola, C. Srinivasan, R. A. Lubet, and R. C. Gupta**. 2006. Lung DNA adducts detected in human smokers are unrelated to typical polyaromatic carcinogens. Chem.Res.Toxicol. **19**:295-299.

2. **Arteel, G. E., G. W. Dryden, and C. J. McClain**. 2006. Clinical Implications of Oxidative Stress and Anti-Oxidant Therapy in Gastrointestinal Disease, p. 329-342. *In* A. Buchman (ed.), Clinical Nutrition in Gastrointestinal Diseases. Slack, Inc., Thorofare, N.J.

3. **Barker, D. F., A. Husain, J. R. Neale, B. D. Martini, X. Zhang, M. A. Doll, J. C. States, and D. W. Hein**. 2006. Functional properties of an alternative, tissue-specific promoter for human arylamine N-acetyltransferase 1. Pharmacogenet.Genomics **16**:515-525.

4. **Barve, S., S. Joshi-Barve, Z. Song, D. Hill, P. Hote, I. Deaciuc, and C. McClain**. 2006. Interactions of cytokines, S-adenosylmethionine, and S-adenosylhomocysteine in alcohol-induced liver disease and immune suppression. J.Gastroenterol.Hepatol. **21 Suppl 3**:S38-S42.

5. **Bergheim, I., C. J. McClain, and G. E. Arteel**. 2006. Treatment of Alcoholic Liver Disease, p. 196-213. *In* M. Singer and D. A. Brenner (eds.), Alcohol and the Gastrointestinal Tract. Karger AG, Basel, Switzerland.

6. **Bergheim, I., L. Guo, M. A. Davis, J. C. Lambert, J. I. Beier, I. Duveau, J. P. Luyendyk, R. A. Roth, and G. E. Arteel**. 2006. Metformin prevents alcohol-induced liver injury in the mouse: Critical role of plasminogen activator inhibitor-1. Gastroenterology **130**:2099-2112.

7. **Bergheim, I., J. P. Luyendyk, C. Steele, G. K. Russell, L. Guo, R. A. Roth, and G. E. Arteel**. 2006. Metformin prevents endotoxin-induced liver injury after partial hepatectomy. J.Pharmacol.Exp.Ther. **316**:1053-1061.

8. **Bergheim, I., L. Guo, M. A. Davis, I. Duveau, and G. E. Arteel**. 2006. Critical role of plasminogen activator inhibitor-1 in cholestatic liver injury and fibrosis. J.Pharmacol.Exp.Ther. **316**:592-600.

9. **Bhaiya, P., S. Roychowdhury, P. M. Vyas, M. A. Doll, D. W. Hein, and C. K. Svensson**. 2006. Bioactivation, protein haptenation, and toxicity of sulfamethoxazole and dapsone in normal human dermal fibroblasts. Toxicol.Appl.Pharmacol. **215**:158-167.

10. **Boyd-Kimball, D., H. F. Poon, B. C. Lynn, J. Cai, W. M. Pierce, Jr., J. B. Klein, J. Ferguson, C. D. Link, and D. A. Butterfield**. 2006. Proteomic identification of proteins specifically oxidized in Caenorhabditis elegans

expressing human Abeta(1-42): implications for Alzheimer's disease. Neurobiol.Aging **27**:1239-1249.

11. **Butterfield, D. A., A. Gnjec, H. F. Poon, A. Castegna, W. M. Pierce, J. B. Klein, and R. N. Martins**. 2006. Redox proteomics identification of oxidatively modified brain proteins in inherited Alzheimer's disease: An initial assessment. J.Alzheimers.Dis. **10**:391-397.

12. **Butterfield, D. A., H. F. Poon, C. D. St, J. N. Keller, W. M. Pierce, J. B. Klein, and W. R. Markesbery**. 2006. Redox proteomics identification of oxidatively modified hippocampal proteins in mild cognitive impairment: insights into the development of Alzheimer's disease. Neurobiol.Dis. **22**:223-232.

13. **Cai, L., Y. Wang, G. Zhou, T. Chen, Y. Song, X. Li, and Y. J. Kang**. 2006. Attenuation by metallothionein of early cardiac cell death via suppression of mitochondrial oxidative stress results in a prevention of diabetic cardiomyopathy. J.Am.Coll.Cardiol. **48**:1688-1697.

14. **Carrithers, R. I. and C. J. McClain**. 2006. Alcoholic Liver Disease, p. 1771-1792. *In* M. Feldman, L. S. Friedman, and L. J. Brant (eds.), Sleisenger & Fordtran's Gastrointentinal and Liver Disease, 8th Ed. Saunders/Elsevier, Philadelphia, PA.

15. **Chagpar, A. B., K. M. McMasters, R. C. Martin, C. Thoene, J. Y. Nurko, and M. J. Edwards**. 2006. North American Fareston Tamoxifen Adjuvant Trial. Determinants of early distant metastatic disease in elderly patients with breast cancer. Am J Surg **192** :317-321.

16. **Chagpar, A. B., C. R. Scoggins, R. C. G. Martin, D. J. Carlson, A. L. Laidley, S. E. El-Eid, T. Q. McGlothin, and K. M. McMasters**. 2006. Prediction of sentinel lymph node-only disease in women with invasive breast cancer. Am J Surg **192**:882-887.

17. **Chagpar, A. B., C. R. Scoggins, R. C. G. Martin, E. F. Cook, T. McCurry, N. Mizuguchi, K. J. Paris, D. J. Carlson, A. L. Laidley, S. E. El-Eid, T. Q. McGlothin, and K. M. McMasters**. 2006. Prediction patients at low probability of requiring postmastectomy radiation therapy. Ann Surg Oncol .

18. **Chagpar, A. B., J. L. Studts, C. R. Scoggins, R. C. G. Martin, D. J. Carlson, A. L. Laidley, S. E. El-Eid, T. Q. McGlothin, R. D. Noyes, and K. M. McMasters**. 2006. The University of Louisville Breast Sentinel Lymph Node Study. Factors associated with surgical options for breast carcinoma. Cancer **106**:1462-1466.

19. **Chen, Y., C. Daosukho, W. O. Opii, D. M. Turner, W. M. Pierce, J. B. Klein, M. Vore, D. A. Butterfield, and D. K. St Clair**. 2006. Redox proteomic identification of oxidized cardiac proteins in adriamycin-treated mice. Free Radic.Biol.Med. **41**:1470-1477.

20. **Cherian, M. G. and Y. J. Kang**. 2006. Metallothionein and liver cell regeneration. Exp.Biol.Med.(Maywood.) **231**:138-144.

21. **Chi L, Ke Y, Luo C, Li B, Gozal D, Kalyanaraman B, and Liu R**. 2006. Motor neuron degeneration promotes neural progenitor cell proliferation, migration and neurogenesis in the spinal cords of ALS mice. Stem Cells **24**:34-43.

22. **Deaciuc, I. V. and McClain C.J.** 2006. Role of Activated Macrophages in Liver Disease, p. 159-178. *In* D. Mann, S. Friedman, and S. Ali (eds.), Liver Diseases Biochemical Mechanisms and New Therapeutic Insights, Vol.1. Science Publishers Enfield.

23. **Dougherty, S. M., W. Mazhawidza, A. R. Bohn, K. A. Robinson, K. A. Mattingly, K. A. Blankenship, M. O. Huff, W. G. McGregor, and C. M. Klinge**. 2006. Gender difference in the activity but not expression of estrogen receptors alpha and beta in human lung adenocarcinoma cells. Endocr.Relat Cancer **13**:113-134.

24. **Dryden, G. W., M. Song, and C. McClain**. 2006. Polyphenols and gastrointestinal diseases. Curr.Opin.Gastroenterol. **22**:165-170.

25. **Dumstorf, C. A., A. B. Clark, Q. Lin, G. E. Kissling, T. Yuan, R. Kucherlapati, W. G. McGregor, and T. A. Kunkel**. 2006. Participation of mouse DNA polymerase iota in strand-biased mutagenic bypass of UV photoproducts and suppression of skin cancer. Proc.Natl.Acad.Sci.U.S.A **103**:18083-18088.

26. **El-Eid, S., A. J. Strombert, S. Ames, S. Ellis, K. M. McMasters, and R. C. G. Martin**. 2006. Assessment of symptom experience in patients undergoing hepatic resection or ablation. Cancer **107**:2715-2722.

27. **Enzmann, V., B. W. Row, Y. Yamauchi, L. Kheirandish, D. Gozal, H. J. Kaplan, and M. A. McCall**. 2006. Behavioral and anatomical abnormalities in a sodium iodate-induced model of retinal pigment epithelium degeneration. Exp.Eye Res. **82**:441-448.

28. **Feng, W., F. W. Benz, J. Cai, W. M. Pierce, and Y. J. Kang**. 2006. Metallothionein disulfides are present in metallothionein-overexpressing transgenic mouse heart and increase under conditions of oxidative stress. J.Biol.Chem. **281**:681-687.

29. **Fortunato, F., X. Deng, L. K. Gates, C. J. McClain, D. Bimmler, R. Graf, and D. C. Whitcomb**. 2006. Pancreatic response to endotoxin after chronic alcohol exposure: switch from apoptosis to necrosis? Am.J.Physiol Gastrointest.Liver Physiol **290**:G232-G241.

30. **Gao, X., M. Qian, J. L. Campian, D. R. Clark, T. J. Burke, J. W. Eaton, and W. G. McGregor**. 2006. Cytotoxic and mutagenic effects of tobacco-borne free fatty acids. Free Rad.Biol.Med. **40**:165-172.

31. **Girvan, A. C., Y. Teng, L. K. Casson, S. D. Thomas, S. Juliger, M. W. Ball, J. B. Klein, W. M. Pierce, Jr., S. S. Barve, and P. J. Bates**. 2006. AGRO100 inhibits activation of nuclear factor-kappaB (NF-kappaB) by forming a complex with NF-kappaB essential modulator (NEMO) and nucleolin. Mol.Cancer Ther. **5**:1790-1799.

32. **Gobejishvili, L., S. Barve, S. Joshi-Barve, S. Uriarte, Z. Song, and C. McClain**. 2006. Chronic ethanol-mediated decrease in cAMP primes macrophages to enhanced LPS-inducible NF-kappaB activity and TNF expression: relevance to alcoholic liver disease. Am.J.Physiol Gastrointest.Liver Physiol **291**:G681-G688.

33. **Goldbart, A. D., J. Krishna, R. C. Li, L. D. Serpero, and D. Gozal**. 2006. Inflammatory mediators in exhaled breath condensate of children with obstructive sleep apnea syndrome. Chest **130**:143-148.

34. **Goldbart, A. D., B. W. Row, L. Kheirandish-Gozal, Y. Cheng, K. R. Brittian, and D. Gozal**. 2006. High fat/refined carbohydrate diet enhances the susceptibility to spatial learning deficits in rats exposed to intermittent hypoxia. Brain Res. **1090**:190-196.

35. **Gozal, D.** 2006. Respiratory manifestations of neuromuscular diseases, *In* Nelson Textbook of Pediatrics. WB Saunders, Philadelphia.

36. **Gozal, D. and L. Kheirandish-Gozal**. 2006. Sleep apnea in children--treatment considerations. Paediatr.Respir.Rev. **7 Suppl 1**:S58-S61.

37. **Gozal, D. and L. Kheirandish**. 2006. Oxidant stress and inflammation in the snoring child: confluent pathways to upper airway pathogenesis and end-organ morbidity. Sleep Med.Rev. **10**:83-96.

38. **Gozal, D. and A. D. Goldbart**. 2006. Inherited Myopathies, p. 98-103. *In* G. J. Laurent and S. D. Shapiro (eds.), Encyclopedia of Respiratory Medicine. Elsevier, Ltd.

39. **Gozal, D. and L. Kheirandish**. 2006. Disorders of Breating During Sleep, p. 1046-1070. *In* V. Chernick, T. Boat, R. Wilmott, and A. Bush (eds.), Kendig's Disorders of the Respiratory Tract in Children. Elsevier, Ltd.

40. **Gozal, D. and L. Kheirandish-Gozal**. 2006. Neurobehavioral mobidity in children with sleep-disordered breathing, p. 183-197. *In* M. A. Richardson and N. R. Friedman (eds.), Clinician's Guide to Pediatric Sleep Disorders. Informa Healthcare.

41. **Habas, A., G. Kharebava, E. Szatmari, and M. Hetman**. 2006. NMDA Neuroprotection Against a Phosphatidylinositol-3 Kinase Inhibitor, LY294002 by NR2B-mediated Suppression of Glycogen Synthase Kinase-3 Beta-Induced Apoptosis. J.Neurochem. **86**:335-348.

42. **Hammond, G. B., M. Mae, J. A. Hong, and H. E. Hurst**. 2006. Characterization of gem-difluoropropargyl synthons through HF loss from protonated molecules in methane chemical ionization mass spectra. J Fluorine Chem **127**:126-132.

43. **Hanje, A. J., B. Fortune, M. Song, D. Hill, and C. McClain**. 2006. The use of selected nutrition supplements and complementary and alternative medicine in liver disease. Nutr.Clin.Pract. **21**:255-272.

44. **Hein, D. W., A. J. Fretland, and M. A. Doll**. 2006. Effects of single nucleotide polymorphisms in human N-acetyltransferase 2 on metabolic activation (O-acetylation) of heterocyclic amine carcinogens. Int.J.Cancer **119**:1208-1211.

45. **Hein, D. W.** 2006. N-acetyltransferase 2 genetic polymorphism: effects of carcinogen and haplotype on urinary bladder cancer risk. Oncogene **25**:1649-1658.

46. **Hein, D. W., M. A. Doll, D. E. Nerland, and A. J. Fretland**. 2006. Tissue distribution of N-acetyltransferase 1 and 2 catalyzing the N-acetylation of 4-aminobiphenyl and O-acetylation of N-hydroxy-4-aminobiphenyl in the congenic rapid and slow acetylator Syrian hamster. Mol.Carcinog. **45**:230-238.

47. **Hein, D. W., M. A. Doll, and D. E. Nerland**. 2006. Methods for N-acetyltransferase (NAT-1 and NAT-2) genotype determination, p. 119-124. *In* S. H. Y. Wong, M. W. Linder, and R. Jr. Valdes (eds.), Pharmacogenomics and Proteomics: Enabling the Practice of Personalized Medicine. AACC Press, Washington, D.C.

48. **Jiang, G. H., M. Skorvaga, D. L. Croteau, B. Van Houten, and J. C. States**. 2006. Robust incision of Benoz[a]pyrene-7,8-dihyrodiol-9,10-epoxide-DNA adducts by a recombinant thermoresistant interspecies combination UvrABC endonuclease system. Biochemistry **45**:7834-7843.

49. **Kaiserova, K., S. Srivastava, J. D. Hoetker, S. O. Awe, X. L. Tang, J. Cai, and A. Bhatnagar**. 2006. Redox activation of aldose reductase in the ischemic heart. J.Biol.Chem. **281**:15110-15120.

50. **Kang, Y. J.** 2006. Metallothionein redox cycle and function. Exp.Biol.Med.(Maywood.) **231**:1459-1467.

51. **Kang, Y. J.** 2006. Cardiac hypertrophy: a risk factor for QT-prolongation and cardiac sudden death. Toxicol.Pathol. **34**:58-66.

52. **Kang, Y. J.** 2006. Book Review: Molecular Medicine--An Introductory Text, 3rd Edition by Ronald J. Trent. Environ Health Persp **114**:A1-A3.

53. **Ke, Y., L. Chi, R. Xu, C. Luo, D. Gozal, and R. Liu**. 2006. Early response of endogenous adult neural progenitor cells to acute spinal cord injury in mice. Stem Cells **24**:1011-1019.

54. **Kheirandish-Gozal, L., O. Sans Capdevila, R. Tauman, and D. Gozal**. 2006. Plasma C-reactive protein in non-obese children with obstructive sleep apnea before and after adenotonsillectomy. J.Clin.Sleep Med. **2**:301-304.

55. **Kheirandish, L. and D. Gozal**. 2006. Neurocognitive dysfunction in children with sleep disorders. Dev.Sci. **9**:388-399.

56. **Kheirandish, L., A. D. Goldbart, and D. Gozal**. 2006. Intranasal steroids and oral leukotriene modifier therapy in residual sleep-disordered breathing after tonsillectomy and adenoidectomy in children. Pediatrics **117**:e61-e66.

57. **Kidd, L. R., A. Coulibaly, T. M. Templeton, W. Chen, L. O. Long, T. Mason, C. Bonilla, F. Akereyeni, V. Freeman, W. Isaacs, C. Ahaghotu, and R. A. Kittles**. 2006. Germline BCL-2 sequence variants and inherited predisposition to prostate cancer. Prostate Cancer Prostatic.Dis. **9**:284-292.

58. **Kidd, L. R., Martin R.C.G., J. H. Moore, and D. W. Hein**. 2006. Genetic polymorphism of N-acetyltransferase genes as risk modifiers of colorectal cancer from consumption of well-done meat., p. 189-212. *In* S.-W. Choi and S. Frisco (eds.), CRC Press, Boca Raton, Florida.

59. **Krishna, J., O. Sans-Capdevila, and D. Gozal**. 2006. Sleep studies: which technologies? Paediatr.Respir.Rev. **7 Suppl 1**:S202-S205.

60. **Krishna, J., Z. A. Shah, M. Merchant, J. B. Klein, and D. Gozal**. 2006. Urinary protein expression patterns in children with sleep-disordered breathing: preliminary findings. Sleep Med. **7**:221-227.

