CURRICULUM VITAE

NAME: Barbara Thompson Alexander

ADDRESS: Department of Physiology and Biophysics

The University of Mississippi Medical Center

2500 North State Street Jackson, MS 39216-4505 Phone: (601) 984-1831 FAX: (601) 984-1817

E-mail: balexander@umc.edu

EDUCATIONAL BACKGROUND:

1975-1979 Mississippi State University,

Mississippi State, Mississippi

B.S., Zoology, 1979

March, 1991-June, 1997 The University of Mississippi Medical Center,

Jackson, Mississippi

Ph.D., Biochemistry, 1997

June, 1997-January, 1999 Post-doctoral Fellow

Department of Physiology and Biophysics The University of Mississippi Medical Center,

Jackson, Mississippi

ACADEMIC APPOINTMENTS:

February, 1999- Instructor

January 2002 Department of Physiology and Biophysics

The University of Mississippi Medical Center,

Jackson, Mississippi

February 2002- Assistant Professor

July 2007 Department of Physiology and Biophysics

The University of Mississippi Medical Center,

Jackson, Mississippi

July 2007-present Associate Professor

Department of Physiology and Biophysics The University of Mississippi Medical Center,

Jackson, Mississippi

July 2014-present Professor

Department of Physiology and Biophysics The University of Mississippi Medical Center, Jackson, Mississippi

PROFESSIONAL MEMBERSHIPS:

The American Physiological Society, 1998-

Member, Council on High Blood Pressure Research of the American Heart Association, 1998-

Council on the Kidney in Cardiovascular Disease, American Heart Association, 2008-

The International Society for Developmental Origins of Health and Disease, 2008-

United States chapter of the Society for Developmental Origins of Health and Disease, 2017-

American Society of Nephrology, 2012- 2013

RECOGNITIONS/AWARDS:

Excellence in Research Award, Platinum Level, UMMC, November 2015.

Fellow, American Physiological Society, 2015.

Faculty Member, Alpha Omega Alpha, 2014.

Arthur Guyton New Investigator Award, Consortium for Southeastern Hypertension Control (COSEHC), Miami Beach, Fl, May 2007.

New Investigator Award, Water and Electrolyte Section, American Society of Physiology, Experimental Biology, San Diego, CA. April 2005.

Excellence in Research Award, Gold Level, UMMC, December 2004.

FASEB Summer Research Conference Travel Stipend Recipient, Renal Microcirculatory and Tubular Dynamics: Molecules to Man, Callaway Gardens, June 2004.

American Society of Hypertension / Monarch Pharmaceuticals Young Scholar Award, New York, NY, May 2003.

Fellow, American Heart Association, Council for High Blood Pressure Research, 2003

FASEB Summer Research Conference Travel Stipend Recipient, Renal Microcirculatory Hemodynamics, Saxtons River, Vermont, June 2001.

The Inter-American Society of Hypertension Travel Award, Santiago, Chile, March 2001.

American Society of Hypertension/Bristol Myers Squibb Recognition Awards for Young Investigators in Training, New York, NY, May 2000.

Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award, American Physiological Society, San Diego, CA, April 2000.

Third Hypertension Summer School Travel Stipend Recipient, American Heart Association/Astra Pharmaceuticals, Boulder, CO, July 1999.

Merck New Investigator Award: Excellence in High Blood Pressure Research, American Heart Association, Orlando, FL, September 1999.

National Research Service Award: Cardiovascular-Renal Mechanisms of Hypertension, February 1999, February 2000, and February 2001.

SERVICE:

1. Departmental.

Director Analytical and Assay Core Laboratory, 2002-Physiology AHA Heart Walk Departmental Captain, Fall 2010 Departmental Chemical Safety Officer, 2011-

Member, Departmental Graduate Committee

Member, Department Tenure and Promotion Committee, 2014-

Member, Departmental Review Self-Study Committee, 2014

2. Institutional.

Member, Center for Excellence in Cardiovascular-Renal Research, 2002-

Member, Graduate Studies Alumni Board, UMMC, 2007-2010

Member, Search Committee, Academic Information Services and Director of the Rowland Medical Library, 2008.

Member, Women's Health Research Center, 2009-

Member, Steering Committee, Women's Health Research Center, 2009-

Editor, Women's Health Research Center Newsletter, 2009-2013

Member, Institutional Animal Care and Use Committee, 2011-2016

Member, Sub-committee of the Research Advisory Committee for Management of Core Facilities, 2012

Member, Internal Research Support Program Review Committee, Fall 2012, Spring 2013, Spring 2015

Member, Service Learning Committee, School of Graduate Studies in the Health Sciences, 2013

Judge, Graduate Research Day Posters, 2010, 2011, 2013, 2014

Faculty Advisor, Discovery U Outreach, Mississippi Children's Museum, Spring 2014, 2015

Member, GWIMS Steering Committee, 2013-2014

Member, UMMC Medical School Curriculum Committee, 2014-2016

Director of Basic Research, Center for Excellence in Development Disorders Research, 2015-

Member, Executive Committee for the Center for Developmental Disorders Research, 2015-

Member, Medical School Curriculum Development Sub-Committee, 2015, 2016

Member, Graduate Program Review Committee, 2015, 2016

Member, University Promotion and Tenure Committee, 2015-2018

Member, AOA Research Award Committee, 2012, 2013, 2014, 2017

Reviewer, CPN Pilot Grants Program, Spring 2014, Spring 2015, Fall 2015, Spring 2017

Member, MCTTR Small Grants Peer Review Committee, 2017

Reviewer, MCOR Pilot Grants Program, Fall 2017

3. Professional Consultation and Service.

Invited participant, Small for Gestational Age Advisory Board, Pfizer Pharmaceuticals, 2004.

NIH Study section: Renal Urology Special Member Conflicts Meeting, 2004.

Reviewer, External Reviewer, Israel Science Foundation, Spring 2005

Ad-hoc reviewer, NIH Study section: Hypertension and Microcirculatory Study Section, October, 2005.

Reviewer, AHA, Cardiorenal Study Section, April 2008, October 2008, March 2009, October 2009, April 2010, September 2010, Spring 2011, Fall 2011, Spring 2012

Ad-hoc reviewer, NIH, Challenge Grant Applications, Special Emphasis Panel, ZRG1 VH-D (58) R, May 2009.

Member, NIH, College of CSR Reviewers, 2010

External reviewer, Canada Foundation for Innovation Peer Review, Spring 2010.

- External reviewer, Australian Government, National Health and Medical Research Council, June 2010, July 2010.
- Abstract Grader, 7th World Congress on Developmental Origins of Health and Disease, Scientific Review Panel: Abstract Selection, 2011
- External reviewer, College of Veterinary Medicine, Mississippi State University, Office of Research and Graduate Studies, 2011-2012 Internal Grants Program, External Reviewer, July 2011
- External reviewer, The Netherlands Organisation for Health Research and Development (ZonMw) (and The Deutsche Forschungsgemeinschaft (DFG)); External Reviewer Fall 2011.
- Co-Chair, Cardiorenal Basic Science Study Section, American Heart Association, Spring 2012
- Judge, Poster Presentation Travel Awards, sponsored by the Trainee Advisory Committee, Hypertension Council Fall Sessions, Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016.
- Ad-hoc Member, NIH Study section: Hypertension and Microcirculatory Study Section, February, 2013.
- Chair, American Heart Association, Cardiorenal Basic Science Study Section 3, Spring 2013, Fall 2013
- Member, NIH Study section: Hypertension and Microcirculatory Study Section, July 2013-.
- Ad-hoc reviewer, Hartstichting, Dutch Heart Foundation, Summer 2013
- Invited participant, Workshop on the Developmental Origins of Health and Disease (DOHaD): Building on Canada's Unique & Diverse Strengths, Sponsored by the CIHR Institutes of Human Development, Child and Youth Health, of Cancer Research, of Circulatory and Respiratory Health and of Gender and Health, September 19-20, 2013, Toronto, Canada
- Reviewer, NIH, Centers of Biomedical Research Excellence (COBRE), Special Emphasis Panel/Scientific Review Group 2014/01 ZGM1 TWD-C (C3), November 5, 2013.
- Reviewer, NIH, Centers of Biomedical Research Excellence (COBRE), Special Emphasis Panel/Scientific Review Group 2014/01 ZGM1 TWD-C (C1), January 7, 2014.
- Judge, ALVARO OSORIO DE ALMEIDA (AOA) AWARD, Pan American Congress of Physiological Sciences, Brazil, August 2014.
- Abstract Grader, 2014 World Congress for the International Society for the Study of Hypertension in Pregnancy, August 2014
- Reviewer, Center for Scientific Review Special Emphasis Panel, ZRG1 VH-D 02, November 2014
- Reviewer, American Heart Association, Collaborative Science Award LOI Committee, December 2014
- Reviewer, American Heart Association, Strategically Focused Hypertension Network Committee, January 2015
- External Reviewer, Health Research Council of New Zealand Funding Round 2015
- Reviewer, Canadian Institutes of Health Research, Review Committee for Team Grant: DOHaD Implications for Men, Women, Boys and Girls, 2015
- Reviewer, Center for Scientific Review Special Emphasis Panel, ZRG1 VH-D02 IAM, July 2015

Reviewer, NIH, Special Emphasis Hypertension and Microcirculatory, 2016/10 ZRG1 HM-A (02) S, June 2016

Reviewer, NIH, Special Emphasis Panel/Scientific Review Group 2017/05 ZRG1 HM-A (02) S meeting.

Abstract Grader, American Heart Association, Annual High Blood Pressure Research Conference, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Ad-hoc Reviewer, Medical Research Council, UK, July 2017

Ad-hoc Reviewer, Diabetic Complications Consortium, July 2017

4. Journal/Editorial activity.

a. ASSOCIATE EDITOR

Gender Medicine, 2009-Dec 2012

b. GUEST EDITOR

Experimental Diabetes Research; Call for papers: "Impact of Maternal Obesity and Diabetes on Long-Term Health of the Offspring, Fall 2011

Journal of Nutrition and Metabolism, Special Issue: "Developmental Origins of Adult Disease." Winter 2011

c. EDITORIAL BOARD MEMBER:

Hypertension, 2005- (Top Reviewer: 2007, 2008, 2010, 2011, 2012, 2014, 2016)

American Journal of Physiology, Regulatory, Integrative and Comparative Physiology, 2005- (Star Reviewer 2007)

American Journal of Physiology, Renal 2011- (Star Reviewer 2015, 2017)

American Journal of Physiology, Heart and Circulatory Physiology 2012-

Frontiers in Integrative Physiology 2011-

PLOS ONE, 2013-2015

c. AD HOC REVIEWER:

American Journal of Hypertension

American Journal Physiology:

Endocrinology and Metabolism

Heart and Circulatory Physiology

Regulatory, Integrative, and Comparative Physiology,

Renal

Basic & Clinical Pharmacology & Toxicology

Biology of Reproduction

British Journal of Pharmacology

Circulation

Clinical and Experimental Pharmacology and Physiology

Clinical Sciences

Comprehensive Physiology

Current Cardiology Reviews

Current Hypertension Reviews

Diabetologia

Experimental Diabetes Research

Experimental Physiology

Expert Review of Cardiovascular Therapy

Hypertension

Hypertension in Pregnancy

International Journal of Vascular Medicine

Journal of American Society of Nephrology

Journal of Applied Physiology

Journal of Developmental Origins of Health and Disease

Journal of Human Hypertension

Journal of Physiology

Kidney & Blood Pressure Research

Life Sciences

Pediatric Research

Pediatric Nephrology

Physiology

Physiological Genomics

Physiology & Behavior

Physiology Reviews

PloS ONE

Reproduction

Reproduction, Fertility and Development

Reproductive Sciences

The Lancet

Translational Research

Vascular Pharmacology

5. Professional Scientific Society Service

Councilor, Gulf Coast Physiology Society, 2005.

