

**Gary L. Pierce, PhD**  
Professor and Department Executive Officer (DEO)  
Department of Health and Human Physiology  
Russell B. Day and Florence D. Day Endowed Chair in Liberal Arts & Sciences  
The University of Iowa  
**Curriculum Vitae as of March 1, 2023**

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## CONTACT INFORMATION

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## EDUCATION AND PROFESSIONAL HISTORY

### Post Graduate Education

2005 - 2009 **Postdoctoral Fellow**, Human Vascular Physiology/Aging  
Department of Integrative Physiology, University of Colorado-Boulder  
Mentor: Douglas R. Seals, PhD

### Higher Education

2005 **Ph.D., Applied Physiology & Kinesiology**, University of Florida, Gainesville, FL  
Concentration: Cardiovascular Exercise Physiology  
Mentor(s): Randy W. Braith, PhD; Wilmer W. Nichols, PhD; Scott Powers, PhD

1997 **M.S., Clinical Exercise Physiology**, Northeastern University, Boston, MA

1994 **B.S., Biology**, Worcester State University, Worcester, MA  
Minor: Health Sciences

### Professional and Academic Positions

2022- Present **Chair and Department Executive Officer (DEO)**, Department of Health and Human Physiology, University of Iowa

2021- Present **Professor**, Department of Health and Human Physiology, University of Iowa

2020 - Present **Associate Professor**, Internal Medicine, Division of Nephrology and Hypertension, University of Iowa Carver College of Medicine

2018 - 2022 **Director of Graduate Studies**, Department of Health and Human Physiology, University of Iowa

2014 - Present **Associate Member**, Environmental Health Sciences Research Center, College of Public Health, University of Iowa

2012 - Present **Faculty Member**, Fraternal Order of Eagles Diabetes Research Center, Carver College of Medicine, University of Iowa

2017 - 2021 **Associate Professor (with tenure)**, Department of Health and Human Physiology, University of Iowa

2015 - 2018 **Faculty member**, Center for Hypertension Research, University of Iowa, Carver College of Medicine

2011 - 2017 **Assistant Professor**, Department of Health and Human Physiology, University of Iowa

2011 - 2013 **NIH KL2 Scholar**, Institute for Clinical and Translational Science, University of Iowa

2009 - 2011 **Assistant Professor**, Department of Pediatrics, Georgia Prevention Institute, College of Medicine, Georgia Health Sciences University

2005 - 2009 **Postdoctoral Research Associate**, Department of Integrative Physiology, University of Colorado at Boulder

2005 - 2007 **NIH T32 Postdoctoral Research Fellow**, Division of Geriatric Medicine and

	Department of Integrative Physiology, University of Colorado
2003 - 2005	<b>American Heart Association Predoctoral Research Fellow</b> , Department of Applied Physiology and Kinesiology, University of Florida
2002 - 2005	<b>Instructor</b> , Department of Applied Physiology and Kinesiology, University of Florida
Summer 2002	<b>Adjunct Instructor</b> , Department of Allied Health Sciences, Santa Fe Community College
2001 - 2002	<b>Graduate Teaching Assistant</b> , Department of Applied Physiology and Kinesiology, University of Florida
1999 - 2001	<b>Adjunct Instructor</b> , Dept of Exercise Physiology, Lasell College, Newton, MA
1997 - 2001	<b>Supervising Clinical Exercise Physiologist</b> , Exercise Testing Laboratory, Division of Cardiovascular Medicine, Brigham and Women's Hospital, Boston, MA
Fall 2000	<b>Adjunct Lab Instructor</b> , Department of Health Sciences, Sargent College of Health Sciences, Boston University
1995 - 1999	<b>Exercise Physiologist (part-time)</b> , Fitcorp Healthcare Centers, Boston, MA
1996 - 1997	<b>Graduate Teaching Assistant</b> , Department of Health, Recreation and Leisure Studies, Northeastern University

### Licensures and Certifications

2011	<b>Completed Biomedical Responsible Conduct of Research Course, Collaborative Institutional Training Initiative (CITI)</b> , University of Iowa
1997- present	<b>ACSM Certified Clinical Exercise Physiologist®</b> , American College of Sports Medicine

### Honors and Awards

2023	<b>Fellow</b> , American Physiological Society (FAPS)
2022-present	<b>Russell B. Day and Florence D. Day Endowed Chair in Liberal Arts &amp; Sciences</b> , College of Liberal Arts & Sciences, University of Iowa
2016	<b>Fellow</b> , American Heart Association (FAHA)
2015 - 2019	<b>Strategically Focused Hypertension Research Network Grant</b> , American Heart Association
2013 - 2017	<b>Scientist Development Grant Award</b> , American Heart Association National Center
2015 - 2017	<b>Career Development Research Award</b> , Environmental Health Sciences Research Center, College of Public Health, University of Iowa
2016	<b>Research Leadership Academy (invited)</b> , American Heart Association
2011 - 2013	<b>KL2 Career Development Award, Institute for Clinical and Translational Science</b> , University of Iowa
2009	<b>Environmental and Exercise Physiology Section Beginning Investigator Recognition Award</b> , American Physiological Society
2009	<b>Research Career Enhancement Award</b> , American Physiological Society
2008	<b>Cardiovascular Section Young Investigator Research Recognition Award</b> , American Physiological Society
2006 - 2008	<b>NIH Clinical Research Loan Repayment Program Award</b> , National Institutes of Health
2007	<b>Summer Institute on Aging Research</b> , National Institute on Aging, National Institutes of Health (1 week)
2005 - 2007	<b>NIH T32 Postdoctoral Research Fellowship</b> , Division of Geriatric Medicine, University of Colorado Health Sciences Ctr, Denver
2003 - 2005	<b>Predocctoral Research Fellowship</b> , American Heart Assoc Florida/Puerto Rico Affiliate
2001 - 2002	<b>J. Edmonds Predocctoral Fellowship</b> , College of Health and Human Performance, University of Florida
1992	<b>Beta Beta Beta Biology Honor Society</b> , Chi Iota Chapter, Worcester State University

### Memberships

2017 - Present	American College of Sports Medicine
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2010 - Present	North American Artery Society
2004 - Present	American Physiological Society
2003 - Present	American Heart Association
1997 - 2012	American College Sports Medicine
1996 - 2001	New England Chapter of American College of Sports Medicine

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## TEACHING

### Courses Taught at the University of Iowa

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Spring 2023	HHP:5935	Clinical Exercise Physiology Internship	2	
Spring 2023	HONR:4990	Honors Thesis or Project	1	
Spring 2023	HHP:6000	Research	2	
Spring 2023	HHP:7500:0IND	Thesis: M.S.	1	
Spring 2023	HHP:7900:0IND	Thesis: Ph.D.	3	
Spring 2023	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	10	
Fall 2022	HHP:5935	Clinical Exercise Physiology Internship	1	
Fall 2022	HHP:6000	Research	4	
Fall 2022	HHP:6410:0001	Advanced Exercise Physiology	9	9
Fall 2022	HHP:6460:0A01	Advanced Cardiovascular Physiology	6	6
Spring 2022	HHP:4150:0002	Clinical Exercise Physiology	33	33
Spring 2022	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	5	5
Spring 2022	HHP:4935:9375	Clinical Exercise Physiology Internship	2	2
Spring 2022	HHP:4900:0001	Honors Research	1	1
Spring 2022	HHP:6000:1535	Research	3	3
Fall 2021	HHP:6460:0A01	Advanced Cardiovascular Physiology	5	5
Fall 2021	HHP:4460:0A01	Cardiovascular Physiology	15	15
Fall 2021	HHP:4410:0001	Exercise Physiology	38	38
Fall 2021	HHP:4935:9375	Clinical Exercise Physiology Internship	2	2
Spring 2021	HHP:6150:0A01	Advanced Clinical Exercise Physiology	5	5
Spring 2021	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	5	5

<b>Term</b>	<b>Course#</b>	<b>Title</b>	<b>Ten-Day Enrollment</b>	<b>Final Enrollment</b>
Spring 2021	HHP:4150:0002	Clinical Exercise Physiology	20	20
Spring 2021	HHP:4935:1398	Clinical Exercise Physiology Internship	3	3
Spring 2021	HHP:6000:1535	Research	3	3
Spring 2021	HHP:7500:1533	Thesis: M.S.	1	1
Spring 2021	HHP:4500:1812	Undergraduate Independent Study	2	2
Fall 2020	HHP:6460:0A01	Advanced Cardiovascular Physiology	9	9
Fall 2020	HHP:6460:0AAA	Advanced Cardiovascular Physiology	9	9
Fall 2020	HHP:6460:0002	Advanced Cardiovascular Physiology	1	1
Fall 2020	HHP:6410:0001	Advanced Exercise Physiology	7	7
Fall 2020	HHP:4460:0001	Cardiovascular Physiology	15	20
Fall 2020	HHP:4935:9375	Clinical Exercise Physiology Internship	4	4
Fall 2020	HHP:4410:0001	Exercise Physiology	38	42
Fall 2020	HHP:6400:0001	Integrative Physiology Seminar	9	9
Fall 2020	HHP:6000:9368	Research	5	5
Fall 2020	HHP:4500:9495	Undergraduate Independent Study	2	2
Spring 2020	HHP:6150:0A01	Advanced Clinical Exercise Physiology	7	7
Spring 2020	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	7	7
Spring 2020	HHP:4150:0002	Clinical Exercise Physiology	13	13
Spring 2020	HHP:4935:8042	Clinical Exercise Physiology Internship	1	1
Spring 2020	HHP:4900:0001	Honors Research	7	7
Spring 2020	HHP:6000:7238	Research	2	2
Spring 2020	HHP:7900:8816	Thesis: Ph.D.	1	1
Spring 2020	HHP:4500:7482	Undergraduate Independent Study	4	4
Fall 2019	HHP:6460:0002	Advanced Cardiovascular Physiology	1	1
Fall 2019	HHP:6460:0A01	Advanced Cardiovascular Physiology	5	5
Fall 2019	HHP:6460:0AAA	Advanced Cardiovascular Physiology	5	5

<b>Term</b>	<b>Course#</b>	<b>Title</b>	<b>Ten-Day Enrollment</b>	<b>Final Enrollment</b>
Fall 2019	HHP:6410:0001	Advanced Exercise Physiology	9	9
Fall 2019	HHP:4460:0001	Cardiovascular Physiology	27	27
Fall 2019	HHP:4410:0001	Exercise Physiology	39	39
Fall 2019	HHP:6400:0001	Integrative Physiology Seminar	3	3
Fall 2019	HHP:6000:5530	Research	3	3
Fall 2019	HHP:7900:6102	Thesis: Ph.D.	2	2
Fall 2019	HHP:4500:6656	Undergraduate Independent Study	1	1
Summer 2019	HHP:4935:5690	Clinical Exercise Physiology Internship	2	2
Spring 2019	HHP:6150:0A01	Advanced Clinical Exercise Physiology	2	2
Spring 2019	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	2	2
Spring 2019	HHP:4150:0002	Clinical Exercise Physiology	24	24
Spring 2019	HHP:4935:2949	Clinical Exercise Physiology Internship	5	5
Spring 2019	HHP:4800:0101	Honors Research I	2	2
Spring 2019	HHP:4900:0001	Honors Research II	15	15
Spring 2019	HHP:6400:0001	Integrative Physiology Seminar	4	4
Spring 2019	HHP:6000:3480	Research	1	1
Spring 2019	HHP:7500:3478	Thesis: M.S.	1	1
Spring 2019	HHP:7900:4079	Thesis: Ph.D.	2	2
Spring 2019	HHP:4500:2918	Undergraduate Independent Study	3	3
Spring 2019	URES:3994:4293	Undergraduate Research/Creative Projects	1	1
Fall 2018	HHP:6460:0002	Advanced Cardiovascular Physiology	1	
Fall 2018	HHP:6460:0A01	Advanced Cardiovascular Physiology	5	5
Fall 2018	HHP:6460:0AAA	Advanced Cardiovascular Physiology	5	
Fall 2018	HHP:6410:0001	Advanced Exercise Physiology	3	
Fall 2018	HHP:4460:0001	Cardiovascular Physiology	34	
Fall 2018	HHP:4935:1910	Clinical Exercise Physiology Internship	3	

<b>Term</b>	<b>Course#</b>	<b>Title</b>	<b>Ten-Day Enrollment</b>	<b>Final Enrollment</b>
Fall 2018	HHP:4410:0001	Exercise Physiology	39	
Fall 2018	HHP:4800:0001	Honors Research I	14	
Fall 2018	HHP:4900:0001	Honors Research II	3	
Fall 2018	HHP:6400:0001	Integrative Physiology Seminar	8	
Fall 2018	HHP:6000:0722	Research	1	
Fall 2018	HHP:7900:0718	Thesis: Ph.D.	2	
Fall 2018	HHP:4500:1806	Undergraduate Independent Study	3	
Summer 2018	HHP:4935:1573	Clinical Exercise Physiology Internship	1	
Summer 2018	HHP:7900:1284	Thesis: Ph.D.	1	
Spring 2018	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	8	
Spring 2018	HHP:4150:0001	Clinical Exercise Physiology	39	
Spring 2018	HHP:6100:0001	Health and Human Physiology Seminar	13	
Spring 2018	HHP:4800:0101	Honors Research I	2	
Spring 2018	HHP:4900:0001	Honors Research II	16	
Spring 2018	HHP:6400:0001	Integrative Physiology Seminar	5	
Spring 2018	HHP:6000:8460	Research	1	
Spring 2018	HHP:7900:9663	Thesis: Ph.D.	2	
Spring 2018	HHP:4500:9113	Undergraduate Independent Study	5	
Fall 2017	HHP:6410:0001	Advanced Exercise Physiology	7	
Fall 2017	HHP:4935:6146	Clinical Exercise Physiology Internship	2	
Fall 2017	HHP:4410:0001	Exercise Physiology	34	
Fall 2017	HHP:6100:0001	Health and Human Physiology Seminar	12	
Fall 2017	HHP:4800:0001	Honors Research I	20	
Fall 2017	HHP:4900:0001	Honors Research II	2	
Fall 2017	HHP:6400:0001	Integrative Physiology Seminar	1	
Fall 2017	HHP:6000:6566	Research	2	