61. **Li, D., L. Jiao, Y. Li, M. A. Doll, D. W. Hein, M. L. Bondy, D. B. Evans, R. A. Wolff, R. Lenzi, P. W. Pisters, J. L. Abbruzzese, and M. M. Hassan**. 2006. Polymorphisms of cytochrome P4501A2 and N-acetyltransferase genes, smoking, and risk of pancreatic cancer. Carcinogenesis **27**:103-111.

62. **Li, R. C., S. K. Lee, F. Pouranfar, K. R. Brittian, H. B. Clair, B. W. Row, Y. Wang, and D. Gozal**. 2006. Hypoxia differentially regulates the expression of neuroglobin and cytoglobin in rat brain. Brain Res. **1096**:173-179.

63. **Li, X., H. Chen, and P. N. Epstein**. 2006. Metallothionein and Catalase Sensitize to Diabetes in Nonobese Diabetic Mice: Reactive Oxygen Species May Have a Protective Role in Pancreatic {beta}-Cells. Diabetes **55**:1592-1604.

64. **Loehle, J. A., V. Cornish, L. Wakefield, M. A. Doll, J. R. Neale, Y. Zang, E. Sim, and D. W. Hein**. 2006. N-acetyltransferase (Nat) 1 and 2 expression in Nat2 knockout mice. J.Pharmacol.Exp.Ther. **319**:724-728.

65. **Martin, R. C., J. Ahn, S. A. Nowell, D. W. Hein, M. A. Doll, B. D. Martini, and C. B. Ambrosone**. 2006. Association between manganese superoxide dismutase promoter gene polymorphism and breast cancer survival. Breast Cancer Res. **8**:R45.

66. **Martin, R. C., S. Husheck, C. R. Scoggins, and K. M. McMasters**. 2006. Intraoperative magnetic resonance imaging for ablation of hepatic tumors. Surg.Endosc. **20**:1536-1542.

67. **Martin, R. C. G., V. A. Augenstein, C. S. Scoggins, and K. M. McMasters**. 2006. Quality of survival reporting in chemotherapy and surgery trials in patients with metastatic colorectal cancer. Cancer **106**:1389-1394.

68. **Martin, R. C. G., C. R. Scoggins, and K. M. McMasters**. 2006. A Phase II study of radiofrequency ablation of unresectable metastatic colorectal cancer with hepatic arterial infusion pump chemotherapy. J.Clin.Oncol. **93**:387-393.

69. **McClain C.J., D. B. Hill, and L. Marsano**. 2006. Nutrition and Liver Disease, p. 747-763. *In* B. A. Bowman and R. M. Russell (eds.), Present Knowledge in Nutrition. International Life Science Institute.

70. **McNeely, S. C., X. Xu, B. F. Taylor, W. Zacharias, M. J. McCabe, Jr., and J. C. States**. 2006. Exit from arsenite-induced mitotic arrest is p53 dependent. Environ.Health Perspect. **114**:1401-1406.

71. **Mehl, R. C., L. M. O'brien, J. H. Jones, J. K. Dreisbach, C. B. Mervis, and D. Gozal**. 2006. Correlates of sleep and pediatric bipolar disorder. Sleep **29**:193-197.

72. **Merten, K. E., Y. Jiang, W. Feng, and Y. J. Kang**. 2006. Calcineurin activation is not necessary for Doxorubicin-induced hypertrophy in H9c2 embryonic rat cardiac cells: involvement of the phosphoinositide 3-kinase-Akt pathway. J.Pharmacol.Exp.Ther. **319**:934-940.

73. **Miano, S., R. Donfrancesco, O. Bruni, R. Ferri, S. Galiffa, J. Pagani, E. Montemitro, L. Kheirandish, D. Gozal, and V. M. Pia**. 2006. NREM sleep instability is reduced in children with attention-deficit/hyperactivity disorder. Sleep **29**:797-803.

74. **Montgomery-Downs, H. E. and D. Gozal**. 2006. Toddler behavior following polysomnography: effects of unintended sleep disturbance. Sleep **29**:1282-1287.

75. **Montgomery-Downs, H. E., J. Krishna, L. J. Roberts, and D. Gozal**. 2006. Urinary F(2)-isoprostane metabolite levels in children with sleep-disordered breathing. Sleep Breath. **10**:211-215.

76. **Montgomery-Downs, H. E. and D. Gozal**. 2006. Sleep habits and risk factors for sleep-disordered breathing in infants and young toddlers in Louisville, Kentucky. Sleep Med. **7**:211-219.

77. **Montgomery-Downs, H. E., L. M. O'brien, T. E. Gulliver, and D. Gozal**. 2006. Polysomnographic characteristics in normal preschool and early school-aged children. Pediatrics **117**:741-753.

78. **Montgomery-Downs, H. E. and D. Gozal**. 2006. Snore-associated sleep fragmentation in infancy: mental development effects and contribution of secondhand cigarette smoke exposure. Pediatrics **117**:e496-e502.

79. **Morton, L. M., M. Schenk, D. W. Hein, S. Davis, S. H. Zahm, W. Cozen, J. R. Cerhan, P. Hartge, R. Welch, S. J. Chanock, N. Rothman, and S. S. Wang**. 2006. Genetic variation in N-acetyltransferase 1 (NAT1) and 2 (NAT2) and risk of non-Hodgkin lymphoma. Pharmacogenet.Genomics **16**:537-545.

80. **Moslehi, R., N. Chatterjee, T. R. Church, J. Chen, M. Yeager, J. Weissfeld, D. W. Hein, and R. B. Hayes**. 2006. Cigarette smoking, N-acetyltransferase genes and the risk of advanced colorectal adenoma. Pharmacogenomics. **7**:819-829.

81. **Nebane, N. M., B. Kellie, and Z. H. Song**. 2006. The effects of charge-neutralizing mutation D6.30N on the functions of the CB1 and CB2 cannabinoid receptors. FEEBS Letter **580**:5392-5398.

82. **Njie, Y. F., A. Kumar, Z. Qiao, L. Zhong, and Z. H. Song**. 2006. Noladin ether acts on trabecular meshwork cannabinoid (CB1) receptors to enhance aqueous humor outflow facility. Invest Ophthalmol.Vis.Sci. **47**:1999-2005.

83. **O'brien, L. M., L. D. Serpero, R. Tauman, and D. Gozal**. 2006. Plasma adhesion molecules in children with sleep-disordered breathing. Chest **129**:947-953.

84. **O'Brien, T. J., G. Jiang, G. Chun, H. G. Mandel, C. S. Westphal, K. Kahen, A. Montaser, J. C. States, and S. R. Patierno**. 2006. Incision of trivalent chromium [Cr(III)]-induced DNA damage by Bacillus caldotenax UvrABC endonuclease. Mutat.Res. **610**:85-92.

85. **Oz, H. S., H. J. Im, T. S. Chen, W. J. S. de Villiers, and C. J. McClain**. 2006. Glutathione-enhancing agents protect against steatohepatitis in a dietary model. J.Biochem.Mol.Toxicol. **20**:39-47.

86. **Poon, H. F., H. M. Shepherd, T. T. Reed, V. Calabrese, A. M. Stella, G. Pennisi, J. Cai, W. M. Pierce, J. B. Klein, and D. A. Butterfield**. 2006. Proteomics analysis provides insight into caloric restriction mediated oxidation and expression of brain proteins associated with age-related impaired cellular

processes: Mitochondrial dysfunction, glutamate dysregulation and impaired protein synthesis. Neurobiol.Aging **27**:1020-1034.

87. **Porter, P. C., D. R. Clark, L. D. McDaniel, W. G. McGregor, and J. C. States**. 2006. Telomerase Immortalized Human Fibroblasts Retain p53-mediated DNA Damage Responses. DNA Repair **5**:61-70.

88. **Ravoori, S., M. V. Vadhanam, D. D. Davey, C. Srinivasan, B. Nagarajan, and R. C. Gupta**. 2006. Modulation of novel DNA adducts during human uterine cervix cancer progression. Int.J.Oncol. **29**:1437-1443.

89. **Reeves, S. R. and D. Gozal**. 2006. Respiratory and metabolic responses to early postnatal chronic intermittent hypoxia and sustained hypoxia in the developing rat. Pediatr.Res. **60**:680-686.

90. **Reeves, S. R., S. Z. Guo, K. R. Brittian, B. W. Row, and D. Gozal**. 2006. Anatomical changes in selected cardio-respiratory brainstem nuclei following early post-natal chronic intermittent hypoxia. Neurosci.Lett. **402**:233-237.

91. **Scoggins, C. R., M. I. Ross, D. S. Reintgen, D. Noyes, J. S. Goydos, P. D. Beitsch, M. M. Urist, S. Ariyan, J. J. Sussman, M. J. Edwards, A. B. Chagpar, R. C. G. Martin, A. J. H. L. Strombert, and K. M. McMasters**. 2006. Gender-related differences in outcome for melanoma patients. Ann.Surg. **243**:693-698, discussion, 698-700.

92. **Scoggins, C. R., M. I. Ross, D. S. Reintgen, R. D. Noyes, J. S. Hoydos, P. D. Beitsch, M. M. Urist, S. Ariyan, B. S. Davidson, J. J. Sussman, M. J. Edwards, R. C. G. Martin, A. J. Conrad, J. Albrecht, and K. M. McMasters**. 2006. A prospective multi-institutional study of reverse transcriptase polymerase chain reaction for molecular staging of melanoma. J.Clin.Oncol. **24**:2849-2857.

93. **Shah, Z. A., S. A. Jortani, R. Tauman, R. Valdes, Jr., and D. Gozal**. 2006. Serum proteomic patterns associated with sleep-disordered breathing in children. Pediatr.Res. **59**:466-470.

94. **Shen, X., S. Zheng, N. S. Metreveli, and P. N. Epstein**. 2006. Protection of cardiac mitochondria by overexpression of MnSOD reduces diabetic cardiomyopathy. Diabetes **55**:798-805.

95. **Song, Z., I. Deaciuc, M. Song, D. Y. Lee, Y. Liu, X. Ji, and C. McClain**. 2006. Silymarin protects against acute ethanol-induced hepatotoxicity in mice. Alcohol Clin.Exp.Res. **30**:407-413.

96. **Souhkova-O'Hare, G. K., J. Z. Cheng, A. M. Roberts, and D. Gozal**. 2006. Impaired control of renal sympathetic nerve activity following neonatal intermittent hypoxia in rats. Am.J.Physiol.(Heart and Circul.Physiol) **290**:H1157-H1164.

97. **Soukhova-O'Hare, G. K., J. W. Zhang, D. Gozal, and J. Yu**. 2006. Bradykinin B2 receptors mediated pulmonary sympathetic afferents induced reflexes in rabbits. Life Sci. **78**:1990-1997.

98. **Sultana, R., S. F. Newman, H. M. Abdul, J. Cai, W. M. Pierce, J. B. Klein, M. Merchant, and D. A. Butterfield**. 2006. Protective effect of D609 against amyloid-beta1-42-induced oxidative modification of neuronal proteins: redox proteomics study. J.Neurosci.Res. **84**:409-417.

99. **Sultana, R., H. F. Poon, J. Cai, W. M. Pierce, M. Merchant, J. B. Klein, W. R. Markesbery, and D. A. Butterfield**. 2006. Identification of nitrated proteins in Alzheimer's disease brain using a redox proteomics approach. Neurobiol.Dis. **22**:76-87.

100. **Sultana, R., D. Boyd-Kimball, H. F. Poon, J. Cai, W. M. Pierce, J. B. Klein, M. Merchant, W. R. Markesbery, and D. A. Butterfield**. 2006. Redox proteomics identification of oxidized proteins in Alzheimer's disease hippocampus and cerebellum: an approach to understand pathological and biochemical alterations in AD. Neurobiol.Aging **27**:1564-1576.

101. **Sultana, R., D. Boyd-Kimball, H. F. Poon, J. Cai, W. M. Pierce, J. B. Klein, W. R. Markesbery, X. Z. Zhou, K. P. Lu, and D. A. Butterfield**. 2006. Oxidative modification and down-regulation of Pin1 in Alzheimer's disease hippocampus: A redox proteomics analysis. Neurobiol.Aging **27**:918-925.

102. **Tauman, R., T. E. Gulliver, J. Krishna, H. E. Montgomery-Downs, L. M. O'brien, A. Ivanenko, and D. Gozal**. 2006. Persistence of obstructive sleep apnea syndrome in children after adenotonsillectomy. J.Pediatr. **149**:803-808.

103. **Tauman, R. and D. Gozal**. 2006. Obesity and obstructive sleep apnea in children. Paediatr.Respir.Rev. **7**:247-259.

104. **Tauman, R., L. M. O'brien, F. Barbe, V. G. Iyer, and D. Gozal**. 2006. Reciprocal interactions between spontaneous and respiratory arousals in adults with suspected sleep-disordered breathing. Sleep Med. **7**:229-234.

105. **Taylor, B. F., S. C. McNeely, H. L. Miller, G. M. Lehmann, M. J. McCabe, Jr., and J. C. States**. 2006. p53 suppression of arsenite-induced mitotic catastrophe is mediated by p21CIP1/WAF1. J.Pharmacol.Exp.Ther. **318**:142-151.

106. **Vega, C., R. Sachleben, D. Gozal, and E. Gozal**. 2006. Differential metabolic adaptation to acute and long-term hypoxia in rat primary cortical astrocytes. J.Neurochem. **97**:872-883.

107. **Waddell WJ**. 2006. Critique of dose response in carcinogenesis. Hum Exp Toxicol **25**:413-436.

108. **Waddell WJ, Fukushima S, and Williams GM**. 2006. Concordance of thresholds for carcinogenicity of N-nitrosodiethylamine. Arch Toxicol **80**:305-309.

109. **Walraven, J. M., M. A. Doll, and D. W. Hein**. 2006. Identification and characterization of functional rat arylamine N-acetyltransferase 3: comparisons with rat arylamine N-acetyltransferases 1 and 2. J.Pharmacol.Exp.Ther. **319**:369-375.

110. **Wang, J., Song Y., Q. Wang, P. M. Kralik, and P. N. Epstein**. 2006. Causes and characteristics of diabetic cardiomyopathy. The Review of Diabetic Studies. The Review of Diabetic Studies **3**:108-117.

111. **Watson, N. B., S. Mukhopadhyay, and W. G. McGregor**. 2006. Translesion DNA polymerases as molecular targets for cancer prevention. Cancer Lett **241**:13-20.

112. **Wells, G., R. C. G. Martin, and K. M. McMasters**. 2006. (Invited Commentary) Soft tissue sarcoma of the extremity and trunk: Issues for the general surgeon. Am.Surg. **72**: 665-671.

113. **Xu, J., J. Han, P. N. Epstein, and Y. Q. Liu**. 2006. Regulation of PDK mRNA by high fatty acid and glucose in pancreatic islets. Biochem.Biophys.Res.Commun. **344**:827-833.

114. **Zhang, X., J. C. Lambert, M. A. Doll, J. M. Walraven, G. E. Arteel, and D. W. Hein**. 2006. 4,4'-methylenedianiline-induced hepatotoxicity is modified by N-acetyltransferase 2 (NAT2) acetylator polymorphism in the rat. J.Pharmacol.Exp.Ther. **316**:289-294.

115. **Zhu, Y., D. W. Hein, M. A. Doll, K. K. Reynolds, N. Abudu, R. Valdes, Jr., and M. W. Linder**. 2006. Simultaneous determination of 7 N-acetyltransferase-2 single-nucleotide variations by allele-specific primer extension assay. Clin.Chem. **52**:1033-1039.

X. PUBLICATIONS (OTHER JOINT FACULTY)

1. **Awe, S.O., Adeagbo, A.S.O., D'Souza, S.E., Bhatnagar, A., Conklin, D.J.** (2006) Acrolein Induces Vasodilatation of Rodent Mesenteric Bed via an EDHF-Dependent Mechanism. Tox Appl Pharm. 217, 266-276.

2. **Bhatnagar, A.** (2006) Environmental Cardiology: Studying mechanistic links between pollution and heart disease. Circ Res 99, 692-705.

3. **Bivona, T.G., Quatela, S.E., Bodemann, B.O., Ahearn, I.M., Soskis, M.J., Mor, A., Miura, J., Wiener, H.H., Wright, L., Saba, S.G., Yim, D., Fein, A., Perez de Castro, I., Li, C., Thompson, C.B., Cox, A.D., Philips, M.R**. (2006). PKC regulates a farnesyl-electrostatic switch on K-Ras that promotes its association with Bcl-Xl on mitochondria and induces apoptosis. Mol Cell. 21: 481-493.

4. **Brown, SL., Jala, VR, Raghuwanshi, SK, Nasser, MW, Haribabu, B Richardson, RM.** (2006). Activation and Regulation of Platelet-Activating Factor Receptor: Role of Gi and Gq in receptor-mediated chemotactic, cytotoxic and cross-regulatory signals. J. Immunol 177: 3242-3249

5. **Brozovic S, Sahoo R, Barve S, Shiba H, Uriarte S, Blumberg RS, Kinane, DF**. (2006). Porphyromonas gingivalis enhances FasL expression via up-regulation of NFkappaB-mediated gene transcription and induces apoptotic cell death in human gingival epithelial cells. Microbiology 152(pt3):797-806.

6. **Chagpar AB, McMasters KM**. (2006) Treatment of sentinel node-positive breast cancer. (Review) Expert Rev Anticancer Ther. 6(8):1233-1239.