Member, Women in Physiology, APS, 2006-2008, 2012-2014

Member, Communications Committee, APS 2009- 2011

Secretary/Treasurer, Water and Electrolyte Homeostasis Section, American Physiology Society, 2011- 2014

Editor, Water and Electrolyte Homeostasis Section Newsletter, American Physiology Society, 2011- 2014

Editor, American Heart Association, Council for High Blood Pressure Research *Connections* Newsletter, Print and Online Versions, 2011-2013

Member. American Heart Association, Council for High Blood Pressure, Leadership Committee, 2011-

Member, American Heart Association, Council for High Blood Pressure, Membership Committee, 2011-2017

Chair, American Heart Association, Council for High Blood Pressure, Membership Committee, 2014-2016

Councillor, American Physiological Society, 2014-2017

TEACHING/MENTORING:

1. Dissertation Mentor

Jeremy Johnson, Department of Physiology, UMMC, Master's Degree. December 2010.

Joyee Esters, Department of Physiology, UMMC, Master's Degree, 2012

John Henry Dasinger, UMMC PhD, May 2016

APS Abstract Travel Award, Cardiovascular, Renal and Metabolic Disease: Physiology and Gender, 2015.

Graduate School Research Day Poster Presentation Award, UMMC, 2015.

AHA Hypertension council Poster Competition Award Winner, 2015

WEH Section Predoctoral Award Finalist, Experimental Biology 2015, 2016

APS Professional Skills Training Course: Writing and Reviewing for Scientific Journals, 2015.

APS Professional Skills Training Course Travel Stipend Recipient, Professional Integrity: Best Practices for Publishing Your Work, 2014.

Graduate School Research Day Poster Presentation Award, UMMC, 2013.

Ashley Newsome, UMMC 2013-

Caroline Tum Suden/Frances A. Hellebrandt Professional Opportunity Award, American Society of Physiology, 2016

Minority Travel Award, APS, EB2016

Phi Kappa Phi, 2016

F30DK112718, 2017

Gwen Davis, UMMC 2015-

Steven M. Horvath Professional Opportunity Award, EB 2017

Laura Coats, UMMC 2017-

2. Dissertation Committees

Sean Abram, Ph.D., Department of Physiology, UMMC, 2004.

Evelyn Ajelabi, Master's Degree, Department of Physiology, UMMC, 2006.

Sydney Robertson Murphy, PhD, Department of Physiology, UMMC, 2010

Rana Walley, PhD, Department of Health Sciences, UMMC, 2015

Emily Gilbert, PhD, Department of Physiology, UMMC, 2014

Xu Hou, PhD, Neurosciences Program, UMMC, 2015

Victoria Wolf, PhD Candidate 2016-

3. External Dissertation Examiner

Chantal Hoppe, PhD, Department of Anatomy and Developmental Biology, Monash University

Adelle Margaret McArdle, PhD, Department of Anatomy and Developmental Biology, Monash University

Marc Q. Mazzuca, PhD, Department of Physiology, University of Melbourne

Linda Gallo, PhD, Department of Physiology, University of Melbourne

Xiaochu Cai PhD, of Anatomy and Developmental Biology, Monash University

Debra Sue Ying Fong, Department of Physiology, Monash University

4. Trainees.

Post-doctoral Fellows:

Dr. Norma Ojeda, MD, May 2004 – February 2009.

Caroline Tum Suden/Frances A. Hellebrandt Professional Opportunity Award, American Society of Physiology

Investigator Travel Award, Council of High Blood Pressure Research of the American Heart Association

Young Investigator Travel Award, Federation of Associated Societies for Experimental Biology.

Minority Travel Fellowship Award, American Physiology Society

Finalist, Integrative Systems Biology Trainee Award, Water and Electrolyte Homeostasis Section, American Society of Physiology.

Dr. Daniela Grigore, PhD, MD, June 2005 – May 2008.

Dr. Leigh Campbell, MD, July 2008-May 2010

Dr. Suttira Intapad, PhD, September 2010--present.

Post-doctoral Award, American Heart Association

Outstanding Poster Presentation Awardee, Gulf Coast Physiological Society Meeting

2013 Research with Distinction Certificates for Post-Doctoral Trainees, Water & Electrolyte Homeostasis Section, American Physiological Society

2014 Novel Disease Model Awardee from the American Physiological Society

2015 Kidney Council New Investigator Travel Award from the American Heart Association

2014Postdoctoral Fellowship. American Heart Association. Alexander (PI)

Dr. Ana D. Paixao, August 2012-2013

CAPES, Brazil, Post-doctoral Fellowship,2012

Graduate Students

Jeremy Johnson, Master's Student 2009-2010

Joyee Esters, Masters Student 2012-2013

John Henry Dasinger, PhD, 2017

WEH Section Predoctoral Award Finalist, Experimental Biology 2016, San Diego, CA

APS Abstract Travel Award, Cardiovascular, Renal and Metabolic Disease: Physiology and Gender, November 2015.

Graduate School Research Day Poster Presentation Award, UMMC, October 2015.

AHA Poster Competition Award Winner, September 2015, Washington DC

WEH Section Predoctoral Award Finalist, Experimental Biology 2015, Boston, MA

APS Professional Skills Training Course: Writing and Reviewing for Scientific Journals, Orlando, FL, January 2015.

APS Professional Skills Training Course Travel Stipend Recipient, Professional Integrity:

Best Practices for Publishing Your Work, Orlando, FL, January 2014.

Graduate School Research Day Poster Presentation Award, UMMC, October 2013.

Ashley Newsome, MD/PhD student, August 2013-

Dean's Service/William Forrest Hutchinson memorial Award, 2014

Gold Humanism Honor Society Inductee, Arnold P. Gold Foundation, 2015

Funded, NIH F30 Individual MD PhD Fellowship

Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Awards, 2016

APS Minority Travel Fellowship Award, 2016

Phi Kappa Phi Inductee, 2016

Gwen Davis, PhD Student, June 2015-

Steven M. Horvath Professional Opportunity Award, 2017

Laura Coats, PhD Student, June 2017-

Summer Research Project, Mississippi College, MS of Biological Sciences

Josh Black, Summer 2011

Joel Fahling, Summer 2012

Dean's Summer Research Program

Thomas Royals, Medical student, Summer 2010

Charles Runyan, Medical student, Summer 2012

Andrew Brown, Medical student, Summer 2013

William L. Stephen Morgan, Medical student, Summer 2014

Adria Luk, Medical student, Summer 2015

Osasu Adah, Medical student, Summer 2017

Medical Research Scholars Program

Thomas Royals, Medical Student, Fall 2011-2013

AOA Research Award, Spring 2013

2nd Place MRSP Research Day Oral Presentation, Spring 2013

Andrew Brown, Fall 2013-

2015 MD/DO Professional Opportunity Award, American Physiological Society

Base Pair Program (High School Credit Based Research Experience Program):

Antoinette Dawson, January 2003 – May 2005.

Christina Bernard, January 2009-December 2009.

Health Disparities Future Student Summer Research Program

Ashley Newsome, Summer 2011

Summer REO/Mississippi Functional Genomics Network Student Research Program

Contrina Huffman, Summer 2006.

LaTeia Taylor, Summer 2008.

Summer Undergraduate Research Experience Program

Ashley Richard, Summer 2009

Jessica Wiseman, Summer 2010

Elliott Varney, Summer 2011, Summer 2012

Benjamin Rudsenske, Summer 2013

Olivia McNeal, Summer 2014

Nick Bohannon, Summer 2015, Summer 2016

Alyssa Cole, Summer 2017

Summer Undergraduate Student Researchers

Geoff Ferrill, Summers 2004 and 2005

Jamie Bumgardner, Summers 2007 and 2009

LaTeia Taylor, Summer 2010

5. Mentoring:

Mentor-Net

Rasna Sabharwal, University of Iowa, April 2008-December 2008.

Laura Serwer, University of California San Francisco, January - August 2009.

Mary Forman, University of South Carolina, September 2009-May 2010

Baoshan Xu, Louisiana State University, School of Medicine, Shreveport, LA, June 2010-February 2011

Jennifer Sasser, University of Florida, Gainesville, FL, March 2011- November 2011 Kevin S Heffernan, Syracuse University, December 2011-July 2012 Laura Gillman, East Carolina University, July 2012-April 2013 Sarah Baker, University of Arizona, April 2013--January 2014

<u>CHAMP Mentoring Program</u>, Hypertension Council of the American Heart Association Margaret Murphy, PhD, University of Kentucky, September 2015-August 2016

Faculty Development Program, School of Dentistry, UMMC

Dr. Denise Krause, 2008

<u>UMMC Mentoring Program AY2012-2013, Division of Multicultural Affairs</u> Marianne Kerut

UMMC Pediatric Faculty Development Advisory Group

Hua Liu, Assistant Professor of Pediatrics, 2014-current Cindy Karlson, Assistant Professor of Pediatrics, 2013

Evalue Preclinical Advisor Program

Three M1 and three M2 students: 2013-2014, 2014-2015, 2015-2016, 2016-2017

6. Graduate and Medical Teaching.

Dental Physiology ID 725, Renal Physiology Section. Winter 2002, Winter 2003, Winter 2004, Winter 2005, Winter 2006, Winter 2007, Winter 2008: 10 contact hours

Fundamentals of Physiology ID 625/725, Circulation Physiology Section. Winter 2009, Winter 2010, Winter 2011, Winter 2012, Winter 2013, Winter 2014. Winter 2015, Winter 2016: 15 contact hours

Renal Physiology update lectures for Anesthesiology Residents, June 2007. 8 contact hours Graduate Physiology, Molecular and Cellular Physiology, Fall 2003: 2 contact hours

Graduate Physiology, Molecular and Cellular Physiology, Summer 2000: 2 contact hours

Professional Skills for Graduate Students and Postdoctoral Fellows ID 714, 2010, 2011, 2012, 2013, 2014; 2015, 2016, 2017: 4 contact hours

Current Issues in Biomedical Research and Translational Medicine ID 727, 2011, 2012, 201, 2014; 2015, 2016, 2017: 2 contact hours

Medical Student Research Program Summer Seminar Series, 2 contact hours, Summer 2013

Medical Physiology 701, Problem Based Learning, 2014: 4 contact hours; 2015: 8 contact hours, 2016: 4 contact hours

SGSHS sponsored COPD Workshop, "How to prepare a competitive CV," September 2015, 1 contact hour

PHYSIO 717. Circulatory Physiology, Fall 2015, 2016

PHYSIO 731. Renal and Body Fluid Physiology, Spring 2016: 6 contact hours. 2017: 3 contact hours

PHYSIO 727 Physiological Applications of Molecular Biology, Spring 2016, Spring 2017: 3 contact hours

9. Educational based or career development seminars.

Invited Speaker, Career Opportunity and Professional Development Lecture Series sponsored by the School of Graduate Studies in the Health Sciences, "The First Step to Success: Prepare a Competitive CV", University of Mississippi Medical Center, Fall 2015

Panelist, UMMC Mid-Career Women Professional Development Workshop, May 31, 2017

8. Community Outreach

Physiology Understanding Week (PhUn), Fall 2011, Fall 2012, Fall 2013, Fall 2014, Fall 2016

- Co-Co-Coordinator, Physiology Understanding Week (PhUn) at the Mississippi Children's Museum Event Fall 2013, Fall 2014, Fall 2016
- Co-Coordinator, School of Graduate Studies Discovery U Community Outreach at the Mississippi Children's Museum Event, Spring 2014, Spring 2015.

