

CURRICULUM VITAE

NAME: Sydney R. Murphy, M.S., Ph.D.

WORK ADDRESS: Department of Pharmacology
University of Mississippi Medical Center
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RESEARCH/WORK EXPERIENCE:

2020-Present	Associate Professor Department of Pharmacology and Toxicology University of Mississippi Medical Center, Jackson, MS
2020- Present	Associate Professor (secondary appointment) Department of Population Health Science John D. Bower School of Population Health University of Mississippi Medical Center, Jackson, MS
2017-Present	Associate Dean of Academic Affairs School of Graduate Studies in the Health Sciences University of Mississippi Medical Center
2017-2020	Assistant Professor (secondary appointment) Department of Population Health Science John D. Bower School of Population Health University of Mississippi Medical Center, Jackson, MS
2016-Present	Associate Dean of Academic and Faculty Affairs John D. Bower School of Population Health University of Mississippi Medical Center, Jackson, MS
2014-2017	Assistant Dean of Academic Affairs School of Graduate Studies in the Health Sciences University of Mississippi Medical Center, Jackson, MS
2014-2020	Assistant Professor Department of Pharmacology and Toxicology University of Mississippi Medical Center, Jackson, MS
2012-2014	Instructor Department of Pharmacology and Toxicology

University of Mississippi Medical Center, Jackson, MS

2010-2012 Post-doctoral Research Fellow I
Department of Pharmacology and Toxicology
University of Mississippi Medical Center, Jackson, MS

2006-2010 Graduate Assistant
Department of Physiology and Biophysics
University of Mississippi Medical Center, Jackson, MS

EDUCATION:

2010- 2012 Post-doctoral Research Fellowship (Mentor: Richard J. Roman, Ph.D.) Department of Pharmacology and Toxicology
University of MS Medical Center, Jackson, MS

2006-2010 Ph.D. (Mentor: Joey P. Granger, Ph.D.)
Department of Physiology and Biophysics
Department of Physiology, University of MS Medical Center, Jackson, MS
Dissertation: "Role of sFlt-1 in Pregnancy-Induced Hypertension: Mechanisms of Production and Hypertensive Actions"

2006-2009 M.S.
Biomedical Sciences
University of Mississippi Medical Center, Jackson, MS

2002-2006 B. S.
Biochemistry and Molecular Biology
Mississippi State University, Mississippi State, MS

PROFESSIONAL MEMBERSHIPS:

2007-Present American Physiological Society
2008-Present American Heart Association
2014-2019 American Society of Experimental Pharmacology and Therapeutics
2014-2018 International Society of the Study of Hypertension in Pregnancy

HONORS/AWARDS:

2019 Top 50 Under 40, Mississippi Business Journal
2018 UMMC Bronze Level of Excellence in Research Awards
2015-16 UMMC Leadership Development Program
2012 Best Post-doctoral Oral Presentation, Juan Carlos Romero Memorial
Postdoctoral Travel and Research Recognition Awardee
2010 Best Pre-doctoral Oral Presentation, American Physiological Society
DSI- Water and Electrolyte Homeostasis trainee symposium
2010 Regions Graduate Research Award

- 2009 Best Oral Student Presentation at the 5th Annual Gulf Coast Physiological Society Meeting
- 2009 Pre-doctoral Trainee Finalist, American Physiological Society DSI-Water and Electrolyte Homeostasis trainee symposium
- 2009 New Investigator Travel Award to the 63rd High Blood Pressure Research Conference

TEACHING/MENTORING:

Teaching

Responsible Conduct in Research for Post-doctoral research fellows

Fall 2019, 2020, 2021

Responsible Conduct in Research (ID 709) – course director – (3 credit hours)

Spring 2019, Spring 2020, Spring 2021

Teaching in Higher Education (ID 715) - course director – (3 credit hours)

Fall 2017, Spring 2018

Teaching Practicum (ID 716) – course director

Fall 2017, Spring 2018

Medical Physiology- Small group leader

2016

Recent Advances in Pharmacology (Journal Club), Director

2014- 2017

Responsible Conduct in Research (ID 709) - Data Management Lecture

2015-2016

Medical Pharmacology- Small group leader

2013-2019

Mechanisms of Drug Action

Fall 2012 sophomore graduate students

Mentoring

Summer Medical Student Research Fellow

Summer 2007 Lyndsay R. Shipp
Jason Bridges

Summer Undergraduate Research Fellow

Summer 2007 Matt Dukes
Summer 2007-2010 Drew Colson
Summer 2015 Christopher Fisher
Summer 2016-2017 Joshua Cotton

OB/GYN Maternal-Fetal Medicine Fellow

2013-2016 Nicole Lee, M.D.

