



American Heart Association®
Hypertension

Final Program

Hypertension 2019 Scientific Sessions

September 5-7 | Marriott New Orleans | New Orleans, LA

Sponsored and organized by the Council on Hypertension in collaboration with the Council on the Kidney in Cardiovascular Disease.

professional.heart.org/hypertensionsessions

Program at a Glance

Thursday, Sept. 5		Friday, Sept. 6		Saturday, Sept. 7		Sunday, Sept. 8	
7:00 AM Coffee & Exhibits		7:00 AM Coffee & Exhibits		7:00 AM Coffee & Exhibits		7:00 AM Coffee	
Session 1.1 7:50-8:00 AM President's Welcome and Opening Remarks Curt D. Sigmund, PhD, FAHA, Chair, Fall Conference Planning Committee Karen Griffin, MD, FAHA, Chair, Council on Hypertension Session 1.2 8:00– 9:00 AM Recent Advances in Hypertension: Keynote Lectures		Session 7 8:00-9:00 am Recent Advances: Microbiome		Concurrent Session 13 7:30-9:00 AM A – Nutrition, Salt and Hypertension B – Vascular Biology and Function C – Gender Differences and Sex Hormones 9:00-9:30 AM Donald Seldin Award Lecture		Concurrent Session 13 7:30-8:30 AM D – Primary Care Track: Atrial Fibrillation and Hypertension in Primary Care Setting 8:30-9:30 AM D – Primary Care Track: Diabetes and Hypertension Concurrent Session 18 7:30-9:00 AM A – Vascular Stiffness and Fibrosis B – Inflammation and Immune Mechanisms C – Mechanisms in Chronic Kidney Disease and Fibrosis 9:00-9:30 AM The Lewis K. Dahl Memorial Lecture	
Session 2 9:00-10:00 AM Recent Advances: Debates		Session 8 9:00-10:00 AM Recent Advances: Chronotherapy and Circadian Rhythms in Hypertension		9:30-10:00 AM Refreshment Break		9:30-10:00 AM Refreshment Break	
10:00-10:30 AM Refreshment Break		10:00-10:30 AM Refreshment Break		Concurrent Session 14 10:00-10:30 AM The Harriet Dustan Award Lecture		Concurrent Session 19 10:00-11:30 AM A – Role of the CNS in Obesity B – Renal Hemodynamics Mechanisms C – Preeclampsia and Developmental Programming	
Session 3 10:30-11:10 AM Recent Advances: Relationship Between Metabolism and Blood Pressure		Session 9 10:30 AM-12:00 PM Recent Advances: Neurogenic Hypertension: Brain, Heart, Kidney		10:30 AM-12:00 PM A – Renal Transport Mechanisms B – Regulation of Blood Pressure by the Central Nervous System C – Cardiac Hypertrophy and Dysfunction in Hypertension		D – Primary Care Track: The Evolving Landscape of Blood Pressure Guidelines	
Session 4 11:10 AM-12:00 PM Recent Advances: Arterial Stiffness- Clinical Research to Mechanisms							
12:00– 1:30 PM Lunch on your own		12:00– 1:30 PM Lunch on your own		12:00-1:30 PM Lunch on your own		11:30 AM Meeting Adjourns See you next year:	
Concurrent Session 5 1:30-3:00 PM A – Epidemiology of Hypertension and Atherosclerosis B – Mechanisms Involving Aldosterone and Mineralocorticoid Receptors C – Hypertension in Pregnancy and Offspring	Concurrent Session 5 1:30-3:00 PM D – Clinical Practice Clinical Science Track: Update on Antihypertensive Pharmacology	1:30-3:00 PM POSTER SESSION II	Session 10 1:30-3:00 PM Primary Care Track: 2019 AHA Scientific Statement: Measurement of Blood Pressure in Humans	1:30-3:00 PM POSTER SESSION III	Session 15 1:30-3:00 PM Clinical Practice Clinical Science Track: Hypertension Control Strategies in the Populations of the Pacific Rim: A Focus on the Effective Clinical Implementation: A joint session of AHA and World Hypertension League	Legend  Joint Attended Session  Concurrent D: Primary Care Track  Concurrent D: Clinical Practice Clinical Science Track  Council on Hypertension  Poster Session  Lunch and Breaks	
3:00-3:30 PM Refreshment Break		3:00-3:30 PM Refreshment Break		3:00-3:30 PM Refreshment Break			
Concurrent Session 6 3:30 -5:30 PM A – Neuroimmune Mechanisms in Hypertension B – Clinical Hypertension C – Genetics and Epigenetics in Hypertension	Concurrent Session 6 3:30-5:30 PM D – Clinical Practice Clinical Science Track: Debates	Concurrent Session 11 3:30-4:00 PM Arthur C. Corcoran Memorial Lecture 4:00-5:30 PM A – Chemoreceptor and Autonomic Mechanisms B – Cerebrovascular Disease and Stroke C – Hypertension Early Career Oral Awards	Concurrent Session 11 3:30-5:30 PM D – Primary Care Track: Blood Pressure Management in Women	Concurrent Session 16 3:30-5:30 PM A – Renin Angiotensin System B – Clinical Hypertension and Target Organ Damage C – Mechanisms in Diabetes and Obesity	Concurrent Session 16 3:30-5:30 PM D – Clinical Practice Clinical Science Track: Hypertension Journal CPC Case Study Session		
		Session 12 5:30-6:45 PM Awards Session Mid-Career Award for Research Excellence; The Harry Goldblatt Award for New Investigators; British and Irish Hypertension Society Young Investigator Award; High Blood Pressure Research Council of Australia Award; Stephanie Watts Career Development Award Finalist Competition		Session 17 5:45-6:30 PM The Excellence in Hypertension Research Award Lecture			
5:30-7:30 PM POSTER SESSION I Trainee Onsite Poster Competition with Reception		7:00-11:00 PM Trainee Advocacy Mixer		7:00 PM Social (cash bar) <i>Dinner ticket required for entrance</i> 7:30-10:30 PM The Annual Hypertension Scientific Sessions Awards Banquet <i>Dinner ticket required</i>			

Letter From the Chair

September 5, 2019

Dear Colleagues,

On behalf of the American Heart Association Council on Hypertension and Council on the Kidney in Cardiovascular Disease, it's my pleasure to welcome you to the Hypertension 2019 Scientific Sessions. This conference, focusing on advances in basic and clinical research on hypertension, is considered the premier scientific meeting on the subject in the world. The science submitted to this conference continues to feature the most up-to-date developments on our understanding of the causes of hypertension; its relationship to stroke, cardiac disease and kidney dysfunction; and the most effective ways to detect, evaluate and treat high blood pressure across diverse populations.

We're pleased to have two opening keynote lectures this year: Sir Mark Caulfield, FMedSci, FAHA, presenting "Blood Pressure Genomewide Studies at One Million," and Mingyu Liang, PhD, FAHA, presenting "Light in the Dark Genome for Hypertension Research."

Recent Advances in Hypertension will follow on Thursday and Friday mornings. Clinical Practice, Clinical Science and Primary Care tracks will be offered concurrently throughout the conference. Clinical Practice, Clinical Science focuses on applying clinical science to the clinician's practice and Primary Care is a "meeting within a meeting" dedicated to practical advice for the primary care provider interested in clinical hypertension. About 415 abstracts will be presented during our 3½-day meeting — 152 of those being oral.

We hope that you take full advantage of all the excellent programming throughout the conference and enjoy New Orleans. We strive to create an enriched atmosphere for conference attendees. Please let us know if we can do anything to enhance your experience. We look forward to interacting with you during the next few days.

Sincerely,



A handwritten signature in black ink that reads "Curt D. Sigmund". The signature is fluid and cursive, with the first name "Curt" being more prominent.

Curt D. Sigmund, PhD, FAHA

Vice-Chair for the Council on Hypertension

Chair of the Council on Hypertension Scientific Sessions Planning Committee

Hypertension

An American Heart Association Journal

Amplify Your Wake.
Publish in *Hypertension*.

Serving the international hypertension community through a balance of basic science research and research that may immediately help clinicians manage patient care.

**2.2
Billion**

Media impressions*

**6
Million**

Article downloads per year†

www

2 Million

Online visits per year‡

”

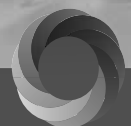
36,908

Total cites‡



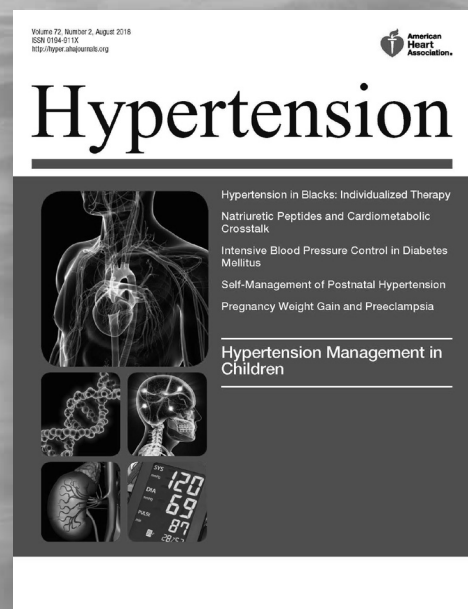
2,500+

Facebook followers§



1,293

Highest Altmetric score||



hype-submit.aha-journals.org

* From July 1, 2017, to June 30, 2018. Source: American Heart Association.

† Based on 2017 metrics calculated by HighWire Press and Wolters Kluwer.

‡ 2017 Journal Citation Reports (Clarivate Analytics, 2018).

§ As of July 2018.

|| Reflects the highest Altmetric score for a specific point in time, January-June 2018. Altmetric scores constantly change as articles are mentioned and shared online. Source: Altmetric Explorer. Article: "Relation of Dietary Sodium (Salt) to Blood Pressure and Its Possible Modulation by Other Dietary Factors: The INTERMAP Study." *Hypertension*. 2018;71:631-637.

Table of Contents

Supporters	3
Abstract Graders	4
Room Locator	5
Hotel Map	8
Program Information	11
Conference Highlights	12
Conference Awards	15
Speaker Resource Room.....	19
Continuing Education Credits	19
General Information and Conference Policies	20
Conference Schedule	21
Poster Presentations	42
Author Index	63

Questions and Information

If you have questions after reading this program, contact:

The American Heart Association

Telephone (888) 242-2453 (inside the United States)
(214) 570-5935 (outside the United States)
Fax (214) 373-3406
Email scientificconferences@heart.org
Website professional.heart.org

Professional Membership Customer Service

Lippincott, Williams & Wilkins
Telephone (800) 787-8984 (inside the United States)
Fax (301) 223-2327 (outside the United States)
Email ahaonline@lww.com

*The American Heart Association is a national voluntary health organization whose mission is:
"To be a relentless force for a world of longer, healthier lives."*

The American Heart Association is grateful to the Council on Hypertension 2019 Scientific Sessions
Program Committee for their dedication and leadership in planning the program.

Council on Hypertension 2019 Scientific Sessions Program Committee

Curt D. Sigmund, PhD, FAHA, Chair, Medical College of Wisconsin, Milwaukee, Wisconsin
Vivek Bhalla, MD, Vice-Chair, Stanford University, Palo Alto, California
Karen Griffin, MD, FAHA, Immediate Past Chair, Chair, Council of Hypertension, Hines VA Hospital, Hines, Illinois
Joey Granger, PhD, FAHA, Ex-officio, University of Mississippi Medical Center, Jackson, Mississippi
Gail Adler, MD, PhD, Brigham and Women's Hospital, Boston, Massachusetts
Jan N. Basile, MD, FAHA, Medical University of South Carolina, Charleston, South Carolina
John Bisognano, MD, PhD, FAHA, University of Rochester Medical Center, Rochester, New York
Michael J. Bloch, MD, FACP, FASH, FSVM, FNLA, FAHA, Blue Spruce Medicine Consultants, Reno, Nevada
Heddwyn Brooks, MSc, PhD, University of Arizona, Tucson, Arizona
Angela Brown, MD, Washington University School of Medicine, St. Louis, Missouri
Debbie Cohen, MD, University of Pennsylvania, Philadelphia, Pennsylvania
Leslie Davis, PhD, FAHA, University of North Carolina Durham, North Carolina
William J. Elliott, MD, PhD, FAHA, Pacific Northwest University of Health Sciences, Yakima, Washington
David Ellison, MD, Oregon Health Sciences University, Portland, Oregon
Jeffrey Garvin, PhD, FAHA, Case Western Reserve University, Cleveland, Ohio
Justin L. Grobe, PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin
Kenneth Jamerson, MD, University of Michigan Medical Center, Ann Arbor, Michigan
Donald Kohan, MD, PhD, FAHA, University of Utah, Salt Lake City, Utah
Eric Lazartigues, PhD, FAHA, Louisiana State University Health Sciences Center, New Orleans, Louisiana
Thu Le, MD, FAHA, University of Rochester, Rochester, New York
Lilach O. Lerman, MD, PhD, FAHA, Mayo Clinic, Rochester, Minnesota
Sarah Lindsey, PhD, FAHA, Tulane University, New Orleans, Louisiana
Mitra K. Nadim, MD, University of Southern California Keck School of Medicine, Los Angeles, California
Patrick Pagano, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania
Aldo Peixoto, MD, Yale School of Medicine, New Haven, Connecticut
Jennifer Pollock, PhD, FAHA, University of Alabama Birmingham, Birmingham, Alabama
Gary Schwartz, MD, FAHA, Mayo Clinic, Rochester, Minnesota
Alexander Staruschenko, PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin
Zhongie Sun, MD, PhD, FAHA, University of Tennessee, Memphis, Tennessee
Sandra Taler, MD, FAHA, Mayo Clinic, Rochester, Minnesota
Elaine M. Urbina, MD, FAHA, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio
Richard Wainford, PhD, Boston University School of Medicine, Boston, Massachusetts
Stephanie W. Watts, PhD, FAHA, Michigan State University, East Lansing, Michigan
R. Clinton Webb, PhD, FAHA, Augusta University, Augusta, Georgia
Brandi Wynne, PhD, Emory University School of Medicine, Atlanta, Georgia
Colin Young, PhD, George Washington University, Washington, D.C.

Members of the 2019 Clinical Practice, Clinical Science Track Committee

William J. Elliott, MD, PhD, FAHA, Chair, Pacific Northwest University of Health Sciences, Yakima, Washington
David Ellison, MD, Chair, Oregon Health Sciences University, Portland, Oregon
John Bisognano, MD, PhD, FAHA, University of Rochester Medical Center, Rochester, New York
Steven D. Crowley, MD, Duke University School of Medicine, Durham, North Carolina
Brent Egan, MD, FAHA, American Medical Association, Charleston, South Carolina
Karen Griffin, MD, FAHA, Hines VA Hospital, Hines, Illinois
Allan B. Schwartz, MD, FAHA, Drexel University College of Medicine, Philadelphia, Pennsylvania
Susan P. Steigerwalt, MD, FAHA, University of Michigan, Ann Arbor, Michigan

Members of the 2019 Primary Care Track Committee

Michael Bloch, MD, FACP, FASH, FSVM, FNLA, FAHA, Chair, Blue Spruce Medicine Consultants, Reno, Nevada
Robert D. Brook, MD, University of Michigan, Ann Arbor, Michigan
Keith C. Ferdinand, MD, FAHA, Tulane University, New Orleans, Louisiana
F. Wilford Germino, MD, FACP, FASH, FAHA, Chair, Orland Primary Care Specialists, Chicago, Illinois

Louis Kuritzky, MD, University of Florida College of Medicine, Gainesville, Florida
Joshua A. Samuels, MD, MPH, McGovern Medical School at UT Health, Houston, Texas
Daichi Shimbo, MD, Columbia University, New York, New York
Steven M. Smith, RPH, University of Florida College of Medicine, Gainesville, Florida
Anthony J. Viera, MD, MPH, FAHA, University of North Carolina, Chapel Hill, North Carolina
Steven A. Yarows, MD, FAHA, University of Michigan Health System, Chelsea, Michigan

**The American Heart Association gratefully acknowledges
the unrestricted educational grant from**

Medtronic

**Additionally, we would like to thank the following
for their generous support of HTN 2019:**

***Hypertension*, an AHA Journal**

Cardiovascular Research Foundation — Center for Education

DSI

Abstract Graders

The program committee gratefully acknowledges these individuals
for their assistance with the abstract grading process.

Barbara T. Alexander	Michael E. Ernst	James M. Luther	Paul W. Sanders
William J. Arendshorst	Bonita E. Falkner	Dewan S. Majid	Jennifer M. Sasser
Michael Bader	Nicholas R. Ferreri	Frank Mantero	Ernesto L. Schiffrin
Jan Neil Basile	Gregory D. Fink	David L. Mattson	Tatsuo Shimosawa
Donald Batisky	Joseph T. Flynn	James McCormick	Curt D. Sigmund
Daniel C. Batlle	Toshiro Fujita	Mariela E. Mendez	Helmy M. Siragy
Vivek Bhalla	Eric M. George	Kenneth D. Mitchell	James R. Sowers
Anil K. Bidani	Roberto A. Gomez	Augusto C. Montezano	David E. Stec
John D. Bisognano	Philip B. Gorelick	Alberto Nasjletti	Colin Sumners
Ana M. Briones	Diane E. Handy	Akira Nishiyama	E. Ann Tallant
Robert Brook	Pamela Harding	Ravi Nistala	Rhian M. Touyz
K. Bridget B. Brosnihan	David G. Harrison	Pablo A. Ortiz	Paolo Verdecchia
Angela L. Brown	Lisa M. Harrison Bernard	Patrick Osei Owusu	Massimo Volpe
David A. Calhoun	Yoshitaka Hirooka	Suresh S. Palaniyandi	Richard D. Wainford
Dulce E. Casarini	Daria Ilatovskaya	Kailash Nath Pandey	Donna Wang
Alejandro R. Chade	John D. Imig	Joon Young Park	Hanjun Wang
Steven D. Crowley	Raouf A. Khalil	Iuliia Polina	Stephanie W Watts
Jan H. Danser	Donald E. Kohan	Ambra Pozzi	Michael A. Weber
katia de angelis	Yoshihiro Kokubo	J. Howard Pratt	Matthew R. Weir
Donald J. Dipette	John B. Kostis	Morton P. Printz	William J. Welch
Debra I. Diz	Nitin Kumar	Kamal Rahmouni	Ulrich Wenzel
Anna F. Dominiczak	Louis Kuritzky	Richard N. Re	Robert E. Widdop
Satoru Eguchi	Daniel T. Lackland	Richard Joseph Roman	J. Michael Wyss
Khalid M. Elased	Lilach O. Lerman	Luis M. Ruilope	Steven A. Yarows
Fernando Elijevich	Moshe Levi	Michael J. Ryan	Xueying Zhao
David H. Ellison	Thomas E. Lohmeier	Helio C. Salgado	Irving H. Zucker



Join us for complimentary lunch in a Satellite Symposium while learning about the*
Renal Denervation and Blood Pressure Control: A Clinical Trial Update

Date: Friday, September 6, 2019

Time: 12:15 P.M. – 1:30 P.M.