Expert Contributor to PhysiologyInfo.org. 2009-2012

RESEARCH:

1. Funding.

Current.

- P20GM121334, National Institutes of Health, National Institute of General Medical Science, \$2,283,522, Role: Basic Science Core Director, Mentor, Mississippi Center of Excellence in Perinatal Research. Reckelhoff (PI), 06/08/2017-05/31/2022
- P01-HL51971, National Institutes of Health. National Heart Lung and Blood Institute, \$1,491,245, Role: Core Leader, Cardiovascular dynamics and their control. Hall (PI) 01/01/2014-12/31/2019.
- 1P20GM104357, National Institutes of Health, National Institute of General Medical Science, \$2,278,362, Role: Core Leader & Mentor, Cadiorenal and Metabolic Diseases Research Center. 09/07/201308/31/2017
- R01HL137791, National Institutes of Health. National Heart Lung and Blood Institute, \$1,345,500; Role: Co-Investigator, A novel therapy of preeclampsia. George (PI). 07/01/2017-5/31/2022
- R01HL121527, National Institutes of Health. National Heart Lung and Blood Institute, \$1,345,500; Role: Co-Investigator, A novel protein delivery system for therapy of preeclampsia. Bidwell (PI). 01/01/2014-12/31/2019
- UMMC IRSP, \$30,000, Role: Principal Investigator. Low birth weight and Kidney Disease: epigenetic Processes and Therapeutic Interventions, 01/01/2015-12/31/2017.

Previous.

- GRNT19900004. American Heart Association Grant in Aid, \$165,000, Role: Principal Investigator. Age dependent hypertension in female growth restricted rats. 07/01/2014-06/30/2017.
- R01-HL074927. National Institutes of Health. National Heart Lung and Blood Institute. \$1,665,000, Role: Principal Investigator. Low birth weight, the kidney, and hypertension. 09/01/2004-04/30 2016
- R2HL109763, National Institutes of Health. National Heart Lung and Blood Institute, \$186,875, Role: Co-Investigator, Preeclampsia, IUGR and Hypertension: Targets for Treatment. Granger (PI). 08/012012-07/31/2014.

- P20MD002725. National Institutes of Health, National Center on Minority Health and Health Disparities, \$350,000, Role: Collaborator, Research Infrastructure in Minority Institutions (RIMI) at Tougaloo College. 10/01/2007-09/30 2011.
- P20RR017701 Intramural Funding, University of Mississippi Medical Center, \$17,500, Role: Principal Investigator, COBRE Pilot Studies, Pilot Study 1, 07/012011-06/30/2012.
- 3R01HL074927-05A2S1, National Institutes of Health. National Heart Lung and Blood Institute, AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009, Supplement for Summer Undergraduate Research Position. \$14,297, Role: Principal Investigator, Low birth weight the kidney and hypertension, Summers 2009 and 2010.
- R01-HL38499. National Institutes of Health. National Heart Lung and Blood Institute, Role: Co-Investigator, Abnormal Pressure Natriuresis in Hypertension, 01/01/2006-12/31/2011.
- 5P20RR016476. National Institutes of Health, National Center for Research Resources. Role: Mentor and Research Advisor to Undergraduate Professor, Mississippi Functional Genomics Network. May 2009.
- Howard Hughes Medical Institute, Base Pair Program University of Mississippi Medical Center, Role: Mentor High School Researcher. January 2003, August 2004, August 2005, January 2009.
- National Institutes of Health, National Center for Research Resources. Role: Mentor Summer Undergraduate Researcher. Mississippi Functional Genomics Network. Summer 2006, Summer 2008.
- Intramural Research Support Program University of Mississippi Medical Center, \$12,000, Role: Principal Investigator. Low birth weight, the kidney, and hypertension. November 2003.
- Beginning Grant-in-Aid, Southeast Affiliate American Heart Association. \$100,000, Role Principal Investigator. Role of relaxin and nitric oxide synthase isoforms in mediating renal vasodilation during pregnancy in the rat. July 2001, July 2002.
- National Research Service Award, National Institutes of Health. Role: Post-doctoral Fellowship. Cardiovascular-Renal Mechanisms of Hypertension, February 1999, February 2000, and February 2001
- R01-HL38499. National Institutes of Health. National Heart Lung and Blood Institute, Role: Investigator, Abnormal Pressure Natriuresis in Hypertension, January 2006, January 2007 January 2008, January 2009, and January 2010.

2. Oral Presentations and Invited Participation in Scientific Meetings.

- Judge, Junior Investigator Poster Presentation, Council on Hypertension Annual Meeting, San Francisco, CA September 14, 2017
- Chair, Council on Hypertension Annual Meeting, San Francisco, CA September 17, 2017
- Chair, APS President's Symposium Series: Research Advances in Sex/Gender and Developmental Programming of Chronic Diseases. Developmental Programming of Diseases, EB 2017, Chicago IL, April 25, 2017
- Symposium Speaker, Session: Adverse experiences and sex-based differences in cardiorespiratory function, OSSD 2017, Montreal CA, May 5, 2017
- Invited Speaker, Session 3: Sex Steroids and Kidney disease, FASEB Summer Research Conference, Renal Hemodynamics and Cardiovascular Function in Health & Disease, June 2016, Big Sky, MT

- Symposium Speaker, Session: Early life stress and sex-specific manifestations of cardiorespiratory dysfunction: insight from microglial cells, Experimental Biology 2016, San Diego, CA
- Invited Speaker, International Symposia on the Fetal Origins of Obesity and Metabolic Programming, Morelia, Mexico, November 13, 2015.
- Invited Speaker, Session VII, Developmental Programming of Cardiovascular Diseases, Hypertension 2015 Scientific Sessions, Washington DC, September 16, 2015
- Judge, Poster Presentation Travel Awards, Sponsored by the Trainee Advisory Committee, Council for Hypertension Scientific Sessions, September 16, 2015.
- Invited Symposium Speaker, 2015, Asian Congress of Nutrition, Yokohama, Japan, May 17, 2015
- Invited Speaker, 2014 World Congress for the International Society for the Study of Hypertension in Pregnancy, New Orleans, October 28, 2014
- Keynote Speaker: The impact of nutritional insults during fetal life on blood pressure, Summer School on Nutrigenomics, Camerino, Italy, September 3, 2014.
- Organizing Committee, American Physiological Society Sponsored Cardiovascular, Renal and Metabolic Diseases: Physiology and Gender, Annapolis, MD, November 17-20, 2015.
- Organizing Committee, FASEB Summer Research Conference, 'New Frontiers in Kidney Research', Big Sky, MT, Summer 2016
- Judge, Poster Presentation Travel Awards, Sponsored by the Trainee Advisory Committee, Council for Hypertension Research Fall Sessions, September 9, 2014.
- Invited Speaker, Symposium: Novel Actions of Sex Steroids, 1st PanAmerican Congress of Physiological Sciences, Fos de Iguacu, August 5, 2014.
- Invited Speaker, Symposia: Sex Disparities in Cardiovascular Disease: Implications for Prevention, Prognosis, and Treatment, Experimental Biology, San Diego, CA, April 30,2014
- Table Leader, Networking Breakfast for the APS Minority Travel Fellows: Networking, Experimental Biology 2014, San Diego, CA, April 28, 2014
- Judge, Poster Presentation Travel Awards, Sponsored by the Trainee Advisory Committee, Council for High Blood Pressure Research Fall Sessions, Fall 2013.
- Invited Symposium Speaker and Session Organizer, Developmental programming of cardiovascular and renal disease in adulthood, IUPS, July 2013, Birmingham England.
- Table Leader, Networking Breakfast for the APS Minority Travel Fellows: CVs, Experimental Biology 2013, Boston MA, April 22, 2013
- Moderator: Poster session I: Pregnancy and Preeclampsia, High Blood Pressure Research 2012 Scientific Sessions, Washington, D.C., September 19, 2012.
- Chair, Origins of impaired cardiovascular-renal function and body fluid balance. Experimental Biology 2012, San Diego., April 23, 2012.
- Moderator: Poster session: Pregnancy and Preeclampsia. High Blood Pressure Research 2011 Scientific Sessions, Orlando, FL, September 23, 2011.
- Organizing Committee, 2011 APS Conference: Physiology Cardiovascular Disease: Gender Disparities, Jackson MS, Oct 12-14, 2011.
- Invited Speaker, Symposium VI: Sex differences in peripheral influences on cardiovascular control, 2011 Annual Meeting of the Organization for the Study of Sex Differences, Oklahoma City, OK, June 4, 2011.

