

Curriculum Vitae

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Personal Information:

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Education:

2001-2005 B. S., Belhaven College, Jackson, MS, Major: Chemistry
Minor: Mathematics
2006-2011 Ph.D., University of Mississippi Medical Center, Jackson, MS.
Physiology and Biophysics

Postdoctoral Training:

2011-2013 Postdoctoral Fellow, Section of Experimental Medicine,
Georgia Regents University, Augusta, GA
2014-2015 Postdoctoral Fellow, Cardio-Renal Physiology and Medicine,
University of Alabama at Birmingham, Birmingham, AL

Faculty Appointments

2018- Assistant Professor, Department of Physiology and Biophysics,
University of Mississippi Medical Center
2015-2017: Instructor, Department of Medicine, Division of Nephrology,
Section of Cardio-Renal Physiology and Medicine, University of
Alabama at Birmingham
2015-Present Nephrology and Research Training Center, University of Alabama
at Birmingham

2015-Present Nutrition and Obesity Research Center, University of Alabama at Birmingham

2016-Present UAB Comprehensive Diabetes Center, University of Alabama at Birmingham

Awards and Honors:

2011 Caroline tum Suden Professional Opportunity Award. American Physiological Society.

2012 Juan Carlos Romero and Water & Electrolyte Homeostasis Section *Postdoctoral* Research Recognition Award Finalist

2012 Caroline tum Suden Professional Opportunity Award. American Physiological Society.

2012 Council for High Blood Pressure 2012 Onsite poster presentation award

2013 International Conference on Endothelin-1 2013 travel award

2014 Caroline tum Suden Professional Opportunity Award. American Physiological Society

2015 "Creativity is a Decision" Award from the Nutrition and Obesity Research Center at University of Alabama at Birmingham

2016 AHA Council on Hypertension Poster presentation award

Professional Society Memberships:

2010-Present American Physiological Society

2010-Present American Heart Association

2016-Present American Society of Nephrology

University Activities:

Organizer for Cardio Renal Physiology and Medicine Grant Peer Review for Trainees

Mentor for SECURE summer research program for under-represented groups

Group Leader for American Physiological Society Physiology Understanding Week

Ad Hoc Reviewer:

2016-2017	<i>Hypertension</i>
2015-2017	<i>American Journal of Physiology: Renal Physiology</i>
2014-2017	<i>American Journal of Physiology: Regulatory, Integrative and Comparative Physiology</i>
2016	American Heart Association Council on Hypertension Scientific Sessions abstract reviewer
2016-2017	<i>Journal of the American Heart Association</i>
2015	<i>Canadian Journal of Physiology and Pharmacology</i>
2015	<i>Peptides</i>
2014	<i>European Journal of Pharmacology</i>

Major Research Interests:

The main goal of my research revolves around pathophysiology associated with high salt diet and the importance of endothelin-1 to promote salt homeostasis and maintain normal blood pressure. Currently, my research focuses on renal circadian rhythms and the mechanisms related to diurnal blood pressure variation. Non-dipping of blood pressure is a major risk factor for cardiovascular disease; therefore, my research is aimed at elucidating the mechanisms and dietary factors that influence blood pressure rhythms.

More recently, I have become interested in the possibility that increases in salt intake promotes the development of obesity. High salt intake, a common component of a Western diet, stimulates the production of endothelin-1 (ET-1) by the endothelium. ET-1 receptors located on adipocytes have a major impact on lipid metabolism depending on the receptor subtype that is activated, ET_A or ET_B. The current hypothesis is that an imbalance of ET-1 receptor signaling can promote the development of obesity, especially since salt intake among the population is well above recommended levels. Currently, these studies are funded by a K99/R00 that activated in January 2016.

Teaching Experience:

2017	Fundamentals of Renal Physiology, UAB School of Graduate Studies
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2016-2017	Cardio Renal Physiology and Medicine Journal Club Course Master, School of Graduate Studies, UAB
2016-2017	Advance Renal Physiology Instructor (Long term control of blood pressure by the kidney), School of Graduate Studies, UAB
2016	Supplemental Instructor, Renal Physiology for School of Public Health, UAB
2015-2017	Preceptor for TRIM research program introducing medical residents to basic science research, UAB

PhD Thesis Committees:

2016- Present Dingguo Zhang

Research Trainees:

Maria Johannsen, Aarhus University, Aarhus, Denmark, 2012

Mackenzie Powell, Undergraduate, University of Evansville, 2013-2014

Jovanna Navarro, Undergraduate, University of California at Merced, 2014

Marcos Lucero, Undergraduate University of California at Merced, 2015

Vivek Patel, Gap Year Intern, 2014-2015

Kaehler Roth, Gap Year Intern, 2015-2016

Issac Campos, Undergraduate, University of California at Merced, 2016

Anamarija Sogorovic, Gap Year Intern, 2016-present

Christian Gutierrez Huerta, Undergraduate, University of California at Merced, 2017

Major Lectures:

2015 Nov 30 "Pretzels, Pressures, and Clocks: How Salt Regulates Diurnal Blood
Pressure Rhythms."; Nephrology Research and Training Center
Conference, University of Alabama at Birmingham.

2015 Dec 16 "Pretzels, Pressures, and Clocks: How Salt Regulates Diurnal Blood
Pressure Rhythms."; Epidemiology Cardiovascular Research Group,
University of Alabama at Birmingham

- 2016 May 23 Core Concepts in Kidney Research Series, "Circadian Rhythms in Blood Pressure: Potential Mechanisms and Clinical Implications."
- 2017 Mar 27 "High Salt Intake as a Novel Risk Factor for Obesity." Nephrology Research and Training Center Conference, University of Alabama at Birmingham
- 2017 Apr 5 "High Salt Intake as a Novel Risk Factor for Obesity." Department of Physiology and Biophysics Seminar Series. University of Mississippi Medical Center.

Oral Presentations:

- 2010 "Interaction Between Endothelin and 20-HETE in the Control of Na⁺ excretion and Arterial Pressure." University of Mississippi Medical Center, Department of Physiology and Biophysics Seminar
- 2010 "Interaction Between Endothelin and 20-HETE in the Control of Na⁺ excretion and Arterial Pressure." Medical College of Georgia, Department of Vascular Biology Seminar.
- 2011 Chronic intramedullary infusion of endothelin-1 blunts Dahl salt sensitive hypertension. Experimental Biology, Washington, D.C.
- 2012 Renal Medullary Circadian Clock Genes are Altered in Endothelin B Deficient Rats. Experimental Biology, San Diego, CA.
- 2013 Endothelin in the Extrarenal Control of Sodium Homeostasis. FASEB Renal Hemodynamics. Saxtons Rivers, VT.
- 2014 "Endothelin in the Extrarenal control of Na⁺ Balance." Southern Salt, Water, and Kidney Meeting. Sarasota, FL.
- 2015 "ET-1 modulates renal molecular clock," Endothelin-14 conference. Savannah, GA.
- 2015 "Regulation of Circadian Blood Rhythm by Endothelin-1," Southern Salt, Water, and Kidney Meeting. Sarasota, FL.
- 2016 "High salt intake alters renal medullary clock genes via ET_B receptors." Experimental Biology, San Diego, CA.
- 2018 "Nighttime sodium intake is associated with cardiometabolic risk and insulin resistance in night shift nurses." Experimental Biology, San Diego, CA

Chaired Sessions:

2015 Hot Topics Happy Hour, The Fourteenth International Conference on Endothelin, Savannah, GA.

Grant Support

Active Awards:

NIH/NHLBI-R00-HL127178 Speed (PI) 01/15/18-12/31/20
\$249,000/year

Endothelin: Mechanisms in Hypertension and Obesity

The R00 phase will address the mechanisms by which ET-1 affects lipid metabolism by adipocytes and whether ET_A/ET_B receptor imbalance may contribute to the development of obesity.

Anderson Award for Nephrology Research 03/1/16-2/28/18
\$50,000/year for 2 years

This award will focus on the mechanisms by which high salt intake affects lipid metabolism

Nutrition and Obesity Research Center Pilot and Feasibility Grant 7/1/17-5/31/18
\$25,000

This award provides seed funding to test the hypothesis that Endothelin-1 promotes adiposity and insulin resistance via activation of the ET_B receptor.

Previous Awards:

NIH/NHLBI-K99 HL127178 Speed (PI) 01/15/16-12/31/17
\$155,000/year

Endothelin: Mechanisms in Hypertension and Obesity

For the K99 portion of this grant, the major goal is to determine the mechanisms by which extrarenal vascular endothelin-1 regulates skin Na⁺ storage during high salt intake. It will also address the mechanisms by which vascular ET-1 is upregulated in response to high salt intake.