7. **Chao C, McMasters KM**. (2006) Sentinel lymph node biopsy in breast cancer. Methods Mol Med. 120:91-111. Review.

8. **Chesney, J**. (2006) Fibrocytes: Immunologic Features. In: Fibrocytes: New Insights Into Tissue Repair and Systemic Fibroses, World Scientific Publishing, Singapore,

9. **Chesney, J.** (2006) 6-Phosphofructo-2-Kinase/Fructose-2,6-Bisphosphatase and Tumor Cell Glycolysis. Current Opinion in Clinical Nutrition and Metabolic Care. 9(51):535-539.

10. **Colliver, D.W., Crawford, N. P. S., Eichenberger, M.R., Zacharias, W., Petras, R.E., Stromberg, A.J., and Galandiuk, S.** (2006) Molecular profiling of ulcerative colitis associated neoplastic progression. Exp. Molec. Pathol. 80:1-10.

11. **Conklin, D.J., Bhatnagar, A., Cowley, H., Johnson, G.H., Wiechmann, R.J., Sayre, L.M., Trent, M.B., Boor, P.** (2006) Acrolein stimulates

hypercontraction in isolated human blood vessels. Tox Appl Pharm. 217, 277-288.

12. **Fan, T.W., Higashi, R.M., Lane, A.N.** (2006). Integrating metabolomics and transcriptomics for probing SE anticancer mechanisms. Drug Metab Rev 38(4):707-32.

13. **Girvan AC, Teng Y, Casson LK, Thomas SD, Juliger S, Ball MW, Klein JB, Pierce WM Jr, Barve SS, Bates PJ** (2006). AGRO100 inhibits activation of nuclear factor-kappaB (NF-kappaB) by forming a complex with NF-kappaB essential modulator (NEMO) and nucleolin. Mol Cancer Ther 5(7):1790-1799.

14. **Gomez-Gutierrez JG, Souza V, Hao HY, Montes de Oca-Luna R, Dong YB, Zhou HS, McMasters KM**. (2006) Adenovirus-mediated gene transfer of FKHRL1 triple mutant efficiently induces apoptosis in melanoma cells. Cancer Biol Ther. 5(7):875-883.

15. **Hagg T**. (2006) Neurotrophins and CNTF variably protect and induce sprouting of transected basal forebrain cholinergic axons. International Journal of Neuroprotection and Neuroregeneration Vol 2(3) 16338

16. **Hagg T.**, **Oudega M**. (2006) Degenerative and spontaneous regenerative processes following spinal cord injury. Journal of Neurotrauma 23: 263-280.

17. **Hagg T**. (2006) Collateral sprouting as a target for improved function after spinal cord injury. Journal of Neurotrauma 23: 281-294.

18. **Hao H, Dong Y, Bowling MT, Zhou HS, McMasters KM**. (2006) Alteration of gene expression in melanoma cells following combined treatment of E2F-1 and doxorubicin. Anticancer Res. 26:1947-1956

19. **Hetman M, Kharebava G.** (2006) Survival signaling pathways activated by NMDA receptors. Current Top. Med. Chem. 6: 787-799.

20. **Hill B.G., Barski, O., Bhatnagar, A.** (2006) Getting to the heart of pollution: is pollution a new risk factor for cardiovascular disease? Sustain, 13:17-23

21. **Hughes T.S., Muldoon S.B., Tollerud D.J**. (2006) Underestimation of mortality due to chronic obstructive pulmonary disease (COPD) in Kentucky. J Ky Med Assoc Aug; 104(8):331-339.

22. **Jala, VR, Haribabu, B**. (2006). Real time analysis of G-protein coupled receptor signaling in live cells. Transmembrane Signaling Protocols 2nd Edition for the "Methods in Molecular Biology Series" Editors: Ali, H and Haribabu, B; Humana Press, New Jersey. Vol 332: 159-168.

23. **Kaiserova, K., Srivastava, S., Hoetker, J.D., Awe, B.O., Tang X.-L., Cai, J., Bhatnagar, A.** (2006) Redox activation of aldose reductase in the ischemic heart. J. Biol. Chem., 281: 5110-5120.

24. **Kalita K, Kharebava G, Zheng J, Hetman M**. (2006) Role of MKL1 in ERK1/2-dependent stimulation of SRF-driven transcription in response to BDNF or increased synaptic activity. J. Neurosci. 26:10020-10032

25. **Laber D, Okeke RI, Arce-Lara C, Taft BS, Schonard CL, McMasters KM, Kloecker GH, Miller DM.** (2006) A phase II study of extended dose temozolomide and thalidomide in previously treated patients with metastatic melanoma. J Cancer Res Clin Oncol. 132(9): 611-616.

26. **Lai M.W., Klein-Schwarz, W., Rodgers, G.C., Abrams, J.Y., Haber, D.A., Bronstein, A.C., Wruk, K.M.** (2006). 2005 Annual Report of the American Association of Poison Control Centers' national poisoning and exposure databases. Clin Toxicol (Phila) 44(6-7):803-932.

27. **Liao, T., Ke, Y., Shao, WH., Haribabu, B, Kaplan, H.J., Sun, D, Shao, H**. (2006). Blockade of the interaction of leukotriene B4 with its receptor prevents development of autoimmune uveitis. Invest Ophthalmol Vis Sci. 47(4):1543-1549.

28. **Li, W., M. Ostblom, L. H. Xu, A. Hellsten, P. Leanderson, B. Liedberg, U. T. Brunk, J. W. Eaton, X. M. Yuan**. (2006). Cytocidal effects of atheromatous plaque components: the death zone revisited. FASEB J. 20:2281-2290.

29. **McMasters KM.** (2006) Hope for Melanoma Victims. UofL's Cancer Center spearheads new studies and treatments. (Editorial) The Lane Report, July.

30. **McMasters KM.** (2006) A New Wave. New Treatments for Breast Cancer. Biztrends, Louisville Business First.; Aug 23(3)20.

31. **Min L, McDow SR, Tollerud DJ, Mazurek MA**. (2006) Seasonal abundance of organic molecular markers in urban particulate matter from Philadelphia, PA. Atmospheric Environment, 40(13): 2260-2273.

32. **Min L, McDow SR, Tollerud DJ, Mazurek MA**. (2006) Quantitation, Detection and Measurement Precision of Organic Molecular Markers in Urban Particulate Matter from Philadelphia, PA. Journal of Air & Waste Management Association

33. **Mukhopadhyay, P., S. Singh, R.M. Greene, M.M. Pisano**. (2006). Molecular fingerprinting of BMP2- and BMP4-treated embryonic maxillary mesenchymal cells. Orthodont.Craniofacial Res. 9: 93-110.

34. **Mukhopadhyay P, R.M. Greene, M.M. Pisano**. (2006). Expression profiling of genes associated with the TGFß superfamily in developing orofacial tissue. Birth Defects Res. A 76:528-543.

35. **Nagaraj, N.S., Beckers, S., Mensah, J., Waigel, S., Vigneswaran, N., Zacharias, W.** (2006) Cigarette smoke condensate induced cytochromes P450 and aldo-keto reductases in oral cancer cells. Toxicology Letters165:182-194.

36. **Nagaraj, N.S., Vigneswaran, N., Zacharias, W.** (2006) Cathepsin B promotes TRAIL-induced apoptosis in oral cancer cells. *J. Cancer Res. Clin. Oncol.* 132:171-183.

37. **Ra JH, McMasters KM, Spitz FR**.(2006) Should all melanoma patients undergo sentinel lymph node biopsy? Curr Opin Oncol. Mar 18(2):185-188.

38. **Ramana, K.V., Bhatnagar, A., Awasthi, S., Srivastava, S., Yadav, U.C.S., Awasthi, Y.C., Srivastava, S.K.** (2006) Mitogenic responses of vascular smooth muscle cells to lipid peroxidation-derived aldehyde 4-hydroxy-trans-2-nonenal (HNE): Role of aldose reductase-catalyzed reduction of HNE-glutathione conjugates in regulating cell growth. J. Biol. Chem. 281(26):17652-17660.

39. **Ramana, K., Willis, M., White, M., Horton, J., DiMaio, M., Srivastava, D., Bhatnagar, A., Srivastava, S**. (2006) Endotoxin-Induced Cardiac Myopathy and Systemic Inflammation in Mice is Prevented by Aldose Reductase Inhibition. Circulation 114, 1838-1846

40. **Rao, X.-M., Zheng, X., Waigel, S., Zacharias, W., McMasters, K.M., Zhou, H.S.** (2006) Gene expression profiles of normal human lung cells affected by adenoviral E1B. Virology 350:418-428. [Epub ahead of print]

41. **Shao, WH., Del Prete, A., Bock, CB, Haribabu, B**. (2006). Targeted Disruption of Leukotriene B4 Receptors BLT1 and BLT2: A Critical Role for BLT1 in Collagen-Induced Arthritis in Mice. J. Immunol 176: 6254-6261.

42. **Singh, R., White, M.A., Ramana, K.V., Petrash, J.M., Watowich, S.J., Bhatnagar, A., Srivastava, S.K.** (2006) Structure of a glutathione conjugate bound to the active site of aldose reductase. *Proteins*, 64:101-110.

43. **Singh S., Y. Yin, M.M. Pisano, R.M. Greene**. (2006). Molecular expression profiles of mitogen activated protein kinase signaling pathways in craniofacial development. Birth Defects Res. A 79:35-44.

44. **Srivastava, S., Ramana, K.V., Tammali, R., Srivastava, S.K. Bhatnagar, A**. (2006) Contribution of aldose reductase to diabetic hyperproliferation of vascular smooth muscle cells. Diabetes 55, 901-910.

45. **Telang S., Yalcin A., Clem A. L., Bucala R., Lane A. N., Eaton J. W., Chesney J**. (2006) Ras Transformation Requires Metabolic Control by 6-Phosphofructo-2-Kinase. Oncogene, 25(55):7225-34.

46. **Tollerud, DJ** (Committee Chair) (2006): National Academy of Sciences, Institute of Medicine. Committee on the Dispositon of the Air Force Health Study. National Academies Press, Washington, DC.

47. **Tseng, M.T., Dozier, A, Haribabu, B, U.M. Graham**. (2006). Transendothelial migration of ferric ion in FeCl3 injured murine common carotid artery. Thrombosis Research 118(2):275-80.

48. **Ujhelyi, L., G. Balla, V. Jeney, Z. Varga, E. Nagy, G. M. Vercellotti, A. Agarwal, J. W. Eaton, J. Balla**. (2006) Hemodialysis reduces inhibitor effect of plasma ultrafiltrate on LDL oxidation and subsequent endothelial reactions. Kidney Int. 69:144-151.

49. **Vigneswaran, N., Beckers, S., Waigel, S., Mensah, J., Wu, J., Bouquot, J., Sacks, P.G., Zacharias, W.** (2006) Increased EMMPRIN (CD 147) expression during oral carcinogenesis. Exp. Molec. Pathol. 80:147-159.

50. **Vigneswaran, N., Wu, J., Nagaraj, N., James, R., Zeeuwen, P. L.J. M., Zacharias, W.** (2006) Silencing of cystatin M in metastatic oral cancer cell line MDA-686Ln by siRNA increases cysteine proteinases and legumain activities, cell proliferation and in vitro invasion. Life Sci. 78:898-907.

51. **Wang J, Song Y, Elsherif L, Song Z, Zhou G, Prabhu SD, Saari JT, Cai L.** (2006) Cardiac metallothionein induction plays the major role in the prevention of diabetic cardiomyopathy by zinc supplementation. Circulation. Jan 1;113(4):544-54. Epub 2006 Jan 23.

52. **Wang J, Song Y, Wang Q, Kralik PM, Epstein PN.** (2006) Causes and characteristics of diabetic cardiomyopathy. The Review of Diabetic Studies. Fall 3(3): 108-17

53. **Warner D., M.M. Pisano, R.M. Greene**. (2006). Functional analysis of CBP/p300 in embryonic orofacial mesenchymal cells. J. Cell. Biochem. 99:1374-1379.

54. **Wattenberg, B.W., Pitson, S.M., Raben, D.M**. (2006). The sphingosine-and diacylglycerol-kinase superfamily of signaling kinases. Localization as a key to signaling function. J. Lipid Res.47(6):1128-39

55. **West, M.B., Hill, B.G., Xuan, Y-T., Bhatnagar, A.** (2006) Protein glutathiolation by nitric oxide: An intracellular mechanism regulating redox protein modification. FASEB J 20, 1715-1717.

56. **Wong SSL, Morton DL, Thompson JF, Gershenwald JE, Leong SPL, Reintgen DS, Gutman H, Sabel MS, Carlson GW, McMasters KM, Tyler DS, Goydos JS, Eggermont AMM, Nieweg LE, Cosimi AB, Riker AI, Coit DG**. (2006) Melanoma patients with positive sentinel nodes who did not undergo completion lymphadenectomy: a multi-institutional study. Ann Surg Oncol. Jun;13(6):809-816.

57. **Yang P., Baker K.A., Hagg T**. (2006) The ADAMs family: coordinators of nervous system development, plasticity and repair. Progress in Neurobiology. 79: 73-94.

58. **Zheng X, Rao XM, Snodgrass CL, McMasters KM, Zhou HS**. (2006) Selective replication of E1B55K-deleted adenoviruses depends on enhanced E1A expression in cancer cells. Cancer Gene Ther.;13(6):572-583.

Books:

1. **Ali, H and Haribabu, B**, Editors. Transmembrane Signaling Protocols, 2nd Edition for the "Methods in Molecular Biology Series", Humana Press, New Jersey. Vol 332:(2006).

XI. ABSTRACTS (SALARIED FACULTY AND STAFF)

1. **Ai J, Liu B, Gozal D, Epstein P, Cheng Z**. Cardiac Neuropathy in Type 1 Diabetic Mice (OVE 26). The FASEB Journal, Abstracts Part 1, March 6, 2006, Vol. 20, No.4

2. **Aiyer H, Srinivasan C. Gupta R**. Dietary berries and ellagic acid diminish estrogen-mediated mammary cancer in the ACI rat model. Proc. Am. Assoc. Cancer Res., 47: 2267. 2006

3. **Aiyer HS, Gupta RC**. Estrogen-induced mammary cancer in ACI rats: Role of cytochrome P450s. Proc. Am. Assoc. Cancer Res., 48, in press, 2007.

4. **Amancherla K, Redinger D, Barve S, Joshi-Barve S, McClain C**. Decreased SAMe:SAH Ratio and Impaired Transmethylation Enhance Free Fatty Acid Induced Lipotoxicity in Hepatic Cells, Research Louisville, 2006

5. **Atmaca-Sonmez P, Yang X, Cai J, Eskan MA, Yolcu ES, Tezel G**. Proteomic Identification of Glycated Proteins Shared in Ocular Hypertensive and Diabetic Rat Retinas. 2006 ARVO Annual Meeting, Fort Lauderdale, FL, Apr 30-May 4, 2006.

6. **Barker, DF, Husain, A, Neale, JR, Martini, BD Zhang, X, Doll, MA, States, J Hein, DW**. Functional Properties Of An Alternative, Tissue-Specific Promoter For The N-Acetyltransferase-1 Gene, NAT1. Toxicologist (2006) 90(1): 279 (#1370)

7. **Barker, DF, Husain, A, Zhang, X, Doll, MA, States, JC, Hein, DW**. Quantitation and characterization of N-acetyltransferase-2 mRNA in human tissues. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

8. **Barker DF, Husain A, Neale JR, Martini BD, Zhang X, Doll MA, States JC, Hein DW**. Functional properties of an alternative, tissue-specific promoter for the N-acetyltransferase-1 gene, NAT1. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #1370).

9. **Barker DF, Husain A, Zhang X, Doll MA, States JC, Hein DW**. Functional analysis of the human NAT1 major promoter: Quantitation of tissue expression and identification of critical sequence elements. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

10. **Barker, D.F., Husain, A., Zhang, X., Doll, M.A., States, J.C., Hein, D.W**. Quantitation and characterization of N-acetyltransferase-2 mRNA in human tissues. Proceedings of the Fifth James Graham Brown Cancer Center Annual

Retreat, Abstract #2, Louisville, KY, November, 2006

11. **Beier JI, von Montfort C, Duveau I, Arteel GE** (2006) Priming of the monocytic and hepatic inflammatory response to lipopolysaccharide. Hepatology 44:570A.

12. **Beier JI, von Montfort C, Duveau I, Arteel GE** (2006) Priming of the monocytic and hepatic inflammatory response to lipopolysaccharide. Research! Louisville.

13. **Bendaly J, Zhao S, Doll MA, States J, Hein DW**. Chinese Hamster Ovary Cells Expressing CYP1A1 OR CYP1A2 And Rapid Or Slow Acetylator N-Acetyltransferase 1 (NAT1): A Model To Investigate Effects Of Human Nat1 Polymorphism On Arylamine Genotoxicity. Toxicologist (2006) 90(1): 162 (#799)

14. **Bendaly J, Neale JR, Zhao S, Metry KJ, Doll MA, States JC, Hein DW.** Significantly higher 2-Amino-3,8-dimethylimidazo-[4,5-f]quinoline-Induced DNA Adducts and Mutagenesis in Chinese Hamster Ovary Cells Expressing Human CYP1A1 and Rapid vs Slow Acetylator N-acetyltransferase 2. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

15. **Bendaly J, Neale JR, Zhao S, Metry KJ, Doll MA, States JC, Pierce WM, Hein DW.** Significantly higher 2-amino-3,8-dimethylimidazo-[4,5-b]quinoxaline-induced DNA adducts and mutagenesis in Chinese hamster ovary (CHO) cells expressing human CYP1A1 and rapid versus slow acetylator N-acetyltransferase 2. Proceedings of Research!Louisville, Abstract #PRF22, Louisville, KY, October 2006

16. **Bendaly J, Zhao S, Doll MA, States JC, Hein DW.** Chinese hamster ovary cells expressing CYP1A1 or CYP1A2 and rapid or slow acetylator N-acetyltransferase 1 (NAT1): A model to investigate effects of NAT1 polymorphism on arylamine genotoxicity. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #799).

