

*curriculum vitae*

**Jennifer C. Sullivan, Ph.D.**

---

**EXECUTIVE SUMMARY**

**Profile**

Tenured professor in physiology with extensive experience in academic medicine as both a researcher and educator.

Continuously funded since becoming a tenure track faculty member in 2008

Consistently publish in top journals in the field of hypertension

Train undergraduate, graduate, and medical students and postdoctoral fellows

**Skills Summary**

Developed a robust research program currently funded by an NIH R01, NIH Program Project Grant and an American Heart Association Established Investigator Award to advance our understanding of cardiovascular physiology and pathophysiology in females.

Provide a challenging and collaborative training environment for graduate students and postdoctoral fellows, resulting in a high success rate in obtaining fellowships and travel awards.

---

**Professor**

**Office Address**      Department of Physiology, CB 2204  
Augusta University  
Augusta, Georgia 30912-2500  
phone: 706-721-9796 (office) or 706-721-4630 (lab)  
fax: 706-721-9799  
email: jensullivan@augusta.edu

**Home Address**      1114 Sumter Landing Circle  
Evans, Georgia 30809  
706-860-3352 (home) or 706-495-6793 (cell)

**EDUCATION**

2000-2003      Post-doctoral Fellow, Medical College of Georgia, Augusta, GA  
Advisor: Jennifer S. Pollock

\*Funded by an American Physiological Society Postdoctoral Fellowship in Physiological Genomics, included stipend plus mini-grant

- 1996-2000    PhD    Albany Medical College, Albany, NY  
Center for Cardiovascular Sciences, Cardiovascular Pharmacology  
Advisor: Cathy A. Davison  
Thesis title: The effects of estrogen, age and gender on vascular function.  
\*Funded by a PhARMA Foundation Advanced Pre-doctoral Fellowship in Pharmacology/Toxicology, included stipend plus supply funds
- 1996-1999    MS    Albany Medical College, Albany, NY  
Center for Cardiovascular Sciences, Cardiovascular Pharmacology
- 1992-1996    BS    State University of New York at Geneseo, Geneseo, NY  
Major: Biology

## **PROFESSIONAL EXPERIENCE**

### **Academic Appointments**

- 2018-present      Professor with tenure  
Department of Physiology  
Medical College of Georgia at Augusta University (AU)
- 2014-2018      Associate Professor with tenure  
Department of Physiology  
Medical College of Georgia at AU, Augusta, GA
- 2013-2014      Associate Professor with Tenure  
Department of Medicine, Section of Experimental Medicine  
Georgia Regents University (GRU), Augusta, GA
- 2011-2013      Assistant Professor  
Department of Medicine, Section of Experimental Medicine  
Georgia Health Sciences University (GHSU), Augusta, GA
- 2011-present      Associate member of the Department of Pharmacology  
Associate member of the Vascular Biology Center
- 2008-2011      Assistant Professor, tenure track  
Vascular Biology Center

Department of Pharmacology and Toxicology  
Medical College of Georgia (MCG), Augusta, GA

2006-2008      Instructor, non-tenure track  
Vascular Biology Center  
Department of Pharmacology and Toxicology  
MCG, Augusta, GA

2003-2006      Assistant Research Scientist, non-tenure track  
Vascular Biology Center  
Department of Pharmacology and Toxicology  
MCG, Augusta, GA

**Note:**

- Medical College of Georgia officially changed its name to Georgia Health Sciences University effective February 1, 2011 and the School of Medicine retained the name Medical College of Georgia
- Georgia Health Sciences University merged with Augusta State University and the new university was named Georgia Regents University effective January 8, 2013
- Georgia Regents University was renamed Augusta University effective December 2015

**Administrative Responsibilities/Appointments**

*Editorial Duties:*

- 2018-present      Editorial Board Member, *Biology of Sex Differences*
- 2018-present      Guest Editor, *British Journal of Pharmacology* issue on sex differences
- 2016-present      Editorial Board Member, *American Journal of Hypertension*
- 2013-present      Associate Editor, *American Journal of Physiology: Renal Physiology*
- 2011-2012      Editorial Board Member, *Gender Medicine*
- 2010-present      Editorial Board Member, *American Journal of Physiology: Renal Physiology*
- 2008-present      Editorial Board Member, *American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology*
- Ad-Hoc reviewer: *Hypertension, British Journal of Pharmacology, Circulation Research, American Journal of Physiology: Heart and Circulatory Physiology, Journal of Applied Physiology, PLoS ONE, Life Sciences*

*Study Sections, Grant Reviewer:*

2018	NIH Specialized Centers of Research Excellence (SCORE) on sex Differences, RFA OD-18-004 reviewer
2018-present	Fellowship CV Cardiorenal Basic Science Study Section <i>Chair</i> ; American Heart Association
2018	NHLBI Biorepository: Scientific Opportunities for Exploratory Research (R21), RFA HL-17-022 reviewer
2017	NHLBI Biorepository: Scientific Opportunities for Exploratory Research (R21), RFA HL-17-022 reviewer
2017-present	NIH/NHLBI Loan Repayment Program reviewer
2016-2017	Cardiorenal 1 Study Section <i>Chair</i> ; American Heart Association
2016-present	NIH/NHLBI Hypertension and Microcirculation Study Section Ad Hoc reviewer
2015	NIH/NHLBI R13 Special Emphasis Panel reviewer
2013-2015	Cardiorenal 1 Study Section <i>Co-Chair</i> ; American Heart Association
2013-2015	NIH/NHLBI Program Project Grant Special Emphasis Panel reviewer
2010-2013	Cardiorenal 1 Study Section member; American Heart Association
2005-2007	Vascular Wall 1 Study Section member; Southern Research Consortium; American Heart Association

*Abstract reviewer:*

2017-present	American Physiological Society Renal Section Pre-doctoral and Post-doctoral Travel and Research Recognition Awards
2017-present	American Society of Nephrology - Kidney Week
2016-present	American Heart Association Scientific Sessions

- 2011-2014 Water and Electrolyte Homeostasis section, American Physiological Society Pre-doctoral and Post-doctoral Travel and Research Recognition Awards
- 2008-2016 Women in Physiology Section, American Physiological Society Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards
- 2007-present American Heart Association Council on Hypertension

*Organizing Committees:*

- 2017-2019 American Physiological Society Summer Research Conference: Control of Renal Function in Health and Disease
- 2017 NIH NIDDK: Sex-Gender Dimorphisms in Renal and Urologic Disease: Research Opportunities Workshop
- 2016-2018 American Physiological Society Conference: Cardiovascular, Renal and Metabolic Diseases: Gender-Specific Implications for Physiology on Sex and Gender; *Chair of Organizing Committee*
- 2015-2016 Mechanisms of Vasodilation 12<sup>th</sup> International Symposium
- 2014-2015 American Physiological Society Conference: Cardiovascular, Renal and Metabolic Diseases: Physiology and Gender
- 2008-2010 FASEB Summer Research Conference Renal Hemodynamics: Mechanisms to Understand Disease

*National Professional Societies:*

- 2018-present American Physiological Society Renal Section, *Co-Chair Awards Committee*
- 2018-2020 American Heart Association Central Savannah River Area Affiliate, *Board of Directors*
- 2016-2018 American Heart Association, *Chair of Membership/Communications Committee*
- 2015-2017 American Physiological Society, Water and Electrolyte Homeostasis *Section Representative to the FAPS Committee*

2015-2018	American Physiological Society, Water and Electrolyte Homeostasis <i>Section Representative</i> to the Committee on Committees
2015-2019	American Physiological Society, Sex and Gender Interest Group <i>Chair</i>
2014-2015	American Physiological Society Water and Electrolyte Homeostasis Section, <i>Chair</i> of Data Diuresis
2013-2015	American Heart Association, <i>Vice-Chair</i> of the Membership/Communications Committee
2011-2014	American Physiological Society, Water and Electrolyte Homeostasis Section <i>Chair</i> of Awards Committee

*Institutional:*

2019-present	Augusta University Research Institute <i>Board of Directors Member</i>
2017-2018	Augusta University Graduate Research Day <i>Chair</i>
2017-present	1 <sup>st</sup> year <i>Biomedical PhD Program Director</i>
2017-present	Introduction to Faculty Research (BIOM 8040) <i>Course Director</i>
2017-present	Introduction to Research I (BIOM 8050) <i>Course Director</i>
2017-present	Introduction to Research II (BIOM 8060) <i>Course Director</i>
2013-2015	GRU Women's Health Research Interest Group in the Division of Clinical and Translational Science, <i>Chair</i>
2013-2015	Current Topics in Translational Medical Research (GMED 5092) <i>Co-Director</i>
2013-present	Experimental Therapeutics (BIOM 8030) <i>Course Director</i>
2011-2014	DOM <i>Seminar Series Coordinator</i>
2011-2012	Experimental Therapeutics (BIOM 8030) <i>Co-Course Director</i>
2010-2011	Vascular Biology Graduate Program <i>Co-Director</i>

2009-2013 Fundamentals in Vascular Biology (VBIO 8010) *Course Director*

### **Career Development**

2016 Augusta University and AU Health System Authentic Women Leaders Pipeline Program

### **Committee Assignments**

#### *National:*

2018-present American Heart Association, Nominating Committee of the Council on Hypertension Member

2016-present American Physiological Society, Renal Section Awards Committee Member

2013-present F1000Prime Faculty Member

2013-2017 American Physiological Society, Membership Committee Member

2012 American Heart Association, Science Classification Taskforce Working Group 5 Discussion Leader

2012 American Heart Association, Science Classification Taskforce Working Group 8 Member

2011-2018 American Physiological Society, Water and Electrolyte Homeostasis Section Steering Committee Member

2009-2011 American Physiological Society, Renal Section Awards Committee Member

#### *Institutional:*

2018-2019 Physiology Chair Search Committee Member

2017-present Radiation Safety Committee Member

2017-present Use of Ionizing Radiation Subcommittee Member

2017-present Graduate School Recruitment and Admissions Committee Member

2017-present	Graduate Council Member
2017-2018	Oral Biology Faculty Search Committee Member
2014-2016	GRU AHA Health Sciences Fellowship Selection Committee Member
2014-2016	LCME Self-Study Committee 5
2014-present	MD/PhD Admission Committee
2013-present	IACUC Member
2013-2018	MCG Admissions Committee
2012	DOM Fellow Research Day faculty judge
2012	GHSU Chief Audit Officer Search Committee Member
2011-2014	GHSU Faculty Senate Membership, Voting and Nomination Subcommittee
2011-2012	SEM Faculty Search Committee
2011-2012	Department of Pharmacology Faculty Search Committee
2010-2013	Member of GHSU Animal Resource Committee
2010-2011	Member of MCG Faculty Support Services Action Team

### **Research and Training Grants Awarded**

#### Research Funding Awards and Grants, Active:

American Heart Association Established Investigator Award **17EIA33410565** (2017-2021)

Title: Role of T cells in salt-sensitive females

Role: Principal Investigator

Direct Costs: \$72,727/yr

Indirect Costs: \$7,273/yr

Total Costs for Award Duration: \$400,000

NIH PPG 1 **P01 HL134604-01** (2017-2022)



PPG Title: Damage Associated Molecular Patterns in Hypertension  
Project 2 Title: Sex Differences in Hypertension: Contribution of DAMPs  
Roles: Project 2 Leader, Project 3 Co-Investigator, Animal Core Co-investigator  
Direct Costs Project 2: \$250,000/yr  
Indirect Costs Project 2: \$130,000/yr  
Total Costs for Award Duration Project 2: \$1,520,000  
Total Costs for Award Duration PPG: \$9,442,660

**NIH R01 HL127091-02 (2016-2020)**

Title: Mechanisms of T cell mediated hypertension in males and females  
Role: Principal Investigator  
Direct Costs: \$250,000/yr  
Indirect Costs: \$130,000/yr  
Total Costs for Award Duration: \$1,520,000

**AU Intramural Grants Program (Pilot Study Research Program; 2018)**

Title: Physiologic Biomarkers to Detect Sub-clinical Neonatal Acute Kidney Injury  
Role: Co-Principal Investigator  
Direct Costs: \$24,902/yr

**Research Funding Awards and Grants, Previous:**

**American Heart Association Grant-in-Aid 14GRNT20480199 (2014-2016)**

Title: Effect of HMBG1 on blood pressure and vascular function in hypertension: does sex matter?  
Role: Principal Investigator  
Direct Costs: \$75,000/yr  
Indirect Costs: \$7,500/yr  
Total Costs for Award Duration: \$165,000

**NIH PPG 1PO1 HL095499 (2010-2015)**

PPG Title: Endothelin Control of Renal Hemodynamics and Excretory Function  
Role: Core C, Animal Core Director  
Direct Costs Animal Core: \$160,000/yr  
Indirect Costs Animal Core: \$130,000/yr  
Total Costs for Award Duration Animal Core: \$1,450,000

**NIH R01 5 HL093271 (2009-2014)**

Title: Role of the renin-angiotensin system in sexual dimorphisms in the development of hypertension and renal injury  
Role: Principal Investigator  
Direct Costs: \$250,000/yr  
Indirect Costs: \$130,000/yr  
Total Costs for Award Duration: \$1,520,000

GHSU Intramural Grants Program (GHSU Pilot Study Research Program; 2014)

Title: Effects of Sex on Vascular T Cells and Adhesion Molecule Expression in Hypertension

Role: Principal Investigator

Direct Costs: \$25,000/yr

GHSU Intramural Grants Program (Extramural Success Award; 2012-2013)

Title: Mechanisms of T cell mediated hypertension in females and males.