SOM Pre-Clinical Advisor

2014-2016 Class of 2018: Susan Robbins, Melissa Mayeux, Mary Ball Markow
 2015-2017 Class of 2019: Ashli Fitzpatrick, Emily Ousterhout, Hannah Miller
 2016-2018 Class of 2020: Trace Palmer, Yamin Partee, Ritesh Patel
 2017-2019 Class of 2021: Aalaap Desai, Jordan Jackson, Patel Bijalben
 2018-2020 Class of 2022: William Bigham, Taylor Johnson, Shelby Swede
 2019-Present Class of 2023: Sydney James, Michael Mahoney, Mitchell Ostrander, Avery Villeret, Jasmine McNair
 2020-Present Class of 2024: Rebecca Burson, Dion Kevin, Rachael Pace, Kallie Sheridan, Katie Weeks

Dissertation Committee

2014-2018 Kasi McPherson (Pharmacology)
 2014-2016 Jessica Faulkner (Pharmacology)
 2016-2019 Vennam R. Vaka (Experimental Therapeutics and Pharmacology)
 2018-present Corbin Shields (Experimental Therapeutics and Pharmacology)
 2018-2019 Karen Arrant (Nursing)
 2018-2020 Pamela Farris (Nursing)
 2020-present Andrew Ferriby (Clinical Anatomy)
 2021-present Sara Fitzgerald (Experimental Therapeutics and Pharmacology)

SERVICE:

1. Professional:

2019 Program Reviewer, Southern Association of Colleges and Schools, Commission on Colleges
 2019 Ad-Hoc member, Awards Committee, Water and Electrolytes Homeostasis Section, American Physiological Society
 2010-2014 Trainee Advisory Committee, Water and Electrolyte Homeostasis Section, American Physiological Society
 2013 Ad-Hoc member, Awards Committee, Water and Electrolytes Homeostasis Section, American Physiological Society

2. Institutional Service:

2013-2014 Office of Postdoctoral Studies Advisory Committee
 2014-2015 Faculty Development Committee
 2014-Present SOM Pre-clinical Advisor
 2014-Present Academic Affairs Counsel
 2014-2016 Educational Technology Working Group
 2014-Present Institutional Assessment Committee
 2014-Present Academic Accommodations Committee
 2014-Present SGSHS Graduate Council
 2014-2018 SGSHS Clinical Health Sciences TeachOut Executive Committee
 2015-Present SGSHS Graduate Curriculum Committee, Chair
 2015-2016 Social Determinants on Health Committee
 2015-Present SGSHS Admissions Committee, MS in Biomedical Sciences
 2015-Present Interprofessional Education Collaborative
 2015-2017 SACSCOC 5th year Report Committee
 2016-2016 Faculty Development Task Force
 2017-Present Interprofessional Advisory Group

2017	Education Intelligence Advisory Committee
2017-Present	SOPH Academic Council
2017-Present	SOPH Curriculum Committee, chair
2017- Present	SOPH Leadership Team
2018- Present	SOPH Administrative Council
2019- Present	SOPH Workforce Development Scholarship Committee
2020- Present	UMMC Sexual Misconduct Investigative Team, Adjudicator
2020 –Present	UMMC Basic Science Education Initiative Committee