17. **Bendaly, J, Neale, JR, Zhao, S, Metry, KJ, Doll, MA, States, JC, Pierce, WM Hein, DW.** Significantly Higher 2-Amino-3,8-Dimethylimidazo-[4,5-f]Quinoxaline - Induced DNA Adducts and Mutagenesis in Chinese Hamster Ovary (CHO) Cells Expressing Human CYP1A1 and Rapid Versus Slow Acetylator N-acetyltransferase 2, Research!Louisville, University of Louisville, Louisville, KY, Oct 10-13, 2006.

18. **Burckhardt IC, Row BW, Cheng Y, Dayyat E, Gozal D.** Oral Green tea Catechin Polyphenols (GTP) Attenuate Intermittent Hypoxia (IH)-Induced

Expression of NADPH Oxidase and Lipid Peroxidation in Rat Brain. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

19. **Cai J, Bhatnagar A, Pierce WM.** Reactivity of acrolein with peptidyl amino acid residues. 54th ASMS Conference, Seattle, WA, May 20-Jun 1, 2006.

20. **Carrasquer A, Nebane NM, Song Z-H**. The effects of polymorphisms on the functions of CB2 cannabinoid receptor. The 15th World Congress of Pharmacology (IUHAR-2006), July 2-7, 2006

21. **Chang W, Barve SS, McClain CJ, Chen TS.** Glutathione Precursor Prevents 4-Hydroxynonenal-induced Cytotoxicity in CD4+ T Lymphocytes., FASEB, 2006

22. **Crabtree VM, Dayyat E, Witcher LA, Topp RV, Molfese DL, Moore JB, Wedig RT, Jones VF, Valdes XL, Gozal D.** Objective Quantification of Short Sleep Duration in Obese Children. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

23. **Crabtree VM, Holbrook C, Sans Capdevila O, Kheirandish-Gozal L, Gozal D.** Parent-Reported Shortened Sleep Duration in Obese Snoring Children. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

24. **Dayyat E, Maarafiya MM, Sans Capdevila O, Montgomery-Downs HE**, **Gozal D.** The Nocturnal Flip-Flop During Sleep: Is it Different in Pediatric Sleep Apnea? SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

25. **Deaciuc IV, Song Z, Peng X, McClain CJ.** Comprehensive gene profiling of the liver in a mouse model of high carbohydrate diet-induced hepatic steatosis, AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, 2006.

26. **Doll MA, Jensen NS, Hein DW.** N-acetyltransferase 2 (NAT2) genotype-dependent metabolic activation of N-hydroxy arylamine carcinogens in cryopreserved human hepatocytes. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #793).

27. **Doll MA, Hein DW.** Functional effects of human N-acetyltransferase-2 (NAT2) single nucleotide polymorphisms (SNPs) on the activation of arylamine carcinogens. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #16, Louisville, KY, November, 2006.

28. Dumstorf, C.A., Clark, A. Lin, Q., Burke,T., Kucherlapati, R., Kunkel, T., McGregor, W.G. Participation of mouse DNA polymerase iota in strand-biased mutagenic bypass of UV photoproducts and suppression of skin cancer. Midwest

DNA Repair Symposium, Indianapolis, IN, 5/2006 (Platform presentation by CAD).

29. **Feldhoff, RC, Bowen, KE Cai, J Pierce, WM Houck, LD Feldhoff, PW.** Disulfide bonding pattern in a structurally constrained family of 7 kDa vertebrate pheromones FASEB JOURNAL 20: (5 Pt.2) A972, 2006.

30. **Feng W, Benz FW, Cai J, Pierce WM, Kang YJ**. Metallothionein disulfides are present in metallothionein-overexpressing transgenic mouse heart and increase under conditions of oxidative stress. The 45th Annual Meeting of the Society of Toxicology, San Diego, CA. Toxicological Sci. 90 (Suppl. 1): 642, 2006.

31. **Feng W, Xiao C, Zhou Z, Ye F, Kang YJ.** Copper is required for hypoxia-inducible factor 1 activation and VEGF expression, 26th International Symposium of Proteins, Peptides and Polynucleotides, Innsbruck, Austria, 2006.

32. **Feng W, Xiao C, Zhou Z, Ye F, Kang YJ.** (2006). Copper is required for hypoxia-inducible factor 1 activation and VEGF expression, 4th Asian-European Conference on Biorecognition, Vienna, Austria

33. **Feng W, Cai L, Kang YJ** (2006). Metallothionein regulation of hypoxia-inducible factor in diabetic heart, 16th International conference on Chelators, Limassol, Cyprus.

34. **Feng Y, Neale JR, Doll MA, Hein, D.W.** The protective effect of celecoxib, a cyclooxygenase-2 inhibitor, on aberrant crypt formation in rats administered 3,2'-dimethyl-4-aminobiphenyl. Proceedings of the American Association for Cancer Research 47: #3165, 2006.

35. **Gao X, Qian M, Campian LJ, Cardwell EM, Marshall J, Zhou Z, Roberts AM, Kang YJ, Prabhu SD, Eaton JW**. (2006) Mitochondrial damage and cardiac failure in iron overload

37. **Gobejishvili L, Karandikar S, Metreveli N, Hote PT, Epstein P, Joshi-Barve S, McClain CJ. Barve S.** Impairment of antiviral cytokine expression and enhancement of Murine Cytomegalovirus (MCMV) mediated liver injury in a diabetic mouse model, FASEB, 2006

38. **Gobejishvili L, Barve S, Joshi-Barve S, Song Z, McClain CJ,** Chronic Alcohol Consumption Decreases Cellular c-AMP Levels And Enhances LPS-Inducible NF□B Activity And TNF Expression in Monocytes: Relevance to Alcoholic Liver Disease. Digestive Disease Week, Chicago, IL, 2006

39. **Gobejishvilli, L, Karandikar, S, Metreveli, N, Hote, P, Epstein, P, Joshi-Barve, S, McClain, CJ, Barve, S**., Enhanced Murine Cytomegalovirus (MCMV) Mediated Liver Injury and Impaired Antiviral Expression in a Diabetic Mouse

Model, Digestive Disease Week, Chicago, IL, 2006

40. **Gobejishvili L, Barve S, Joshi-Barve S, Song Z, McClain CJ**. Chronic Alcohol Consumption Increases Phosphodiesterase 4b (Pde 4b) Expression, Decreases Cellular Camp Levels And Primes Monocytes Leading To Augmented Lps-Inducible TNF Expression: Relevence To Alcoholic Liver Disease. Research Louisville, 2006

41. **Goldstein JW, Chen T, Khan R, Lanter J, Barve S, McClain CJ, Hill DB**. Increased S-Adenosylhomocysteine (SAH) may Predispose to TNF Liver Injury in Human Alcoholic Liver Disease (ALD), ACG, 2006

42. **Goldstein J, Sahoo R, Joshi-Barve S, Hote P, McClain CJ, Barve SS, Hill D**. Modulation of Inflammatory Cytokines by misoprostol (PGE analog): Ivolvement of p38 MAPK Pathway. Digestive Disease Week, Chicago, IL 2006

43. **Gozal D, Simakajornboon N, Holbrook CR, Crabtree VM, Krishna J, Jones JH, Kheirandish-Gozal L**. Secular Trends in Obesity and Parentally Reported Daytime Sleepiness Among Children Referred to a Pediatric Sleep Center for Snoring and Suspected Sleep-Disordered Breathing (SDB). SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

44. **Gupta R, Meireles S, Stoner G, Clapper M, Gairola C**. Cytochrome P450 1B1 as a potential molecular target for cigarette smoke-mediated mouse lung cancer and its prevention AACR Special Conference titled "Cancer Susceptibility", Maui, Hawaii, March 2006.

45. **Hambrecht VS, Vlisides PE, Row BD, Gozal D, Baghdoyan HA, Lydic R.** Hypoxia Alters G-Protein Activation by Carbachol in the Hippocampus of Sprague-Dawley Rat. Neuroscience 2006, Oasis, Online Abstract Submission and Invitation System-Program Planner

46. **He F, Qiao Z-H, Cai J, Pierce W, He D, Song Z-H**. Proteomic analysis leads to the identification of hsp90 as a CB2 cannabinoid receptor interacting protein The 15th World Congress of Pharmacology (IUPHAR-2006), July 2-7, 2006

47. **Hein DW, Husain A, States JC, Barker DF**. Regulation of the human arylamien N-acetyltransferases: Implications for cancer susceptibility. Toxicologist (2006) 90(1): 4 (#21)

48. **Hein DW.** Role of N-acetyltransferase genetic polymorphisms in cancer risk. 36th Annual Meeting of the European Environmental Mutagen Society, Prague, Czech Republic, July 2006.

49. **Hein DW.** N-acetyltransferase genetic polymorphisms predispose cigarette smokers to pancreatic adenocarcinoma, colorectal adenoma, and non-Hodgkin

lymphoma: Leads to genomic-based personalized cancer prevention strategies. Proceedings of Research!Louisville, Abstract #F16, Louisville, KY, October 2006.

50. **Hein DW**. N-acetyltransferase genetic polymorphisms predispose cigarette smokers to pancreatic adenocarcinoma, colorectal adenoma, and non-Hodgkin lymphoma: Leads to genomic-based personalized cancer prevention strategies. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #28, Louisville, KY, November, 2006.

51. **Hein DW, Runge-Morris M, Xie W, Kensler, T**. Regulation of phase II xenobiotic metabolizing enzymes: Implications for health and disease. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #17).

52. **Jeyabalan J, Kadlubar F, Gupta R**. Lipophilic DNA adducts detected in the pancreas of cigarette smokers are unrelated to typical polyaromatic carcinogens. Proc. Am. Assoc.Cancer Res., 47: 5202, 2006.

53. **Jiang, G, States, JC**. Arsenite Co-Exposure Disrupts P53-Mediated Responses To Bpde Induced DNA Damage In Human Lung Cells. Toxicologist (2006) 90(1): 107 (#520)

54. **Julien CA, Miller CJ, Schurr A, Dematteis M, Gozal E**. PKA modulates hypoxic tolerance and metabolic adaptation in PC12 cells. Presented at: 36th Annual Meeting of the Society for Neuroscience, October 14-18, 2006, Atlanta, GA. Vol. 32, Abstract # 680.15.

55. **Joshi-Barve, S, Hote P, Gobejishvili L, Cave M, McClain, CJ, Barve S**., Exposure of hepatocytes to the fatty acid, palmitate, stimulated IL-8 production: Relevance to NASH. AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, 2006.

56. **Joshi-Barve S, Hote P, Gobejishvili L, Cave M, McClain C, Barve S.** Exposure of hepatocytes to the fatty acid, palmitate, stimulates IL-8 production: relevance to NASH, Digestive Disease Week, Chicago, IL 2006

57. **Kaiser JP, Davis MA, Arteel GE (**2006) Metformin prevents downregulation of GK caused by ethanol: critical role in steatosis? Research! Louisville

58. **Kang X, Liu J, Feng W, Song Z, McClain C, Kang YJ, Zhou Z.** Prevention by zinc supplementation from alcohol-induced liver injury through modulation of gene expression, AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, 2006

59. **Kang X, Liu J, Feng W, Song Z, McClain C, Kang YJ, Zhou Z.** Zinc supplementation prevents alcohol-induced liver injury through modulation of gene expression,Research Louisville, 2006

60. **Kang YJ.** Herbogenomics: from traditional Chinese medicine to molecular Therapy. The 12th National Neural Pharmacology Conference, Zunyi, China. 2006.

61. **Kang YJ.** Antioxidant defenses: lessons from transgenic animals and proteomics. International Workshop on Anthracycline Cardiotoxicity. Como, Italy, 2006.

62. **Kang YJ.** Role of zinc in preserving intestinal integrity in alcohol-intoxicated mice. NIH Workshop on Alcohol, Intestinal bacterial Growth, Intestinal Permeability to Endotoxin, and Medical Consequences. Rockville, MD, 2006.

63. **Kang YJ.** (2006). Zinc/metallothionein antioxidant effects. NIH Workshop on Alcohol, Zinc, and Immune System. Boston, MA

64. **Kang X, Liu J, Feng W, Song Z, McClain CJ, Kang YJ, Zhou Z**. (2006). Prevention by zinc supplementation from alcohol-induced liver injury through modulation of gene expression. Digestive Disease Week, Chicago, IL.

65. **Karandikar S, Sahoo R, Joshi-Barve S, McClain CJ, Barve S**. Ethanol affects lipid raft-mediated TCR signal transduction and IL-2 expression in CD4+ T lymphocytes, Research Louisville, 2006

66. **Kaserouni S, Vos M, Mueller-Blech K, McClain CJ, Bischoff SC, Bergheim I.** Effect Of Sugar-Sweetend Beverages On Hepatic Steatosis In Mice, AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, 2006

67. **Kennedy, MJ Smith, NB Pierce, WM, Lin, T, Pearce, RE Gaedigk, A Sullivan, JE.** Chronic intermittent nocturnal hypoxemia alters activities of hepatic cytochrome P4501A2 (CYP1A2), N-acetyltransferase 2 (NAT2) and xanthine oxidase (XO) in children with obstructive sleep APNEA (OSA). Clin Pharm Therapeutics 79 (Suppl.): P33, 2006.

68. **Kennedy MJ, Sullivan JE, Doll MA, Griffin BS, Hein, D.W**.: Slow acetylator NAT2 genotype is associated with atopic dermatitis (AD) in children. Proceedings of the annual meeting of the American Society of Clinical Pharmacology and Therapeutics, Baltimore MD, March, 2006.

69. **Khan, R, Goldstein, G, Barve, S, McClain, CJ, Hill D**., S-adenosylhomocysteine (SAH) may sensitize to TNF-induced liver injury in alcoholic liver disease patients with impaired mitochondrial methionine metabolism., Digestive Disease Week, Chicago, IL 2006

70. **Khan, R, Barve, S, Joshi-Barve, S, Combon, A, McClain, CJ, Hill, D**., Misoprostol, Novel Anti-Cytokine Therapy for Alcoholic Liver Disease (ALD), Digestive Disease Week, Chicago, IL 2006

71. **Khan R, Goldstein J, Lanter J, Chen T, McClain C, Hill D.** Methionine Breath Test and Serum Clearance as a Diagnostic Tool in Chronic Liver Disease, ACG, 2006

72. **Kheirandish-Gozal L, Sans Capdevila O, Tauman R, Serpero LD, Gozal D.** C Reactive Protein (CRP) Serum Levels in Children with Obstructive Sleep Apnea Syndrome (OSAS): Effect of Adenotonsillectomy. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

73. **Kheirandish-Gozal L, Gozal D.** The Effect of Intranasal Budesonide Therapy in Children With Mild Sleep Disordered Breathing (SDB): A Randomized, Double-Blind, Placebo-Controlled Trail. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

74. **Kidd LR, Templeton TM, Thacker B, Srivastava DS, Komolafe O, Pihur V, Brock G, Doll MA, Hein DW.** Interaction among carcinogen-biotransformation genes (N-acetyltransferase 1 and 2) and prostate cancer risk. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #43, Louisville, KY, November, 2006.

75. **Komolafe O, Srivastava DS, Thacker B, Templeton T, Doll MA, Hein DW, Pihur V, Brock G, Kidd LR**. Combined Effects of Variant N-Acetyltranserase 1 (NAT1) and Multiple Drug Resistance 1 (MDR1) Genes in Prostate Cancer Risk. 4th Annual James Graham Brown Cancer Center Retreat Research Louisville, University of Louisville, Louisville, KY, November 29, 2006.

76. **Komolafe O, Srivastava D, Thacker B, Templeton T, Doll M, Hein D, Pihur V, Brock G, Kidd L.** Combined effects of variant N-acetyltransferase 1 (NAT1) and multiple drug resistance genes (MDR1) in prostate cancer risk. Proceedings of Research!Louisville, Abstract #NPH90, Louisville, KY, October 2006.

77. **Krishnan E, Dumstorf CA, Mushtaq M, Maturu P, Jenson AB, McGregor WG, Bodduluri H.** Role of leukotriene B4 and its high affinity receptor BLT1 in inflammation promoted lung cancer. Research Louisville, 2006

78. **Krishnan E, Mushtaq M, Dumstorf CA, Jenson AB, McGregor WG, Bodduluri H.** Targeting Inflammation to Treat Cancers: Role of Leukotriene B4 Receptor-1 in Mouse Models of "Inflammation Promoted Cancers" and Familial Adenomatous Polyposis. James Graham Brown Cancer Center Retreat, 2006.

