

Michael W. Brands, Ph.D.

CURRICULUM VITAE

PERSONAL DATA

Professional Address

Department of Physiology, CA-3098
Medical College of Georgia (MCG)
Augusta University
Augusta, GA 30912

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e-mail: mbrands@augusta.edu

EDUCATION

1979-1983	Rockhurst Jesuit University, Kansas City, MO	B.S., Biology
1984-1988	University of Missouri, Columbia, MO	Ph.D., Physiology

POSTGRADUATE TRAINING

Sept. 1, 1988 Research Associate, Department of Physiology and Biophysics, University of Mississippi Medical Center (UMMC).

PROFESSIONAL APPOINTMENTS

July 1, 1989	Instructor, Department of Physiology and Biophysics, University of Mississippi Medical Center
July 1, 1991	Assistant Professor, Department of Physiology and Biophysics, University of Mississippi Medical Center
July 1, 1996	Associate Professor, Department of Physiology and Biophysics, University of Mississippi Medical Center
Oct. 12, 2000	Professor of Physiology, Medical College of Georgia, Augusta University
May 10, 2016	Regents' Professor, Medical College of Georgia, Augusta University

RESEARCH INTERESTS

Cardiovascular-renal integrative physiology and hypertension. Longstanding interest in renal and hormonal mechanisms for chronic blood pressure and circulatory system control in states of insulin resistance, hyperinsulinemia, and diabetes. New work reveals insulin as a physiologic regulator of sodium homeostasis. Postprandial hyperinsulinemia is required to prevent renal sodium wasting, and loss of insulin is the mechanism for the natriuresis and diuresis in type 1 diabetes. Exaggeration of this action may contribute to hypertension in metabolic syndrome through activation of thromboxane synthesis by hyperglycemia.

HONORS and AWARDS

1979-1983	Academic Scholarship, Rockhurst Jesuit University
1983	Biology Department Alumni Award, Rockhurst Jesuit University

1984-1985	Gregory Fellowship Award, University of Missouri
1985-1986	Gregory Fellowship Award, University of Missouri
1986	Graduate Student Teaching Award, University of Missouri
1986-1988	National Institutes of Health Cardiovascular Trainee
1989-1992	National Institutes of Health Research Service Award
1990-1994	Travel Award: Meeting of the American Society of Hypertension, New York
1995	Young Scholar Award of the American Society of Hypertension
1995	Fellow, Council for High Blood Pressure Research, American Heart Association
1997	Young Investigator Award, American Physiological Society, Water & Electrolyte Homeostasis Section
1998	Established Investigator Award, American Heart Association
1999	Basic Science Teacher of the Year Award, UMMC School of Dentistry
2005	Outstanding Faculty Award, Graduate School, Augusta University
2007	NIH Working Group: Diuretic-Induced Hyperglycemia in Trtmnt. of Hypertension
2009	External Consultant, NASA Head-Up Tilt Workshop, Houston, TX
2010	Distinguished Faculty Award, Basic Science Teaching, MCG, Augusta University
2011	Distinguished Teacher Award, Graduate School, Augusta University
2012-2017	Exemplary Teaching Award, MCG, Augusta University
2016	MCG Regents' Professor, University System of Georgia Board of Regents

UNIVERSITY TEACHING, SERVICE, and LEADERSHIP

University Teaching

1984 - 88	undergraduate physiology, Univ. of Missouri	laboratory assistant
1987 & 88	medical physiology, Univ. of Missouri	laboratory assistant
1987 & 88	undergraduate physiology, Univ. of Missouri	instructor
1988 & 89	nursing physiology, masters program, UMMC	instructor
1988 - 90	nursing physiology, undergraduate, UMMC	instructor
1988 - 2000	medical physiology, UMMC	laboratory instructor
1991 - 2000	medical physiology, dental, UMMC	instructor
1997 - 2000	medical physiology, UMMC	instructor
2000 - 2003	allied health physiology, MCG	instructor
2001 - 2012	Advanced Cardiovascular Phys, Grad School, Augusta U	course director *
2004 - 2013	Advanced Renal Physiology, Grad School, Augusta U	course director *
2000 →	Scientific Communications, Grad School, Augusta U	instructor
2000 →	Medical Physiology, MCG, Augusta University	instructor
2001 →	Advanced Cardiovascular Phys., Grad School, MCG	instructor
2003 - 2017	Scientific Grant Writing, Grad School, Augusta U	instructor
2003 →	Graduate Physiology, Grad School, Augusta U	instructor
2004 - 2013	Advanced Renal Physiology, Grad School, Augusta U	instructor
2007 →	Medical Physiology, MCG, Augusta University	instructor
2007 →	Medical Physiology, Patient Simulation Lab Exercise # # see publication 82	instructor *
2011 - 2017	Problem Based Learning I, MCG, Augusta University	instructor
2011 - 2017	Problem Based Learning II, MCG, Augusta University	instructor
2000 - 2017	Graduate Laboratory Rotations, Grad School, Augusta U	course director
2003 - 2017	Scientific Grant Writing, Grad School, Augusta U	course director *
2007 →	Medical Physiology, Phase I, MCG, Augusta University	component director
2014 →	Cardiopulmonary Module, Phase I, MCG, Augusta U	course director
2016	Am. Physiol. Society Institute on Teaching and Learning	faculty attendee
2018 →	Genitourinary Module, Phase I, MCG, Augusta U	course director

(* developed the course)

Graduate Students

Henry L. Keen: Mechanisms of Insulin Hypertension in Rats, 06/1997
 Current: Asst. Res. Scientist, Univ. of Iowa School of Medicine

Christie R. Claxton: Mechanism for Attenuation of Insulin Hypertension by Endogenous Nitric Oxide, 5/2000

Tracy Bell, AHA postdoctoral research awardee. Mechanisms for control of renal vascular resistance in Type I diabetes, 05/2007
 American Heart Assn. predoctoral award
 Current: Asst. Prof. Univ. Maryland Eastern Shore

LaShon Sturgis, NIH Cardiovascular Physiology training grant; American Physiological Society Porter Fellowship. Mechanisms for the Dependency of Angiotensin II Hypertension on Interleukin-6, 05/2008.
 2008-2009 Assistant Professor, Paine College
 Currently, Emergency Dept. Resident, MCG

Dissertation Committees

Magdalena Alonso-Galicia, 1995	Jan Williams, 2005
Henry Keen, 1997	Zhekang Ying, 2006
Tracy Taylor, 2002	Pimonrat Ketsawatsomkron, '08
Brett Mitchell, 2003	Tracy Bell, 2007
Ericka Daniels, 2004	LaShon Sturgis, 2008
Ahmed El-Marakby, 2004	Margaret Zimmerman, 2014
Saiprasad Zemse, 2009	Brett Heimlich, 2014
Wararat Kittelkusluth, 2012	Ryan Crislip, 2017

Postdoctoral Fellows

Sharyn M. Fitzgerald, Ph.D., 12/97 to 12/2000. AHA Postdoctoral Fellowship (Senior Research Fellow, Baker Heart Institute, Australia)

Modesto Rojas, M.D., 2003-2004 (Research Associate, VBC @ MCG)

Dexter L. Lee, Ph.D. 2003-2006 (Associate Professor, Howard University)

Amy Banes-Berceli 2007-2009 (Associate Professor, Oakland University)

Marlina Manhiani, Ph.D. 2008-2012 (student, Dental College of Georgia)

Debra Irsik, Ph.D. 2014-2017

Dean's Medical Student Research Fellowships

Michael Holman, 1992: *Am. J. Hypertension* 7:104-109, 1994

David Harrison, 1993: *Hypertension*; 29:1014-1019, 1997

Angela Gardner, 1993: *Hypertension*; 29:1014-1019, 1997

Will Lee, 1994: *Am J. Physiol.* 271: R276-R281, 1996

Tim Hopkins, 1995: *Hypertension* 27[part 2]:735-729, 1996

Will Hewitt, 1997: *Am J. Physiol. Endocrinol. Metab.* 278: E917-E924, 2000

Leslie Cloud, 2001: *Am. J. Hypertens.* 16:600-603, 2003.

Brad Gibson, 2002: *Hypertension* 43:57-63, 2004.

James B. Osborne, 2004; *Am J Physiol Heart Circ Physiol* 290:H935-H940, 2006.

Rachel Biemiller, 2006; *Am. J. Physiol. Renal Physiol.* 295:F1449-F1456, 2008.

Dmitriy Panteleyev, 2007; *Am. J. Physiol. Regul. Physiol.* 296:R265-R271, 2009.

Michael Cormican, 2008; *Am J Physiol Renal Physiol.* 300:F957-F965, 2011.

Hunter Wilson, 2010 and 2011; *Hypertension*. 59:421-430, 2012.

Peer Reviewed Education Publications

Brands MW, Schumacher L. Active learning strategies to teach renal-cardiovascular integration with high student-to-teacher ratios. *Adv Physiol Educ*. 2009;33:282-285.

Klein N, Brands M. Basic Circulatory Physiology: Interactive Animation and Review Module. MedEdPORTAL; 2011. Available from: www.mededportal.org/publication/8591.