3. Volunteer Service:

2007, 2009-2013	Judge, Mississippi Independent School Association regional science fair
2011, 2013	Judge, Mississippi Independent School Association district science fair
2014	Judge, UMMC Graduate Student Research Day Poster Session
2014-2015	UMMC Discovery U, PhUn Week event at the MS Children’s Museum
2015- Present	APS WEH Mentoring on the Go, Mentor
2016	March of Dimes
2012-2020	Sunday School teacher, Little Lakers, Pinelake Kids
2021-present	Sunday School teacher, Pinelake Kids

4. Ad-Hoc Reviewer:

Hypertension
 Current Vascular Pharmacology
 American Journal of Obstetrics and Gynecology
 Prostaglandins and other Lipid Mediators
 American Journal of Physiology-Renal
 Physiological Genomics

5. Personal:

2017- Present	Madison Avenue Elementary Parent Teacher Organization
2018- Present	Hoy Farms Homeowners Association, President
2020- Present	Madison Avenue Upper Elementary Parent Teacher Organization

6. Publications:

2018	SACSCOC Substantive Change Prospectus- MS of Population Health Science – Approved June 25, 2018
2018	SACSCOC Substantive Change Prospectus- Executive MS of Population Health Management – Approved June 25, 2018
2018	SACSCOC Substantive Change Prospectus- PhD of Population Health Science – Approved June 25, 2018
2018	SACSCOC Substantive Change Prospectus- Doctorate of Audiology – Approved June 7, 2019

RESEARCH:

Funding:

Previous:

2014-2018 American Heart Association National
 Scientist Development Grant 14SDG20160020
 “Vascular eicosanoids and Preeclampsia”
 Total costs: \$308,000

2011-2013 American Heart Association Southeastern Affiliate

“CYP Metabolites, Hypertension, and Renal Disease”

Total costs: \$94,928.00

2011-2012 NIH Training Grant 1T32HL105324-01
University of Mississippi Medical Center, Jackson, MS

2009-2010 American Heart Association Southeastern Affiliate
Pre-doctoral Fellowship 09PRE2250498
“Pregnancy, The Kidney, and Hypertension”
Total costs: \$43,540

Oral Presentations/Invited Participation

1. The Frazzled Female: Today’s Working Mom. UMMC GWIMS Ignite Symposium. November 2020.
2. Responsible Conduct in Research. A Summer Workshop to Drive Collaborative Innovation in Science Education. Science Teaching Excites Medical Interest. University of Mississippi Medical Center, July 2020.
3. Responsible Conduct in Research. A Summer Workshop to Drive Collaborative Innovation in Science Education. Science Teaching Excites Medical Interest. University of Mississippi Medical Center, June 2019.
4. Oral Presentation, Translational Physiology Showcase : Focus on Sex differences in Obesity and Blood Pressure, Developmental Programming, and Women’s Health, Experimental Biology, Chicago, IL ; April 2017
5. Oral Presentation, Water and Electrolyte Homeostasis Trainee symposium, Experimental Biology, San Diego, CA ; April 2012
6. Oral Presentation, Water and Electrolyte Homeostasis Trainee symposium, Experimental Biology, Anaheim, CA ; April 2012
7. Invited Speaker, American Association of Anatomist Intra-uterine Programming and Placentation symposium, Experimental Biology, Anaheim, CA ; April 2012
8. Oral Presentation, American Heart Association, Council for High Blood Pressure Research, Chicago, IL; September 2009
9. Oral Presentation, Water and Electrolyte Homeostasis Trainee symposium, Experimental Biology, New Orleans, LA. April 2009
10. Oral Presentation, American Physiological Society 5th Annual Gulf Coast Physiological Society Meeting. New Orleans, LA. April 2009

Publications:

1. C Zhang, X He, **SR Murphy**, H Zhang, S Wang, Y Ge, W Gao, JM Williams, AM Geurts, RJ Roman, F Fan. Knockout of Dual-Specificity Protein Phosphatase 5 Protects Against Hypertension-Induced Renal Injury. J Pharm and Exp Therapeutics, 2019. PMID:31118214.
2. BM Beech, N Gaughf, **S Murphy**. Population Health: The Scope, Training, and Practice. What are the Benefits for Mississippi? Journal of Mississippi State Medical Association. 2018; 59(8):344-346
3. Plenty NL, JL Faulkner, J Cotton, SK Spencer, K Wallace, B LaMarca, **SR Murphy**. Arachidonic acid metabolites of CYP4A and CYP4F are altered in women with preeclampsia. Prostaglandins and Other Lipids, 2018; 136: 15-22. PMID: 29588191.
4. JL Faulkner, NL Plenty, K Wallace, LM Amaral, MW Cunningham, **S Murphy**, B LaMarca. Selective Inhibition of 20-hydroxyeicosatetraenoic acid lowers blood pressure in a rat model of