<b>Term</b>	<b>Course#</b>	<b>Title</b>	<b>Ten-Day Enrollment</b>	<b>Final Enrollment</b>
Fall 2017	HHP:7900:7170	Thesis: Ph.D.	1	
Summer 2017	HHP:4935:7097	Clinical Exercise Physiology Internship	1	
Spring 2017	HHP:6150:0002	Advanced Clinical Exercise Physiology	1	
Spring 2017	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	2	
Spring 2017	HHP:4150:0001	Clinical Exercise Physiology	6	
Spring 2017	HHP:4935:3919	Clinical Exercise Physiology Internship	1	
Spring 2017	HHP:6100:0001	Health and Human Physiology Seminar	12	
Spring 2017	HHP:4800:0101	Honors Research I	1	
Spring 2017	HHP:4900:0001	Honors Research II	11	
Spring 2017	HHP:6400:0001	Integrative Physiology Seminar	3	
Spring 2017	HHP:6000:3922	Research	2	
Spring 2017	HHP:7500:4152	Thesis: M.S.	1	
Spring 2017	HHP:4500:4763	Undergraduate Independent Study	2	
Fall 2016	HHP:6410:0001	Advanced Exercise Physiology	6	
Fall 2016	HHP:4935:2585	Clinical Exercise Physiology Internship	1	
Fall 2016	HHP:4410:0001	Exercise Physiology	40	
Fall 2016	HHP:4900:0001	Honors Research II	3	
Fall 2016	HHP:6400:0001	Integrative Physiology Seminar	6	
Fall 2016	HHP:6000:2153	Research	3	
Fall 2016	HHP:7500:1501	Thesis: M.S.	1	
Fall 2016	HHP:4500:1780	Undergraduate Independent Study	3	
Summer 2016	HHP:4935:2073	Clinical Exercise Physiology Internship	1	
Spring 2016	HHP:6150:0AAA	Advanced Clinical Exercise Physiology	9	
Spring 2016	HHP:4150:0001	Clinical Exercise Physiology	14	
Spring 2016	HHP:4935:0035	Clinical Exercise Physiology Internship	3	
Spring 2016	HHP:6000:0035	Research	4	

<b>Term</b>	<b>Course#</b>	<b>Title</b>	<b>Ten-Day Enrollment</b>	<b>Final Enrollment</b>
Spring 2016	HHP:7500:0035	Thesis: M.S.	1	
Spring 2016	HHP:4500:0035	Undergraduate Independent Study	1	
Fall 2015	HHP:6410:0001	Advanced Exercise Physiology	9	
Fall 2015	HHP:4935:0035	Clinical Exercise Physiology Internship	3	
Fall 2015	HHP:4410:0001	Exercise Physiology	84	
Fall 2015	HHP:6400:0001	Integrative Physiology Seminar	11	
Fall 2015	HHP:6000:0035	Research	3	
Fall 2015	HHP:4500:0035	Undergraduate Independent Study	2	
Spring 2015	HHP:6150:0100	Advanced Clinical Exercise Physiology	5	
Spring 2015	HHP:4150:0100	Clinical Exercise Physiology	25	
Spring 2015	HHP:4935:0035	Clinical Exercise Physiology Internship	3	
Spring 2015	HHP:6400:0100	Integrative Physiology Seminar	3	
Spring 2015	HHP:6000:0035	Research	2	
Spring 2015	HHP:7500:0035	Thesis: M.S.	1	
Spring 2015	HHP:4500:0035	Undergraduate Independent Study	4	
Fall 2014	HHP:6410:0001	Advanced Exercise Physiology	6	
Fall 2014	HHP:4935:0035	Clinical Exercise Physiology Internship	2	
Fall 2014	HHP:4410:0001	Exercise Physiology	82	
Fall 2014	HHP:6400:0001	Integrative Physiology Seminar	12	
Fall 2014	HHP:6000:0035	Research	2	
Fall 2014	HHP:4500:0035	Undergraduate Independent Study	3	
Summer 2014	027:193:035	Clinical Exercise Physiology Internship	1	
Summer 2014	027:404:035	Thesis: M.S.	1	
Summer 2014	027:195:035	Undergraduate Independent Study	1	
Spring 2014	027:250:SCB	Advanced Clinical Exercise Physiology	8	
Spring 2014	027:150:SCA	Clinical Exercise Physiology	15	



<b>Term</b>	<b>Course#</b>	<b>Title</b>	<b>Ten-Day Enrollment</b>	<b>Final Enrollment</b>
Spring 2014	027:193:035	Clinical Exercise Physiology Internship	1	
Spring 2014	027:241:001	Integrative Physiology Seminar	3	
Spring 2014	027:201:035	Research	2	
Spring 2014	027:404:035	Thesis MS	2	
Spring 2014	027:195:035	Undergraduate Independent Study	5	
Fall 2013	027:240:001	Advanced Exercise Physiology	5	
Fall 2013	027:141:001	Exercise Physiology	96	
Fall 2013	027:241:SCA	Integrative Physiology Seminar	5	
Fall 2013	027:201:035	Research	3	
Fall 2013	027:404:035	Thesis MS	2	
Fall 2013	027:195:035	Undergraduate Independent Study	5	
Spring 2013	027:250:SCB	Advanced Clinical Exercise Physiology	9	
Spring 2013	027:150:SCA	Clinical Exercise Physiology	30	
Spring 2013	027:201:035	Research	2	
Spring 2013	027:195:035	Undergraduate Independent Study	2	
Fall 2012	027:141:001	Exercise Physiology	120	
Fall 2012	027:201:035	Research	2	
Fall 2011	027:141:001	Exercise Physiology	119	

### **Additional Courses Taught**

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
November 2020	MED:8124:	Mechanisms of Health and Disease 1(MOHD1): delivered 1 didactic lecture (50 min)	160	160
November 2019	MED:8124:	Mechanisms of Health and Disease 1(MOHD1): delivered 1 didactic lecture (50 min) and 1 exercise test demo (50 min)	160	160
November 2018	MED:8124:	Mechanisms of Health and Disease 1(MOHD1): Gave 1 lecture and lead 1 Discussion module	160	160
November 2017	MED:8124:	Mechanisms of Health and Disease 1(MOHD1): Gave 1 lecture and lead 1 Discussion module	160	160

### Innovations in Teaching (Other Teaching Contributions)

#### **Design & Implementation of New Courses**

Jan 2013 - Present      Created new course HHP:4150 Clinical Exercise Physiology as an upper level elective for undergraduate students in the BS Human Physiology track;  
Created new course HHP:6150 Adv. Clinical Exercise Physiology for the new non-thesis MS graduate program in Clinical Exercise Physiology.

2013 - 2016      Established Internship external sites for HHP:4935 Clinical Exercise Physiology Internship:  
2016- Exercise Testing and EKG Holter Monitoring Lab, Division of Pediatric Cardiology, University of Iowa Hospitals and Clinics (UIHC)  
2015- Outpatient Cardiac and Pulmonary Rehabilitation, St' Luke's Hospital at Unity Point, Cedar Rapids, IA  
2014- Inpatient Cardiac Rehabilitation and Diagnostic Exercise Testing, Heart and Vascular Center, UIHC, Iowa City, IA  
2013- CHAMPS Outpatient Cardiac Rehab, Heart and Vascular Center, UIHC, Iowa City, IA  
2013- Outpatient Cardiac Rehabilitation Program, Mercy Hospital, Iowa City, IA  
2013- Pulmonary Rehabilitation Program, Division of Rehabilitation Services, UIHC, Iowa City, IA

#### **Innovations in Teaching**

2013 - 2014      Developed Clinical Exercise Physiology Internship agreements with University of Iowa Department of Risk Management, Insurance and Loss Prevention

Jan - Dec 2012      Faculty Facilitator, 650:270/604 Principles of Scholarly Integrity, Graduate School

Jan 2012      Instructor, 050:240:600 Human Organ Systems, College of Medicine

### Student Mentoring

#### **BS - Directed Individual/Independent Study**

Jan-May 2020      Foster, Grace; *Completed*  
Jan-May 2020      Gruber, Kelsey; *Completed*  
Jan-May 2020      Huesner, Jared; *Completed*  
Jan-May 2020      Long, Mikalya; *Completed*

Fall-Spring 2019	Martin, Ben; <i>Completed</i>
Spring 2016	Lentner, Jacob; <i>Completed</i>
Fall 2015	Adebiyi, Mayowa; <i>Completed</i>
Spring 2014	Klosak, Randy; <i>Completed</i>
Spring 2014	Myers, Janie; <i>Completed</i>
Fall 2013	Myers, Janie; <i>Completed</i> , HHP senior, BS Human Phys
Spring 2013	Delillo, Emily; <i>Completed</i>
Spring 2013	Radolsky, Richard; <i>Completed</i>
Sept 2011 - May 2012	Guintier, Mark; <i>Completed</i> , BS Human Phys 2012; PhD student, Univ of S. Carolina

### **BS - Research Assistant**

July 2016 - July 2017	Fitszimmmons, Adam; <i>Completed</i>
January 2016 - July 2017	Wooldridge, BS, Nealy; <i>Completed</i>
December 2015 - July 2017	Myers, Janie; <i>Completed</i>
May 2015 - July 2017	Jensen, Nicholas; <i>Completed</i>
January 2014 - May 2015	Myers, Janie; <i>Completed</i>
August 2013 - July 2014	Wehrle, Andrea; <i>Completed</i> , BS Human Phys 2014

### **BS - Supervised Research**

May 2021 - Aug 2021	Gruber, Kelsey; [Iowa Center for Undergraduate Research (ICRU) Summer Research Fellowship]; <i>Completed</i>
May 2020 - Aug 2020	Foster, Grace; ([Iowa Center for Research by Undergraduates (ICRU) summer fellowship]; <i>Completed</i>
May 2019 - Aug 2019	Martin, Ben [Iowa Center for Research by Undergraduates (ICRU) Fellowship]; <i>Completed</i>
May 2017 - Aug 2017	Majee, Rumbi (American Physiological Society STRIDE Summer Research Fellowship); <i>Completed</i>
May 2015 - Aug 2015	Rasor, Madalyn (American Physiological Society STRIDE Summer Research Fellowship); <i>Completed</i>

### **BS - Undergraduate Honors Thesis**

August 2022-May 2023	Ryan Staub, <i>In process</i>
August 2021-May 2022	Kelsey Gruber; <i>Completed</i>
August 2019 - May 2020	Martin, Ben; <i>Completed</i>
Fall 2017 - Spring 2018	Majee, Rumbi; <i>Completed</i>

Fall 2017 - Spring 2018	Reierson, Leah; <i>Completed</i>
Spring 2017 - Fall 2017	Rader, Melissa; <i>Completed</i>
August 2015 - May 2016	Rasor, Madalyn [Iowa Center for Research by Undergraduates (ICRU) Fellowship]; <i>Completed</i>
August 2015 - May 2016	Stecklein, Taylor; <i>Completed</i>
August 2013 - May 2015	Younatham, Ramsan; <i>Completed</i>
August 2013 - May 2014	Tank, Ericka; <i>Completed</i>

***MAT - Comprehensive Exam Committee, MS Athletic Training, Member***

2017 - 2019      Sultan, Nate; *Completed*

***MD - Supervised Research***

May 2019 - August 2019	Ward, Ryan (PreM1 Carver College of Medicine, Medical Student Summer Research Fellowship); <i>Completed</i>
May 2018 - August 2018	Wooldridge, Nealy (M1 Carver College of Medicine, Medical Student Summer Research Fellowship); <i>In Process</i>
May 2016 - August 2016	Parker, Nicolas (M1 Carver College of Medicine Medical Student Summer Research Fellowship); <i>Completed</i>
May 2015 - August 2015	Tank, Ericka (M1 Carver College of Medicine, Medical Student Summer Research Fellowship); <i>Completed</i>
May 2014 - August 2014	Tank, Ericka (awarded Iowa Center for Research by Undergraduates Fellowship, ICRU); <i>Completed</i>

***MS – Non-Thesis Final Exam Committee, Clinical Exercise Physiology, Chair***

Dec 2023	Brookhart, Brian, <i>In Process</i>
May 2023	Fathi, Somayeh, <i>In Process</i>
Dec 2022	Snytsheuvel, Ryan; <i>Completed</i>
May 2022	Hocker, Alex; <i>Completed</i>
May 2021	Aramamudhan, Vikraman; <i>Completed</i>
May 2021	Guerrero, Mariah; <i>Completed</i>
May 2021	Lewis, Bailey; <i>Completed</i>
May 2021	Miller, Jack; <i>Completed</i>
May 2021	Nugent, Kayla; <i>Completed</i>
May 2020	Mathre, Erik; <i>Completed</i>
May 2020	Welch, Alexa; <i>Completed</i>
April 2019	Damon, Lucienne; <i>Completed</i>
May 2019	Perla, Anthonie; <i>Completed</i>
May 2019	Petersen, Courtney; <i>Completed</i>
May 2019	Schneider, Kayla; <i>Completed</i>
May 2019	Taylor, Stephen; <i>Completed</i>
May 2017	Crosser, Jordan; <i>Completed</i>
May 2017	O'Deen, Allison; <i>Completed</i>
April 2017	Vernon, Charles; <i>Completed</i>

April 2016 Aldridge, Anna; *Completed*  
 April 2016 Micho, Jared; *Completed*  
 April 2016 Pavic, Milosch; *Completed*  
 April 2016 Reist, Lauren; *Completed*

***MS – Non-Thesis Final Exam Committee, Clinical Exercise Physiology, Member***

April 2015 (Greenwalt) Driscoll, Eva; *Completed*  
 April 2015 Carano, Anna; *Completed*  
 April 2015 Morano, Theresa; *Completed*  
 April 2015 Segre, Elena; *Completed*  
 April 2014 Dubishar, Kaitlyn; *Completed*

***MS -Clinical Exercise Physiology Internship Advisor***

Jan – May 2023 Brookhardt, Brian, *In Process*  
 Aug-Dec 2022 Fathi, Somayeh, *Completed*  
 Jan- May 2022 Hockner, Alex; *Completed*  
 Jan – May 2022 Snytsheugel, Ryan; *Completed*  
 Aug – Dec 2021 Aravamudhan, Vikraman; *Completed*  
 Jan- May 2021 Guerrero, Mariah; *Completed*  
 Jan-May 2021 Lewis, Bailey; *Completed*  
 Jan-May 2021 Miller, Jack; *Completed*  
 Jan-May 2021 Nugent, Kayla; *Completed*  
 Summer 2019 Mathre, Erik; *Completed*  
 Jan - May 2019 Welch, Alexa; *Completed*  
 Aug 2016 - May 2017 Vernon, Charles; *Completed*  
 May 2016 - August 2016 O'Deen, Allison; *Completed*  
 January 2016 - May 2016 Micho, Jared; *Completed*  
 January 2016 - May 2016 Pavic, Milosch; *Completed*  
 August 2015 - May 2016 Reist, Lauren; *Completed*  
 August 2014 - December 2015 (Greenwalt) Driscoll, Eva; *Completed*  
 January 2015 - May 2015 Morano, Theresa; *Completed*  
 January 2015 - May 2015 Segre, Elena; *Completed*  
 August 2014 - May 2015 Carano, Anna; *Completed*  
 Spring 2014 Dubishar, Kaitlyn; *Completed*