University Service

1992 Faculty, School of Graduate studies, UMMC
 1996 Graduate Education in the Basic Sciences Committee, UMMC
 1996 - 98 Curriculum Committee, School of Dentistry, UMMC
 1997 UMMC Biomedical Research Grant Review Committee
 1997 - 2000 Institutional Animal Care and Use Committee, UMMC
 1998 - 2000 Student Evaluation and Promotion Committee, School of Dentistry, UMMC
 1998 - 2000 Graduate Program Director, Dept. of Physiology, UMMC
 1998 - 2000 Graduate Council, School of Graduate Studies, UMMC
 1999 UMMC Biomedical Research Grant Review Committee
 2000 → Curriculum Committee, Grad School, Augusta University
 2000 - 2006 Institutional Animal Care and Use Committee, Augusta University
 2001 → Faculty, School of Graduate Studies, Grad School, Augusta University
 2001 - 2007 Graduate Program Director, Dept. of Physiology, MCG, Augusta University
 2001 - 2007 Admissions Committee, Graduate School, Augusta University
 2001 - 2009 Chair's Advisory Committee, Dept. of Physiology, MCG, Augusta University
 2001 - 2004 Graduate Council, Graduate School, Augusta University
 2002 - 2004 Academic Council's Student Affairs Committee, Augusta University
 2003 - 2005 MD/PhD Program Admissions Committee, MCG, Augusta University
 2004 Student Appreciation Day Organizer, Graduate School, Augusta University
 2004 - 2005 Family Day Coordinator, Graduate School, Augusta University
 2004 Faculty Search Committee, Pharmacology & Tox., MCG, Augusta University
 2005 → Graduate Research Day Organizer, Graduate School, Augusta University
 2005 - 2006 Dean of the School of Medicine Search Committee, MCG, Augusta University
 2005 - 2010 Board of Directors, Medical College of Georgia Research Institute
 2005 - 2011 Chair, Faculty Grievance Subcommittee, Augusta University
 2005 - 2011 Chair, Campus Review Body, Augusta University
 2007 → Phase 1&2 Curriculum Committee, MCG, Augusta University
 2007 → Curriculum Oversight Committee, MCG, Augusta University
 2009-2012 Information Technology Advisory Committee (ITAC), MCG, Augusta University
 2009 Work Group on Technology Infused Curricula, MCG, Provost ad hoc committee
 2009 School of Medicine Site Visit Team for Technology & Teaching, Wayne State
 2009 President's *ad hoc* Promotion & Tenure Appeal Review Committee
 2010 Dean of College of Allied Health Sciences Search Committee
 2010 President's Task Force for Strategic Plan Development and Evaluation
 2011 → Institutional Animal Care and Use Committee, Augusta University
 2011 Provost's *ad hoc* Admissions Appeal Review Committee
 2011 Vice Dean for Academic Affairs, MCG, Search Committee
 2012 Chair, Campus Review Body Student Disciplinary Appeal Review

2012	Provost's Education Strategic Priority working group
2012	Interprofessional Education (IPE) Pilot Project planning and implementation group
2012-13	USG Chancellor's Consolidation Work Team for ASU-MCG Consolidation
2013	Chair search committee for Director of Lab Animal Services
2013	Co-Chair search committee for Dean of Math & Science
2013-17	MCG Student Promotions Committee, Class of 2017 Subcommittee
2014	Search committee, Chair of Biochemistry
2014-16	Co-Chair, search committee for MCG Faculty Educator Positions
2014 →	Graduate Council, Graduate School, Augusta University
2015 →	Chair, Institutional Animal Care and Use Committee, Augusta University
2015 →	Animal Care and Use Leadership Committee, Augusta University
2017	Chair, Dean's Committee on Basic Science Faculty Compensation

University Leadership

1998 - 2000	Graduate Program Director, Department of Physiology, UMMC
2001 - 2007	Graduate Program Director, Department of Physiology, MCG
2005 - 2017	Graduate Research Day Organizer, Grad School, Augusta University
2007 →	Medical Physiology Component Director, Phase I, MCG, Augusta University
2011 - 2017	Biomedical Sciences Core Curriculum Program Director, Grad School, Augusta U
2014 →	Cardiopulmonary Module Director, Phase I, MCG, Augusta University
2015 →	Chair, Institutional Animal Care and Use Committee, Augusta University
2018 →	Genitourinary Module, Phase I, MCG, Augusta University

PROFESSIONAL SOCIETIES

1991 →	American Physiological Society
1993 →	American Heart Association, Council for High Blood Pressure Research

GRANT SUPPORT

1989-92	F32 HL08171: National Institutes of Health. NRSA. Calcium Homeostasis in Hypertension.
1995-97	MS-G-950057: American Heart Association, Mississippi Affiliate. Calcium and PTH in Low-Renin Hypertension; funds relinquished upon funding of following proposal. PI
1995-98	951191: American Heart Association, National Center. Calcium and PTH in Low-Renin Hypertension. PI
1997-12/01	R29 HL56259: National Institutes of Health. Cardiovascular and Renal Dysfunction in Early Diabetes. PI .
1998-12/01	974011N: American Heart Association, Established Investigator Award. The Role of Thromboxane in Mediating Glucose-Induced Changes in Vascular Function. PI .
2001-7/03	0150976B: American Heart Association, Georgia Affiliate. Mechanisms for Cardiovascular and Renal Dysfunction in Diabetes. PI .
2003-2007	R01 HL56259-10: National Institutes of Health. Cardiovascular and Renal Dysfunction in Early Diabetes. PI .
2004-2008	R01 HL075625-04 National Institutes of Health. Renal Control of Blood Pressure in Early Diabetes. PI .
2004-2009	P01 HL74167-03: National Institutes of Health. Cytokines and Angiotensin II-induced Hypertension, R.C. Webb, Principal Investigator. Project Leader
2008-2012	R01 HL56259-14: National Institutes of Health. Mechanisms for

Cardiovascular Control Early in Diabetes. **PI**.
 2010-2012 Tengion, Inc. Testing of Tengion's Neokidney Augment Cellular Protopyca. **PI**

Active Grants

R01 HL56259-17 Brands, MW 06/01/2013 - 05/31/2018 PI 25% effort (3.0 cal)
 Title: Mechanisms for Cardiovascular Control in Early Diabetes. NO COST EXTENSION

R01 NS097818 (Filosa, J, PI) 03/01/2017 – 02/28/2021 .6 calendar co-investigator
 Title: Clinically unscreened vasculo-glial-neuronal coupling is critical for physiological brain function.

R01 DK099548 (O'Connor, P, PI) 08-01-2014-03-30-2019 .6 calendar co-investigator
 Title: Role of HV1 in development of salt-sensitive hypertension and renal injury

P01 HL128207-01A1 (Webb, RC, PI) 09-01-2016 – 08-31-2021 role: Core B Director
 Title: Animal Use and Instrumentation Core"

Pending Grants

1R01DK117323-01A1 Brands, MW reviewed 06-29-2018 28th percentile PI
 Title: Physiology and Pathophysiology if Insulin-Induced Antinatriuresis

EDITORIAL and SOCIETY/NATIONAL SERVICE

1993 → Editorial Board, *The American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology*

1995 City College of New York Research Award Program External Grant Reviewer

1995 Natural Sciences and Engineering Research Council of Canada: External Grant Reviewer

1995 Section Editor, *Hypertension*, Proceedings of the Inter-American Society of Hypertension

1996 City College of New York Research Award Program External Grant Reviewer

1996 Department of Veterans Affairs Merit Review, ad-hoc referee

1997 American Heart Association, Alabama/Arkansas/Mississippi Grant Review Committee

1997 Department of Veterans Affairs Merit Review, ad-hoc referee

1998-09 American Heart Assn., Council for HBPR Annual Fall Conference Abstract Reviewer

1999-09 American Heart Association, Nutrition Committee

1998-00 American Heart Association, Southern & Ohio Valley Consortium Grant Review Comm

2000 NIH, Diabetic Complications Special Emphasis Panel ad-hoc referee

2000-03 American Heart Association Grant Review, National

2001-03 American Physiological Society, Animal Care and Experimentation Committee

2001-10 American Heart Assn., Council for HBPR Program Committee,

2001- 08 American Heart Association, Fall Scientific Sessions Abstract Reviewer

2002 → Editorial Board, *Hypertension*

2002-09 American Physiological Society, W&E Homeostasis Section Steering Committee

2002-05 American Physiological Society, Committee on Committees

2003 Department of Veterans Affairs – Nephrology Merit Review ad-hoc referee

2003-09 American Heart Association, Nutrition Committee liaison to Industry Advisory Panel

2004-07 NIH, Pathobiology of Kidney Disease (PBKD) Study Section regular member.