Role: Principal Investigator

Direct Costs: \$27,154.60/yr

MCG Cardiovascular Discovery Institute Seed Grant (2010-2011)

Title: Contribution of endothelial cell-derived endothelin-1 to renal ischemia-reperfusion injury.

Role: Co-Principal Investigator

Direct Costs: \$25,000/yr

American Heart Association **Scientist Development Grant 0635047N** (2006-2010)

Title: Role of NO Bioavailability in Sexual Dimorphism in Renal Injury in Male and Female Spontaneously Hypertensive Rats.

Role: Principal Investigator

Direct Costs: \$59,091/yr

Indirect Costs: \$5,909/yr

Total Costs for Award Duration: \$260,000

MCG Intramural Grants Program (Pilot Study Research Program; 2006-2007)

Title: Molecular Mechanisms of Sexual Dimorphism in Renal Injury in Spontaneously Hypertensive Rats (SHR): Involvement of Angiotensin II and the JAK/STAT Pathways

Role: Co-Principal Investigator

Direct Costs: \$18,000/yr

NIH **R03 AG024616** (2004-2006)

Title: Interaction of Age and Gender on NO Bioavailability

Role: Principal Investigator

Direct Costs: \$50,000/yr

Indirect Costs: \$21,500/yr

Total Costs for Award Duration: \$143,000

MCG Children's Medical Center H. Victor Moore Research Grant (2003)

Title: Regulation of vascular nitric oxide synthase I in normotensive and hypertensive arteries.

Role: Principal Investigator

Direct Costs: \$2,500/yr

Unfunded Research Applications:

NIH T32 HL144471-01A1 (2019)

Title: Multi-Disciplinary Training Program in the Mechanisms of Cardiometabolic Disease

Role: Co-Principal Investigator with David Stepp

Total Costs for Award Duration: \$ 1,726,791

A1 Score: not discussed

NIH **R01 HL116859** (2013)

Title: Angiotensin (1-7) and Hypertension: influence of sex and race

Role: Co-Principal Investigator

Direct Costs: \$470,246/yr

Indirect Costs: \$235,220/yr

Total Costs for Award Duration: \$3,527,331

A1 Score: 35<sup>th</sup> percentile

Conference Support Grants:

DiaComp Conference Support Program **#18AU3929** (2018)

Title: Conference on Cardiovascular, Renal, and Metabolic Diseases: Gender-Specific Implications in Physiology

Role: Principal Investigator

Direct Costs: \$10,000

Total Costs for Award Duration: \$10,000 to support travel to APS conference

NIH **1R13HL143981-01** (2018)

Title: Conference on Cardiovascular, Renal, and Metabolic Diseases: Gender-Specific

Implications in Physiology

Role: Co-Principal Investigator

Direct Costs: \$15,000

Total Costs for Award Duration: \$15,000 to support travel to APS conference

Trainee Research Funding Awards:

American Heart Association Post-doctoral Fellowship **18POST34030252** (2018-2020)

Title: Sex differences in renal Treg recruitment and maintenance in SHR

Trainee: Ellen E. Gillis

Direct Costs: \$52,216/yr

Total Costs for Award Duration: \$104,432

NIH Diversity **Supplement 3 R01 HL127091-01A1S1** (2016-2020)

Title: Mechanisms of T cell-mediated hypertension in females and males: Diversity Supplement For Lia Taylor

Trainee: Lia Taylor

Direct Costs: \$15,250/yr

Indirect Costs: \$7,930/yr

Total Costs for Award Duration: \$92,720

American Physiological Society Porter Physiology Pre-doctoral Fellowship (2016-2018)

Trainee: Lia Taylor

Direct Costs: \$28,300/yr

Total Costs for Award Duration: \$56,600

\*declined due to receipt of NIH Supplement

American Heart Association Pre-Doctoral Fellowship **15PRE25850008** (2015-2017)

Title: The Impact of Sex on Renal Medullary Pericytes in Ischemia Reperfusion Injury

Trainee: G. Ryan Crislip

Direct Costs: \$26,844/yr

Total Costs for Award Duration: \$53,688

American Heart Association Pre-Doctoral Fellowship **13PRE16110000** (2013-2014)

Title: The impact of blood pressure on TGF-beta on the renal T cell profile in females and males

Trainee: Ashlee J. Tipton

Direct Costs: \$25,180/yr

Total Costs for Award Duration: \$25,180

\*turned in the second year after defending

American Heart Association Pre-Doctoral Fellowship **12PRE11470003** (2012-2014)

Title: Mechanisms of Ang (1-7) Mediated Control of Blood Pressure in Males and Females

Trainee: Margaret A. Zimmerman

Direct Costs: \$25,180/yr

Total Costs for Award Duration: \$50,360

American Heart Association Post-Doctoral Fellowship **12POST12040030** (2012-2014)

Title: Role of Oxidative Stress in Sex Differences in Response to Angiotensin II

Trainee: Kanchan Bhatia

Direct Costs: \$49,960/yr

Total Costs for Award Duration: \$99,920

American Physiological Society Porter Physiology Pre-doctoral Fellowship (2011-2013)

Trainee: Ashlee Tipton

Title: Role of Inflammation within the Vasculature in the Development of Hypertension

Direct Costs: \$28,300/yr

Total Costs for Award Duration: \$56,600

American Heart Association Pre-Doctoral Fellowship **11PRE6220003** (2011-2013)

Title: How Sex of the Animal Affects DDAH/ADMA/NOS Pathway in Hypertension

Trainee: Krystal N. Brinson

Direct Costs: \$25,180/yr

Total Costs for Award Duration: \$50,360

### **Educational and Classroom Teaching Experience**

#### *Lecturer:*

2018	PSIO 8350, Current Trends in Physiology: Experimental models of hypertension, AU
2018-present	BIOM 8012, Scientific Communication, AU
2015-present	BIOM 8130, Scientific Grant Writing, AU
2014-present	BIOM 8011, Responsible Conduct of Research, AU
2013-2015	GMED 5092, Current Topics in Translational Medical Research, AU
2008-present	BIOM 8033, Integrated Systems Biology, AU
2008-present	BIOM 8030, Experimental Therapeutics, AU
2010-present	MEDI 5220 Module 2: Cell & System Disease State, AU
2009-2013	VBIO 8010, Fundamentals in Vascular Biology, GRU
2011	Tutorials in Pharmacology for Medical Students, GHSU
2002-2003	Facilitator for first and second year medical student group discussions, MCG
1998-2000	GI Pharmacology Lecture to Physician Assistants, Albany Medical College (AMC)
1998-2000	Cardiovascular Laboratory for first year medical students, AMC

## Student and Post-doctoral Fellow Training

### Postdoctoral Fellows:

- 2017-present     **Riyaz Mohamed, PhD**
- 2019     Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award
  - 2019     APS Renal Section Postdoctoral Excellence in Research Award
  - 2018     Travel award to attend the 17<sup>th</sup> Annual SSCI Nephrology Young Investigators' Forum
- 2016-present     **Ellen Gillis, PhD**
- 2019     Invited oral presentation for The NIH Geroscience Interest Group Symposium on “Tissue-Resident Immune Cells”
  - 2018     APS Conference: Cardiovascular, Renal and Metabolic Diseases: Sex-Specific Implications for Physiology Abstract Travel Award
  - 2018     Abstract selected for oral presentation at the 2018 APS conference on Sex-Specific Implications for Physiology
  - 2018     American Heart Association post-doctoral fellowship awardee
  - 2017     American Heart Association Council on Hypertension Onsite Trainee Poster Award
  - 2017     8th Annual Southern Translational Education and Research Best Postdoctoral Poster Presentation Award
  - 2017     Caroline tum Suden/Francis Hellebrandt Professional Opportunity Award
  - 2016     Travel award to attend the FASEB Summer Conference on Renal Hemodynamics
  - 2016     Abstract selected for oral presentation at the 2016 APS conference on “Inflammation, Immunity and Cardiovascular Disease”
  - 2016     APS Conference: Inflammation, Immunity, and Cardiovascular Disease APS Abstract Travel Award
- 2013                 **Krystal Brinson, PhD**
- \*Current Position: Research Grants Project Manager for the American Urological Association
- 2013-2014         **Olga Rafikova, MDPhD**
- \*Current Position: Assistant Professor at the University of Arizona
- 2009-2013         **Kanchan Bhatia, PhD**

- \* Current Position: Instructor at Arizona State University, Phoenix Campus
- 2012 American Heart Association post-doctoral fellowship awardee
- 2011 Women's Health Research Center Travel Award to attend the APS Conference: Physiology of Cardiovascular Disease: Gender Disparities

*PhD Students as Major Advisor:*

- 2018-present **Lindsey Ramirez**, AU PhD student in Physiology
  - 2019 2019 Martin Frank Diversity Travel Award
  - 2019 Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award
  - 2018 APS Conference: Cardiovascular, Renal and Metabolic Diseases: Sex-Specific Implications for Physiology Abstract Travel Award
- 2018-present **Kasey Belanger**, AU PhD student in Physiology
  - 2018 APS Conference: Cardiovascular, Renal and Metabolic Diseases: Sex-Specific Implications for Physiology Abstract Travel Award
- 2017-present **Mahmoud Abdelbary**, AU PhD student in Physiology
  - 2019 Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award
  - 2019 Chair's Fellowship to attend APS Professional Skills Workshop on Writing and Reviewing
  - 2018 APS Conference: Cardiovascular, Renal and Metabolic Diseases: Sex-Specific Implications for Physiology Abstract Travel Award
  - 2018 Excellence in Physiology Research Award, Graduate Research Day at AU
- 2015-2018 **Lia Taylor**, AU PhD Student in Physiology
  - 2018 APS Conference: Cardiovascular, Renal and Metabolic Diseases: Sex-Specific Implications for Physiology Abstract Travel Award
  - 2018 Abstract selected for oral presentation at the 2018 APS conference on Sex-Specific Implications for Physiology
  - 2018 Chair's Fellowship to attend APS Professional Skills Workshop on Writing and Reviewing
  - 2017 Water and Electrolyte Section of the American Physiological Society (APS) Research Distinction Award