- preeclampsia. Prostaglandins & Other Lipids Mediators, 2018; 134: 108-113. PMID: 28951260. PMCID: PMC5902033.
5. **SR Murphy** and K Cockrell. Regulation of soluble fms-like tyrosine kinase-1 production in response to placental ischemia/hypoxia: role of angiotension II. *Physiological Reports*. 2015 Feb 3(2). PMID: 25716926. PMCID: PMC4393214.
 6. JM Sasser, **SR Murphy**, JP Granger. Emerging drugs for preeclampsia- the endothelium as a target. *Expert Opinion on Emerging Drugs*. 2015;20(4). PMID: 26138471. PMCID: PMC4697827.
 7. F Fan, AM Geurts, **SR Murphy**, MR Pabbidi, HJ Jacob, RJ Roman. Impaired myogenic response and autoregulation of cerebral blood flow is rescued in CYP4A1 transgenic Dahl salt-sensitive rat. *Am J Physiol Regul Integr Comp Physiol*. 2015; 305(5): R379-R390. PMID: 25540098. PMCID: PMC4346760.
 8. Warrington JP, F Fan, **SR Murphy**, RJ Roman, HA Drummond, JP Granger, MJ Ryan. Placental ischemia in pregnant rats impairs cerebral blood flow autoregulation and increases blood-brain barrier permeability. *Physiological Reports* Aug 2014;2(8). PMID: 25168877.
 9. Ge, Ying, **SR Murphy**, F Fan, JM Williams, J Falck, R Liu, RJ Roman. Role of 20-HETE in the impaired myogenic and TGF responses of the Af-Art of Dahl Salt-sensitive rats. *Am J Physiol Renal Physiol* July 9, 2014. PMID: 25007887. PMCID: 4154113.
 10. **Murphy SR** and JM Williams. Impaired renal autoregulation in susceptible models of renal disease. *Curr Vasc Pharm*. 2014; 12(6):859-66. PMID: 24066939.
 11. Ge, Ying, **SR Murphy**, Y Lu, J Falck, R Liu, R Roman. Endogenously produced 20-HETE modulates myogenic and TGF response in microperfused afferent arterioles. *Prostaglandins & other Lipid Mediators* 2013 April-May; 102-103:42-48. PMID: 23500064. PMCID: PMC3959178.
 12. **Murphy SR**, BBD LaMarca, M Parrish, K Cockrell, JP Granger. Control of soluble fms-like tyrosine kinase-1 (sFlt-1) production in response to placental ischemia/hypoxia: Role of tumor necrosis factor alpha (TNF- α). *Am J Physiol Regul Integr Comp Physiol*. 2013 Jan;304(2):R130-5. PMID: 23193111. PMCID: MPC3543655.
 13. **Murphy SR**, AJ Dahly-Vernon, KMJ Dunn, CCA Chen, SR Ledbetter, JM Williams, RJ Roman. Renoprotective effects of anti-TGF- β antibody and antihypertensive therapies in Dahl S rats. *Am J Physiol Regul Integr Comp Physiol*. 2012 Jul;303(1):R57-69. PMID: 22538513. PMCID: PMC 3404639.
 14. J Williams, F Fan, **S Murphy**, C Schreck, J Lazar, H Jacob, and R Roman. Role of 20-HETE in the antihypertensive effect of transfer of chromosome 5 from Brown Norway to Dahl Salt-sensitive rats. *Am J Physiol Regul Integr Comp Physiol*. 2012 May;302(10):R1209-18. Epub 2012 Mar 21. PMID: 22442195. PMCID: PMC3362151.
 15. **Murphy SR**, B LaMarca, K Cockrell, M Arany, JP Granger. L-arginine supplementation abolishes the blood pressure and endothelin response to chronic increases in plasma sFlt-1 in pregnant rats. *Am J Physiol Regul Integr Comp Physiol*. 2012 Jan 15;302(2):R259-63. Epub 2011 Nov 9. PMID: 22071155. PMCID: PMC3349388.
 16. KB Tam Tam, B LaMarca, M Arany, K Cockrell, L Fournier, **S Murphy**, JN Martin Jr, JP Granger. Role of reactive oxygen species during hypertension in response to chronic antiangiogenic factor (sFlt-1) excess in pregnant rats. *Am J Hypertens*. 2010 Jan;24(1):110-3. PMID: 20725052
 17. JM Williams, **S Murphy**, M Burke, and RJ Roman. 20-HETE: A new target for the treatment of hypertension. *Journal of Cardiovascular Pharmacology*. *J Cardiovasc Pharmacol* 56(4): 336-44, 2010. PMID: 20930591
 18. **Murphy SR**, BBD LaMarca, K Cockrell, JP Granger. Role of endothelin in mediating soluble