2004-07 Department of Veterans Affairs – Nephrology Merit Review regular member

2004 Department of Veterans Affairs – Nephrology Merit Review ad-hoc referee

- 2004 NIH, NCRR Special Emphasis Panel
 2004 NIH, NIDDK Special Emphasis Panel
 2005 American Heart Association, Southern & Ohio Valley Consortium Grant Review Comm
 2005 American Physiological Society Minority Travel Fellow Mentor, EB 2005
 2005 → American Heart Association, Council for HBPR Nominating Committee
 2005-08 American Physiological Society, W&E Homeostasis Section Programming Rep.
 2006-07 American Heart Association, Southern & Ohio Valley Grant Review Comm. Co-Chair
2006 → Editorial Board, *Journal of the American Society of Hypertension*
 2008-09 American Heart Association, Southern & Ohio Valley Grant Review Comm. Chair
 2008-11 American Physiological Society, Public Affairs Committee
 2009 NIH, Pathobiology of Kidney Disease (PBKD), ad hoc reviewer
 2010 NHLBI Clinical Trials Review Committee, ad hoc reviewer
 2010 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2011 NHLBI Clinical Trials Review Committee, ad hoc reviewer
 2011 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2011-15 Department of Veterans Affairs – Nephrology Merit Review regular member
 2011 NIH NHLBI PPG Special Emphasis Panel reviewer
 2012-14 American Physiological Society, Conference Committee
 2012 NIH NHLBI PPG Special Emphasis Panel reviewer
 2013 NIH KMBD study section ad hoc member
 2014-16 Chair, American Physiological Society Conference Committee
 2014 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2014 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2014 NIH, CSR, Nephrology R21 SEP Review Committee, ad hoc reviewer
 2015 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2015 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2015 NIH VCMB ad hoc reviewer
 2015 NIH, National Center for Advancing Translational Sciences (NCATS) review panel
 2016 NIH, SBIR/STTR Nephrology CSR Review Committee, ad hoc reviewer
 2017 NIH, ZRG1 EMNR-V Endocrin., Met., Nutrition and Repro. Science ad hoc reviewer
 2018 NIH F10A Fellowships - Physiology & Pathobiology CV/Respiratory ad hoc reviewer
 2018 NIH F10A Fellowships - Physiology & Pathobiology CV/Respiratory ad hoc reviewer

INVITED LECTURES

- 1990 The Insulin-Lipid-Hypertension Connection, Basel, Switzerland
 1995 The Renin-Angiotensin System: Novel Therapeutic Opportunities, Washington, D.C.
 1995 Insulin Hypertension, Hypertension Conference, University of Mississippi Medical Center, Division of Hypertension
 1996 Angiotensin II and Intrarenal Hemodynamics. Therapeutic Advances in Fibrosis Research, Workshop on Diabetic Nephropathy, Washington, D.C., April, 1996.
 1997 How is Glycemic Control in Diabetes Linked to Chronic Renal Failure? Chronic Renal Failure, Boston, MA, March, 1997.
 1997 Young Investigator Award Lecture, Insulin as a Cardiovascular Hormone. Experimental Biology '97, New Orleans, LA
 1997 Insulin Resistance and Hypertension. Pathophysiology of Cardiorenal Systems in Obesity, Experimental Biology '97, New Orleans, LA, April, 1997.
 1997 Obesity and Hypertension. World Conference of the International Society of Molecular Nutrition and Therapy, Winnipeg, Canada, August 1997.
 1997 Mechanisms of Hypertensive Renal Injury. 4th National Meeting of COSEHC, Orlando, FL, 1997.
 1999 Mechanisms of Hypertension in Insulin Resistance Syndrome. 40th Annual Meeting of the American College of Nutrition, Washington, D.C., October, 1999.

- 2000 Pathophysiological Mechanisms Linking Obesity, Insulin Resistance, and Hypertension. ASPET-Ray Fuller Symposium, London, Ontario, Canada. March, 2000.
- 2000 Endothelial Dysfunction and Arterial Pressure Control in Diabetes. Faculty Presentation, Meeting of the American Society of Hypertension, New York, NY. May, 2000.
- 2000 Mechanisms of Hypertension in Diabetes. Jackson Cardiovascular-Renal Meeting, Jackson, MS. November, 2000.
- 2001 The Early Impact of Diabetic Hyperglycemia on Cardiovascular Function, Symposium Organizer, Experimental Biology 2001. Talk: The Roles of NO and Angiotensin II in Determining the Arterial Pressure Response to the Onset of Diabetes.
- 2004 Renal Mechanisms for Blood Pressure Control Early in Diabetes. University of North Texas Health Sciences Center, Physiology Seminar Program. Fort Worth, January 2004.
- 2004 Renal Mechanisms for Blood Pressure Control Early in Diabetes. Cardiology Grand Rounds, Medical College of Georgia. February, 2004.
- 2004 Renal Mechanisms for Blood Pressure Control Early in Diabetes. St. Louis University, Department of Biochemistry and Molecular Biology. September, 2004.
- 2005 Renal Mechanisms for Blood Pressure Control Early in Diabetes. University of Mississippi Medical Center, Jackson, MS, February 2005.
- 2005 Is GFR a Focal Point for Blood Pressure Control in Diabetes? Wake Forest University, Winston-Salem, NC. October 2005.
- 2006 Potential Role of IL-6 in Acute and Long-term Blood Pressure Control. Cardiology Grand Rounds, Medical College of Georgia. February, 2006.
- 2006 IL-6 Causes a Hypertensive Shift in Renal Pressure Natriuresis. EB 2006 Symposium: "Pharmacology of cytokines in the cardiovascular system" San Francisco. April 2006.
- 2006 Inflammatory Cytokines in Acute and Chronic Blood Pressure Control. Boehringer-Ingelheim, Ridgefield, CT. June, 2006.
- 2006 Mechanisms Controlling Renal Vascular Resistance Early in Diabetes. Howard University, Washington, D.C., December 2006.
- 2007 Circulatory System Anatomy and Hemodynamics: Integrated Analysis of the Circulation. Pool Society Memorial Symposium, Medical College of Georgia, February, 2007.
- 2007 Renal Mechanisms for Hypertension in Metabolic Syndrome. Celebration of 20th Anniversary of Second Hospital of Shandong University, Jinan, China, May 2007.
- 2007 Mechanisms Controlling Renal Vascular Resistance Early in Diabetes. FASEB Summer Conference, Saxtons River, VT, July 2007.
- 2007 Mechanisms Controlling Renal Vascular Resistance Early in Diabetes. Medical College of South Carolina, Charleston, SC, August, 2007.
- 2008 Mechanism of Hypertension: The Heart / Kidney Link. Cardiology Grand Rounds, Medical College of Georgia, January 2008.
- 2008 How does inflammation fit with hypertension? Potential role of IL-6. School of Dentistry, Medical College of Georgia, February 2008.
- 2008 Mechanisms Controlling Renal Vascular Resistance Early in Diabetes. University of Alabama-Birmingham, Division of Hypertension, March 2008.
- 2008 Renal Actions of IL-6 that Modulate AngII Hypertension. Jackson Cardiovascular-Renal Meeting 2008, University of Mississippi Medical Center, October 2008.
- 2009 Potential Role of Glomerular Filtration Rate Controlling Blood Pressure Early in Metabolic Syndrome. Indiana University, Cellular and Integrative Physiology, February.
- 2009 Active Learning Strategies to Teach Renal-Cardiovascular Integration with High Student:Teacher Ratios. Experimental Biology 2009 Symposium. April 2009.
- 2009 New Evidence for a Chronic Sodium Retaining Action of Insulin. University of Kentucky Cardiovascular Research Center. September 2009.
- 2009 Approaches to Promote Active Learning and Integrative Thinking in the Biological Sciences. University of Kentucky, Department of Biology, September 2009.
- 2009 Renal Mechanisms for Long-Term Blood Pressure Control. Division of Nephrology, Medical College of Georgia, December 2009.

- 2010 Approaches to promote active learning and integrative thinking in biomedical science. Tulane University, School of Medicine, Department of Physiology, October, 2010.
- 2010 Insulin may be required to prevent renal salt wasting in Type II diabetes. Tulane University, School of Medicine, Department of Physiology, October, 2010.
- 2011 Renal Body Fluid Feedback System for Chronic Blood Pressure Control. Department of Physiology, Georgia Health Sciences University, January 2011
- 2011 Intra-Renal Insulin Replacement Reverses Diabetes Induced Natriuresis and Diuresis. University of South Carolina Biomedical Sciences Seminar Series, October, 2011.
- 2012 Insulin Causes Sustained Sodium Retention: New Evidence and Implications. University of Missouri, Columbia, MO, February 2012.
- 2012 Sodium Retaining Actions of Insulin in Diabetes. Symposium at Experimental Biology April 2012, San Diego, CA.
- 2015 Should we still care about insulin in the cardiovascular realm? University of Mississippi Medical Center, Jackson, MS, September, 2015.
- 2016 Insulin Resistance and Hypertension, Sun Yat-sen University, China, December 2016.
- 2018 Insulin and Glucose Effects on Renal Sodium Handling. APS Summer Research Conference, "Control of Renal Function in Health and Disease"

PUBLICATIONS

Book Chapters

1. Hall, J.E. and M.W. Brands. "The Renin-Angiotensin-Aldosterone Systems." The Kidney: Physiology and Pathophysiology. Eds. D.W. Seldin and G. Giebisch. Raven Press, New York, 1992.
2. Hall, J.E. and M.W. Brands. "Intrarenal and circulating angiotensin II and renal function." Renin-Angiotensin System Textbook. Eds. J.I.S. Robertson, and M.G. Nicholls. Gower Medical Publishing, Plymouth, United Kingdom, 1992.
3. Hall, J.E., A.C. Guyton, and M.W. Brands. "Control of sodium excretion and arterial pressure by intrarenal mechanisms and the renin-angiotensin system." Hypertension. Eds. J.H. Laragh and B.M. Brenner. Raven Press, Ltd., New York, 1995.
4. Hall, J.E. and M.W. Brands. "The Renin-Angiotensin-Aldosterone Systems: Renal Mechanisms and Circulatory Homeostasis." The Kidney: Physiology and Pathophysiology. Eds. D.W. Seldin and G. Giebisch. Raven Press, New York, 2000.
5. Brands, M.W. and J.E. Hall. "Mechanism for Chronic Antihypertensive Effect of Angiotensin II Blockade." Angiotensin II Receptor Antagonists. Eds. M. Epstein and H. Brunner. Hanley & Belfus, Inc., Philadelphia, 2000.
6. Brands, M.W. and D.L. Lee. "Psychosocial Stress and Hypertension" Comprehensive Hypertension, Eds. G.Y.H. Lip and J.E. Hall. Mosby Elsevier, Philadelphia, 2007
7. Brands, M.W. "Chronic Blood Pressure Control" Comprehensive Physiology: Renal Physiology. American Physiological Society. 2012:2481-2494.