- 2017 APS Minority Travel Fellowship Award to attend EB
- 2017 AU 3MT competition semi-finalist
- 2017 Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award
- 2016 APS Minority Travel Fellowship Award to attend the 2016 conference on "Inflammation, Immunity and Cardiovascular Disease"
- 2016 Finalist for the 2016 Water & Electrolyte Homeostasis Section Predoctoral Research Recognition Award
- 2016 APS Minority Travel Fellowship Award to attend EB
- 2016 APS Society Porter Physiology Pre-doctoral Fellowship awardee  
\*declined due to receipt of NIH Minority Supplement

2014-2017 **G. Ryan Crislip**, AU PhD Student in Physiology

\*Current Position: Postdoctoral Fellow, University of Florida

- 2017 Excellence in Physiology Research Award, Graduate Research Day at AU
- 2017 AU 3MT competition semi-finalist
- 2017 Chair's Fellowship to attend APS Professional Skills Workshop on Writing and Reviewing
- 2016 Travel award to attend the FASEB Summer Conference on Renal Hemodynamics
- 2016 Named "Who's Who for 2016" for Biomedical Science PhD students
- 2015 Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award
- 2015 Abstract selected for oral presentation at Experimental Biology
- 2015 American Heart Association pre-doctoral fellowship awardee
- 2015 APS Abstract Travel Award to attend the APS Conference: Cardiovascular, Renal and Metabolic Diseases: Physiology and Gender

2011-2014 **Margaret Zimmerman**, GRU PhD Student in Physiology

\*Current Position: Research Instructor, Pharmacology Department Tulane University

- 2014 GRU Graduate Faculty Assembly Award for Excellence in Research
- 2013 Poster Award at High Blood Pressure Research Scientific Sessions



2013 American Physiology Society: Water and Electrolyte Homeostasis Section Predoctoral Research Recognition Award

2012 American Heart Association pre-doctoral fellowship awardee

2012 GRU Faculty and Spouse Club Scholarship winner

2012 Chair's Fellowship to attend APS Professional Skills Workshop on Writing and Reviewing

2011 American Physiology Society Abstract-based Travel Award to attend APS: Physiology of Cardiovascular Disease: Gender Disparities Conference.

2011 Finalist for American Physiology Society: Water and Electrolyte Homeostasis Section Predoctoral Research Recognition Award

2011 Selected for Caroline tum Suden/Francis A. Hellebrandt Award, declined to accept WEH award

2010 American Society for Biochemistry & Molecular Biology Regional Undergraduate Research Conference travel award

2010-2014 **Ashlee J. Tipton**, GRU PhD Student in Vascular Biology

\*Current Position: Scientific Review Officer, Division of Extramural Activities, National Center for Complementary and Integrative Health (NCCIH)

2014 Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award

2013 Miltenyi Biotec "I want to be a Pro" abstract winner

2013 American Heart Association Pre-doctoral Fellowship awardee

2013 WEH Research with Distinction award

2013 APS Minority Travel Fellowship Awards to attend EB

2012 High Blood Pressure New Investigator Travel Award to attend HBPR 2012 Scientific Sessions

2012 FASEB/MARC travel award to attend the Leadership Development and Grant Writing Seminar Program.

2012 William Townsend Porter Pre-doctoral Fellowship from the American Physiological Society

*\* Ashlee was named the Eleanor Ison Franklin Fellow for having the highest scored application.*

2012 Finalist for American Physiology Society: Water and Electrolyte Homeostasis Section Predoctoral Research Recognition Award

2012 Selected for Caroline tum Suden/Francis A. Hellebrandt Award, declined to accept WEH award

2012 APS/NIDDK Minority Travel Fellowship Award to attend Experimental Biology

2011 William Townsend Porter Pre-doctoral Fellowship from the American Physiological Society

2011 APS/NIDDK Minority Travel Fellowship Award to attend APS Conference: Physiology of Cardiovascular Disease: Gender Disparities

2011 Women's Health Research Center Travel Award to attend APS Conference: Physiology of Cardiovascular Disease: Gender Disparities

2010 APS/NIDDK Minority Travel Fellowship Award to attend APS Conference: Inflammation and Immunity

2008-2013 **Krystal Brinson**, GHSU PhD Student in Vascular Biology

\*Current Position: Research Grants Project Manager for the American Urological Association

2013 WEH Research with Distinction award

2013 APS Minority Travel Fellowship Award to attend EB

2013 Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award

2011 APS/NIDDK Minority Travel Fellowship Award to attend APS Conference: Physiology of Cardiovascular Disease: Gender Disparities

2011 Women's Health Research Center Travel Award to attend APS Conference: Physiology of Cardiovascular Disease: Gender Disparities

2011 American Heart Association Pre-doctoral Fellowship awardee

2009 APS/NIDDK Minority Travel Fellowship Award to attend Experimental Biology meeting

*PhD Students as Thesis Committee Member:*

2018-present **Casey Derella**  
AU PhD Student in the Department of Physiology

2018-present **Sarah Ray**  
AU PhD Student in the Department of Physiology

2018-present **Ellie Mannon**  
AU MDPHD Student in the Department of Physiology

2016-present **Wael Eldahshan**  
University of Georgia PhD Student in the Department of Neurology

2015-2017 **Jasmine Fuller**

AU PhD Student in the Department of Cellular Biology and Anatomy

- 2014-2018      **John Paul Valenzuela**  
AU PhD Student in the Department of Physiology
- 2014-2016      **Trevor Hardigan**  
GRU MD/PhD Student in the Department of Physiology
- 2013-2014      **Nicole Yiew**  
GRU PhD Graduate Student in Pharmacology
- 2011-2014      **Katie Spitler**  
GHSU PhD Graduate Student in the Department of Physiology
- 2009-2013      **Wararat Kittulsuth**  
GHSU PhD Graduate Student in Vascular Biology
- 2008-2011      **Frank Spradley**  
GHSU PhD Graduate Student in Vascular Biology
- 2008-2011      **Mohamed Saleh**  
GHSU PhD Graduate Student in Pharmacology

*PhD Students as Rotation Advisor:*

- 2018            **Sarah Ray**, PhD candidate
- 2018            **Lindsey Ramirez**, PhD candidate
- 2017            **Mahmoud Abdelbary**, PhD candidate
- 2017            **Kasey Belanger**, PhD candidate
- 2014            **Rachel Roberts**, PhD candidate
- 2013            **Priscilla Simmons**, PhD candidate
- 2013            **G. Ryan Crislip**, PhD candidate
- 2013            **Merry Ma**, GRU MD/PhD Student
- 2009            **Jenna Gallops**, PhD candidate
- 2008            **Mary Zimmerman**, PhD candidate

*PhD Student as Thesis Reader:*

- 2015            **Cam McCarthy,**  
AU PhD Student in the Department of Physiology
- 2012            **Aisha Cobbs**  
GHSU PhD Student in the Department of Physiology
- 2011            **Crista Royal**  
GHSU PhD Student in the Department of Pharmacology
- 2010            **Hua Lu**  
MCG PhD Student in Vascular Biology
- 2009            **Jan Foster**  
MCG PhD Student in Vascular Biology
- 2007            **Kyu-Tae Kang**  
MCG PhD Student in Vascular Biology

*Medical Students:*

- 2017            **Chukwuemeka (Vincent) Onyilo,** Medical Scholars Fellow
- 2014            **Chiemelie Ebeledike,** Medical Scholars Fellow  
2015 APS Excellence in Professional Student Research Travel Award to attend Experimental Biology
- 2013            **Eric Williams,** Diabetes and Obesity Discovery Institute Scholar
- 2012            **Mandy Wommack,** Diabetes and Obesity Discovery Institute Scholar

*Undergraduate Students:*

*Center for Undergraduate Research and Scholarship (CURS) as Honors Thesis Advisor*

- 2019            **Ellis Reavis,** Augusta University Junior
- 2019            **Isabella Esteban,** Augusta University Sophomore

*Summer Fellows*

- 2017 **Jacqueline Timmerman**, STAR student (undergraduate summer fellow)
- 2016 **Justin Hutchinson**, STAR student (undergraduate summer fellow)
- 2013 **Beverly Li**, UPSTaRT (Undergraduate Physician Scientist and Research Training) Scholar
- 2011 **Merry Ma**, GHSU Undergraduate Research Fellow
- 2010 **Chester Joyner**, MCG Undergraduate Research Fellow
- 2009 **Margaret Zimmerman**, MCG Undergraduate Research Fellow

#### **Faculty Mentorship**

- 2018 **Mykola Mamenko**, Assistant Professor in Physiology

#### **AWARDS/HONORS**

- 2019 Featured on the ABC Evening News Channel 6-  
<https://www.wjbf.com/csra-traffic/research-shows-high-fat-diets-are-bad-for-blood-pressure-even-in-young-people/1685442785>
- 2018 Augusta University “Caught in the Act of Great Teaching” Award recipient
- 2018 Mid-Career Award for Research Excellence, American Heart Association Hypertension Council
- 2018 Promoted to Professor effective July 1, 2018
- 2018 Inaugural recipient of the John Laragh Research Award, *American Journal of Hypertension*
- 2017 Outstanding Faculty Member, the Graduate School AU
- 2017 Featured on the JENNIE Show on ABC News Channel 6-  
<http://abc6.wjbf.com/2kuRmYv>
- 2017 Featured in 2 articles in the Augusta Chronicle

- 2017 Established Investigator of the American Heart Association
- 2016 STAR Reviewer *AJP-Regulatory, Integrative and Comparative Physiology*
- 2014 Named recipient of the 2015 APS Renal Section Young Investigator Award
- 2013 Promoted to Associate Professor with tenure
- 2013 Selected as Associate Editor for *AJP:Renal Physiology*
- 2011 GHSU Outstanding Young Basic Science Faculty Award
- 2011 GHSU Research Institute Emerging Scientist Award
- 2010 Named Fellow of the American Heart Association and the Council for Hypertension Research
- 2009 Sex Steroids and Gender in Cardiovascular-Renal Physiology Travel Award
- 2009 Consortium for Southeastern Hypertension Control Arthur Guyton New Investigator Award
- 2008 Forest Pharmaceuticals New Investigator Travel Award
- 2007 Water and Electrolyte Homeostasis Section New Investigator Award
- 2007 Kidney Council New Investigator Travel Award
- 2006 Merck New Investigator Award
- 2006 Named a Rippel Scholars Program Finalist
- 2003 American Physiological Society Research Recognition Award
- 2001 Stipend recipient to attend Hypertension Summer School
- 2000 Merck, Sharpe and Dohme New Investigator Travel Award
- 1999 Dean's Certificate and Prize for Excellence in Extramural Research Endeavors

1995 Inducted into Beta Beta Beta Biological Honor Society

### **SCIENTIFIC AND PROFESSIONAL SOCIETIES**

#### **American Society of Nephrology**, member since 2016

2017 Review Abstracts for Kidney Week  
 2017 Career Panel Moderator for Graduate Students at ASN Kidney Week 2017

#### **American Physiological Society**, member since 2001

2018-present *Co-Chair*, Renal Section Awards Committee  
 2017-2018 *Chair*, Organizing Committee for 2018 APS Conference on Sex and Gender  
 2017 Faculty, On-line Professional Skills Courses  
 2016-2018 Committee Member, Renal Section Awards Committee  
 2016-2019 Representative for Water and Electrolyte Homeostasis (WEH) Section, Committee on Committee  
 2015-2017 Representative for WEH Section, Membership and FAPS Committee  
 2015 *Chair*, Featured Topic at Experimental Biology  
 2015-2019 *Chair*, Sex and Gender Research Interest Group  
 2014-present WEH Section Mentoring-On-The-Go Mentor  
 2014-2016 *Chair*, WEH Section Data Diuresis  
 2013-present *Associate Editor*, *AJP-Renal Physiology*  
 2010-2013 Editorial Board Member, *AJP-Renal Physiology*  
 2013 *Chair*, Featured Topic at Experimental Biology  
 2013-2015 Committee Member, Membership Committee  
 2012 WEH Section Representative, SAC Meeting  
 2012-2013 *Chair*, Featured Topic at Experimental Biology  
 2012 *Chair*, Presidential Symposium at Experimental Biology  
 2011 WEH Section Representative, Nominating Committee Meeting  
 2011-2014 *Chair*, WEH Section Awards Committee  
 2011-present Committee Member, WEH Section Executive Steering Committee