Location: Acadia Ballroom

Speakers:

Jan Basile, MD Michael J. Bloch, MD Michel Azizi, MD
David E. Kandzari, MD Michael A. Weber, MD

Supported by: Cardiovascular Research Foundation
Supported through educational grants from Medtronic, Inc. and ReCor Medical

**Complimentary lunch provided by The American Heart Association to the first 200 attendees*

**This event is not part of the official Hypertension 2019 Scientific Sessions
as planned by the AHA Hypertension Fall Program Committee**

Room Locator

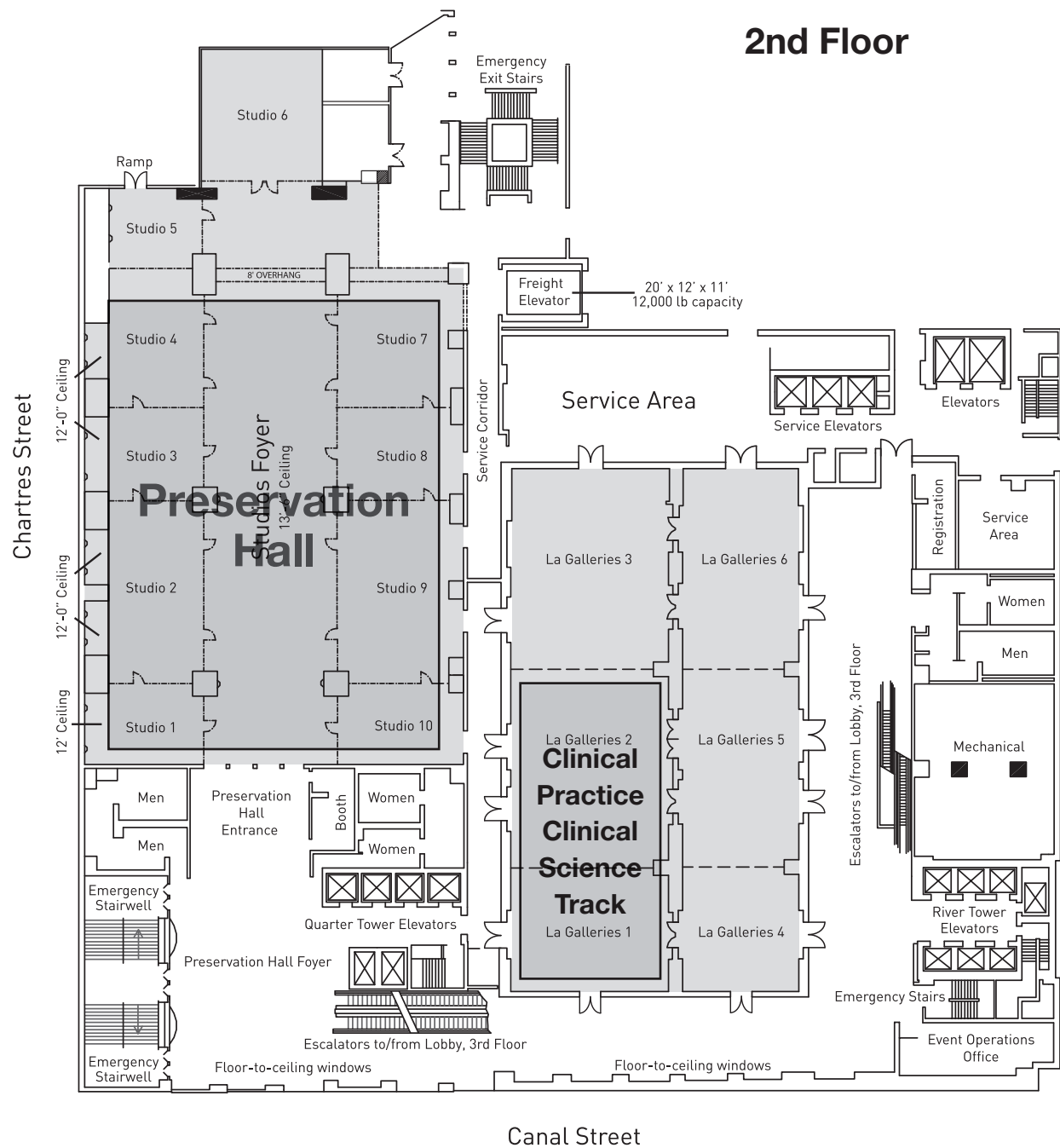
Wednesday		
Time	Event	Room
2:00-7:00 PM	Registration	Preservation Hall
2:00-7:00 PM	Speaker Resource Room	Regent
Noon-4:00 PM	HTN/ASH Strategic Planning Meeting	Balcony K-J
4:30-7:30 PM	Hypertension Fall Leadership Committee Meeting	Balcony K-J
Thursday		
Time	Event	Room
6:00-7:45 AM	HTN Professional and Public Education Science Subcommittee	Bonaparte
7:00-7:45 AM	Refreshment Break and Exhibits	Preservation Hall
6:30 AM-5:30 PM	Speaker Resource Room	Regent
7:00 AM-7:00 PM	Registration	Preservation Hall
7:00 AM-3:30 PM	Exhibits	Preservation Hall
7:50-8:00 AM	Session 1.1: Welcome and Opening Remarks	Acadia
8:00-9:00 AM	Session 1.2: Recent Advances: Keynote Lectures	Acadia
9:00-10:00 AM	Session 2: Recent Advances: Debates	Acadia
10:00-10:30 AM	Refreshment Break and Exhibits	Preservation Hall
10:30-11:10 AM	Session 3: Recent Advances: Relationship Between Metabolism and Blood Pressure	Acadia
11:10 AM-Noon	Session 4: Recent Advances: Arterial Stiffness – Clinical Research to Mechanisms	Acadia
Noon-1:30 PM	Lunch on Own	
Noon-5:00 PM	Poster Session I Set-up	Preservation Hall
1:30-3:00 PM	Session 5 Concurrent A: Epidemiology of Hypertension and Atherosclerosis	Galerie 3
1:30-3:00 PM	Session 5 Concurrent B: Mechanisms Involving Aldosterone and Mineralocorticoid Receptors	Galerie 4 and 5
1:30-3:00 PM	Session 5 Concurrent C: Hypertension in Pregnancy and Offspring	Galerie 6
1:30-3:00 PM	Session 5: Concurrent D: Clinical Practice Clinical Science Track: Update on Antihypertensive Pharmacology	Galerie 1 and 2
3:00-3:30 PM	Refreshment Break and Exhibits	Preservation Hall
3:30-5:30 PM	Session 6 Concurrent A: Neuroimmune Mechanisms in Hypertension	Galerie 3
3:30-5:30 PM	Session 6 Concurrent B: Clinical Hypertension	Galerie 4 and 5
3:30-5:30 PM	Session 6 Concurrent C: Genetics and Epigenetics in Hypertension	Galerie 6
3:30-5:30 PM	Session 6: Concurrent D: Clinical Practice Clinical Science Track: Debates	Galerie 1 and 2
5:30-7:30 PM	Poster Session I (for Trainees) with Reception	Preservation Hall
Friday		
Time	Event	Room
6:15-8:00 AM	Hypertension Editors Breakfast Meeting	Bonaparte
7:00-8:00 AM	Refreshment Break and Exhibits	Preservation Hall
7:00 AM-7:00 PM	Speaker Resource Room	Regent
7:00 AM-7:00 PM	Registration	Preservation Hall
7:00 AM-3:30 PM	Exhibits	Preservation Hall
9:00 AM-1:00 PM	Poster Session II Set-up	Preservation Hall
8:00-9:00 AM	Session 7: Recent Advances: Microbiome	Acadia
9:00-10:00 AM	Session 8: Recent Advances: Chronotherapy and Circadian Rhythms in Hypertension	Acadia
10:00-10:30 AM	Refreshment Break and Exhibits	Preservation Hall
10:30 AM.-Noon	Session 9: Recent Advances: Neurogenic Hypertension: Brain, Heart, Kidney	Acadia

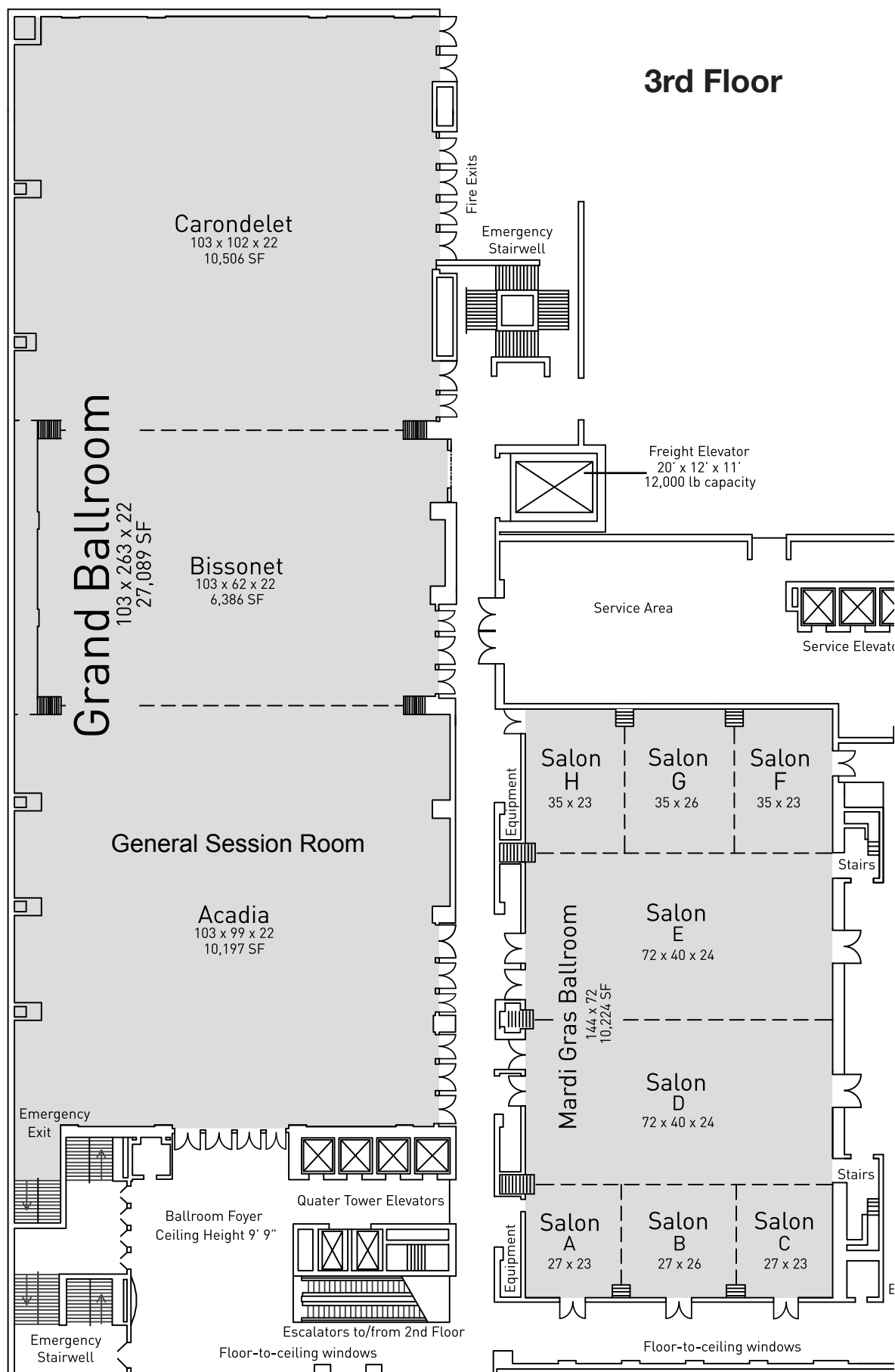
Room Locator (continued)

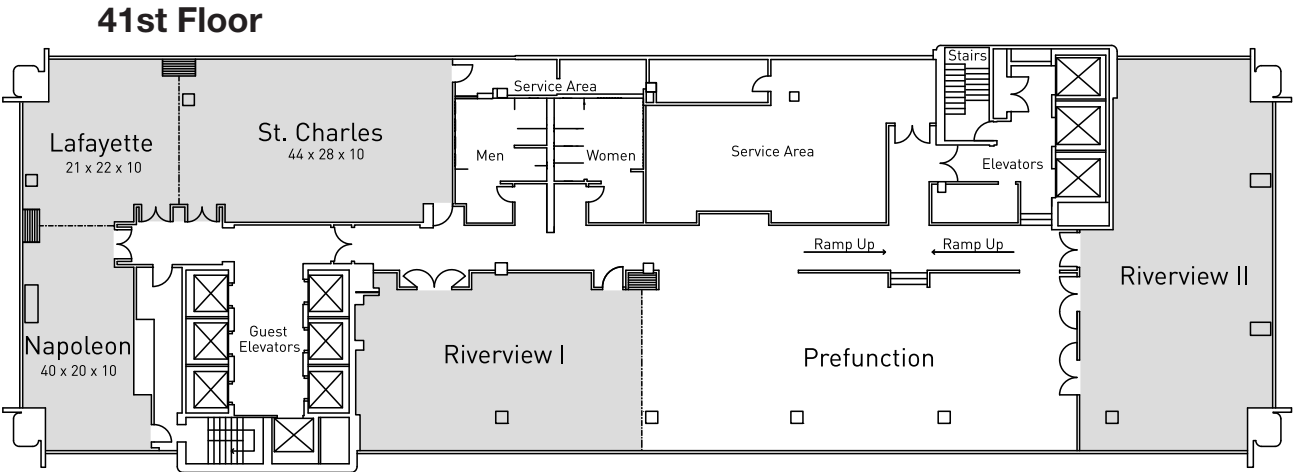
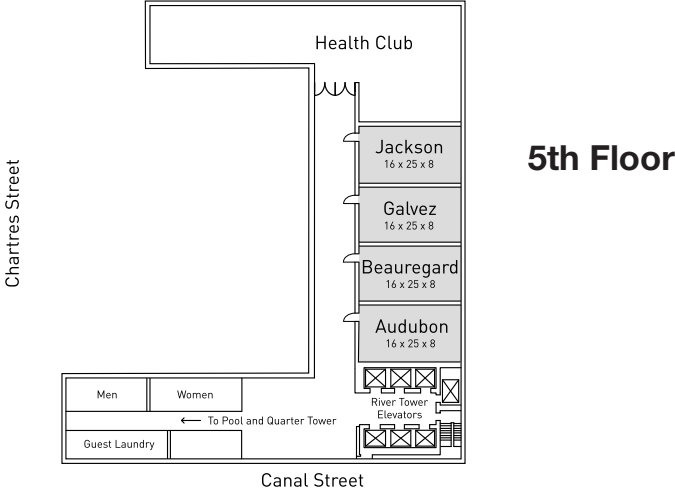
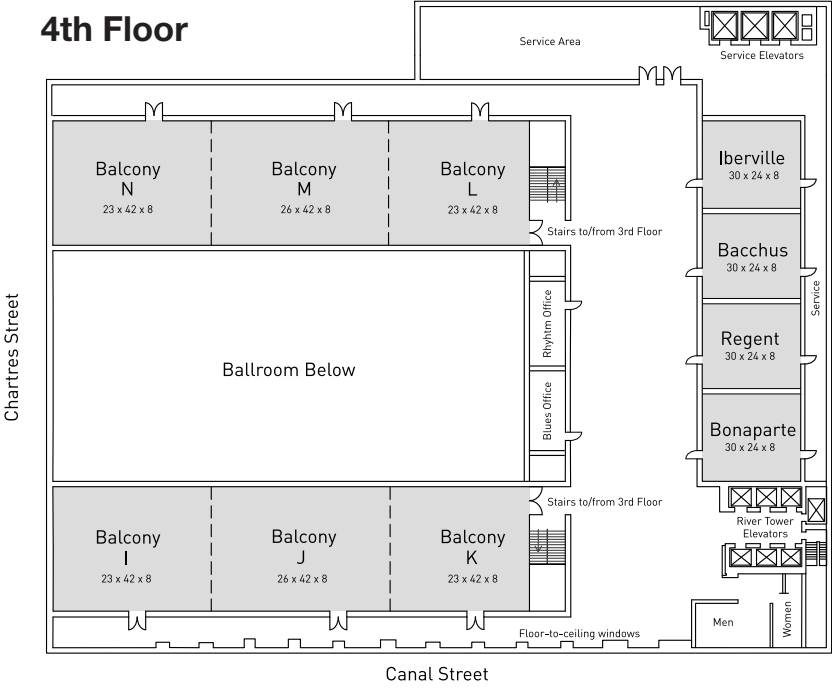
11:00-2:00 PM	Target BP Advisory Committee Meeting	Bonaparte
Noon-1:30 PM	Lunch on Own	
Noon-1:30 PM	CHAMP Luncheon	Riverview 1
1:30-3:00 PM	Poster Session II	Preservation Hall
1:30-3:00 PM	Session 10: Primary Care Track: 2019 AHA Scientific Statement: Measurement of Blood Pressure in Humans	Galerie 1 and 2
3:00-3:30 PM	Refreshment Break & Exhibits	Preservation Hall
3:30-4:00 PM	Session 11: Arthur C. Corcoran Memorial Lecture	Acadia
4:00-5:30 PM	Session 11 Concurrent A: Chemoreceptor and Autonomic Mechanisms	Galerie 3
4:00-5:30 PM	Session 11 Concurrent B: Cerebrovascular Disease and Stroke	Galerie 4 and 5
4:00-5:30 PM	Session 11 Concurrent C: Hypertension Early Career Oral Awards	Galerie 6
3:30-5:30 PM	Session 11: Concurrent D: Primary Care Track: Blood Pressure Management in Women	Galerie 1 and 2
5:30-6:45 PM	Session 12: Awards Session	Acadia
6:00-9:00 PM	Hypertension Editorial Board Meeting, Reception and Dinner	Riverview 1
7:00-11:00 PM	Trainee Advocacy Mixer	Riverview 2
Saturday		
Time	Event	Room
7:00 AM-7:00 PM	Registration	Preservation Hall
6:30 AM-6:30 PM	Speaker Resource Room	Regent
7:00-7:30 AM	Refreshment Break and Exhibits	Preservation Hall
9:00 AM-1:00 PM	Poster Session III Set-up	Preservation Hall
7:30-9:00 AM	Session 13 Concurrent A: Nutrition, Salt and Hypertension	Galerie 3
7:30-9:00 AM	Session 13 Concurrent B: Vascular Biology and Function	Galerie 4 and 5
7:30-9:00 AM	Session 13 Concurrent C: Gender Differences and Sex Hormones	Galerie 6
9:00-9:30 AM	Session 13: Donald Seldin Award Lecture	Acadia
7:30-8:30 AM	Session 13: Concurrent D Part 1: Primary Care Track: Atrial Fibrillation and Diabetic Hypertension in a Primary Care Setting	Galerie 1 and 2
8:30-9:30 AM	Session 13: Concurrent D Part 2: Primary Care Track: Diabetes and Hypertension	Galerie 1 and 2
9:30-10:00 AM	Refreshment Break and Exhibits	Preservation Hall
10:00-10:30 AM	Session 14: Harriet Dustan Award Lecture	Acadia
10:30 AM-Noon	Session 14 Concurrent A: Renal Transport Mechanisms	Galerie 3
10:30 AM-Noon	Session 14 Concurrent B: Regulation of Blood Pressure by the Central Nervous System	Galerie 4 and 5
10:30 AM-Noon	Session 14 Concurrent C: Cardiac Hypertrophy and Dysfunction in Hypertension	Galerie 6
10:00 AM-Noon	Session 14: Concurrent D: Primary Care Track: The Evolving Landscape of Blood Pressure Guidelines	Galerie 1 and 2
Noon-1:30 PM	Lunch on Own	
12:30-1:30 PM	Target BP Connections	Riverview 1
1:30-3:00 PM	Poster Session III	Preservation Hall
1:30-3:00 PM	Session 15: Concurrent D: Clinical Practice Clinical Science Track: Hypertension Control Strategies in the Populations of the Pacific Rim: A Focus on the Effective Clinical Implementation: A Joint Session of AHA and World Hypertension League	Galerie 1 and 2
3:00-3:30 PM	Refreshment Break and Exhibits	Preservation Hall
3:00-3:30 PM	Awards Photo Session	Bacchus
3:30-5:30 PM	Session 16 Concurrent A: Renin Angiotensin System	Galerie 3
3:30-5:30 PM	Session 16 Concurrent B: Clinical Hypertension and Target Organ Damage	Galerie 4 and 5
3:30-5:30 PM	Session 16 Concurrent C: Mechanisms in Diabetes and Obesity	Galerie 6

Room Locator (continued)

3:30-5:00 PM	Session 16: Concurrent D: Clinical Practice Clinical Science Track: Hypertension Journal CPC Case Study Session	Galerie 1 and 2
5:45-6:30 PM	Session 17: The Excellence Award for Hypertension Research Lecture	Acadia
7:00-7:30 PM	VIP Reception (invitation only)	Napoleon
7:00-7:30 PM	Annual Hypertension Scientific Sessions Awards Social Hour (ticketed event)	Acadia – Foyer
7:30-10:30 PM	Annual Hypertension Scientific Sessions Awards Banquet (ticketed event)	Acadia
Sunday		
Time	Event	Room
7:00-11:30 AM	Registration	Preservation Hall
6:30-11:30 AM	Speaker Resource Room	Regent
7:00-8:00 AM	Refreshment Break	Preservation Hall
7:30-9:00 AM	Session 18 Concurrent A: Vascular Stiffness and Fibrosis	Galerie 3
7:30-9:00 AM	Session 18 Concurrent B: Inflammation and Immune Mechanisms	Galerie 4 and 5
7:30-9:00 AM	Session 18 Concurrent C: Mechanisms in Chronic Kidney Disease and Fibrosis	Galerie 6
9:00-9:30 AM	Session 18: The Lewis K. Dahl Memorial Lecture	Acadia
7:30-9:30 AM	Session 18: Concurrent D: Clinical Practice Clinical Science Track: Blood Pressure Controversies: The Central Nervous System and the Older Patient	Galerie 1 and 2
9:30-10:00 AM	Refreshment Break	Preservation Hall
10:00-11:30 AM	Session 19 Concurrent A: Role of the CNS in Obesity	Galerie 3
10:00-11:30 AM	Session 19 Concurrent B: Renal Hemodynamics Mechanisms	Galerie 4 and 5
10:00-11:30 AM	Session 19 Concurrent C: Preeclampsia and Developmental Programming	Galerie 6
10:00-11:30 AM	Session 19: Concurrent D: Clinical Practice Clinical Science Track: Treatment of Cardiorenal Syndrome	Galerie 1 and 2







Program Information

Conference Summary

Hypertension 2019 Scientific Sessions, focusing on recent advances in basic and clinical research on hypertension, is the premier scientific meeting on the subject in the world. A collaborative effort between the AHA Council on Hypertension and the Council on the Kidney in Cardiovascular Disease, the science submitted to this conference continues to feature the most up-to-date developments on our understanding of the causes of hypertension; its relationship to stroke, cardiac disease and kidney dysfunction; and the most effective ways to detect, evaluate and treat high blood pressure across diverse populations.

The agenda includes 19 sessions during 3½ days, with more than 500 presentations focused on recent advances in hypertension research that include oral and poster presentations by clinical and basic researchers as well as the Primary Care and Clinical Practice, Clinical Science tracks for clinicians.

Conference Learning Objectives

After completing this program, participants will be able to:

1. Implement the AHA/ACC guidelines to prevent, detect, evaluate and manage hypertension.
2. Describe opportunities to improve blood pressure measurement in the clinical setting, as well as new research on methods to evaluate white coat and masked hypertension.
3. Identify genetics/epigenetics, microbiome, arterial stiffness, circadian rhythm and central nervous system mechanisms that contribute to the development of hypertension and discuss the research and clinical implications.
4. Identify immune and inflammatory mechanisms that contribute to the development of hypertension and hypertension-related end-organ damage and discuss the research and clinical implications.
5. Discuss weight and medical management, as well as the importance of a multi-disciplinary approach, for the management of comorbid obesity in patients with hypertension.
6. Describe current data supporting pharmacotherapy, as well as device-based interventions in resistant hypertension.
7. Describe strategies to address clinical inertia, improve blood pressure control, while engaging patients in shared decision making, in an era of value-based reimbursement framework.




Hypertension

An American Heart Association Journal

EDITOR-IN-CHIEF
Anna F. Dominiczak, DBE, MD, FRCP, FAHA, FRSE, FMedSci

WEBSITE
hyper.ahajournals.org

MANUSCRIPT SUBMISSION SITE
hype-submit.aha-journals.org

PUBLISHING METRICS
www.ahajournals.org/content/metrics

CLINICAL-PATHOLOGICAL CONFERENCE VIDEOS
hyper.ahajournals.org/content/clinical-pathological-conferences

Sharing practical knowledge through recorded clinical case discussions.

Rapid Publication Online
Open Access Options for Original Research

Serving the international hypertension community through a balance of basic science research and research that may immediately help clinicians manage patient care.

Annual Top Paper Awards

Categories:
Basic, Clinical, and Population Science

High Impact Papers in Hypertension

Collections Are Posted Seasonally: Summer, Fall, Winter, Spring

2017 Clinical Hypertension Guidelines

New Collection Online: Guidelines Conversations

Visit Our Booth and Talk to the Managing Editor To Learn More




Program Information (continued)

Conference Highlights

Opening Session and Lecture

Acadia

Please join us at 7:50 AM Thursday for the Welcome and Opening Remarks, featuring Curt Sigmund, PhD, FAHA, Chair, Hypertension Planning Committee; and Karen Griffin, MD, FAHA, Chair, Council on Hypertension.