fms-like tyrosine kinase-1 (sFlt-1)-induced hypertension in pregnant rats. *Hypertension*. 2010; 55(2): 394-398. PMID: 20026766

19. Parrish MR, **SR Murphy**, S Rutland, K Wallace, K Wenzel, G Wallukat, S Keiser, LF Ray, R Dechend, JN Martin, JP Granger, B LaMarca. The effect of immune factors, tumor necrosis factor- α , and agonistic autoantibodies to the angiotensin II type I receptor on soluble fms-like tyrosine-1 and soluble endoglin production in response to hypertension during pregnancy. *Am J Hypertens*. 23(8):911-6, 2010. PMID: 20431529
20. LaMarca B, M. Parrish, LF Ray, **SR Murphy**, L Roberts, P Glover, G Wallukat, K Wenzel, K Cockrell, JN Martin Jr, MJ Ryan, R Dechend. Hypertension in response to autoantibodies to the angiotensin II type I receptor (AT1-AA) in pregnant rats: role of endothelin-1. *Hypertension*. 54(4):905-9; 2009. PMID: 19704104. PMCID: PMC2785498.
21. LaMarca BBD, BT Alexander, JS Gilbert, MJ Ryan, M Sedeek, **SR Murphy**, JP Granger. Pathophysiology of Hypertension in Response to Placental Ischemia during Pregnancy: A Central Role for Endothelin?. *Gend Med*. 2008;5 Suppl A:S133-8. PMID: 18395679
22. Gilbert JS, MJ Ryan, BB LaMarca, M Sedeek, **SR Murphy**, JP Granger. Pathophysiology of hypertension during preeclampsia: linking placental ischemia with endothelial dysfunction. *Am J Physiol Heart Circ Physiol* 294:H541-H550, 2008. PMID: 18055511
23. LaMarca BD, MJ Ryan, JS Gilbert, **SR Murphy**, JP Granger. Inflammatory cytokines in the pathophysiology of hypertension during preeclampsia. *Curr Hypertens Rep*. 9(6):480-5; 2007. PMID: 18367011

Abstracts:

1. X He, C Zhang, **S Murphy**, PN Mims, F Fan. Role of Dusp5 in Hypertension Induced Chronic Renal Disease. April 2017. The FASEB Journal, Experimental Biology, Chicago, IL
2. F Fan, **S Murphy**, Y Ge, P Mims, K Maeda, J Williams, R Roman. Zinc-finger nuclease knockout of dual-specificity protein phosphatase-5 protect against DOCA-salt induced chronic renal injury. April 2017. The FASEB Journal, Experimental Biology, Chicago, IL
3. N Lee, SK Spencer, K Wallace, B LaMarca, **S Murphy**. 20-HETE Impedes trophoblast migration and contributes to hypertension in the RUPP Rat Model of Placental Ischemia. April 2017. The FASEB Journal, Experimental Biology, Chicago, IL
4. J Cotton, W Wu, **S Murphy**. Increases in Cytochrome P450 Expression and 20-HETE production reduce mean arterial pressure in an animal of preeclampsia. April 2017. The FASEB Journal., Experimental Biology, Chicago, IL
5. W Wu, **S Murphy**. Sex Differences in CYP 450 activity and the development of hypertension and renal injury in the Dahl S rat. Council on Hypertension, AHA, September 2016
6. **S Murphy**, N Lee, SK Spence, K Wallace, B LaMarca. Alterations in Cytochrome P450 expression and circulating 20-HETE levels contribute to maternal hypertension and decreased trophoblast migration. March 2016. The FASEB Journal. 30(1)
7. Lee N, Faulkner J, **Murphy S**, LaMarca B. Blockade of 20-HETE synthesis improves blood pressure and fetal survival in the RUPP rat model of preeclampsia. ISSHP, October 2015, Chicago, IL.
8. Fan F, W Wu, **SR Murphy**. Alterations in 20-HETE production contribute to end organ damage in Dahl S rats. Council on Hypertension, AHA, September 2015
9. Fan F, W Wu, **SR Murphy**. Alterations in 20-HETE production contribute to end organ damage in Dahl S rats. Cardiovascular and Metabolic Diseases: Physiology and Gender, November 2015
10. Lee N, S-K Spencer, BBD LaMarca, **SR Murphy**. Alterations in placental eicosanoid production contribute to impaired vascular remodeling in preeclampsia. *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health* (2015). 53-156. [262-POS]
11. **SR Murphy**, N Lee, S Spencer. Alterations in placental eicosanoid production contribute to impaired vascular remodeling in preeclampsia. April 2015. The FASEB Journal. 29(1)
12. J Faulkner, **S Murphy**, N Lee, J Moseley, B LaMarca. Inhibition of 20-HETE synthesis