- 2010-present Organize and run **Physiology Understanding (PhUn)** workshops at local elementary schools
- 2009-2011 Committee Member, Renal Section Awards Committee
- 2009-present Abstract reviewer, Women in Physiology Section for Caroline tum Suden awards
- 2008-present Minority Mentor at APS-sponsored meetings
- 2008-present Editorial Board member, *AJP-Regulatory, Integrative and Comparative Physiology*

**American Heart Association**, member since 2001

- 2018 Nominating Committee of the Council on Hypertension Member
- 2018 Invited Speaker, Go Red for Women Executive Leadership Committee
- 2018 Invited Speaker, Heart Walk Executive Leadership Committee
- 2018 Invited Speaker, Heart Ball Executive Leadership Committee
- 2018 Invited Speaker, 2018 Hypertension Scientific Sessions
- 2018 Board Member, AHA Central Savannah River Area (CSRA) Affiliate
- 2018 *Chair*, Fellowship CV Cardiorenal Basic Science Study Section
- 2016-present Abstract Reviewer, Scientific Sessions
- 2016-2017 *Chair*, Cardiorenal 1 Study Section
- 2016-2018 *Chair*, Membership Committee
- 2015 Invited Speaker, Recent Advances workshop at Council on Hypertension meeting
- 2014-2016 Session Chair, Hypertension Scientific Sessions
- 2014-2016 *Co-Chair*, Cardiorenal 1 Study Section
- 2013-2015 *Vice-Chair*, Membership Committee
- 2013-2015 Committee Member, Membership/Communications Committee
- 2012 Science Classification Taskforce member
- 2010-2014 *Organizer and Chair*, “Go RED for Women” symposium at AU
- 2010-2015 Participate in local elementary school “Jump Rope for Heart” event
- 2010-2015 Participate in local elementary school “Hoops for Heart” event
- 2007-present Abstract Reviewer, Hypertension Scientific Sessions
- 2006-present Reviewer for *Hypertension*



2005-present Participate in Heart Walk

### **COMMUNITY ACTIVITIES**

2019 Attend American Heart Association Heart Ball  
2018 Board Member, AHA Central Savannah River Area (CSRA) Affiliate  
  
2017 Attend Bonne Santé benefitting the National Kidney Foundation serving Georgia  
2011-2014 MentorNet  
2011-2015 Career Day presenter at local elementary school to raise awareness of career choices in the biological sciences  
2010-2015 Girl Scout volunteer  
2010-present Volunteer in local elementary school classrooms (K-5<sup>th</sup>) to run age-appropriate science experiments  
2009 Girl Scout Daisy Troop Leader

### **INVITED PRESENTATIONS AT NATIONAL, REGIONAL AND STATE MEETINGS**

*APS/ASN Conference: Control of Renal Function in Health and Disease: June 23-27, 2019, Charlottesville, VA*

Invited Speaker and Chair for Workshop on “Sex and Gender as Research Variables”

*Joint Hypertension 2018 Scientific Sessions: AHA Council on Hypertension | AHA Council on Kidney in Cardiovascular Disease: September 6-9, Chicago, IL*

Invited Speaker as **Mid-Career Award for Research Excellence Awardee**

Presentation Title: Sex Differences in Hypertension: Does it all come down to a T?

*Experimental Biology: April 21-27, 2017, Chicago, IL*

Invited Speaker in an American Physiological Society-sponsored Symposium Entitled “Mechanisms of Hypertension Risk”

Presentation Title: T Regulatory Cells and Sex Differences in Hypertension Risk

*FASEB Renal Hemodynamics and Cardiovascular Function in Health and Disease: June 19-23, 2016, Big Sky, MN*

Invited Speaker in Session 3 Entitled “Sex Steroids and Kidney Disease”

Presentation Title: Impact of Sex on Renal T Cell Infiltration in Hypertension

*10<sup>th</sup> Annual Meeting of the Organization for the Study of Sex Differences: The Cause and Consequences of Sex Differences: May 23-26, 2016, Philadelphia, PA*

Invited Speaker in Session IX Entitled “Sex Differences in Cardiovascular Disease”

Presentation Title: Role of T Cells in the Development of Sex Differences in Cardiovascular Disease and Hypertension

*American Physiological Society Conference: Cardiovascular, Renal and Metabolic Diseases: Physiology and Gender: November 17-20, 2015, Annapolis, MD*

Invited Speaker in Symposia I Entitled "Immune System and Regenerative Medicine- Impact of Sex and Gender"

Presentation Title: Role of T Cells in the Development of Sex Differences in Cardiovascular Disease and Hypertension

*Hypertension 2015 Scientific Sessions: September 16-19, 2015, Washington, DC*

Invited Speaker in Session VI Entitled "Gender and Cardiovascular Disease"

Presentation Title: Gender Differences in Blood Pressure Control: Physiological Mechanisms

*14<sup>th</sup> International Conference on Endothelin: Physiology, Pathophysiology, and Therapeutics: September 2-5, 2015, Savannah, GA*

Invited Speaker in Symposia III Entitled "ET, Sex and Pregnancy"

Presentation Title: Sex and Hypertension

*Experimental Biology: March 28-April 2, 2015, Boston MA*

Invited Speaker in APS Renal Section-Sponsored Featured Topic Entitled "Immune Cells, the Kidney, and Hypertension"

Presentation Title: **Renal Section Young Investigator Award Lecture:** Sex Determines the Renal T Cell Profile in Hypertension

*Southern Salt and Water Kidney Club: December 1-3, 2014, Lido Beach, FL*

Invited Speaker

Presentation Title: Renal Immune Cell Infiltration in Hypertension: The Impact of Sex

*Experimental Biology: April 26-30, 2014, San Diego, CA*

Invited Speaker in APS Cardiovascular Section-Sponsored Symposium Entitled "Sex Disparities in Cardiovascular Disease: Implications for Prevention, Prognosis, and Treatment"

Presentation Title: The impact of sex on innate and adaptive immunity in hypertension

*FASEB Renal Hemodynamics: Integrating with the Nephron and Beyond: June 30-July 5, 2013, Saxtons River, VT*

Invited Speaker in Session 2 Entitled "Pathogenesis of Renal Dysfunction in Hypertension"

Presentation Title: Ang (1-7) Protects against Ang II-Induced Renal Injury

*8th Hypertension Summer School: July 27-31, 2013, Columbia, SC*

Invited Faculty in Session VII: Autacoid and Immune Mechanisms in Hypertension  
Presentation Title: Sex Steroid Regulation of Immune System Function and Hypertension

*7th Annual Meeting of the Organization for the Study of Sex Differences: April 25-27, 2013, Weehawken, NJ*

Invited Speaker in Symposium VI: Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology  
Presentation Title: Immune system regulation in males and females

*American Society of Hypertension 27<sup>th</sup> Annual Scientific Meeting: May 19-22, 2012, New York, NY*

Invited Speaker  
Presentation Title: Gender Differences and Hypertension: What can we learn from animal models?

*Vasculata 2012 sponsored by the North American Vascular Biology Organization: July 25-28, 2012, Nashville, TN*

Invited Faculty  
Presentation Title: Gender Difference in Vascular Disease: Basic Mechanisms

*American Physiological Society Conference: Gender Disparities: October 12–14, 2011, Jackson, MS*

Invited Speaker in Symposia VI: Cardiovascular Disease and Inflammation  
Presentation Title: Sex Differences in Inflammatory Mediators.

*FASEB Renal Hemodynamics: Mechanisms to Understanding Disease: June 20-25, 2010, Saxtons River, VT*

Invited Speaker  
Presentation Title: Renal NOS in Male and Female SHR

*High Blood Pressure Research 2010 Scientific Sessions: October 13-16, 2010, Washington, D.C.*

Invited Speaker  
Presentation Title: Ang (1-7) Receptor Antagonism Equalizes Angiotensin II-Induced Hypertension in Male and Female SHR

*Experimental Biology: April 28-May 2, 2007, Washington DC 2007*

Invited Speaker in APS WEH-Sponsored Symposium Entitled: **Young Investigator Award in Regulatory and Integrative Physiology Lecture**  
Presentation Title: Sexual dimorphism in the development of hypertension and renal injury in Spontaneously Hypertensive Rats (SHR)

**INVITED LECTURES (last 5 years)**

2017	Virginia Commonwealth University, Department of Pharmacology & Toxicology
2017	University of Kentucky, Department of Pharmacology
2017	College of Veterinary Medicine, The University of Georgia, Department of Physiology and Pharmacology
2017	AU, Department of Physiology
2015	Tulane, Department of Pharmacology
2014	University of Nebraska, Department of Physiology
2014	University of Mississippi Medical Center, Department of Pharmacology
2013	University of Alabama at Birmingham, Division of Nephrology

**PUBLISHED ABSTRACTS**

1. Buncha V, Cherezova A, Gillis EE, Covington K, McDonough A, Brands M, Sullivan JC, Mamenko M. Spironolactone Effectively Reduces Renal ENaC Activity and Hypertension in Ang II-Infused Female Rats in a Sex-Specific Manner. *FASEB J*, 2019.
2. Gillis EE and **Sullivan JC**. Splenectomy increases blood pressure and alters the renal T cell profile in a sex-specific manner in Spontaneously Hypertensive Rats (SHR). *FASEB J*, 2019.
3. Mohamed R, Crislip GR, Ray R, Wei Q, **Sullivan JC**. Resolution of Vascular Congestion Improves Renal Recovery and Function Post Renal Ischemia Reperfusion in Male Spontaneous Hypertensive Rats (SHR). *FASEB J*, 2019.
4. Ramirez LA, Snyder E, Marin T, **Sullivan JC**. Intermittent hypoxia prior to completion of nephrogenesis increases systolic blood pressure and proteinuria after angiotensin II treatment in adult male rats. *FASEB J*, 2019.
5. Mohamed R, Crislip GR, **Sullivan JC**. Female Spontaneous Hypertensive Rats (SHR) have better recovery in response to acute kidney injury than males. *FASEB J*, 2018.

6. Abdelbary M, Onyilo C, Crislip GR, Gillis E, Brands M, **Sullivan JC**. Inhibition of necrosis via Necrox-5 attenuates the development of hypertension in male, but not female Spontaneously Hypertensive Rats (SHR). *FASEB J*, 2018.
7. Gillis E, Crislip GR, **Sullivan JC**. Oral L-arginine treatment significantly reduces blood pressure without altering the renal T cell profile in the DOCA salt model of hypertension. *FASEB J*, 2018.
8. Gillis EE and **Sullivan JC**. Systemic Administration of an Angiotensin Type-2 Receptor Agonist Decreases Renal Regulatory T Cells. *Hypertension*, 70:AP288, 2017.
9. Taylor LE, Gillis EE, Ocasio H, Baban B, **Sullivan JC**. The anti-contractile effect of perivascular adipose tissue is maintained in female Dahl Salt-Sensitive rats in response to a high-fat diet despite increases in blood pressure and vascular inflammation. *FASEB J*, 31:853.4, 2017.
10. Crislip GR, O'Connor PM, **Sullivan JC**. Novel use of ultrasound to measure regional kidney volume changes post ischemia reperfusion (IR) in male and female rats. *FASEB J*, 31:1030.24; 2017.
11. Hutchinson J, Gillis EE, Crislip GR, Musall JB, Baban B, **Sullivan JC**. The temporal effects of DOCA-salt on the renal T cell profile is sex-specific. *FASEB J*, 31:850.3; 2017.
12. O'Connor P, Chen JK, Ray S, Taylor L, Musall J, Ocasio H, Baban B, **Sullivan JC**. Bicarbonate therapy has no effect on renal T-cell infiltration or blood pressure but markedly reduces tubular casts/fibrosis and is associated with an M1 to M2 shift in Dahl salt-sensitive rats. *FASEB J*, 30:966.8, 2016.
13. Gillis E, Ralph E, Tiesma S, Lindquist R, **Sullivan JC**. Continuous glucose measurements using telemetry in male and female Dahl Salt-Sensitive Rats (DSS) on a high-fat diet. *FASEB J*. 30(1): Supplement 961.5, 2016.
14. Crislip GR and **Sullivan JC**. Sex-specific cell death response following renal ischemia-reperfusion in spontaneously hypertensive rats (SHR). *FASEB J*. 30(1): Supplement 964.9, 2016.
15. Taylor L, Musall J, Belin de Chantemele EJ, Baban B, **Sullivan JC**. A high fat diet increases blood pressure and leads to a renal pro-inflammatory immune cell profile in female Dahl Salt-Sensitive rats. *FASEB J*. 30(1): Supplement 964.5, 2016.