***MS - Master's Thesis Committee Chair***

Fall 2021-Spring 2023 Somers, Emma, *In Process*  
 Fall 2019 - Spring 2021 Shatalova, Violetta; *Completed*  
 August 2017 - Nuckols, Virginia; *Completed*

May 2019

August 2015 - Schneider, Aaron; *Completed*  
Spring 2017

August 2014 - Ajibewa, Tiwaloluwa; *Completed*  
May 2016

Fall 2013 - DuBose, Lyndsey; *Completed*  
Spring 2015

Spring 2012 - Harris, Stephen; *Completed*  
Summer 2014

Fall 2012 - Siefers, Kyle; *Completed*  
Spring 2014

***MS - Master's Thesis Committee Member***

Fall 2022-Spring 2023 Halstead, Kristen, *In process*

Fall 2019 - Dziewior, Jaclyn; *Completed*  
Spring 2021

Fall 2017 - Barnard, Christopher; *Completed*  
Spring 2019

Fall 2017 - Hoover, Mike; *Completed*  
Spring 2018

Fall 2012 - Ferrante, Kim; *Completed*  
Spring 2014

***MS - Research Assistant***

September 2016 - August 2019 O'Deen, Allison; *Completed*

August 2014 - July 2015 Dubishar, Kaitlyn; *Completed*

***PhD - Comprehensive Exam, Member***

Spring 2023 Schwartz, Kelsey, *In Process*

Spring 2023 Dziewior, Jaclyn; *In Process*

Fall 2021 Hanson, Brady; *Completed*

Fall 2021 Banks, Nile; *Completed*

Fall 2021 Rogers, Emily; *Completed*

Fall 2019 Harris, Matthew; *Completed*

Spring 2016 Hughes, William; *Completed*

Spring 2015 Francis, Shelby; *Completed*

Spring 2015 Metcalf, Kristen; *Completed*

Spring 2015 Santillan, MD, Mark; *Completed*

Spring 2012 Ebnet, Tom; *Failed*

***PhD - Dissertation Committee Chair***

Aug 2022-present Davis, Kristen; *In Process*

Aug 2021-present Khataei, Tahsin, *In Process* (Co-chair)

Aug 2020- present	Gimblet, Colin; <i>In Process</i>
Aug 2019- May 2023	Nuckols, Virginia; <i>Completed</i>
Dec 2016 - May 2020	Luehrs, Rachel; <i>Completed</i> . <u>Current position</u> : Assistant Professor, Dept of Exercise Science, North Central College (IL)
August 2015 - Dec 2019	Dubose, Lyndsey; <i>Completed</i> . <u>Current position</u> : Postdoctoral Research Fellow, Dept of Medicine, Division of Geriatric Medicine, University of Colorado Anschutz Medical Campus, Denver, CO

#### ***PhD - Dissertation Committee Member***

2022-present	Brady Hanson, <i>In Process</i>
2022-present	Jaclyn Dziewior, <i>In Process</i>
2021-2023	Nile Banks; <i>In Process</i>
2021-2023	Emily Rogers; <i>In Process</i>
2019 - 2021	Harris, Matthew; <i>Completed</i>
2019 - 2021	Oh, Minsuk; <i>Completed</i>
2015 - 2019	Benzo, Roberto; <i>Completed</i>
2016 - 2018	Metcalf, Kristen; <i>Completed</i>
2016 - 2018	Hughes, William; <i>Completed</i>
2015 - 2017	Francis, Shelby; <i>Completed</i>
2014 - 2016	Santillan, MD, Mark; <i>Completed</i>
2011 - 2012	Rarick, Kevin; <i>Completed</i>

#### ***Unknown Degree Objective – PhD Postdoctoral Research Supervision***

March 2021-pres	Armstrong, Matthew; <i>In Process</i>
April 2020 - Sept 2021	Roy, Stephen; <i>Completed</i> . <u>Current position</u> : Postdoctoral research associate, Univ of Southern Illinois School of Medicine
Oct 2015 - Mar 2020	Holwerda, Seth; <i>Completed</i> . <u>Current position</u> : Assistant Professor, Dept of Anesthesiology, Univ of Kansas Medical Center
Aug 2013 - Aug 2015	Lane-Cordova, Abbi; <i>Completed</i> . <u>Current position</u> : Assistant Professor, Dept of Exercise Science, Univ of South Carolina
Dec 2013 - July 2015	Kalil, Graziela; <i>Completed</i> . <u>Current position</u> : Assistant Professor, Dept of Internal Medicine, Univ of Maryland
July 2012 - 2014	Witmer, Jordan; <i>Completed</i> .

#### ***Unknown Degree Objective – Staff Research Associate***

April 2015 - Present	Stroud, MSN, RN, Amy; <i>In Process</i>
June 2012 - 2018	Points, PhD, Lauren; <i>Completed</i> ; <u>Current position</u> : Assistant Professor of Biology, Simpson College (IA)

#### ***Unknown Degree Objective - Supervised Research (Medical resident or MD fellow)***

2018 - 2020	Holland, Marshall (Neurosurgery); <i>Completed. <u>Current position</u></i> : Assistant Professor of Neurosurgery, Univ of Alabama Birmingham
2016 - 2017	Betz, Alexandria (OB/Gyn Maternal-Fetal Medicine); <i>Completed. <u>Current</u></i> : Maternal-Fetal Medicine Physician, Maine Health.
2010 - 2011	DiPietro, Amy (Ped Cardiology); <i>Completed. <u>Current position</u></i> : Pediatric Cardiologist, St. Christopher's Hospital for Children, Philadelphia

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## SCHOLARSHIP

### Publications

**CLAS \* System** \* = Senior Author, Major Contribution, \*\* = Secondary Contribution, \*\*\* = Equal Contribution, \*\*\*\* = Minor Contribution

### Refereed Articles

- \* Gimblet CJ, Armstrong MK, Nuckols VR, DuBose LE, Holwerda SW, Luehrs RE, Lane AD, Voss MW, Pierce GL (2023). Sex-specific associations of reservoir-excess pressure parameters with age and subclinical vascular remodeling. *J Hypertens* 2023 Feb 2. Online ahead of print.
- \* Holwerda SW, Gangwish ME, Luehrs RE, Nuckols VR, Thyfault JP, Miles JM, Pierce GL (2023). Concomitantly higher resting arterial blood pressure and transduction of sympathetic neural activity in human obesity without hypertension. *J Hypertens* 41(2):326-335.
- \* Armstrong MK, Chirinos JA, Kapuku GK, Pierce GL. Aortic pressure-only wave separation analysis in adolescents: accuracy and associations with left ventricular mass index (2022). *J Hum Hypertens*. Sept 23. On-line ahead of print.
- \*\*\*\* Vignato JA, Gumusoglu SB, Davis HA, Scroggins SM, Hamilton WS, Brandt DS, Pierce GL, Knosp BA, Santillan DA, Santillan MK (2022). Selective Serotonin Reuptake Inhibitor Use in Pregnancy and Protective Mechanisms in Preeclampsia. *Reprod Sci*. Aug 19. On-line ahead of print.
- \*\*\*\* Oh M, Jacobs DR, Pettee Gabriel K, Bao W, Pierce GL, Carr LJ, Terry JG, Ding J, Carr JJ, Whitaker, KM (2022). Ten-year change in TV viewing and physical activity are associated with concurrent 10-year changes in pericardial adipose tissue: the CARDIA Study. *J Phys Act Health*. 19(8):531-539.
- \*\* Dziewior JM, Carr L, Pierce GL, Whitaker KM (2022). College students report less physical activity and more sedentary behavior during the COVID-19 pandemic. *J Am Coll Health*. 26:1-9.
- \* Nuckols VR, Stroud AK, Armstrong MK, Brandt DS, Santillan MK, Santillan DA, Pierce GL (2022). Postpartum ambulatory and home blood pressure monitoring in women with history of preeclampsia: diagnostic agreement and detection of masked hypertension. *Pregnancy Hypertens* 29:23-29.
- \*\*\*\*Oh M, Gabriel KP, Jacobs DR, Bao W, Pierce GL, Carr LJ, Terry JG, Ding J, Carr JJ, Whitaker KM. (2022). Cardiorespiratory fitness in adults aged 18 to 34 years and long-term pericardial adipose tissue (from the CARDIA study). *Amer J Cardiol* 172:130-136.
- \*\*\* DuBose LE, Weng TB, Pierce GL, Wharff C, Reist L, Hamilton C, O'Deen A, Dubishar K, Lane-Cordova A, Voss MW (2022). Association between cardiorespiratory fitness and cerebrovascular reactivity to a breath hold stimulus in older adults: influence of aerobic exercise training. *J Appl Physiol*. Apr 28. Online ahead of print.



10. \*\*\*\*Oh M, Jacobs DR, Gabriel KP, Bao W, Pierce GL, Carr LJ, Ding J, Whitaker KM (2022). Cross-sectional and longitudinal associations of lifestyle behaviors with pericardial adipose tissue: the MESA study. *Med Sci Sports Exerc.* 54(6):984-993.
11. \*\*\*\* Kumar R, Sonkar VK, Swamy J, Ahmed A, Sharathkumar AA, Pierce GL, Dayal S (2021). DNase 1 protects from increased potential for thrombin generation and venous thrombosis during aging: cross-sectional study in mice and humans. *J Am Heart Assoc.* 11(2):e021188.
12. \* Nuckols, V. R., Stroud, A., Huesner, J., Brandt, D., DuBose, L. E., Santillan, D., Santillan, M. K., Pierce GL (2021). Twenty-four hour blood pressure variability is associated with lower cognitive function in young women with a history of preeclampsia. *Am J Hypertens* 34(12):1291-1299.
13. \*\*\* Fiedorowicz, JG., Dindo, L., Boykin, D. M., Wooldridge, N., Myers, J. L., Ajibewa, T., Stroud, A., Kuwaye, D., Liu, Z., Pierce, G. L. (2021) One-day acceptance and commitment therapy (ACT) workshop improves anxiety but not vascular function of inflammation in adults with moderate to high anxiety levels in a randomized controlled trial. *General Hospital Psychiatry.* Nov-Dec;73:64-70.
14. \*\* Reho, J. J., Guo, D.-F., Beyer, A., Wegman-Points, L., Pierce, G. L., Rahmouni, K. (2021). Vascular effects of disrupting endothelial mTORC1 (Mechanistic Target of Rapamycin Complex 1) signaling in obesity. *Am J Physiol Reg Integr Comp Physiol*, 321(2), R228-R237.
15. \*\*\* Luehrs, R. E., Moreau, K. L., Wamboldt, F., Aloia, M., Weinberger, H., Make, B., Crapo, J. D., Pierce, G. L., Hoth, K. F. (2021). Cognitive Performance is Lower Among Individuals with Overlap Syndrome than with COPD or Obstructive Sleep Apnea Alone: Role of Carotid Artery Stiffness. *Journal of Applied Physiology*, 131(1), 131-141.
16. \*\* Santillan, M. K., Becker, R., Calhoun, D. A., Cowley, A. W., Grobe, J. L., Kotchen, T. A., Lackland, D. T., Leslie, K. K., Liang, M., Mattson, D. L., Meyers, K. E., Mitsnefes, M. M., Muntner, P. M., Pierce, G. L., Pollock, J. S., Sigmund, C. D., Thomas, S. J., Urbina, E. M., Kidambi, S. (2021). Team Science - American Heart Association's HTN Strategically Focused Research Network Experience. *Hypertension*, 77(6), 1857-1866.
17. \*\* Luehrs, R. E., Zhang, D., Pierce, G. L., Jacobs, D., Kalhan, R., Whitaker, K. (2021). Cigarette Smoking and Longitudinal Associations with Blood Pressure: The CARDIA Study. *Journal of the American Heart Association*, 10(9), e019566.
18. \*\*\*\* Holwerda, S. W., Carter, J. R., Yang, H., Wang, J., Pierce, G. L., Fadel, P. J. (2021). CORP: Standardizing methodology for assessing spontaneous baroreflex control of muscle sympathetic nerve activity in humans. *American Journal of Physiology. Heart and Circulatory Physiology*, 320(2), H762-H771.
19. \*\*\* Dindo, L., Fiedorowicz, J., Boykin, D. M., Wooldridge, N., Myers, J. L., Ajibewa, T., Stroud, A., Kuwaye, D., Liu, Z., Pierce, G. L. A randomized controlled trial for symptoms of anxiety and depression: Effects of a one-day Acceptance and Commitment Training Workshop. *Annals of Clinical Psychiatry* 2021:33(4):258-269.
20. \* Holwerda, S. W., Holland, M. T., Green, A. L., Pearson ACS, Pierce, G. L. (2021). Dissociation between reduced pain and arterial blood pressure following epidural spinal cord stimulation in patients with chronic pain: A retrospective study. *Clinical Autonomic Research*, 31(2), 303-316.
21. \* Nuckols, V. R., Holwerda, S. W., Luehrs, R. E., DuBose, L. E., Stroud, A. K., Brandt, D., Betz, A. M., Fiedorowicz, J. G., Scroggins, S. M., Santillan, D. A., Grobe, J. L., Sigmund, C. D., Santillan, M. K., Pierce, G. L. (2020). Beat-to-Beat Blood Pressure Variability in the First Trimester Is Associated With the Development of Preeclampsia in a Prospective Cohort: Relation With Aortic Stiffness. *Hypertension* 76(6), 1800-1807.