Immediately following the Opening Remarks at 8:00 AM, Sir Mark Caulfield, FMedSci, FAHA, and Mingyu Liang, PhD, FAHA, will present this year's keynote lectures.

Poster Session Featuring Trainees

All poster sessions will be held in Preservation Hall.

5:30-7:30 PM Thursday*

1:30-3:00 PM Friday

1:30-3:00 PM Saturday

***The On-site Trainee Poster Competition** will be held during Poster Session I at 5:30-7:30 PM Thursday. This session highlights presentations by trainees and features an on-site poster competition. Awards are sponsored by the Council on Hypertension Trainee Advocacy Committee. Be sure to join us and engage conference poster presenters on their innovative research. A reception will be held during this session. *No additional fee for this event.*

Awards Session

Acadia

5:30-6:45 PM Friday

This special session will feature several presentations, including the Mid-Career Award for Research Excellence; Harry Goldblatt Award for New Investigators; British and Irish Hypertension Society Young Investigator Award; High Blood Pressure Research Council of Australia Student Oral Award; and Stephanie Watts Career Development Award Finalist Competition.

See pages 16 for a listing of all awardees and join us for this special session.

Hypertension Journal CPC Case Study Session

Galerie 1 and 2

3:30-5:00 PM Saturday

This filmed audience participatory session, sponsored by *Hypertension*, an American Heart Association journal representing the Council on Hypertension and the Council on the Kidney in Cardiovascular Disease, will highlight two clinical cases presented by clinicians and discussed with experts from Hypertension's editorial board. Audience members significantly contributing to the discussion may be included as contributing authors for the accompanying article in *Hypertension*.

Annual Hypertension Scientific Sessions Awards Banquet

Acadia

7:30-10:30 PM Saturday

Join us in honoring our 2019 awardees, including the recipient of the Excellence Award for Hypertension Research, Rhian M. Touyz, MBBCh, PhD, FMedSci, FAHA; Irvine Page and Alva Bradley Lifetime Achievement Awardee, George L. Bakris, MD, MA, FASN, FAHA; Marvin Moser Clinical Hypertension Awardee, Jan N. Basile, MD, FACP, FAHA; and the Stephanie Watts Career Development Finalists. Details on the 2019 award winners can be found on page 16.

Members and non-members are welcome. This is a ticketed event. If you didn't pre-register for this event, please visit the conference registration desk to see if tickets are still available.

Clinical Practice Clinical Science Track: Hypertension Control Strategies in the Populations of the Pacific Rim: A Focus on the Effective Clinical Implementation: A Joint Session of AHA and World Hypertension League

Galerie 1 and 2

Join us at 1:30 PM Saturday as we honor Dr. Jeffrey A. Cutler, MD, FAHA, the **2019 WHL Claude Lenfant Excellence Award in Population Hypertension Control** recipient.

Program Information (continued)

Trainee/Early Career Focused Events

We are pleased to offer numerous events for early-career attendees:

- Noon-1:30 pm Friday

Riverview 1

The **CHAMP (Council on Hypertension Advisory and Mentoring Program)** networking lunch and panel discussion, **“How to choose a mentor/mentee at the graduate student, postdoc and early career level.”** This year’s CHAMP Panel members are: Jane F. Reckelhoff; David Mattson; Amy Arnold and Sarah Lindsey.

(Open only to CHAMP participants by invitation only. For information on CHAMP, please visit the TAC Booth)

- 5:30-7:30 pm Thursday

Preservation Hall

Poster Session I features the trainee on-site poster competition and reception.

There is no fee for this event.

- 4:00-5:30 pm Friday

Galerie 6

The **Hypertension Early Career Oral Award Session** features the best of the best top trainee oral abstract presentations. The winner will receive the Hypertension Early Career Award and will be invited to travel to the British and Irish Society of Hypertension’s Annual Scientific Meeting. The HTN Trainee Advocacy Committee would like to thank the International Society of Hypertension New Investigator Committee, DSI, *Hypertension*, an AHA Journal, the British and Irish Society of Hypertension, and the Council on the Kidney in Cardiovascular Disease for their support of this award.

- 7:00-11:00 PM Friday

Riverview 2

Trainee Advocacy Mixer. This popular annual event is co-sponsored by the Trainee Advocacy Committee of the Council on Hypertension, the Council on the Kidney in Cardiovascular Disease, DSI and the International Society of Hypertension New Investigator Committee. Open to all attendees, we encourage early career and trainees/students to come and enjoy music, fun and networking.

(Attendance is limited, first come, first served).

Exhibits

Exhibits are located in *Preservation Hall* beginning at 7:00 AM Thursday. Please take a moment to visit our exhibitors and be sure to pick up an exhibitor guide at the registration desk. Refreshments will also be available in *Preservation Hall* in the morning and during breaks.

Exhibitor Hours:

- 7:00 AM–3:30 PM Thursday
- 7:00 AM–3:30 PM Friday
- 7:00 AM–3:30 PM Saturday

Program Information (continued)

The Council on Hypertension is pleased to present . . .

The Excellence Award for Hypertension Research

Saturday, September 7, 2019



**Molecular Mechanisms
and Vascular Biology of
Hypertension**

**Rhian M. Touyz,
MBBCh, PhD, FMedSci, FAHA**

Director, Institute of Cardiovascular and
Medical Sciences, British Heart Foundation
Glasgow Cardiovascular Research Centre,
University of Glasgow, Glasgow, Scotland

Lecture

5:45 PM

Acadia

Social

7:00 PM

Acadia – Foyer

(Dinner ticket required for entrance)

Annual Hypertension Scientific Sessions Awards Banquet

7:30 PM

Acadia

(Dinner ticket required for entrance)

Program Information (continued)

Conference Awards



Irvine Page & Alva Bradley Lifetime Achievement Award

George L. Bakris, MD, MA, FASN, FAHA,

Professor of Medicine, Director, AHA Comprehensive Hypertension Center, University of Chicago Medicine, Chicago, Illinois

The Lifetime Achievement Award is named in honor of Dr. Irvine Page and Mr. Alva Bradley, who played prominent roles in establishing the National Foundation for High Blood Pressure Research in 1945. The foundation became the Council on Hypertension of the American Heart Association.

The Page-Bradley Award is presented each year to an individual who has had a lifetime of outstanding achievements in the field of hypertension and has served as a role model through service, research and teaching. Recipients have generally had a career spanning at least 25 years.

Please join us for the presentation during the Awards Banquet at 7:30 PM Saturday in *Acadia*.



The Marvin Moser Clinical Hypertension Award

Jan N. Basile, MD, FACP, FAHA,

Professor of Medicine, Seinsheimer Cardiovascular Health Program, Medical University of South Carolina, Ralph H. Johnson VA Medical Center, Vice-Chair of Clinical Affairs AHA Council on Hypertension, Charleston, South Carolina

The Marvin Moser Clinical Hypertension Award honors the memory of Dr. Marvin Moser, one of the leading figures in the field of hypertension, and the inaugural editor-in-chief of *The Journal of Clinical Hypertension*. After completing his cardiology fellowship at Mount Sinai Hospital in New York, Dr. Moser served as the chief of vascular disease and hypertension at the Walter Reed Army Medical Center in Washington, D.C. In the 1950's, when hypertension was only recognized in its most malignant form and debilitating procedures were the mainstay of treatment given the lack of antihypertensive medications, Dr. Moser was one of the first to suggest that hypertension had far greater prognostic importance than just its immediate effects on major life-threatening events. He was a pioneer in the exploration of drug therapy for reducing blood pressure, thus making the treatment of hypertension possible. Dr. Moser concluded his career as a clinical professor of medicine at the Yale School of Medicine.

The Marvin Moser Clinical Hypertension Award recognizes a qualified mid-career or senior hypertension clinician for their dedication to the treatment and care of hypertensive patients.

Please join us for this presentation during the Awards Banquet at 7:30 PM Saturday in *Acadia*.



Arthur C. Corcoran Memorial Lecture

Patrick J. Pagano, PhD, FAHA, Professor in the Department of Pharmacology & Chemical Biology and PI of the Vascular Medicine Institute, University of Pittsburgh, Pittsburgh, Pennsylvania

The Arthur C. Corcoran Memorial Lecture was established in 1977 to honor Dr. Arthur C. Corcoran for his early application of clearance methods in both hypertensive patients and animals.

Dr. Pagano will present his lecture at 3:30 PM Friday in *Acadia*.



The Lewis K. Dahl Memorial Lecture

John D. Imig, PhD, FAHA, Professor of Pharmacology and Toxicology, Director, Drug Discovery Center, Medical College of Wisconsin, Milwaukee, Wisconsin

The Lewis K. Dahl Memorial Lecture was established in 1988 by the Council for Hypertension in honor of Dr. Dahl's pioneering work on the relations between salt, the kidney and hypertension, and the establishment of a major genetically based experimental model of hypertension, the Dahl salt-sensitive rat.

Dr. Imig will present the lecture at 9:00 AM Sunday in *Acadia*.

Program Information (continued)



The Harriet Dustan Award

Bina Joe, PhD, FAHA, FAPS, Distinguished University Professor and Chair, Department of Physiology and Pharmacology, University of Toledo College of Medicine, Toledo, Ohio

The Harriet Dustan Award recognizes female investigators who have made outstanding contributions in the field of hypertension. This award honors the memory of Dr. Harriet Dustan, an outstanding clinician and investigator who was a tireless worker on behalf of the Council on Hypertension and the American Heart Association for more than 50 years. In addition to her numerous career achievements, Dr. Dustan served the AHA as president, chaired its Ethics and Research committees and was the founding editor-in-chief of *Hypertension*.

Dr. Joe will present the lecture at 10:00 AM Saturday in *Acadia*.



The Donald Seldin Lecture

Allen W. Cowley, Jr., PhD, FAHA, Professor of Physiology, Medical College of Wisconsin, Milwaukee, Wisconsin

The Donald Seldin Lecture honors Dr. Donald Seldin, a pioneer and leader in the field of cardiovascular disease as it relates to kidney failure. This lecture continues to raise the awareness about the rising epidemic of cardiovascular disease and mortality in patients with chronic kidney disease.

Dr. Cowley will present the lecture at 9:00 AM Saturday in *Acadia*.



Mid-Career Award for Research Excellence

Daniela Carnevale, PhD, FAHA, Associate Professor, Department of Molecular Medicine, La Sapienza at IRCCS Neuromed, University of Rome, Pozzilli, Italy

The award recognizes a mid-career investigator active in hypertension or cardiovascular research. This year's winner, **Daniela Carnevale, PhD, FAHA**, was selected for her major contributions to the field of hypertension. She will present at 5:30 PM Friday during the Awards Session in *Acadia*.



The Harry Goldblatt New Investigator Award

Francine Marques, PhD, Senior Lecturer, Head, Hypertension Research Laboratory, Monash University School of Biological Sciences, Melbourne, Australia

The award recognizes a new independent investigator working in hypertension or cardiovascular research who has significantly contributed to the understanding of the causes of hypertension and related cardiovascular disease.

The award is named after Dr. Harry Goldblatt, a pathologist who established the first animal model of hypertension in 1934. This model provided researchers with the tools to delineate the renin-angiotensin system of blood pressure control and, eventually, to design enzyme inhibitors to treat chronic hypertension.

Dr. Marques will present at 5:45 PM Friday during the Awards Session in *Acadia*.

Program Information (continued)



The Stephanie Watts Career Development Award Finalists

The award supports early career investigators working in hypertension and cardiovascular research who show exceptional promise but may be currently unfunded or have limited access to extramural funding. The award honors the advocacy work of Dr. Stephanie Watts, an active member of the Council on Hypertension, who has always advocated for the needs of the many trainees associated with the council. Dr. Watts' efforts led to the creation of the Trainee Advocacy Committee, which she chaired from 2005 to 2007. As a founding member of the TAC, she contributed to the planning of the Hypertension Summer School, another important Council on Hypertension initiative that helped many trainees to become highly skilled hypertension researchers.

This year's finalists will present beginning at 6:30 PM Friday during the Awards Session in *Acadia*:



Jin Kwon Jeong, PhD, George Washington University, Washington, D.C., will present his pitch, "Involvement of Subfornical Organ Insulin Receptor Signaling in the Development of Angiotensin-II Hypertension" at 6:30 PM.



Lorena M. Amaral, PharmD, PhD, The University of Mississippi Medical Center, Jackson, Mississippi, will present her pitch, "Inhibition of Progesterone Induced Blocking Factor Causes Clinical Characteristics of Preeclampsia in Sprague Dawley Rats" at 6:35 PM.

Thiago Bruder do Nascimento, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania, will present his pitch "Leptin Restores Endothelial Function, Diminishes Vascular Adrenergic Contractility, but Does Not Alter Arterial Stiffness and Blood Pressure, in a Mouse Model of Congenital Generalized Lipodystrophy" at 6:40 PM.

British and Irish Hypertension Society Young Investigator Award and the High Blood Pressure Research Council of Australia Award

Part of an exchange program between societies/associations, these awards are for early career investigators to encourage them to present their research at the conference.



British and Irish Hypertension Society Young Investigator Award

Dr. Clare Oliver-Williams, Cambridge University, Cambridge United Kingdom, will present her abstract "Association Between Hypertensive Disorders of Pregnancy and Later Risk of Cardiovascular Outcomes" at 6:00 PM Friday in *Acadia*.



High Blood Pressure Research Council of Australia Award

Tara Elizabeth Scott, BSc (Hons), Department of Pharmacology, Biomedicine Discovery Institute, Monash University, Clayton, Victoria, Australia will present her abstract "Targeting The NLRP3 Inflammasome for the Treatment of Pulmonary Hypertension" at 6:15 PM Friday in *Acadia*.

Abstract Awards

Council on Hypertension New Investigator Travel Award

Sponsored by the Council on Hypertension

Name	Abstract/Presentation Number	Day/Time
Maia Aisicovich	91	11:00 AM Saturday
Livia Camargo	68	8:15 AM Saturday
Hannah Cooper	118	7:45 AM Saturday
Maria Jones-Muhammad	14	1:45 PM Thursday
Cameron McCarthy	66	7:45 AM Saturday
Hannah Morris	P145	5:30 PM Thursday
Rugina Neuman	147	10:00 AM Sunday
Yuan Sun	97	4:00 PM Saturday
Olivia Travis	17	2:30 PM Thursday
Tao Yang	15	2:00 PM Thursday

Program Information

New Investigator Travel Award

Sponsored by the Council on Hypertension Trainee Advocacy Committee

Name	Abstract/Presentation Number	Day/Time
Stephanie Cicalese	P116	5:30 PM Thursday
Sharon de Morais	42	4:15 PM Friday
Shaunak Roy	122	8:45 AM Sunday
Caleb Worker	140	11:15 AM Sunday

Kidney Council New Investigator Award

Sponsored by the Council on Kidney in Cardiovascular Disease

Name	Abstract/Presentation Number	Day/Time
Mark Cunningham	P1110	5:30 PM Thursday
Andrew Eaton	79	11:00 AM Saturday
Fan Fan	130	7:45 AM Sunday
Jorge Gamboa	107	4:30 PM Saturday
Supaporn Kulthinee	142	10:15 AM Sunday
Yong Liu	40	5:15 PM Thursday
Francisco Rios	11	2:30 PM Thursday
Bruna Visniauskas	73	8:00 AM Saturday
Yan Wang	101	5:00 PM Saturday
Chuanming Xu	96	3:45 PM Saturday

Hypertension Early Career Oral Award Session (*Hypertension Early Career Award Competition*)

Sponsored by the Trainee Advocacy Committee of the Council on Hypertension, the British and Irish Hypertension Society, the Hypertension Journal and the International Society of Hypertension's New Investigator Committee.

Name	Abstract/Presentation Number	Day/Time
Karen C. Clark	053	4:15 PM Friday
Jin Wei	054	4:30 PM Friday
Franco J. Puleo	055	4:45 PM Friday
Michael Z. Grzeskowiak	056	5:00 PM Friday
Farah Ammous	057	5:15 PM Friday
Giacomo Rossitto	058	5:30 PM Friday

AFHRE Travel Award for Patient-Oriented or Clinical Research in Hypertension

Supported by the American Foundation for Hypertension Research and Education

The Council on Hypertension supports the research efforts of its early career investigators engaged in clinical or patient-oriented research. This award encourages physician scientists and other investigators (PharmD, PhD, DO, etc.) to undertake or continue mechanistic patient-oriented or clinical hypertension research and to participate in the conference. The Council on Hypertension thanks the American Foundation for Hypertension Research and Education for their support of this award.

Name	Abstract/Presentation Number	Day/Time
Svetlana Glova	P137	5:30 PM Thursday
Stephen Juraschek	47	4:00 PM Friday
Keem Patel	P3050	1:30 PM Saturday
Shumin Rui	4	2:15 PM Thursday
Alexander Myint Swan	P117	5:30 PM Thursday

Clinical Science Investigator Award for Excellence in Translational or Clinical Hypertension Research

Supported by the journal, Clinical Science (www.clinsci.org)

This award recognizes an outstanding abstract submitted in the area of translational or clinical hypertension research.

Badhma Valaiyapathi, MBBS, MPH, University of Alabama at Birmingham, Birmingham, Alabama presents her abstract, "Amplification of Systolic Blood Pressure and Pulse Pressure is Higher in Resistant Hypertensive Patients Irrespective of Blood Pressure Control," at 3:45 PM Saturday in *Galerie 4 and 5*.

Program Information

New Investigator Award for Japanese Fellows

The Council on Hypertension supports the efforts of its early career members as well as those located internationally. The New Investigator Award for Japanese Fellows will be presented to new investigators from Japan who will present their abstracts. The competition encourages new investigator from Japan to undertake or continue hypertension research.

Satoshi Shimada, MD, PhD, Department of Physiology, Medical College of Wisconsin

Daisuke Yamazaki, MD, Department of Pharmacology, Faculty of Medicine, Kagawa University

Tomohisa Yamashita, MD, PhD, Department of General Surgery, Wake Forest University School of Medicine

American Heart Association Awards 2019

Congratulations 2019 Distinguished Scientists:



Costantino
Iadecola, MD,
Weill Cornell
Medicine, New
York, New York



Suzanne Oparil,
MD, FAHA,
University of
Alabama at
Birmingham,
Birmingham,
Alabama



Paul Whelton,
MB, MD, MSc,
Tulane University,
New Orleans,
Louisiana

Congratulations 2019 Louis B. Russell, Jr., Memorial Award:



Brent M. Egan, MD, FAHA, American Medical Association, Charleston, South Carolina

General Information

Registration

Conference registration is located in *Preservation Hall* at the Marriott New Orleans. Pre-registered attendees can pick up their conference badge here. Please inquire here if you need a ticket for any of the ticketed events. The Registration Desk opens at 2:00 PM Wednesday and closes at 11:30 AM Sunday.

Speaker Resource Room

The Speaker Resource Room is located in *Regent*. Speakers are asked to deliver their presentations on a USB drive to the Speaker Resource Room at least 12 hours before the beginning of the session in which they will speak. Those speaking on Thursday can visit the speaker ready room 2:00-7:00 PM Wednesday. This will allow you time to prepare, rehearse and finalize your presentation before submitting it. Speakers may review and revise their presentations before submission. ***It is imperative that you review your presentation in the Speaker Resource Room if it contains video files or if it was created on a Macintosh computer.*** Staff will be available to assist with technical issues. The Speaker Resource Room will be open:

2:00-7:00 PM	Wednesday
6:30 AM-5:30 PM	Thursday
7:00 AM-7:00 PM	Friday
6:30 AM-6:30 PM	Saturday
6:30-11:30 AM	Sunday

Abstract Information

Abstract presentations 001-152 will be presented as oral presentations throughout the conference. ***Please note that orals with a box around them denotes a clinical oral presentation.***

Abstracts P100-P199 and P1100-P1127 will be presented at the annual Trainee On-Site Poster Competition at 5:30-7:30 PM Thursday.

Abstracts P2001-P2074; P3001-P3063 will be presented as poster presentations during Poster Session II and Poster Session III.

Details on Poster Session I, II, and III can be found on page 42-43.

Policy Information

ePosters

ePosters and QR Codes with Audio/Video

We are excited to offer ePosters at Hypertension 2019 Scientific Sessions. Poster presenters were asked to upload an ePoster (electronic version of their poster) and record narration or add a video file. The QR code on the poster board allows attendees to view the ePoster and abstract through their smartphone, as well as listen to any recorded narration or videos the presenter may have provided. ePosters and abstracts can be viewed online at <https://htn.apprisor.org>.

Continuing Medical Education Accreditation

Please visit the Registration Desk for information on Continuing Medical Education Accreditation.

Policy Information

Disclaimer

The Hypertension 2019 Scientific Sessions is a scientific and educational conference for exchanging and discussing research results and scientific developments in the field of cardiovascular outcomes research. Accordingly, the American Heart Association cannot offer any assurance or warranty of the accuracy, truthfulness or originality of the information presented at the conference.

AHA Harassment Policy

The AHA requires that all attendees, exhibitors, presenters, contractors, vendor and volunteers of the AHA meeting comply with all federal, state and local laws and regulations, including those that prohibit harassment and discrimination against individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin.

Embargo Guidelines

Abstracts, lectures and presentations in HTN 2019 are embargoed for release at the time of presentation. Information may not be released before the scheduled presentation time.

Photography/Recording Policy

Unauthorized recording of the AHA Scientific Sessions, scientific conferences and the ASA International Stroke Conference is prohibited, whether by video, still or digital photography, audio or any other recording or reproduction mechanism. This includes recording of presentations and supporting audio-visual materials, poster presentations and supporting poster materials.

The American Heart Association and American Stroke Association reserve the rights to all recordings or reproductions of presentations at AHA/ASA scientific conferences and meetings. Check the program for information about the availability of videotapes or audiotapes for purchase. Exceptions to this policy prohibition are:

1. Non-flash photography of the speaker and his/her presentation materials is permitted by attendees or AHA/ASA accredited reports upon the prior written consent of the AHA/ASA and the speaker.
2. Audiotape recording for strictly personal and non-commercial use is permitted if not disruptive; and exhibitors may photograph their booth for promotional purposes upon prior written consent of the AHA/ASA.