16. Taylor LE, Baban B, **Sullivan JC**. A high fat diet increases blood pressure and leads to a pro-inflammatory immune cell and cytokine profile in the female Dahl Salt-Sensitive rats (DSS). *The Physiologist*, 59(6): 48, 2016.
17. Gillis EE and **Sullivan JC**. Increased pro-inflammatory T cells and HMGB1 are associated with vascular dysfunction in male SHR. *The Physiologist*, 59(6): 21, 2016.
18. Ebeledike C, Ralph E, Musall J, **Sullivan JC**. Female sex hormones protect against salt-induced increases in immune system activation in Dahl salt-sensitive rats (DSS). *FASEB J*, 29:667.5, 2015.
19. Crislip GR, O'Connor PM, **Sullivan JC**. Pericytes protect against renal ischemia-reperfusion injury in male and female Spontaneously Hypertensive rats (SHR). *FASEB J*, 29:963.5, 2015.
20. Crislip GR, **Sullivan JC**. Apoptotic cell death in renal ischemia-reperfusion injury in male and female Spontaneously Hypertensive rats. *FASEB J*, 29:963.5; 2015.
21. Tipton AJ, Li B, **Sullivan JC**. Female spontaneously hypertensive rats have a compensatory increase in renal regulatory T cells in response to elevated blood pressure. *FASEB J*. 28:1083.3, 2014.
22. Crislip RG, Williams E, Tipton AJ, **Sullivan JC**. Inhibition of endoplasmic reticulum stress does not alter blood pressure in adult male and female spontaneously hypertensive rats. *FASEB J*. 28:1083.2, 2014.
23. Zimmerman MA, Tipton AJ, Baban B, **Sullivan JC**. Chronic Ang II hypertension differentially impacts the renal T cell profile in males and females. *Hypertension*, 62:A254; 2013.
24. Harris RA, Zimmerman MA, **Sullivan JC**. Impact of sex and race on Angiotensin (1-7) in humans. *Hypertension*, 62:A513, 2013.
25. Tipton AJ, Baban B, **Sullivan JC**. Male SHR have higher HMGB1 mediated renal T cell activation compared to females. *Hypertension*, 62:A89, 2013.
26. Crislip GR, Tipton AJ, **Sullivan JC**. The impact of high mobility group box 1 protein (HMGB1) on renal ischemia-reperfusion injury in male and female SHR. *FASEB J*, 27:1114.7, 2013.
27. Brinson KN, Sharma S, Romero MJ, **Sullivan JC**. Sex does not impact asymmetric dimethylarginine (ADMA) or L-arginine (L-Arg) levels in spontaneously hypertensive rats (SHR). *FASEB J*. 27:1112.1, 2013.

28. Tipton AJ, Womack M, **Sullivan JC**. Neither hypertension nor sexual maturation is responsible for elevated mesenteric arterial expression of TGF- $\beta$  in female SHR. *FASEB J*. 27:1113.3, 2013.
29. Zimmerman MA and **Sullivan JC**. Ang (1-7) has a greater contribution to the blood pressure lowering effects of AT<sub>1</sub> receptor blockade in female Spontaneously Hypertensive rats (SHR) compared to males. *FASEB J*, 27:904.3; 2013.
30. Elmarakby AA, Pye C, Brinson K, **Sullivan JC**. Female Spontaneously Hypertensive rats are more dependent on nitric oxide in modulating blood pressure and renal injury than males. *Hypertension*. 60:A440, 2012.
31. Brinson KN and **Sullivan JC**. Renal inner medullary tetrahydrobiopterin-dependent nitric oxide synthase activity in male and female Spontaneously Hypertensive Rats. *Hypertension*, 60:A644, 2012.
32. Abdelsaid M, Cobbs A, Li W, Filosa J, **Sullivan JC**, Webb RC, Ergul A. Damage-associated molecular pattern (DAMP) signaling contributes to poor outcomes in diabetic ischemic stroke. *Hypertension*, 60:A611, 2012.
33. Tipton AJ, Baban B, **Sullivan JC**. Female sex hormones blunt renal pro-inflammatory T cell infiltration compared to males. *Hypertension*, 60:A155, 2012.  
\*Named as "Best of AHA Specialty Conference Poster"
34. **Sullivan JC**, Zimmerman MA, Harris RA. Sexual dichotomy in blood pressure regulation: Is Ang (1-7) a key player? *Hypertension*. 60:A392, 2012.
35. Crestani S, Gasparotto Jr. A, Marques MCA, **Sullivan J**, Webb RC, da Silva-Santos E. Reduced functionality of renin-angiotensin-aldosterone system in young rats exposed to high-salt diet. *FASEB J*. 26:1140.4, 2012.
36. Zimmerman MA, Crislip GR, **Sullivan JC**. Female Spontaneously Hypertensive Rats (SHR) have greater increases in NOS in mesenteric arteries than males. *FASEB J*, 26: 878.5; 2012.
37. Tipton AJ and **Sullivan JC**. Female Spontaneously Hypertensive Rats (SHR) have higher expression of TGF- $\beta$  and Smad signaling in mesenteric arteries following the development of hypertension. *FASEB J*, 26:880.1, 2012.

38. Tipton AJ, Baban B, **Sullivan JC**. Mycophenolate mofetil reduces blood pressure to a greater extent in female SHR than in males. *Hypertension*. 58:e33-e183, P450, 2011.
39. Bhatia K, Zimmerman MA, **Sullivan JC**. Sex differences in ACE modulates Ang (1-7) levels in normotensive WKY rats. *The Physiologist*. 56(6):4.25, 2011.
40. Zimmerman MA, Bhatia K, **Sullivan JC**. Female SHR maintain higher levels of Ang (1-7) through enhanced levels of renal cortical ACE 2 activity during chronic Ang II infusion. *The Physiologist*. 56(6):4.25, 2011.
41. Shah YI, Zimmerman MA, Berry BL, Poore TS, **Sullivan JC**, Harris RA. Angiotensin peptides and FMD: Does sex matter? *The Physiologist*. 56(6):4.14, 2011.
42. Brinson KN and **Sullivan JC**. Influence of female sex hormones and salt in essential and salt-sensitive hypertension. *The Physiologist*. 56(6):4.28, 2011.
43. Tipton AJ and **Sullivan JC**. Sex differences in downstream TGF-beta signaling in the arteries of spontaneously hypertensive rats. *The Physiologist*. 56(6):10.3, 2011.
44. Zimmerman MA and **Sullivan JC**. Sex Differences to AT<sub>1</sub> receptor control of blood pressure unveiled following chronic Angiotensin (Ang) II infusion in spontaneously hypertensive rats (SHR). *FASEB J*, 25: 837.7, 2011.
45. Brinson KN and **Sullivan JC**. Chronic angiotensin II (Ang II) increases renal oxidative stress in male spontaneously hypertensive rats (SHR), but not in female SHR. *FASEB J*. 24: 1041.1, 2010.
46. Bhatia K and **Sullivan JC**. AT<sub>1</sub> receptor- independent oxidative stress in angiotensin II (Ang II) infused Male Spontaneously Hypertensive Rats (SHR). *FASEB J*. 24: 605.14, 2010.
47. Zimmerman MA and **Sullivan JC**. Effect of Angiotensin II on oxidative stress in female borderline hypertensive rats. *FASEB J*. 24: 701.10, 2010.
48. Tipton AJ and **Sullivan JC**. Role of inflammation in hypertension in male and female spontaneously hypertensive rats. *The Physiologist*. 53(6):8.18, 2010.
49. **Sullivan JC** and Elmarakby AA. Ang (1-7) receptor antagonism equalizes angiotensin II-induced hypertension in male and female SHR. *Hypertension*. 2010;56:e55, 2010.



50. Spradley FT, Kang KT, **Sullivan JC**, Pollock DM, Pollock JS. Mechanisms of attenuated angiotensin II-induced aortic constriction from Dahl salt-sensitive rats following a 4-week high-fat diet. *FASEB J.* 23:626.20, 2009.
51. Brinson KN, **Sullivan JC**. Influence of salt and estrogen on inner medullary NOS expression in female spontaneously hypertensive rats. *FASEB J.* 23:968.4, 2009.
52. Boesen EI, Wang B, Pollock DM, **Sullivan JC**. Measurement of regional kidney perfusion in mice: comparison of a novel non-invasive technique against conventional laser-Doppler flowmetry. *FASEB J.* 23:969.1, 2009.
53. Elmarakby AA, Foster JM, **Sullivan JC**. Induction of hemeoxygenase-1 slows the progression of hypertension and proteinuria in spontaneously hypertensive rats. *FASEB J.* 23:1071.38, 2009.
54. Anea CB, **Sullivan JC**, Rudic RD. Pathological vascular remodeling in mice with disrupted circadian rhythm. *FASEB J.* 23:1033.3, 2009.
55. **Sullivan JC**, Pollock JS. Greater inflammatory mediators expressed in female spontaneously hypertensive rats compared to males. *ATVB.* P90, 2009.
56. Elmarakby AA, Saleh MA, Mozaffari MS, **Sullivan JC**. Renoprotective mechanisms of hemeoxygenase-1 induction in diabetic spontaneously hypertensive rats. *Hypertension.* 54:e87, 2009.
57. Giachini FR, Lima V, Yogi A, **Sullivan JC**, Touyz RM, Callera GE, Webb RC, Tostes RC. Activation of defective mitogen activated protein kinase phosphatase 1 contributes to vascular dysfunction in DOCA-salt hypertension. *Hypertension.* 54:e122, 2009.
58. Bhatia K, Elmarakby AA, **Sullivan JC**. Chronic L-NAME exposure results in sex-specific downregulation of the non-classical renin-angiotensin system in SHR. *Hypertension.* 54:e80, 2009.
59. **Sullivan JC**, Pollock JS. NOS1-specific activity is lost and NOS3-specific activity is attenuated in the renal inner medulla of male spontaneously hypertensive rats (SHR) compared to female SHR. *FASEB J.* 22:941.1, 2008.
60. Kang KT, Spradley F, **Sullivan JC**, Pollock DM, Pollock JS. High fat diet reduces NOS functional activity during vasoconstriction in aorta, but not small mesenteric arteries, from Dahl rats. *FASEB J.* 22:947.9, 2008.