22. \* Holwerda, S. W., Kardon, R. H., Hashimoto, R., Full, J. M., Nellis, J. K., DuBose, L. E., Fiedorowicz, J. G., Pierce, G. L. (2020). Aortic stiffness is associated with changes in retinal arteriole flow pulsatility mediated by local vasodilation in healthy young/middle-age adults. *Journal of Applied Physiology*, 129(1), 84-93.
23. \*\*\*\* Barnard, C. R., Peters, M., Sindler, A. L., Farrell, E. T., Baker, K., Palta, M., Stauss, H. M., Dagle, J. M., Segar, J., Pierce, G. L., Eldridge, M. W., Bates, M. L. (2020). Increased aortic stiffness and elevated blood pressure in response to exercise in adult survivors of prematurity. *Physiol Rep*, 8(12), e14462.
24. \*\*\*\* Hoth, K. F., Moreau, K. L., Weinberger, H. D., Holm, K. E., Meschede, K., Crapo, J. D., Make, B. J., Moser, D. J., Kozora, E., Bowler, R. P., Pierce, G. L., Ten Eyck, P., Wamboldt, F. S. (2020). Carotid Artery Stiffness is Associated With Cognitive Performance in Former Smokers With and Without Chronic Obstructive Pulmonary Disease. *Journal of the American Heart Association*, 9(9), e014862.
25. \*\*\*\* Cole, R., Hazeltine, E., Weng, T. B., DuBose, L. E., Schmid, P., Sigurdsson, G., Magnotta, V. A., Pierce, G. L., Voss, M. W. (2020). Cardiorespiratory fitness predicts greater hippocampal volume and rate of episodic associative learning in older adults. *Hippocampus*, 30(2), 143-155.
26. \*\*\*\* Perschbacher, K. J., Deng, G., Sandgren, J., Walsh, L., Santillan, D. A., Devor, E., Pierce, G. L., Fisher, R. A., Santillan, D., Gibson-Corley, K., Sigmund, C. D., Santillan, M. K., Grobe, J. L. (2020). Reduced mRNA Expression of Regulator of G-Protein Signaling-2 (RGS2) in the Placenta is Associated with Preeclampsia and Sufficient to Cause Features of the Disorders in Mice. *Hypertension*, 75(2), 569-579.
27. Voss MW, Weng TB, Narayana-Kumanan K, Cole RC, Wharff C, Reist L, DuBose LE, Sigurdsson G, Mills JA, Long JD, Magnotta VA, Pierce GL. (2020). Acute exercise effects predict training change in cognition and connectivity. *Med Sci Sports Exerc*, 52(1):131-140.
28. \*\*\*\* Nair, A. R., Silva, Jr, S. D., Agbor, L. N., Wu, J., Nakagawa, P., Mukohda, M., Lu, K. T., Sandgren, J. A., Pierce, G. L., Santillan, M. K., Grobe, J. L., Sigmund, C. D. (2019). Endothelial PPAR $\gamma$  (Peroxisome Proliferator-Activated Receptor- $\gamma$ ) Protects From Angiotensin II-Induced Endothelial Dysfunction in Adult Offspring Born From Pregnancies Complicated by Hypertension. *Hypertension (Dallas, Tex. : 1979)*, 74(1), 173-183.
29. \* Holwerda, S. W., Luehrs, R. E., Collins, M. T., Wooldridge, N. A., Stroud, A. K., Fadel, P. J., Abboud, F. M., Pierce, G. L. (2019). Elevated muscle sympathetic nerve activity contributes to central artery stiffness in young and middle-age/older adults. *Hypertension*, 73(5), 1025-1035.
30. \*\* Tong, B., Obosi, O., Schmitz, s., Myers, J., Pierce, G. L., Fiedorowicz, J. G. (2018). Bipolar disorder and related mood states are not associated with endothelial function of small arteries in adults without heart disease. *Gen Hospital Psychiatry*, 51, 36-50.
31. \*\*\* Luehrs, R. E., Newell, Jr, J. D., Comellas, A. P., Hoffman, E. A., Warner, K., Croghan, A., DuBose, L. E., Nopoulos, P., Magnotta, V., Arndt, S., #Pierce, G. L., #Hoth, K. F. (2018). CT-Measured Lung Air-Trapping is Associated with Higher Carotid Artery Stiffness in Individuals with Chronic Obstructive Pulmonary Disease. *Journal of applied physiology (Bethesda, Md. : 1985)*. #Co-senior authors.
32. \*\*\*\* Sandgren, J. A., Deng, G., Linggonegoro, D. W., Scroggins, S. M., Perschbacher, K. J., Nair, A. R., Nishimura, T. E., Zhang, S. Y., Agbor, L. N., Wu, J., Keen, H. L., Naber, M. C., Pearson, N. A., Zimmerman, K. A., Weiss, R. M., Bowdler, N. C., Usachev, Y. M., Santillan, D. A., Potthoff, M. J., Pierce, G. L., Gibson-Corley, K. N., Sigmund, C. D., Santillan, M. K., Grobe, J. L. (2018). Arginine vasopressin infusion is sufficient to model clinical features of preeclampsia in mice. *JCI Insight*, 3(19), 99403.

33. \* DuBose, L., Boles-Ponto, L., Moser, D. J., Harlynn, E., Reiersen, L., Pierce, G. L. (2018). Elevated aortic stiffness is associated with reduced cerebrovascular reactivity but not global cerebrovascular blood flow among older humans. *Hypertension*, 72(2), 476-482.
34. \* Holwerda, S. W., Luehrs, R., Gremaud, A., Wooldridge, N., Stroud, A., Fiedorowicz, J. G., Abboud, F. M., Pierce, G. L. (2018). Relative burst amplitude of muscle sympathetic nerve activity is an indicator of altered sympathetic outflow in chronic anxiety. *Journal of Neurophysiology*, 120(1), 11-22.
35. \* Holwerda, S. W., Holland, M., Reddy, C., Pierce, G. L. (2018). Femoral vascular conductance and peroneal muscle sympathetic nerve activity responses to acute epidural spinal cord stimulation in humans. *Experimental Physiology*, 103(6), 905-915.
36. \*\*\*\* Sandgren, J. A., Linggonegoro, D., Zhang, S. Y., Sapouckey, S., Claflin, K. E., Pearson, N. A., Leidinger, M. R., Pierce, G. L., Santillan, M. K., Gibson-Corely, K. N., Sigmund, C. D., Grobe, J. L. (2018). Angiotensin AT1A Receptors Expressed in Vasopressin-Producing Cells of the Supraoptic Nucleus Contribute to the Osmotic Control of Vasopressin. *Am J Physiol Regul Integr Comp Physiol.*, 314(6), R770-R780.
37. \*\*\*\* Scroggins, S. M., Santillan, D. A., Lund, J. M., Sandgren, J. A., Krotz, L. K., Hamilton, W. S., Devor, E., Davis, H. A., Pierce, G. L., Gibson-Corley, K. N., Sigmund, C. D., Grobe, J. L., Santillan, M. K. (2018). Elevated Vasopressin in Pregnant Mice Induces T Helper Subset Alterations Consistent with Human Preeclampsia. *Clinical Science*, 132(3), 419-436.
38. \* Lane-Cordova, A. D., Kalil, G. Z., Wagner, C. J., Sindler, A. L., Fiedorowicz, J. G., Ajibewa, T., Haynes, W. G., Pierce, G. L. (2018). Hemoglobin A1c and c-reactive protein are independently associated with blunted nocturnal blood pressure dipping in obesity-related prediabetes. *Hypertension Research*, 41(1), 33-38.
39. \*\* Rossman, M. J., Rachel, k. E., M, M. N., Jessica, S.-P. R., Pierce, G. L., Seals, D. R., Donato, A. J. (2017). Endothelial cell senescence with aging in healthy humans: prevention by habitual exercise and relation to vascular endothelial function. *Am J Physiol Heart Circ Physiol.*, 313(5), H890-H895.
40. \*\*\* Casey, D. P., Ueda, K., Wegman-Points, L. J., Pierce, G. L. (2017). Muscle contraction induced arterial shear stress increases endothelial nitric oxide synthase phosphorylation in humans. *Amer J Physiol Heart Circ Physiol*, 313(4), H854-H859.
41. \* Pierce, G. L., Kalil, G. Z., Holwerda, S. W., Ajibewa, T., Persons, J., Moser, D. J., Fiedorowicz, J. G. (2017). Anxiety independently contributes to elevated inflammation in obesity. *Obesity*, 25(2), 286-289.
42. \* DuBose, L. E., Voss, M. W., Weng, T. B., Kent, J. D., Dubishar, K. M., Lane-Cordova, A., Sigurdsson, G., Schmid, P., Barlow, P., Pierce, G. L. (2017). Carotid  $\beta$ -stiffness index is associated with slower processing speed but not working memory or white matter integrity in healthy middle-aged/older adults. *Journal of Applied Physiology*, 122(4), 868-876.
43. \*\* Parker-Santos, J. R., Strahler, T. R., Vorwald, V. M., Pierce, G. L., Seals, D. R. (2017). Habitual aerobic exercise does not protect against macro- or microvascular endothelial dysfunction in healthy estrogen-deficient postmenopausal women. *Journal of Applied Physiology*, 122(1), 11-19.
44. \* Pierce, G. L., Pajaniappan, M., DiPietro, A., Darracott, K., Gaston, K. (2016). Abnormal central pulsatile hemodynamics in adolescents with obesity: higher aortic forward pressure wave amplitude is independently associated with greater left ventricular mass. *Hypertension*, 68(5), 1200-1207.
45. \* Lane-Cordova, A. L., Witmer, J., Dubishar, K. M., DuBose, L. E., Chenard, C., Siefers, K. J., Myers, J. E., Points, L. J., Pierce, G. L. (2016). High trans but not saturated fat beverage causes an acute reduction in postprandial vascular endothelial function and insulin sensitivity but not large elastic artery stiffness in humans. *Vascular Medicine*, 21(5), 429-436.

46. \*\* Weng, T. B., Pierce, G. L., Darling, W. G., Magnotta, V., Falk, D., Voss, M. W. (2016). The acute effects of aerobic exercise on the functional connectivity of human brain networks. *Brain Plasticity*, 2, 171-190.
47. \* Pierce, G. L., Harris, S. A., Seals, D. R., Casey, D. P., Barlow, P., Stauss, H. M. (2016). Estimated aortic stiffness is independently associated with cardiac baroreflex sensitivity in humans: role of aging and habitual endurance exercise. *Journal of Human Hypertension*, 30, 513-520.
48. \*\*\* Munter, P., Becker, R. C., Calhoun, D., Chen, D., Cowley, Jr, A. W., Flynn, J. T., Grobe, J. L., Kidambi, S., Kotchen, T. A., Lackland, D. T., Leslie, K. K., Li, Y., Liang, M., Lloyd, A., Mattson, D. L., Mendizabal, B., Mitsnefes, M., Nair, A., Pierce, G. L., Pollock, J. S., Safford, M. M., Santillan, M. K., Sigmund, C. D., Thomas, S. J., Urbina, E. M. (2016). Introduction to the American Heart Association's hypertension strategically focused research network. *Hypertension*, 67, 674-680.
49. \* Kalil, G. Z., Reeber, A., Hoang-Tienor, A., Bridget Zimmerman, M., Haynes, W. G., Pierce, G. L. (2016). Higher augmentation index is associated with tension-type headache and migraine in middle-aged/older humans with obesity. *Obesity (Silver Spring, Md.)*, 24, 865-870.
50. \*\* Weng, T. B., Pierce, G. L., Darling, W. G., Voss, M. W. (2015). Differential effects of acute exercise on distinct aspects of executive function. *Medicine and Science in Sports and Exercise*, 47, 1460-1469.
51. \*\*\*\* Peña-Silva, R. A., Chalouhi, N., Wegman-Points, L., Ali, M., Mitchell, I., Pierce, G. L., Chu, Y., Ballas, Z. K., Heistad, D., Hasan, D. (2015). Novel role for endogenous hepatocyte growth factor in the pathogenesis of intracranial aneurysms. *Hypertension*, 65, 587-93.
52. \*\* Sandgren, J. A., Scroggins, S. M., Santillan, D. A., Devor, E. J., Gibson-Corley, K. N., Pierce, G. L., Sigmund, C. D., Santillan, M. K., Grobe, J. L. (2015). Vasopressin: the missing link for preeclampsia? *American journal of physiology. Regulatory, integrative and comparative physiology*, 309(9), R1062-4.
53. \*\* Chu, Y., Wilson, K. M., Gu, H., Wegman-Points, L., Dooley, S., Pierce, G. L., Cheng, G., Pena-Silva, R., Heistad, D. D., Hasan, D. M. (2015). Myeloperoxidase is increased in human cerebral aneurysms and increases formation and rupture of cerebral aneurysms in mice. *Stroke*, 46(6), 1651-1656.
54. \*\* Montero, D., Pierce, G. L., Stehouwer, C. D., Padilla, J., Thijssen, D. H. (2015). The impact of age on vascular smooth muscle function in humans. *J Hypertens*, 33(3), 445-53.
55. \*\* Bharadwaj, J., Harris, R. A., Parikh, S., Zhu, H., Huang, Y., Kotak, I., Seigler, N., Pierce, G. L., Egan, B. M., Dong, Y. (2014). Epithelial sodium channel inhibition by amiloride on blood pressure and cardiovascular disease risk in young prehypertensives. *Journal of Clinical Hypertension*, 16, 47-53.
56. \*\*\*\* Linder, J. R., Stauss, H. M., Gindes, H., Pierce, G. L., Von Bergen, N. H., Haynes, W. G., Fiedorowicz, J. G. (2014). Finger volume pulse waveforms facilitate reliable assessment of heart rate variability, but not blood pressure variability or baroreflex function. *BMC Cardiovasc Disorders*, 14(180), 1-8.
57. \*\* Walker, A. E., Kaplan, R. E., Pierce, G. L., Nowman, M., Seals, D. R. (2014). Prevention of age-related endothelial dysfunction by habitual aerobic exercise in healthy humans: possible role of nuclear factor  $\kappa$ B. *Clin Sci*, 127, 645-54.
58. \* Pierce, G. L., Casey, D. P., Fiedorowicz, J. G., Seals, D. R., Curry, T. B., Barnes, J. N., Wilson, D., Stauss, H. M. (2013). Aortic pulse wave velocity and reflecting distance estimation from peripheral waveforms in humans: detection of age- and exercise training-related differences. *Am J Physiol Heart Circ Physiol*, 305, H135-142.

59. \*\* Chalouhi, N., Points, L., Pierce, G. L., Ballas, Z., Jabbour, P., Hasan, D. (2013). Localized increase of chemokines in the lumen of human cerebral aneurysms. *Stroke*, 44, 2594-7.
60. \*\* Devan, A. E., Eskurza, I., Pierce, G. L., Walker, A. E., Kaplon, K. L., Seals, D. R. (2013). Regular aerobic exercise protects against impaired fasting glucose-associated vascular endothelial dysfunction with aging. *Clin Sci*, 124, 325-331.
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62. \* Pierce, G. L., Zhu, H., Darracott, K., Edet, I., Bhagatwala, J., Huang, Y., Dong, Y. (2013). Arterial stiffness and pulse pressure amplification in overweight/obese African-American adolescents: relation with higher systolic and pulse pressure. *Am J Hypertens*, 26(1), 20-26.
63. \* Pierce, G. L., Jablonski, K. L., Walker, A. E., Seibert, S. M., Black, S. M., Shruti, S., Seals, D. R. (2012). Tetrahydrobiopterin supplementation enhances carotid artery compliance in healthy older men: a pilot study. *Am J Hypertens*, 25, 1050-1054.
64. \*\*\*\* LaRocca, T. J., Henson, G. D., Thorburn, A., Sindler, A. L., Pierce, G. L., Seals, D. R. (2012). Translational evidence that impaired autophagy contributes to arterial ageing. *J Physiol*, 590, 3305-3316.
65. \*\* Christou, D. D., Pierce, G. L., Walker, A. E., Hwang, M. H., Yoo, J. K., Luttrell, M., Meade, T., English, M., Seals, D. R. (2012). Vascular smooth muscle responsiveness to nitric oxide is reduced in healthy adults with increased adiposity. *Am J Physiol Heart Circ Physiol*, 303, H743-50.
66. \*\* Jablonski, K. L., Chonchol, M., Pierce, G. L., Walker, A. E., Seals, D. R. (2011). 25-hydroxyvitamin D deficiency is associated with inflammation-linked vascular endothelial dysfunction in middle-aged and older adults. *Hypertension*, 575, 63-69.
67. \* Pierce, G. L., Donato, A. J., LaRocca, T. J., Eskurza, I., Silver, A. E., Seals, D. R. (2011). Habitually exercising older men do not demonstrate age-associated vascular endothelial oxidative stress. *Aging Cell*, 10, 1032-1037.
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### **Invited Reviews (peer-reviewed)**

- 1 \* Pierce GL, Coutinho T, DuBose LE, Donato AJ. (2022). Is it good to have a stiff aorta with aging? Causes and consequences. *Physiology* 37(3);154-173.
2. \* Pierce, G. L. (2017). Aortic stiffness in aging and hypertension: prevention and treatment with habitual aerobic exercise (19(11) ed., pp. 90). *Current Hypertension Reports*.
3. \* Pierce, G. L. (2017). Recent advances: mechanisms and subclinical consequences of aortic stiffness (5th ed., vol. 70, pp. 848-853). *Hypertension*.