AHA 15SDG25090194 Speed (PI) 07/01/15-06/30/18
Resigned 1/14/2016

Extrarenal Control of Na⁺ Homeostasis and Blood Pressure by Endothelin-1

The major goal of this grant is to determine the mechanisms by which extrarenal vascular endothelin-1 regulates skin Na⁺ storage during high salt intake. It will also address the mechanisms by which vascular ET-1 is upregulated in response to high salt intake.

NIH/NIDDK-5T32DK007545-27 Agarwal (PI) 07/01/14-06/30/15
Interdisciplinary Training in Kidney-Related Research

The major goals of this training grant are to provide funding for postdoctoral fellows for 1-2 years with protected research training in kidney related research.

AHA 12POST11800038 Speed (PI) 07/01/12-06/30/14

Endothelin in Na⁺ Homeostasis and Hypertension

The major goal of this grant was to determine if extrarenal vascular ET-1 regulates Na⁺ handling by the skin.

AHA 09PRE2250470

Speed (PI)

07/01/09-06/30/14

The Kidney, Endothelin, and Hypertension

The major goal of this grant was to determine the interaction between renal endothelin-1 and 20-HETE in regulating sodium excretion and blood pressure. Further, it was determine if reduced renal ET-1 mediates elevated blood pressure in a model of salt sensitive hypertension.

Bibliography

Manuscripts:

1. Granger JP, Abram S, Stec D, Chandler D, **Speed JS**, LaMarca B. Endothelin, the kidney, and hypertension. *Curr Hypertens Rep.* 2006 Aug;8(4):298-303. Review. PubMed PMID: 16884660.
2. Jernigan NL, LaMarca B, **Speed JS**, Galmiche L, Granger JP, Drummond HA. Dietary salt enhances benzamil-sensitive component of myogenic constriction in mesenteric arteries. *Am J Physiol Heart Circ Physiol.* 2008 Jan;294(1):H409-20. PubMed PMID: 18024548.
3. LaMarca B, **Speed JS**, Fournier L, Babcock SA, Berry H, Cockrell K, Granger JP. Hypertension in response to chronic reductions in uterine perfusion in pregnant rats: effect of tumor necrosis factor-alpha blockade. *Hypertension.* 2008 Dec;52(6):1161-7. doi: 10.1161/HYPERTENSIONAHA.108.120881. PMC2788766.
4. Jernigan NL, **Speed JS**, LaMarca B, Granger JP, Drummond HA. Angiotensin II regulation of renal vascular ENaC proteins. *Am J Hypertens.* 2009 Jun;22(6):593-7. doi: 10.1038/ajh.2009.59. PMC2787100.
5. Chandler DL, Llinas MT, Reckelhoff JF, LaMarca B, **Speed JS**, Granger JP. Effects of hyperhomocysteinemia on arterial pressure and nitric oxide production in pregnant rats. *Am J Hypertens.* 2009 Oct;22(10):1115-9. doi: 10.1038/ajh.2009.130. PMC2824241.
6. Young SC, Storm MV, **Speed JS**, Kelsen S, Tiller CV, Vera T, Drummond HA, Stec DE. Inhibition of biliverdin reductase increases ANG II-dependent superoxide levels in cultured renal tubular epithelial cells. *Am J Physiol Regul Integr Comp Physiol.* 2009 Nov;297(5):R1546-53. doi: 10.1152/ajpregu.90933.2008. PMC2777783.
7. **Speed JS**, George EM, Arany M, Cockrell K, Granger JP. Role of 20-hydroxyeicosatetraenoic acid in mediating hypertension in response to chronic renal medullary endothelin type B receptor blockade. *PLoS One.* 2011;6(10):e26063. doi: 10.1371/journal.pone.0026063. PMC3189228.
8. Tam Tam KB, George E, Cockrell K, Arany M, **Speed JS**, Martin JN Jr, LaMarca B, Granger JP. Endothelin type A receptor antagonist attenuates placental ischemia-induced hypertension and uterine vascular resistance. *Am J Obstet Gynecol.* 2011 Apr;204(4):330.e1-4. doi: 10.1016/j.ajog.2011.01.049. PMC3072697.
9. **Speed JS**, LaMarca B, Berry H, Cockrell K, George EM, Granger JP. Renal medullary endothelin-1 is decreased in Dahl salt-sensitive rats. *Am J Physiol*