- attenuate elevations in blood pressure and uttering artery resistance index in the RUPP rat model of preeclampsia. April 2015. The FASEB Journal. 29(1)
13. Ge Y, **S Murphy**, F Fan, J Williams, J Falck, and R Roman. A deficiency in the formation of 20-HETE impairs the myogenic and TGF responses of the Af-Art of Dahl salt-sensitive rats. FASEB J April 2014 28(1):857.8
 14. Fan F, Y Ge, **S Murphy**, A Geurts, H Jacob, R Roman. CYP4A1 transgenic rats generated using Sleeping Beauty transposon system restores the impaired myogenic responses in the afferent arteriole of Dahl S rats. Hypertension CHBPR 2013
 15. **Murphy S**, W Wu, T White, JM Williams. Renoprotective effects of Empagliflozin in Type 1 and Type 2 models of diabetic nephropathy with hypertension.
 16. **Murphy SR**, F Fan, R Baker, RJ Roman. Increases in outer medullary 20-HETE formation oppose the development of hypertension and improves the pressure natriuresis response in CYP4A1 transgenic rats. FASEB J April 2013
 17. Ge Y, F Fan, **SR Murphy**, JM Williams, R Liu, J Falck, RJ Roman. Deficiency in the production of 20-HETE contributes to impaired myogenic and TGF responses in the afferent arteriole of Dahl S rats. Hypertension 2012; 60:A36.
 18. Ge Y, Y Lu, LA Juncos, **SR Murphy**, R Liu, RJ Roman. The role of 20-HETE in myogenic responses of the afferent arterioles and tubuloglomerular feedback (TGF). Proceedings, 11. 2012.
 19. **Murphy SR**, F Fan, R Baker, A Guertz, H Jacob, R Roman. Upregulation of renal medullary 20-HETE production opposes the development of hypertension in Sleeping Beauty Transposon CYP4A1 Transgenic Dahl S rats. FASEB J 26. 2012.
 20. Ge Y, Y Lu, LA Juncos, **SR Murphy**, R Liu, RJ Roman. The role of 20-HETE in myogenic responses of the afferent arterioles and tubuloglomerular feedback. 2011.
 21. **Murphy SR**, F Fan, H Jacob, A Guertz, R Baker, RJ Roman. Upregulation of the renal production of 20-HETE opposes the development of hypertension in CYP4A1 transgenic Dahl S rats. FASEB J 25, 2011.
 22. Fan F, H Jacob, A Geurtz, **S Murphy**, RJ Roman. Generation of CYP4A1 transgenic rats using the Sleeping Beauty transposon system. FASEB J 25, 2011.
 23. **Murphy SR**, K Cockrell, JP Granger. L-Arginine supplementation abolishes the blood pressure and endothelin response to chronic increases in plasma sFlt-1 in pregnant rats FASEB J April 6, 2010 24:1041.9
 24. **Murphy SR**, B LaMarca, K Cockrell, JP Granger. Hypertension in response to soluble fms-like tyrosine kinase-1 during pregnancy: Role of endothelin-1. Hypertension 54 (4), E35-E36, 2009
 25. LaMarca B, M Parrish, LF Ray, **SR Murphy**, L Roberts, P Glover, G Wallukat, K Wenzel, K Cockrell, JN Martin, MJ Ryan, R Dechend. Hypertension in response to autoantibodies to the angiotensin II type I receptor (AT1-AA) in pregnant rats: Role of endothelin-1. Hypertension 54 (4), 905-909, 2009
 26. LaMarca, B, **SR Murphy**, M Parrish, L Ray, K Cockrell, R Dechend. Hypertension in Response to Agonistic Autoantibodies to the Angiotensin II Type I Receptor Is Associated with Increased sFlt-1 and S endoglin in Pregnant Rats. Hypertension 54 (4), E109-E109, 2009
 27. TamTam K, BBD LaMarca, **S Murphy**, M Arany, NM Leel, L Fournier-Ray, K Cockrell, JP Granger. Hypertension in response to chronic sFlt-1 excess during pregnancy: Role of reactive oxygen species. FASEB J, Mar 2009
 28. **Murphy SR**, B LaMarca, J Speed, S Keiser, K Cockrell, J Granger. Soluble fms-like tyrosine-1 (sFlt-1) is enhanced in response to chronic tumor necrosis factor-alpha excess during pregnancy FASEB J 23, 2009
 29. Parrish, M, **S Murphy**, R Dechend, S Keiser, E Veillon, K Cockrell, L Fournier, JN Martin, B LaMarca. Hypertension in response to agonistic autoantibodies to the angiotensin II type I receptor is associated with elevated circulating sFlt-1. American Journal of Obstetrics and Gynecology 199 (6), S158, 2008
 30. **Murphy SR**, B LaMarca, J Speed, S Keiser, K Cockrell, J Granger. Soluble fms-like tyrosine-1 (sFlt-1) is enhanced in response to chronic tumor necrosis factor-alpha excess during pregnancy

FASEB J 23, 2008

31. B LaMarca, R Dechend, L Fournier, **SR Murphy**, K Cockrell. Chronic elevations in agonistic autoantibodies to the angiotensin II type I receptor during pregnancy in rats increase arterial pressure and endothelin-1. *Hypertension* 52 (4), E49-E49, 2008
32. **Murphy SR**, B LaMarca, K Cockrell, JP Granger. Placental angiotensin II and soluble fms-like tyrosine-1 production increase in response to reductions in uterine perfusion pressure *Hypertension* 52 (4), E93-E93, 2008
33. LaMarca BB, L Roberts, MP Dukes, **SR Murphy**, L Fournier, J Speed, K Cockrell. Endothelial cell activation in response to placental ischemia in pregnant rats is mediated by agonistic autoantibodies to the angiotensin type I receptor. *FASEB J*, Mar 2008; 22: 969.19
34. **Murphy SR**, BB LaMarca, E LaMarca, K Cockrell, J Gilbert, and JP. Granger Soluble fms-like tyrosine-1 (sFlt-1) production in response to placental ischemia and hypoxia in placenta of pregnant rats *FASEB J*, Mar 2008; 22: 969.19
35. Grifoni SC, **S Murphy**, HA Drummond. Enhanced surface expression of ASIC2 inhibits VSMC migration. *FASEB J* 21 (5), A521-A522, 2007