- Organizer, Moderator, and Speaker, Developmental programming of renal and cardiovascular disease in adults. Experimental Biology 2011, Washington, D.C., April 11, 2011.
- Moderator, Concurrent Session III A: Impact of Fetal and Neonatal Environment on Adult Obesity, Global Obesity Summit, Jackson, MS, November 10, 2010.
- Moderator: Poster session: Gender and Hypertension, High Blood Pressure Research 2010 Scientific Sessions, Washington, D.C., October 2010.
- Invited Speaker, Session: Developmental and Fetal Programming, South East Lipids Research Conference, Callaway Gardens, GA, October 2010.
- Invited Speaker, and Member, Program Committee, FASEB Summer Research Conference, Renal Hemodynamics: Mechanisms to Understand Renal Disease, Saxtons River VT, June 2010.
- Session Chair and Moderator, Sex Steroids in Cardiovascular –Renal Physiology and Pathophysiology, Experimental Biology, Anaheim CA; April 27, 2010.
- Oral Presentation, Sex Steroids and Gender in Cardiovascular –Renal Physiology and Pathophysiology / APS Conference, Broomfield, CO, July 17, 2009.
- Session Chair and Organizer: Mentoring Symposium, Pathways to Leadership: Developing Critical Skills, Women in Physiology, Experimental Biology, April 21, 2009, New Orleans, LA.
- Invited Symposium Speaker: Cardiovascular Disease in Women, Jackson Cardiovascular-Renal Meeting, Jackson, MS, October 18, 2008.
- Moderator: Poster session: Vasoactive Mediators and Autacoids (Poster III), 62nd High Blood Pressure Research Conference 2008 in association with the Council on the Kidney in Cardiovascular Disease, September 19, 2008, Atlanta, GA.
- Invited Symposium Speaker: The A. Clifford Barger Memorial Symposium, The Kidney: Aging, Apoptosis, Endocrine Sensitivity and the Kidney's Role in Hypertension, 2008 Experimental Biology, April 6, 2008, San Diego, CA.
- Moderator: Sex, Pregnancy and Hypertension, 61st Annual High Blood Pressure Research Conference 2007 in association with the Council on the Kidney in Cardiovascular Disease, September 27, 2007, Tucson, AZ.
- Invited Symposium Speaker and Moderator, 2007 APS Conference Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology, August 12, 2007, Austin, TX.
- Invited Symposium Speaker: XVIIth Scientific Sessions of the Inter-American Society of Hypertension and joint sessions with COSEHC, May 8, 2007, Miami Beach, Fl.
- Chair, Concurrent Oral Session III: Hot topics in Cardiovascular Health; and Chairperson: Pregnancy and Gender Differences Poster Session, XVIIth Scientific Sessions of the Inter-American Society of Hypertension and the Consortium for Southeastern Hypertension Control, May 8, 2007, Miami Beach, Fl.
- Invited Symposium Speaker: American Society of Nephrology, November 18, 2006, San Diego, CA.
- Invited Symposium Speaker: Fetal programming of hypertension, Role of the kidney. XXVI Annual Course of Update in Nephrology, June 21, 2006, Mexico City, Mexico.
- Invited Symposium Speaker: Fetal programming of hypertension, Gender differences. XXVI Annual Course of Update in Nephrology, June 21, 2006, Mexico City, Mexico.

- Invited Speaker, Workshop on Sex Differences in Hypertension and Cardiovascular and Renal Disease, Center for the Study of Sex Differences in Health, Aging and Disease, September 24, 2005, Georgetown University, Washington DC.
- Oral Presentation, Experimental Biology. April 2005. San Diego, CA.
- Moderator: Oral Session IV: Experimental Models, 57th Annual Fall Conference and Scientific Sessions of the Council for High Blood Pressure Research in association with the Council on the Kidney in Cardiovascular Disease, September, 2003, Washington, DC.
- Oral Presentation, 18th Annual Scientific Meeting of the American Society of Hypertension. May 17, 2003. New York, NY.
- Oral Presentation, American Society of Hypertension, New York, NY, May 2000.
- Oral Presentation, XIV Scientific Meeting of the Inter-American society of Hypertension. March 26, 2001, Santiago Chile.
- Oral Presentation, 54th Annual Fall Conference and Scientific Sessions of the Council for High Blood Pressure Research, American Heart Association. October 25, 2000. Washington, D.C.
- Oral Presentation, 18th Scientific Meeting of the International Society of Hypertension. August 22, 2000. Chicago, IL, USA.
- Oral Presentation, Experimental Biology. April 20, 1998. San Francisco, CA.

3. Invited Seminars.

Tougaloo College, Departments of Chemistry and Biology, Tougaloo MS, January 27, 2017

University of Kentucky, Keynote Speaker, Healthy Hearts for Women Symposium, March 4, 2016

Department of Pharmacology and Nutritional Sciences, University of Kentucky, March 3, 2016 Waseda University, Tokyo, Japan, May 15, 2015

Wake Forest School of Medicine Symposium, "Sex Differences in Translational Medicine," Wake Forest School of Medicine, NC, April 29, 2015.

Department of Pharmacology and Toxicology, UMMC, December 8, 2014.

Department of Neurobiology and Anatomical Sciences, UMMC, November 11, 2014.

Department of Pharmacology, Virginia Commonwealth University, Richmond, VA, September 25, 2014.

Department of Physiology, Tulane University, New Orleans, LA, April 12, 2014.

Invited seminar for "Women in STEM" sponsored by Mississippi EPSCOR, April 9, 2014, Department of Biology, Tougaloo College, Tougaloo, MS

Department of Medicine, Georgia Regents University, Augusta, GA, March 6, 2014.

Summer Research Seminar, Summer Undergraduate Research Program, School of Graduate Studies in the Health Sciences, University of Mississippi Medical Center, June 22, 2012.

Department of Pharmacology, University of Mississippi Medical Center, Jackson, MS, February 13, 2012.

Nutritional Sciences Seminar, Graduate Center for Nutritional Sciences, University of Kentucky, Lexington, KY; February 10, 2010.

Cardiovascular Research Institute Seminar Series, Morehouse School of Medicine, March 17, 2009, Atlanta, Ga.

Department of Physiology and Medicine, Wayne State University, March 5, 2009, Detroit, MI.

Go Red for Women, American Heart Association and the Office of Research, University of Mississippi Medical Center, January 23, 2009, Jackson MS.

Department of Biochemistry, University of Mississippi Medical Center, Jackson, MS, November 13, 2008.

Department of Biology, Mississippi State University, Ms. State, MS, September 26, 2008.

Department of Biological Sciences, Tougaloo College, Tougaloo, MS, October 27, 2006.

University of Mississippi Medical Center Research Series, December 1, 2005.

Gender Based Research Symposium, Center of Excellence in Women's Health, University of Mississippi Medical Center, October 27, 2005.

Department of Biochemistry, University of Mississippi Medical Center, September 15, 2005.

Mississippi State University. February 2, 2005. Ms. State, MS.

Small for Gestational Age Advisory Board, Pfizer Pharmaceuticals. December 6, 2004. London, UK.

Women's Research Symposium, September 23, 2004. UMMC, Jackson, MS.

Department of Integrative Physiology, The University of North Texas Health Science Center, April, 1999.

4. Publications. (Dr. Alexander has published under the following names:

B. T. Alexander, B. A. Thompson, and B. T. Dyess)

- 1. Newsome AD, Davis GK, Ojeda NB, **Alexander BT**. Complications during pregnancy and fetal development: implications for the occurrence of chronic kidney disease. *Expert Rev Cardiovasc Ther*. 2017 Mar;15(3):211-220
- 2. Davis GK, Newsome AD, Ojeda NB, Alexander BT. Effects of intrauterine growth restriction and female sex on future blood pressure and cardiovascular disease. Curr Hypertens Rep. 2017; 19:13 doi:10.1007/s11906-017-0712-7
- 3. Dasinger JH, Davis GK, Newsome AD, **Alexander BT**. Developmental Programming of Hypertension: Physiological Mechanisms. *Hypertension*. 2016;68(4):826-831.
- 4. Dasinger JH, Intapad S, Backstrom MA, Carter AJ, **Alexander BT**. Intrauterine growth Restriction programs accelerated age-related increased cardiovascular risk in male offspring. *Am J Physiol Renal Physiol* 2016;311(2):F312-F319.
- 5. Dasinger JH, Intapad S, Rudenske BR, Davis GK, Newsome AD, **Alexander BT**. Chronic blockade of the androgen receptor abolished age-dependent increases in blood pressure in female growth-restricted rats. *Hypertension* 2016;67(6):1281-1290.
- 6. Intapad S, Dasinger JH, Brown AD, Fahling JM, Esters J, **Alexander BT.** Glucose intolerance develops prior to increased adiposity and accelerated cessation of estrous cyclicity in female growth-restricted rats. *Pediatr Res.* 2016;79:962–970.
- 7. Dasinger JH, **Alexander BT.** Gender differences in developmental programming of cardiovascular diseases. *Clin Sci (Lond)*. 2016;130 (Part 5), Pages: 337-348
- 8. Intapad S, Ojeda NB, Varney ET, Royals TP, **Alexander BT**. Sex-specific effect of endothelin in the blood pressure response to acute angiotensin II in growth-restricted rats. *Hypertension*. 2015,66:1260-1266.
- 9. **Alexander BT**. The Impact of Nutritional Insults during Fetal Life on Blood Pressure. *J Nutr Sci Vitaminol (Tokyo)*. 2015;61 Suppl:S5-6.
- 10. Dasinger JH, Intapad S., **Alexander BT.** Fetal Programming and Cardiovascular Pathology. *Compr Physiol.* 2015;5(2):997-1025.

- 11.Intapad S, Warrington JP, Spradley FT, Palei AC, Drummond HA, Ryan MJ, Granger JP, **Alexander BT**. Reduced uterine perfusion pressure induces hypertension in the pregnant mouse. *Am J Physiol Regul Integr Comp Physiol*. 2014; 307(11):R1353-R1357.
- 12. **Alexander BT,** Dasinger JH, Intapad S. Effect of low birth weight on women's health. *Clin Therapeutics*. 2014; 36(12):1913-1923.
- 13. **Alexander BT**. The secret to getting your foot in the door: the academic job search portfolio. *The Physiologist*, 2014;57:151-156.
- 14. Intapad S, Ojeda NB, Dasinger JH, **Alexander BT**. Sex differences in the developmental origins of cardiovascular disease. *Physiology*. 2014;29(2):122-32.
- 15. Ojeda NB, Intapad S, **Alexander BT**. Sex differences in the developmental programming of hypertension. *Acta Physiol (Oxf)*. 2013 210:307-316.
- 16. Hennington BS, **Alexander BT**. Linking IUGR and Blood Pressure: Insight into the Human Origins of Cardiovascular Disease. *Circulation*. 2013;128(20):2179-2180.
- 17. Paixão AD, **Alexander BT**. How the Kidney Is Impacted by the Perinatal Maternal Environment to Develop Hypertension. *Biol Reprod*. 2013;89(6):144,1-10.
- 18. Intapad S, **Alexander BT**. Activation of the sympathetic nervous system, is it key to the developmental origins of enhanced cardiovascular risk? *Am J Physiol Renal Physiol*. 2013; 305(5):F641-F642.
- 19. Intapad S, **Alexander BT**. Pregnancy Complications and Later Development of Hypertension. *Curr Cardiovasc Risk Rep.* 2013, 7:183-189.
- 20. Intapad S, Tull FL, Brown AD, Dasinger JH, Ojeda NB, Fahling JM, **Alexander BT**. Renal Denervation Abolishes the Age-Dependent Increase in Blood Pressure in Female Intrauterine Growth-Restricted Rats at 12 Months of Age. *Hypertension*. 2013;61(4):828-834.
- 21. Ojeda NB, Royals TP, **Alexander BT.** Sex differences in the enhanced responsiveness to acute angiotensin II in growth-restricted rats: Role of fasudil, a Rho kinase inhibitor. *Am J Physiol Renal Physiol*. 2013;304(7):F900-F907.
- 22. Intapad S, **Alexander BT**. Future Cardiovascular Risk: Interpreting the Importance of Increased Blood Pressure during Pregnancy. *Circulation*. 2013;127(6):668-9.
- 23. Flynn ER, **Alexander BT**, Lee J, Hutchens ZM Jr, Maric-Bilkan C. High fat/fructose feeding during prenatal and postnatal development in female rats increases susceptibility to renal and metabolic injury later in life. *Am J Physiol Regul Integr Comp Physiol*. 2013; 304(4):R278-R285
- 24.Ojeda NB, Hennington BS, Williamson DT, Hill ML, Betson NE, Sartori-Valinotti JC, Reckelhoff JF, Royals TP, **Alexander BT**. Oxidative stress contributes to sex differences in blood pressure in adult growth-restricted offspring. *Hypertension*. 2012: 60:114-122.
- 25.Langley-Evans SC, **Alexander B**, McArdle HJ, Sloboda DM. Developmental origins of health and disease. *J Nutr Metab.* 2012: 2012:838640.
- 26.Campbell LR, Pang Y, Ojeda NB, Zheng B, Rhodes PG, **Alexander BT**. Intracerebral lipopolysaccharide induces neuroinflammatory change and augmented brain injury in growth-restricted neonatal rats. *Pediatr Res.* 2012;71:645-652
- 27. Intapad **S, Alexander BT** The double hit of growth restriction: its origins and outcome on this generation and the next. *J Physiol*. 2012;590(Pt 5):1019.
- 28.Maric-Bilkan C, Symonds M, Ozanne S, **Alexander BT**. Impact of maternal obesity and diabetes on long-term health of the offspring. *Exp Diabetes Res.* 2011;302:F774-F783