Journals

1. Verburg KM, Freeman RH, Villarreal D, Brands MW. Atrial natriuretic factor in dogs with one-kidney, one-clip Goldblatt hypertension. Am J Physiol. 1987;253:H1623-1627.
2. Brands MW, Freeman RH. Aldosterone and renin inhibition by physiological levels of atrial natriuretic factor. Am J Physiol. 1988;254:R1011-1016.
3. Villarreal D, Freeman RH, Verburg KM, Brands MW. Renal hemodynamic response to intrarenal infusion of calcitonin gene-related peptide in dogs. Peptides. 1988;9:1129-1135.
4. Villarreal D, Freeman RH, Verburg KM, Brands MW. Effects of calcitonin gene-related peptide on renal blood flow in the rat. Proc Soc Exp Biol Med. 1988;188:316-322.
5. Brands MW, Freeman RH. Aldosterone and renin inhibition by atrial natriuretic factor in potassium-loaded rats. Am J Physiol. 1989;257:R1423-1428.

6. Verburg KM, Freeman RH, Villarreal D, Brands MW. Cardiovascular and renal effects of calcitonin gene-related peptide in hypertensive dogs. Peptides. 1989;10:663-669.
7. Villarreal D, Freeman RH, Brands MW. DOCA administration and atrial natriuretic factor in dogs with chronic heart failure. Am J Physiol. 1989;257:H739-745.
8. Gaillard CA, Mizelle HL, Montani JP, Brands MW, Hildebrandt DA, Hall JE. Atrial natriuretic factor and blood pressure control: role of sodium and aldosterone. Am J Physiol. 1990;259:R973-980.
9. Hall JE, Brands MW, Kivlighn SD, Mizelle HL, Hildebrandt DA, Gaillard CA. Chronic hyperinsulinemia and blood pressure. Interaction with catecholamines? Hypertension. 1990;15:519-527.
10. Hall JE, Mizelle HL, Hildebrandt DA, Brands MW. Abnormal pressure natriuresis. A cause or a consequence of hypertension? Hypertension. 1990;15:547-559.
11. Hildebrandt DA, Mizelle HL, Brands MW, Gaillard CA, Smith MJ, Jr., Hall JE. Intrarenal atrial natriuretic peptide infusion lowers arterial pressure chronically. Am J Physiol. 1990;259:R585-592.
12. Mizelle HL, Hildebrandt DA, Gaillard CA, Brands MW, Montani JP, Smith MJ, Jr., Hall JE. Atrial natriuretic peptide induces sustained natriuresis in conscious dogs. Am J Physiol. 1990;258:R1445-1452.
13. Villarreal D, Freeman RH, Brands MW. ANF and postprandial control of sodium excretion in dogs with compensated heart failure. Am J Physiol. 1990;258:R232-239.
14. Brands MW, Hildebrandt DA, Mizelle HL, Hall JE. Sustained hyperinsulinemia increases arterial pressure in conscious rats. Am J Physiol. 1991;260:R764-768.
15. Brands MW, Mizelle HL, Gaillard CA, Hildebrandt DA, Hall JE. The hemodynamic response to chronic hyperinsulinemia in conscious dogs. Am J Hypertens. 1991;4:164-168.
16. Hall JE, Brands MW, Mizelle HL, Gaillard CA, Hildebrandt DA. Chronic intrarenal hyperinsulinemia does not cause hypertension. Am J Physiol. 1991;260:F663-669.
17. Brands MW, Hall JE. Insulin resistance, hyperinsulinemia, and obesity-associated hypertension. J Am Soc Nephrol. 1992;3:1064-1077.
18. Brands MW, Hildebrandt DA, Mizelle HL, Hall JE. Hypertension during chronic hyperinsulinemia in rats is not salt-sensitive. Hypertension. 1992;19:I83-89.
19. Hall JE, Brands MW, Hildebrandt DA, Mizelle HL. Obesity-associated hypertension. Hyperinsulinemia and renal mechanisms. Hypertension. 1992;19:I45-55.
20. Hall JE, Mizelle HL, Brands MW, Hildebrandt DA. Pressure natriuresis and angiotensin II in reduced kidney mass, salt-induced hypertension. Am J Physiol. 1992;262:R61-71.
21. Hildebrandt DA, Mizelle HL, Brands MW, Hall JE. Comparison of renal actions of urodilatin and atrial natriuretic peptide. Am J Physiol. 1992;262:R395-399.
22. Brands MW, Alonso-Galicia M, Mizelle HL, Montani JP, Hildebrandt DA, Hall JE. Chronic angiotensin-converting-enzyme inhibition improves cardiac output and fluid balance during heart failure. Am J Physiol. 1993;264:R414-422.
23. Hall JE, Brands MW, Dixon WN, Smith MJ, Jr. Obesity-induced hypertension. Renal function and systemic hemodynamics. Hypertension. 1993;22:292-299.
24. Brands MW, Garrity CA, Holman MG, Hall JE. Exaggerated pressor and chronotropic response to chronic hyperinsulinemia in SH versus WKY. Am J Hypertens. 1994;7:75-81.
25. Brands MW, Garrity CA, Holman MG, Keen HL, Alonso-Galicia M, Hall JE. High-fructose diet does not raise 24-hour mean arterial pressure in rats. Am J Hypertens. 1994;7:104-109.
26. Hall JE, Summers RL, Brands MW, Keen H, Alonso-Galicia M. Resistance to metabolic actions of insulin and its role in hypertension. Am J Hypertens. 1994;7:772-788.
27. Hu L, Manning RD, Jr., Brands MW. Long-term cardiovascular role of nitric oxide in conscious rats. Hypertension. 1994;23:185-194.
28. Brands MW. High fructose diet and blood pressure. Am J Hypertens. 1995;8:335-336.
29. Brands MW, Hall JE, Van Vliet BN, Alonso-Galicia M, Herrera GA, Zappe D. Obesity and hypertension: roles of hyperinsulinemia, sympathetic nervous system and intrarenal mechanisms. J Nutr. 1995;125:1725S-1731S.

30. Hall JE, Brands MW, Zappe DH, Alonso Galicia M. Insulin resistance, hyperinsulinemia, and hypertension: causes, consequences, or merely correlations? Proc Soc Exp Biol Med. 1995;208:317-329.
31. Hall JE, Brands MW, Zappe DH, Alonso-Galicia M. Cardiovascular actions of insulin: are they important in long-term blood pressure regulation? Clin Exp Pharmacol Physiol. 1995;22:689-700.
32. Hall JE, Brands MW, Zappe DH, Dixon WN, Mizelle HL, Reinhart GA, Hildebrandt DA. Hemodynamic and renal responses to chronic hyperinsulinemia in obese, insulin-resistant dogs. Hypertension. 1995;25:994-1002.
33. Alonso-Galicia M, Brands MW, Zappe DH, Hall JE. Hypertension in obese Zucker rats. Role of angiotensin II and adrenergic activity. Hypertension. 1996;28:1047-1054.
34. Brands MW, Hopkins TE. Poor glycemic control induces hypertension in diabetes mellitus. Hypertension. 1996;27:735-739.
35. Brands MW, Lee WF, Keen HL, Alonso-Galicia M, Zappe DH, Hall JE. Cardiac output and renal function during insulin hypertension in Sprague-Dawley rats. Am J Physiol. 1996;271:R276-281.
36. Hall JE, Brands MW, Shek EW. Central role of the kidney and abnormal fluid volume control in hypertension. J Hum Hypertens. 1996;10:633-639.
37. Hall JE, Guyton AC, Brands MW. Pressure-volume regulation in hypertension. Kidney Int Suppl. 1996;55:S35-41.
38. Keen HL, Brands MW, Alonso-Galicia M, Hall JE. Chronic adrenergic receptor blockade does not prevent hyperinsulinemia-induced hypertension in rats. Am J Hypertens. 1996;9:1192-1199.
39. Brands MW, Harrison DL, Keen HL, Gardner A, Shek EW, Hall JE. Insulin-induced hypertension in rats depends on an intact renin-angiotensin system. Hypertension. 1997;29:1014-1019.
40. Keen HL, Brands MW, Smith MJ, Jr., Shek EW, Hall JE. Inhibition of thromboxane synthesis attenuates insulin hypertension in rats. Am J Hypertens. 1997;10:1125-1131.
41. Keen HL, Brands MW, Smith MJ, Jr., Shek EW, Hall JE. Thromboxane is required for full expression of angiotensin hypertension in rats. Hypertension. 1997;29:310-314.
42. Brands MW, Fitzgerald SM. Acute endothelium-mediated vasodilation is not impaired at the onset of diabetes. Hypertension. 1998;32:541-547.
43. Brands MW, Granger JP. Control of renal function and blood pressure by angiotensin II: implications for diabetic glomerular injury. Miner Electrolyte Metab. 1998;24:371-380.
44. Brands MW, Hall JE. Renal perfusion pressure is an important determinant of sodium and calcium excretion in DOC-salt hypertension. Am J Hypertens. 1998;11:1199-1207.
45. Brands MW, Hall JE, Keen HL. Is insulin resistance linked to hypertension? Clin Exp Pharmacol Physiol. 1998;25:70-76.
46. Hall JE, Brands MW, Henegar JR, Shek EW. Abnormal kidney function as a cause and a consequence of obesity hypertension. Clin Exp Pharmacol Physiol. 1998;25:58-64.
47. Keen HL, Brands MW, Smith MJ, Jr., Hall JE. Maintenance of baseline angiotensin II potentiates insulin hypertension in rats. Hypertension. 1998;31:637-642.
48. Shek EW, Brands MW, Hall JE. Chronic leptin infusion increases arterial pressure. Hypertension. 1998;31:409-414.
49. Hall JE, Brands MW, Henegar JR. Mechanisms of hypertension and kidney disease in obesity. Ann N Y Acad Sci. 1999;892:91-107.
50. Hall JE, Brands MW, Henegar JR. Angiotensin II and long-term arterial pressure regulation: the overriding dominance of the kidney. J Am Soc Nephrol. 1999;10 Suppl 12:S258-265.
51. Brands MW, Fitzgerald SM. Chronic intravenous glucose infusion causes moderate hypertension in rats. Am J Hypertens. 2000;13:99-102.
52. Brands MW, Fitzgerald SM, Hewitt WH, Hailman AE. Decreased cardiac output at the onset of diabetes: renal mechanisms and peripheral vasoconstriction. Am J Physiol Endocrinol Metab. 2000;278:E917-924.