79. **Lavender NA, Komolafe OO, Templeton TM, Srivastava DS, Thacker B, States JC, Brock G, Kidd LR**. Interplay between Xeroderma Pigmentosum

Complimentary Group D and Multiple Drug Resistance 1 Genes (XPD and MDR1) in Relation to Prostate Cancer Risk. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

80. **Li RC, Morris MW, Pouranfar FL, Lee S, Brittian KR, Clair HB, Wang Y, Gozal D.** Neuroglobin Projects PC-12 cells from Oxidative Stress. Neuroscience 2006, Oasis, Online Abstract Submission and Invitation System-Program Planner

81. **Lin M, Gozal D, Liu R, Cheng Z.** Nucleus Ambiguus (NA) Projections to Cardiac Ganglia is Augmented Following Chronic Intermittent Hypoxia (CIH) in C57BL/6J Mice. The FASEB Journal, Abstracts Part II, March 7, 2006, Vol. 20, No. 5

82. **Liu R, Chen LH, McClain CJ**. Betaine modulates high carbohydrate diet-induced fatty liver in mice. FASEB, 2006

83. **Liu R, Wang J, Chen T, Lee D, Barve S, Gobejishvili L, Mosley D, Chen L, McClain CJ.** Silymarin modulates molecular mediators of hepatic steatosis and liver injury, FASEB, 2006

84. **Lominadze D, Gozal D, Roberts AM**. Platelet Thrombogenesis During Intermittent Hypoxia in Mice. The FASEB Journal, Abstracts Part 1, March 6, 2006, Vol. 20, No.4

85. **Louthan, M., Joshi-Barve, S, Barve, S, McClain, C.** Adiponectin Deficiency in Mexican American Children with NAFLD more important than markers of insulin resistance, AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, 2006.

86. **Martin RCG, Ahn J, Nowell SA, Hein DW, Doll MA, Martini BD, Ambrosone CB.** Association between manganese superoxide dismutase promoter gene polymorphism and breast cancer survival. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #62, Louisville, KY, November, 2006.

87. **M'Bemba-Meka P, McNeely SC, Miller HL, States JC**. A comparison of protein expression changes involved in mitotic progression in response to arsenite exposure in $p53^{(+/+)}$, $p53^{(+/-)}$ and $p53^{(-/-)}$ human prostate cancer cell lines. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

88. **McGregor WG, Burke T, Miller I, Dumstorf CA**. Cells from skin cancer-prone xeroderma pigmentosum variant patients have greatly reduced mutant frequencies induced by the environmental carcinogen BPDE. Research Louisville 2006; James Graham Brown Cancer Center Retreat, 2006

89. **McNeely SC, Taylor BF, States JC**. Arsenic: A Potential Chemotherapeutic For Melanoma. Toxicologist (2006) 90(1): 86 (#418)

90. **McNeely SC, States JC**. Arsenic Resistance in Melanoma Cell Lines is Attenuated by both Buthionine Sulfoximine and the MRP Inhibitor MK571. 4th Conference on Molecular Mechanisms of Metal Toxicity and Carcinogenesis, Morgantown WV, September 24-27, 2006

91. **McNeely SC, States JC**. Sodium Arsenite Induces Apoptosis in Melanoma Cell Lines, Research!Louisville, University of Louisville, Louisville, KY, Oct 10-13, 2006

92. **McNeely SC, States JC.** Sodium Arsenite Induces Apoptosis in Melanoma Cell Lines, Ohio Valley Society of Toxicology, Children's Research Institute, Columbus, OH, Nov 10, 2006.

93. **McNeely SC, States JC.** Sodium Arsenite Induces Apoptosis in Melanoma Cell Lines. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006

94. **Merten K E, Jiang Y, Feng W, Kang YJ.** Modulation of calcineurin activity by zinc in Adrimaycin-treated H9c2 cardiac muscle cells. The 45th Annual Meeting of the Society of Toxicology, San Diego, CA. Toxicological Sci. 90 (Suppl. 1): 1379. 2006.

95. **Metry KJ, Zhao S, Neale JR, Doll MA, States JC, McGregor WG, Pierce WM, Hein DW.** 2-Amino-1-Methyl-6-Phenylimidazo [4,5-B] Pyridine (Phip)-Induced DNA Adducts In Chinese Hamster Ovary (CHO) Cells Expressing Human CYP1A2 And Rapid And Slow Nacetyltransferase 2 (NAT2). Toxicologist (2006) 90(1): 162 (#800)

96. **Metry KJ, Zhao S, Neale JR, Howarth AL, Doll MA, States JC, McGregor WG, Pierce WM, Hein DW.** Human rapid acetylator N-acetyltransferase 2 (NAT2) expression leads to greater mutagenesis and DNA damage from slow acetylator NAT2 expression in Chinese hamster ovary (CHO) cells treated with heterocyclic and aromatic amine carcinogens. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #68, Louisville, KY, November, 2006.

97. **Metry KJ, Zhao S, Neale JR, Howarth AL, Doll MA, States JC, McGregor WG, Pierce WM, Hein DW**. Human Rapid Acetylator N-Acetyl Tranferase 2 (NAT2) Expression Leads to Greater Mutagenesis and DNA Damage than Slow Acetylator NAT2 Expression in Chinese Hamster Ovary (CHO) Cells Treated With Heterocyclic and Aromatic Amine Carcinogens, Research!Louisville, University of Louisville, Louisville, KY, Oct 10-13, 2006.

98. **Metry KJ, Zhao S, Neale JR, Doll MA, States JC, McGregor WG, Pierce WM, Hein, DW**. Human Rapid Acetylator N-Acetyltansferase 2 (NAT2) Genotype Leads to Greater Mutagenesis and DNA Damage than Slow Acetylator NAT2 Genotype in DNA-Deficient Chinese Hamster Ovary (CHO) Cells Treated with Arylamine Carcinogens. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006

99. **Miller CJ, Julien CA, Sachleben, LR Jr, Dematteis M, Gozal E**. PKA regulation of hypoxia-induced ROS production and PC-12 cell death. Presented at: 36th Annual Meeting of the Society for Neuroscience, October 14-18, 2006, Atlanta, GA. Vol. 32, Abstract # 314.11

100. **Montgomery-Downs H, Gozal D.** New Reference Values for Infant and Toddler Sleep Duration and Distribution. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

101. **Moslehi R, Chatterjee N, Cross A, Church TR, Yeager M, Weissfeld J, Hein DW, Hayes RB.** N-acetyltransferases (NAT1 and NAT2) and the risk of advanced colorectal adenoma. Proceedings of the American Association for Cancer Research Special Conference on Cancer Susceptibility and Cancer Susceptibility Syndromes, Maui, HI, March 2006.

102. **Mukhopadhyay S, Zacharias W, McGregor WG**. Novel ribozyme-based strategy for cancer chemoprevention. American Society for Gene Therapy 5/31-6/4/2006.

103. **Neale JR, Smith NB, Pierce WM, Hein DW.** Quantification of 4-aminobiphenyl DNA adducts in rapid and slow acetylator rats by liquid chromatography-tandem mass spectrometry. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #794).

104. **Nerland DE.** The Antioxidant/Electrophile Response Element Motif. Abstracts of the 5th Annual Brown Cancer Center Retreat, page 47. November 29, 2006

105. **Oz HS, Chen T, de Villiers W, Zhong J, Nagasawa H**. Novel action of PTCA compared with Cysteine/GSH prodrugs against colitis in murine model. Gastroenterology sup, 130: A-494, T1193, 2006.* Poster of distinction

106. **Oz HS, Zhong J, de Villiers W, Chen T**. Green Tea Polyphenols Attenuate acetaminophen hepatotoxicity. Gastroenterology sup, 130: A-793, S1583, 2006.

107. **Qin F, Biolo A, Siwik DA, Dorn GW, Pimentel DR, Kang YJ, Colucci WS**. Cardiac-Specific Overexpression of Catalase Prevents Progressive Left Ventricular Remodeling and Failure in Gαq-Overexpressing Transgenic Mice. 2006 American Heart Association Annual Meeting, Chicago, IL, 2006.

108. **Ravoori S, Feng Y, Neale J, Jeyabalan J, Srinivasan C, Hein D., Gupta R**. Dose dependent reduction of 3,2'-dimethyl-4-aminobiphenyl (DMABP)-derived DNA adducts in colon and liver 0of rats administered celecoxib. Proc. Am. Assoc. Cancer Res., 47: 3169. 2006.

109. **Ravoori S, Ayotte P, Srinivasan C, Pereg D, Robertson LW, Russell GK, Jeyabalan J, Gupta RC**. The 4th PCB Conference: Recent Advances in the Environmental Toxicology and Health Effects of PCBs, Zakopane, Poland, Page 54, September 6-10, 2006.

110. **Redinger D, Vos MV, Barve , Joshi-Barve S, Sullivan J, Whitington P, McClain CJ.** Low Adiponectin is associated with increased cell death in Pediatric Nonalcoholic Fatty liver disease, Digestive Disease Week, Chicago, IL, 2006

111. **Reeves SR, Gozal D.** Platelet-Activating Factor Receptor Activity Mediates Critical Components of Induction but Not Maintenance of Intermittent Hypoxia-Induced Phrenic Long-Term Facilitation in the Rat. Neuroscience 2006, Oasis, Online Abstract Submission and Invitation System-Program Planner

112. **Reeves SR, Gozal D.** Protein Kinase C (PKC) Within the Nucleus of the Solitary Tract (nTS) Mediates Critical Components of the Hypoxic Ventilatory Response (HVR), but Has No Apparent Role in Intermittent Hypoxia-Induced Phrenic Long-Term Facilitation (pLTF) in Adult Rats**.** The FASEB Journal, Abstracts Part II, March 7, 2006, Vol. 20, No. 5

113. **Rice JM, Doll MA, Shin A, Zheng, W, Hein DW.** N-acetyltransferase genetic polymorphism is associated with increased colorectal polyp risk from dietary red meats. Proceedings of Research!Louisville, Abstract #FMED19, Louisville, KY, October 2006.

114. **Rice JM, Doll MA, Shin A, Zheng W, Hein DW**. N-acetyltransferase genetic polymorphism is associated with increased colorectal polyp risk from dietary red meats. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #29, Louisville, KY, November, 2006.

115. **Row BW, Cheng Y, Burckhardt I, Gozal D**. High Fat/Refined Carbohydrate Diet Augments Brain Expression of Receptors for Advanced Glycation and Products (RAGE) in Rats Exposed to Intermittent Hypoxia. Neuroscience 2006, Oasis, Online Abstract Submission and Invitation System-Program Planner

116. **Row BW, Cheng Y, Burckhardt I, Gozal D.** High Fat/Refined Carbohydrate Diet Down Regulates Insulin Receptor MRNA in Rats Exposed to Intermittent Hypoxia. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

117. **Row BW, Cheng Y, Burckhardt I, Gozal D.** Exposure to Intermittent hypoxia (IH) Affects Strategy Selection in the Morris Water Maze. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

118. **Sans Capdevila O, Guo SZ, Reeves SR, Serpero LD, Brittian KR, Row BW, Gozal D, Wang Y**. EEG Evidence of Improved Brain Function in Severely Hypoxic Rats Treated with Whole-Body Hypoxic Preconditioning. Neuroscience 2006, Oasis, Online Abstract Submission and Invitation System-Program Planner

119. **Sans Capdevila O, Gozal D.** Epileptiform Activity in Healthy Children During Sleep: How often? SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

120. **Sans Capdevila O, Kheirandish-Gozal L, Tauman R, Gozal D.** Sleep Disordered Breathing (SDB) and Metabolic Dysfunction in Children: A Pre- Vs. Post- Adenotonsillectomy Study**.** SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

121. **Schuschke DA, Williams C, Kang, YJ, Saari JT**. (2006). Cu-repletion promotes angiogenesis in the Cu-deficient rat heart. FASEB J. 20: Abstract #701.5.

122. **Serpero LD, Kheirandish L, Sans Capdevila O, Tauman R, Gozal D**. Sleep Fragmentation and Circulating TNF∞ Levels in Children with Sleep Disordered Breathing. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

123. **Serpero LD, San Capdevila O, Kheirandish L, Tauman R**, **Gozal D.** Asymmetric Dimethylarginine (ADMA) Plasma Levels in Pediatric Obstructive Sleep Apnea Syndrome (OSAS). SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

124. **Serpero LD, Dayyat E, Kheirandish-Gozal L, Goldman JL, Veling MC, Gozal D.** Cellular Proliferation in Tonsillar Tissues Harvested from Children with Obstructive Sleep Apnea (OSA) or Recurrent Tonsillitis (RT). American Journal of Respiratory and Critical Care Medicine, Abstracts ATS 2007 International Conference.

125. **Simakajornboon N, Kheirandish-Gozal L, Gozal D, Sharon D, Murry L, Abraham M.** A Log-Term Follow-Up Study of Periodic Limb Movement Disorders in Children after Iron Therapy**.** SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

126. **Song, M, Song, Z, Uriarte, S, Chen, T, Deaciuc, I, Lee, D, McClain, CJ**. Silymarin attenuates palmitate-induced lipotoxicity in HepG2 cells by preventing Akt Kinase inhibition, Digestive Disease Week, Chicago, IL 2006

127. **Song M, Song Z, Deaciuc IV, McClain CJ.** Silymarin Attenuates Palmitate-Induced Increase in IL-8 Secretion in HepG2 Cells. American Association for the Study of Liver Diseases, 2006

128. **Song M, Song Z, Deaciuc I, McClain C**. Silymarin Attenuates Palmitate-induced Increase in IL-8 Secretion in HepG2 Cells. Research Louisville, 2006

129. **Song Z-H, Qiao Z, Cai J, Pierce W, He D, He F.** Characterization of hsp90 as a CB2 cannabinoid receptor interacting protein. The 5th Asian-Pacific Organization for Cell Biology Congress, October 28-30, 2006

130. **Song Z, Zhou Z, Song M, Uriarte S, Chen T, Deaciuc I, McClain CJ.** Alcohol-induced S-adenosylhomocysteine accumulation in the liver sensitizes to TNF hepatotoxicity. International Symposium on Alcoholic Liver and Pancreatic Diseases and Cirrhosis, Los Angeles, CA, May 2006.

131. **Srivastava, DS, Komolafe, OO, Templeton, TM, States, JC, Brock, G, Kidd, LR**. Association Between Variant Polymorphisms in the Base Excision Repair Genes (hOGG1, APE1, XRCC1) and Prostate Cancer Susceptibility in African-American Men. James Graham Brown Cancer Center 5th Annual Retreat, Louisville, KY, November 29, 2006.

132. **Srivastava D, Komolafe O, Templeton T, States JC, Brock G, Kidd L.** Interaction Among Variant Base Excision Repair Genes (hOGG1, APE-1, and XRCC1) in Relation to Prostate Cancer Risk in African-American Men. 4th Annual James Graham Brown Cancer Center Retreat Research Louisville, University of Louisville, Louisville, KY, November 29, 2006.

133. **Srivastava D, Komolafe O, Templeton T, States JC, Kidd L.** Variant Oxidative Stress Gene (hOGG1) and Prostate Cancer Risk Among African-American Men. 11th Annual Research Louisville, University of Louisville, Louisville, KY, October 14, 2006

134. **Tadtayev S, Gozal D, Reeves SR, Ansari T, Row BW, Sibbons P**. Quantitative Morphometric Analysis of the Effects of Chronic Intermittent Hypoxia on Three Brainstem Nuclei in a Developmental Rodent Model. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

135. **Tadtayev S, Gozal D, Row BW, Ansari T, Sibbons P.** Stereological Investigation in a Rodent Model of Pediatric Sleep Disordered Breathing: Morphometric Evidence for Cognitive Deficiencies. The FASEB Journal, Abstracts Part II, March 7, 2006, Vol. 20, No. 5

136. **Taylor BF, McNeely SC, Miller HL, McCabe MJ, States JC.** P53 suppression of arsenite-induced mitotic catastrophe is mediated by $p21^{waf1/cip1}$. Toxicologist (2006) 90(1): 86 (#417)

137. **Taylor BF, States JC**. Mechanism of arsenite induced cell death is distinct from both nocodazole and Taxol. 4th Conference on Molecular Mechanisms of Metal Toxicity and Carcinogenesis, Morgantown WV, September 24-27, 2006
138. **Taylor BF, States JC**. Mechanism of Arsenite Induced Cell Death is Distinct from both Nocodazole and Taxol, Research!Louisville, University of Louisville, Louisville, KY, Oct 10-13, 2006.

139. **Taylor BF, States JC**. Mechanism of Arsenite Induced Cell Death is Distinct from both Nocodazole and Taxol, Ohio Valley Society of Toxicology, Children's Research Institute, Columbus, OH, Nov 10, 2006.

140. **Taylor BF, States JC**. Mechanism of arsenite-induced cell death is distinct from both nocodazole and Taxol. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

141. **Templeton T, Thacker B, Srivastava DS, Komolafe O, Pihur V, Brock G, Doll M, Hein D, Kidd L**. Interaction among Carcinogen-biotransformation Genes (N-acetyltransferase 1 and 2) and Prostate Cancer Risk Using a Comprehensive Analytical Approach 5th Annual James Graham Brown Cancer Center Retreat Research Louisville, University of Louisville, Louisville, KY, November 29, 2006.

142. **Thacker B, Templeton T, Srivastava D, Komolafe O, Pihur V, Brock G, Doll M, Hein D, Kidd L.** Interaction among carcinogen-biotransformation genes (N-acetyltransferase 1 and 2) and prostate cancer risk using a comprehensive analytical approach. Proceedings of Research!Louisville, Abstract #SMED82, Louisville, KY, October 2006.

143. **Tiu AC, Cave MC, McClainCJ**. Metabolic coma after bariatric surgery: two case reports, Research Louisville, 2006

144. **Vadhanam M, Ravoori S, Sahoo S, Srinivasan C, Gupta, R**. An improvised model for estrogen mediated mammary tumors in ACI rats. Proc. Am. Assoc. Cancer Res., 47: 1773. 2006.