- 29. Jackson CM, **Alexander BT**, Roach L, Haggerty D, Marbury DC, Hutchens ZM, Flynn ER, Maric-Bilkan C. Exposure to maternal overnutrition and a high fat diet during early postnatal development increases susceptibility to renal and metabolic injury later in life. *Am J Physiol Renal Physiol*. 2012; 302:F774-F783.
- 30. **Alexander BT**, Intapad S. Preterm Birth: A Novel Risk Factor for Higher Blood Pressure in Later Life. *Hypertension*. 2012;59:189-190.
- 31. Ojeda NB, Intapad S, Royals TP, Black JT, Dasinger JH, Tull FL, **Alexander BT**. Hypersensitivity to acute angiotensin II in female growth-restricted offspring is exacerbated by ovariectomy. *Am J Physiol Regul Integr Comp Physiol*. 2011;301(4):R1199-R1205
- 32. **Alexander BT**. Gender medicine in the field of developmental origins of adult disease. *Gend Med.* 2010;7(5):379-380.
- 33. **Alexander BT**. Early life exposure to hypoxia: a developmental insult critical to the programming of cardiovascular risk. *Am J Hypertens*. 2010;23(11):1158.
- 34. **Alexander BT**. Is maternal blood pressure the key to vascular dysfunction in preterm offspring with elevated blood pressure? *Hypertension*. 2010;56(1):34-35.
- 35.Ojeda NB, Royals TP, Black JT, Dasinger JH, Johnson JM, **Alexander BT.** Enhanced sensitivity to acute angiotensin II is testosterone dependent in adult male growth-restricted offspring. *Am J Physiol Regul Integr Comp Physiol*. 2010; 298:1421-1427
- 36.**Alexander BT.** Epigenetic changes in gene expression. Focus on "The Liver X-Receptor (LXR) gene promoter is hypermethylated in a mouse model of prenatal protein restriction" *Am J Physiol Regul Integr Comp Physiol*. 2010;298(2):R272-274.
- 37. Nuyt AM, **Alexander BT.** Developmental programming of hypertension. *Curr Opin Nephrol Hypertens*. 2009;18(2):144-52.
- 38. **Alexander BT.** Developmental programming of sex-dependent alterations in lipid metabolism: A role for long-term, sex-specific alterations in LDL receptor expression. *Am J Physiol Regul Integr Comp Physiol.* 2009;296(4):R1027-8.
- 39. **Alexander BT,** Ojeda NB. Prenatal inflammation and the early origins of hypertension. *Clin Exp Pharmacol Physiol*. 2008;35(12):1403-4.
- 40. **Alexander BT**, Ojeda NB. Slow pre-natal growth; accelerated post-natal growth: Critical influences on adult blood pressure. *Hypertension*. 2008;52:1-2.
- 41. Ojeda NB, Grigore D, **Alexander BT**. Developmental programming of hypertension: Insight from animal models of nutritional manipulation. *Hypertension*. 2008;52:44-50.
- 42. Ojeda NB, Grigore D, Hennington BS, Alexander BT. Prenatal programming of hypertension. *Brazilian Journal of Hypertension*. 2008;15(1):3-8.
- 43.Ojeda NB, Grigore D, **Alexander BT**. Role of fetal programming in the development of hypertension. *Future Cardiol*. 2008;4(2):163-174.
- 44. **Alexander BT**. Mentoring Forum: Early years and planning for tenure review. *The Physiologist*. 2008;51(2):64-65.
- 45. Grigore D, Ojeda NB, **Alexander BT**. Sex differences in the fetal programming of hypertension. *Gend Med.*, 2008; 5(Suppl A): S121-S132.
- 46.LaMarca BB, **Alexander BT**, Gilbert JS, Ryan MJ, Sedeek M, Murphy SR, Granger JP. Pathophysiology of Hypertension in Response to Placental Ischemia during Pregnancy: A Central Role for Endothelin? *Gend Med.* 2008; 5(Suppl A): S133-S138.
- 47. Ojeda NB, Grigore D, **Alexander BT**. Intrauterine growth Restriction: Fetal programming of hypertension and kidney disease. *Adv Chronic Kidney Dis.* 2008;15(2):101-106.

- 48.Ojeda NB, Grigore D, Robertson EB, **Alexander BT.** Estrogen protects against increased blood pressure in postpubertal female growth restricted offspring. *Hypertension*. 2007; 50:679-685.
- 49. Ojeda NB, Johnson WR, Dwyer TM, **Alexander BT.** Early renal denervation prevents development of hypertension in growth-restricted offspring. *Clin Exp Pharmacol Physiol*, 2007;34:1212-1216.
- 50. **Alexander BT.** Divergent pathways of programming: Pre-natal versus post-natal protein undernutrition. *Am J Physiol Regul Integr Comp Physiol*. 2007;293(3):R1257-1258.
- 51. **Alexander BT.** Divergent origins of slow fetal growth. Relevance to adult cardiovascular disease. *Hypertension*. 2007;50(3):465-466.
- 52. Grigore D, Ojeda NB, Robertson EB, Dawson AS, Huffman C, Bourassa E, Speth RC, Brosnihan, KB, **Alexander BT**. Placental insufficiency results in temporal alterations in the renin angiotensin system in male hypertensive growth restricted offspring. *Am J Physiol Regul Integr Comp Physiol*. 2007;293(2):R804-R811.
- 53. Joyner J, Neves LA, Granger JP, **Alexander BT**, Merrill DC, Chappell MC, Ferrario CM, Davis WP, Brosnihan KB. Temporal-spatial expression of angiotensin-(1-7) and angiotensin converting enzyme 2 in the kidney of normal and hypertensive pregnant rats. *Am J Physiol Regul Integr Comp Physiol*, 2007;293(1):R169-R177.
- 54. **Alexander BT.** Pre-natal influences and endothelial dysfunction: a link between reduced placental perfusion and preeclampsia. Hypertension, 2007;49(4):775-6.
- 55.Ojeda NB, Grigore D, Yanes LL, Iliescu R, Robertson EB, Zhang H, **Alexander BT.** Testosterone contributes to marked elevations in mean arterial pressure in adult male intrauterine growth restricted offspring. *Am J Physiol Regul Integr Comp Physiol.* 2007;292(2):R758-63.
- 56. **Alexander, BT**. Fetal Programming of Hypertension, *Am J Physiol*; 2006;290(1):R1-R10.
- 57. Lamarca BB, Bennett WA, **Alexander BT**, Cockrell K, Granger JP. Hypertension Produced by Reductions in Uterine Perfusion in the Pregnant Rat. Role of Tumor Necrosis Factor-{alpha}. *Hypertension*, 2005; 46(4):1022-1025.
- 58. **Alexander BT**, Hendon AE, Ferril G, Dwyer TM. Renal denervation abolishes hypertension in low birth weight offspring from pregnant rats with reduced uterine perfusion. *Hypertension*, 2005, 45(2):754-758.
- 59. **Alexander BT**, Llinas MT, A., Kruckeberg WC, and Granger JP.L-arginine attenuates hypertension in pregnant rats with reduced uterine perfusion pressure. *Hypertension*, 2004;43(4):832-836.
- 60.Llinás MT, **Alexander BT**, Capparelli MF, Carroll MA and Granger JP. Cytochrome P-450 inhibition attenuates hypertension and renal vasoconstriction induced by chronic reductions in uterine perfusion pressure in pregnant rats. *Hypertension*, 2004;43(3):623-628.
- 61. Payne JA, **Alexander BT**, Khalil RA. Decreased endothelium-dependent NO-cGMP vascular relaxation and hypertension in growth-restricted rats on a high-salt diet. *Hypertension*, 2004;43(2):420-7.
- 62. **Alexander, BT.** Intrauterine growth restriction and reduced glomerular number: role of apoptosis. *Am J Physiol Regul Integr Comp Physiol*, 2003;285(5):R933-4.
- 63. Sedeek MH, Llinas MT, Drummond H, Fortepiani L, Abram SR, **Alexander BT**, Reckelhoff JF, and Granger JP. Role of reactive oxygen species in endothelin-induced hypertension. *Hypertension*, 2003;42(4):806-10.