53. Claxton CR, Brands MW, Fitzgerald SM, Cameron JA. Inhibition of nitric oxide synthesis potentiates hypertension during chronic glucose infusion in rats. Hypertension. 2000;35:451-456.
54. Fitzgerald SM, Brands MW. Nitric oxide may be required to prevent hypertension at the onset of diabetes. Am J Physiol Endocrinol Metab. 2000;279:E762-768.
55. Hall JE, Brands MW, Hildebrandt DA, Kuo J, Fitzgerald S. Role of sympathetic nervous system and neuropeptides in obesity hypertension. Braz J Med Biol Res. 2000;33:605-618.
56. Brands MW, Fitzgerald SM. Arterial pressure control at the onset of type I diabetes: the role of nitric oxide and the renin-angiotensin system. Am J Hypertens. 2001;14:126S-131S.
57. Brands MW, Hailman AE, Fitzgerald SM. Long-term glucose infusion increases arterial pressure in dogs with cyclooxygenase-2 inhibition. Hypertension. 2001;37:733-738.
58. Fitzgerald SM, Hall JE, Brands MW. Rapid hypotensive response to fasting in spontaneously hypertensive rats. Am J Hypertens. 2001;14:1123-1127.
59. Fitzgerald SM, Henegar JR, Brands MW, Henegar LK, Hall JE. Cardiovascular and renal responses to a high-fat diet in Osborne-Mendel rats. Am J Physiol Regul Integr Comp Physiol. 2001;281:R547-552.
60. Brands MW, Fitzgerald SM. Blood pressure control early in diabetes: a balance between angiotensin II and nitric oxide. Clin Exp Pharmacol Physiol. 2002;29:127-131.
61. Fitzgerald SM, Brands MW. Hypertension in L-NAME-treated diabetic rats depends on an intact sympathetic nervous system. Am J Physiol Regul Integr Comp Physiol. 2002;282:R1070-1076.
62. Brands MW, Cloud LJ. Control of arterial pressure by angiotensin II and nitric oxide at the onset of diabetes. Am J Hypertens. 2003;16:600-603.
63. Claxton CR, Brands MW. Nitric oxide opposes glucose-induced hypertension by suppressing sympathetic activity. Hypertension. 2003;41:274-278.
64. Brands MW, Bell TD, Gibson B. Nitric oxide may prevent hypertension early in diabetes by counteracting renal actions of superoxide. Hypertension. 2004;43:57-63.
65. Lee DL, Leite R, Fleming C, Pollock JS, Webb RC, Brands MW. Hypertensive response to acute stress is attenuated in interleukin-6 knockout mice. Hypertension. 2004;44:259-263.
66. Lee DL, Webb RC, Brands MW. Sympathetic and angiotensin-dependent hypertension during cage-switch stress in mice. Am J Physiol Regul Integr Comp Physiol. 2004;287:R1394-1398.
67. Huang H, Zhou Y, Raju VT, Du J, Chang HH, Wang CY, Brands MW, Falck JR, Wang MH. Renal 20-HETE inhibition attenuates changes in renal hemodynamics induced by L-NAME treatment in pregnant rats. Am J Physiol Renal Physiol. 2005;289:F1116-1122.
68. Tang J, Fitzgerald SM, Boughtman BN, Cole SW, Brands MW, Zhang JH. Decreased RhoA expression in myocardium of diabetic rats. Can J Physiol Pharmacol. 2005;83:775-783.
69. Zhou Y, Lin S, Chang HH, Du J, Dong Z, Dorrance AM, Brands MW, Wang MH. Gender differences of renal CYP-derived eicosanoid synthesis in rats fed a high-fat diet. Am J Hypertens. 2005;18:530-537.
70. Appel LJ, Brands MW, Daniels SR, Karanja N, Elmer PJ, Sacks FM, American Heart A. Dietary approaches to prevent and treat hypertension: a scientific statement from the American Heart Association. Hypertension. 2006;47:296-308.
71. Banes-Berceli AK, Shaw S, Ma G, Brands M, Eaton DC, Stern DM, Fulton D, Caldwell RW, Marrero MB. Effect of simvastatin on high glucose- and angiotensin II-induced activation of the JAK/STAT pathway in mesangial cells. Am J Physiol Renal Physiol. 2006;291:F1116-F1121.
72. Bell TD, DiBona GF, Wang Y, Brands MW. Mechanisms for renal blood flow control early in diabetes as revealed by chronic flow measurement and transfer function analysis. J Am Soc Nephrol. 2006;17:2184-2192.

73. Jin L, Beswick RA, Yamamoto T, Palmer T, Taylor TA, Pollock JS, Pollock DM, Brands MW, Webb RC. Increased reactive oxygen species contributes to kidney injury in mineralocorticoid hypertensive rats. *J Physiol Pharmacol*. 2006;57:343-357.
74. Lee DL, Sturgis LC, Labazi H, Osborne JB, Jr., Fleming C, Pollock JS, Manhiani M, Imig JD, Brands MW. Angiotensin II hypertension is attenuated in interleukin-6 knockout mice. *Am J Physiol Heart Circ Physiol*. 2006;290:H935-940.
75. Lichtenstein AH, Appel LJ, Brands M, Carnethon M, Daniels S, Franch HA, Franklin B, Kris-Etherton P, Harris WS, Howard B, Karanja N, Lefevre M, Rudel L, Sacks F, Van Horn L, Winston M, Wylie-Rosett J. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. *Circulation*. 2006;114:82-96.
76. Rojas M, Bell TD, Sturgis LC, Springfield V, Janardhanan R, Fleming C, Brands MW. Blood pressure early in diabetes depends on a balance between glomerular filtration rate and the renin-angiotensin system. *Am J Hypertens*. 2006;19:1249-1255.
77. Smith AD, Brands MW, Wang MH, Dorrance AM. Obesity-induced hypertension develops in young rats independently of the renin-angiotensin-aldosterone system. *Exp Biol Med (Maywood)*. 2006;231:282-287.
78. Brands MW, Bell TD, Fleming C, Labazi H, Sturgis LC. Lack of blood pressure salt-sensitivity supports a preglomerular site of action of nitric oxide in Type I diabetic rats. *Clin Exp Pharmacol Physiol*. 2007;34:475-479.
79. Bell TD, DiBona GF, Biemiller R, Brands MW. Continuously measured renal blood flow does not increase in diabetes if nitric oxide synthesis is blocked. *Am J Physiol Renal Physiol*. 2008;295:F1449-1456. PMC2584904.
80. Brands MW, Labazi H. Role of glomerular filtration rate in controlling blood pressure early in diabetes. *Hypertension*. 2008;52:188-194. PMC2692107.
81. Brands MW, Bell TD, Rodriguez NA, Polavarapu P, Panteleyev D. Chronic glucose infusion causes sustained increases in tubular sodium reabsorption and renal blood flow in dogs. *Am J Physiol Regul Integr Comp Physiol*. 2009;296:R265-271. PMC2643985.
82. Brands MW, Schumacher L. Active learning strategies to teach renal-cardiovascular integration with high student-to-teacher ratios. *Adv Physiol Educ*. 2009;33:282-285.
83. Carneiro FS, Sturgis LC, Giachini FR, Carneiro ZN, Lima VV, Wynne BM, San Martin S, Brands MW, Tostes RC, Webb RC. TNF-alpha knockout mice have increased corpora cavernosa relaxation. *J Sex Med*. 2009;6:115-125.
84. Giachini FR, Carneiro FS, Lima VV, Carneiro ZN, Brands MW, Webb RC, Tostes RC. A key role for Na⁺/K⁺-ATPase in the endothelium-dependent oscillatory activity of mouse small mesenteric arteries. *Braz J Med Biol Res*. 2009;42:1058-1067.
85. Manhiani M, Quigley JE, Knight SF, Tasoobshirazi S, Moore T, Brands MW, Hammock BD, Imig JD. Soluble epoxide hydrolase gene deletion attenuates renal injury and inflammation with DOCA-salt hypertension. *Am J Physiol Renal Physiol*. 2009;297:F740-748. PMC2739707.
86. Sturgis LC, Cannon JG, Schreihof DA, Brands MW. The role of aldosterone in mediating the dependence of angiotensin hypertension on IL-6. *Am J Physiol Regul Integr Comp Physiol*. 2009;297:R1742-1748. PMC2803630.
87. Rojas M, Zhang W, Lee D, Romero M, Nguyen DT, Al-Shabrawey M, Tsai NT, Liou G, Brands MW, Caldwell RW, Caldwell RB. Role of IL-6 in Angiotensin II-induced Retinal Vascular Inflammation. *Invest Ophthalmol Vis Sci*. 2010;51:1709-1718.
88. Brands MW, Banes-Berceli AKL, Inscho, EW Al-Azawi H, Allen AJ, Labazi H. Interleukin-6 Knockout Prevents Angiotensin II Hypertension: Role of Renal Vasoconstriction and JAK2/STAT3 Activation. *Hypertension*. 2010;56:879-84.
89. Manhiani MM, Cormican M, Brands MW. Chronic Sodium-Retaining Action of Insulin in Diabetic Dogs. *Am J Physiol Renal Physiol*. 300:F957-F965, 2011.
90. Banes-Berceli AK, Hind AA, Proctor D, Qu H, Hill-Pryor C, Webb RC, Brands MW. Angiotensin II utilizes JANUS KINASE 2 in hypertension, but not physiologic control of blood pressure. *Am J Physiol Regul Integr Comp Physiol*. 301:R1169-1176, 2011.