4. \*\* Seals, D. R., Walker, A. E., Pierce, G. L., Lesniewski, L. A. (2009). Habitual exercise and vascular ageing. *The Journal of physiology*, 587(Pt 23), 5541-9.

### **Invited Editorials**

1. \* Pierce, G. L., Roy, S. J., Gimblet, C. J. (2021). The gut-arterial stiffness axis: Is TMAO a novel target to prevent age-related aortic stiffening? *Hypertension*, 78(2), 512-515.
2. \* Pierce, G. L. (2018). Initiating life-long aerobic exercise 4-5 days/week before or near age 50 years: is this the "holy-grail" of preventing age-related central artery stiffness? (14th ed., vol. 596, pp. 2635-2636). *Journal of Physiology*.
3. \*\*\* Franklin, S. S., Pierce, G. L. (2014). Cardiorespiratory fitness and the attenuation of age-related rise in blood pressure: an important role for effective primordial prevention. *J Amer Coll Cardiol*, 64(12), 1254-56.
4. \* Pierce, G. L. (2013). Targeting vascular endothelial insulin resistance in type 2 diabetes mellitus: is protein kinase C $\beta$  the 'bullseye' for reducing vascular risk in diabetes? *Circulation*, 127, 16-18.
5. \* Pierce, G. L. (2013). Oral BH<sub>4</sub>: novel remedy for age-related skin microvascular dysfunction during hyperthermia or fool's elixir? *J Appl Physiol*, 115, 951-3.

### **Non-refereed Commentary Articles**

1. \* Holwerda, S. W., Fadel, P. J., Abboud, F. M., Pierce, G. L. (2019). *Response by Holwerda et al to Letter Regarding Article "Elevated Muscle Sympathetic Nerve Activity Contributes to Central Artery Stiffness in Young and Middle-Age/Older Adults"*. (2nd ed., vol. 74, pp. e33). *Hypertension* (Dallas, Tex.: 1979).
2. \* Pierce, G. L., Donato, A. J. (2009). Will standardization of brachial artery shear stimulus make fmd ready for clinical "prime-time"? *Journal of applied physiology* (Bethesda, Md. : 1985), 107(4), 1365; author reply 1366.
3. \*\* Seals, D. R., Donato, A. J., Pierce, G. L., Walker, A. E. (2007). Commentary on Viewpoint "Human experimentation: no accurate, quantitative data?". *Journal of applied physiology* (Bethesda, Md.: 1985), 102(3), 1294.

### **Book Chapter**

1. \* Pierce GL, Heffernan KS, Davy KP (2022). "Effect of Exercise Training and Weight Loss on Arterial Stiffness and Pulsatile Hemodynamics." Academic Press (1<sup>st</sup> ed) In: *Arterial Stiffness and Pulsatile Hemodynamics in Health and Disease*. Julio A. Chirinos, PhD (Editor).

### **Abstracts**

1. \* Nuckols VR, Guerrero M, Stroud AK, Santillan MK, Pierce GL. Association between postpartum sleep characteristics and twenty-four-hour blood pressure patterns in women with and without a history of preeclampsia.. *Hypertension* 2022 563(Supp 1):P098. (Presented as a poster at 2022 American Heart Association Hypertension Sessions.)
2. \* Nuckols VR, Stroud AK, Brandt DS, Santillan DA, Santillan MK, Pierce GL (2022). Effect of parity on baroreflex sensitivity and blood pressure variability in sequential pregnancies and Postpartum. *FASEB J*. (Presented at 2022 Experimental Biology Meeting as poster presentation.)
3. \* Gimblet C, Armstrong MK, Nuckols VR, Stroud AK, Guerrero M, Pierce GL (2022). Aortic Stiffness is Negatively Associated with Microvascular Glycocalyx Thickness and Microvascular Perfusion among Older Adults: Role of Carotid Pressure Pulsatility. *FASEB J*. (Presented at 2022 Experimental Biology Meeting as oral presentation.)
4. Armstrong MK, Chirinos JA, Kapuku GK, Pierce GL (2022). Pressure only wave separation



- pulsatile hemodynamics in adolescents: accuracy and associations with left ventricular mass index. *FASEB J.* (Presented at 2022 Experimental Biology Meeting as poster presentation.)
5. Holwerda SW, Gangwish ME, Luehrs RE, Nuckols VR, Pierce GL (2022). Obesity-related higher blood pressure is associated with augmented transduction of spontaneous muscle sympathetic nerve activity. *FASEB J.* (Presented at 2022 Experimental Biology Meeting as poster presentation.)
  6. \*\*\*\* Jain S, Pipoly MA, Sodoma M, Magnotta V, Pierce GL, Voss MW. *Is brain modularity a biomarker of exercise intervention-related plasticity?* 2021 Neuroscience.
  7. \* Nuckols VR, Stroud AK, Gruber K, Ngonyama R, Brandt D, Santillan DA, Santillan MK, Pierce GL (2021). *Increased Sedentary Time Is Associated with Greater Postpartum Blood Pressure In Women With A History Of Preeclampsia.* *Hypertension*, 78(Suppl\_1), Abstract ???. (Presented as a poster at 2021 American Heart Association Hypertension Sessions.)
  8. \*\* Myers MC, Santillan MK, Brandt DS, Stroud AK, Vignato JA, Scroggins SM, Virginia Nuckols, Pierce GL, Santillan DA (2021). *Role For Adverse Childhood Experiences and Depression In Preeclampsia.* *Hypertension*, 78(Suppl\_1), Abstract 30. (Poster presentation at 2021 American Heart Association Hypertension Sessions.)
  9. \*\*\* Iwakuma, Y., Holland, M. T., Pierce, G. L., Holwerda, S. W (2021). *Nociceptor-mediated impairment in spontaneous sympathetic baroreflex sensitivity and the potential for improvement via epidural spinal cord stimulation in chronic low back pain.* Clin Auto Sci. 2021 American Autonomic Society Meeting. Accepted/In Press.
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  11. \*\*\*\* Scroggins, S., Gray, G., Berkey, C., Gandley, R. E., Sutton, E. F., Brandt, D., Santillan, D., Pierce, G. L., Hubel, C. A., Catov, J., Santillan, M. K. (2020). *Preeclampsia-induced T helper-associated cytokine imbalances persist post-partum* (pp. Suppl\_1). *Hypertension*
  12. \*\*\* Arthur, G., Pierce, G. L., DuBose, L. E., Lane-Cordova, A. D., Jensen, N., Wehrle, A., Stroud, A., Yiannikouris, F. B. *Sex differences in the association between soluble prorenin receptor and physiological and cardiometabolic risk factors in healthy human varying in age and obesity* (pp. Suppl\_1). *Hypertension*. Accepted/In Press August 1, 2020.
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  16. \* Luehrs, R. E., Linkenmeyer, C., Amaza, H., Wong, C., Ward, R. C., Phillips, G., Comellas, A. P., Pierce, G. L., Hoth, K. F. (2019). *Greater Beat-To-Beat Blood Pressure Variability is Associated With Lower Cognitive Performance Independent of Mean Blood Pressure Among Cigarette Smokers* (Suppl 1 ed., vol. 74). *Hypertension*.
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  14. \*\* Kumar, R., Sonkar, V. K., Pierce, G. L., Dayal, S. (2019). *Neutrophil Extracellular Trap Mediated Increased Thrombin Generation in Aging* (Suppl\_1 ed., vol. 39, pp. 119). *Arteriosclerosis, Thrombosis, and Vascular Biology*.

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22. \*\*\*\* Perschbacher, K. J., Pierce, G. L., Grobe, J. L. (2019). *Reduced Placental Regulator of G-Protein Signaling-2 (RGS2) and Preeclampsia* (1\_Supplement ed., vol. 33). FASEB J.
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- Pierce, G. L., Santillan, M. K., Fisher, R. A., Gibson-Corley, K., Grobe, J. L. (2018). *Reduced Placental Regulator of G-Protein Signaling-2 (RGS2) and Preeclampsia*. FASEB J.
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40. \*\*\*\* (2017). K. J. Perschbacher, G. Deng, J. A. Sandgren, L. Carillo-Saenz, D. A. Santillan, E. J. Devor, G. L. Pierce, M. K. Santillan, R. A. Fisher, K. N. Gibson-Corley, & J. L. Grobe (Eds.), *Reduced Placental Regulator of G-Protein Signaling-2 (RGS2) and Preeclampsia* (vol. 70, pp. A144). Hypertension.
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45. \* Holwerda, S. W., Credeur, D. P., DuBose, L. E., Schwartz, C. E., Fadel, P. J., Pierce, G. L. (2017). *Elevated sympathetic nerve activity mediates increases in large central elastic artery stiffness independent of changes in blood pressure in humans* (vol. 31, pp. 847.10). FASEB J.  
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### Podcasts

1. Pierce, G. L., Alexander, L., Kregel, K. C. (2013). *Oral sapropterin, aging, and skin blood flow.* Journal of Applied Physiology. <http://japppodbean.com/2013/07/08/oral-sapropterin-aging-and-skin-blood-flow/>.

### Inventions and Patents

1. Pierce, Gary L, Holland, Marshall, Holwerda, Seth W. UIRF 2018-039, "Treatment Using Spinal Cord Stimulation".

### Grants and Contracts

#### Funded

- |                     |  |
|---------------------|--|
| Jul 2022- Jun 2025  | <i>Cognitive function and brain structure early postpartum in women with preeclampsia.</i> AHA969732<br>Funded by American Heart Association. Award amount: (\$300,000.00)<br>Percent effort: 20. Investigator/s Gary L Pierce (Principal Investigator). |
| Aug 2017 - Jul 2022 | <i>Exercise to improve hippocampal connectivity and learning in older adults</i> R01 AG055500<br>Funded by NIH/NIA. Award amount: (\$3,511,184.00) Percent effort: 10.<br>Investigator/s Michelle Voss (Principal Investigator), Gary L Pierce (Co-      |



Investigator).

- Jul 2019 - Jun 2022 *Inorganic Nitrate, Large Artery Stiffness and Cerebral Blood Flow in Aged Humans 19TPA34910016*  
Funded by American Heart Association. Award amount: (\$300,000.00)  
Percent effort: 21. Investigator/s Gary L Pierce (Principal Investigator).
- May 2017 - Apr 2022 *Determinants of altered brain structure and function in smokers with COPD-related lung R01 HL134822*  
Funded by NHLBI. Award amount: (\$3,250,544.00) Percent effort: 10.  
Investigator/s Gary L Pierce (Co-Investigator), Karin Hoth (Principal Investigator).
- Jan 2019 - Dec 2020 *Static Hyperinflation and Sympathetic Nerve Activity-Associated Large Artery Stiffness in COPD (Predoctoral Fellowship)*.  
Funded by American Heart Association. Award amount: \$53,688.00.  
Investigator/s Rachel Luehrs (Co-Principal), Gary L Pierce (Co-Principal).
- Sep 2015 -Sep 2020 *Peroxide-mediated prothrombotic effects of aging 1R01 AG049784-01A*  
Funded by NIH/NHLBI. Award amount: (\$2,226,000.00) Percent effort: 5.  
Investigator/s Sanjana Dayal (Principal Investigator), Gary L Pierce (Co-Investigator).
- Jul 2018 - Jun 2020 *Mechanisms of Early and Late Postpartum Hypertension in Women with Preeclampsia*  
Funded by American Heart Association. Award amount: (\$465,681.00)  
Percent effort: 5. Investigator/s Gary L Pierce (Co-Investigator), Mark Santillan (Principal Investigator).
- Jan 2017 - Dec 2019 *Anxiety-mediated impairments in large elastic artery function and the autonomic nervous system 16POST30980038*  
Funded by American Heart Association. Award amount: (\$185,142.00)  
Percent effort: 0. Investigator/s Seth W Holwerda (Co-Principal), Gary L Pierce (Co-Principal).
- Sep 2018 -Aug 2019 *Static Lung Hyperinflation and Sympathetic Nerve Activity-Associated Large Artery Stiffness in COPD 5P30 ES005605-28 (Thorne)*  
Funded by Environmental Health Sciences Research Center, College of Public Health. Award amount: (\$39,613.00) Percent effort: 100.  
Investigator/s Gary Pierce (Principal Investigator). Pilot Grant
- Sep 2018 -Aug 2019 *Static lung hyperinflation and sympathetic nerve activity-associated large artery stiffness in COPD patients*  
Funded by Environmental Health Sciences Research Center, UI College of Public Health. Award amount: (\$39,613.00) Percent effort: 10.  
Investigator/s Gary L Pierce (Principal Investigator).
- Jul 2014 - Jun 2019 *Does anxiety cause vascular dysfunction through inflammation and SNS activation? 2 P01 HL014388-41*  
Funded by NIH/NHLBI. Award amount: (\$2,427,796.00) Percent effort: 15.  
Investigator/s Francois Abboud (Principal Investigator), Gary L Pierce (Co-Investigator). In Program project grant: Integrative neurobiology of cardiovascular regulation.