- 64. Payne JA, **Alexander BT**, and Khalil RA. Reduced endothelial vascular relaxation in growth-restricted offspring of pregnant rats with reduced uterine perfusion. *Hypertension*. 2003;42(4):768-74.
- 65.Moore LE, Wallace KL, **Alexander BT**, May WL, Thigpen BD, Bennett WA. Reduced placental perfusion causes an increase in maternal serum leptin. *Placenta*, 2003;24(8-9):877-81.
- 66. **Alexander, BT.** Placental insufficiency leads to development of hypertension in growth restricted offspring. *Hypertension*, 2003;41(3):457-462.
- 67.Llinas MT, **Alexander BT**, Seedek M, Abram SR, Crell A, and Granger JP. Enhanced thromboxane synthesis during chronic reductions in uterine perfusion pressure in pregnant rats. *Am J Hypertens*, 2002;15(9):793-797.
- 68.Granger JP, **Alexander BT,** Llinas MT, Bennett WA, and Khalil RA. Pathophysiology of preeclampsia: linking placental ischemia/hypoxia with microvascular dysfunction. *Microcirculation*, 2002;9:147-160.
- 69. Granger JP, **Alexander BT**, Llinas M. Mechanisms of pressure natriuresis. *Curr Hypertens Rep*, 2002;4(2):152-159.
- 70. **Alexander BT,** Cockrell K.L., Cline FD, and Granger JP. Inducible nitric oxide synthase inhibition attenuates renal hemodynamics during pregnancy. *Hypertension*, 2002;39(2 Pt 2):586-590.
- 71. **Alexander BT**, Cockrell KL, Massey M.B, Bennett WA, and Granger JP. Tumor necrosis factor-alpha induced hypertension in pregnant rats results in decreased renal neuronal nitric oxide synthase expression. *Am J Hypertens*, 2002;15(2 Pt 1):170-175.
- 72. Davis JR, Giardina JB, Green GM, **Alexander BT**, Granger JP, and Khalil RA. Reduced endothelial NO-cGMP vascular relaxation pathway during TNF-alpha-induced hypertension in pregnant rats. *Am J Physiol Regul Integr Comp Physiol*, 2002;282(2):R390-R399.
- 73. **Alexander BT**, Bennett WA, Khalil RA, and Granger JP. Preeclampsia: linking placental ischemia with cardiovascular-renal dysfunction. *News Physiol Sci*, 2001;16:282-286.
- 74. Abram SR, **Alexander BT**, Bennett WA, Granger JP. Role of neuronal nitric oxide synthase in mediating renal hemodynamic changes during pregnancy. *Am J Physiol Regul Integr Comp Physiol*, 2001;281(5):R1390-1393.
- 75. **Alexander BT**, Cockrell K, Cline FD, Llinas MT, Sedeek M, and Granger JP. Effect of angiotensin II synthesis blockade on the hypertensive response to chronic reductions in uterine perfusion pressure in pregnant rats. *Hypertension*, 2001;38:742-745.
- 76.Granger JP, **Alexander BT**, Llinas MT, Bennett WA, and Khalil RA. Pathophysiology of hypertension during preeclampsia linking placental ischemia with endothelial dysfunction. *Hypertension*, 2001;38(3 Pt 2):718-722.
- 77. **Alexander BT**, Rinewalt AN, Cockrell KL, Bennett WA, and Granger JP. Endothelin type A receptor blockade attenuates the hypertension in response to chronic reductions in uterine perfusion pressure. *Hypertension*, 2001;37(2 Part 2):485-489.
- 78. **Alexander BT**, Kassab SE, Miller MT, Abram SR, Reckelhoff JF, Bennett WA, and Granger JP. Reduced uterine perfusion pressure during pregnancy in the rat is associated with increases in arterial pressure and changes in renal nitric oxide. *Hypertension*, 2001;37(4):1191-1195.
- 79. Granger JP, **Alexander BT**, Bennett WA, and Khalil RA. Pathophysiology of pregnancy-induced hypertension. *Am J Hypertens*, 2001;14(6):178S-185S.

- 80. **Alexander BT**. Cockrell KL, Rinewalt AN, Herrington JN, and Granger JP. Enhanced renal expression of preproendothelin mRNA during chronic angiotensin II hypertension. *Am J Physiol Regul Integr Comp Physiol*, 2001;280(5):R1388-R1392.
- 81. Kanashiro CA, Cockrell KL. **Alexander BT,** Granger JP, and Khalil RA. Pregnancy-associated reduction in vascular protein kinase C activity rebounds during inhibition of NO synthesis. *American Journal of Physiology Integr Comp Physiol*, 2001;278(2): R295-303.
- 82. Granger JP and **Alexander BT.** Abnormal pressure-natriuresis in hypertension: role of nitric oxide. *Acta Physiol Scand*, 2000;168(1):161-168.
- 83. Granger JP and **Alexander BT.** Pathogenesis of pregnancy-induced hypertension. *Current concepts in hypertension*, 1999;3(4):5-6
- 84.Gunjan A, **Alexander BT**, Sittman DB, and Brown DT. Effects of H1 histone variant overexpression on chromatin structure. *J Biol Chem*, 1999;274(53):37950-37956.
- 85. Kanashiro CA, **Alexander BT**, Granger JP, and Khalil RA. Ca²⁺-insensitive vascular protein kinase C during pregnancy and NOS inhibition. *Hypertension*, 1999;34(2):924-930.
- 86. **Alexander BT**, Miller TM, Kassab S, Novak J, Reckelhoff JF, Kruckeberg WC, and Granger JP. Differential expression of renal nitric oxide synthase isoforms during pregnancy in rats. *Hypertension*, 1999;33(part II):435-439.
- 87. Brown DT, Gunjan A, **Alexander BT**, and Sittman DB. Differential effect of H1 variant overproduction on gene expression is due to differences in the central globular domain. *Nucleic Acids Research*, 1997;25:5003-5009.
- 88. Brown D.T, **Alexander BT**, and Sittman DB. Differential effect of H1 variant overexpression on cell cycle progression and gene expression. *Nucleic Acids Research*, 1996;24:486-493.
- 89. Olson MOJ, Rivers, Z.M, **Thompson BA**, Kao W Y, and Case ST. Interaction of nucleolar phosphoprotein C23 with cloned segments of rat ribosomal deoxyribonucleic acid. *Biochemistry*, 1983;22:3345-3351.
- 90. Olson MOJ, and **Thompson BA.** Distribution of proteins among chromatin components of nucleoli. *Biochemistry*, 1983;22:3187-3193.
- 91. Pao CC, and **Dyess BT.** Effect of unusual guanosine nucleotides on the activities of some *Escherichia coli* cellular enzymes. *Biochimica et Biophysica Acta*, 1981;677:358-362.
- 92. Pao CC, and **Dyess BT.** Regulation of small RNAs in *Escherichia coli*. Alteration in the intracellular concentrations of small RNAs during amino acid and energy starvation. *Biochimica et Biophysica Acta*. 1981;653:1-8.
- 93. Pao CC, and **Dyess BT**. Stringent control of RNA synthesis in the absence of guanosine 5'-diphosphate 3'-diphosphate. *Journal of Biological Chemistry*, 1981;256:2252-2257.
- 94. Pao CC, Fleckenstein J, and **Dyess BT.** Role of peptide chain elongation factor G in guanosine 5'-diphosphate 3'-diphosphate synthesis. *Journal of Bacteriology*, 1981;145:429-433.

5. Book chapters.

- 1. Ojeda N, **Alexander BT**. Chapter 4: "Developmental programming of hypertension by placental insufficiency." Book: "Developmental Programming of Diabetes and Metabolic Syndrome". Transworld Research Network. Marlon Cerf, Editor. 2008, pp 51-66.
- 2. Dasinger, JH, Intapad S, **Alexander BT**. Chapter 61, "Placental insufficiency: The impact on cardiovascular health in the mother and her offspring across the lifespan," Book:

Pathophysiology and Pharmacotherapy of Cardiovascular Disease, Editors: Jagadeesh, Balakumar, and Maung, .Springer Healthcare, *Adis* Books, Auckland, New Zealand

6. Books

1. Developmental Programming of Cardiovascular Disease, June 2013, Morgan & Claypool Publishers; (doi:10.4199/C00084ED1V01Y201305ISP038)

7. Abstracts.

- 1. Davis GK, Newsome AD, Ojeda NB, **Alexander BT**. Chronic estrogen preplacement prevents the increase in blood pressure in female IUGR offspring at 12 months of age. *Hypertension*. 2017: A.
- 2. Newsome AD, Davis GK, Ojeda NB, **Alexander BT.** Intrauterine growth restriction programs a greater age-related decline in renal function in response to chronic renal injury *Hypertension*. 2017; A.
- 3. Davis GK, Newsome AD, **Alexander BT.** The Androgen Receptor Contributes to Hypertension in Ovariectomized IUGR but Not in Ovariectomized Control Rats. *The FASEB J* 2017; 31:852.4
- 4. Newsome AD, Davis GK, **Alexander BT.** Intrauterine Growth Restriction Programs Greater Susceptibility to Chronic Kidney Injury in Male and Female Aged Rats. *The FASEB J* 2017; 31:852.4.
- 5. Newsome AD, Dasinger JH, Intapad S, Davis GK, **Alexander BT.** Effect of aging on kidney function in male intrauterine growth restricted rats. *The FASEB J* 2016;30:S1214.6
- 6. Dasinger JH, Intapad S, Newsome AD, Davis GK, **Alexander BT.** Chronic Flutamide Treatment Alters Intrarenal Renin Angiotensin System Expression in Intrauterine Growth Restricted Female Rats, *The FASEB J* 2016;30:S1214.5
- 7. JH Dasinger, S Intapad, MA. Backstrom, **BT Alexander.** Vendor-specific effects on sex differences in the developmental programming of blood pressure in the Sprague Dawley rat. *The Physiologist.* 2015.
- 8. Dasinger JH, Intapad S, Backstrom MA, Cater AJ, **Alexander BT**. Vendor Specific differences in the Sprague Dawley Rat Strain Alter Baseline Blood Pressure and Body Composition and Influence the Impact of Slow Fetal Growth on Later Cardiovascular Risk. *Hypertension*. 2015, P029.
- 9. Intapad S, Dasinger JH, Carter AJ, Backstrom MA, **Alexander BT.** Impact of commercial vendor on the developmental programming of later chronic health. *The FASEB J.* 2015; 811.20.
- 10. Dasinger JH, Intapad S, Rudenske BR, Carter AJ, **Alexander BT.** Postmenopausal hypertension is blunted following chronic flutamide treatment in intrauterine growth restricted female rat. *The FASEB J.* 2015; 966.20
- 11. Brown AD, Intapad S, **Alexander BT**. Impact of chronic salt load on mean arterial pressure in female growth restricted rats at one year of age. *The FASEB J.* 2015; 966.80.
- 12. Intapad S, Backstrom MA, Carter AJ, Dasinger JH, **Alexander BT**. Chronic Endothelin Type A Receptor Blockade Abolishes Age-dependent Hypertension In Female Intrauterine Growth Restricted Rat Offspring. *Hypertension* 2014, A235.