Conference Photography

Please be aware that during Hypertension 2019, attendees, vendors and guests may be photographed and videotaped by AHA vendors. Some of these images may be displayed in publications or materials connected with the event. If you don't want your image to be displayed by the AHA, please contact the AHA in writing at 7272 Greenville Avenue, Dallas, TX 75231, Attention: Manager, Scientific Conferences, Hypertension Scientific Sessions, no later than Sept. 30, 2019.

No-Smoking Policy

The AHA policy prohibits smoking in all conference meeting rooms and exhibits/registration areas. Thank you for your cooperation.

Seating/Badge Requirement

Seating is on a first-come, first-serve basis. According to fire code, a session must be closed if the room fills to capacity. You must wear your name badge at all times during the conference. Nonregistered guests may not be permitted into the sessions or food and beverage events. Be sure to remove your badge when you leave the conference or your hotel room.

The American Heart Association reserves the right to revoke or deny attendance to any registered participant, speaker, exhibitor, news media reporter, or photographer of presentations or activities at AHA/ASA scientific conferences and meetings.

Program Agenda

THURSDAY, SEPTEMBER 5

7:00 AM

Registration, Exhibits and Refreshments

Preservation Hall

7:50–8:00 AM

Session 1.1

Welcome and Opening Remarks

Acadia

7:50 **Opening Remarks**

Curt Sigmund, PhD, FAHA, Chair,
Fall Specialty Conference Planning Committee

7:55 **Welcome**

Karen Griffin, MD, FAHA, Chair,
Council on Hypertension

8:00–9:00 AM

Session 1.2

**Recent Advances in Hypertension:
Keynote Lectures**

Acadia

Chairs:

Karen Griffin, MD, FAHA, Hines VA Hospital,
Hines, Illinois
Professor Dame Anna F. Dominiczak, MD, FAHA,
University of Glasgow, Glasgow, Scotland

8:00 **Blood Pressure Genomewide Studies
at One Million**

Professor Mark Caulfield, MD, FRCP, FESC, FBHS,
FMedSci, Genomics England & QMUL, London,
United Kingdom

8:30 **Light in the Dark Genome for Hypertension
Research**

Mingyu Liang, PhD, FAHA, Medical College of
Wisconsin, Milwaukee, Wisconsin

9:00–10:00 AM

Session 2

Recent Advances: Debates

Acadia

Chairs:

Jan N. Basile, MD, FAHA, Medical University of
South Carolina, Charleston, South Carolina
Anthony Viera, MD, MPH, FAHA, Duke University,
Durham, North Carolina

9:00 **Debate 1 (AMBULATORY): For Out-of-Office
Blood Pressure Monitoring, is Ambulatory
Blood Pressure Monitoring or Home (Self) Blood
Pressure Monitoring the Best Approach?**

Raymond Townsend, MD, Pennsylvania School of
Medicine, Philadelphia, Pennsylvania

9:10 **Debate 1 (HOME): For Out-of-Office Blood
Pressure Monitoring, is Ambulatory Blood
Pressure Monitoring or Home (Self) Blood
Pressure Monitoring the Best Approach?**

Michael K. Rakotz, MD, FAHA, FAAFP, American
Medical Association, Chicago, Illinois

9:20 **Debate 1: Q&A**

9:30 **Debate 2 (AUTOMATED): Should Automated
Office Blood Pressure (AOBP) Measurement
or an Auscultatory Measurement be the Primary
Approach for the Screening of Hypertension in
the Clinic?**

Martin Myers, MD, FRCPC, Sunnybrook Health
Sciences Center, Toronto, Ontario, Canada

9:40 **Debate 2 (AUSCULTATORY): Should Automated
Office Blood Pressure (AOBP) Measurement or
an Auscultatory Measurement be the Primary
Approach for the Screening of Hypertension in
the Clinic?**

Paul K. Whelton, MD, MSc, Tulane University, New
Orleans, Louisiana

9:50 **Debate 2: Q&A**

10:00–10:30 AM

Refreshment Break and Exhibits

Preservation Hall

10:30–11:10 AM

Session 3

**Recent Advances: Relationship Between
Metabolism and Blood Pressure**

Acadia

Chairs:

Kamal Rahmouni, PhD, FAHA, University of Iowa,
Iowa City, Iowa
James Sowers, MD, University of Missouri,
Columbia, Missouri

10:30 **Intersection of Metabolic and Blood Pressure
Regulatory Circuits in the CNS**

Justin L. Grobe, PhD, FAHA, Medical College of
Wisconsin, Milwaukee, WI

10:50 **Adiposity, Metabolism and Hypertension**

Vidya Kidambi, MD, Medical College of Wisconsin
Milwaukee, Wisconsin

11:10 AM–Noon

Session 4

Recent Advances:

Arterial Stiffness – Clinical Research to Mechanisms

Acadia

Chairs:

George L. Bakris, MD, MA, FASN, FAHA,
University of Chicago Medicine, Chicago, Illinois
Gary Pierce, PhD, FAHA, University of Iowa,
Iowa City, Iowa

THURSDAY

Program Agenda (continued)

THURSDAY

11:10 **Arterial Stiffness in Aging: Does it Have a Place in Clinical Practice?**

Gary Mitchell, MD, Cardiovascular Engineering, Inc., Norwood, Massachusetts

11:35 **The Role of the Cytoskeleton in Vascular Aging**

Kathleen Morgan, PhD, Boston University, Boston, Massachusetts

Noon–1:30 PM

Lunch on your own

1:30–3:00 PM

Session 5 Concurrent A

Epidemiology of Hypertension and Atherosclerosis

Galerie 3

Chairs:

Daniel T. Lackland, DrPH, FAHA, Medical University of South Carolina, Mt Pleasant, South Carolina
Christian Delles, MD, FAHA, University of Glasgow, Glasgow, Scotland

Oral Abstract Presentations

1:30 **Hypertension Control to Systolic Blood Pressure <140 and <130. Implications for Hypertension Guidelines and Performance Metrics Based on Sprint Pop Data** 1

Brent M Egan, Susan E. Sutherland, Care Coordination Inst, Greenville, SC

1:45 **Racial Disparities in Hypertension Among Young, Black and White Women, 1999-2014 National Health and Nutrition Examination Surveys** 2

Anika L Hines, Virginia Commonwealth Sch of Med, Richmond, VA; Roland J Thorpe Jr., Johns Hopkins Bloomberg Sch of Public Health, Baltimore, MD

2:00 **Early and Late Post-Kidney Transplant Hypertension and Late Renal Allograft Outcome** 3

Ekamol Tantisattamo, Div of Nephrology, Hypertension and Kidney Transplantation, Dept of Med, Univ of California Irvine Sch of Med, Orange, CA; Possawat Vutthikraivit, Phramongkutklao Coll of Med, Mahidol Univ, Bangkok, Thailand; Natnicha Leelaviwat, Faculty of Med, Ramathibodi Hosp, Mahidol Univ, Bangkok, Thailand; Siroj Dejansathit, Phramongkutklao Coll of Med, Mahidol Univ, Bangkok, Thailand

2:15 **Antihypertensive Treatment Stops Cognition Decline in Elderly Chinese With Hypertension** 4

Shumin Rui, Chihua Li, L H Lumey, Columbia Univ, New York, NY

2:30 **Intensity of Hypertensive Exposure in Young Adulthood and Subclinical Atherosclerosis in Middle Age** 5

Zhenyu Xiong, Sun Yat-Sen Univ, Guangzhou, China; Jiaying Li, Nanfang Hosp of Southern Medical Univ, Guangzhou, China; Xiaodong Zhuang, Xinxue Liao, Sun Yat-Sen Univ, Guangzhou, China

2:45 **Blood Pressure Categories and Newly Progression of Carotid Artery Plaques in a Prospective Cohort Study: The Suita Study** 6

Yoshihiro Kokubo, Makoto Watanabe, Aya Higashiyama, Yoshihiro Miyamoto, Natl Cerebral and Cardiovasc Ctr, Suita, Osaka, Japan

1:30–3:00 PM

Session 5 Concurrent B

Mechanisms Involving Aldosterone and Mineralocorticoid Receptors

Galerie 4 and 5

Chairs:

James M. Luther, MD, FAHA, Vanderbilt University Medical Center, Nashville, Tennessee
Augusto C. Montezano, PhD, FAHA, University of Glasgow, Glasgow, Scotland

Oral Abstract Presentations

1:30 **Endothelial Mineralocorticoid Receptors are Increased by Pregnancy in Mice and Mediate Obesity-Associated, Leptin-Induced Endothelial Dysfunction in Pregnancy** 7

Jessica L Faulkner, Simone Kennard, Augusta Univ, Augusta, GA; Iris Z Jaffe, Tufts Univ, Boston, MA; Eric J Belin de Chantemele, Augusta Univ, Augusta, GA

1:45 **Aldosterone Contributes to the Blood Pressure Elevation, Endothelial Dysfunction, and Norepinephrine Sensitivity Caused by Endothelial Human Endothelin-1 Overexpression in Mice** 8

Olga Berillo, Nada Mahjoub, Suellen C Coelho, Ahmad Mahmoud, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Stefan Offermanns, Dept of Pharmacology, Max-Planck-Inst for Heart and Lung Res, Bad Nauheim, Germany; Pierre Paradis, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Ernesto L Schiffrin, Lady Davis Inst for Medical Res, Jewish General Hosp, Montreal, QC, Canada

2:00 **Endothelial Epithelial Sodium Channel Promotes Intrinsic Cardiomyocyte Stiffness and Diastolic Dysfunction in Response to a Diet Induced Obesity in Female Mice** 9

Annayya Aroor, Vincent DeMarco, Guanghong Jia, Javad Habibi, Yang Yan, Camila Manrique, Guido Lastra, Chen Dongqing, Sun Zhe, Michael Hill, Adam Whaley-Connell, Frederic Jaisser, James Sowers, Univ of Missouri, Columbia, MO

Program Agenda (continued)

THURSDAY

- | | |
|--|--|
| <p>2:15 Neutrophil Gelatinase Associated Lipocalin From Immune Cells is Involved in Renal Damages Induced by Mineralocorticoid Excess
Benjamin Bonnard, Ernesto Martínez-Martínez, Mathieu Buonafina, INSERM 1138, Paris, France; Jaime Ibarrola, Amaya Fernández-Celis, Natalia López-Andrés, Univ Pública de Navarra, Pamplona, Spain; Frederic Jaisser, INSERM 1138, Paris, France 10</p> <p>2:30 TRPM7 is Cardiovascular Protective in Aldosterone-Induced Hypertension
Francisco J Rios, ZhiGuo Zou, Katie Y Hood, Adam P Harvey, Karla B Neves, Sarah E Nichol, Livia L Camargo, Augusto C Montezano, Rhian M Touyz, Univ of Glasgow, Glasgow, United Kingdom 11</p> <p>2:45 Regulation of Cardiomyocyte Fibrosis by a Negative Feedback Loop Between Aldosterone-Induced Osteopontin Up-Regulation and beta2-Adrenergic Receptor Signaling
Celina M Pollard, Victoria L Desimine, Shelby L Wertz, Arianna Perez, Barbara M Parker, Nova Southeastern Univ, Fort Lauderdale, FL; Jennifer Maning, Jackson Memorial Hosp, Miami, FL; Katie A McCrink, Massachusetts General Hosp, Boston, MA; Lina A Shehadeh, Univ of Miami, Miami, FL; Anastasios Lymperopoulos, Nova Southeastern Univ, Fort Lauderdale, FL 12</p> | <p>2:00 Maternal High Blood Pressure Control Persistently Alters Gut-Brain Communication and Attenuates Hypertension of Offspring
Tao Yang, Hongbao Li, Elaine Richards, Carl Pepine, Mohan Raizada, Univ of Florida, Gainesville, FL 15</p> <p>2:15 Sex-Specific Effects of Neuropeptide Y2 Receptor (y2) Deletion in Adipose Tissue From Mice Exposed to Early Life Stress
Jacqueline R Leachman, Xiu Xu, Carolina Dalmaso, Univ of Kentucky, Lexington, KY; Bradley K Taylor, Univ of Pittsburgh, Pittsburgh, PA; Analia S Loria, Univ of Kentucky, Lexington, KY 16</p> <p>2:30 Cytolytic Natural Killer Cells Play a Direct Role in Causing Hypertension and Intrauterine Growth Restriction in Pregnant Rats
Olivia K Travis, Cedar H Baik, Carmilya Jackson, Chelsea Giachelli, Jan Micheal Williams, Denise C Cornelius, Univ of Miss Med Ctr, Jackson, MS 17</p> <p>2:45 Female Offspring of Polycystic Ovary Syndrome Rat Model Exhibit Insulin Resistance and Tendency Toward Increased Blood Pressure With Aging
Noha M. Shawky, Ruth M. Vinson, Jane F. Reckelhoff, Dept of Cell and Molecular Biology, Mississippi Ctr of Excellence in Perinatal Res, Women's Health Res Ctr, Univ of Mississippi Medical Ctr, Jackson, MS 18</p> |
|--|--|

1:30–3:00 PM

Session 5 Concurrent C

Hypertension in Pregnancy and Offspring

Galerie 6

Chairs:

Denise C. Cornelius, PhD, School of Medicine, University of Mississippi Medical Center, Jackson, Mississippi
John Henry Dasinger, PhD, Augusta University, Augusta, Georgia

Oral Abstract Presentations

- | | |
|--|--|
| <p>1:30 Racial Disparities in Maternal Hypertension and Pregnancy Outcomes a Population-Based Study
Chintan Bhatt, Anshul Saxena, Muni Rubens, Donna Armaignac, Joseph Salami, Sankalp Das, Emir Veleddar, Baptist Health South Florida, Coral Gables, FL 13</p> <p>1:45 Impact of Placental Ischemia on Hippocampal Asic2a and Glutamate Receptor Protein Expression in Mice
Maria A Jones-Muhammad, Rachael Thompson, Qingmei Shao, Junie P Warrington, Univ Mississippi Medical Ctr, Jackson, MS 14</p> | <p>1:30 Which Diuretic, When and Why?
Allan B. Schwartz, MD, FAHA, Drexel University College of Medicine, Philadelphia, Pennsylvania</p> <p>1:45 ACE-Inhibitors vs. ARBs for Hypertension?
Suzanne Oparil, MD, FACC, FAHA, FASH, FAPS, University of Alabama at Birmingham, Birmingham, Alabama</p> <p>2:00 CCBs: Dihydropyridine vs Non-dihydropyridine
Domenic Sica, MD, Virginia Commonwealth University, Richmond, Virginia</p> <p>2:15 The Role of Beta-Blockers for Hypertension
Keith C. Ferdinand, MD, FAHA, Tulane University, New Orleans, Louisiana</p> <p>2:30 Panel Discussion & Q&A</p> |
|--|--|

Program Agenda (continued)

THURSDAY

3:00–3:30 PM

Refreshment Break and Exhibits

Preservation Hall

3:30–5:30 PM

Session 6 Concurrent A

Neuroimmune Mechanisms in Hypertension

Galerie 3

Chairs:

Giuseppe Lembo, MD, PhD, IRCCS Neuromed and Sapienza University of Rome, Italy

Stephanie W. Watts, PhD, FAHA, Dept of Pharmacology and Toxicology, Michigan State University, East Lansing Michigan

3:30 State of the Art Lecture: Hypertension and the Maladaptive Immune Response

Meena S. Madhur, MD, PhD, FAHA, FACC, Vanderbilt University Medical Center, Nashville, Tennessee

Oral Abstract Presentations

- 4:00 **Gut Microbiome Governs Independent Risks for Hypertension Comorbid With Depression, Hypertension Without Depression, and Depression Without Hypertension in Human Subjects** 19
Bruce R. Stevens, Carl Pepine, Mohan Raizada, Kim Seungbum, Elaine Richards, Univ of Florida, Gainesville, FL

- 4:15 **PLGF VEGFB Neuropilin1 a Neuroimmune Mechanism Necessary for the Initiation of the Adaptive Immune Response Recruited by Angiotensin II to Induce Hypertension and Target Organ Damage** 20
Daniela Carnevale, Sapienza Univ and IRCCS Neuromed, Pozzilli, Italy; Daniele Iodice, IRCCS Neuromed, Pozzilli, Italy; Sara Perrotta, Sapienza Univ, Pozzilli, Italy; Lorenzo Carnevale, Roberta Iacobucci, IRCCS Neuromed, Pozzilli, Italy; Marialuisa Perrotta, Sapienza Univ, Pozzilli, Italy; Fabio Pallante, Giuseppe Cifelli, IRCCS Neuromed, Pozzilli, Italy; Giuseppe Lembo, Sapienza Univ and IRCCS Neuromed, Pozzilli, Italy

- 4:30 **Single Cell Multiplex Mass Cytometry Reveals Differential Abundance of Specific Memory and Regulatory T Cell Populations in Human Hypertension** 21
Matthew R Alexander, Vanderbilt Univ Medical Ctr, Nashville, TN; Bethany L Dale, Vanderbilt Univ Sch of Med, Nashville, TN; Fernando Eljovich, Vanderbilt Univ Medical Ctr, Nashville, TN; Cara E Wogslund, Univ of Bergen, Bergen, Norway; Jonathan M Irish, Vanderbilt Univ Sch of Med, Nashville, TN; Meena S Madhur, Vanderbilt Univ Medical Ctr, Nashville, TN

- 4:45 **Role of Interleukin-17 in the Regulation of Hemodynamics and Renal Sympathetic Nerve Activity in Rats** 22

Yiling Cao, Yang Yu, Ye Wang, Robert B Felder, Shun-Guang Wei, Univ of Iowa Carver Coll of Med, Iowa City, IA

- 5:00 **$\gamma\delta$ T Cells Mediate $\alpha\beta$ T Cell Activation in Angiotensin II-Induced Hypertension** 23
 Antoine Caillon, Pierre Paradis, Ernesto L Schiffrin, McGill Univ, Montreal, QC, Canada

- 5:15 **Melatonin Abolishes Renal Infiltration of T Lymphocytes in a High Salt Diet Induced Hypertension Model** 24
 Ariel Bier, Rawan Khashab, Ehud Grossman, **Avshalom Liebowitz**, Chaim Sheba Medical Ctr, Ramat Gan, Israel

3:30–5:30 PM

Session 6 Concurrent B

Clinical Hypertension

Galerie 4 and 5

Chairs:

John Bisognano, MD, PhD, FAHA, University of Rochester Medical Center, Rochester, New York
 Jordana Cohen, MD, MSCE, University of Pennsylvania, Philadelphia, Pennsylvania

Oral Abstract Presentations

- 3:30 **Potential Implications of Simplified Blood Pressure Measurement Approaches: The Atherosclerosis Risk in Communities Study** 25
 Yifei Lu, Olive Tang, Edger Miller, Johns Hopkins Univ, Baltimore, MD; Gerardo Heiss, Univ of North Carolina, Chapel Hill, MD; Andrew Moran, Columbia Univ, New York, NY; Lawrence J Appel, **Kunihiro Matsushita**, Johns Hopkins Univ, Baltimore, MD

- 3:45 **Attended Versus Unattended Blood Pressure Measurement in Patients With Cardiovascular Disease: Does It Matter?** 26
Matthew Villanueva, Yiqing E Chen, Steven M Smith, Yan Gong, Eileen M Handberg, Carl J Pepine, Ellen C Keeley, Rhonda M Cooper-Dehoff, Univ of Florida, Gainesville, FL

- 4:00 **Changes in Renin Angiotensin System Monitored Across Time Following Bariatric Surgery** 27
Anna Oliveras, Hosp del Mar, Barcelona, Spain; David Benito, Hosp del Mar Medical Res Inst, Barcelona, Spain; Tai M Ho Wong, Hosp del Mar, Barcelona, Spain; Sara Álvarez, Hosp del Mar Medical Res Inst, Barcelona, Spain; Sara Outon, Albert Goday, Susana Vázquez, Anna Faura, Julio Pascual, Hosp del Mar, Barcelona, Spain; Marta Riera, Hosp del Mar Medical Res Inst, Barcelona, Spain

Program Agenda (continued)