- Regul Integr Comp Physiol. 2011 Aug;301(2):R519-23. doi: 10.1152/ajpregu.00207.2011. PMC3154719.
10. Lamarca B, **Speed JS**, Ray LF, Cockrell K, Wallukat G, Dechend R, Granger J. Hypertension in response to IL-6 during pregnancy: role of AT1-receptor activation. *Int J Interferon Cytokine Mediat Res.* 2011 Nov;2011(3):65-70. PMC3446210.
 11. Hall JE, Granger JP, do Carmo JM, da Silva AA, Dubinion J, George E, Hamza S, **Speed JS**, Hall ME. Hypertension: physiology and pathophysiology. *Compr Physiol.* 2012 Oct;2(4):2393-442. doi: 10.1002/cphy.c110058. Review. PubMed PMID: 23720252.
 12. Hyndman KA, Xue J, MacDonell A, **Speed JS**, Jin C, Pollock JS. Distinct regulation of inner medullary collecting duct nitric oxide production from mice and rats. *Clin Exp Pharmacol Physiol.* 2013 Mar;40(3):233-9. doi: 10.1111/1440-1681.12057. PMC3826779.
 13. **Speed JS**, Pollock DM. Endothelin, kidney disease, and hypertension. *Hypertension.* 2013 Jun;61(6):1142-5. doi: .1161/HYPERTENSIONAHA.113.00595. Review. PMC3804114.
 14. Jin C*, **Speed JS***, Hyndman KA, O'Connor PM, Pollock DM. Sex differences in ET-1 receptor expression and Ca²⁺ signaling in the IMCD. *Am J Physiol Renal Physiol.* 2013 Oct 15;305(8):F1099-104. doi: 10.1152/ajprenal.00400.2013. PMID: PMC3798723.
 15. **Speed JS**, Fox BM, Johnston JG, Pollock DM. Endothelin and renal ion and water transport. *Semin Nephrol.* 2015 Mar;35(2):137-44. doi: 10.1016/j.semnephrol.2015.02.003. Review. PMC4499165.
 16. **Speed JS**, D'Angelo G, Wach PA, Sullivan JC, Pollock JS, Pollock DM. High salt diet increases the pressor response to stress in female, but not male ETB-receptor-deficient rats. *Physiol Rep.* 2015 Mar;3(3). pii: e12326. doi: 10.14814/phy2.12326. PMC4393160.
 17. Heimlich JB, **Speed JS**, Bloom CJ, O'Connor PM, Pollock JS, Pollock DM. ET-1 increases reactive oxygen species following hypoxia and high-salt diet in the mouse glomerulus. *Acta Physiol (Oxf).* 2015 Mar;213(3):722-30. doi: 10.1111/apha.12397. PMC4308436.
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 19. **Speed JS**, Heimlich JB, Hyndman KA, Fox BM, Patel V, Yanagisawa M, Pollock JS, Titze JM, Pollock DM. Endothelin-1 as a master regulator of whole-body Na⁺ homeostasis. *FASEB J.* 2015 Dec;29(12):4937-44. doi: 10.1096/fj.15-276584. PMC4653060.
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 21. De Miguel C, **Speed JS**, Kasztan M, Gohar EY, Pollock DM. Endothelin-1 and the kidney: new perspectives and recent findings. *Curr Opin Nephrol Hypertens.* 2016 Jan;25(1):35-41. doi: 10.1097/MNH.000000000000185. Review. PMC4698004.
 22. **Speed JS**, Hyndman KA. In vivo organ specific drug delivery with implantable peristaltic pumps. *Sci Rep.* 2016 May 17;6:26251. doi: 10.1038/srep26251. PMC4869096.
 23. Gohar EY, **Speed JS**, Kasztan M, Jin C, Pollock DM. Activation of purinergic receptors (P2) in the renal medulla promotes endothelin-dependent natriuresis in