61. **Sullivan JC**, Elmarakby A. Male spontaneously hypertensive rats are more sensitive to angiotensin II-induced hypertension compared to females. *Hypertension*. 52(4):e34(LB040), 2008.
62. **Sullivan JC**, Pardieck JL, Pollock JS. Estrogen effects on NOS in the renal cortex of Spontaneously Hypertensive Rats (SHR). *FASEB J*. A1417, 2007.
63. Pardieck JL, **Sullivan JC**, Pollock JS. Sex differences in fractalkine responses in spontaneously hypertensive rats (SHR). *FASEB J*. A1418, 2007.
64. Kang K, **Sullivan JC**, Cruthirds DL, Pollock JS. Catalase activity and expression are reduced in mesenteric arteries from angiotensin II-infused hypertensive rats. *FASEB J*. A445, 2007.
65. Banning JE, Schneider MP, Morgan NC, **Sullivan JC**, Pollock JS, Pollock DM. Renal medullary NADPH oxidase activity in DOCA-salt hypertensive rats. *FASEB J*. A1364, 2007.
66. Kang K, **Sullivan JC**, Pollock JS. Activation of nitric oxide/cGMP signaling is mediated by phosphorylation of NOS3 in small arteries from angiotensin II-infused hypertensive rats. *Hypertension*. 50(4):e103(P39), 2007.
67. Xue J, **Sullivan JC**, Spencer AC, Pollock DM, Pollock JS. Regulation of NOS1 activity in the renal inner medulla. *Hypertension*. 50(4):e121(P133), 2007.
68. **Sullivan JC**, D'Angelo G, Boesen EI, Pollock JS, Pollock DM. Novel use of ultrasound to examine regional blood flow in the mouse kidney. *Hypertension*. 50(4):e138(P224), 2007.
69. **Sullivan JC**, Pollock DM, Pollock JS. Sexual dimorphism in the regulation of NOS 3 and oxidative stress in the renal cortex of Spontaneously Hypertensive Rats (SHR). *Hypertension*. 48(4):e28(13), 2006.
70. Banes-Berceli AKL, Marrero MB, Pollock JS, **Sullivan JC**. Molecular mechanisms of sexual dimorphism in renal injury in spontaneously hypertensive rats (SHR): involvement of Angiotensin II and the JAK/STAT pathways. *Hypertension*. 48(4):e48(P13), 2006.
71. Kang K, **Sullivan JC**, Sasser JM, Imig JD, Pollock JS. NO/cGMP signaling and NOS-dependent H<sub>2</sub>O<sub>2</sub> production maintain vasorelaxation in small arteries from hypertensive rats. *Nitric Oxide*. 14: O16, 2006.

72. Kang K, **Sullivan JC**, Sasser JM, Imig JD, Pollock JS. NO/cGMP signaling and NOS-dependent H<sub>2</sub>O<sub>2</sub> production maintains vasorelaxation in small arteries from hypertensive rats. *Circulation*. 114, 2006.
73. **Sullivan JC**, Pollock JS. Sexual dimorphism in the hydrogen peroxide pathway is androgen dependent in Spontaneously Hypertensive Rats. *FASEB J*. 19: A104, 2005.
74. Osmond DA, **Sullivan JC**, Loomis ED, Pollock DM, Pollock JS. Endothelin-1 mediated increased vasoconstriction in rat aorta is attenuated by sepiapterin and apocynin. *FASEB J*. 19: A540, 2005.
75. Kang K, **Sullivan JC**, Imig JD, Pollock JS. Increased nitric oxide synthase-mediated relaxation in small resistance mesenteric arteries from angiotensin II-induced hypertensive rats. *FASEB J*. 19: A576, 2005.
76. **Sullivan JC**, Sasser JM, Pollock DM, Pollock JS. COX-2 inhibition exacerbates renal injury in male, but not female, spontaneously hypertensive rats. *Hypertension*. 46(10):850, 2005.
77. Kang K, **Sullivan JC**, Zemse S, Sasser JM, Pollock JS. Protective effect of chronic resveratrol treatment on aortic contraction in angiotensin II-infused hypertensive rats. *Hypertension*. 46(10):842, 2005.
78. Pollock DM, **Sullivan JC**, Pollock JS. Sex-differences and the role of superoxide in salt-induced hypertension in ETB receptor deficient rats. *Hypertension*. 46(10):847, 2005.
79. Kang KT, **Sullivan JC**, Zhao X, Imig JD, and Pollock JS. The nitric oxide synthase-mediated component of Ach-induced relaxation is increased in mesenteric arteries from ANG-induced hypertensive rats. *FASEB J*. 18: A1036, 2004.
80. **Sullivan JC**, Sasser JM, Osmond DA, Pollock JS. Sexual dimorphism in oxidative stress and renal production of endothelin-1 and prostanoids in Spontaneously Hypertensive Rats. *Hypertension*. 44(4):561, 2004.
81. Collins MH, **Sullivan JC**, Willams JM, Pollock DM, and Pollock JS. Aortic NOS activity and expression in DOCA-salt hypertensive rats. *FASEB J*. 17(5):A343.15, 2003.
82. Sasser JM, **Sullivan JC**, Elmarakby AA, Willams JM, Pollock DM, and Pollock JS. Reduced basal NOS3 phosphorylation and cGMP production in mesenteric arteries of DOCA-salt hypertensive rats. *FASEB J*. 17(5):A341.4, 2003.

83. Sasser JM, **Sullivan JC**, Loomis ED, Elmarakaby AA, Pollock DM, and Pollock JS. Reduced NO/cGMP signaling in mesenteric resistance arteries of DOCA-salt hypertensive rats is mediated by dysregulation of NOS3. *Hypertension*. 42(3):397, 2003.
84. **Sullivan JC**, Zhang Y, Joshi RM, She J, and Pollock JS. Microarray analysis of the influence of gender on gene expression in mesenteric arteries from genetically hypertensive rats. *The Physiologist*. 46(4):228, 2003.
85. Sasser JM, **Sullivan JC**, Zhao X, Veguilla V, Imig JD, and Pollock JS. Differential regulation of NOS3 phosphorylation in the renal medulla of male and female spontaneously hypertensive rats. *The Physiologist*. 46(4):231, 2003.
86. **Sullivan JC**, Williams JM, Pollock DM, and Pollock JS. Effect of apocynin on NOS activity and expression in mesenteric arteries in DOCA-salt hypertension. *FASEB J*. 16(4):A123.22, 2002.
87. **Sullivan JC**, Collins M, Imig JD, Inscho EW, and Pollock JS. Effect of age and gender on NOS activity and expression in mesenteric arteries. *FASEB J*. 16(5):A635.17, 2002.
88. Pollock JS, Giulumian AD, Loomis ED, Jenkins JM, Ocasio H, **Sullivan JC**, Pollock DM, and Fuchs LC. Chronic air jet stress increases oxidative stress in Dahl salt-sensitive rats on normal salt diet. *FASEB J*. 16(5):A619.16, 2002.
89. Mitchell BM, **Sullivan JC**, and Webb RC. GTP cyclohydrolase 1 inhibition attenuates vasodilation and increases blood pressure in rats. *FASEB J*. 16(4):A123.21, 2002.
90. **Sullivan JC**, Loomis ED, Imig JD, Inscho EW, and Pollock JS. Advancing Age is Associated with a decrease in stimulated NO production and an increase in oxidative stress. *Hypertension*. 40(3):P195, 2002.
91. **Sullivan JC**, Pollock DM, and Pollock JS. Chronic angiotensin-II infusion alters NOS 3 localization in mesenteric arteries. *Hypertension*. 38(3):P212, 2001.
92. **Sullivan JC** and Davison CA. Effect of age and gender on electrical field stimulation (EFS)-induced vasoconstriction. *FASEB J*. 14(4):A482.12, 2000.
93. **Case J** and Davison CA. Estrogen modulates mechanisms of endothelial-dependent vasodilation. *FASEB J*. 12(4):A367, 1998.

#### **PUBLICATIONS IN REFEREED JOURNALS**

1. Ryan MJ and Sullivan JC. Sex as a Biological Variable in Renal, Metabolic and Cardiovascular Physiology: Eighteen Years of Leadership by the American Physiological Society. *Am J Physiol Renal Physiol*, in press.
2. Barman S, Li X, Haigh S, Kondrikov D, Mahboubi K, Bordan Z, Stepp D, Zhou J, Wang Y, Weintraub D, Traber P, Snider W, Jonigk D, **Sullivan J**, Crislip GR, Butcher J, Thompson J, Su Y, Chen F, Fulton D. Galectin-3 Underlies the Development of Pulmonary Hypertension by Promoting a Profibrotic Phenotype in Vascular Smooth Muscle Cells. *Am J Physiol- Lung*, in press. DOI: 10.1152/ajplung.00186.2018
3. Rafikov R, Nair V, Sinari S, Babu H, **Sullivan JC**, Desai AA, Rafikova O. Reductive stress as a selective determinant of pulmonary hypertension progression in males. *Antioxidants and Redox Signaling*, in press. DOI: 10.1089/ars.2018.7664
4. Layton AT and **Sullivan JC**. Recent Advances in Sex Differences in Kidney Function. *Am J Physiol Renal Physiol*, in press. DOI: 10.1152/ajprenal.00584.2018
5. Jeong J, Lee N, Tucker M, Rodriguez Miguelez P, Looney J, Thomas J, Derella C, Elmarakby A, Musall J, **Sullivan J**, McKie K, Forseen C, Davison G, Harris R. Tetrahydrobiopterin Improves Endothelial Function in Patients with Cystic Fibrosis. *J Applied Phys*. 126(1):60-66, 2019. DOI: 10.1152/jappphysiol.00629.2018.
6. Kang KT, **Sullivan JC**, Pollock JS. Superoxide Dismutase Activity in Small Mesenteric Arteries Is Downregulated by Angiotensin II but Not by Hypertension. *Toxicol Res*. 2018 Oct;34(4):363-370. DOI: 10.5487/TR.2018.34.4.363
7. Ramirez L, **Sullivan JC**. Sex Differences in Hypertension: Where have we been and where are we going. *Am J Hypertension*, 31(12):1247-1254, 2018. DOI: 10.1093/ajh/hpy148
8. Taylor L, Gillis EE, Musall JB, Baban B, **Sullivan JC**. High Fat Diet Induced Hypertension is Associated with a Pro-Inflammatory T Cell Profile in Male and Female Dahl Salt Sensitive Rats. *Am J Physiology- Heart*, in press, 2018. DOI: 10.1152/ajpheart.00389.2018
9. Taylor LE and **Sullivan JC**. Cutting the Fat: Dissecting Sources of Irregularity in the Cardiovascular and Metabolic Phenotypes of High Fat Fed Rats. *Hypertension*, 72(5):1081-1083, 2018. DOI: 10.1161/HYPERTENSIONAHA.118.11680

10. Gillis EE, Brinson KN, Rafikova O, Chen W, Musall JB, Harrison DG, **Sullivan JC**. Oxidative stress induced BH<sub>4</sub> deficiency in male, but not female SHR. *Bioscience Reports*, 38(4), 2018. DOI: 10.1042/BSR20180111
11. Abdul Y, Abdelsaid M, Li W, Webb RC, **Sullivan JC**, Dong G, Ergul A. Inhibition of Toll-Like Receptor-4 (TLR-4) Improves Neurobehavioral 6 Outcomes after Acute Ischemic Stroke in Diabetic Rats: Possible Role of Vascular Endothelial TLR-4. *Molecular Neurobiology*, in press, 2018.
12. Rodriguez-Miguel P, Gregg J, Lee N, Bass L, Thomas J, Pollock J, **Sullivan JC**, Dillard T, Harris RA. Acute tetrahydrobiopterin improves endothelial function in patients with COPD. *Chest*. in press, 2018.
13. Ray S, Baban B, Tucker M, Seaton A, Chang KC, Mannon E, Sun J, Patel B, Wilson K, Musall JB, Ocasio H, Irsik D, Filsoa J, **Sullivan JC**, Marshall B, Harris RA, and O'Connor PA. Oral NaHCO<sub>3</sub> activates the splenic anti-inflammatory pathway; evidence vagal signals are transmitted via mesothelial cells. *J Immunol*. in press, 2018.
14. Elmarakby AE, Katary M, Pollock JS, **Sullivan JC**. Influence of the selective COX-2 inhibitor celecoxib on sex differences in blood pressure and albuminuria in Spontaneously Hypertensive Rats. *Prostaglandins and Other Lipid Mediators*. in press, 2018.
15. Stewart D, Dong Y, Zhu H, McCarthy CG, **Sullivan J**, Ergul A, Webb RC, Harshfield G. Angiotensin II-mediated increases in damage-associated molecular patterns during acute mental stress. *Psychosom Med*. 79:112-114, 2017.
16. Crislip GR, Wei Q, O'Connor PM, **Sullivan JC**. Vasa Recta Pericyte Density is Negatively Associated with Vascular Congestion in the Renal Medulla Following Ischemia Reperfusion in Rats. *Am J Physiol Renal Physiol*. 313(5):F1097-F1105, 2017. DOI: 10.1152/ajprenal.00261.2017
17. **Sullivan JC** and Gillis EE. Sex and Gender Differences in Hypertensive Kidney Injury. *Am J Physiol Renal Physiol*, 313(4):F1009-F1017, 2017. DOI: 10.1152/ajprenal.00206.2017  
  