91. Klein N, Brands M. Basic Circulatory Physiology: Interactive Animation and Review Module. MedEdPORTAL; 2011. Available from: www.mededportal.org/publication/8591.
92. Manhiani MM, Duggan AD, Wilson H, and Brands MW. Chronic Intra-Renal Insulin Replacement Reverses Diabetes Induced Natriuresis and Diuresis. *Hypertension*. 2012;59:421-430.
93. Brands MW and Manhiani MM. Sodium retaining effect of insulin in diabetes. *Am J Physiol Regul Integr Comp Physiol*. 303:R1101-1109, 2012.
94. Hyndman KA, Boesen EI, Elmarakby AA, Brands MW, Huang P, Kohan DE, Pollock DM, Pollock JS. Renal collecting duct NOS1 maintains fluid-electrolyte homeostasis and blood pressure. *Hypertension*. ePub April 22, 2013.
95. Loria AS, Brands MW, Pollock DM, Pollock JS. Early life stress sensitizes the renal and systemic sympathetic system in rats. *Am J Physiol Renal Physiol*. 305:F390-395, 2013.
96. Romero MJ, Yao L, Sridhar S, Bhatta A, Dou H, Ramesh G, Brands MW, Pollock DM, Caldwell RB, Cederbaum SD, Head CA, Bagi Z, Lucas R, Caldwell RW. 1-Citrulline protects from kidney damage in Type I diabetic mice. *Front Immunol* 2013;4:480.
97. Ilatovskaya DV, Lvchenko V, Brands MW, Pavlov TS, Staruschenko A. Cross-talk between insulin and IGF-1 receptors in the cortical collecting duct principal cells: implication for ENaC-mediated Na⁺ reabsorption. *Am J Physiol Renal Physiol* 2015;308:F713-F719.
98. Wilson PC, Fitzgibbon WR, Garrett SM, Jaffa AA, Luttrell LM, Brands MW, El-Shewy HM. Inhibition of sphingosine kinase 1 ameliorates angiotensin II-induced hypertension and inhibits transmembrane calcium entry via store-operated calcium channel. *Molecular Endocrinology* 2015;29:896-908.
99. Ranganathan P, Mohamed R, Jayakumar C, Brands MW, Ramesh G. Deletion of UNC5B in kidney epithelium exacerbates diabetic nephropathy in mice. *Am J Nephrol* 2015; 41:220-230.
100. Manhiani M, Seth DM, Banes-Berceli AKL, Satou R, Navar G, Brands MW. The role of IL-6 in the physiologic versus hypertensive blood pressure actions of angiotensin II. *Physiol Rep* 2015;3:e12595 pp1-9.
101. Burder-Nascimento T, Butler BR, Herren DJ, Brands MW, Bence KK, Belin de Chantemele, EJ. Deletion of protein tyrosine phosphatase 1b in proopiomelanocortin neurons reduces neurogenic control of blood pressure and protects mice from leptin- and sympatho-mediated hypertension. *Pharmacol Res* 2015;102:235-244.
102. Irsik D, Blazer-Yost B, Staruschenko A, Brands MW. The normal increase in insulin after a meal may be required to prevent postprandial renal sodium and volume losses. *Am J Physiol Reg Integ Comp Physiol*, 2017 2017;312:R965-R972.
103. Irsik DL, Chen JK, Brands MW. Chronic renal artery insulin infusion increases mean arterial pressure in Sprague-Dawley rats. *Am J Physiol Renal Physiol*, 2018;314:F81-F88.
104. Irsik DL, Brands MW. Physiologic Hyperinsulinemia Caused by Acute Hyperglycemia Minimizes Renal Sodium Loss by Direct Action on the Kidney. *Am J Physiol Renal Physiol*. 2018;315:R547-R552.
105. Faulkner JL, Harwood D, Bender L, Shrestha L, Brands MW, Morwitzer MJ, Kennard S, Antonova G, Belin de Chantemèle EJ. Lack of Suppression of Aldosterone Production Leads to Salt-Sensitive Hypertension in Female but Not Male Balb/C Mice. *Hypertension*. 2018;72:1397-1406.
106. Brands MW. The Role of Insulin-Mediated Antinatriuresis in Sodium Homeostasis and Hypertension. *Hypertension*. 2018 72:1255-1262.
107. Diaz JR, Kim KJ, Brands MW, Filosa JA. Augmented astrocyte microdomain Ca²⁺ dynamics and parenchymal arteriole tone in angiotensin II-infused hypertensive mice. *Glia*. 2019;67:551-565.

Abstracts

1. Brands, M.W. and R.H. Freeman. Aldosterone and renin inhibition by physiologic levels of atrial natriuretic factor. *FASEB Journal* 2: A524, 1988.
2. Brands, M.W. and R.H. Freeman. Atrial natriuretic factor inhibits renin and aldosterone secretion at different threshold doses in chronic potassium-loaded rats. *Am. J. Hypertension*, 1988.
3. Hall, J.E., M.W. Brands, S.D. Kivlighn, D.A. Hildebrandt, H.L. Mizelle, and C.A. Gaillard. Hyperinsulinemia, catecholamines, and long-term blood pressure regulation. *Am. J. Hypertension* 2: 32A, 1989.
4. Brands, M.W., J.E. Hall, D.A. Hildebrandt, and H.L. Mizelle. Hypertension during chronic hyperinsulinemia in conscious rats. *FASEB Journal* 4(3): A817, 1990.
5. Hall, J.E., H.L. Mizelle, M.W. Brands, and D.A. Hildebrandt. Salt-induced hypertension: role of pressure natriuresis. *FASEB Journal* 4(3): A817, 1990.
6. Mizelle, H.L., M.W. Brands, C.A. Gaillard, R.D. Manning, W.N. Dixon, D.A. Hildebrandt, and J.E. Hall. Chronic hemodynamic actions of atrial natriuretic peptide. *FASEB Journal* 4(3): A694, 1990.
7. Brands, M.W., H.L. Mizelle, C.A. Gaillard, D.A. Hildebrandt, and J.E. Hall. The hemodynamic response to chronic hyperinsulinemia in conscious dogs. *Am. J. Hypertension* 3(5) [part 2]: 19A, 1990.
8. Hildebrandt, D.A., H.L. Mizelle, M.W. Brands, and J.E. Hall. Comparison of the renal actions of urodilatin (URO) and atrial natriuretic peptide. *FASEB Journal* 4: A695, 1990.
9. Hall, J.E., M.W. Brands, H.L. Mizelle, C.A. Gaillard, and D.A. Hildebrandt. Chronic intrarenal hyperinsulinemia and blood pressure regulation. *Am. J. Hypertension* 3(5) [part 2]: 26A, 1990.
10. Hall, J.E., M.W. Brands, H.L. Mizelle, C.A. Gaillard, and D.A. Hildebrandt. Control of arterial pressure during chronic intrarenal or systemic hyperinsulinemia. *J. Hypertension* 8(Suppl. 3): S9, 1990.
11. Hildebrandt, D.A., H.L. Mizelle, M.W. Brands, and J.E. Hall. Renal pressure natriuresis and urodilatin: a new natriuretic hormone. *J. Am. Soc. Nephrol.* 1(4): 417, 1990.
12. Hall, J.E., W.N. Dixon, M.W. Brands, H.L. Mizelle, and D.A. Hildebrandt. Obesity, hyperinsulinemia, and hypertension: control of renal function and systemic hemodynamics. *J. Am. Soc. Nephrol.* 1(4): 490, 1990.
13. Mizelle, H.L., M.W. Brands, D.A. Hildebrandt, and J.E. Hall. Role of renal perfusion pressure in chronic hypercalciuria. *J. Am. Soc. Nephrol.* 1(4): 496, 1990.
14. Brands, M.W., J.E. Hall, H.L. Mizelle, and D.A. Hildebrandt. Chronic angiotensin converting enzyme inhibition (ACEI) improves cardiac output and fluid balance during heart failure. *FASEB Journal* 5: A738, 1991.
15. Hall, J.E., M.W. Brands, W.N. Dixon, H.L. Mizelle, and D.A. Hildebrandt. Hyperinsulinemia does not elevate blood pressure in obese hypertensive dogs. *FASEB Journal* 5: A737, 1991.
16. Hall, J.E., M.W. Brands, W.N. Dixon, H.L. Mizelle, and D.A. Hildebrandt. Renal function in obesity-associated hypertension in conscious dogs. *Am. J. Hypertension* 4: 118A, 1991.
17. Hildebrandt, D.A., H.L. Mizelle, M.W. Brands, and J.E. Hall. Low-salt diet abolishes the renal response to urodilatin. *FASEB Journal* 5: A1019, 1991.
18. Brands, M.W., J.E. Hall, D.A. Hildebrandt, and H.L. Mizelle. Hypertension during hyperinsulinemia in rats is not salt-sensitive. *Am. J. Hypertension* 4: 13A, 1991.
19. Hu, L., R.D. Manning, and M.W. Brands. The long-term cardiovascular effects of inhibition of nitric oxide synthesis. *FASEB Journal* 6: A1256, 1992.
20. Hildebrandt, D.A., B.N. Van Vliet, M.W. Brands, H.L. Mizelle, and J.E. Hall. Chronic intravertebral (IVT) angiotensin II (AII) infusion increases arterial pressure. *FASEB Journal* 6: A1469, 1992.