THURSDAY

4:15	Remote Health Monitoring Platform Reduces Blood Pressure and Crisis Hypertension Nirav Shah , Clifford Fonner, Noah Manders, Rama Aysola, Sarah Sutton, Jorge Sanchez, Sentinel Healthcare, Seattle, WA	28	3:45	Differential Regulation of Renal Injury in Npr1 Gene-Targeted Male and Female Mice: Role of Class I-Specific HDAC Inhibitor Prerna Kumar , Kailash N. Pandey, Dept of Physiology, Tulane Univ Health Sciences Ctr and Sch of Med, New Orleans, LA	34
4:30	Antihypertensive Treatment and Short-Term Blood Pressure Variability Alejandro De La Sierra , Hosp Mutua Terrassa, Terrassa, Spain; Jose R Banegas, Juan J de la Cruz, Univ Autonoma, Madrid, Spain; Manuel Gorostidi, Hosp Central Asturias, Oviedo, Spain; Ernest Vinyoles, Cap la Mina, Barcelona, Spain; Julian Segura, Hosp 12 Octubre, Madrid, Spain; Luis M Ruilope, Hosp 12 octubre, Madrid, Spain	29	4:00	Unique Associations of DNA Methylation With 24-Hour Blood Pressure Phenotypes in African Americans Srividya Kidambi , Xiaoqing Pan, Yingchuan Li, Michelle Roberts, Chun Yang, Pengyuan Liu, Tao Wang, Purushottam Laud, Thomas Chelius, Yannick Munyura, David Mattson, Yong Liu, Allen Cowley, Theodore Kotchen, Mingyu Liang, Medical Coll of Wisconsin, Milwaukee, WI	35
4:45	Low Indoleamine 2,3 Dioxygenase Activity in Pregnancy are Associated With Increased Carotid-Femoral Pulse Wave Velocity in Preeclampsia Mark K Santillan , Casee R Meincke, Sabrina M Scroggins, Alexandria M Betz, Debra S Brandt, Amy K Stroud, Donna A Santillan, Gary L Pierce, Univ of Iowa, Iowa City, IA	30	4:15	Genetics and Epigenetics on Circadian Blood Pressure and Variability in Rats Compared With Ambulatory Blood Pressure Variability in Humans Mary S Lee, Northwestern U Feinberg Sch of Med, Chicago, IL; John S Lee, Princeton Univ, Princeton, NJ; Jong Y Lee , Silvia H Azar, Franz Halberg, Univ of MN Sch of Med, Minneapolis, MN	36
5:00	Association Between Non-Oral Hormonal Contraceptives and Blood Pressure: A Systematic Review Cindy Z Kalenga , Amy Metcalfe, Sofia B Ahmed, Ramesh Sharanya, Jennifer M MacRae, Kara Nerenberg, Darlene Y Sola, Sandi Dumanski, Univ of Calgary, Calgary, AB, Canada	31	4:30	Monogenic Hypertension Associated With a Pathogenic STX16 Mutation Elizabeth Wan, Reecha Sofat, Jennifer Cross, Stephen B Walsh , Univ Coll London, London, United Kingdom	37
5:15	A Pilot Study of Antihypertensive Medication Adherence Trends by Sex and Drug Class Rhonda M Cooper-Dehoff , Henry R Holmes, Qian Li, Ke Xu, Seungbum Kim, Elaine M Richards, Ellen C Keeley, Eileen M Handberg, Steven M Smith, Mohan K Raizada, Carl J Pepine, Univ of Florida, Gainesville, FL	32	4:45	The Arg16 / Gln27 Diplotype of the Beta-2 Adrenergic Receptor: Cardiovascular Insights from a Novel Transgenic Mouse Model Thitinan Treesaranuwattana, Stephen Maris, Amanda E. Garza, Danielle Brooks, Luminita H Pojoga , Brigham and Women's Hosp, Boston, MA	38
3:30–5:30 PM Session 6 Concurrent C Genetics and Epigenetics in Hypertension <i>Galerie 6</i> Chairs: Olga Berillo, PhD, FAHA, Lady Davis Institute, Montreal, Quebec Anne E. Kwitek, PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin			5:00	The PDE3A Gene Regulates Blood Pressure Friedrich C Luft , Experimental and Clinical Res, Berlin, Germany; Maria Ercu, Max-Delbrück Ctr for Molecular Med, Berlin, Germany; Carolin Schächterle, Lajos Marko, Experimental and Clinical Res, Berlin, Germany; Philipp Maass, SickKids Res Intitute, Toronto, ON, Canada; Kerstin Zühlke, Max-Delbrück Ctr for Molecular Med, Berlin, Germany; Alexa M Kidd, Canterbury Health Labs, Christchurch, New Zealand; Nerine Gregersen, Auckland District Health Board, Auckland, New Zealand; Norbert Hübner, Russell Hodge, Max-Delbrück Ctr for Molecular Med, Berlin, Germany; Rosana Molé Illas, Experimental and Clinical Res, Berlin, Germany; Stephan Walter, Abteilung für Nephrologie / Hypertensiologie, St. Vincent Krankenhaus, Limburg, Germany; Robert Preissner, Experimental and Clinical Res, Berlin, Germany; Arnd Heuser, Max-Delbrück Ctr for Molecular Med, Berlin, Germany; Yoland-Marie Anistan, Dmitry Tsvetkov, Experimental and Clinical Res, Berlin, Germany; Mihail Todiras, Elena Popova, Sofia Forslund, Max-Delbrück Ctr	39
Oral Abstract Presentations			3:30	Genetic Polymorphisms Associated With Apparent Treatment-Resistant Hypertension in Patients With Chronic Kidney Disease Ling Wang , Kevin Pezeshkian, Donna Wang, Michigan State Univ, East Lansing, MI	33

Program Agenda (continued)

THURSDAY/FRIDAY

for Molecular Med, Berlin, Germany; Dominik N Müller, Maik Gollasch, Experimental and Clinical Res, Berlin, Germany; Atakan Aydin, Max-Delbrück Ctr for Molecular Med, Berlin, Germany; Sylvia Bähring, Experimental and Clinical Res, Berlin, Germany; Michael Bader, Enno Klussmann, Max-Delbrück Ctr for Molecular Med, Berlin, Germany

5:15 **Comparative Genomic Analysis and Functional Insights for Blood Pressure-Associated Single Nucleotide Polymorphisms** 40

Yong Liu, Manoj Mishra, Eugene Liang, Aron Geurts, Medical Coll of Wisconsin, Milwaukee, WI; Paul W. Auer, Univ of Wisconsin-Milwaukee, Milwaukee, WI; Pengyuan Liu, Medical Coll of Wisconsin, Milwaukee, WI; Sridhar Rao, Blood Res Inst, Milwaukee, WI; Andrew Greene, Mingyu Liang, Medical Coll of Wisconsin, Milwaukee, WI

3:30–5:30 PM

Session 6 Concurrent D

Clinical Practice Clinical Science Track: Debates
Galerie 1 and 2

Chairs:

Vivek Bhalla, MD, Stanford University, Palo Alto, California
Susan Steigerwalt, MD, FAHA, University of Michigan, Detroit, Michigan

Debate: The Evidence for the Universal BP Goal of < 130/80 mm Hg Is Strong

3:30 **Against**

Sanjay Kaul, MD, FACC, FAHA, Cedars Sinai Medical Center, Los Angeles, California

3:50 **For**

Robert M. Carey, MD, FAHA, University of Virginia, Charlottesville, Virginia

4:10 **Rebuttal (Dr Kaul)**

4:15 **Rebuttal (Dr Carey)**

4:20 **Panel and Q&A Dr Kaul and Dr Carey**

Debate: It Matters Which Drug Is Given First for Hypertension Without Compelling Indications

4:30 **For**

Paul Whelton, MD, MSc, Tulane University, New Orleans, Louisiana

4:50 **Against**

Professor Bryan Williams, University College London, London, United Kingdom

5:10 **Rebuttal (Dr Whelton)**

5:15 **Rebuttal (Dr Williams)**

5:20 **Panel and Q&A Dr Whelton and Dr Williams**

5:30–7:30 PM

Poster Session I

Trainee Onsite Poster Competition with Reception
Preservation Hall

Details on all poster sessions can be found on pages 42–43.

FRIDAY, SEPTEMBER 6

7:00 AM

Registration, Exhibits, and Refreshments
Preservation Hall

8:00–9:00 AM

Session 7

Recent Advances: Microbiome

Acadia

Chairs:

Dominik N. Mueller, PhD, Max-Delbruck Center and Clinical Experimental Research Center, Berlin, Germany
Jennifer M. Sasser, PhD, FAHA, University of Mississippi Medical Center, Jackson, Mississippi

8:00 **Genetic Mechanisms Regulating the Microbiome**

Matam Vijay-Kumar, PhD, University of Toledo, Toledo, Ohio

8:30 **Nutrition and the Microbiome**

Katie A Meyer, ScD, University of North Carolina, Kannapolis, North Carolina

9:00–10:00 AM

Session 8

Recent Advances: Chronotherapy and Circadian Rhythms in Hypertension

Acadia

Chairs:

David Fulton, PhD, Medical College of Georgia, Augusta, Georgia
David M. Pollock, PhD, FAHA, University of Alabama at Birmingham, Birmingham, Alabama

9:00 **Circadian Rhythms, Clock Genes, and Hypertension**

Michelle L Gumz, PhD, University of Florida, Gainesville, Florida

9:30 **Chronotherapy in the Treatment of Hypertension: Where do we Stand?**

Mahboob Rahman, MD, Case Western Reserve University, Cleveland, Ohio

10:00–10:30 AM

Refreshment Break and Exhibits

Preservation Hall

Program Agenda (continued)

10:30 am–Noon

Session 9

Recent Advances:

Neurogenic Hypertension: Brain, Heart, Kidney
Acadia

Chairs:

Eric D. Lazartigues, PhD, FAHA, School of Medicine,
Louisiana State University Health Sciences Center,
New Orleans, Louisiana

Murray Esler MBBS, PhD, FAA, Baker Heart
and Diabetes Institute, Melbourne Australia

10:30 **Neuronal Networks in Hypertension**

Patrice G. Guyenet, PhD, University of Virginia,
Charlottesville, Virginia

11:00 **Is the Kidney the Right Target to Interrupt the
SNS in Hypertension?**

John W. Osborn, PhD, FAHA, University of
Minnesota, Minneapolis, Minnesota

11:30 **Role of the Heart in Blood Pressure Lowering
During Chronic Baroreflex Activation**

Thomas E. Lohmeier, PhD, FAHA, Dept. of
Physiology, University of Mississippi Medical Center,
Jackson, Mississippi

Noon–1:30 PM

Lunch on Your Own

1:30–3:00 PM

Poster Session II

Preservation Hall

Details on all poster sessions can be found on
pages 42–43.

1:30–3:00 PM

Session 10

**Primary Care Track: 2019 AHA Scientific Statement:
Measurement of Blood Pressure in Humans**
Galerie 1 and 2

Chair:

Jan Basile, MD, FAHA Medical University of
South Carolina, Charleston, South Carolina

1:30 **Welcome and Introduction to Primary Care
Symposia: Goals and Objectives**

Michael J. Bloch, MD, FACP, FASH, FSVM,
FNLA, FAHA, Blue Spruce Medical Consultants,
Reno, Nevada

1:35 **General Overview and Purpose of the
Scientific Statement**

Daichi Shimbo, MD, Columbia University,
New York, New York

1:47 **Office Blood Pressure Measurement:
Auscultatory, Oscillometric and Automated**

Jackson T. Wright, MD, PHD, FACP, FASH, FAHA,
Case Western Reserve University, Cleveland, Ohio

1:59 **Home BP Measurement: How Can We Improve
Accuracy and Reproducibility**

Gbenga Ogedegbe, MD, MPH, FAHA, NYU School of
Medicine, New York, New York

2:11 **Ambulatory BP Measurement: Can We Put it Into
Practice**

Anthony Viera, MD, MPH, FAHA, Duke University,
Durham, North Carolina

2:23 **Measurement of Blood Pressure, In and Out of
the Office in Pediatrics and Adolescents**

Joshua Samuels, MD, MPH, FAAP, FAHA, McGovern
Medical School at UTHealth, Houston, Texas

2:35 **Panel – Putting It All Together - Implementation
and Reimbursement**

Panelists:

Michael J. Bloch, MD, FACP, FASH, FSVM,
FNLA, FAHA, Blue Spruce Medical Consultants,
Reno, Nevada

Daichi Shimbo, MD, Columbia University,
New York, New York

Jackson T. Wright, MD, PHD, FACP, FASH, FAHA
Case Western Reserve University, Cleveland, Ohio
Gbenga Ogedegbe, MD, MPH, FAHA, NYU School
of Medicine, New York, New York

Anthony Viera, MD, MPH, FAHA, Duke University,
Durham, North Carolina

Joshua Samuels, MD, MPH, FAAP, FAHA, McGovern
Medical School at UTHealth, Houston, Texas

Steven A. Yarows, MD, FAHA, University of Michigan
Health System, Chelsea, Michigan

3:00–3:30 PM

Refreshment Break and Exhibits

Preservation Hall

3:30–4:00 PM

Session 11

The Arthur C. Corcoran Memorial Lecture
Acadia

3:30 **The Enigmatic Vascular NOX, From Artifact to
Double Agent of Change**

Patrick J Pagano, PhD, FAHA, University of
Pittsburgh, Pittsburgh, Pennsylvania

FRIDAY

Program Agenda (continued)

FRIDAY

4:00–5:30 PM

Session 11 Concurrent A

Chemoreceptor and Autonomic Mechanisms

Galerie 3

Chairs:

Colin N. Young, PhD, George Washington University School of Medicine and Health Sciences, Washington, DC
Yumei Feng Earley, MD, PhD, FAHA, University of Nevada Reno, Reno, Nevada

Oral Abstract Presentations

- 4:00 **Hypoxic Peripheral Chemoreceptor Activation Engages Sympathetic Brainstem and Hypothalamic Nuclei in Human Subjects**
Darius Andreas Gerlach, German Aerospace Ctr, Cologne, Germany; Jorge Manuel, Hannover Medical Sch, Hannover, Germany; Alex Hoff, Hendrik Kronsbein, Fabian Hoffmann, Karsten Heusser, German Aerospace Ctr, Cologne, Germany; André Diedrich, Vanderbilt Univ, Nashville, TN; Heimo Ehmke, Univ Medical Ctr Eppendorf, Hamburg, Germany; Jens Jordan, Jens Tank, German Aerospace Ctr, Cologne, Germany; Florian Beissner, Hannover Medical Sch, Hannover, Germany
- 4:15 **Carotid Body Ablation of TRPV1 Reduces Chemoreflex Sensitivity in Rats With Heart Failure**
Sharon Db de Moraes, Irving H Zucker, Harold D Schultz, Univ of Nebraska Medical Ctr, Omaha, NE
- 4:30 **Local Passive Heat in the Treatment of Nocturnal Supine Hypertension in Autonomic Failure**
Luis E Okamoto, Jorge E Celedonio, Emily C Smith, Alfredo Gamboa, Cyndya A Shibao, Andre Diedrich, Sachin Paranjape, Bonnie K Black, James A Muldowney 3rd, Amanda C Peltier, Ralf Habermann, Vanderbilt Univ Medical Ctr, Nashville, TN; Craig G Crandall, Inst for Exercise and Environmental Med, Dallas, TX; Italo Biaggioni, Vanderbilt Univ Medical Ctr, Nashville, TN
- 4:45 **High Sodium Intake Impairs Afferent Sympathodepressory Pathways in Rats**
Kristina Rodionova, Tilmann Ditting, Univ of Erlangen, Paracelsus Private Medical Sch Nuremberg, Erlangen, Germany; Franziska Fahrmeier, Sonja Loosen, Univ of Erlangen, Erlangen, Germany; Christian Ott, Univ of Erlangen, Paracelsus Private Medical Sch Nuremberg, Erlangen, Germany; Roland Schmieder, Mario Schiffer, Kerstin Amann, Univ of Erlangen, Erlangen, Germany; **Roland Veelken**, Univ of Erlangen, Paracelsus Private Medical Sch Nuremberg, Erlangen, Germany

- 5:00 **Attenuated Natriuretic Response to Saline Loading in Sheep With Hypertensive Kidney Disease Following Radiofrequency Catheter-Based Renal Denervation**
Kate M Denton, Zoe McCardle, Harshil Singh, Monash Univ, Clayton, Australia; Lindsey Booth, Clive May, The Florey Inst of Neuroscience and Mental Health, The Univ of Melbourne, Parkville, Australia; Geoffrey Head, Baker IDI Heart and Diabetes Inst, Prahan, Australia; Karen Moritz, The Univ of Queensland, Brisbane, Brisbane, Australia; Markus Schlaich, Univ of Western Australia, Perth, Australia; Reetu Singh, Monash Univ, Clayton, Australia

41

- 5:15 **Chronic Nicotine Inhalation Promotes the Development of Hypertension**
Jiaxi Xu, Tamara M Morris, Joshua M Oakes, Jason D Gardner, Xiping Yue, Eric Lazartigues, Louisiana State Univ Health Sciences Ctr, New Orleans, LA

46

4:00–5:30 PM

Session 11 Concurrent B

Cerebrovascular Disease and Stroke

Galerie 4 and 5

Chairs:

Fan Fan, MD, MS, FAHA, University of Mississippi Medical Center, Jackson, Mississippi
Rhian M. Touyz, MBBCh, PhD, FMedSci, FAHA, University of Glasgow, Glasgow, Scotland

42

Oral Abstract Presentations

- 4:00 **Mode of Orthostatic Hypotension Assessment and Dizziness in Older Adults**
Stephen P Juraschek, BIDMC-Harvard Medical Sch, Boston, MA; Edgar R Miller III, Erin D Michos, Lawrence J Appel, Johns Hopkins Univ, Baltimore, MD
- 4:15 **Association of Central Arterial Stiffness With Hippocampal Blood Flow, N-Acetyl Aspartate and Anxiety in Hypertensive Dahl Salt Sensitive Rats**
Samuel Ajamu, Rachel Fenner, Yulia Grigorova, Mustapha Bouhrara, Edward Lakatta, Richard Spencer, Kenneth Fishbein, Olga Fedorova, Natl Inst on Aging, Baltimore, MD
- 4:30 **Intracranial Atherosclerosis and Stage 1 Hypertension Defined by the 2017 ACC and AHA Guideline**
Hyung-Min Kwon, Ki-Woong Nam, Jin-Ho Park, Seoul Natl Univ, Seoul, Korea, Republic of

47

48

44

49

Program Agenda (continued)

4:45	Essential Role of Cerebral Endothelial AT1 Receptors in the Blood-Brain Barrier Disruption Induced by Angiotensin-II Hypertension Monica M Santisteban , Sung Ji Ahn, Diane Lane, Giuseppe Faraco, Lidia Garcia-Bonilla, Gianfranco Racchumi, Steven Segarra, Samantha Schaeffer, Carrie Poon, Ziasmin Shahanoor, Virginia Cipollini, Josef Anrather, Costantino Iadecola, Weill Cornell Medical Coll, New York, NY	50	4:45	Racial Differences in Length of Stay and Hospital Expenses in Hypertension and Pregnancy Michael Z Grzeskowiak , Navid Berenji, Son Pham, Rene Oliveros, Univ of Texas Health Science Ctr at San Antonio, San Antonio, TX	56
5:00	Oral Antihyperglycemic Therapy With a SGLT2 Inhibitor Reverses Cognitive Impairments in Elderly Diabetics Shaoxun Wang, Fan Fan , Univ of MS Medical Ctr, Jackson, MS	51	5:00	Epigenome Wide Association Study Identifies DNA Methylation Sites Associated With Target Organ Damage in Elderly African Americans Farah Ammous , Wei Zhao, Scott M Ratliff, Univ of Michigan, Ann Arbor, MI; Thomas H Mosley, Univ of Mississippi Medical Ctr, Jackson, MS; Sharon L Kardia, Xiang Zhou, Jennifer A Smith, Univ of Michigan, Ann Arbor, MI	57
5:15	Rho Kinase and Endoplasmic Reticulum Stress Mediate Peripheral Vascular Dysfunction in a Model of Small Vessel Disease of the Brain Karla B Neves , Hannah Morris, Rheure Alves-Lopes, Univ of Glasgow, Glasgow, United Kingdom; Anne Joutel, Inserm U1266, Inst of Psychiatry and Neurosciences of Paris, Paris, France; Augusto C Montezano, Rhian M Touyz, Univ of Glasgow, Glasgow, United Kingdom	52	5:15	High Sodium Intake Induces a Catabolic State via Glomerular Hyperfiltration and Enhanced Glomerulotubular Balance in Essential Hypertension Giacomo Rossitto , Univ of Glasgow, Glasgow, United Kingdom; Giuseppe Maiolino, Silvia Lerco, Giulio Ceolotto, Univ of Padua, DIMED, Padua, Italy; Gavin Blackburn, Univ of Glasgow, Glasgow Polyomics, Glasgow, United Kingdom; Sheon Mary, Univ of Glasgow, Glasgow, United Kingdom; Giorgia Antonelli, Univ of Padua, Clinical Biochemistry, Glasgow, United Kingdom; Chiara Berton, Valeria Bisogni, Maurizio Cesari, Teresa M Seccia, Livia Lenzini, Univ of Padua, DIMED, Padua, Italy; Alessio Pinato, Univ of Padua, Clinical Biochemistry, Padua, United Kingdom; Augusto Montezano, Rhian M Touyz, Mark C Petrie, Paul Welsh, Univ of Glasgow, Glasgow, United Kingdom; Mario Plebani, Univ of Padua, Clinical Biochemistry, Padua, Italy; Gian Paolo Rossi, Univ of Padua, DIMED, Padua, Italy; Christian Delles, Univ of Glasgow, Glasgow, United Kingdom	58
4:00–5:30 PM Session 11 Concurrent C Hypertension Early Career Oral Awards <i>Galerie 6</i> Chairs: Christian Delles, MD, FAHA, University of Glasgow, Glasgow, Scotland Francine Marques, PhD, Monash University, Melbourne, Australia					
Oral Abstract Presentations					
4:00	Gene Editing Yields a Novel Rat Model of Cardiometabolic Disease Karen C Clark , Medical Coll of Wisconsin, Milwaukee, WI; Valerie A Wagner, Jacob A Malek, Alyssa A Arroyo, Justin L Grobe, Univ of Iowa, Iowa City, IA; Anne E Kwitek, Medical Coll of Wisconsin, Milwaukee, WI	53	3:30–5:30 PM Session 11 Concurrent D Primary Care Track: Blood Pressure Management in Women <i>Galerie 1 and 2</i> Chairs: Suzanne Oparil, MD, FACC, FAHA, FASH, FAPS, University of Alabama at Birmingham, Birmingham, Alabama Shawna Nesbitt, MD, MS, University of Texas Southwestern Medical Center, Dallas, Texas		
4:15	High Protein Diet-Induced Glomerular Hyperfiltration is Dependent on NOS1α Jin Wei , Jie Zhang, Jiang Shan, Erik Persson, Ruisheng Liu, Univ of South Florida, Tampa, FL	54	3:30	Should Biological Differences in Sex Influence BP Thresholds for Treatment and Choice of Anti-hypertensives in Chronic Hypertension? Sandra J. Taler, MD, FAHA, Mayo Clinic, Rochester, Minnesota	
4:30	Sex Differences in the Development of Age-Dependent Hypertension and the Salt Sensitivity of Blood Pressure Franco J Puleo , Alissa A Frame, Parul Chaudhary, Richard D Wainford, Boston Univ Sch Med, Boston, MA	55			

Program Agenda (continued)

FRIDAY/SATURDAY

- 3:50 **Incidence and Prognosis of White Coat Hypertension in Women**
Jordana Cohen, MD, MSCE, University of Pennsylvania, Philadelphia, Pennsylvania
- 4:10 **Management of Hypertension in Women Contemplating Pregnancy and During the First Trimester**
Mark K. Santillan, MD, PhD, FAHA, University of Iowa Carver College of Medicine, Iowa City, Iowa
- 4:30 **Management of Hypertension During Pregnancy and in the Fourth Trimester and Managing Future Cardiovascular Risk**
Natalie Bello, MD, MPH, Columbia University, New York, New York

4:50 Panel and Q&A

5:30–6:45 PM

Session 12

Awards Session

Acadia

Chairs:

Karen A. Griffin, MD, FAHA, Hines VA Hospital, Hines, Illinois
Curt D. Sigmund, PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin

- 5:30 **Hypertension 2019 Mid-Career Award for Research Excellence: Neuroimmune Interactions in Hypertension**
Daniela Carnevale, PhD, FAHA, Sapienza University of Rome, Pozzilli, Italy
- 5:45 **The Harry Goldblatt Award for New Investigators: Targeting the Gut Microbiome to Lower Blood Pressure**
Francine Marques, PhD, Hypertension Research Group, Monash University School of Biological Sciences, Melbourne, Australia
- 6:00 **British and Irish Hypertension Society Young Investigator Award: Association Between Hypertensive Disorders of Pregnancy and Later Risk of Cardiovascular Outcomes**
Dr. Clare Oliver-Williams, University of Cambridge, Cambridge, United Kingdom
- 6:15 **High Blood Pressure Research Council of Australia Award: Targeting the NLRP3 Inflammasome for the Treatment of Pulmonary Hypertension**
Tara Elizabeth Scott, BSc (Hons), Monash University, Clayton, Victoria, Australia

The Stephane Watts Career Development Award Finalist Presentations:

- 6:30 **Involvement of Subfornical Organ Insulin Receptor Signaling in the Development of Angiotensin-II Hypertension**
Jin Kwon Jeong, PhD, George Washington University, Washington, DC
- 6:35 **Inhibition of Progesterone Induced Blocking**

Factor Causes Clinical Characteristics of Preeclampsia in Sprague Dawley Rats
Lorena M. Amaral, PharmD, PhD, The University of Mississippi Medical Center, Jackson, Mississippi

- 6:40 **Leptin Restores Endothelial Function, Diminishes Vascular Adrenergic Contractility, but Does Not Alter Arterial Stiffness and Blood Pressure, in a Mouse Model of Congenital Generalized Lipodystrophy**
Thiago Bruder do Nascimento, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania

7:00–11:00 PM

Trainee Advocacy Mixer

Riverview 2

SATURDAY, SEPTEMBER 7

7:00 AM

Registration, Exhibits and Refreshments

Preservation Hall

7:30–9:00 AM

Session 13 Concurrent A

Nutrition, Salt and Hypertension

Galerie 3

Chairs:

Steven D. Crowley, MD, Duke University Medical Center, Durham, North Carolina
Alicia A. McDonough, PhD, FAHA, USC Keck School of Medicine, Los Angeles, California

Oral Abstract Presentations

- 7:30 **Deficiency of Either Prebiotic Dietary Fibre or Prebiotic-Responsive Gut Microbiota Result in High Blood Pressure** **59**
Francine Marques, Monash Univ, Melbourne, Australia; Waled Shihata, Baker Heart and Diabetes Inst, Melbourne, Australia; Hamdi Jama, Kirill Tsyganov, Monash Univ, Melbourne, Australia; Mark Ziemann, Deakin Univ, Melbourne, Australia; Helen Kiriazis, Duncan Horlock, Beverly Giam, Baker Heart and Diabetes Inst, Melbourne, Australia; Antony Vinh, LaTrobe Univ, Melbourne, Australia; Chad Johnson, Monash Univ, Melbourne, Australia; April Fiedler, Daniel Donner, Baker Heart and Diabetes Inst, Melbourne, Australia; Matthew Snelson, Monash Univ, Melbourne, Australia; Sarah Phillips, Swinburne Univ of Technology, Melbourne, Australia; Xiao-Jun Du, Baker Heart and Diabetes Inst, Melbourne, Australia; Sam El-Osta, Monash Univ, Melbourne, Australia; Grant Drummond, LaTrobe Univ, Melbourne, Australia; Gavin Lambert, Swinburne Univ of Technology, Melbourne, Australia; Charles Mackay, Monash Univ, Melbourne, Australia; David Kaye, Baker Heart and Diabetes Inst, Melbourne, Australia

Program Agenda (continued)

7:45 **Increased Urinary Potassium Excretion Does Not Associate With Reduced Systolic Blood Pressure in the Dietary Approaches to Stop Hypertension Sodium Trial** 60
Parul Chaudhary, Richard D Wainford, Boston Univ Sch Med, Boston, MA

8:00 **Systolic Blood Pressure is Maintained Despite Varying Degrees of Acute Caloric Restriction and Sodium-Glucose Cotransporter-2 Inhibition in Obese, Insulin Resistant Rats** 61
Manuel A Cornejo, Univ of California, Merced, Merced, CA; Daisuke Nakano, Akira Nishiyama, Kagawa Univ, Takamatsu, Japan; Rudy M Ortiz, Univ of California, Merced, Merced, CA

8:15 **Elevated Cerebrospinal Fluid Sodium Concentration in Hypertensive Humans** 62
Lucas Ac Souza, Fatima Trebak, Depts of Pharmacology and Physiology & Cell Biology, Univ of Nevada, Reno, Sch of Med, Reno, NV, USA. / Ctr for Molecular and Cellular Signaling in the Cardiovascular System, Univ of Nevada, Reno, Reno, NV, USA., Reno, NV; Veena Kumar, Dept of Neurology, Emory Univ Sch of Med, Atlanta, GA, USA., Atlanta, GA; Ryosuke Satou, Dept of Physiology, Tulane Univ Sch of Med, New Orleans, LA, USA, New Orleans, LA; Patrick G. Kehoe, Inst of Clinical Neurosciences, Univ of Bristol, Bristol, UK., Bristol, United Kingdom; Wei Yang, Univ of Nevada, Reno, Sch of Community Health Sciences, Reno, Nevada, USA, Reno, NV; Whitney Wharton, Dept of Neurology, Emory Univ Sch of Med, Atlanta, GA, USA., Atlanta, GA; Yumei Feng, Depts of Pharmacology and Physiology & Cell Biology, Univ of Nevada, Reno, Sch of Med, Reno, NV, USA. / Ctr for Molecular and Cellular Signaling in the Cardiovascular System, Univ of Nevada, Reno, Reno, NV, USA., Reno, NV

8:30 **Evaluation of a Combination Therapy of Bone Marrow-Derived Stem Cells and Serelaxin Against Established Renal Fibrosis in Normotensive and Hypertensive Models of Disease** 63
Chrisan S Samuel, Jordan Nguyen, Yifang Li, Matthew Shen, Dorota Ferens, Anita A Pinar, Sharon D. Ricardo, Monash Univ, Clayton, Australia

8:45 **Left Ventricular Mass Reduction Induced by Low Sodium Diet in Treated Hypertensive Patients** 64
Natale Musso, Andrea Dotto, Zhongyi Shen, Ospedale Policlinico San Martino, Genova, Italy

7:30–9:00 AM
Session 13 Concurrent B
Vascular Biology and Function
Galerie 4 and 5

Chairs:
Karla B. Neves, PhD, BHF Glasgow Cardiovascular Research Centre, University of Glasgow, United Kingdom
Adam C. Straub, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania

Oral Abstract Presentations

- 7:30 **Endothelial CULLIN3 Mutation Causes Vascular Dysfunction, Arterial Stiffening, and Hypertension** 65
Jing Wu, Shi Fang, Medical Coll of Wisconsin, Milwaukee, WI; Chunyan Hu, Univ of Utah, Salt Lake City, UT; Adokole J J Otanwa, Anand R Nair, Larry N Agbor, The Univ of Iowa, Iowa City, IA; Ko-Ting Lu, Medical Coll of Wisconsin, Milwaukee, WI; Masashi Mukohda, The Univ of Iowa, Iowa City, IA; Curt D Sigmund, Medical Coll of Wisconsin, Milwaukee, WI
- 7:45 **Beta-Hydroxybutyrate Synthesis Contributes to the Anti-Vascular Aging Effect of Autophagy** 66
Cameron G Mccarthy, Saroj Chakraborty, Zachary Schreckenberger, Camilla F Wenceslau, Bina Joe, Univ of Toledo, Toledo, OH
- 8:00 **Endothelial mTORC1 Signaling Regulates Vascular Function and Mediates Angiotensin II Actions** 67
John J Reho, Deng-Fu Guo, Kamal Rahmouni, Univ Iowa, Iowa City, IA
- 8:15 **Interplay Between Nox5 and Endoplasmic Reticulum Stress Regulates Vascular Signalling in Human Hypertension** 68
Livia L Camargo, Augusto C Montezano, Yu Wang, Univ of Glasgow, Glasgow, United Kingdom; Misbah Hussain, Fazli R Awan, Natl Inst for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, Pakistan; Francisco J Rios, Rhian M Touyz, Univ of Glasgow, Glasgow, United Kingdom
- 8:30 **Local and Circulating Sphingosine-1-Phosphate in Blood Pressure Regulation** 69
Ilaria Del Gaudio, Luisa Rubinelli, Weill Cornell Med, New York, NY; Susan Schwab, New York Univ, New York, NY; Christian Wadsack, Medical Univ of Graz, Graz, Austria, Austria; **Annarita Di Lorenzo**, Weill Cornell Med, New York, NY
- 8:45 **The Prostaglandin Ep4 Receptor in Endothelium Modulates eNos Expression and Aortic Integrity** 70
Ting Yang, Matthew A Sparks, Duke Univ, Durham, NC; Beverly H Koller, Univ of North Carolina Chapel Hill, Chapel Hill, NC; Thomas M Coffman, Duke Univ, Durham, NC

SATURDAY

Program Agenda (continued)

SATURDAY

7:30–9:00 AM

Session 13 Concurrent C

Gender Differences and Sex Hormones

Galerie 6

Chairs:

Jorge F. Giani, PhD, Cedars-Sinai Medical Center, Los Angeles, California

Sarah H. Lindsey, PhD, FAHA, Tulane University, New Orleans, Louisiana

Oral Abstract Presentations

- 7:30 **Endothelin-1 Contributes to Vascular Dysfunction in Peri-Menopausal Women**
Megan M Wenner, Univ of Delaware, Newark, DE; Kerrie L Moreau, Univ of Colorado Anschutz Medical Campus, Denver, CO

71

- 7:45 **Medroxyprogesterone Prevents the Decline in Renal Health Due to Estradiol**
Margaret Zimmerman, Benard Ogola, Sarah Lindsey, Tulane Univ, New Orleans, LA

72

- 8:00 **The Association Between Plasma Soluble Prorenin Receptor and Renin Activity Points Toward Renin Angiotensin System Activation and Cardiovascular Complications in Women With Type-2 Diabetes**
Bruna Visniauskas, Danielle Y Arita, Carla B Rosales, Mohammed A Feroz, Dept of Physiology, Tulane Univ SOM, New Orleans, LA; John Lefante, Sch of Public Health, Biostatistics, Tulane Univ, New Orleans, LA; Tina K Thethi, Vivian A Fonseca, Frank Mauvais-Jarvis, Dept of Med, Tulane Univ HSC, New Orleans, LA; Minolfa C Prieto, Dept of Physiology, Hypertension and Renal Ctr of Excellence, Tulane Univ SOM, New Orleans, LA

73

- 8:15 **Vascular Dysfunction in Boys With Androgen Insufficiency – Role of Nox5 and Calcium**
Angela Lucas-Herald, Rheure Alves-Lopes, Laura Haddow, Univ of Glasgow, Glasgow, United Kingdom; Stuart O'Toole, S Basith Amjad, Martyn Flett, Boma Lee, Mairi Steven, Royal Hosp for Children, Glasgow, United Kingdom; Antoniia Pashova, Augusto Montezano, S Faisal Ahmed, Rhian Touyz, Univ of Glasgow, Glasgow, United Kingdom

74

- 8:30 **Sex Differences in the Development of Autoimmune-Associated Hypertension**
Keisa W Mathis, Cassandra Young-Stubbs, Jessica Morales, Univ of North Texas Health Sc, Fort Worth, TX

75

- 8:45 **Sex Difference in the Effects of Dopamine D2 Receptor Specific Deletion in the Renal Proximal Tubules of Mic**
Megha Kumar, Prasad Konkalmatt, Laureano D Asico, Jessica Hunt, Patricia Latham, Pedro A Jose, Ines Armando, George Washington Univ, Washington, DC

76

9:00–9:30 AM

Session 13

The Donald Seldin Lecture

Acadia

- 9:00 **Harnessing Complexity – The Odyssey of the Kidney in Hypertension**
Allen W. Cowley, Jr., PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin

7:30–9:30 AM

Session 13 Concurrent D

Primary Care Track:

Part 1 – Atrial Fibrillation and Diabetic Hypertension in Primary Care Setting

Part 2 – Diabetes and Hypertension

Galerie 1 and 2

Chairs:

Louis Kuritzky, MD, University of Florida, Gainesville, Florida
Anthony Viera, MD, MPH, FAHA, Duke University, Durham, North Carolina

7:30–8:30 AM

Atrial Fibrillation and Diabetic Hypertension in Primary Care Setting

- 7:30 **Atrial Fibrillation and Hypertension in Primary Care Setting**
Carl “Chip” J. Lavie, MD, Ocshner Health System, New Orleans, Louisiana
- 7:50 **Current Management-AF: Addressing Patient Issues – The Nuts and Bolts**
F. Wilford Germino, MD, FACP, FASH, FAHA, Orland Primary Care Specialists, Chicago, Illinois
- 8:10 **Panel and Q&A Dr. Lavie and Dr. Germino**

8:30–9:30 AM

Diabetes and Hypertension

- 8:30 **Reviewing the BP Lowering Effects of Glucose Lowering Therapies**
Keith C. Ferdinand, MD, FAHA, Tulane University, New Orleans, Louisiana
- 8:50 **SONAR and CREDENCE: New Hope for People with Diabetic Kidney Disease**
Donald E. Kohan, MD, PhD, FAHA, University of Utah Health Center, Salt Lake City, Utah
- 9:10 **Panel and Q&A Dr. Ferdinand and Dr. Kohan**

9:30–10:00 AM

Refreshment Break and Exhibits

Preservation Hall

Program Agenda (continued)

10:00–10:30 AM

Session 14

The Harriet Dustan Award Lecture

Acadia

- 10:00 **New Insights Into a Variety of Metabolites Mechanistically Linking Microbiota With Hypertension**
Bina Joe, PhD, FAHA, FAPS, University of Toledo College of Medicine, Toledo, Ohio

10:30 AM–Noon

Session 14 Concurrent A

Renal Transport Mechanisms

Galerie 3

Chairs:

Heddwyn L. Brooks, PhD, College of Medicine, University of Arizona, Tucson, Arizona
Johannes Stegbauer, MD, University Hospital, Heinrich-Heine University, Düsseldorf, Germany

Oral Abstract Presentations

- 10:30 **Proximal Tubule-Specific Deletion of the NHE3 (na⁺/h⁺Exchanger 3) in the Kidney Attenuates Angiotensin II-Induced Hypertension in Mice**
Xiao C Li, Dongmin Zhu, Xu Chen, Xiaowen Zheng, Chunling Zhao, Xinzhou Zhou, Univ Mississippi Medical Ctr, Jackson, MS; Manoocher Soleimani, UNIV Cincinnati Coll of Med, Cincinnati, OH; Isabelle Rubera, Michel Tauc, Univ Côte d'Azur, Nice, France; Jia L Zhuo, Univ Mississippi Medical Ctr, Jackson, MS
- 10:45 **Nephron-Specific Deletion of Intraflagellar Transport 88 Alters Renal Electrolyte Excretion in the Absence of Cystic Kidney Disease in a Sex-Specific Manner**
Chunyan Hu, Jayalakshmi Lakshminpathi, Deborah Stuart, Donald Kohan, The Univ of Utah, Salt Lake City, UT
- 11:00 **Elevated Fructose Intake Induces Hypertension in Dahl Salt Sensitive (SS) Rats on a Normal Na Diet: Role of SPAK (STK39) and NKCC2**
Andrew J Eaton, Jose A Garcia-Pedraza, Henry Ford Health System, Detroit, MI; Pablo A Ortiz, Henry Ford Health System, Hypertension and Vascular Res Div, Detroit, MI
- 11:15 **Dietary Fructose Enhances Protein Kinase C Activation by Angiotensin II in Proximal Tubules via Changes in Intracellular Calcium**
Jeffrey L Garvin, Nancy Hong, Nianxin Yang, Case Western Reserve Univ, Cleveland, OH

- 11:30 **Ghrelin is Produced by the Kidney and Mediates Distal Tubular Sodium Reabsorption in Rats**
Brandon A Kemp, Nancy L Howell, Shetal H Padia, Univ of Virginia Sch of Med, Charlottesville, VA

- 11:45 **Histone Deacetylase 1 Activates Renal Inner-Medullary Nitric Oxide Production**
Randee Sedaka, Univ of Alabama at Birmingham, Birmingham, AL; Elena Mironova, James D Stockand, Univ of Texas Health Science Ctr at San Antonio, San Antonio, TX; Kelly A Hyndman, Jennifer S Pollock, Univ of Alabama at Birmingham, Birmingham, AL

10:30 AM–Noon

Session 14 Concurrent B

Regulation of Blood Pressure by the Central Nervous System

Galerie 4 and 5

Chairs:

Keisa W. Mathis, PhD, FAHA, Department of Physiology and Anatomy, University of North Texas Health Science Center, Fort Worth, Texas
Richard D. Wainford, PhD, FAHA, Department of Pharmacology, Boston University School of Medicine, Boston, Massachusetts

Oral Abstract Presentations

- 10:30 **Divergent Metabolic and Cardiovascular Effects of FGF21**
Donald A Morgan, Matthew J Potthoff, Kamal Rahmouni, Univ Iowa, Iowa City, IA
- 10:45 **Gut Dysbiosis Impairs Serotonergic Gut-Brain Axis and Increases Blood Pressure**
Tao Yang, Riley Larkin, Carla Bueno Silva, Basak Donertas, Luis Colon-Perez, Nora Awadallah, Jose Antonio Pino Reyes, Wendi Malphurs, Gonzalo Torres, David Baekey, Marcelo Febo, Univ of Florida, Gainesville, FL
- 11:00 **Loss of Microglia Enhances Neuronal Activity in the Sympathetic Paraventricular Nucleus**
Qianqian Bi, Chao Wang, Bo Wei, Zhejiang Univ, Hangzhou, China; Xiaoli Liu, Zhejiang Hosp, Hangzhou, China; Yan Gu, Xiao Z Shen, Peng Shi, Zhejiang Univ, Hangzhou, China
- 11:15 **Pvn-Specific Microgliosis Drives Inflammation in G-Alpha-i2 Protein Dependent Salt Sensitive Hypertension and Gnai2 Snps Correlate With Essential Hypertension**
Jesse D Moreira, Parul Chaudhary, Kayla M Nist, Eric Abkin, Alissa A Frame, Franco Puleo, Richard D Wainford, Boston Univ, Boston, MA

SATURDAY

Program Agenda (continued)

SATURDAY

11:30 **Impaired Brain Cystathionine Beta-Synthase-Derived H₂S Production is Associated With the Development of Neurogenic Hypertension**
Huijing Xia, Zhen Li, Eric Lazartigues, Daniel R Kapusta, David J Lefer, Cardiovascular Ctr of Excellence and Dept of Pharmacology, Louisiana State Univ Health Sciences Ctr, New Orleans, LA

11:45 **Overexpression of Neuronal Nitric Oxide Synthase Associated Protein in the Paraventricular Nucleus Contributes to Increased Sympathoexcitation in Male Mice by Modulating Subcellular Localization of Neuronal Nitric Oxide Synthase**
Neeru Sharma, Kenichi Katsurada, Shyam Nandi, Lie Gao, Kaushik Patel, UNMC, Omaha, NE

10:30 AM–Noon

Session 14 Concurrent C

Cardiac Hypertrophy and Dysfunction in Hypertension
Galerie 6

Chairs:

Jussara M. do Carmo, PhD, FAHA, University of Mississippi Medical Center, Jackson, Mississippi
 Alison J. Kriegel, PhD, Medical College of Wisconsin, Milwaukee, Wisconsin

Oral Abstract Presentations

10:30 **Role of Nox5 in Systemic Vascular Dysfunction in Ischemic Heart Disease**
Augusto C Montezano, Raquel D Sarafian, Karla B Neves, Francisco J Rios, Patricia Passaglia, Livia L Camargo, Laura Haddow, Thomas J Ford, Michael Dunne, Rheure Alves-Lopes, Niall MacQuaide, Colin Berry, Godfrey Smith, Rhian M Touyz, ICAMS – Univ of Glasgow, Glasgow, United Kingdom

10:45 **Intergenerational Inheritance of Obesity-Induced Diastolic Dysfunction With Preserved Ejection Fraction**
Alexandre A da Silva, Fabio N Gava, Ana C Omoto, Sydney P Moak, Xuemei Dai, John E Hall, Jussara M Docarmo, Univ of Mississippi Medical Ctr and Mississippi Ctr for Obesity Res,

11:00 **Leptin-Thyroliberin Pathway in Left Ventricle Hypertrophy**
Maia Aisicovich, Medical Res Inst IDIM, Natl Council of Scientific and Tech Res (CONICET); Buenos Aires Univ (UBA), Buenos Aires, Argentina; Ludmila S Peres Diaz, Mariano L Schuman, Medical Res Inst IDIM, Natl Council of Scientific and Tech Res (CONICET); Buenos Aires Univ (UBA), Buenos Aires, Argentina; Jorge E Toblli, Lab of Experimental Med, Hosp Alemán, Buenos Aires, Argentina; Maria S Landa, Silvia I García, Medical Res Inst IDIM,

87 Natl Council of Scientific and Tech Res (CONICET); Buenos Aires Univ (UBA), Buenos Aires, Argentina

11:15 **Fine-Tuning of G_i/o Signaling by Rgs2 and 5 is Critical to Ensuring Normal Ventricular Rhythm**
Shelby Dahlen, Drexel Univ, Philadelphia, PA

11:30 **Novel Mir-21-5p-/- Rat Model Exhibits Protection Against Chronic Kidney Disease Associated Cardiac Dysfunction**
Victoria L Nasci, Aron Geurts, Alison J Kriegel, Medical Coll of Wisconsin, Milwaukee, WI