\*selected by APS Communications Office for a press release: <http://www.the-aps.org/mm/hp/Audiences/Public-Press/2017/67.html>
18. Tipton AJ, Musall JB, Crislip GR, **Sullivan JC**. Greater transforming growth factor- $\beta$  in adult female SHR is dependent on blood pressure, but does not account for sex differences in renal T regulatory cells. *Am J Physiol Renal Physiol*, 313(4):F847-F853, 2017. DOI: 10.1152/ajprenal.00175.2017

*\*an Editorial Focus was written on this manuscript*

19. Chen Y, **Sullivan JC**, and Layton AT. Sex-specific Computational Models of the Spontaneously Hypertensive Rat Kidneys: Factors Affecting Nitric Oxide Bioavailability. *Am J Physiol Renal*, 2017, Epub ahead of print. DOI: 10.1152/ajprenal.00482.2016
20. Gillis EE and **Sullivan JC**. Sex Differences in Hypertension: Recent Advances. *Hypertension*, 68(6):1322-1327 2016. DOI: 10.1161/HYPERTENSIONAHA.116.06602
21. Taylor L and **Sullivan JC**. Sex Differences in Obesity-Induced Hypertension and Vascular Dysfunction: A Protective Role for Estrogen in Adipose Tissue Inflammation? *Am J Physiol Regu*, 2016, Epub ahead of print. DOI: 10.1152/ajpregu.00202.2016  
*\*Featured as an "Editor's Pick-AJP-Regulatory, Integrative and Comparative Physiology"*
22. Spradley FT, Sasser JM, Musall JB, **Sullivan JC**, Granger JP. Nitric oxide synthase-mediated blood pressure regulation in obese melanocortin-4 receptor-deficient pregnant rats. *Am J Physiol Regu*, 311(5):R851-R857, 2016. DOI: 10.1152/ajpregu.00285.2016
23. Gillis EE, Sasser JM, **Sullivan JC**. Endothelin, Sex, and Pregnancy: Unique considerations for blood pressure control in females. *Am J Physiol*, 310(8):R691-6, 2016. DOI: 10.1152/ajpregu.00427.2015
24. Crislip GR and **Sullivan JC**. T cell involvement in sex differences in blood pressure control. *Clinical Sci*, 130(10):773-83, 2016. DOI: 10.1042/CS20150620
25. Elmarakby AA, Bhatia K, Crislip GR, **Sullivan JC**. Hemodynamic responses to acute angiotensin II infusion are exacerbated in male versus female spontaneously hypertensive rats. *Physiol Reports*, pii: e12677, 2016. DOI: 10.14814/phy2.12677
26. **Sullivan JC**. Emerging Concept: Bringing our Trainees into Focus. *Am J Physiol-Renal Physiol*, 309(2): F89, 2015. DOI: 10.1152/ajprenal.00179.2015
27. McCarthy CG, Wenceslau CF, Goulopoulou S, Ogbi S, Baban B, **Sullivan JC**, Matsumoto T, Webb RC. Circulating mitochondrial DNA and Toll-like receptor 9 are associated with vascular dysfunction in spontaneously hypertensive rats. *Cardiovascular Research*, 107(1):119-30, 2015. DOI: 10.1093/cvr/cv137

28. **Sullivan JC** and Pollock JS. Five Years of Data Diuresis: What have WEH learned? *Am J Physiol- Regu.* 309(9):R1060-1; 2015. DOI: 10.1152/ajpregu.00107.2015
  29. Sasser JM, Brinson KN, Tipton AJ, Crislip GR and **Sullivan JC**. Blood pressure, sex and female sex hormones influence renal inner medullary nitric oxide synthase activity and expression in Spontaneously Hypertensive Rats. *J Am Heart Association.* 4(4); pii: e0017382015, 2015. DOI: 10.1161/JAHA.114.001738
  30. Speed J, D'Angelo G, Wach P, **Sullivan JC**, Pollock JS, Pollock DM. High salt diet increases the pressor response to stress in female, but not male ETB receptor deficient rats. *Physiological Reports.* 3(3). pii: e12326, 2015. DOI: 10.14814/phy2.12326
  31. **Sullivan JC**, Rodriguez-Miguel P, Zimmerman MA, Harris RA. Differences in angiotensin (1-7) between men and women. *Am J Physiol-Heart.* 308(9):H1171-6, 2015. DOI: 10.1152/ajpheart.00897.2014
  32. Zimmerman MA, Baban B, Tipton AJ, O'Connor PM, **Sullivan JC**. Chronic Ang II Infusion Induces Sex-Specific Increases in Renal T cells in Sprague Dawley Rats. *Am J Physiol- Renal Physiol.* 308(7):F706-12, 2015. DOI: 10.1152/ajprenal.00446.2014
- \* an Editorial Focus was written on this manuscript; selected for APSselect May 2015 for distinction in scholarship*
33. Loria AS, Brinson KN, Fox B, **Sullivan JC**. Sex-specific alterations in NOS regulation of vascular function in aorta and mesenteric arteries from spontaneously hypertensive rats compared to Wistar Kyoto rats. *Physiological Reports.* 2(8);pii: e12125, 2014. DOI: 10.14814/phy2.12125
  34. Tipton AJ and **Sullivan JC**. Sex and gender differences in T cells in hypertension. *Clinical Therapeutics,* 36(12):1882-1900; 2014. DOI: 10.1016/j.clinthera.2014.07.011
  35. Tipton AJ, Baban B, **Sullivan JC**. Female SHR Have a Compensatory Increase in Renal Regulatory T Cells in Response to Elevations in Blood Pressure. *Hypertension,* 64(3):557-64; 2014. DOI: 10.1161/HYPERTENSIONAHA.114.03512
  36. Brinson KN, Rafikova O, **Sullivan JC**. Female sex hormones protect against salt-sensitive hypertension but not essential hypertension. *Am J Physiol Regul Integr Comp Physiol.* 307(2):R149-57; 2014. DOI: 10.1152/ajpregu.00061.2014

*\* Selected as an "Editor's Pick" May 2014*



37. Tipton AJ and **Sullivan JC**. Sex differences in blood pressure control: Are T lymphocytes the missing link? *Hypertension*. 64(2):237-9; 2014. DOI: 10.1161/HYPERTENSIONAHA.114.03688
38. Zimmerman MA, Harris RA, and **Sullivan JC**. Female Spontaneously Hypertensive Rats Are More Dependent on Ang (1-7) to Mediate Effects of Low Dose AT<sub>1</sub> Receptor Blockade than Males. *Am J Physiol- Renal*. 306(10):F1136-42; 2014. DOI: 10.1152/ajprenal.00677.2013
39. Crestani Sandra, Arquimedes Gasparotto Júnior, Maria Consuelo C Marques, **Sullivan JC**, Webb RC, da Silva-Santos JE. Enhanced angiotensin-converting enzyme activity and systemic reactivity to angiotensin II in normotensive rats exposed to a high-sodium diet. *Vascular Pharmacology*, 60(2):67-74, 2014. DOI: 10.1016/j.vph.2013.12.001
40. Rafikova O and **Sullivan JC**. Estrogen: Good, Bad, or Both? *Hypertension*. 63(3):449-50, 2014. DOI: 10.1161/HYPERTENSIONAHA.113.02500
41. Brinson KN, Elmarakby AA, Tipton AJ, Crislip GR, Yamamoto T, Baban B, **Sullivan JC**. Female SHR have greater blood pressure sensitivity and renal T cell infiltration following chronic NOS inhibition than males. *American J Physiol*. 305(7):R701-10, 2013. DOI: 10.1152/ajpregu.00226.2013
42. Zimmerman MA, **Sullivan JC**. Hypertension: What's Sex Got to do With It? *Physiology*. 28(4):234-44; 2013. DOI: 10.1152/physiol.00013.2013
43. Beierwaltes WH, Harrison-Bernard LM, **Sullivan JC**, Mattson DL. Assessment of renal function; clearance, the renal microcirculation, renal blood flow, and metabolic balance. *Compr Physiol*. 3(1):165-200; 2013. DOI: 10.1002/cphy.c120008
44. Bhatia K, Zimmerman MA, **Sullivan JC**. Sex differences in angiotensin converting enzyme modulation of Ang (1-7) levels in normotensive WKY rats. *American Journal of Hypertension*, 26(5):591-8, 2013. DOI: 10.1093/ajh/hps088  
*\* Sullivan JC*. Letter to the Editor: Response to "Determination of Sex Differences in Activities of Angiotensin-Converting Enzyme 2 (ACE2) Requires an Activity Assay That Doesn't Underestimate ACE2". *American Journal of Hypertension*, 26: 1173-1173, 2013.
45. Kittikulsuth W, **Sullivan JC**, Pollock DM. ET-1 actions in the kidney: evidence for sex differences. *Br J Pharmacol*. 168(2):318-26, 2013. DOI: 10.1111/j.1476-5381.2012.01922.x

46. Boesen EI, Crislip GR, **Sullivan JC**. Use of ultrasound to assess renal reperfusion and p-selectin expression following unilateral renal ischemia. *Am J Physiol Renal*. 303(9):F1333-40, 2012. DOI: 10.1152/ajprenal.00406.2012
- \*an Editorial Focus was written based on this article.*
47. Tipton A, Baban B, **Sullivan JC**. Female Spontaneously Hypertensive Rats Have Greater Renal Anti-Inflammatory T Lymphocyte Infiltration Than Males. *Am J Physiol Regulatory*. 303(4):R359-67, 2012. DOI: 10.1152/ajpregu.00246.2012
48. Elmarakby AA, Faulkner J, Saleh MA, Baban B, **Sullivan JC**. Induction of hemeoxygenase-1 reduces glomerular injury and apoptosis in diabetic spontaneously hypertensive rats. *Am J Physiol Renal Physiol*. 302(7):F791-800, 2012. DOI: 10.1152/ajprenal.00472.2011
49. El-Marakby A, Faulkner J, Baban B, **Sullivan JC**. Induction of hemeoxygenase-1 reduces renal oxidative stress and inflammation in diabetic spontaneously hypertensive rats. *Int J Hypertension*, 2012:1-11, 2012. DOI: 10.1155/2012/957235
50. Bhatia K, Elmarakby AA, A El-Remessey, **Sullivan JC**. Oxidative stress contributes to sex differences in angiotensin II-mediated hypertension in spontaneously hypertensive rats. *Am J Physiol Regul Integr Comp Physiol*. 302(2):R274-82, 2012. DOI: 10.1152/ajpregu.00546.2011
51. Elmarakby AA, **Sullivan JC**. Relationship between oxidative stress and inflammatory cytokines in diabetic nephropathy. *Cardiovascular Therapeutics*. 30:49-59, 2012. DOI: 10.1111/j.1755-5922.2010.00218.x
52. Kang KT, **Sullivan JC**, Spradley FT, d'Uscio LV, Katusic ZS, Pollock JS. Anti-hypertensive therapy increases BH<sub>4</sub> levels and NO/cGMP signaling in small arteries of angiotensin II-infused hypertensive rats. *Am J Physiol*. 300(3):H718-24, 2011. DOI: 10.1152/ajpheart.00393.2010
53. Mozaffari MS, Baban B, Liu JY, Abebe W, **Sullivan JC**, Elmarakby AA. Mitochondrial complex I and NAD(P)H oxidase are major sources of exacerbated oxidative stress in pressure-overloaded ischemic-reperfused rats. *Basic Res Cardiol*. 106(2):287-97, 2011. DOI: 10.1007/s00395-011-0150-7
54. Brinson KN and **Sullivan JC**. Sex of the animal impacts responses to angiotensin II (Ang II), oxidative stress levels and nitric oxide (NO) bioavailability. *Hypertension*. May;57(5):e18, 2011. DOI: 10.1161/HYPERTENSIONAHA.111.171017