- Apr 2015 - Mar 2019 *Early vascular dysfunction and elevated copeptin in preeclampsia*  
15SFRN23760002  
Funded by American Heart Association NCRP Strategically Focused Hypertension Research Network (SFRN). Award amount: (\$887,488.00) Percent effort: 25. Investigator/s Curt Sigmund (Director), Gary L Pierce (Principal Investigator). Clinical Science Project in Program grant: "Novel Neuroendocrine Mechanisms in Preeclampsia: Vasopressin and Copeptin"
- Jan 2017 - Dec 2018 *Anxiety-mediated impairments in large elastic artery function and the*  
17POST33440101  
Funded by American Heart Association. Award amount: (\$98,950.00) Percent effort: 100. Investigator/s Seth W Holwerda (Co-Principal), Gary L Pierce (Principal Investigator).
- Jul 2013 - Jun 2017 *Vascular dysfunction in human obesity hypertension: integrative role of sympathetic and renin-angiotensin systems* 13SDG143400012  
Funded by American Heart Association National Center-Scientist Development Grant. Award amount: (\$308,000.00) Percent effort: 25. Investigator/s Gary L Pierce (Principal Investigator).
- Apr 2015 - Mar 2017 *Large elastic artery stiffening, lung structure and function, and aortic calcium* Research Career Development Award  
Funded by Environmental Research Health Sciences Center, College of Public Health, University of Iowa. Award amount: (\$30,000.00) Number of Months: 24. Investigator/s Gary L Pierce (Principal Investigator).
- Apr 2015 - Mar 2017 *Bridging acute and long-term exercise effects on brain function in older adults* 1R21 AG048170-01A1  
Funded by NIH/NIA. Award amount: (\$415,000.00) Percent effort: 5. Investigator/s Michelle W Voss (Principal Investigator), Gary L Pierce (Co-Investigator).
- Jan 2015 - Jun 2016 *Molecular mechanisms of endothelial dysfunction and aortic stiffness in obesity* Pilot grant  
Funded by University of Iowa Center for Hypertension Research. Award amount: (\$90,000.00). Investigator/s Gary L Pierce (Co-Principal), Kamal Rahmouni (Co-Principal).
- Apr 2016 - Apr 2016 *Travel Funds Award for graduate student Lyndsey DuBose to travel to and present research at Experimental Biology Meeting in San Diego*  
Funded by Graduate Student Senate (GSS). Award amount: (\$500.00). Investigator/s Lyndsey E DuBose (Investigator), Gary L Pierce (Principal Investigator).
- Nov 2015 -Nov 2015 *Travel Funds Award for graduate student Lyndsey DuBose to travel to and present research at American Heart Association Scientific Sessions Meeting in Orlando, FL,*  
Funded by Graduate and Professional Student Government (GPSG). Award amount: (\$500.00). Investigator/s Lyndsey E DuBose (Investigator), Gary L Pierce (Principal Investigator).
- Oct 2015- Dec 2017 *Role of sympathetic nerve activity and baroreflex sensitivity on vascular function in humans with moderate/high state anxiety* 5T32 HL007121-3

Funded by Interdisciplinary Cardiovascular Research Fellowship, Department of Internal Medicine. Award amount: (\$44,240.00) Percent effort: 100. Investigator/s Seth Holwerda (Investigator), Gary L Pierce (Principal Investigator).

- Aug 2013 -Aug 2015 *Mechanisms of microvascular dysfunction in a clinical/translational model of human sepsis 5T32 HL007121-37*  
Funded by Interdisciplinary Pulmonary Research Fellowship. Award amount: (\$40,664.00) Percent effort: 100. Investigator/s Gary L Pierce (Principal Investigator), Abbi Lane-Cordova (Co-Investigator). \$39,264 (salary) + \$1400 (travel), Role: Postdoctoral Mentor
- Aug 2013 - Jul 2015 *Targeting inflammation to treat cardiovascular aging in humans 1R21 AG043722*  
Funded by National Institutes of Health/National Institute on Aging. Award amount: (\$415,000.00) Percent effort: 20. Investigator/s Gary L Pierce (Principal Investigator).
- Jul 2014 - Jun 2015 *Microvascular and endothelial responses to inhaled endotoxin: potential therapeutic effect of parenteral ascorbic acid Pilot grant*  
Funded by Environmental Health Sciences Research Center. Award amount: (\$39,760.00) Number of Months: 12. Investigator/s Gary L Pierce (Principal Investigator).
- Aug 2012 - Aug 2014 *Inflammation inhibition for microvascular and autonomic dysfunction in obese adults with prediabetes Pilot grant*  
Funded by Fraternal Order of Eagles Diabetes Research Center (FOEDRC) University of Iowa, Pilot & Feasibility Research Grant. Award amount: (\$100,000.00) Number of Months: 24. Investigator/s Gary L Pierce (Principal Investigator).
- May 2014 -Aug 2014 *Molecular mechanisms of visceral adipose-stimulated endothelial cell dysfunction and insulin resistance: protective effects of sodium salicylate and laminar shear stress" Undergraduate STRIDE Summer Research Fellowship*  
Funded by American Physiological Society. Award amount: (\$4,300.00) Percent effort: 100. Investigator/s Gary L Pierce (Principal Investigator), Ramsan Younatham (Collaborator). Undergraduate American Physiological Society STRIDE Summer Research Fellowship for Ramsan Younatham
- Aug 2012 - Jul 2014 *Mechanisms of high-fat meal-induced vascular endothelial dysfunction in middle- aged/older humans: modulating role of habitual aerobic exercise." 5T32 HL007121-3*  
Funded by Interdisciplinary Cardiovascular Research Fellowship, Department of Internal Medicine. Award amount: (\$40,664.00) Percent effort: 100. Investigator/s Jordan Witmer (Co-Investigator), Gary I Pierce (Principal Investigator). \$39,264 (salary) + \$1400 (travel)  
Role: Postdoctoral mentor for Jordan Witmer, PhD
- Jun 2014 - Jun 2014 *International Travel Award Travel to present an Invited Seminar at Pulse of Asia International Meeting and attend the International Society of Hypertension Meeting, Athens, Greece*

Funded by Univ of Iowa Stanley Foundation Support Organization. Award amount: (\$700.00).

- Jun 2013 - Jun 2014 *Sparking the plastic brain: Effects of aerobic exercise on brain function Pilot grant*  
Funded by Biological Sciences Funding Program, University of Iowa Office of the Vice President for Research. Award amount: (\$25,000.00) Number of Months: 12. Investigator/s Michelle W. Voss (Principal Investigator), Gary L Pierce (Co-Investigator).
- May 2013 - Aug 2013 *Cellular mechanisms of aortic stiffness and vascular endothelial dysfunction in obese adolescents*  
Funded by University of Iowa Center for Research for Undergraduates (ICRU). Award amount: (\$2,000.00) Number of Months: 9. Investigator/s Gary L Pierce (Principal Investigator), Ericka Tank (Co-Investigator). Role: Mentor  
(ICRU) Award for Ms. Ericka Tank (Undergraduate Student in Health & Human Physiology)
- May 2013 -Aug 2013 *Cellular mechanisms of aortic stiffness and vascular endothelial dysfunction in obese adolescents" Summer Undergraduate Research Fellowship*  
Funded by American Physiological Society. Award amount: (\$4,300.00) Percent effort: 100. Investigator/s Gary L Pierce (Principal Investigator), Ericka Tank (Co-Investigator). Undergraduate Summer Research Fellowship for Ms. Ericka Tank (Undergraduate Student in HHP),
- Jul 2011 - Jun 2013 *Anti-inflammatory therapy to treat vascular aging in humans 5 KL2 RR 24980-5*  
Funded by University of Iowa Institute for Clinical and Translational Science (ICTS). Award amount: (\$130,968.00) Percent effort: 75. Investigator/s Gary L Pierce (Principal Investigator). KL2 Research Career Development Award
- Jan 2013 - May 2013 *Effects of salsalate on hyperglycemia induced endothelial cell insulin resistance." Graduate student grant for Kyle Siefers (Master's degree candidate in Health & Human Physiology) Graduate Research Scholarship*  
Funded by University Iowa Executive Council of Graduate and Professional Students (ECGPS). Award amount: (\$1,000.00). Investigator/s Gary L Pierce (Principal Investigator), Kyle Siefers (Co-Investigator). Role: Mentor for graduate student Kyle Siefers
- Oct 2012 - Oct 2012 *Travel to present research abstract at ARTERY 12 International Meeting, Vienna, Austria*  
Funded by Univ of Iowa Stanley Foundation Support organization. Award amount: (\$600.00).

### **Currently Under Review**

- Apr 2023-Mar 2027 *Depression, Adverse Childhood Experiences and Vascular Function in Human Preeclampsia*  
American Heart Association Strategically Focused Research Network  
Percent effort: 20. (Award amount: \$1,187,807.00). Investigator: Gary L. Pierce (Principal investigator).

**Invited Lectures and Conference Presentations****Department - Grand Rounds**

- 2015 Division of Cardiology, Department of Medicine, *Habitual aerobic exercise in the prevention of arterial aging: mechanistic insights from translational studies in humans*, University of California at Los Angeles (UCLA), Los Angeles, California
- 2008 Division of Cardiology Grand Rounds, *Vascular aging in humans: modulating factors and cellular mechanisms*, Department of Medicine, Emory University School of Medicine, Atlanta, Georgia Presenters/Authors: Pierce, Gary L

**Department - Invited Lecture**

- 2015 Department of Pharmacology Seminar, *Habitual aerobic exercise in the prevention of arterial aging: translational mechanistic insights from human and animal models*, Department of Pharmacology, Carver College of Medicine, University of Iowa, Iowa City, Iowa Presenters/Authors: Pierce, Gary L
- 2010 Basic Science Seminar, *Arterial aging in humans: translation from basic mechanisms to clinical interventions*, Department of Medicine, Medical College of Georgia, Augusta, Georgia Presenters/Authors: Pierce, Gary L
- 2010 Departmental Seminar, *Mechanisms of endothelial dysfunction in human aging and obesity: role of NFκB*, Department of Kinesiology, University of Georgia, Athens, Georgia Presenters/Authors: Pierce, Gary L
- 2008 Departmental seminar, *Vascular aging in humans: modulating effects of biological factors and lifestyle behaviors*, Department of Rehabilitation and Movement Science, University of Vermont,, Burlington, Vermont Presenters/Authors: Pierce, Gary L
- 2006 Vascular Biology Symposium, *Endothelium-dependent dilation in heart transplant recipients: effects of exercise training*, Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, Florida Presenters/Authors: Pierce, Gary L
- 2003 Center for Exercise Science Seminar, *Abnormalities in peripheral vasodilation: the new therapeutic target for patients with heart disease*, Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, Florida Presenters/Authors: Pierce, Gary L

**International - Conference Presentation**

- 2019 ARTERY 19 International Meeting, *Update on the 2019 North American Artery Meeting*, Artery Society (Europe), Budapest, Hungary Presenters/Authors: Pierce, Gary (October 2019)
- 2018 ARTERY 18 International Meeting, *Update on the 2018 North American Artery Meeting*, Artery Society (Europe), Guimaeres, Portugal Presenters/Authors: Pierce, Gary

**International - Invited Lecture**

- 2022 ACSM World Congress on Basic Science of Exercise and Vascular Health; *Endurance Exercise and Arterial Stiffness with Aging and Hypertension: Mechanisms and Clinical Relevance*, 2022 American College of Sports Medicine Annual Meeting, June 2022, San Diego, CA. Presenters/Authors: Pierce, Gary
- 2021 ACSM World Congress on Basic Science of Exercise in Regenerative Medicine (Virtual Symposium), *Human Arterial Aging: Mechanisms of Prevention and Treatment with Habitual Aerobic Exercise*, American College of Sports Medicine Annual Meeting, May 2021. Presenters/Authors: Pierce, Gary
- 2020 Kidney Week 2020- ASN Annual Meeting, *Aging, Arterial Stiffness and Hypertension: in Symposium "Extrarenal Mechanisms of Hypertension"*, American Society of Nephrology, Denver, Colorado Presenters/Authors: Pierce, Gary

- 2020 ARTERY 20 Virtual Conference, *Sympathetic control of arterial stiffness and central hemodynamics*, Artery Society (Europe) Presenters/Authors: Pierce, Gary
- 2020 ACSM Basic Science World Congress on Exercise in Regenerative Medicine (\*meeting cancelled because of COVID19 pandemic), *Human Arterial Aging: Mechanisms of Prevention and Treatment with Habitual Aerobic Exercise*, American College of Sports Medicine, San Francisco, California Presenters/Authors: Pierce, Gary
- 2018 DeGag Congress on Arterial Stiffness, *Sympathetic Regulation of Arterial Stiffness with Aging*, DeGag- German Artery Stiffness Society, Dresden, Germany Presenters/Authors: Pierce, Gary
- 2017 7th Annual Meeting, *Sympathetic Regulation of Arterial Stiffness*, North American Artery Society, Chicago, Illinois Presenters/Authors: Pierce, Gary L
- 2014 6th Annual Meeting of Pulse of Asia, *Mechanisms of vascular aging in humans: role of habitual aerobic exercise*, Pulse of Asia, Athens, Greece Presenters/Authors: Pierce, Gary L
- 2013 Symposium Vascular Aging II: Translational Research to Clinical Application, *Targeting inflammation to treat vascular aging in humans*, International Association of Gerontology and Geriatrics (IAGG), 20th IAGG World Congress of Gerontology and Geriatrics, Seoul, South Korea

#### **International - Poster**

- 2017 ARTERY 17 Annual Meeting, *Effect of Chronic Inflammation Inhibition with Salsalate on Aortic Stiffness and Vascular Endothelial Function in Older Adults: A Randomized Controlled Study*, Artery Society, Pisa, Italy Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2016 ARTERY 16 Meeting, *Carotid artery stiffness is associated with CT-measured lung air-trapping in COPD patients and controls independent of age, blood pressure and smoking history*, Artery Society-Europe, Copenhagen, Denmark Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2012 2012 ARTERY 12 International Meeting, *Validation of aortic pulse wave velocity estimation from brachial artery and finger blood pressure waveforms in humans: Ability to detect age- and exercise training- related differences in effective reflecting distance and aortic pulse wave velocity.*, Artery Society, Vienna, Austria Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2011 2011 ARTERY 11 International Meeting, *Augmented aortic forward pressure wave amplitude contributes to increased left ventricular mass in overweight adolescents*, Paris, France Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L.