21. Brands, M.W., M. Alonso-Galicia, H.L. Mizelle, D.A. Hildebrandt, and J.E. Hall. Renal perfusion pressure and sodium balance in DOCA-salt hypertension. *FASEB Journal* 6: A1469, 1992.
22. Hall, J.E., M.W. Brands, W.N. Dixon, H.L. Mizelle, and D.A. Hildebrandt. Blood pressure regulation during chronic hyperinsulinemia in obese, insulin resistant dogs. *International Society of Hypertension*, 1992.
23. Hall, J.E., R.D. Connell, C.A. Garrity, and M.W. Brands. Endothelial derived relaxing factor (EDRF) in long-term circulatory control in normal and obese dogs. *Circulation* 86: 1947, 1992.
24. Hall, J.E., B.N. Van Vliet, C.A. Garrity, R.D. Connell, and M.W. Brands. Role of increased adrenergic activity in obesity-induced hypertension. *Circulation* 86: 2154, 1992.
25. Brands, M.W., C.A. Garrity, M.G. Holman, and J.E. Hall. Exaggerated pressor and chronotropic response to chronic hyperinsulinemia in SH versus WKY rats. *FASEB J* 7: A6, 1993.
26. Hall, J.E., N.N. Van Vliet, C. Torrey, C.N. Garrity, and M.W. Brands. Adrenergic mechanisms in obesity-induced hypertension. *FASEB J* 7: A188, 1993.
27. Brands, M.W., C.A. Garrity, M.G. Holman, H.L. Keen, M. Alonso-Galicia, and J.E. Hall. High-fructose diet does not raise 24-hour mean arterial pressure in rats. *Am. J. Hypertension* 6: 59A, 1993.
28. Zappe, D.H., C.A. Garrity, M.W. Brands, and J.E. Hall. Role of beta adrenergic system in mediating chronic systemic hemodynamic effects of insulin. *FASEB J* 8: A527, 1994.
29. Brands, M.W., D.L. Harrison, and J.E. Hall. Sustained intrarenal calcium infusion does not lower arterial pressure in normal dogs. *FASEB J* 8: A527, 1994.
30. Brands, M.W., J.E. Hall, and H.L. Mizelle. Hypercalciuria in DOC-salt hypertension is secondary to increased renal perfusion pressure. *Am. J. Hypertension* 7: 10A, 1994.
31. Zappe, D.H., S.E. Kassab, M.W. Brands, and J.E. Hall. Chronic adrenergic blockade attenuates the development of hypertension due to weight gain in dogs. *FASEB J* 9: A296, 1995.
32. Chronic AT1 receptor blockade in obese Zucker rats. M. Alonso-Galicia, M.W. Brands, M.J. Smith, and J.E. Hall. *FASEB J* 9: A296, 1995.
33. Brands, M.W., W.F. Lee, H.L. Keen, M. Alonso-Galicia, D.H. Zappe, and J.E. Hall. Cardiac output and renal function during insulin-hypertension in Sprague-Dawley rats. *FASEB J* 9: A296, 1995.
34. Brands, M.W., A. Gardner, H.L. Keen, M. Alonso-Galicia, D.H. Zappe, and J.E. Hall. Chronic ACE inhibition prevents insulin-induced hypertension in Sprague-Dawley rats. *Am. J. Hypertension* 8: 55A, 1995.
35. Keen, H.L., M.W. Brands, M. Alonso-Galicia, and J.E. Hall. Chronic adrenergic receptor blockade does not prevent hyperinsulinemia-induced hypertension in rats *Hypertension* 26: 552, 1995.
36. Brands, M.W. Poor glycemic control induces hypertension in diabetes mellitus. *Hypertension* 26: 554, 1995.
37. Keen, H.L., M.W. Brands, E.W. Shek, and J.E. Hall. Inhibition of thromboxane synthesis attenuates insulin-hypertension in rats. *FASEB J* 10: A566, 1996.
38. Shek, E.W., H.L. Keen, M.W. Brands, and J.E. Hall. Inhibition of nitric oxide synthesis enhances insulin-hypertension in conscious rats. *FASEB J* 10: A566, 1996.
39. Brands, M.W., H.L. Keen, and J.R. Acord, Jr. Hypertension with poor glycemic control in IDDM is not dependent on a decrease in insulin per se. *FASEB J* 10: A566, 1996.
40. * Keen, H.L., M.W. Brands, E.W. Shek, and J.E. Hall. Thromboxane is required for full expression of angiotensin hypertension in rats. *Hypertension* 28: 537, 1996.
41. Brands, M.W., H.L. Keen, and J.R. Acord, Jr. Hindlimb blood flow control very early in insulin-dependent diabetes mellitus. *FASEB J* 11: A77, 1997.
42. Keen, H.L., M.W. Brands, E.W. Shek, and J.E. Hall. Maintenance of baseline angiotensin II potentiates insulin-hypertension. *FASEB J* 11: A258, 1997.
43. Shek, E.W., H.L. Keen, J.R. Henegar, M.W. Brands, and J.E. Hall. Does increased leptin contribute to obesity hypertension? *FASEB J* 11: A258, 1997.

44. Hall, J.E., M.W. Brands, E.W. Shek, and J.R. Hennegar. Mechanisms of renal dysfunction in obesity and role in hypertension. *Am. Society of Hypertension*, 1998.
45. Brands, M.W., H.L. Keen, A.E. Hailman, and J.E. Hall. Chronic intravenous glucose infusion raises blood pressure in rats. *FASEB J.* 12: A94, 1998.
46. Brands, M.W., S.M. Fitzgerald, and A.M. Hailman. Decreased cardiac output at the onset of diabetes: renal mechanisms and peripheral vasoconstriction. *FASEB J.* 13: A458, 1999.
47. Fitzgerald, S.M., J.E. Hall, and M.W. Brands. Rapid hypotensive response to fasting in spontaneously hypertensive rats. *FASEB J.* 13: A457, 1999.
48. Brands, M.W., C. Claxton, and S.M. Fitzgerald. Hypertension during chronic glucose infusion in rats is potentiated by inhibition of nitric oxide synthesis. *Hypertension* 34:339, 1999.
49. Fitzgerald, S.M., M.W. Brands, and A.E. Hailman. Impairment of nitric oxide production exaggerates the pressor response to induction of diabetes. *Hypertension* 34:369, 1999.
50. Brands, M.W. Hypertension in Syndrome X. *J. Am. Coll. Nutr.* 18:524, 1999.
51. Claxton, C.R., M.W. Brands, S.M. Fitzgerald, and J.A. Cameron. Nitric oxide may suppress sympathetic nervous system activity in glucose-induced hypertension. *FASEB J.* 14: A56, 2000.
52. Fitzgerald, S.M., M.W. Brands, and A.E. Hailman. L-NAME hypertension in diabetic rats depends on an intact sympathetic nervous system. *FASEB J.* 14: A374, 2000.
53. Brands, M.W., A.E. Hailman, and S.M. Fitzgerald. Arterial pressure increases in dogs with chronic hyperinsulinemia if COX-2 is inhibited. *Hypertension* 36:724, 2000.
54. Brands, M.W., L. Cloud, J. Williams, and E.Y. Jones. Chronic angiotensin II clamp prevents hypertension in L-NAME-treated diabetic rats. *Hypertension* 38:507, 2001.
55. Brands, M.W., C. Fleming, and E.Y. Jones. Tempol prevents the hypertension caused by onset of diabetes in L-NAME-treated rats. *FASEB J.* 16: A94, 2002.
56. Brands, M.W., B. Gibson, C. Fleming and E.Y. Jones. Hypertensive and renal responses to onset of diabetes in rats without a functional nitric oxide system are not salt sensitive. *Experimental Biology* 2003.
57. Lee, D.L., R. C. Webb, and M.W. Brands. A Novel Model of Cage-Switch-Induced Psychosocial Stress in Mice Causes Marked Hypertension that is Inhibited by Atenolol. *Experimental Biology* 2003.
58. Lee, D.L., R. C. Webb, and M.W. Brands. Knockout of interleukin-6 (IL-6) significantly attenuates the hypertensive response to acute psychosocial stress. *Experimental Biology* 2003.
59. Brands, M.W. and T.D. Bell. Preventing increased GFR at onset of diabetes may increase arterial pressure. *Hypertension* 42: 429, 2003.
60. Lee, D.L., R.C. Webb, and M.W. Brands. IL-6 and TNF-alpha attenuate the prolonged hypertensive response to psychosocial stress in mice. *Hypertension* 42: 443, 2003.
61. Bell, T.D. and M.W. Brands. Time-dependent requirement of blood pressure on nitric oxide at the onset of diabetes. *Experimental Biology* 2004.
62. Lee, D.L., T. Cooney, T.M. Mills, R.C. Webb, and M.W. Brands. The Hypertensive Response to the Cage-Switch Model of Acute Psychosocial Stress in Male Mice depends on Male Sex Hormones. *Experimental Biology* 2004.
63. Lee, D.L., R.C. Webb, and M.W. Brands. Angiotensin II-induced Hypertension Attenuates the Pressor Response to Psychosocial Stress in Cytokine Knockout Mice. *Experimental Biology* 2004.
64. Lee, D.L., J.B. Osborne, Jr., C.Fleming, H. Labazi, R.C. Webb, and M.W. Brands. Attenuated mean arterial pressure response in IL-6 knockout mice during angiotensin II hypertension and a high-salt diet. *Hypertension* 44: 556, 2004.
65. Rojas, M.A., T.D. Bell, C. Fleming, H. Labazi, and M.W. Brands. Angiotensin II-dependent hypertension in rats with reduced kidney mass at the onset of diabetes. *Hypertension* 44: 558, 2004.
66. Wang, M.H., Y. Zhou, H.H. Channg, A.M. Dorrance, and M.W. Brands. Gender differences of blood pressure regulation and renal CYP-derived eicosanoid synthesis in rats on high-fat diet. *Hypertension* 44: 552, 2004.