- male rats. *Am J Physiol Renal Physiol*. 2016 Aug 1;311(2):F260-7. doi: 10.1152/ajprenal.00090.2016. PMC5008671.
24. Jin C, **Speed JS**, Pollock DM. High salt intake increases endothelin B receptor function in the renal medulla of rats. *Life Sci*. 2016 Aug 15;159:144-7. doi: 10.1016/j.lfs.2015.12.038. PMC5384466
 25. Johnston JG, **Speed JS**, Jin C, Pollock DM. Loss of endothelin B receptor function impairs sodium excretion in a time- and sex-dependent manner. *Am J Physiol Renal Physiol*. 2016 Nov 1;311(5):F991-F998. doi: 10.1152/ajprenal.00103.2016. PMC5130462.
 26. Becker BK, **Speed JS**, Powell M, Pollock DM. Activation of neuronal endothelin B receptors mediates pressor response through alpha-1 adrenergic receptors. *Physiol Rep*. 2017 Feb;5(4). pii: e13077. doi: 10.14814/phy2.13077. PMC5328762.
 27. Kasztan M, Fox BM, **Speed JS**, Townes TM, Kutlar A, Pollock JS, Pollock DM. Long-term ETA receptor antagonism provides robust renal protection in humanized sickle cell disease mice. *J Am Soc Nephrol*. 2017 Aug;28(8):2443-2458. PMC5533228
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 29. Becker BK, Feagan A, Chen D, Kasztan M, Jin C, Speed JS, Pollock JS, Pollock DM. Renal Denervation Attenuates Hypertension but not Salt-Sensitivity in ETB Receptor Deficient Rats. *Am J Physiol Regul Integr Comp Physiol*. *Am J Physiol Regul Integr Comp Physiol*. 2017 Oct 1;313(4):R425-R437; PMC5668611
 30. **Speed JS**, Hyndman KA, Roth KJ, Heimlich JB, Kasztan M, Fox BM, Johnston JG, Becker BK, Jin C, Gamble KL, Young ME, Pollock JS, Pollock DM. High dietary sodium desynchronizes the renal molecular clock in rats. *Am J Physiol Renal Physiol*. 2018 Jan 1;314(1):F89-F98: PMC Journal-In Process
 31. **Speed JS**, Hyndman KA, Kasztan M, Johnston JG, Roth KJ, Titze JM, Pollock DM. Diurnal pattern in skin Na⁺ and water content is associated with salt-sensitive hypertension in ET_B receptor deficient rats. *Am J Physiol Regul Integr Comp Physiol*. 2017 Dec 13. PMC Journal-In Process

Published Abstracts:

1. Murphy SR, LaMarca BB, **Speed JS**, Keiser S, Cockrell K, and Granger JP, Soluble fms-like tyrosine-1 (sFlt-1) is enhanced in response to chronic tumor necrosis factor- alpha excess during pregnancy. *FASEB J* April 22, 2009 23:805.4
2. LaMarca BBD, Roberts L, Dukes MP, Murphy SR, Fournier L, **Speed JS**, and Cockrell K. Endothelial cell activation in response to placental ischemia in pregnant rats is mediated by agonistic autoantibodies to the angiotensin type I receptor. *FASEB J*. 2008.
3. LaMarca BBD, **Speed JS**, Fournier L, Babcock S, Berry H, Cockrell K, Granger JP. Hypertension in response to chronic reductions in uterine perfusion in pregnant rats: Effect of TNF alpha blockade. Council for High Blood Pressure Research, Tucson AZ, 2007