- 13. Dasinger JH, Intapad S, Backstrom MA, **Alexander BT**. Intrauterine Growth Restriction Programs A Reduction In Nitric Oxide Bioavailability Indicative Of Accelerated Vascular Aging In The Male Growth-restricted Rat. *Hypertension* 2014, A235.
- 14. Ryan MJ, Sasser JM, **Alexander BT**. Kidney, Heart, Lung PhUn at the Mississippi Children's Museum, 2014 *The FASEB J*.
- 15. Intapad S, Warrington JP, Spradley FT, Palei A, Drummond HE, Ryan MJ, Granger JP, **Alexander BT**. A reduction in uterine perfusion pressure induces hypertension during pregnancy in the mouse. 2014 *The FASEB J*, 1084.5
- 16. Intapad S, Dasinger JH, Backstrom MA, **Alexander BT**. Blockade of the renin angiotensin system abolishes age-dependent hypertension in female intrauterine growth restricted rats in the absence of an enhanced sensitivity to acute angiotensin II. 2014 *The FASEB J*, 1085.2
- 17. Dasinger JH, Intapad S, Backstrom MA, **Alexander BT**. Age impacts the developmental programming of blood pressure regulation in the intrauterine growth-restricted male rat. 2014 *The FASEB J*, 1085.10
- 18. Intapad S, Fahling JM, **Alexander BT.** Age impacts circulating testosterone levels in male intrauterine growth restricted rats leading ot glucose intolerance and alterations in programmed hypertension. *Hypertension*. 2013, A218.
- 19. Intapad S, Brown AD, Tull FL, Fahling JM, Dasinger JH, Ojeda NB, **Alexander BT.** Impaired pancreatic function contributes to the age-dependent development of metabolic syndrome in female intrauterine growth restricted rats. *The FASEB J*, 2013, B76 1114.8.
- 20. Ojeda NB, Intapad S, Carter AJ, **Alexander BT**, Bhatt A. Translational Research NB in Kidney Disease, Hypertension and Electrolyte Disorders. *The FASEB J*, 2013, B169 910.1.
- 21. Intapad S, Brown AD, Tull FL, Fahling JM, Dasinger JH, Ojeda NB, **Alexander BT**. Renal denervation abolishes age-dependent hypertension in female intrauterine growth restricted rats. *The FASEB J*, 2013; B133 906.17.
- 22. Intapad S, Brown AD, Tull FL, Dasinger JH, Ojeda NB, **Alexander BT.** A Postnatal Diet Rich in Fat and Sucrose Leads to the Differential Alterations in Renal Function and Metabolic Health in Male Control and Intrauterine Growth Restricted Offspring. *Hypertension*. 2012;60:A18.
- 23. Intapad S, Tull FL., Brown AD, Dasinger JH, Ojeda NB, **Alexander BT**. Intrauterine growth restriction induces a greater susceptibility to hypertension and metabolic dysfunction with aging in female growth-restricted rats. *FASEB J* 2012.
- 24. Ojeda NB, Wilkening S, Dasinger JH, **Alexander BT**, Graves G, Rhodes P. Prenatal antioxidant prevented developmental origins of cardio-renal diseases in rat's offspring exposed to placental insufficiency. *FASEB J* 2012.
- 25. Intapad, S., Tull, FL., Dasinger, JH., Fan, F., Roman, RJ., Ojeda, NB., Alexander, BT. 20-HETE contributes to hypersensitivity to acute angiotensin II in intrauterine growth restricted rats. *Hypertension*, 2011;58:e33-e183.
- 26. Royals TP, Ojeda NB, Manigrasso MB, Tucci MA, **Alexander BT**. Osteoclast Activity Is Increased Following Ovariectomy In A Model Of Low Birth Weight Induced By Placental Insufficiency In The Female Sprague-Dawley Rat. 2011 http://www.asbmr.org/Meetings/AnnualMeeting/AbstractDetail.aspx?aid=d8f0db8b-38ca-48f8-8159-19fe0816bc00.

- 27. NB Ojeda, TP Royals, **BT. Alexander** Rho kinase mediates the basal pressor response, but not the enhanced pressor response to acute angiotensin II in intrauterine growth restricted rats.2011, *J DOHaD* 2(S1)
- 25. S Intapad, JM Wiseman, FL Tull, JH Dasinger, JT Black, NB Ojeda, C Maric, **BT Alexander**. A mismatch of fetal and postnatal nutrition leads to sex dependent differences in postnatal growth and blood glucose levels. 2011. *FASEB J* 25;1029.5
- 276. C. Maric, J. Lee, Z. Hutchens, **B.T.Alexander**, E. Flynn. Exposure to maternal obesity and a high fat diet during early postnatal development increases susceptibility to renal injury later in life. 2011. *FASEB J* 25;836.2
- 28. Hill M, Trocquet D, **Alexander, BT**, Hennington BS. Regulation of NOS enzymes by splice variants. *FASEB J* 25;10.9.9
- 29. Hennington BS, Trocquet D, **Alexander, BT**. Chronic L-NAME leads to differential expression of renal NOS isoform and renal antioxidant expression in control and intrauterine growth restricted rats. 2011.*FASEB J* 25;1029.10
- 30. Campbell L, Pang Y, Zheng B, Ojeda B, Rhodes PG, **Alexander BT.** Neuroinflammation and brain damage following intracerebral lipopolysaccharide insult in growth restricted rat pups. *Neuroscience* 2010 S-10022 SfN.
- 31. **Alexander BT**, Royals TP, Ojeda NB. Enhanced responsiveness to angiotensin II is androgen dependent in a rodent model of intrauterine growth restriction induced by placental insufficiency. *The Physiologist* 2009; 1041.8.
- 32. Ojdea NB, Royals TP, **Alexander BT**. Ovariectomy induces an enhanced sensitivity to angiotensin II in female growth restricted rats. *FASEB J* 2010;1041.8.
- 33. Hennington BS, Jones EJ, Taylor L, Trocquet DM, Ojeda NB, Royals TP, **Alexander BT**. Bioavailability of nitric oxide is impaired in hypertensive male IUGR offspring. *FASEB J* 2010; 1041.7
- 34. Ojeda NB, Romero DG, Dasinger, JH, **Alexander BT**, Rhodes P. Aldosterone levels are inversely correlated to superoxide dismutase acitivity in the low birth weight newborn. *FASEB J* 2010;629.6
- 35. Maric C, Roach L, Haggerty D, Richard A, Marbury DC, **Alexander BT.** Impact of maternal diabetes on short- and long-term renal injury in the offspring. *FASEB J* 2010;812.2.
- 36. Ojeda NB, Royals TP, **BT Alexander.** Endothelin receptor blockade abolishes acute angiotensin II sensitivity in intrauterine growth restricted rats. *The FASEB J.* 2009.
- 37. Campbell LR,, Zheng B, Ojeda NB, Royals TP, Rhodes PG, Pang Y, **BT Alexander.** Intrauterine growth restriction inhibits cell proliferation within the subventricular zone and white matter of rat offspring. *The FASEB J.* 2009.
- 38. Hennington BS, Dawson A, NB Ojeda, TP Royals, **BT Alexander.** Oxidant status is maintained through different mechanisms in male and female intrauterine growth restricted offspring. *The FASEB J.* 2009.
- 39. Ojeda NB, Royals TP, **Alexander BT.** Sensitivity to angiotensin II contributes to sex differences in a model of fetal programming of hypertension. *Hypertension*. 2008, 52:e34-e131 (P282).
- 40. Grigore D, Ojeda NB, **Alexander BT** Estrogen is nephroprotective in the rat remnant kidney in a rat model of intrauterine growth restriction. *The FASEB J.* 2008; 22:941.6.

- 41. Grigore D, Ojeda NB, LaMarca BB, **Alexander BT.** Inflammatory cytokines are elevated in intrauterine growth restricted offspring in response to placental insufficiency. *The FASEB J.* 2008; 22:923.6.
- 42. Ojeda NB, Royals TP, **Alexander BT**. Responsiveness to acute angiotensin II is increased in intrauterine growth restricted rats. *The FASEB J.* 2008; 22:735.7.
- 43. Ojeda NB, Grigore D, Royals TP, **Alexander BT**. Susceptibility to renal injury is increased in a rat model of intrauterine growth restriction. *The FASEB J.* 2008; 22: 941.5.
- 44. Norma B Ojeda, Julio C Sartori-Valinotti, Daniela Grigore, Elliott B Robertson, **Barbara T Alexander**. Chronic administration of tempol abolishes programmed hypertension induced by placental insufficiency in the rat. *Hypertension* 2007;50(4):e78.
- 45 Daniela Grigore, Norma B Ojeda, Elliott B Robertson, **Barbara T Alexander**. Chronic ETA receptor blockade attenuates hypertension in intrauterine growth restricted offspring. *Hypertension* 2007;50(4):e109.
- 46. Norma Ojeda, Daniela Grigore, Elliott B. Robertson **Barbara T. Alexander.** Estradiol has protective effects on female growth restricted offspring in a model of programmed hypertension. *Faseb J*; 2007; 21(6, Pt II):A1417.
- 47. Norma Ojeda, Daniela Grigore, Elliott B. Robertson **Barbara T. Alexander.** Tempol abolishes hypertension induced by ovariectomy in a model of programmed hypertension. *Faseb J* 2007; 21(6, Pt II):A1417.
- 48. Daniela Grigore, Norma Ojeda, Elliott B. Robertson, **Barbara T. Alexander**. Up-regulation of renal ACE2 is associated with gender differences in a model of fetal programming of hypertension induced by placental insufficiency. *Hypertension* 2006;48(4):e25, P5.
- 49. Norma Ojeda, Daniela Grigore, Elliott B. Robertson **Barbara T. Alexander.** Ovariectomy induces hypertension in adult growth restricted female offspring in a model of fetal programming due to placental insufficiency. *Hypertension* 2006;48(4):e25, P10.
- 50. Ojeda N, Grigore D, Robertson EB, **Alexander BT**. Sex differences in fetal programming of hypertension. *The FASEB J*, 2006;20(5, Pt 2):A1191.
- 51. Dawson AS, Ojeda N, Grigore D, Robertson EB, and **Alexander BT**. Effect of early inhibition of the renin angiotensin system on the development of hypertension in a model of low birth weight induced by reduced uterine perfusion in the pregnant rat. *The FASEB J*, 2006;20(4, Pt 1):A758.
- 52. Grigore D, Ojeda N, Robertson EB, **Alexander BT**. Hypertension in adult growth restricted offspring is associated with activation of the renal renin angiotensin system. *The FASEB J*, 2006;20(4, Pt 1):A757.
- 53. Ojeda N, Johnson W, Dwyer T, **Alexander BT**. Bilateral Renal Denervation Prevents Development of Hypertension in a model of Fetal Programming Induced by placental insufficiency in the rat. *Hypertension*, 2005; 46:884.
- 54. Llinas M, Wallukat G, Dechend R, Mueller DN, Luft FC, **Alexander BT**, LaMarca B, Granger JP. Agonistic autoantibodies to the At1 receptor in a rat model of preeclampsia induce by chronic reductions in uterine perfusion pressure. *Hypertension*. 2005; 46:884.
- 55. Ojeda N, Johnson WR, **Alexander BT**. Early renal denervation abolishes hypertension in low birth weight offspring from pregnant rats with reduced uterine perfusion. *FASEB J*. 2005;19(5):A1586.