145. **von Montfort C, Beier JI, Arteel GE** (2006) Preexposure to epinephrine sensitizes macrophages to lipopolysaccharide. Hepatology 44:571A.

146. **von Montfort C, Beier JI, Arteel GE** (2006) Preexposure to epinephrine sensitizes macrophages to lipopolysaccharide. Research! Louisville.

147. **Vos M, Barve S, Joshi-Barve S, Redinger D, Sullivan J, Whitington P, McClain CJ.** Low Adiponectin is associated with increased cell death in Pediatric Nonalcoholic Fatty liver disease, AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES, 2006

148. **Voor MJ, Xu Q, Burden RL Jr, Neale J, Carter H, Yang S, Waddell SW, Pierce WM.** Alendronate is strongly anabolic in a young rat model of OVX-induced osteoporosis whereas hormones have little effect. Orthopaedics Research Society, Sept. 2006.

149. **Walraven JM, Barker DF, Doll MA, Hein DW.** A novel polymorphic rat N-acetyltransferase allele (Nat3*2) with reduced catalytic activity in vitro. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #968).

150. **Walraven J, Hein D**. Arylamine N-acetyltransferase 2 structure homology modeling and deletion mutant studies. Proceedings of Research!Louisville, Abstract #GRD70, Louisville, KY, October 2006.

151. **Walraven JM, Trent JO, Barker DF, Hein DW**. Structure homology modeling of human arylamine N-acetyltransferases: Computational and Experimental Approaches. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #101, Louisville, KY, November, 2006.

152. **Watson N, Nelson E, Mukhopadhyay S, Alphenaar B, McGregor WG**. The ubiquitin ligase RAD18 regulates translesion synthesis in human cells. Research Louisville 2006 and James Graham Brown Cancer Center Retreat, 2006 (Second place award, graduate student division).

153. **Wiegand CB, Rane MJ, Sachleben LRJr., Wu R, Gozal E**. Hsp90 inhibition by Geldanamycin upregulates expression heat shock proteins in PC-12 cells. Presented at:Cell Signaling World , Signal Transduction Pathways as Therapeutic Targets. Luxembourg, January 25-28, 2006.

154. **Wiegand CB, Rane, MJ, Gozal E.** Role of geldanamycin in Akt/ERK-mediated PC12 cells survival. Presented at: 36th Annual Meeting of the Society for Neuroscience, October 14-18, 2006, Atlanta, GA. Vol. 32, Abstract # 89.2.

155. **Witcher La, Carter BD, Gozal D, Kronenberger WG, Crabtree VM**. Nurse-Reported Sleep in Hospitalizes Children. SLEEP Vol. 29, 2006, Abstract Supplement 20th Anniversary Meeting of the APSS, LLC.

156. **Yan B, Lin Y, Gozal D, Cheng Z**. Changes in Glutamate Receptor Expression in the Nucleus Ambiguus (NA) of F334 Rats During Aging and Following Chronic Intermittent Hypoxia (CIH). The FASEB Journal, Abstracts Part II, March 7, 2006, Vol. 20, No. 5

157. **Yang X, Luo C, Cai J, Tezel G**. Proteomic Identification of Phosphorylated Proteins in a Chronic Pressure-Induced Rat Model of Glaucoma. 2006 ARVO Annual Meeting, Fort Lauderdale, FL, Apr 30-May 4, 2006.

158. **Zang Y, Doll MA, States J, Hein DW.** Genetic Polymorphisms Of Human N-Acetyltransferase 2 Influence The Bioactivation Of Aromatic And Heterocyclic Amines. Toxicologist (2006) 90(1): 160 (#792)

159. **Zang Y, Doll MA, States JC, Hein DW**. The effect of the G857A(K268R) polymorphism on N-acetyltransferase 2-mediated carcinogen metabolism is substrate-dependent. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

160. **Zang Y, Doll MA, States JC, Hein DW**. Genetic Polymorphisms of Human N-acetyltransferase 2 Influences the Bioactivation of Aromatic and Heterocyclic Amines. James Graham Brown Cancer Center 5th Annual Retreat, Lousiville, KY, November 29, 2006.

161. **Zang Y, Doll MA, States JC, Hein DW.** The effect of the G857A (K268R) polymorphism on N-acetyltransferase 2-mediated carcinogen metabolism is substrate dependent. Proceedings of the American Association for Cancer Research 47: #2033, 2006.

162. **Zang Y, Doll MA, States JC, Hein DW.** Genetic polymorphisms of human N-acetyltransferase 2 influence the bioactivation of aromatic and heterocyclic amines. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #31, Louisville, KY, November, 2006

163. **Zang Y, Doll MA, States JC, Hein DW**: Genetic polymorphisms of human N-acetyltransferase 2 influence the bioactivation of aromatic and heterocyclic amines. Proceedings of the annual meeting of the Society of Toxicology, San Diego, CA, March 2006 (Toxicological Sciences 90: Supplement 1, abstract #792).

164. **Zhang X, Barker DF, Doll MA, States JC, Klinge CM, Hein DW**. Effect of Estrogen on NAT1 Expression in Breast Tumor Cells, Research!Louisville, University of Louisville, Louisville, KY, Oct 10-13, 2006.

165. **Zhang X, Barker DF, Doll MA, Martin RC, States JC, Klinge CM, Hein DW.** Effect of estrogen on NAT1 expression in breast tumor cells. Proceedings of the Fifth James Graham Brown Cancer Center Annual Retreat, Abstract #116, Louisville, KY, November, 2006.

166. **Zhang SXL, Miller JJ, Zhao W, Guo SZ, Gozal D. Wang Y.** Whole-Body Hypoxic Preconditioning Reduces Hypoxia-Induced Lung Injury Through Preferential Protection of Alveolar Type I Cells. The FASEB Journal, Abstracts Part 1, March 6, 2006, Vol. 20, No.4

167. **Zhou G, Kang YJ, Cai L**. Metallothionein prevents angiotensin-induced cardiac cell death through suppression of NADPH oxidase activation. The 45th Annual Meeting of the Society of Toxicology, San Diego, CA. Toxicological Sci. 90 (Suppl. 1): 2156. 2006.

168. **Zhou Y, Jiang Y, Feng, W, Kang YJ.** Copper reverses hypertrophy in primary cultures of neonatal rat cardiomyocytes. Research!Louisville. 2006.

169. **Zhou Z, Feng W, Song Z, Song M, McClain CJ, Kang YJ.** (2006). Preservation of hepatocyte nuclear factor 4α is involved in zinc protection against TNF-α-induced liver injury in mice. Digestive Disease Week, Chicago, IL.

XII. RESEARCH GRANTS FUNDED

Scholarly Activity—Active Grant Funding-2006

Gavin Arteel, PhD

Agency and Number	Title	PI	Role on Project	Dates	Costs
NIH KO1 AA13099	Hypoxia and free radicals in alcoholic pancreatitis	G Arteel	PI	08/01/01-07/31/07	$555,846 (Total Costs)
NIH R01 AA003624	Control of drug and ethanol metabolism	G Arteel	PI	05/02/06-04/30/11	$1,364,794 (Total Costs)
NIH R44 HL073578	Development of a direct cellular energy delivery system	WD Ehringer	Co-I	05/15/03-01/31/08	$1,655,671 (Total Costs)
NIH R43 DK071354	A new ATP delivery system for liver transplantation	WD Ehringer	Co-I	10/10/05-02/28/07	$100,000 (Total Direct Costs)
NIH R21 AA015611	Matrix Metalloproteinases in Alcoholic Liver Injury	I Deaciuc	Co-I	08/01/06-05/31/08	$250,000 (Total Direct costs)

Jian Cai, PhD

NIH 1P01ES 011860-01A1	Cardiovascular Toxicity of Environmental Aldehydes	A Bhatnagar	Core Lab PI	07/01/03 – 06/30/08	$6,986,060 (Total)
KY Sci. & Tech. Corporation	Pharmacodynamics of Bone Targeted Drugs. Part B (IB070345)	J Cai	PI	09/10/06-09/09/07	$104,500 (Total)

Theresa Chen, PhD

NIH RO1AA12592	Oral Antioxidant/Anticytokine Therapy for ALD	D Hill	Co-I	5/01/02-4/30/07	$357,500 (Current Year Total)
NIH, RO1AA 014371	Mechanisms of Alcohol-Induced Immunosuppresion	S Barve	Co-I	09/1/04-8/30/09	$294,000 (Current Year Total)
NIH 5R21 AT001490-03	Green Tea Polyphenols: A Novel Approach to IBD	H Oz	Co-I	2/15/04-2/28/08	
NIH 5R01 DK072032-02	Podocytes and oxidative stress in diabetic kidney	P Epstein	Co-I	9/1/05-7/31/10	$250,000/yr (Direct Costs)

Paul Epstein, PhD

NIH R01 DK077624	B-cells in pups of mild and severe STZ diabetic mothers; antioxidant protection	YQ Liu	Co-I	9/15/06-9/14/10	$200,000/yr (Direct Costs)
NIH R01 HL062892	Antioxidant Transgenes in Diabetic Cardiomyopathy	P Epstein	PI	8/1/03-7/30/07	$200,000/yr (Direct Costs)
NIH R01 HL075080	Altered glucose homeostasis by sleep impairment	P Epstein	PI	9/30/03-4/30/07	$225,000/yr (Direct Costs)
NGA	Molecular Determinants of	YQ Liu	Project PI	9/30/02-	$150,000/yr

P20RR17702 COBRE	Developmental Defects			9/29/07	(Direct Costs)
NIH R01 DK073586	Podocytes and Oxidative Stress in Diabetic Kidney	P Epstein	PI	9/30/05-8/31/10	$250,000/yr (Direct Costs)
NIH R01 DK073586	Prolonged Diabetic Damage to Cardiac Mitochondria	P Epstein	PI	12/05-9/30/09	$244,000/yr (Direct Costs)
JDRF 1-2005-88	Podocyte Specific Antioxidant Protection in Diabetic Nephropathy	P Epstein	PI	4/1/05-3/30/08	$149,000/yr (Direct Costs)

David Gozal, MD

NIH RO1-HL69932	Postnatal Brain Susceptibility to Intermittent Hypoxia.	D Gozal	PI	6/1/2002-5/31/2007	$ 1,000,000 (Total Direct Costs)
NIH RO1 HL65270-05	Neurocognitive Function in Snoring Children.	D Gozal	PI	9/1/03-6/30/08	$1,200,000 (Total Direct Costs)
NIH HL-083075	Tonsillectomy and Adenoidectomy in Children with Sleep Disordered Breathing	S Redline	Site PI	2006-11	Site direct costs: apx. $180,000/year
NIH SCOR P50 HL60286-06	Intermittent Hypoxia and Stroke	J Siegel	Project 2 PI	6/1/03-5/31/08	$1,000,000 (Total Direct Costs)
NIH NS 045839	Intermittent Hypoxia-Mediated Neuronal Cell Death	R Liu	Co-I	2/1/03-1/31/07	$1,150,000 (Total Direct Costs)
NIH R25 CA44789	Cancer Education Grant Program	N Burzinski	Student Mentor	8/1/02-7/31/07	$516,145 (Total Direct Costs)
NIH R01HL 58737	Role of Vagal Afferents in Hyperpnea	J Yu	Co-I	1/1/03-12/31/07	$1,100,000 (Total Direct Costs)
NIH R01 HL 75080	Altered glucose homeostasis by sleep impairment	P Epstein	Co-I	10/1/03-6/30/07	$900,000 (Total Direct Costs)
NIH R01 HL75045	Episodic Hypoxia-Induced Cardiovascular Dysfunction	R Liu	Co-I	10/1/03-6/30/07	$1,000,000 (Total Direct Costs)
NIH R01 HL074369	Moncarboxylate Transporter in Hypoxic Pre-conditioning	Y Wang	Co-I	2/1/04-1/31/08	$1,000,000 (Total Direct Costs)
Dept of Defense (DARPA BAA)	Surviving Blood Loss	Y Wang	Co-I		$1,100,000 (Total Direct Costs
NIH R01 HL070911-01	Sleep and Sleep Disorders in Children	D Molfese	Co-I	7/04-6/09	$1,000,000 (Total Direct Costs)
NASA	Sleep and Cognition in Space	D Molfese	Co-I	7/06-6/09	$1,000,000 (Total Direct Costs)

Evelyn Gozal, PhD

NIH R01 HL074296	Hypoxia Induced Akt Signaling Module in Neuronal Cells	E. Gozal	PI	7/1/03-6/30/07	$1,000,000 (Total Direct Costs)
NIH P20 RR015576	Mechanisms of Plasticity and Repair after SCI (Project 1: Heat shock proteins in spinal cord neural survival)	S. Whittemore	PI, Project 1	7/1/05-6/30/10	$296,000 (Direct Costs for Project 1)
NIH R56 AI059165-01A2	Role of Hsp27 in regulation of Neutrophil Apoptosis	M Rane	Co-I	7/1/06-6/30/10	$296,000 (Direct Costs)

Ramesh Gupta, PhD

NIH R01 CA90892	Breast Cancer Etiology	R Gupta	PI	11/01-10/07	$1,051,114 (Total Costs)
NIH R01 CA96310	Chemoprevention of Experimental Tobacco Tumorigenesis	R Gupta	PI	5/02-4/08	$1,461,364 (Total Costs)
KY Lung Cancer Res. Board	Etiology & Prevention of Lung Cancer: Biomarker development in clinical studies	R Gupta	PI	1/02-12/07	$116,835 (Total Costs)
U of L Competative Enh. Grant	Breast Cancer Chemoprevention Potential fo Common Spices	R Gupta	PI	11/06-10/07	$15,000 (Total Costs)

David Hein, PhD

NIH R01CA34627	Pharmacogenetics of drug and carcinogen metabolism	D Hein	PI	7/1/03-6/30/09	$1,724,900 (Total Costs)
NIH R01 CA34627-S	Characterization of NAT1 overexpression in breast tumors	D Hein	PI	7/1/04-6/30/07	$113,749 (Total Costs)
NIH T32 ES011564	U of L Environmental Health Sciences Training Program	D Hein	PI	7/1/04-6/30/09	$697,188 (Total Costs)
Philip Morris, USA	Effect of acetylator genotype on genotoxicity from aromatic and heterocyclic amine carcinogens	D Hein	PI	7/1/02-3/31/06	$615,848 (Total Costs)
Procter & Gamble, Inc.	Metabolism and toxicity of aromatic amines associated with hair dyes	D Hein	PI	7/1/02-6/30/07	$310,885 (Total Costs)
NIH P20 CA97942	James Graham Brown P20 Application	D Miller	Program Leader	8/2/02-7/31/07	$1,328,613 (Total Costs)
NIH R25 CA 44789	Cancer Education Grant Program	N Burzynski	Student Mentor	8/1/02-7/31/07	$557,437 (Total Costs)

NIH F30 ES012557	Genetic Polymorphisms in 5'UTR of human NAT1 and NAT2	A Husain	Sponsor/Mentor	7/1/03-5/31/07	$145,022 (Total Costs)
NIH R01 ES11594	Metabolism and detoxification of base propenals	S Srivastava	Consulatant	6/1/03-3/31/08	$1,559,485 (Total Costs)
NIH P01 ES011860	Cardiovascular toxicity of environmental aldehydes	A Bhatnagar	Co-I, Project 1	7/1/03-6/30/08	$6,986,060 (Total Costs)
MD Anderson Cancer Ctr passthrough of NCI funding	NAT1 and NAT2 Genotype determinations in cancer patients and controls	D Hein	PI	1/1/04-12/31/09	$20,000 (Total Costs)
Susan G Komen Breast Cancer Found. DISS0403147	Mechanistic studies on the NAT2 genetic polymorphism: A potential factor that modifies individual breast cancer risk	D Hein	PI	5/1/04-4/30/06	$30,000 (Total Costs)
NIH R01 CA34627-19S to 22S	Pharmacogenetics of drug and carcinogen metabolism (minority supplement for Dr. LaCreis Kidd)	D Hein	PI	7/1/04-6/30-08	$509,635 (Total Costs)
Chemgenex Pharmaceutical	Research in support of Amonafide study	D Hein	PI	2/1/05-1/31/07	$5,670 (Total Costs)
NIH U10 HD045934	Center for Pediatric Clinical Pharmacology Research Center	J Sullivan	Dir, Pharmaco-gen Core Lab	1/1/04-12/31/08	$1,845,463 (Total Costs)
NIH COBRE P20 RR017702	Molecular Determinants of Developmental Defects	R Greene	Mentor	7/1/05-4/30/07	$120,000 (Direct Costs)
JG Brown Cancer Center	Effects of N-acetyltransferase phenotype and gender on the genotoxicity of the tobacco smoke carcinogen, 4-aminobiphenyl	JR Neale	Mentor	8/1/05-7/31/06	$35,100 (Total Costs)
NIH T35 ES014559	Summer Environmental Health Sciences Training Program	R Prough	Student Mentor	4/1/06-3/31/11	$158,355 (Total Costs)
NIH R01 CA100374	Nashville Breast Health Study	W Zheng	Subproject PI	5/3/07-4/30/09 Subproject	$137,202 (Total Subproject Cost)
NIH	Tobacco exposure, biomarkers, and	S Myers	Co-I	7/1/06-6/30/09	$1,110,000 (Total Costs)

	mutations of MSX1 and IRF6 genes in pregnancy				
NIH P20 RR023523	Planning Grant for Louisville Clinical and Translational Science Award	C McClain	Mentor/Taskforce Member	10/1/06-9/30/07	$220,000 (Total Costs)