#### **International - Symposium**

- 2019 Hypertension Scientific Sessions, *Recent Advances in Arterial Stiffness (Co-Chair)*, American Heart Association, New Orleans, Louisiana Presenters/Authors: Pierce, Gary L (September 2019)
- 2016 American Heart Association Scientific Sessions, *Novel Neuroendocrine Mechanisms in Preeclampsia: Vasopressin and Copeptin*, New Orleans, Louisiana

#### **National - Other**

- 2000 2000 ACSM Health/Fitness Instructor™ Certification Exam, *Physical work capacity testing*, American College of Sports Medicine, Boston, Massachusetts Presenters/Authors: Pierce, Gary L
- 1999 1999 ACSM Health/Fitness Instructor™ Certification Exam, *Physical work capacity testing*, American College of Sports Medicine, Boston, Massachusetts Presenters/Authors: Pierce, Gary L
- 1999 1999 ACSM Exercise Specialist™ Certification Exam, *ECG arrhythmia identification and emergency action*, American College of Sports Medicine,

- 1998 Boston, Massachusetts Presenters/Authors: Pierce, Gary L  
1998 ACSM Exercise Specialist™ Certification Exam, *ECG arrhythmia identification and emergency action*, American College of Sports Medicine, Boston, Massachusetts Presenters/Authors: Pierce, Gary L

### **National - Invited Lecture**

- 2022 Invited Tutorial Lecture, 2022 American College of Sports Medicine (ACSM) Annual Scientific Meeting. *Endurance Exercise with Aging and Hypertension: Mechanisms and Clinical Significance*, “Basic Science World Congress on Exercise and Vascular Health”, San Diego, CA (April 2022).
- 2016 6th Annual Meeting, *Habitual aerobic exercise and vascular endothelial function in human age-related prediabetes*, North American Artery Society, Chicago, Illinois, United States Presenters/Authors: Pierce, Gary
- 2016 Annual Meeting, *Elevated copeptin and vascular dysfunction in early pregnancy: novel biomarkers for human preeclampsia*, American Society of Hypertension, New York, New York, United States Presenters/Authors: Pierce, Gary L
- 2015 26th Annual Vascular Biology and Hypertension Meeting, *Elevated Copeptin and Vascular Dysfunction in Early Pregnancy: Novel Biomarkers for Human Preeclampsia*, University of Alabama at Birmingham, Departments of Medicine and Epidemiology, Alabama
- 2014 4th Annual Meeting of North American Artery Society, *De-stiffening the aorta with habitual aerobic exercise in aging and hypertension: fact or fallacy?*, North American Artery Society, Chicago, Illinois, United States
- 2003 2003 American Association of Cardiovascular and Pulmonary Rehabilitation National Meeting, *Exercise prescription in patients with chronic heart failure*, American Association of Cardiovascular and Pulmonary Rehabilitation, Kansas City, Missouri Presenters/Authors: Pierce, Gary L
- 1998 1998 ACSM Health/Fitness Instructor™ Workshop, *ACSM metabolic calculations*, American College of Sports Medicine, Boston, Massachusetts Presenters/Authors: Pierce, Gary
- 1997 1997 ACSM Health/Fitness Instructor™ Workshop, *ACSM metabolic calculations*, American College of Sports Medicine, Boston, Massachusetts Presenters/Authors: Pierce, Gary

### **National - Lecture**

- 1999 1999 ACSM Health/Fitness Instructor™ Workshop, *ACSM metabolic calculations*, American College of Sports Medicine, Boston, Massachusetts Presenters/Authors: Pierce, Gary

### **National - Oral**

- 2015 2015 American Heart Association Council on Hypertension Meeting, *Elevated circulating copeptin in mid-gestation is associated with increased aortic stiffness and vascular endothelial dysfunction in pregnant women at high risk for preeclampsia*, American Heart Association, Washington DC Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2015 5th Annual Meeting of North American Artery Society, *Resting systolic blood pressure and body mass index but not aortic stiffness independently predict systolic blood pressure response to maximal exercise in healthy adults*, North American Artery Society, Chicago, Illinois Peer-Reviewed/Refereed Presenters/Authors: Lane, Abbi, Pierce, Gary L
- 2014 2014 Experimental Biology National Meeting, *Lower soluble RAGE and higher aortic stiffness in african-american adolescents: possible protective effect of higher sRAGE in white youth*, American Physiological Society, Cardiovascular Section, San Diego, California, United States Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary Student Presenters/Authors: Tank, Ericka
- 2009 2009 American Heart Association Scientific Sessions, *Sex-specific effects of*

- habitual aerobic exercise on brachial artery flow-mediated dilation in healthy middle-aged and older adults*, American Heart Association, Orlando, Florida Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2009 American Heart Association Scientific Sessions International Meeting, *2009 Nuclear factor kappaB activation contributes to vascular endothelial dysfunction via reductions in vascular oxidative stress in overweight/obese middle-aged and older humans*, American Heart Association, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2009 Experimental Biology International Meeting, *Habitual aerobic exercise is associated with reduced vascular endothelial cell oxidative stress, NADPH oxidase and NF- $\kappa$ B in middle-aged and older humans*, FASEB, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2008 2008 Experimental Biology International Meeting, *Nuclear factor-kappaB-associated inflammation mediates impaired endothelial function in non-diabetic middle-aged and older overweight/obese men*, FASEB J, San Deigo, California Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2004 2004 American College Sports Medicine National Meeting, *Reproducibility of forearm and calf blood flow to reactive hyperemia in young, healthy subjects*, American College of Sports Medicine, Indianapolis, Indiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2001 2001 American College Sports Medicine Meeting, *Lower exercise oxygen uptake during cycle ergometry in cardiac transplantation patients*, American College of Sports Medicine, Baltimore, Maryland Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 1999 1999 American College Sports Medicine National Meeting, *Absolute peak oxygen uptake is a better indicator of improved exercise capacity in cardiac transplant patients*, American College of Sports Medicine, Seattle, Washington Peer-Reviewed/Refereed Presenters/Authors: Piercce, Gary L

#### **National - Poster**

- 2016 2016 American Thoracic Society Annual Meeting, *COPD-related lung pathophysiology, aortic stiffening and altered brain structure: a magnetic resonance neuroimaging pilot study*, American Thoracic Society, San Francisco, California Peer-Reviewed/Refereed Presenters/Authors: Hoth, Karin
- 2016 2016 Experimental Biology Meeting, *Acute and chronic biological effects of copeptin on vascular function in mice and humans.*, FASEB, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L Student Presenters/Authors: Rasor, Mada,yn
- 2016 2016 Experimental Biology Meeting, *Higher anxiety is associated with elevated inflammation independent of obesity in humans*, FASEB, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Holwerda, Seth, Pierce, Gary
- 2016 2016 Experimental Biology International Meeting, *Higher cardiorespiratory fitness is associated with lower cerebrovascular reactivity in older adults independent of age and aortic stiffness*, FASEB, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L Student Presenters/Authors: DuBose, Lyndsey E
- 2016 2016 Experimental Biology International Meeting, *Higher hemoglobin A1C and c-reactive protein but not aortic stiffness are independently associated with blunting of nocturnal systolic blood pressure dipping among middle-aged/older adults with obesity and prediabetes*, FASEB, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Sindler, Amy, Pierce, Gary L
- 2016 2016 Experimental Biology Meeting, *Increased mTORC1 signaling in the vasculature of diet-induced obese mice and obese humans*, FASEB, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Reho, John R, Pierce, Gary L
- 2015 2015 Society of Maternal Fetal Medicine National Meeting, *Pulse wave velocity and copeptin: Prediction and the possible early etiology of preeclampsia* Peer-



- 2015 Reviewed/Refereed Presenters/Authors: Santillan, Mark, Pierce, Gary L  
2015 American Heart Association Scientific Sessions, *Lower carotid artery compliance and greater carotid  $\beta$ -stiffness index are associated with slower processing speed and reduced working memory performance in older healthy adults*, American Heart Association, Orlando, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L Student Presenters/Authors: DuBose, Lyndsey E
- 2015 2015 Experimental Biology Meeting, *High trans-fat but not saturated fat beverage causes an acute reduction in vascular endothelial function and insulin sensitivity in humans.*, FASEB, Boston, Massachusetts Peer-Reviewed/Refereed Presenters/Authors: Lane-Cordova, Abbi, Pierce, Gary L
- 2015 2015 Experimental Biology Meeting, *Sodium salicylate prevents TNF alpha-induced reductions in insulin-stimulated eNOSser1177 phosphorylation but not Akt in human aortic endothelial cells*, Boston, Massachusetts Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L Student Presenters/Authors: Younatham, Ramsan
- 2015 2015 American Heart Association Epidemiology/Lifestyle Scientific Session, *Three months of novel triple combination pharmacotherapy reduces weight and blood pressure but not aortic stiffness in obese adults: a randomized, placebo controlled double blind clinical trial*, American Heart Association, Baltimore, Maryland Peer-Reviewed/Refereed Presenters/Authors: Kalil, Graziela Z, Pierce, Gary L
- 2013 2013 American Heart Association Epidemiology and Prevention/Physical Activity, Nutrition and Metabolism Scientific Sessions, *Higher physical activity is associated with enhanced left ventricular diastolic function and exercise capacity and lower wave reflection in healthy adolescents independent of time in sedentary activities*, American Heart Association, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2013 2013 American Heart Association Epidemiology and Prevention/Physical Activity, Nutrition and Metabolism Scientific Sessions, *Higher physical activity is associated with enhanced left ventricular diastolic function and exercise capacity and lower wave reflection in healthy adolescents independent of time in sedentary activities*, American Heart Association, New Orleans, Louisiana, United States Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2012 2012 Experimental Biology Meeting, *Endothelium-dependent dilation is inversely related to hematocrit among young and older adults*, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2012 2012 Experimental Biology National Meeting, *Endothelium-dependent dilation is inversely related to hematocrit among young and older adults*, American Physiological Society, San Diego, California, United States Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2011 2011 Experimental Biology International Meeting,, *Higher brachial and central systolic and pulse pressure in overweight/obese black adolescents: relation with aortic stiffness and wave reflection*, FASEB, Washington, DC Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary I
- 2011 2011 American Heart Association Joint Conference-Nutrition, Physical Activity and Metabolism/Cardiovascular Disease Prevention Epidemiology Meeting, *Reduced tetrahydrobiopterin bioactivity contributes to decreased carotid artery compliance with aging in healthy adults,*, American Heart Association, Atlanta, Georgia Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2010 American Heart Association Scientific Sessions, *2010 Higher central artery stiffness and pulse pressure in overweight/obese African-American adolescents,*, Chicago, Illinois Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2009 2009 Experimental Biology International Meeting, *Habitual aerobic exercise is associated with reduced vascular endothelial cell oxidative stress, NADPH*

- oxidase and NF- $\kappa$ B in middle-aged and older humans, FASEB, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2008 2008 Experimental Biology International Meeting, *Nuclear factor kappa B-associated inflammation mediates impaired endothelial function in*, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2008 2008 Experimental Biology Meeting, *Vascular endothelial function is selectively, positively related to leg/hip body fatness in healthy postmenopausal women*, FASEB, San Diego, California Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2007 2007 American College Sports Medicine National Meeting, *Arterial wave reflection properties are associated with c-reactive protein and exercise capacity in heart transplant recipients*, American College of Sports Medicine, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2007 2007 Experimental Biology Meeting, *Enhanced vascular endothelium-dependent dilation in older men who exercise is associated with markedly lower endothelial oxidative stress*, Washington DC, District of Columbia Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2006 2006 American Heart Association Scientific Sessions, *Effect of aging and habitual endurance exercise on vascular endothelial NF kappa B protein expression and dilation in humans*, American Heart Association, Chicago, Illinois Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2006 2006 American College Sports Medicine Meeting, *Acute effects of cold pressor test on central arterial pressure wave reflection in young, healthy adults*, Denver, Colorado Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2005 2005 American Heart Association Scientific Sessions, *Exercise training improves vasodilation of limb resistance vasculature and attenuates inflammation and asymmetric dimethylarginine in heart transplant recipients*, American Heart Association, Dallas, Texas Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2005 2005 American College Sports Medicine Meeting, *Nine months of resistance training does not increase arterial stiffness in postmenopausal women*, Nashville, Tennessee Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 2004 2004 American Heart Association Scientific Sessions, *Cardiac transplantation does not improve central arterial stiffness in patients with severe heart failure*, American Heart Association, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L
- 1999 1999 American College of Cardiology Meeting, *Cardiovascular responses to dobutamine and exercise stress testing in patients taking beta-adrenergic blocking agents*, American College of Cardiology, New Orleans, Louisiana Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L, Hartley, L Howard

### **National - Symposium**

- 2021 2021 American College of Sports Medicine (ACSM) Annual Scientific Meeting. *Human Arterial Aging: Mechanisms of Prevention and Treatment with Habitual Aerobic Exercise*, Invited Lecture, Basic Science World Congress on Exercise in Regenerative Medicine (Virtual Symposium).
- 2015 2015 Experimental Biology Meeting, *Vascular Endothelial Cell Insulin Resistance: The New Target for Reducing Vascular Risk in Diabetes?*, American Physiological Society Cardiovascular Section, Boston, Massachusetts Peer-Reviewed/Refereed
- 2013 2013 Experimental Biology Meeting, *The Aging Cardiovascular System: Structural Remodeling in Health and Disease, Featured Topics Symposium* American Physiological Society Cardiovascular Section, American Physiological Society, Boston, Massachusetts, United States Peer-

Reviewed/Refereed Presenters/Authors: Pierce, Gary L

**Regional - Invited Lecture**

- 2012 2012 Midwest Chapter of the American College of Sports Medicine (MWACSM), *Habitual aerobic exercise in the prevention and treatment of vascular aging*, American College of Sports Medicine, Oregon, Ohio, United States
- 2006 2006 Rocky Mountain Chapter of American College Sports Medicine Meeting, *Acute and chronic cardiovascular effects of exercise in heart transplant recipients*, Rocky Mountain Chapter of American College Sports Medicine, Estes Park, Colorado Presenters/Authors: Pierce, Gary L
- 1998 1998 New England Chapter of American College Sports Medicine Meeting, *Clinical exercise testing in cardiac transplantation patients*, New England Chapter of American College Sports Medicine, Providence, Rhode Island Presenters/Authors: Pierce, Gary L

**Regional - Oral**

- 1997 1997 New England Chapter of American College Sports Medicine Regional Meeting, *Comparison of ramp vs. graded exercise testing protocols in obese women*, New England Chapter of American College Sports Medicine, Providence, Rhode Island Presenters/Authors: Pierce, Gary L

**State - Invited Lecture**

- 2013 17th Annual Meeting of Iowa Physiological Society, *Targeting inflammation to treat arterial aging: translational physiology*, Iowa Physiological Society, Des Moines, Iowa, United States

**State - Oral**

- 2010 2010 Southern Translational and Education Research Conference, *Lower vascular oxidative stress and higher endothelium-dependent dilation in middle-aged and older endurance exercise trained men: relation with extracellular superoxide dismutase activity*, University of Georgia Presenters/Authors: Pierce, Gary L

**State - Poster**

- 2012 16th Annual Meeting of Iowa Physiological Society, *Estimation of effective reflecting distance and aortic pulse wave velocity from peripheral blood pressure waveforms in young and older humans*, Iowa Physiological Society, Des Moines, Iowa, United States Peer-Reviewed/Refereed Presenters/Authors: Pierce, Gary L