- 56. **Alexander BT**, Hendon AE, Dwyer TM. Renal denervation abolishes hypertension in low birth weight offspring from pregnant rats with reduced uterine perfusion. *Hypertension*, 2004;44(4):500.
- 57. **Alexander BT** and Hendon AE. Hypertension in low birth weight offspring from pregnant rats with reduced uterine perfusion is associated with a reduction in pressure natriuresis. *FASEB J*, 2004;18(4):A738.
- 58. **Alexander BT** and Hendon AE. Angiotensin II type 1 receptor antagonism attenuates hypertension in low birth weight offspring from pregnant rats with reduced uterine perfusion. *FASEB J*, 2004;18(4):A737.
- 59. Sedeek MH, **Alexander BT**, Sholook MM, Chandler, DL, Abram SR, and Granger JP. Renal cortical NADPH oxidase and superoxide dismutase activity in response to reduced uterine perfusion pressure in pregnant rats. *FASEB J*, 2004;18(4):A740.
- 60. Granger, JP, Rinewalt AN, Llinas MT and **Alexander BT.** Effects of hypercholesterolemia on the blood pressure resonse to reductions in uterine perfusion pressure in pregnant rats. *FASEB J*, 2004;18(4):A742.
- 61. Payne JA, **Alexander BT**, and Khalil RA. Reduced endothelium-dependent NO-cGMP vascular relaxation and hypertension in growth-restricted rats on high salt diet. *Hypertension*, 2003; 42(3):393.
- 62. **Alexander BT**, Llinas MT, Rinewalt AN, Brosnihan KB, Neves LA, and Granger JP. Chronic reductions in uterine perfusion pressure in the pregnant rat results in marked elevations in arterial pressure and increased sensitivity to angiotensin II. XVth Scientific Meeting of the Inter-American Society of Hypertension, Program Book, 2003;119.
- 63. Granger JP, Rinewalt AN, Llinas MT, **Alexander BT**. Effects of hypercholesterolemia on the blood pressure response to reductions in uterine perfusion pressure during pregnancy in rats. XVth Scientific Meeting of the Inter-American Society of Hypertension, Program Book, 2003;115.
- 64. **Alexander BT**, and Hendon AE. Converting enzyme inhibition attenuates the hypertension in low birth weight offspring from pregnant rats with reduced uterine perfusion. *FASEB J*. 2003;17:A486.
- 65. Llinas MT, **Alexander BT**, Cockrell K, Balzli C, and Granger JP. Angiotensin AT1 receptor blockade prevents the hypertension in response to chronic reductions in uterine perfusion pressure in pregnant rats. *FASEB J.* 2003;17:A487.
- 66. Abram SR, **Alexander BT,** Llinas MT, Sedeek M, and Granger JP. Hypertension induced by chronic endothelin type B (ETB) receptor blockade attenuates the production of renal medullary nitric oxide in rats. *Hypertension*, 2002;40(3):406.
- 67. Llinas MT, **Alexander BT**, Sedeek M, Abram S, and Granger JP. Enhanced renal cortical expression of COX-1 and COX-2 isoforms during pregnancy. *Hypertension*, 2002;40(3):425.
- 68. Llinas MT, **Alexander BT**, Capparelli M, Carroll MA, Granger JP. Role of CYP-450 metabolites of arachidonic acid during pregnancy induced hypertension in rats. *American Journal of Hypertension*, Vol. 15, 4, 2002.
- 69. **Alexander BT**, Steijen CL, and Cockrell K A reduction in uterine perfusion pressure in the pregnant rat results in low birth weight offspring predisposed to development of hypertension. *FASEB J*, 2002;16(5),Pt. 2:A686.

- 70. **Alexander BT,** Llinas MT, and Granger JP. L-arginine supplementation attenuates the hypertension produced in response to chronic reductions in uterine perfusion pressure in the pregnant rat. *FASEB J*, 2002;16(5),Pt. 2:A686.
- 71. **Alexander BT**, Cockrell K, and Granger JP. Inducible nitric oxide synthase inhibition attenuates relaxin-induced increases in renal hemodynamics in non-pregnant rats. *FASEB J*, 2002;16(5),Pt. 2:A686.
- 72. Llinas MT, **Alexander BT**, Capparelli MF, Carroll MA, Granger JP. Role of CYP450 metabolites of arachidonic acid(CYP450-AA metabolites) in a rat model of preeclampsia. *FASEB J,l* 2002:16(5), Pt. 2: A868.
- 73. Abram SA, **Alexander BT**, Llinas MT, Sedeek M, Granger JP. Endothelin Type B (ETB) receptor blockade-induced hypertension during changes in dietary sodium intake: Role of nitric oxide. *FASEB J*, 2002;16(5), Pt. 2: A838.
- 74. Rinewalt AN, Llinas MT, **Alexander BT**, Granger JP. Effects of hypercholesterolemia on blood pressure during pregnancy in rats. *FASEB J*, 2002;6(5), Pt. 2: A868.
- 75. Alexander BT, Cockrell KL, Cline FD, and Granger JP. Inducible nitric oxide synthase inhibition attenuates renal hemodynamics during normal pregnancy. *Hypertension*, 2001;38:499.
- 76. **Alexander BT,** Kline F, Abram SR, Sedeek M, and Granger JP. Blockade of the reninangiotensin system does not alter the hypertension produced by chronic reductions in uterine perfusion pressure in the pregnant rat. *FASEB J*, 2001;15(4 part I):A136.
- 77. Abram SR, **Alexander BT**, Sedeek M, and Granger JP. Role of endothelin type B receptors in modulating the chronic hypertensive effects of angiotensin II. *FASEB J*, 2001;15(4 part I):A136.
- 78. Llinas MT, **Alexander BT**, Abram SR, Sedeek M, and Granger JP. Enhanced production of thromboxane A2 in response to chronic reductions in uterine perfusion pressure in pregnant rats. *FASEB J*, 2001;15(5 part II):A788.
- 79. Sedeek M, **Alexander BT**, Abram SR, and Granger JP. Role of oxidative stress in endothelin-induced hypertension in rats. *FASEB J*, 2001;15(5 part II):A785.
- 80. **Alexander BT,** Cockrell KL, Sedeek M, and Granger JP. Role of the renin-angiotensin system in meditating the hypertension produced by chronic reductions in uterine perfusion pressure in the pregnant rat. *Hypertension*, 2001;37(3):986.
- 81. Granger JP, **Alexander BT**, Abram SR, Reckelhoff JF, Wilson J, and Rinewalt AN. Chronic reductions in uterine perfusion pressure in the pregnant rat produces hypertension and reduces pressure-natriuresis. *Hypertension*, 2001;37(3):1013.
- 82. **Alexander BT,** Rinewalt AN, Massey MB, Bennett WA, and Granger JP. Endothelin-A Receptor Blockade Attenuates the Hypertension in a Rat Model of Pregnancy-Induced Hypertension. *Hypertension*, 2000;36(4):679.
- 83. Granger JP, Cockrell KL, Rinewalt AN, and **Alexander BT**. Endothelin-B receptors play an important role in modulating chronic pressure-natriuresis and blood pressure regulation in response to changes in dietary sodium intake. *Hypertension*, 2000;36(4):682.
- 84. Sirous ZN, Cockrell KL, **Alexander BT**, Granger JP, and Khalil RA. TNF-alpha induced hypertension in pregnant rats is associated with increased [Ca²⁺] signaling in renal arterial smooth muscle. *Hypertension*, 2000;36(4):688.

- 85. Alexander BT, Rinewalt AN, Bennett WM, and Granger JP. The hypertensive response to chronic reductions in uterine perfusion pressure is associated with elevated renal expression of preproendothelin. *Am J Hypertension*, 2000;13(4): 244A.
- 86. Murphy JG, Fleming JB, Alexander BT, Granger JP, and Khalil RA. Increased [Ca²⁺] signaling in renal arterial smooth muscle cells during inhibition of nitric oxide synthesis in pregnant rats. *FASEB J*, 2000;114(4): A137.
- 87. **Alexander BT**, Massey MB, Cockrell KL, Bennett WA, and Granger J P. Elevations in plasma TNFalpha in pregnant rats decreases renal nNOS and iNOS and results in hypertension. *FASEB J*, 2000;114(4):A137.
- 88. Granger JP, **Alexander BT**, Rinewalt AN, Herrington JN, and Opgenorth TJ. Role of endothlin in mediating the chronic renal and hypertensive actions of angiotensin II (ANG II) in rats. *FASEB J*, 2000;114(4):A656.
- 89. Granger JP, Bennett WM, **Alexander BT**, Cockrell K., and Whitworth NS. Long-term elevation of plasma TNF-alpha increases arterial pressure and reduces kidney function in pregnant rats. *Hypertension*, 1999;34(2):337.
- 90. **Alexander BT**, Kassa, SE, Abrams SR, Reckelhoff JF, and Granger JP. Renal protein expression of neuronal NOS is reduced in a rat model of pregnancy-induced hypertension. *Hypertension*, 1999;34(2):368.
- 91. **Alexander BT**, Cockrell KL, Herrington JN, and Granger JP. Enhanced renal expression of preproendothelin mRNA during chronic Angiotensin II hypertension. *Hypertension*, 1999;34(2):362.
- 92. **Alexander BT,** Herrington JN, Kassab S, Reckelhoff JF, and Granger JP. Role of nitric oxide in a rat model of pregnancy-induced hypertension. *Hypertension*, 1999;33(5):1252.
- 93. Kassab S, **Alexander BT**, Miller TM, Reckelhoff JF, and Granger JP. Bilateral renal function responses to chronic endothelin-A receptor antagonism in two-kidney, one-clip Goldblatt hypertensive rats. *Hypertension*, 1999;33(5):1290.
- 94. **Alexander BT**, Herrington JN, Kassab S, Reckelhoff JF, and Granger JP. Nitric oxide production in a rat model of pregnancy-induced-hypertension. *FASEB J*, 1999;13(5):788.17.
- 95. Abram SR, **Alexander BT**, Cockrell KL, Herrington JN, and Granger JP. Role of neuronal nitric oxide synthase (nNOS) in mediating renal hemodynamic changes during pregnancy. *FASEB J*, 1999;13 (5):788.16.
- 96. **Alexander BT**, Reckelhoff JF, Kassab S, and Granger JP. Differential expression of renal nitric oxide synthase isoforms during pregnancy. *Hypertension*, 1998;32(2): 622.
- 97. Granger JP, Cockrell K, Kassab S, and **Alexander BT.** Endothelin-A receptor antagonism attenuates the acute renal actions of angiotensin II in conscious rats. *Hypertension*, 1998;32(2):623.
- 98. **Alexander BT**, Reckelhoff JF, Kassab S, and Granger JP Expression of renal endothelial nitric oxide (NO) synthases (eNOS) during pregnancy in rats. *FASEB J*, 1998;12(4):A53.
- 99. **Alexander BT**, Brown DT, and Sittman DB. Effects of overexpression of histone H1° on chromatin structure. *Mol Biol Cell*, 1995;6:75a.
- 100. Brown DT, **Alexander BT**, and Sittman DB. Transient inhibition of DNA replication in H1 variant-overproducing cell lines is associated with a high H1/nucleosome ratio. *Mol Biol Cell*, 1993;4:397a.