11:45 **Adaptive Cardiac Remodeling to Chronic Pressure Overload Requires the Expression of Placental Growth Factor in the Spleen to Recruit Reparative Macrophages to the Left Ventricle**
Daniela Carnevale, Sapienza Univ and IRCCS Neuromed, Pozzilli, Italy; Sara Perrotta, Sapienza Univ, Pozzilli, Italy; Raimondo Carnevale, Lorenzo Carnevale, IRCCS Neuromed, Pozzilli, Italy; Marialuisa Perrotta, Sapienza Univ, Pozzilli, Italy; Fabio Pallante, Giuseppe Cifelli, IRCCS Neuromed, Pozzilli, Italy; Giuseppe Lembo, Sapienza Univ and IRCCS Neuromed, Pozzilli, Italy

10:00 AM–Noon

Session 14 Concurrent D

Primary Care Track: The Evolving Landscape of Blood Pressure Guidelines

Galerie 1 and 2

Chairs :

Michael J. Bloch, MD, FACP, FASH, FSVM, FNLA, FAHA, Blue Spruce Medicine Consultants, Reno, Nevada
 Jan N. Basile, MD, FAHA, Medical University of South Carolina, Charleston, South Carolina

10:00 **Implementation of 2017 Blood Pressure Guidelines – Where Are We Now in Primary Care?**
 Brent Egan, MD, FAHA, American Medical Association, Charleston, South Carolina

10:20 **How Can We Improve Implementation of 2017 Blood Pressure Guidelines: Panel Discussion**

Moderators:

F. Wilford Germino, MD, FACP, FASH, FAHA, Orland Primary Care Specialists, Chicago, Illinois
 Michael Weber, MD, FAHA, SUNY Downstate College of Medicine, New York, New York

Panelists:

Keith C. Ferdinand, MD, FAHA, Tulane University, New Orleans, Louisiana
 Brent Egan, MD, FAHA, American Medical Association, Charleston, South Carolina
 Sandra J. Taler, MD, FAHA, Mayo Clinic, Rochester, Minnesota
 Jan N. Basile, MD, FAHA, Medical University of South Carolina, Charleston, South Carolina

Program Agenda (continued)

11:00 **Simplified Combination and Stepped Care Treatment for Mild to Moderate Hypertension in Primary Care**
Robert Brook, MD, FAHA, University of Michigan, Ann Arbor, Michigan

11:20 **Evolving Paradigm for Treatment of Resistant Hypertension**
John Flack, MD, MPH, FAHA, Southern Illinois University School of Medicine Springfield, Illinois

11:40 **Panel Discussion with Dr. Brook and Dr. Flack**

Noon–1:30 PM

Lunch on Your Own

1:30–3:00 PM
Poster Session III
Preservation Hall

Details on all poster sessions can be found on pages 42–43

1:30–3:00 PM
Session 15
Clinical Practice Clinical Science Track: Hypertension Control Strategies in the Populations of the Pacific Rim: A Focus on the Effective Clinical Implementation: A joint session of AHA & World Hypertension League
Galerie 1 and 2

Chair:

Daniel T. Lackland, DrPH, FAHA, Medical University of South Carolina, Mt Pleasant South Carolina
Donald Dipette, MD, FAHA, University of South Carolina School of Medicine, Columbia, South Carolina

Discussant:

Jeffrey A. Cutler MD, FAHA Consultant for Medical Research, Washington DC

1:30 **2019 WHL Claude Lenfant Excellence Award in Population Hypertension Control**
Presented to Jeffrey A. Cutler MD, FAHA, Consultant for Medical Research, Washington D.C

1:35 **Approaches in China**
Xin-Hua Zhang, MD, PhD, World Health Organization China Office, Beijing, China

1:47 **Approaches in Japan**
Michael A Weber, MD, FAHA, SUNY Downstate College of Medicine New York, New York

2:01 **Approaches in Australia**
Christopher Reid, PhD, Curtin University, Perth, Australia

2:13 **The USA Complement**
Paul Whelton, MD, MSc, Tulane University, New Orleans, Louisiana

2:25 **Panel Discussion on Implementing the Common Components**

3:00–3:30 PM

Refreshment Break and Exhibits
Preservation Hall

3:30–5:30 PM

Session 16 Concurrent A
Renin Angiotensin System
Galerie 3

Chairs:

Jasmina Varagic, MD, PhD, FAHA, National Heart, Lung and Blood Institute, Bethesda, Maryland
Marko Poglitich, PhD, Attoquant Diagnostics, Vienna, Austria

Oral Abstract Presentations

- | | | |
|------|--|-----|
| 3:30 | Mutation in the Furin Cleavage Site of the Prorenin Receptor Attenuates Angiotensin-II Induced Hypertension and Albuminuria
Nirupama Ramkumar , Deborah Stuart, Will Wheatley, Donald E Kohan, Univ of Utah, Salt Lake Cty, UT | 95 |
| 3:45 | Renal-Specific Deletion of (Pro)Renin Receptor in Mice Induces Hyperkalemia During High Potassium Intake
Chuanming Xu , Univ of Utah, Salt Lake City, UT; Yanting Chen, Shiyang Xie, Sun Yat-Sen Univ Sch of Med, Guangzhou, China; Fei Wang, Renfei Luo, Tianxin Yang, Univ of Utah, Salt Lake City, UT | 96 |
| 4:00 | Megalin: A Novel Endocytic Receptor for Prorenin and Renin?
Yuan Sun , Ingrid M Garrelts, Erasmus Medical Ctr, Rotterdam, Netherlands; Xifeng Lu, Shenzhen Univ, Shenzhen, China; A H Jan Danser, Erasmus Medical Ctr, Rotterdam, Netherlands | 97 |
| 4:15 | Susceptibility of Mice Lacking Renin-B to Chronic Angiotensin II Infusion
Pablo Nakagawa , Medical Coll of Wisconsin, Wauwatosa, WI; Anand Nair, Shao Yang Zhang, Univ of Iowa, Iowa City, IA; Ko-Ting Lu, Mario Zanaty, Javier Gomez, Medical Coll of Wisconsin, Wauwatosa, WI; Justin L Grobe, Univ of Iowa, Iowa City, IA; Curt D Sigmund, Medical Coll of Wisconsin, Wauwatosa, WI | 98 |
| 4:30 | Novel Angiotensin-Converting-Enzyme 2 (ACE2) Truncates to Target the Kidney Renin-Angiotensin-System (RAS)
Jan Wysocki , Arndt Schulze, Ming Zhao, Chad Haney, Daniel Battle, Northwestern Univ, Chicago, IL | 99 |
| 4:45 | Mas Receptor Expression in Bone Marrow Stem/Progenitor Cells is Both Required and Sufficient for the Mobilization of Cells in Response to Ischemic Injury
Shrinidh Joshi, Goutham Vasam, NDSU, Fargo, ND; Steven Adkins, Univ of North Dakota, Grand Forks, ND; Sean E Thatcher, Univ of Kentucky, Lexington, KY; David S Bradley, Univ of North Dakota, Grand Forks, ND; Lisa A Cassis, Univ of Kentucky, Lexington, KY; Yagna P Jarajapu , North Dakota State Univ, Fargo, ND | 100 |

SATURDAY

Program Agenda (continued)

5:00 **Novel AT2 Receptor Agonists are Cardio- and Reno-Protective In Vitro and In Vivo**
Yan Wang, Mark Del Borgo, Mibel Aguilar, Chrisan Samuel, Robert Widdop, Monash Univ, Melbourne, Australia

5:15 **Genetic Deletion of Sirtuin 3 (SIRT3) in the Mitochondria of the Proximal Tubules Aggravates Angiotensin II-Induced Hypertension by Impairing the Pressure-Natriuresis Response in Proximal Tubule-Specific SIRT3 Knockout Mice**
Xiao C Li, Xu Chen, Xiaowen Zheng, Chunling Zhao, Jian Xiong Chen, Jia L Zhuo, Univ Mississippi Medical Ctr, Jackson, MS

3:30–5:30 pm

Session 16 Concurrent B

Clinical Hypertension and Target Organ Damage
Galerie 4 and 5

Chairs:

Eric Judd, MD, MS, University of Alabama at Birmingham, Birmingham, Alabama
 Sandra J. Taler, MD, FAHA, Mayo Clinic, Rochester, Minnesota

Oral Abstract Presentations

3:30 **The Effects of a Lower Blood Pressure Treatment Goal on Orthostatic Hypotension in Adults With Recent Stroke** **103**
Stephen P Juraschek, BIDMC-Harvard Medical Sch, Auburndale, MA; Jennifer L Beach, Anthony Ishak, Kenneth J Mukamal, BIDMC-Harvard Medical Sch, Boston, MA

3:45 **Amplification of Systolic Blood Pressure and Pulse Pressure is Higher in Resistant Hypertensive Patients Irrespective of Blood Pressure Control** **104**
Badhma Valaiyapathi, Tanja Dudenbostel, Mohammed Siddiqui, Bin Zhang, Maria E El Hachem, Suzanne Oparil, David A Calhoun, Univ of Alabama at Birmingham, Birmingham, AL

4:00 **Blood Pressure Variation and Renal Functional Changes in Chronic Renal Insufficiency Patients With or Without Diabetes in a Large Cohort Study** **105**
Ling Wang, Kevin Pezeshkian, Donna Wang, Michigan State Univ, East Lansing, MI

101 4:15 **The Association Between Overnight Rostral Fluid Shift and Sleep Disordered Breathing in Patients With Treatment Resistant Hypertension** **106**

Sayaki Ishiwata, Hiroki Matsumoto, Cardiovascular Respiratory Sleep Med, Juntendo Univ Graduate Sch of Med, Tokyo, Japan; Akihiro Sato, Jun Shitara, Shoko Suda, Dept of Cardiovascular Med, Juntendo Univ Graduate Sch of Med, Tokyo, Japan; Takatoshi Kasai, Cardiovascular Respiratory Sleep Med, Juntendo Univ Graduate Sch of Med, Tokyo, Japan

4:30 **Bradykinin B2 Receptor Blockade Prevents Excessive Blood Pressure Reduction During Hemodialysis** **107**

Jorge L Gamboa, Aaron Falck, Cindy Mambungu, Adrienne Claggett, T. Alp Ikizler, Nancy J Brown, Vanderbilt Univ Medical Ctr, Nashville, TN

4:45 **Prevalence and Characteristics of Cardiac Rehabilitation Participants With Resistant Hypertension** **108**

Luke Joseph Laffin, Asad Khan, Cleveland Clinic Fndn, Cleveland, OH; Katherine Lang, Case Western Reserve Univ Sch of Med, Cleveland, OH; Erik H Van Iterson, Cleveland Clinic Fndn, Cleveland, OH

5:00 **Changes in Plasma Renin Activity After Renal Denervation in the Spyral Htn-Off Med Trial** **109**

Felix Mahfoud, Univsklinikum des Saarlandes, Homburg/Saar, Germany; David E Kandzari, Piedmont Heart Inst, Atlanta, GA; Kazuomi Kario, Jichi Medical Univ Sch of Med, Tochigi, Japan; Stuart Pocock, London Sch of Hygiene and Tropical Med, London, United Kingdom; Roland E Schmieder, Univsklinikum Erlangen, Erlangen, Germany; Raymond R Townsend, Perelman Sch of Med, Univ of Pennsylvania, Philadelphia, PA; Konstantinos Tsioufis, Univ of Athens, Hippocratio Hosp, Athens, Greece; Michael A. Weber, SUNY Downstate Coll of Med, Brooklyn, NY; Lucas Lauder, Univsklinikum des Saarlandes, Homburg/Saar, Germany; Martin Fahy, Medtronic PLC, Santa Rosa, CA; Michael Böhm, Univsklinikum des Saarlandes, Homburg/Saar, Germany

5:15 **Association of Blood Pressure Phenotype With Measures of Target Organ Damage** **110**

Elaine M Urbina, Cincinnati Children's Hosp, Cincinnati, OH; Michael Ferguson, Boston Children's Hosp, Boston, MA; Marc Lande, Univ of Rochester Medical Ctr, Rochester, NY; Kevin Meyers, Children's Hosp of Philadelphia, Philadelphia, PA; Joshua Samuels, Univ of Texas Health Sciences Ctr, Houston, TX; Joseph T Flynn, Seattle Children's Hosp, Seattle, WA

Program Agenda (continued)

3:30–5:30 PM

Session 16 Concurrent C

Mechanisms in Diabetes and Obesity

Galerie 6

Chairs:

Amy Christine Arnold, PhD, FAHA, Pennsylvania State College of Medicine, Hershey, Pennsylvania
Michael R. Garrett, PhD, MBA, FAHA, University of Mississippi Medical Center Jackson, Mississippi

3:30 State of the Art Lecture: Recent Trials in Diabetic Nephropathy: SONAR and CREDENCE

Donald E. Kohan, MD, PhD, FAHA, University of Utah Health Center, Salt Lake City, Utah

Oral Abstract Presentations

4:00 Active Time-Restricted Feeding Potentially Protects Blood Pressure Daily Rhythm in Diabetic Mice 111

Tianfei Hou, Wen Su, Marilyn J Duncan, Ming C Gong, Zhenheng Guo, Univ of Kentucky, Lexington, KY

4:15 Soluble (pro) Renin Receptor Serves as Novel Insulin Sensitizing Agent in Mice With Diet-Induced Obesity 112

Fei Wang, Renfei Luo, Chang-Jiang Zou, Shiyang Xie, Kexin Peng, Long Zhao, Kevin T Yang, Chuanming Xu, Tianxin Yang, Univ of Utah, Salt Lake City, UT

4:30 Chemerin Regulates Adipocyte Size in Mesenteric Perivascular Adipose Tissue When on a Normal but Not High Fat Isocaloric Diet 113

David J Ferland, Hannah Garver, Andres G Contreras, Gregory D Fink, Stephanie W Watts, Michigan State Univ, East Lansing, MI

4:45 Renal Inflammation Correlates With Pararenal and Perirenal Adipose Inflammation in Obesity 114

Maria Jelinic, Vivian Tran, Henry Diep, Christopher G Sobey, Grant R Drummond, Antony Vinh, La Trobe Univ, Melbourne, Australia

5:00 Downregulation of Perivascular Adipose Tissue PPAR Gamma in Western Diet-Induced Persistent Vascular Dysfunction in Female Rats 115

Maria Alicia Carrillo-Sepulveda, Nicole Maddie, Dhandevi Persand, NYIT Coll of Osteopathic Med, New York, NY

5:15 BMI is Not a Risk Factor for All-Cause Mortality and Cardiovascular Disease Among African American Women 116

Srividya Kidambi, Priyanka Agarwal, Almira Yang, Thomas Chelius, David Mattson, Allen Cowley, Purushottam Laud, Tao Wang, Mingyu Liang, Theodore Kotchen, Medical Coll of Wisconsin, Brookfield, WI

3:30–5:00 PM

Session 16 Concurrent D

Clinical Practice Clinical Science Track:

Hypertension Journal CPC Case Study Session

Galerie 1 and 2

Chairs:

Professor Dame Anna F. Dominiczak, MD, FAHA, University of Glasgow, Glasgow, Scotland
Rhian M. Touyz, MBBCh, PhD, FMedSci, FAHA, University of Glasgow, Glasgow, Scotland

3:30 Case I: Case of Episodic and Positional Hypertension – Diagnosis and Treatment

Case Presenters:

Mohammed Siddiqui, MD, University of Alabama at Birmingham, Birmingham, Alabama
Tanja Dudenbostel, MD, University of Alabama at Birmingham, Birmingham, Alabama

4:15 Case II: A Case of Resistant Hypertension with Ibrutinib Therapy and Self-Adjustment of Medications

Case Presenters:

Matthew D'Costa, MD, Mayo Clinic, Rochester, Minnesota
Gary L Schwartz, MD, FAHA, Mayo Clinic, Rochester, Minnesota

5:45–6:30 PM

Session 17

The Excellence Award for Hypertension Research Lecture

Acadia

5:45 Molecular Mechanisms and Vascular Biology of Hypertension

Rhian M. Touyz MBBCh, PhD, FMedSci, FAHA, University of Glasgow, Institute of Cardiovascular and Medical Sciences, Glasgow, Scotland

7:00–7:30 PM

Annual Hypertension Scientific Sessions Awards Social

(Dinner ticket is required)

Acadia Foyer

7:30–10:30 PM

Annual Hypertension Scientific Sessions Award Banquet

(Dinner ticket is required)

Acadia

SATURDAY

Program Agenda (continued)

SUNDAY, SEPTEMBER 8

7:00 AM

Registration and Refreshments

Preservation Hall

7:30–9:00 AM

Session 18 Concurrent A

Vascular Stiffness and Fibrosis

Galerie 3

Chairs:

Lauren Gerard Koch, PhD, College of Medicine and Life Sciences, The University of Toledo, Toledo, Ohio
Pierre Paradis, PhD, Lady Davis Institute for Medical Research, SMBD-Jewish General Hospital, McGill University, Montreal, Quebec, Canada

Oral Abstract Presentations

- 7:30 **Transplantation of Bone Marrow Cells from miR-150-KO Mice Improves Immune Function and Attenuates Arterial Stiffness and Hypertension in Senescence-Accelerated Mice** 117
Jun Fan, Shirley Wang, **Zhongjie Sun**, Univ of Tennessee HSC, Memphis, TN
- 7:45 **Mitochondrial Fission in Vascular Cells Mediates Hypertensive Vascular Remodeling and Inflammation** 118
Hannah Cooper, Masashi Miyao, Tatsuo Kawai, Kyle Preston, Kathy Elliott, Rosario Scalia, Victor Rizzo, Satoru Eguchi, Temple Univ, Philadelphia, PA
- 8:00 **Ccl18 as a Potential Mediator of the Pro-Fibrotic Actions of M2 Macrophages in the Vessel Wall During Hypertension** 119
Mingyu Zhu, Caitlin V Lewis, Meghan J Finemore, Maggie Lieu, Robert E Widdop, Chrishan S Samuel, Monash Univ, Melbourne, Australia; Grant R Drummond, La Trobe Univ, Melbourne, Australia; Barbara K Kemp-Harper, Monash Univ, Melbourne, Australia
- 8:15 **Protective Role of Vascular Smooth Muscle Rho-Related BTB Domain Containing Protein 1 in Hypertension and Arterial Stiffness** 120
Shi Fang, Medical Coll of Wisconsin, Wauwatosa, WI; Masashi Mukohda, Univ of Iowa, Iowa City, IA; Jing Wu, Medical Coll of Wisconsin, Wauwatosa, WI; Anand R Nair, Xuebo Liu, Univ of Iowa, Iowa City, IA; Ko-Ting Lu, Medical Coll of Wisconsin, Wauwatosa, WI; Debbie R Davis, Frederick W Quelle, Univ of Iowa, Iowa City, IA; Curt D Sigmund, Medical Coll of Wisconsin, Wauwatosa, WI

- 8:30 **Leptin Restores Endothelial Function, Diminishes Vascular Adrenergic Contractility, but Does Not Alter Arterial Stiffness and Blood Pressure, in a Mouse Model of Congenital Generalized Lipodystrophy** 121
Thiago Bruder-Nascimento, Jessica L Faulkner, Simone Kennard, Galina Antonova, Weiqin Chen, Eric J Belin de Chantemele, Augusta Univ, Augusta, GA

- 8:45 **Cardiac Hypertrophy and Vascular Function are Directly Proportional to Mitochondrial Variations in Intrinsic Exercise Capacity** 122
Shaunak Roy, Jonnelle M Edwards, Jeremy C Tomcho, Nicole R Bearss, Cameron G McCarthy, Youjie Zhang, Adam C Spegele, Lauren G Koch, Bina Joe, Camilla F Wenceslau, Univ of Toledo Coll of Med and Life Sciences, Toledo, OH

7:30–9:00 AM

Session 18 Concurrent B

Inflammation and Immune Mechanisms

Galerie 4 and 5

Chairs:

Justine M. Abais-Battad, PhD, Augusta University, Augusta, Georgia
Daniela Carnevale, PhD, FAHA, Sapienza University of Rome, Pozzilli, Italy

Oral Abstract Presentations

- 7:30 **Difficult-To-Control Blood Pressure in Non-Diabetic Hypertensive Subjects is Associated With Upregulated Gene Expression of Inflammatory Pathways** 123
Kausik Umanath, Ruicong She, Clare Hassett, Indra Adrianato, Jerry Yee, Albert Levin, Pablo Ortiz, Henry Ford Hosp, Detroit, MI
- 7:45 **NaCl Treatment Prior To Chronic Angiotensin II Infusion Exaggerates Vascular Inflammation and the Development of Abdominal Aortic Aneurysms By Affecting Immune Cell Response** 124
Mina Yakoub, Sebastian Temme, Lydia Hering, Ulrich Flögel, Lars C Rump, Johannes Stegbauer, Heinrich-Heine Univ, Düsseldorf, Germany
- 8:00 **Low-Grade Chronic Infection Induces Vascular Dysfunction and Remodeling in Salt Sensitive Hypertension** 125
Jonnelle Edwards, Sarah Galla, Jeremy C Tomcho, Cameron G McCarthy, Nicole Bearss, Shaunak Roy, Blair Mell, Xi Cheng, Bina Joe, Camilla F Wenceslau, Univ of Toledo Coll of Med and Life Sciences, Toledo, OH

SUNDAY

Program Agenda (continued)