4. LaMarca BBD, Speed JS, Fournier L, Cockrell K, Chandler D Granger JP. The Role Angiotensin II Type I receptor activation in mediating TNF alpha-induced hypertension in the pregnant rat. *FASEB J.* April 18, 2007 21:A592
5. LaMarca BBD, Speed JS, Fournier L, Cockrell K, Granger JP. Hypertension in response to chronic reductions in uterine perfusion in pregnant rats: Effect of IL-6 blockade. *FASEB J.* October 28, 2006 20:A331
6. **Speed JS**, Lamarca BBD, Fournier L, Cockrell K, Granger JP, Renal Endothelin Production is Blunted in the Dahl Salt Sensitive Rat. *FASEB J.* April 5, 2008 22:969.21
7. **Speed JS**, Fournier L, Cockrell K, Dechend R, Granger JP, LaMarca BBD. IL-6 induced hypertension in pregnant rats is associated with agonistic autoantibodies to the angiotensin II type I receptor. *FASEB J.* April 22, 2009 23:805.3
8. **Speed JS**, Berry H, Cockrell K, Granger JP. The Natriuretic Response to Exogenous ET-1 is enhanced in the Dahl Salt Sensitive Rat. FASEB Summer Research Conference. "Renal Hemodynamics." June 2010.
9. **Speed JS**, Arany M, Cockrell K, Purser C, Baker R, Roman R, Granger JP. Chronic inhibition of medullary ET-B receptors attenuates increases in 20-HETE associated with high sodium intake. *FASEB J.* March 17, 2011 25:1079.10
10. **Speed JS**, Arany M, Cockrell K, Granger JP. Chronic intramedullary infusion of endothelin-1 blunts Dahl salt sensitive hypertension. *FASEB J.* March 17, 2011 25:822.9
11. **Speed JS**, Saleh M, Pollock DM. Renal Medullary Circadian Clock Genes are Altered in Endothelin B Deficient Rats. *Experimental Biology FASEB J.* 2012.
12. **Speed JS**, Pollock JS, Pollock DM. Endothelial Cell ET-1 Production is Enhanced with Increasing NaCl Concentration. American Heart Association Council for High Blood Pressure 2012. Washington, D.C.
13. **Speed JS**, Titze JM, Pollock DM. Sodium storage during high salt intake is not dependent upon endothelin B receptors. *FASEB J.* 2013.
14. **Speed JS**, Hyndman KA, Pollock JS, Titze JM, Pollock DM. Evidence for Extrarenal Vascular Endothelin-1 in the Maintenance of Sodium Homeostasis. International Conference on Endothelin-1. Tokyo, Japan.
15. Johnston JG, **Speed JS**, and Pollock DM. Evidence for ETB receptor regulation of circadian control of sodium excretion. *FASEB J.* April 2014 28:860.1
16. Jin C, MacDonell R, **Speed JS**, and Pollock DM. Synergy of high salt and high fat diet on kidney injury and adiposity (1086.1) *FASEB J.* April 2014 28:1086.1
17. Heimlich JB, **Speed JS**, O'Connor PM, and Pollock DM. High salt diet increases glomerular ROS formation through an ET-1/ETA dependent mechanism. *FASEB J.* April 2014 28:1134.9
18. **Speed JS**, Pollock JS, Titze JM, Pollock DM. Vascular endothelin (ET-1) mediates skin Na⁺ storage in response to chronic increases in salt intake. *FASEB J.* April 2014 28:860.13
19. Kasztan M, **Speed JS**, Pollock DM. Sex differences in renal ET-1 mRNA expression after the treatment with hydroxyurea in a mouse model of sickle cell disease *FASEB J* 2015
20. Johnston JG, Mason JA, Jin C, **Speed JS**, Pollock DM. Sex differences in the diurnal natriuretic response to a salt load in rats lacking a functional ET_B receptor. *FASEB J* 2015
21. Powell M, **Speed JS**, Pollock DM. Evidence for ETB receptor mediated pressor effects mediated by alpha-adrenergic receptors. *FASEB J* 2015
22. Gohar E, **Speed JS**, Pollock DM. Sex differences in renal inner medullary ET-1 gene expression levels with increasing medullary osmolality. *FASEB J* 2015

23. **Speed JS**, Hamrick W, Burch M, Siddiqui M, Hyndman KA, Pollock DM, Calhoun DA, Young ME, and Pollock JS. Circadian clock gene expression in human buccal cells: potential use as a biomarker for circadian rhythm disorders. *FASEB J* 2015
24. **Speed JS** and Pollock DM. Endothelial cell-derived endothelin-1 regulates skin Na⁺ storage: Evidence for sex differences. *FASEB J* 2015
25. **Speed JS**, Hyndman KA, Kazstan M, Johnston JG, Young ME, Pollock JS, Pollock DM. Pollock DM, Pollock JS, Endothelin B receptor activation regulates renal inner medullary circadian clock gene expression in response to high salt intake. AHA Council on Hypertension 2015.
26. Pollock DM, Pollock JS, **Speed JS**. Endothelial-derived ET-1 contributes to salt-dependent changes in glomerular filtration rate. Gordon Research Conference on Angiotensin.
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28. **Speed JS**, Hyndman KA, Roth KJ, Kazstan M, Johnston JG, Young ME, Pollock JS, Pollock DM. High salt Intake desynchronizes the molecular clock in rats. Council on Hypertension Scientific Sessions. September 2016.
29. **Speed JS**, Roth KJ, Zhang D, Jin C, Gamble KL, Pollock DM. Reverse feeding with high salt impairs diurnal variation of Na⁺ excretion. American Society of Nephrology Kidney Week. November 2016.
30. **Speed JS**. High salt intake modulates adiposity and insulin sensitivity via endothelin-1. *FASEB J* 2017.
31. **Speed JS**, Molzov HE, Johnson RL, Becker BK, Pollock DM, Gamble KL. Nighttime sodium intake is associated with cardiometabolic risk and insulin resistance in night shift nurses. *FASEB J* 2018.