55. Giachini FR, **Sullivan JC**, Lima VV, Carneiro FS, Fortes ZB, Pollock DM, Caralho MH, Webb RC, Tostes RC. Extracellular signal-related kinase 1/2 activation, via downregulation of mitogen activated protein kinase phosphatase 1, mediates sex differences in deoxycorticosterone acetate-salt hypertension vascular reactivity. *Hypertension*, 55(1):172-9, 2010. DOI: 10.1161/HYPERTENSIONAHA.109.140459
56. **Sullivan JC**, Pardieck JL, Hyndman KA, Pollock JS. Renal NOS activity, expression and localization in male and female spontaneously hypertensive rats. *Am J Physiol Regulatory*, 298(1):R61-9, 2010. DOI: 10.1152/ajpregu.00526.2009
57. Schreihof DA, Deutsch C, Lovekamp-Swan T, **Sullivan JC**, Dorrance AM. Effect of high soy diet on the cerebrovasculature and endothelial nitric oxide synthase in the ovariectomized rat. *Vascul Pharmacol*. 52:236-242, 2010. DOI: 10.1016/j.vph.2010.02.003
58. Schneider MP, **Sullivan JC**, Wach PF, Boesen EI, Yamamoto T, Fukai T, Harrison DG, Pollock DM, Pollock JS. Protective role of extracellular superoxide dismutase in renal ischemia/reperfusion injury. *Kidney Int*. 78(4):374-81, 2010. DOI: 10.1038/ki.2010.141
59. **Sullivan JC**, Bhatia K, Yamamoto T, Elmarakby AA. Ang (1-7) receptor antagonism equalized angiotensin II-induced hypertension in male and female Spontaneously Hypertensive Rats. *Hypertension*. 56(4):658-66, 2010. DOI: 10.1161/HYPERTENSIONAHA.110.153668
60. Elmarakby AA, Faulkner J, Posey SP, **Sullivan JC**. Induction of hemeoxygenase-1 attenuates the hypertension and renal inflammation in Spontaneously Hypertensive Rats. *Pharmacological Research*, 62(5):400-7, 2010. DOI: 10.1016/j.phrs.2010.07.005
61. Ma Y, **Sullivan JC**, Schreihof D. Dietary genistein and equol (4', 7 isoflavandiol) reduce oxidative stress and protect rats against focal cerebral ischemia. *Am J Physiol Regulatory*. 299(3):R871-7, 2010. DOI: 10.1152/ajpregu.00031.2010
62. Anea CB, Ali MI, Osmond JM, **Sullivan JC**, Stepp DW, Merloiu AM, Rudic RD. Matrix Metalloproteinases 2 and 9 Dysfunction Underlie Vascular Stiffness in Circadian Clock-Mutant Mice. *Arterioscler Thromb Vasc Biol*. 30(12):2535-43, 2010. DOI: 10.1161/ATVBAHA.110.214379
63. **Sullivan JC**, Pardieck JL, Doran D, Zhang Y, She JX, Pollock JS. Greater fractalkine expression in mesenteric arteries of female spontaneously hypertensive rats compared to males. *Am J Physiol Heart*, 296:H1080-1088, 2009. DOI: 10.1152/ajpheart.01093.2008

64. **Sullivan JC**, Pardieck JL, Brinson K, Kang KT. Estradiol increases renal cGMP and decreases oxidative stress in Spontaneously Hypertensive Rats. *Gender Medicine*, 6(3):498-510, 2009. DOI: 10.1016/j.genm.2009.09.003
65. **Sullivan JC**, Wang B, Boesen EI, D'Angelo G, Pollock JS, Pollock DM. Novel Use of Ultrasound to Examine Regional Blood Flow in the Mouse Kidney. *Am J Physiol Renal*, 297(1):F228-35, 2009. DOI: 10.1152/ajprenal.00016.2009
66. **Sullivan JC**, Smart EJ, Pollock DM, Pollock JS. Influence of salt on subcellular localization of NOS activity and expression in the renal inner medulla. *Clinical Exp Pharmacol Physiol*. 35(2):120-125, 2008. DOI: 10.1111/j.1440-1681.2007.04802.x
67. **Sullivan JC**. Sex and the Renin-Angiotensin System: Inequality Between the Sexes in Response to RAS Stimulation and Inhibition. *Am J Physiol Regulatory*. 294(4):R1220-1226, 2008. DOI: 10.1152/ajpregu.00864.2007
68. Sasser JM, **Sullivan JC**, Hobbs JL, Yamamoto T, Pollock DM, Carmines PK, Pollock JS. Endothelin A Receptor Blockade Reduces Diabetic Renal Injury via an Anti-Inflammatory Mechanism. *J Am Soc Nephrology*. 18:143-154, 2007. DOI: 10.1681/ASN.2006030208
69. **Sullivan JC**, Sasser JM, Pollock JS. Sexual Dimorphism in Oxidant Status in Spontaneously Hypertensive Rats. *Am J Physiol*. 292(2):R764-R768, 2007. DOI: 10.1152/ajpregu.00322.2006
70. Kang K, **Sullivan JC**, Sasser JM, Imig JD, Pollock JS. Novel nitric oxide synthase-dependent mechanism of vasorelaxation in small arteries from hypertensive rats. *Hypertension*. 49:1-9, 2007. DOI: 10.1161/01.HYP.0000259669.40991.1e
71. Stepp D, Boesen E, Mintz J, Hair C, Pollock D, **Sullivan J**. Obesity augments vasoconstrictor reactivity to angiotensin II in the renal circulation of the Zucker rat. *Am J Physiol*. 293:H2537-H2342, 2007. DOI: 10.1152/ajpheart.01081.2006
72. **Sullivan JC**, Semprun-Prieto L, Boesen EI, David M. Pollock, Pollock JS. Sex and Sex Hormones Influence the Development of Albuminuria and Renal Macrophage Infiltration in Spontaneously Hypertensive Rats. *Am J Physiol Regulatory*. 293:R1573-R1579, 2007. DOI: 10.1152/ajpregu.00429.2007
73. **Sullivan JC**, Goodchild TT, Cai Z, Pollock DM, Pollock JS. ET<sub>A</sub> and ET<sub>B</sub> mediated regulation of NOS isoforms in the renal inner medulla. *Acta Phys*. 191:329-336, 2007. DOI: 10.1111/j.1748-1716.2007.01754.x

74. **Sullivan JC**, Pollock JS, and Pollock DM. Superoxide-dependent hypertension in male and female ETB receptor deficient rats. *Exp Biol Med.* 231(6):818-823, 2006. PMID: 16741005
75. **Sullivan JC** and Pollock JS. Coupled and Uncoupled NOS: Separate but Equal? Uncoupled NOS in endothelial cells is a critical pathway for intracellular signaling. *Circ Res.* 98(6):717-719, 2006. DOI: 10.1161/01.RES.0000217594.97174.c2
76. **Sullivan JC**, Sasser JM, Pollock, DM, Pollock JS. Sexual dimorphism in renal production of prostanoids in Spontaneously Hypertensive Rats. *Hypertension*, 45:406-411, 2005. DOI: 10.1161/01.HYP.0000156879.83448.93
77. Loomis ED, **Sullivan JC**, Osmond DA, Pollock DM, and Pollock JS. Endothelin mediates superoxide production and vasoconstriction through activation of NADPH oxidase and uncoupled NOS in the rat aorta. *J Pharmacol Exp Ther.* 315:1058-1064, 2005. DOI: 10.1124/jpet.105.091728
78. Sasser JM, **Sullivan JC**, Elmarakaby AA, Kemp B, Pollock DM, and Pollock JS. Reduced NO/cGMP signaling in mesenteric resistance arteries of DOCA-salt hypertensive rats is mediated by dysregulation of NOS3. *Hypertension*, 43:1-6, 2004. DOI: 10.1161/01.HYP.0000122804.32680.c9
79. **Sullivan JC**, Loomis ED, Collins MH, Imig JD, Inscho EW, and Pollock JS. Age-related alterations in NOS and oxidative stress in mesenteric arteries from male and female rats. *J Appl Physiol*, 97(4):1268-74, 2004. DOI: 10.1152/jappphysiol.00242.2004
80. **Sullivan JC**, Pollock DM, and Pollock JS. Altered Nitric Oxide Synthase 3 Distribution in Mesenteric Arteries of Hypertensive Rats. *Hypertension*, 39:597-602, 2002. PMID: 11882615
81. **Sullivan JC**, Giulumian AD, Pollock DM, Fuchs LC, and Pollock JS. Functional NOS 1 in the Rat Mesenteric Arterial Bed. *Am J Physiol*, 283:H658-H663, 2002. DOI: 10.1152/ajpheart.00073.2002
82. **Sullivan JC** and Pollock JS. NOS 3 Subcellular Localization in the Regulation of Nitric Oxide Production. *Acta Phys Scand*, 179(2):115-22, 2003. DOI: 10.1046/j.1365-201X.2003.01181.x
83. **Sullivan JC** and Davison CA. Gender differences in the effect of age on electrical field stimulation (EFS)-induced adrenergic vasoconstriction in rat mesenteric resistance arteries. *J Pharm Exp Ther* 296:782-788, 2001. PMID: 11181907

84. **Sullivan JC** and Davison CA. Effect of age on electrical field stimulation (EFS)-induced endothelium-dependent vasodilation in male and female rats. *Cardiovascular Res* 50:137-144, 2001. PMID: 11282086
85. **Case J** and Davison CA. Estrogen alters relative contributions of nitric oxide and cyclooxygenase products to endothelium-dependent vasodilation. *J Pharm Exp Ther* 291:524-530, 1999. PMID: 10525067

**Under Review or Revision:**

Taylor L and **Sullivan JC**. Tipping the Scales: Are Females More at Risk for Obesity and High Fat Diet-Induced Hypertension and Vascular Dysfunction?" *British Journal of Pharmacology*. 2018-BJP-1556-RCT-G

Bairey Merz NC, Dember LM, Ingelfinger JR, Vinson A, Neugarten J, Sandberg KL, **Sullivan JC**, Maric-Bilkan C, Rankin TL, Kimmel PL, Star RA. Sex and the Kidneys: a Report from the National Institute of Diabetes and Digestive and Kidney Diseases Workshop. *Nature Nephrology*. NRNEPH-18-275V1

**Letter to the Editor:**

**Sullivan JC** and Imig JD. RESPONSE to Letter to the Editor: "Concern regarding quantification of urinary nephrin by commercially available ELISA". *Am J Physiol Renal Physiol*. 309(3):F271, 2015.

**Book Chapter**

**Sullivan JC**. Sex differences in Angiotensin II hypertension. Comparative, Evolutionary and Genetic Models of Sodium and Water Homeostasis. edited by KA Hyndman and TL Pannabecker. Springer, 2015