**University - Grand Rounds**

- 2016 Cincinnati Children's Hospital Heart Institute, *Elevated Copeptin and Vascular Dysfunction in Early Pregnancy: Novel Biomarkers for Human Preeclampsia?*, Division of Pediatric Cardiology, Cincinnati, OH Presenters/Authors: Pierce, Gary

**University - Invited Lecture**

- 2019 *Arterial Stiffness with Aging in Humans: Measurement, Mechanisms and Management*, University of Oregon, Department of Human Physiology, Eugene, Oregon Presenters/Authors: Pierce, Gary L
- 2018 *Frontiers in Obesity, Diabetes and Metabolism, Arterial Stiffness in Aging and Chronic Disease in Humans: Measurement, Mechanisms and Management*, University of Iowa Obesity Research and Education Initiative and Fraternal Order of Eagles Diabetes Research Center
- 2017 *The Human Toxicology Program/Iowa Superfund Basic Research Program, Arterial Stiffness and Lung Air-Trapping in Chronic Obstructive Lung Disease (COPD)*, Environmental Health Sciences Research Center, College of Public Health, University of Iowa, Iowa Presenters/Authors: Pierce, Gary L

- 2014 The Environmental Health Sciences Research Center, The Human Toxicology Program Seminar, *Inhaled endotoxin, vascular endothelial dysfunction and cardiovascular disease risk in humans: potential therapeutic role of vitamin C*,, University of Iowa College of Public Health, Iowa City, Iowa, United States Presenters/Authors: Pierce, Gary
- 2014 Diabetes and Obesity Seminar Series, *Sodium salicylates for the prevention of endothelial cell dysfunction in obesity and diabetes: novel role of AMP kinase?*, Fraternal Order of Eagles Diabetes Research Center, University of Iowa, Iowa City, Iowa, United States
- 2014 *Inflammation inhibition for vascular and autonomic dysfunction in human obesity and prediabetes*, Department of Kinesiology and Nutrition, University of Illinois at Chicago, Chicago, Illinois, United States
- 2013 Diabetes and Obesity Seminar Series, *Inflammation inhibition for vascular and autonomic dysfunction in obese prediabetic humans*, Fraternal Order of Eagles Diabetes Research Center, University of Iowa, Iowa City, Iowa, United States
- 2009 Center for Exercise Science Seminar, *Arterial aging in humans: biological factors and cellular mechanisms*, Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, Florida Presenters/Authors: Pierce, Gary L
- 2009 Vascular Biology Center Seminar, *Vascular aging in humans: biological factors and cellular mechanisms*, Vascular Biology Center, School of Medicine, Medical College of Georgia, Augusta, Georgia Presenters/Authors: Pierce, Gary L
- 2009 Georgia Prevention Institute Seminar, *Arterial endothelial dysfunction in human aging and obesity: role of oxidative stress and inflammation*, School of Medicine, Medical College of Georgia, Augusta, Augusta, Georgia Presenters/Authors: Pierce, Gary L
- 2009 School of Sport and Exercise Science Seminar, *Arterial aging in humans: modulating effects of biological factors and lifestyle behaviors*, University of Northern Colorado, Greeley, Colorado Presenters/Authors: Pierce, Gary L

#### **University - Keynote/Plenary Address**

- 2020 Keynote Invited Lecture, COBRE Center for Cardiovascular Health Annual Symposium, *Central Elastic Artery Stiffness with Aging in Humans: Measurement, Mechanisms and Management*. College of Health Sciences, University of Delaware, Newark, Delaware Presenters/Authors: Pierce, Gary L (February 2020)

#### **University - Lecture**

- 2012 Clinical and Community Based 'Chalk Talk' Seminar, *Targeting inflammation in aging and prediabetes in humans*, University of Iowa Obesity Initiative, Iowa City, Iowa, United States Presenters/Authors: Pierce, Gary L

#### **University - Seminar**

- 2006 Adult General Clinical Research Center, Joint Fall Scientific Symposium, *Effect of aging and habitual aerobic exercise on vascular endothelial function and protein expression in humans*, University of Colorado Health Sciences Center and University of Colorado-Boulder, Boulder, Colorado Presenters/Authors: Pierce, Gary L

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## **SERVICE**

### **Profession**

- 2022 External reviewer for promotion to Associate Professor with tenure of faculty at the University of Delaware, Reviewer, Promotion and Tenure
- 2022- pres Editorial Board, *Journal of Applied Physiology*
- 2021 External reviewer for promotion to Professor of Medicine with tenure of dossier of

2021 faculty at Medical College of Wisconsin, Reviewer, Promotion and Tenure  
 External reviewer for promotion to Associate Professor with tenure of faculty at  
 University of North Carolina at Chapel Hill, Reviewer, Promotion and Tenure  
 2015 - pres Editorial Board, *Clinical Science*  
 2019 - 2022 American Physiological Society, Conference Committee, Member  
 2021 North American Artery Society, 10th Annual Meeting Program Committee- Virtual  
 Program, Co-Chair  
 2021 Ad Hoc volunteer (12 manuscript reviews as of Sept 1), Reviewer, Publications  
 2020 Ad Hoc volunteer (20 manuscript reviews), Reviewer, Publications  
 2020 National Institutes of Health, Cardiovascular and Respiratory Sciences (CVRS-J) R15  
 study section, Reviewer, Grant Proposals (May, Sept)  
 2020 North American Artery Society, 10th Annual Meeting Program Committee (\*cancelled  
 because of COVID-19 pandemic), Co-Chair  
 2020 National Institutes of Health, Cardiovascular and Respiratory Sciences (CVRS-J) R15  
 study section, Reviewer, Grant Proposals  
 2019 Ad Hoc volunteer (17 manuscript reviews), Reviewer, Publications  
 2019 External reviewer for promotion to Clinical Associate Professor (non-tenure track) of  
 dossier of faculty at University of Illinois at Chicago, Reviewer, Promotion and Tenure  
 2019 North American Artery Society, 9th Annual Meeting Program Committee, Co-Chair  
 2016 - 2019 American Physiological Society, Awards Committee, Cardiovascular Section, Member  
 2019 Fraternal Order of Eagles Diabetes Research Center, University of Iowa, Poster Judge  
 2018 Ad Hoc volunteer (13 manuscript reviews), Reviewer, Publications  
 2018 External reviewer for promotion to Associate Professor with tenure of dossier of faculty  
 at University of Missouri, Reviewer, Promotion and Tenure  
 2018 American College Sports Medicine, 2018 ACSM Integrative Physiology of Exercise  
 Meeting, Scientific Program Committee, Member  
 2018 External reviewer for promotion and tenure dossier of faculty at Michigan  
 Technological University (R2 University), Reviewer, Promotion and Tenure  
 2018 External reviewer for promotion to Associate Professor with tenure dossier of faculty at  
 University of Delaware, Reviewer, Promotion and Tenure  
 2018 North American Artery Society, Program Committee, Co-Chair  
 2017 - pres Review Editor, *Experimental Physiology*  
 2017 Ad Hoc volunteer (23 manuscript reviews), Reviewer, Publications  
 2017 North American Artery Society, 7th Annual Meeting Program Committee, Co-Chair  
 2016 Ad Hoc volunteer (13 manuscript reviews), Reviewer, Publications  
 2016 Artery Society, Artery 16 Meeting- Poster Session Co-Chair, Co-Chair  
 2016 North American Artery Society, Program Committee, 6th Annual Scientific Meeting,  
 Co-Chair  
 2016 University of Utah Center on Aging, Pilot grant external reviewer, Reviewer, Grant  
 Proposals  
 2015 Ad Hoc Volunteer (23 manuscript reviews), Reviewer, Publications  
 2012 - 2015 American Physiological Society, Nominating Committee, Cardiovascular Section,  
 Member  
 2010 - 2015 *Clinical Science*, Advisory Panel, Member  
 2015 North American Artery Society, Program Committee- 5th Annual Scientific Meeting,  
 Co-Chair  
 2015 National Institutes of Health, Atherosclerosis Inflammation Cardiovascular Sciences  
 (AICS) study section, Reviewer, Grant Proposals  
 2014 - 2015 American College Sports Medicine, Certified Clinical Exercise Specialist  
 subcommittee, Committee on Certification and Registry Boards (CCRB), Member  
 2014 Ad Hoc Volunteer (22 manuscript reviews), Reviewer, Publications  
 2014 North American Artery Society, Program Committee, 4th Annual Scientific Meeting,  
 Co-Chair  
 2014 American Heart Association, Behavioral Science-Clinical 2 Committee, Reviewer,  
 Grant Proposals  
 2013 Ad Hoc Volunteer (22 manuscript reviews), Reviewer, Publications

2013 University of Delaware, INBRE Career Development Grant external reviewer, Reviewer, Grant Proposals

2013 North American Artery Society, Program Committee, 3rd Annual Scientific Meeting, Co-Chair

2012 Ad Hoc Volunteer (22 manuscript reviews), Reviewer, Publications

1997 - 2009 American College Sports Medicine, Member

2000 - 2001 New England Chapter of American College of Sports Medicine, State Representative (MA)

## Department

2021-22 Annual Faculty review (2<sup>nd</sup> year tenure track) committee for Erin Talbert, PhD, Member

2021-22 Annual Faculty review (1st Year tenure-track) committee for Nathaniel Jenkins, PhD, Chair

2021 Promotion to Professor of Instruction committee for Dan Matheson JD committee, Member

2021 Promotion to Associate Professor of Instruction committee for Bri Swope MA, Chair

2020 - Pres HHP Social Media Committee, Member

2018 - Pres Director of Graduate Studies, Dept of Health and Human Physiology, Director

2014 - Pres HHP Carl V. Gisolfi Seminar Series committee, Chair

2020 Annual Faculty review (1st Year tenure-track) committee for Anna Stanhewicz, PhD, Chair

2020 Annual Faculty review (2nd Year tenure-track) committee for Kara Whitaker, PhD, Member

2020 Annual Faculty review (2nd Year tenure-track) committee for Thorsten Rudroff, PhD, Member

2020 Annual faculty review (4th year tenure-track) committee for Melissa Bates, PhD, Chair

2020 Post-tenure 5 Year Review Committee for Prof Ben Hunnicutt, PhD, Member

2019 Department Consulting Group P&T committee Prof. Vitor Lira, Chair

2019 Promotion and Tenure Committee for Prof Vitor Lira, Dept of Health and Human Physiology, Chair

2019 Annual Faculty Review (1st Year) for Assistant Professor Thorsten Rudroff, Chair

2019 Annual faculty review (3rd year) for Assistant Professor Melissa Bates, Chair

2018 - 2019 Tenure track faculty search in Human Physiology, Dept of Health & Human Physiology, Chair

2019 Annual Faculty Review (3rd Year reappointment) for Assistant Professor Qian Xiao, Member

2019 Annual Faculty Review (5th Year) for Assistant Professor Vitor Lira, Chair

2017 - 2018 Annual Faculty Review (3rd year reappointment) for Melissa Bates, Assistant Professor, Chair

2017 - 2018 Annual Faculty Review (5th Year) for Assoc Professor Harald Stauss, Associate Professor, Chair

2017 - 2018 Annual Faculty Review for Shawn Flanagan, Associate Faculty of Instruction, Chair

2017 - 2018 Annual Faculty Review for Vitor Lira, Assistant Professor, Member

2018 Promotion and Tenure Committee for Darren Casey, PhD, Dept of Physical Therapy and Rehabilitation Sciences, Carver College of Medicine, Member, Darren Casey, PhD

2017 - 2018 Search Committee for Tenure-Track Faculty Position in Sensorimotor Neuroscience, Chair, Health and Human Physiology

2016 - 2018 Departmental Undergraduate Honors program, Director

2016 - 2017 Search Committee for Tenure-Track Faculty Position in Exercise Science, Chair

2015 - 2016 HHP Senior Lecturer Promotion committee for Shawn Flanagan, Member

2013 - 2014 Lecturer annual reviewer for Chris Schwartz, PhD, Reviewer

2013 - 2014 Lecturer annual reviewer for Shawn Flanagan, PhD, Reviewer

2013 - 2014 Search Committee for Tenure-track faculty position in Behavioral Nutrition, Department of Health and Human Physiology (#63166), Member

2013 - 2014 Search Committee for Tenure-track faculty position in Translational Physiology,

2013 - 2014	Department of Health and Human Physiology (#63143), Member Search Committee for Tenure-track faculty position in Clinical Exercise Physiology, Department of Health and Human Physiology (#63166), Chair
2012 - 2013	Chair, Louis E. Alley Annual Memorial Lecture Committee, Department of Health & Human Physiology
2012 - 2013	Lecturer annual reviewer for Shawn Flanagan, Reviewer
2012 - 2013	Search committee for Tenure-track faculty position in Nutrition, Department of Health and Human Physiology (#61302), Member
2011 - 2012	Lecturer annual reviewer for Dr. Clay Peterson, Reviewer
2011 - 2012	Lecturer annual reviewer for Dr. Shawn Flanagan, Reviewer
2011 - 2012	Lois E. Alley Memorial Lecture Committee, Member
2011 - 2012	Search committee for Tenure-track faculty position in Department of Health and Human Physiology and UI Obesity Initiative (#60075), Member

### College

2023	Department Consulting Group for new Department Executive Officer of the Department of Communications Sciences and Disorders, CLAS
2022-	CLAS Dean's Department Executive Officer Advisory Board, Member
2022-	CLAS Science Department Executive Officer committee, Chair
2013	Human Studies Animal Welfare Workgroup for 650:270/604 Principles of Scholarly Integrity course, Graduate College, Member

### University

2022-present	West Campus Academic Building Planning HHP Stakeholder Committee, Chair
2022-present	West Campus Academic Building Core Planning Committee, University of Iowa, Member
2021	Recreational Services, Division of Student Life external program review, Internal focus group member
2021 - 2026	Presidential Committee on Athletics, University of Iowa, Member, 5-year term
2020 - 2023	Faculty Senate (CLAS Group III) University of Iowa, Member
2019 - Pres	Clinical Research Unit Advisory Committee, Institute for Clinical and Translational Science, University of Iowa Carver College of Medicine, Member
2018 - 2021	Recreational Services Charter Committee, University of Iowa, Member
2015	Advocacy for Biomedical Research and Preeclampsia Research on Capitol Hill- Wash DC, Attendee, Sponsored by University of Iowa Office of the Vice President for Research

### Community

2017	U Iowa Environmental Health Sciences Research Center/Institute for Clinical and Translational Science, Science Cafe, Invited Lecture
2018-23	Club West Board Member, Iowa City West High School Athletics Booster Club

### Professional Development Activities

2022	New Department Chair Workshop, Academic Impressions, Inc. (six, 3-hours sessions) Training/Development Program, 2021 Leadership Workshop and Pre-Workshop
2021	Sessions, American Kinesiology Association
2021-22	BUILD: Beyond the Numbers- Foundations for Diversity, Equity and Inclusion course