Harrell Hurst, PhD

NIH 1PO1 ES011860-01A1	Cardiovascular toxicity of environmental aldehydes	A Bhatnagar	Core Lab Co-I	7/1/03-6/30/08	$5,015,729 (Total Direct Costs)
NIH U10 HD045934	Center for Pediatric Clinical Pharmacology Research	J Sullivan	Analytic Core Co-Director	1/1/04-12/31/08	$1,483,673 (Total Direct Costs)

Y James Kang, PhD

NIH 2R01 HL59225	Metallothionein and Adriamycin cardiotoxicity	YJ Kang	PI	12/1/02-11/30/07	$1,386,560 (Total Costs)
NIH 3R01 HL59225-S1	Metallothionein and Adriamycin cardiotoxicity Minority supplement for graduate student	YJ Kang	PI	12/1/04-11/30/07	$88,000 (Total Costs)
NIH 1R01 HL63760	Oxidative Stress and Heart Failure by Copper Deficiency	YJ Kang	PI	7/1/01-5/30/06	$1,312,188 (Total Costs)
NIH R01 AA014623	Zinc and alcohol-induced oxidative liver injury	Z Zhou	Co-I	8/10/05-5/31/09	$1,139,252 (Total Costs)

LaCreis Kidd, PhD, MPH

NIH 3R01 CA034627-19S	Pharmacogenetics of drug and carcinogen metabolism, minority supplement	D Hein	Co-I	9/15/04-6/30/08	$509,635 (Total Costs)
U of L School of Medicine	Impact of DNA Repair Genes (hOGG1, XPA, XPD, XRCC1 and APE1) on Prostate Cancer Risk Among Men of African Descent	L Kidd	PI	3/15/06-3/15/07	$15,000 (Total Costs)

Craig McClain, MD

NIH R37 AA01762	Tumor necrosis factor and alcoholic liver disease	C McClain	PI	8/1/01-7/31/11	$1,787,500 (Total Costs)
NIH R01 AA010496	Alcoholic Liver Disease and S-adenosylmethionine	C McClain	PI	1/1/01-7/31/07	$1,433,000 (Total Costs)
NIH R01 DK071765	Mechanisms of S-adenosylmethionine in NASH	C McClain	PI	9/15/05-6/30/10	$1,507,230 (Total Costs)
NIH R01 AA015970	S-adenosylhomocysteine and S-adenosylmethionine in Alcoholic Liver Disease	C McClain	PI	9/30/05-6/30/10	$1,837,500 (Total Costs)
NIH P20 RR023523	Planning Grant for Louisville Clinical and Translational	C McClain	PI	10/1/06-9/30/07	$220,000 (Total Costs)

	Science Award				
VA Merit	Dysregulated TNF/Fas Signaling in alcoholic Liver Disease	McClain	PI	4/1/04-3/31/09	$1,473,000 (Total Costs)
VA CLIM	SAMe Therapy for NASH in Veterans	C McClain	PI	1/1/04-4/1/07	$786,000 (Total Costs)
NIH K01 AA013099	Hypoxia and Free Radicals in Alcoholic Pancreatitis	G Arteel	Mentor	08/01/01-07/31/07	$555,846 (Total)
NIH R01 AA12592	Oral Antioxidant/Anticytokine Therapy for ALD	D Hill	Co-I	5/1/02-4/30/06	$1,687,500 (Total Costs)
NIH K23 AA014235	Suppression of CYP2E1 in Drug Induced Liver Injury	M Linder	Mentor	7/1/03-3/31/08	$588,695 (Total Costs)
NIH R01 GM65459	Novel Feedback Regulation of Xenobiotic Bioactivation	M Linder	Co-I	7/1/03-3/31/08	$1,780,280 (Total Costs)
NIH K23 DK073750	Evaluation of the Effect of Green Tea Polyphenols on IBD	G Dryden	Mentor	9/15/05-8/31/10	$511,650 (Total Costs)
NIH K01 AA015344-01A1	Mechanisms of Sensitization to TNF Hepatotoxicity in ALD	Z Song	Mentor	9/15/05-8/31/10	$501,190 (Total Costs)
NIH R01 AA014623	Zinc and alcohol-induced oxidative liver injury	Z Zhou	Co-I	8/10/05-5/31/09	$1,139,252 (Total Costs)
NIH R01 AA014371	Mechanisms of Alcohol-Induced Immosuppression	S Barve	Co-I	9/1/04-6/30/09	$1,470,000 (Total Costs)

W Glenn McGregor, MD

NIH R01 CA112197	Mutagenesis as a novel target for cancer prevention	WG McGregor	PI	4/1/05-3/31/09	$700,000 (Total Direct Costs)
NIH R03 CA 112664-01A1	Novel strategies to prevent lung cancer	WG McGregor	PI	7/1/05-6/30/07	$100,000 (Total Direct Costs)
NASA Cell Science Prog.	Shared responses to DNA damage, space flight and aging	WG McGregor	PI	5/1/03-9/30/06	$115,999 (Annual Direct Costs)
KY Lung Cancer Res. Board	Role of chemoattractant-mediated inflammation in development and progression of lung cancer	H Bodduluri/ WG McGregor	Co-PI	10/1/03-9/30/06	$300,000 (Total Direct Costs)
NIH R25 CA044789	Cancer Education Grant Program	N Burzynski	Student Mentor	9/1/02-8/31/07	$516,145 (Total Direct Costs)
NIH NCRR	Biacore 3000 Shared Instrument Grant	D Miller	Investigator		$270,000 (Total Costs)
J G Brown Cancer Ctr Pilot Grant	Lung Cancer Research Consortium	H Bodduluri	Participating Investigator		$40,000 (Total Costs)

Steven R. Myers, Ph.D.

Am. Breatfeeding Inst.	Establishment of Breast Milk Bank in Louisville/ Carcinogens in Breast Milk	D Adamkin	Co-I	7/1/05-6/30/06	$189,871 (Total Costs
NIH COBRE P20RR017702	Tobacco exposure, biomarkers, and mutations of MSX1 and IRF6 genes in pregnancy	SR Myers	PI	8/1/05-7/31/06	$60,000 (Total Costs

William Pierce, PhD

KY Sci and Tech Corp	Bone Targeting and Bone Anabolic Agents	W Pierce	PI	12/1/04-11/30/07	$225,000 (Total Direct Costs)
KY Sci and Tech Corp	Bone Targeting of Pharmaceuticals	W Pierce	PI	9/1/04-8/31/06	$15,000 (Total Direct Costs)
KY Sci and Tech Corp	Bone Pharmaceuticals R&D	W Pierce	PI	12/1/04-11/30/07	$200,000 (Total Direct Costs)
NIH P01 ES011860	Cardiovascular Toxicity of Environmental Aldehydes	A Bhatnagar	Core Director	7/1/03-6/30/08	$400,000 (Total Direct Costs for Core)
NIH 5U10 HD045934	Center for Pediatric Clinical Pharmacology Research	J Sullivan	Co-I	1/1/04-12/31/08	$1,483,673 (Total Direct Costs)
NIH R01 DA011551	Structure and Function of CB2 Cannabinoid Receptor	Z-H Song	Co-I	7/1/06-4/30/09	$1,150,000 (Total Direct Costs)
NSF EPSCoR	Center for Regulatory Metabolomics: From Molecules to Communities	T Fan	Co-PI	2005-2008	$2,827,167 (Total Costs)

Peter Rowell, PhD

NIH R01 HL069932	Postnatal Brain susceptibility to Intermittent Hypoxia	D Gozal	Co-I	6/1/02-3/31/06	$1,000,000 (Total Direct Costs)
Fischer-Owen Orthopaedic Trust Fund	Dose and time dependent effects of nicotine on bone blood flow	CS Roberts	Co-I	1/1/03-6/25/06	$8,517 (Total Direct Costs)

Zhao-Hui (Joe) Song, PhD

NIH R01 DA 011551	Structure and Function of CB2 Cannabinoid Deceptor	Z-H Song	PI	5/1/04-4/30/09	$1,297,104 (Total Costs)
NIH R01 DA 011551-09S1	Structure and Function of CB2 Cannabinoid Deceptor	Z-H Song	PI	5/1/04-4/30/09	
NIH R01 EY13632	Cannabinoid Receptors and Novel Antiglaucoma Drugs	Z-H Song	PI	8/1/03-7/31/07	$1,174,166 (Total Costs)
NIH T32 ES11564	U of L Environmental Health Sciences Training Program	D Hein	Mentor	7/1/04-6/30/09	$697,188 (Total Costs)

J Christopher States, PhD

NIH R01 ES011314	ArsenicInduced Mitotic Arrest Associated Apoptosis	JC States	PI	7/1/03-6/30/08	$1,385,869 (Total Costs)
NIH R03 CA119295	Effects of chemopreventive agents on DNA damage response	JC States	PI	9/27/05-8/31/07	$147,000 (Total Costs)
NIH R01 CA034627	Pharmacogenetics of drug and carcinogen metabolism	D Hein	Co-I	7/1/02-6/30/07	$2,510,251 (Total Costs)
NIH R01 ES011594	Metabolism and detoxification of base propenals	S Srivastava	Co-I	6/1/03-3/31/08	$1,650,750 (Total Costs)
U of L School of Medicine	Impact of DNA Repair Genes (hOGG1, XPA, XPD, XRCC1 and APE1) on Prostate Cancer Risk Among Men of African Descent	L Kidd	Collaborator	3/15/06-3/15/07	$15,000 (Total Costs)
NIH F30 ES013372	Arsenic inhibition of mitotic progression	B Taylor	Mentor	6/15/04-6/14/07	$81,884 (Total Costs)
NIH R25 CA044789	Cancer Education Grant Program	N Burzynski	Student Mentor	8/1/02-7/31/07	$557,437 (Total Costs)
NIH T32 ES011564	U of L Environmental Health Sciences Training Program	D Hein	Mentor	7/1/04-6/30/09	$697,188 (Total Costs)

Leonard Waite, PhD

KY Sci and Tech Corp	Bone Targeting and Bone Anabolic Agents	W Pierce	Co-I	12/1/04-11/30/07	$225,000 (Total Direct Costs)
KY Sci andTech Corp	Bone Targeting of Pharmaceuticals	W Pierce	Co-I	9/1/04-8/31/06	$15,000 (Total Direct Costs)

XIII. RESEARCH GRANTS SUBMITTED

Gavin Arteel, PhD

Agency and Number	Title	PI	Role on Project	Dates	Costs
NIH R21 ES015812	Transplacental Arsenic Induced Hepatic Dysfunction and Vascular Disease	JC States	Co-PI	7/1/07-6/30/09	$407,000 (Total Costs)
NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	Investigator	12/1/07-11/3012	$2,500,000 (Total Costs)
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)
UofL (Pilot Grant in Biodefense and Emerging Infectious Dis	Impact of alcohol on macrophage susceptibility to *M. Tuberculosis* infection	G Arteel	PI	7/1/07-6/30/08	$20,000 (Total Costs)

Fred Benz, PhD

NIH OGMB061415	MT Interaction with Zn-Binding Proteins in the Heart	W. Feng	CoI	7/1/07-3/31/09	$409,976 (Total costs)

Jian Cai, PhD

Dept of Defense	Tumor-specific isoforms of nucleolin: novel markers and targets for breast cancer?	P Bates	Co-I	8/1/06-7/31/07	$111,000 (Total Costs)
US EPA	Genotoxic effects of transition metal nanoparticles	Q Zhang	Co-I	9/1/06-8/31/09	$399,000 (Total Costs)
NIH NHLBI	Eicosanoids, PPAR-γ and vascular inflammation associated with hypertension	A Adeagbo	Co-I	9/1/06-8/31/10	$998,985 (Total Costs)
NIH	MT interaction with Zn-binding proteins in the heart	W Feng	Co-I	4/1/07-3/31/09	$407,000 (Total Costs)
KY Sci & Tech Corp.	PPAR-gamma and vascular inflammation during hypertension	A Adeagbo	Co-I	6/1/07-5/31/09	$61,914 (Total Costs)
NIH	TNF in cell death & neuroprotection in glaucoma	G Tezel	Co-I	8/1/07-7/31/12	$1,850,000 (Total costs)

Theresa Chen, PhD

NIH	Efficacy of antioxidants against inflammatory bowel disease, a translational study	H Oz	Co-I	12/06-11/08	
NIH	Compelmentary and alternative approach to	H Oz	Co-I	12/06-11/09	

	inflammatory bowel disease: human trial				
NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	Investigator	12/1/07-11/3012	$2,500,000 (Total Costs)

Paul Epstein, PhD

NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)

David Gozal, MD

NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)

Evelyn Gozal, PhD

NIH NIAID	Modulation of neutrophil apoptosis by Akt-Hsp27 Signalosome	MJ Rane	Co-I	7/1/07-6/30/11	$900,000 (Total Direct Costs)

Ramesh Gupta, PhD

NIH R01 CA125152	Breast cancer chemoprovention potential of common spices	R Gupta	PI	12/1/06-11/30/11	$1,250,000 (Total Direct Costs)
NIH R01 NCI	Effect of estrogen on tobacco smoke-mediated female lung cancer	M Clapper	Co-I	1/1/07-12/30/10	$454,370 (Total Direct Costs)
NIH R01 CA118114-01A2	Breast cancer chemoprevention strategies	R Gupta	PI	4/1/07-2/28/11	$1,282,817 (Total Direct Costs)
NIH R01 CA125152	Breast cancer chemoprovention potential of common spices (resubmission)	R Gupta	PI	9/1/07-8/31/12	
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)
NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	Investigator	12/1/07-11/3012	$2,500,000 (Total Costs)
NIH R01	PAH Exposure & Biomarkers Among Roadway Paving Workers	Herrick	Co-I	7/1/07-6/30/10	$309,184 (Total Costs
KLCRP Cycle 6	Prevention of Lung Cancer in the Mouse Model by Polyphenols Delivered by Novel Slow-	M Vadhanam	Co-I	7/1/07-6/30/09	$224,800 (Total Costs)

	Release Concept				
Dept. of Defense Concept Award	Chemoprevejtion of Mammary Tumorigenesis by Steady Low doses of Berries Extracts	R Gupta	PI	9/1/06-8/31/07	$111,000 (Total Costs)

David Hein, PhD

NIH K07 CA113774	Polymorphisms in MnSOD as a risk factor for lung cancer	RCG Martin	Co-I/Mentor	7/1/06-6/30/11	$667,450 (Total Costs)
NIH R25 GM079188	Maximizing diversity in integrative graduate programs in biomedical sciences	I Joshua	Student Mentor	2/1/07-1/31/11	$1,393,082 (Total Costs)
NIH P30 ES014443	Center for environmental genomics and integrative biology	K Ramos	Investigator	4/1/07-3/31/11	$4,440,000 (Total Costs)
NIH	School to career: Development of a high school health sciences career pathway	D Tollerud	Student Mentor	9/1/06-8/31/11	$1,353,652 (Total Costs)
US Dept of Defense	Predictive models of gene-gene interactions on prostate cancer susceptibility	L Kidd	Mentor/Co-I	10/1/06-9/30/09	$333,000 (Total Costs)
NIH R03 CA128028	A pharmacogenetic approach to prostate cancer susceptibility	L Kidd	Co-I	4/1/07-3/31/09	$148,000 (Total Costs)
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)
Am Cancer Soc	Pathway wide approach to prostate cancer detection in African-American men	L Kidd	Mentor/Co-I	7/1/07-6/30/11	$948,100 (Total Costs)
Am Cancer Soc	Manganese superoxide dismutase polymorphism as a risk factor for lung cancer	RCG Martin	Co-I/Mentor	1/1/07-12/31/12	$668,250 (Total Costs)
Am Surgical Assoc Found	Predictors and biomarkers of Barrett's metaplastic conversion to esophageal adenocarcinoma by novel esophageal	RCG Martin	Co-I/Mentor	7/1/07-12/31/12	$150,000 (Total Costs)

	perfusion				
NIH R01 ES014943	Biomarkers of in utero tobacco exposure	S Myers	Co-I	1/1/07-12/31/11	$3,224,063 (Total Costs)
NIH	Biological markers of breast milk carcinogens	S Myers	Co-I	1/1/07-12/31/09	$1,071,855 (Total Costs)
NIH K07	Obesity, adipocytokines, and breast cancer prognosis	C Wang	Mentor	7/1/07-6/30/11	$665,000 (Total Costs)
NIH P20	Reducing health disparities using personalized medicine	T Miles	Mentor	10/1/07-9/30/12	$7,029,660 (Total Costs)

Harrell Hurst, PhD

NIH R01 CA125152	Breast cancer chemoprovention potential of common spices	R Gupta	Co-I	12/1/06-11/30/11	$1,250,000 (Total Direct Costs)
NIH R01 NCI	Effect of estrogen on tobacco smoke-mediated female lung cancer	R Gupta	Co-I	1/1/07-12/30/10	$454,370 (Total Direct Costs)
NIH	Biomarker of in utero tobacco exposure	SR Myers	Co-I	4/1/07-3/31/11	$2,173,875 (Total Costs)
NIH R01 CA118114-01A2	Breast cancer chemoprevention strategies	R Gupta	Co-I	4/1/07-2/28/11	$1,282,817 (Total Direct Costs)