67. Ma, G., A.E.B. El-Remessy, D.W. Stepp, M.W. Brands, S. Matragoon, and R.B. Caldwell, R.W. Simvastatin prevents impaired vasorelaxation and vascular permeability in diabetic rats. *FASEB J* 19:A108, 2005.
68. Bell, T.D. and M.W. Brands. Unique renal blood flow responses to onset of Type I diabetes revealed by continuous measurement. *FASEB J* 19:A1590, 2005.
69. Lee, D.L., K.A. Lane, and M.W. Brands. Reduced pressor response to norepinephrine, angiotensin II, and L-NAME in interleukin-6 knockout mice. *FASEB J* 19:A1615, 2005.
70. Wang, M.H., Y. Zhou, H. Huang, H.H. Chang, J. Du, and M.W. Brands. Role of renal tubular 20-HETE and EETs in obesity-induced hypertension. *Hypertension* 46(10): A30, 2005.
71. Wang, M.H., H. Huang, Y. Zhou, V.T. Raju, H.H. Chang, J. Du, and M.W. Brands. Renal 20-HETE inhibition attenuates the changes of renal hemodynamics induced by L-NAME treatment in pregnant rats. *Hypertension* 46(10): A30, 2005.
72. Brands, M.W., T.D. Bell, L.C. Sturgis, and V. Springfield. Negative sodium balance may increase the dependence of blood pressure on nitric oxide early in diabetes. *Hypertension* 46(10): A30, 2005.
73. Lee, D.L., J.S. Pollock, M.W. Brands. Chronic AngII infusion causes greater hypertension and increased IL-6 in mice with knockout of peroxisome proliferator activated receptor-alpha. *Hypertension* 46(10): LB4, 2005.
74. Lee, D.L., K. Lane, H. Labazi, C. Fleming, and M.W. Brands. IL-6 knockout significantly attenuates AngII hypertension, but not its salt sensitivity. *FASEB J*. 20:A310. 2006.
75. Lee, D.L., L.C. Sturgis, J.S. Pollock, and M.W. Brands. IL-6 infusion increases mean arterial pressure in mice with reduced renal mass. *FASEB J*. 20:A1184. 2006.
76. Banes-Berceli, A., P. Ketsawatsomkron, M.B. Marrero, D.L. Lee, and M.W. Brands. Characterization of the expression and activation of the members of the JAK family in medulla, cortex, and glomerular mesangial cells in PPAR alpha knockout and wild-type mice. *FASEB J*. 20:A1286. 2006.
77. Janardhanan, R., H. Labazi, C. Fleming, and M.W. Brands. Angiotensin II, but not norepinephrine, potentiates glucose-induced hypertension in rats. *FASEB J*. 20:A1170. 2006.
78. Brands, M.W., T.D. Bell, V. Springfield, C. Fleming, and R. Janardhanan. Chronic glucose infusion significantly decreases 24-hour/day renal blood flow and increases arterial pressure in dogs with reduced renal mass. *FASEB J*. 20:A1170. 2006.
79. Cruthirds, D.L., M.W. Brands, D.M. Pollock, and J.S. Pollock. NOS1 knockout mice exhibit delayed Na excretion following a high-salt challenge. *FASEB J*. 20:A333. 2006.
80. DiBona, G., T.D. Bell, and M.W. Brands. Dynamic renal autoregulation: abnormal in diabetes. *Hypertension* 48:e31, 2006.
81. Bell, T.D. and M.W. Brands. Role of nitric oxide in renal blood flow control during diabetes as revealed by continuous measurement. *Hypertension* 48:e60, 2006.
82. Wynne, B.M. and M.W. Brands. The Effect of IL-6 on the Acute Hypertensive Response to Psychosocial Stress Depends on Angiotensin II. *FASEB J*. 21:1b582, 2007.
83. Sturgis, L.C. and M.W. Brands. Role of TNF- in the dependency of Angiotensin II hypertension on IL-6. *FASEB J*. 21:618.2, 2007.
84. Sturgis, L.C., E. Boesen, K. Lane, and M.W. Brands. Role of IL-6 in DOCA salt hypertension. *FASEB J*. 21:618.1, 2007.
85. Carneiro, F.S., L.C. Sturgis, F.R. Giachini, R. Leite, M.W. Brands, K. Lane, and R.C. Webb. A Role for TNF- in the Functional Alterations of Cavernal Strips in Angiotensin II Hypertensive Mice. *Hypertension* 50: e80, O18, 2007.
86. Labazi, H., and M.W. Brands. Hypertension Caused by High Sugar Intake Is Dose- and NO-Dependent and Inversely Linked to GFR. *Hypertension* 50: e135, P204, 2007.
87. Labazi, H. A.K.L. Banes-Berceli, and M.W. Brands. The Link Between Chronic Renal Blood Flow and Arterial Pressure Control by Angiotensin II in Mice. *FASEB J*. 22:735.14, 2008.

88. Banes-Berceli A.K.L., H. Labazi, and M.W. Brands. Inhibition of the Janus (JAK)/Signal Transducers of Activated Transcription (STAT) Pathway prevents the Development of Angiotensin II-induced Hypertension. *FASEB J.* 22:969.33, 2008
89. Banes-Berceli A.K.L., H. Labazi, D. Cleghorn, and M.W. Brands. IL-6 is required for renal JAK/STAT induction and hypertension during chronic angiotensin II (ANG II) infusion. *Hypertension* 52:e47, O63, 2008.
90. Banes-Berceli A.K.L., L. Sturgis, M.W. Brands, and A. J. Allen. Angiotensin II (ANG II) does not utilize the Janus Kinase 2/Signal Transducers of Activated Transcription (JAK/STAT) pathway in the molecular mechanism of blood pressure response to a low salt diet. *FASEB J.* 23:606.12, 2009.
91. Brands, M.W., M. Cormican, A.Banes-Berceli, M. Manhiani, A.J. Allen, and T.A. Sheppard. Chronic glucose infusion increases tubular sodium reabsorption and renal blood flow in dogs. *FASEB J.* 23:605.12, 2009.
92. Brands M.W., M. Cormican, M.M. Manhiani, T.A. Sheppard TA, and A.J. Allen. Chronic intrarenal insulin plus glucose infusion causes antinatriuresis and activation of the renin-angiotensin system. *Hypertension* 54(4):e29, O61, 2009.
93. Manhiani M.M., T.A. Sheppard, A.J. Allen, M. Cormican, and M.W. Brands. The role of insulin in mediating renal excretory and vascular responses in Type I diabetes. *Hypertension* 54(4):e67, P187, 2009.
94. Brands M.W., A.J. Allen, and A.K.L. Banes-Berceli. IL-6 Knockout Blocks Low-Dose Angiotensin II Hypertension Independent of Renal Vasoconstriction. *FASEB J.* 24:793.5, 2010.
95. Manhiani M.M., T.A. Sheppard, A.J. Allen, M. Cormican, and M.W. Brands. Diabetic Natriuresis is Due to the Loss of Insulin Dependent Proximal Tubular Sodium Reabsorption. *FASEB J.* 24:1025.10, 2010.
96. Manhiani M.M., A.K.L. Banes-Berceli, A.D. Duggan, and M.W. Brands. Physiologic Control of Blood Pressure By Angiotensin II Does Not Require IL-6 or Activate JAK2. Council for High Blood Pressure Research, September 2011.
97. Manhiani M.M., T.A. Sheppard, A.D. Duggan, and M.W. Brands. Intra-Renal Insulin Replacement Reverses Diabetes Induced Natriuresis and Diuresis. Council for High Blood Pressure Research, September 2011.
98. Manhiani M.M. and M.W. Brands. Mechanism for sodium retention by insulin+glucose in diabetes may involve renal epithelial sodium channels (ENaC). *Experimental Biology* 2012.
99. Brands M.W., A. Staruschenko, B.L. Blazer-Yost, R. Alaisami, D. Duggan. Chronic intra-renal insulin infusion increases mean arterial pressure on a background of mild angiotensin II hypertension. *Hypertension.* 2015;64 (Suppl 1):A013-A013.
100. Irsik D, Duggan AD, Alaisami RN, Blazer-Yost BL, Saruschenko A, Brands MW. Chronic renal artery infusion of insulin+glucose increases mean arterial pressure in rats. Council for High Blood Pressure Research, September 2015.
101. Irsik D, Alaisami R, Washington A, Brands MW. Chronic insulin-clamp causes postprandial diuresis in Sprague-Dawley Rats. *Experimental Biology* 2016.