Y James Kang, PhD

NIH R01 HL085082	Ventricular assist device therapy for heart failure	YJ Kang	PI		$8,799,570 (Total Costs)
NIH 2R01 HL063760-05A1	Oxidativestress and heart failure by copper restriction	YJ Kang	PI		$1,850,000 (Total Costs)
NIH R01 HL084450-01A1	Copper nutrition and heart failure	YJ Kang	PI		$1,850,000 (Total Costs)
NIH R01 ES015755	Dietary manipulation of mineral metabolism and heart disease	YJ Kang	PI		$1,480,000 (Total Costs)
NIH R01 NIAAA	The role of zinc in the control of hepatic oxidative stress	W Maret	Subcontract PI		$607,400 (Total Subcontract Costs)
NIH R01 AA016013	Zinc inhibition of endotoxemia in alcoholic liver injury	Z Zhou	Co-I		$1,653,750 (Total Costs)
NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	Investigator	12/1/07-11/3012	$2,500,000 (Total Costs)
NIH	University of Louisville's	CJ McClain	Mentor	7/1/07-	$5,255,751

K12ES915847	Environmental Health Sciences K12			6/30/12	(Total Costs)

La Creis Kidd, PhD, MPH

US Dept of Defense	Predictive models of gene-gene interactions on prostate cancer susceptibility	L Kidd	PI	10/1/06-9/30/09	$333,000 (Total Costs)
NIH R03 CA128028	A pharmacogenetic approach to prostate cancer susceptibility	L Kidd	PI	4/1/07-3/31/09	$148,000 (Total Costs)
NIH	National Center on Minority & Heal Disparities (P20)	T Miles	Co-I	6/1/07-5/31/12	$3,800,000 (Total direct Costs)
American Cancer Society	Research Scholar Grant	L Kidd	PI	7/1/07-6/30/11	$948,100 (Total Costs)
NIH NCI R21	A biosystems approach to prostate cancer susceptibility in African-American men	L Kidd	PI	10/1/07-9/30/12	$275,000 (Total Costs)
NIH NCI K01	A systematic approact to prostate cancer susceptibility in African-American men	L Kidd	PI	10/1/07-9/30/12	$578,000 (Total Costs)
NIH R03 CA128028	A pharmacogenetic approach to prostate cancer susceptibility	L Kidd	PI	4/1/07-3/31/09	$148,000 (Total Costs)

Craig McClain, MD

NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	PI	12/1/07-11/3012	$2,500,000 (Total Costs)
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	PI	7/1/07-6/30/12	$5,255,751 (Total Costs)

W. Glenn McGregor, MD

Phillip Morris Extl Res Prog	RAD18 as a potential target for lung cancer prevention	WG McGregor	PI	6/1/06-5/31/09	$860,065 (Total Costs)
NIH R01 CA122259	Signaling mechanisms in DNA damage induced recombination	WG McGregor	PI	10/1/06-9/30/11	$1,470,000 (Total Costs)
NIH	Using nanochemistry for wound care	S Chien	Co-I	8/1/06-7/31/10	$2,908,090 (Total Costs)
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)

Steven Myers, PhD

NIH	Biomarker of in utero tobacco exposure	SR Myers	Co-I	4/1/07-3/31/11	$2,173,875 (Total Costs)
UofL Res.	Biomarkers of in utero	SR Myers	PI	2006	

Found	tobacco exposure				
UofL Res. Found	Chemoprevention of Dibenzo(a,l)pyrene induced mammary carcinogenesis	SR Myers	PI	2006	

Donald E Nerland, PhD

U of L Internal Grant	Lung cancer chemoprevention	D Nerland	PI		$3,7000 (Total Costs)

Kenneth E Palmer, PhD

U of L BSL3 pilot grant	Evaluation of griffithsin as a broad-spectrum antiviral	KE Palmer	PI	2/1/07-1/21/08	

William Pierce, PhD

Dept of Defense	High technology mass spectrometry laboratory for the identification of chemical signatures	W Pierce	PI	2007-2012	$1,500,000 (Total Costs)
NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	Investigator	12/1/07-11/3012	$2,500,000 (Total Costs)
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)
NIH 2 R01 EY13813-05A1	TNF-α in Cell Death & Neuroprotection in Glaucoma	G Tezel	Co-I	8/1/07-7/31/12	$250,000 (Total Yearly Costs)
NIH R01 EY017131-01A2	Proteomic Analysis of Retinal Ganglion Cell Death in Glaucoma	G Tezel	Co-I	12/1/07-1/31/12	$250,000 (Total Yearly Costs)
Dept of Defense	High Technology Mass Spectrometry Laboratory	W Pierce	PI	2007-2012	$1,500,000 (Total Costs)

Peter Rowell, PhD

NIH	Basis of individual variability in response to nicotine	Va. Commonwealth Univ	PI, Subcontract		$29,990 (Total Subcontract Costs)
NIH	Nicotine exposure and ontogeny of nicotinic receptor function	Va. Commonwealth Univ	PI, Subcontract		$29,990 (Total Subcontract Costs

Zhao-Hui (Joe) Song, PhD

NIH R21 NS059461	Assay development for HTS of ligands for GPR3 and CB2 receptors	Z-H Song	PI	3/1/07-2/28/08	$185,000 (Total Costs)
Leukemia & Lymphoma Soc	The roles of CB2 receptors in leukemia cell differentiation and migration	F He	Faculty Sponsor	7/1/07-6/30/10	$150,000 (Total Costs)

NIH F32 DA023776	Effects of cannabinoids on cancer cells	A Carrasquer	Faculty Sponsor	7/1/07-12/31/09	$68,880 (Total Costs)

J Christopher States, PhD

NIH P30 ES014443	Center for environmental genomics and integrative biology	K Ramos	Investigator	4/1/07-3/31/11	$4,440,000 (Total Costs)
NIH P20 AA017103	Alcohol liver disease and alcohol-nutrient interactions	CJ McClain	Investigator	12/1/07-11/3012	$2,500,000 (Total Costs)
NIH K12ES915847	University of Louisville's Environmental Health Sciences K12	CJ McClain	Mentor	7/1/07-6/30/12	$5,255,751 (Total Costs)
NIH R21 ES015812	Transplacental arsenic induced hepatic dysfunction and vascular disease	JC States	PI	7/1/07-6/30/09	$407,000 (Total Costs)
NIH R21 ES014649	Arsenic, melanosis and melanoma	JC States	PI	7/1/07-6/30/09	$407,000 (Total Costs)
U of L School of Medicine	Xenograft model of ovarian carcinoma in nude mice with assessment of non-invasive imaging and tolerability of intraperitoneal cisplatin, sodium arsenite and mild hyperthermia	CW Helm	Collaborator	3/1/07-2/28/08	$15,000 (Total Costs)
KSEF-1098-RDE-009	Preclinical testing of combination intraperitoneal chemotherapy for ovarian cancer	JC States	PI	1/1/07-12/31/07	$59,999 (Total Costs)
CDMRP2006 OvCa IDEA preproposal	Enhancement of intraperitoneal cisplatin cytocidal activity by co-treatment with arsenic and/or heat	JC States	PI	1/1/07-12/31/07	$300,000 (Total Costs)
CDMRP2006 OvCa IDEA Concept	Whole genome expression profiling for platinum resistance	JC States	PI	1/1/07-12/31/07	$110,250 (Total Costs)
KLCR	Chemopreventive modulation of DNA repair in human lung cells	JC States	PI	7/1/06-6/30/09	$225,000 (Total Costs)

XVI. INVITED SCIENTIFIC PRESENTATIONS (SALARIED FACULTY)

Gavin Arteel, Ph.D.

- Research seminar, 03/06, "Prevention of HCC by preventing cirrhosis," University of Louisville GI/Liver research group, Louisville, KY.

- Research seminar, 03/06, "Blocking liver disease as prevention of HCC," University of Louisville James Graham Brown Cancer Center, Cancer Control and Prevention group, Louisville, KY

- Research seminar, 09/06, "Oxidative stress in ASH and NASH," University of Louisville Alcohol Research Group, Louisville, KY.

- Research symposium, 09/06, "Oxidative stress in ASH and NASH (non-mitochondrial)." American Association for the Study of Liver Disease, Clinical Research Single Topic Conference, Atlanta, GA.

Paul Epstein, Ph.D.

- Antioxidants and Diabetic Nephropathy Suzhou China, June 2006.

- Diabetic Nephropathy and Cardiomyopathy Shanghai China, July 2006.

- Diabetic Nephropathy in OVE26 Mice, Lilly Company, Indianapolis, IN, September 2006

Evelyne Gozal, Ph.D.

- *An overview of Apoptosis: A potential Player in Spinal Cord Injury.* Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville, January 13, 2006.

Ramesh Gupta, Ph.D.

- Cancer Prevention & Control, Brown Cancer Center, May 2006

- 4th Int'l Conference on PCBs, Zakopane, Poland, September 2006

- JN Center for Advanced Research, Bangalore, India,November 2006

- Department of Biotechnology, Integral University, Lucknow, India, November 2006

David Hein, Ph.D.

- *Regulation of the Human Arylamine N-acetyltransferases: Implications for Cancer Susceptibility*. In symposium entitled: Regulation of Phase II Xenobiotic Metabolizing Enzymes: Implications for Health and Disease, annual meeting of the Society of Toxicology, San Diego, California, March 2006.

- *Arylamine N-acetyltransferases and their Role in Genetic Predisposition to Cancer***.** L'Oreal Research & Development, Asnieres, France, April 2006.

- *Pharmacogenetics of N-acetyltransferases and Their Role in Genetic Predisposition to Cancer.* Universite Paris 7- Denis Diderot, Paris, France, April 2006.

- *Role of N-acetyltransferase genetic polymorphisms in cancer risk*. In symposium entitled: Impact of Genetic Variation on Individual Susceptibility. Annual Meeting of the European Environmental Mutagen Society: From Genes to Molecular Epidemiology, Prague, Czech Republic, July 2006.

- *Cancer Prevention and Control Program*. Fifth Annual James Graham Brown Cancer Center Retreat, Louisville, Kentucky, November 2006.

Y. James Kang, Ph.D.

- Nov 17, 2006 Invited Lecture, Guiyang Medicine College Senior Medical Students group, Guiyang, China, "Cardiac Toxicology Research and Development"

- Nov 17, 2006 Invited Lecture, Guiyang Medicine College Graduate Program, Guiyang,China, "Chinese herbal medicine modernization versus modernized approach to study Chinese herbal medicine"

- Nov 13, 2006 Invited Plenary Lecture, The 12th National Neural Pharmacology Conference, Zunyi, China, Nov 12-14, 2006, "Herbogenomics: from traditional Chinese medicine to molecular therapy"

- Nov 12, 2006 Invited Lecture, Department of Thoracic and Cardiovascular Surgery, Zunyi Medical College Affiliated Hospital, "Mineral metabolic disorder and hypertrophic cardiomyopathy"

- Nov 9, 2006 Invited Lecture, Guiyang Chinese Medicine College Graduate Program, Guiyang, China, "Traditional Chinese Medicine in North America."

- Oct 20, 2006 Invited Speaker, "International Workshop on Anthracycline cardiotoxicity" Como, Italy, October 20-21, 2006, "Antioxidant defenses: lessons from transgenic animals and proteomics"

- Oct 11, 2006 Invited Speaker, NIH Workshop "Alcohol, Intestinal bacterial Growth, Intestinal Permeability to Endotoxin, and Medical Consequences" Rockville, MD "Role of zinc in preserving intestinal integrity in alcohol-intoxicated mice"

- May 11, 2006Invited Speaker, NIH Workshop "Alcohol, Zinc, and Immune System" Boston, MA, May 11, 2006, "Zinc/metallothionein antioxidant effects"

- May 10, 2006 Invited Speaker, Amgen Inc. and the Commonwealth of Kentucky partnership workshop. Frankford, KY, "InnoRem Inc, and Antifibrotic Therapy"

LaCreis Kidd, Ph.D., M.P.H.

- Polymorphisms in *N*-Acetyltransferase Genes and Prostate Cancer Susceptibility Among Men of African Descent, August 2, 2006

Craig J. McClain, M.D.

- Allentown, PAGut Club, "NASH", Allentown, PA, February 5, 2006

- University of Cincinnati, Grand Rounds, "NASH", March, 29, 2006

- Ohio Society for Parenteral and Enteral Nutrition, Ohio State University, "Nutrition and Liver Disease, May 5, 2006.

- University of Louisville, Grand Rounds, "Obesity and NASH", Louisville, KY, June 8, 2006.

- University of Kentucky, DDW Update, "New Developments on the Liver Front", Lexington, KY, June 22, 2006.

- Research Society on Alcoholism, "Interactions of Altered Methionine Metabolism and Cytokines in ALD", Baltimore, MD, June 24, 2006.

- AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES Single Topic Conference on Steatohepatitis, "Cytokines and Adipokines in ASH and NASH", Atlanta, GA, September 8, 2006.

- Fellows Nutrition Course, "Micronutrient Requirements and Deficiencies" and "Clinical Implications of Oxidative Stress and Antioxidant Therapy", Chicago, IL, November 12, 2006.

- Developmental Centers for Research on CAM (DCRC) Review Meeting, Bethesda, MD, November 16-17, 2006.

- Jewish Hospital Liver Update 2006, "Alcoholic and Non Alcoholic Fatty Liver – Role of Adipokines, Cytokines, Diet and Potential Therapy" and "Complicated Patients." Louisville, KY, December 2, 2006.

W. Glenn McGregor, M.D.

- "RAD6 family members as targets for cancer prevention". Gordon Research Conference on DNA Repair, Ventura CA 3/5-3/10/2006.

Steven R. Myers, Ph.D.

- "Hazards of Environmental Tobacco Exposure", Metro Louisville City Council, 10/02/06

- "Aromatic Amine Hemoglobin Adducts in Smokers: Correlations with Gestational Age, Birthweight, and Genotype-Implications for Birth Defects", Department of Molecular, Cellular, and Cranofacial Biology and the Birth Defects Center, University of Louisville, 10/31/06

- "Application of Hemoglobin as a Biomarker for Tobacco Exposure", Norton Hospital Neonatal and OB/Gyn Nurses and Fellows, 03/23/06

Donald Nerland, Ph.D.

- The ARE/EpRE Motif. Department of Pharmacology & Toxicology Seminar Series, University of Louisville, November 21, 2006

Zhao-Hui (Joe) Song, Ph. D.

- Invited Seminar: Cannabinoid Receptor as a Potential New Therapeutic Target for Glaucoma Peking University Eye Center, Beijing, China, November 2, 2006.

- Invited Seminar: Cannabinoid Receptors as Therapeutic Targets----Dreams and Realities Poa Pratensis Molecular Target Program, Brown Cancer Center, Louisville, KY ,December 7, 2006.

J. Christopher States, Ph.D.

- 3/16/06 "Arsenic and Cardiovascular Disease", Department of Environmental Medicine, University of Rochester, Rochester, NY

- Arsenic Induced Mitotic Arrest and Apoptosis, 4th Conference on Molecular Mechanisms of Metal Toxicity and Carcinogenesis, Morgantown WV, September 24-27, 2006 (invited oral presentation)

XV. DEPARTMENTAL TEACHING

School of Medicine

The Department team-taught the Medical Pharmacology course to second year medical students. Dr. Mike Williams served as course director. Individual faculty contributions are identified in the Appendix.

School of Dentistry

The Department team-taught the Dental Pharmacology and Therapeutics course and a Dental Review Course to dental students. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

The Department team-taught a Pharmacology course to second year students in the Dental Hygiene Program. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

School of Nursing

The Department team-taught a Basic Pharmacology for Nursing course to second year nursing students. The course is also cross-listed as Biology 390 and is taken by other undergraduate students. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

The Department team-taught an Advanced Pharmacology course to graduate nursing students. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

The Department provided an online pharmacology course in basic pharmacology for undergraduate nursing students. The Department provided online Neonatal and Geriatric Pharmacology courses for graduate nursing students. Dr. Steve Myers developed and served as course director for each of these courses.

Graduate School

The Department team taught several courses for graduate students. The individual courses and course directors were as follows:

- Scientific Writing (Dr. Gavin Arteel)
- Principles of Drug and Chemical Action (Dr. Frederick Benz)
- Research Methods (Dr. Chris States and Dr. Joe Song)
- Pharmacology Seminar (Dr. Donald Nerland)
- Graduate Pharmacology (Dr. Len Waite)
- Molecular Toxicology (Dr. W. Glenn McGregor and Russell Prough)

XVI. DEPARTMENTAL STANDING COMMITTEES

Graduate Program Committee

Dr. William Pierce (Chair)
Dr. Chris States (2008)
Dr. Gavin Arteel (2007)
Dr. Evelyne Gozal (2006)
Jason Walraven (student representative)

SIBUP/Grievance Committee

Dr. Peter Rowell (Chair)
Dr. Don Nerland (2008)
Dr. Harrell Hurst (2007)
Dr. Joe Song (2006)

Teaching Evaluation Committee

Dr. Mike Williams (Chair)
Dr. Len Waite (2008)
Dr. Fred Benz (2007)
Dr. Harrell Hurst (2006)

Seminar Committee

Dr. Don Nerland (Chair)
Dr. Fred Benz (2008)
Dr. Steve Myers (2007)
Dr. Ramesh Gupta (2006)

Core Laboratories/Research Development Committee

Dr. Chris States (Chair)
Dr. Glenn McGregor (2008)
Dr. Theresa Chen (2007)
Dr. Jian Cai (2006)

Events Committee

Dr. Len Waite (Chair)
Dr. Ramesh Gupta (2008)
Dr. LaCreis Kidd (2007)
Dr. Glenn McGregor (2006)

Tier I Information Technology Committee

Dr. Gavin Arteel
Dr. Fred Benz
Dr Harrell Hurst