- | | | | |
|---|----------------------------------|--|----------------------------------|
| <p>8:15 Role of Vγ6+ $\gamma\delta$ T Cells in Angiotensin II-Induced Hypertension and Vascular Injury
Ahmad Mahmoud, Antoine Caillon, Pierre Paradis, Ernesto L Schiffrin, Lady Davis Inst, Montréal, QC, Canada</p> <p>8:30 The Lung-Associated Self-Antigen Type V Collagen is Regulated by Nuclear Factor of Activated T Cells Isoform c3 in Chronic Hypoxia
David T Jones, Benjamin J Lantz, Yan Guo, Univ of New Mexico Health Sciences Ctr, Albuquerque, NM; Ewa Jankowska-Gan, William J Burlingham, Univ of Wisconsin Sch of Med and Public Health, Madison, WI; Laura V Gonzalez Bosc, Univ of New Mexico Health Sciences Ctr, Albuquerque, NM</p> <p>8:45 Leptin Accelerates Autoimmune Disease Progression and the Development of Hypertension in an Experimental Model of Systemic Lupus Erythematosus
Erin Taylor, Michael Ryan, Univ of MS Medical Ctr, Jackson, MS</p> | <p>126</p> <p>127</p> <p>128</p> | <p>Univ, Parkville, Australia; Siew Yeen Chai, Robert E Widdop, Chrishan S Samuel, Tracey A Gaspari, Monash Univ, Clayton,</p> <p>8:15 COUP-TFII is a Novel Regulator of the TGF-β Pathway in Renal Fibrosis by Mediating the SMAD Signaling Cascade
Usman Ashraf, Vishnuprabu Durairajpandian, Sivarajan Kumarasamy, Univ of Toledo, Toledo, OH</p> <p>8:30 The Role of Xanthine Dehydrogenase (XDH) and Uric Acid in Renal Damage
Lashodya Dissanayake, Denisha Spires, Vladislav Levchenko, Oleg Palygin, Alexander Staruschenko, Medical Coll of Wisconsin, Milwaukee, WI</p> <p>8:45 Dopamine D2Receptor Modulates Wnt Expression and Control of Cell Proliferation
Prasad Konkalmatt, Megha Kumar, Laureano Asico, George Washington Univ, Washington, DC; Zachary Freyberg, Univ of Pittsburgh, Pittsburg, PA; Pedro A Jose, Ines Armando, George Washington Univ, Washington, DC</p> | <p>132</p> <p>133</p> <p>134</p> |
|---|----------------------------------|--|----------------------------------|
- 7:30–9:00 AM**
Session 18 Concurrent C
Mechanisms in Chronic Kidney Disease and Fibrosis
Galerie 6

Chairs:
Daria V. Ilatovskaya, MS, PhD, FAHA, Medical University of South Carolina, Charleston, South Carolina
Carmen De Miguel, PhD, University of Alabama at Birmingham, Birmingham, Alabama
- 9:00–9:30 AM**
Session 18
The Lewis K. Dahl Memorial Lecture
Acadia

9:00 **Epoxy Fatty Acids from Salt Regulation to Kidney and Cardiovascular Therapeutics**
John D. Imig, PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin
- 7:30–9:30 AM**
Session 18 Concurrent D
Clinical Practice Clinical Science Track: Blood Pressure Controversies: The Central Nervous System and the Older Patient
Galerie 1 and 2

Chairs:
Brent Egan, MD, FAHA, American Medical Association, Charleston, South Carolina
Steven M. Smith, PharmD, MPH, College of Pharmacy, University of Florida, Gainesville, Florida

Debate: Is There a Best Blood Pressure Target Post-Stroke for Outcome Improvement

7:30 **The Neurologist's Viewpoint**
Philip B. Gorelick, MD, MPH, FAHA, Davee Department of Neurology, Northwestern University Feinberg School of Medicine, Chicago, Illinois

7:55 **The ACC/AHA US Hypertension Guideline Perspective**
Paul Whelton, MD, MSc, Tulane University, New Orleans, LA

8:20 **Rebuttal Dr Gorelick**

8:25 **Rebuttal Dr Whelton**
- Oral Abstract Presentations**

7:30 **The Microbiome Product Urolithin a Abrogates the Tgf- β Egfr Pai-1 Pathway by Inhibiting Egfr Activation and Expression**
Ana Clara Melo, Nancy T Pirro, Wake Forest Sch Med, Winston Salem, NC; Ann Tallant, Patricia E. Gallagher, Wake Forest Sch Med, Winston-Salem, NC; **Mark C Chappell**, Wake Forest Sch Med, Winston Salem, NC

7:45 **Down Regulation of Gamma-Adducin Diminishes Glomerular Function and Promotes Hypertension Related Chronic Kidney Disease**
Xiaochen He, Shaoxun Wang, Ya Guo, Wenjun Gao, Richard J. Roman, **Fan Fan**, UMMC, Jackson, MS

8:00 **Insulin Regulated Aminopeptidase Inhibitors are More Effective Than the ACE Inhibitor, Perindopril in Preventing Unilateral Ureteral Obstruction-Induced Renal Fibrosis in Mice**
Sharenja Chelvaretnam, Matthew Shen, Monash Univ, Clayton, Australia; Simon J Mountford, Philip E Thompson, Monash

Program Agenda (continued)

SUNDAY

- 8:30 **Blood Pressure and Cognitive Decline: SPRINT-MIND**
William C. Cushman, MD, FAHA, FASH, Veterans Affairs Medical Center, Memphis, Tennessee
- 9:00 **Panel Discussion Dr. Gorelick, Dr. Whelton and Dr. Cushman**

9:30–10:00 AM
Refreshment Break
Preservation Hall

10:00–11:30 AM
Session 19 Concurrent A
Role of the CNS in Obesity
Galerie 3

Chairs:
Analia S. Loria, PhD, University of Kentucky, Lexington, Kentucky
Huxing Cui, PhD, University of Iowa Carver College of Medicine, Iowa City, Iowa

Oral Abstract Presentations

- 10:00 **Cellular Senescence in the Paraventricular Nucleus – Novel Implications for Obesity-Induced Sympathoexcitation** **135**
Madhan Subramanian, Delton Hall, Oklahoma State Univ, Stillwater, OK; **Priya Balasubramanian**, Univ of Oklahoma Health Science Ctr, Oklahoma City, OK
- 10:15 **The Ventromedial Hypothalamic BBSome is Required for Energy Homeostasis and Sympathetic Nerve Traffic Control** **136**
Deng-Fu Guo, Mohamed Rouabhi, Donald A Morgan, Kamal Rahmouni, The Univ of Iowa, Iowa City, IA
- 10:30 **Impact of Leptin Deficiency Compared to Neuronal Specific Leptin Receptor Deletion on Cardiometabolic Regulation** **137**
Jussara M do Carmo, Alexandre A da Silva, Fabio N Gava, Sydney P Moak, Xuemei Dai, John E Hall, Univ of Mississippi Medical Ctr, Mississippi Ctr for Obesity Res, Jackson, MS
- 10:45 **Acute Stimulation of Neuro-Adipose Connections Increase Blood Pressure Responses in Male Mice Exposed to Early Life Stress** **138**
Carolina Dalmasso, Sophia Mounce, Jacqueline Leachman, Xiu Xu, Analia Loria, Univ of Kentucky, Lexington, KY
- 11:00 **Nicotinic Acetylcholine Receptor Genes Contribute to Leptin Resistance** **139**
Changwei Li, Luqi Shen, Ruiyuan Zhang, Jia-Sheng Wang, Ye Shen, Jose Cordero, Zhong-Ru Xie, Lei Loou, Lirong Liang, Univ of Georgia, Athens, GA
- 11:15 **Neuronal Prorenin Receptor Deletion Attenuates Astrogliosis and Inflammation in the Arcuate Nucleus of Mice Fed With High Fat Diet** **140**
Caleb J Worker, Yumei Feng, Univ of Nevada, Reno Medical Sch, Reno, NV
- 10:00–11:30 AM**
Session 19 Concurrent B
Renal Hemodynamics Mechanisms
Galerie 4 and 5
- Chairs:**
Nirupama Ramkumar MD, MPH, FAHA, University of Utah, Salt Lake City, Utah
Jennifer S. Pollock, PhD, FAHA, University of Alabama at Birmingham, Birmingham, Alabama
- Oral Abstract Presentations**
- 10:00 **Enhanced Hydrogen Peroxide-Dependent Renin and Pro-Renin Release in Juxtaglomerular Cells from Diabetic Mice: Role of NOX1** **141**
M. Cecilia Ortiz-Capisano, Dipak Maskey, **Mariela Mendez**, Henry Ford Hosp, Detroit, MI
- 10:15 **Purinergic P2 X Receptors and a T 1 Receptors Share Post – Receptor Signaling Pathways Regulating Renal Afferent Arterioles in Angiotensin I I (Ang I I) Dependent Hypertension** **142**
Supaporn Kulthinee, Thammasat Univ, Pathum Thani, Thailand; **Weijian Shao**, Tulane Univ, New Orleans, LA; **Martha Franco**, Insto Nacional de Cardiologia Ignacio Chavez, Mexico City, Mexico; **L Gabriel Navar**, Tulane Univ, New Orleans, LA
- 10:30 **Enhancing Renal Lymphatic Vessel Density Blunts Both Salt-Sensitive and Angiotensin II-Dependent Hypertension in Mice** **143**
Dakshnapriya Balasubramanian, Sunitha Konatham, Geina Iskander, Madison Engelhaupt, Sydney Love, Winter Tate, Bethany L Goodlett, Sophie Wedgeworth, Gaurav Baranwal, Joseph M Rutkowski, Brett M Mitchell, Texas A and M Univ HSC, College Station, TX
- 10:45 **Macula Densa NOS1 β -Mediated TGF Response Plays an Important Role in the Sex Differences in Salt-Sensitive Hypertension** **144**
Jie Zhang, Jin Wei, Shan Jiang, Lei Wang, Ruisheng Liu, The Univ of South Florida, Tampa, FL
- 11:00 **Knockout of Gamma-Adducin Impairs Vascular Function in Renal Arterioles in Association With Htn-Induced Renal Injury** **145**
Wenjun Gao, Letao Fan, Huawei Zhang, Xiaochen He, Shaoxun Wang, Guo Ya, Richard J Roman, Fan Fan, Univ of Mississippi Medical Ctr, Jackson, MS

Program Agenda (continued)

11:15 **Glomerular Capillary Hypertrophy is Insufficient to Mitigate Mechanical Stresses in 5/6 Nephrectomy: A Modeling Study**
Owen Richfield, Luis G Navar, Ricardo Cortez, Tulane Univ, New Orleans, LA

10:00–11:30 AM

Session 19 Concurrent C

Preeclampsia and Developmental Programming

Galerie 6

Chairs:

Jane F. Reckelhoff, PhD, FAHA, University of Mississippi Medical Center, Jackson, Mississippi

Kate M. Denton, PhD, FAHA, Monash University, Clayton, Australia

Oral Abstract Presentations

10:00 **Copeptin and Mid-Regional Pro-ANP in Women With Suspected or Confirmed Preeclampsia: Comparison With the sFlt-1/PIGF Ratio**
Rugina Neuman, Maaïke Alblas van der Meer, Langeza Saleh, Sjoerd van den Berg, Ton van den Meiracker, Willy Visser, Jan Danser, Erasmus Medical Ctr, Rotterdam, Netherlands

10:15 **Sex-Differences in Fetal Programming of Cardiomyopathy Induced by Hypertensive Disorders of Pregnancy in Mice**
 Nissim Benizri, McGill Univ, Montréal, QC, Canada; Nozha Raguema, Casandra Marc, CIUSSS Nord-de-l'Île-de-Montréal, Montréal, QC, Canada; Émilie Pépin, Julie Lavoie, Univ de Montréal, Montréal, QC, Canada; **Mariane Bertagnolli**, CIUSSS Nord-de-l'Île-de-Montréal, Montréal, QC, Canada

10:30 **Postpartum Cognitive Function in Young Women With a History of Preeclampsia: Association With Blood Pressure but Not Large Artery Stiffness**
Virginia R Nuckols, Amy K Stroud, Debra S Brandt, Lyndsey E DuBose, Mark K Santillan, Donna A Santillan, Gary L Pierce, Univ of Iowa, Iowa City, IA

10:45 **Obese Hypertensive Pregnant Rats Have Reduced Placental Growth Factor Whereas Increasing It's Levels Decreases Their Blood Pressure**
Frank T Spradley, Ana C Palei, Univ of Mississippi Medical Ctr, Jackson, MS; Woo S Joo, Paul Kussie, Adelene Y Tan, Aggamin LLC, New York, NY

11:00 **Post-Partum Hypertension in Response to Acute Kidney Injury During Pregnancy**
Jamie Szczepanski, Shauna-Kay Spencer, Teylor Bowles, John P Dumas, Jan M Williams, Ashley Griffin, Kedra Wallace, Univ of Mississippi Medical Ctr, Jackson, MS

146 11:15 **Downregulation of Placental Genes are Associated With the Development of Maternal Syndrome in Dahl Salt-Sensitive Rats**
John Henry H Dasinger, Justine M Abais-Battad, Daniel J Fehrenbach, Hayley Lund, Jeylan Zemaj, Ammar J Alsheikh, David L Mattson, Medical Coll of Wisconsin, Milwaukee, WI

10:00–11:30 AM

Session 19 Concurrent D

Clinical Practice Clinical Science Track:

Treatment of Cardiorenal Syndrome

Galerie 1 and 2

Chairs:

David Ellison, MD, Oregon Health and Science University, Portland, Oregon

Karen Griffin, MD, FAHA, Hines VA Hospital, Hines, Illinois

10:00 **Pathophysiology and Current Concepts in Classification**
 Peter McCullough, MD, Baylor University Medical Center Dallas, Texas

10:20 **Diagnosis: Biomarkers, Imaging, and Invasive Monitoring**
 Kausik Umanath, MD, MS, FASN, Division of Nephrology and Hypertension, Henry Ford Hospital, Wayne State University, Detroit, Michigan

10:40 **Decongestion and Management of Diuretic Resistance in CRS.**
 Maria Rosa Costanzo, MD, FAHA, FACC, FESC, Advocate Heart Institute, Naperville, Illinois

11:00 **Panel Discussion and Q&A Dr. McCullough, Dr. Umanath and Dr. Costanzo**

SUNDAY

Poster Presentations

Poster Session Schedule

All poster sessions will be held in **Preservation Hall**.

Poster Session Date	Presentation Time	Set-up Time	Tear-Down Time
Session I Thursday, September 5	5:30–7:30 PM	Noon–5:00 PM	8:00–9:00 PM
Session II Friday, September 6	1:30–3:00 PM	9:00 AM–1:00 PM	3:00–5:00 PM
Session III Saturday, September 7	1:30–3:00 PM	9:00 AM–1:00 PM	3:00–5:00 PM

Thursday, September 5, 5:30–7:30 PM

Poster Session I, Trainee Onsite Poster Competition

Abstracts P101–P199 and P1100–1127

Note that there may be instances where the posters are not in numerical order due to changes requested by the presenter.

Poster Professors/Judges:

Francois M. Abboud, MD, FAHA, University of Iowa, Iowa City, Iowa
Wissam A. Aboualawi, PhD, University of Toledo, Toledo, Ohio
Barbara T. Alexander, PhD, FAHA, University of Mississippi Medical Center, Jackson, Mississippi
Matt Alexander, MD, PhD, Vanderbilt University Medical Center, Nashville, Tennessee
Amy Christine Arnold, PhD, FAHA, Pennsylvania State, College of Medicine, Hershey, Pennsylvania
George L. Bakris, MD, MA, FASN, FAHA, University of Chicago Medicine, Chicago, Illinois
Christopher T. Banek, PhD, University of Arizona, Tucson, Arizona
Eric Belin de Chantemele, DSc, FAHA, Medical College of Georgia at Augusta University, Augusta, Georgia
John Bisognano, MD, PhD, FAHA, University of Rochester Medical Center, Rochester, New York
J. Brian Byrd, FAHA, MD, University of Michigan Medical School, Ann Arbor, Michigan
Maria Alicia Carrillo-Sepulveda, PhD, New York Institute of Technology, Long Island, New York
Huxing Cui, PhD, University of Iowa Carver, College of Medicine, Iowa City, Iowa
William C. Cushman, MD, FAHA, FASH, Veterans Affairs Medical Center, Memphis, Tennessee
Carmen De Miguel, PhD, University of Alabama at Birmingham, Birmingham, Alabama
Christian Delles, MD, FAHA, University of Glasgow, Glasgow, Scotland
Kate M. Denton, PhD, FAHA, Monash University, Clayton, Australia
Professor Dame Anna F. Dominiczak, MD, FAHA, University of Glasgow, Glasgow, Scotland
Satoru Eguchi, MD, PhD, FAHA, Temple University Lewis Katz School of Medicine, Philadelphia, Pennsylvania
Fernando Eljovich, MD, FAHA, Vanderbilt University, Nashville, Tennessee
Fan Fan, MD, MS, FAHA, University of Mississippi, Medical Center, Jackson, Mississippi
Yumei Feng Earley, MD, PhD, FAHA, University of Nevada Reno, Reno, Nevada
Gregory Fink, PhD, FAHA, Michigan State University, East Lansing, Michigan
Alfredo J. Gamboa, MD, FAHA, Vanderbilt University, Nashville, Tennessee
Edward Inscho, PhD, FAHA, University of Alabama at Birmingham, Birmingham, Alabama
Hana A. Itani, PhD, FAHA FASN, American University of Beirut, Beirut, Lebanon
Pedro A. Jose, MD, PhD, FAHA, The George Washington University School of Medicine & Health Sciences, Washington, DC
Nancy L. Kanagy, PhD, FAHA, University of New Mexico, Albuquerque, New Mexico
Sivarajan Kumarasamy, PhD, University of Toledo College of Medicine and Life Sciences, Toledo, Ohio
Eric Lazartigues, PhD, FAHA, Louisiana State University Health Sciences Center, New Orleans, Louisiana
Meena S. Madhur, MD, PhD, FAHA, Vanderbilt University, Nashville, Tennessee
Cameron G. McCarthy, PhD, Department of Physiology and Pharmacology, University of Toledo College of Medicine and Life Sciences, Toledo, Ohio
Brett Mitchell, PhD, FAHA, Texas A&M College of Medicine, College Station, Texas
Augusto C. Montezano, PhD, FAHA, University of Glasgow, Glasgow, Scotland
Dominik N. Mueller, PhD, Max-Delbrück Center and Clinical Experimental Research Center, Berlin, Germany
Pablo Nakagawa, PhD, Medical College of Wisconsin, Milwaukee, Wisconsin
Benard Ogola, PhD, Tulane University, New Orleans, Louisiana
Patrick J. Pagano, PhD, FAHA, University of Pittsburgh, Pittsburgh, Pennsylvania
Pierre Paradis, PhD, Lady Davis Institute for Medical Research, SMBD-Jewish General Hospital, McGill University, Montreal, Quebec, Canada
Marko Poglitsch, PhD, Attoquant Diagnostics, Vienna, Austria
David M. Pollock, PhD, FAHA, University of Alabama at Birmingham, Birmingham, Alabama
Jennifer Pollock, PhD, FAHA, University of Alabama Birmingham, Birmingham, Alabama
Jane F. Reckelhoff, PhD, FAHA, University of Mississippi Medical Center, Jackson, Mississippi
Francisco Rios, PhD, University of Glasgow, Glasgow, Scotland
Clive Rosendorff, MD, PhD, DScMed, FAHA Icahn School Of Medicine At Mount Sinai, New York, New York
Mark K. Santillan, MD, PhD, FAHA, University of Iowa Carver College of Medicine, Iowa City, Iowa

Poster Presentations (continued)

Jennifer M. Sasser, PhD, FAHA, University of Mississippi Medical Center, Jackson, Mississippi
 Sabrina Scroggins, PhD, University of Iowa, Iowa City, Iowa
 Maria Luisa Sequeira Lopez, MD, University of Virginia, Charlottesville, Virginia
 Cyndya Shibao, MD, Vanderbilt University Medical Center, Nashville, Tennessee
 Hillel Sternlicht, MD, Detroit Medical Center, Detroit, Michigan
 Adam C. Straub, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania
 Wanpen Vongpatanasin, MD, FAHA, University of Texas Southwestern Medical Center, Dallas, Texas
 Stephen Walsh, MRCP, PHD, University College London, London, United Kingdom
 Junie Warrington, PhD, University of Mississippi Medical Center, Jackson, Mississippi
 Stephanie W. Watts, PhD, FAHA, Michigan State University, East Lansing Michigan
 R. Clinton Webb, PhD, FAHA, Augusta University, Augusta, Georgia
 Camilla Wenceslau, PhD, The University of Toledo College of Medicine and Life Sciences, Toledo, Ohio
 Jing Wu, PhD, Medical College of Wisconsin, Milwaukee, Wisconsin
 Brandi Wynne, PhD, Emory University School of Medicine, Atlanta, Georgia
 Frederique Yiannikouris, PhD, University of Kentucky, Lexington, Kentucky

Friday, September 6, 1:30-3:00 PM

Poster Session II

Note that there may be instances where the posters are not in numerical order due to changes requested by the presenter.

Session	Topic	Poster Numbers
APS.2.1	Cardiac Hypertrophy and Heart Failure	P2001-P2013
APS.2.2	Renin-Angiotensin Aldosterone System	P2014-P2033
APS.2.3	Renal Transport and Hemodynamics	P2034-P2049
APS.2.4	Clinical, Genetic and Epidemiological Mechanisms	P2050 -P2074

Poster Professors:

Alison J. Kriegel, PhD, Medical College of Wisconsin, Milwaukee, Wisconsin
 Amy Christine Arnold, PhD, FAHA, Penn State College of Medicine, Hershey, Pennsylvania
 Justin L. Grobe, PhD, FAHA, Medical College of Wisconsin, Milwaukee, Wisconsin
 Jorge F. Giani, PhD, Cedars Sinai Medical Center, Los Angeles, California
 Jennifer S. Pollock, PhD, FAHA, University of Alabama at Birmingham, Birmingham, Alabama
 Bina Joe, PhD, FAHA, FAPS, College of Medicine and Life Sciences, University of Toledo, Toledo, Ohio
 Gary L. Pierce, PhD, FAHA, University of Iowa, Iowa City, Iowa

Saturday, September 7, 1:30-3:00 PM

Poster Session III

Note that there may be instances where the posters are not in numerical order due to changes requested by the presenter.

Session	Topic	Poster Numbers
APS.3.1	Vascular Mechanisms and Biology	P3001-P3025
APS.3.2	Salt and Nutrition	P3026-P3037
APS.3.3	Pregnancy and Preeclampsia	P3038-P3047
APS.3.4	Pharmacology and Non-pharmacological Approaches	P3048-P3059
APS.3.5	Neurogenic Mechanisms	P3060-P3063

Poster Professors:

Nancy L. Kanagy, PhD, FAHA, University of New Mexico, Albuquerque, New Mexico
 Meena S. Madhur, MD, PhD, FAHA, Vanderbilt University, Nashville, Tennessee
 Jing Wu, PhD, Medical College of Wisconsin, Milwaukee, Wisconsin
 Babbette B Lamarca, PhD, FAHA, University of Mississippi Medical Center Jackson, Mississippi
 Cameron G. McCarthy, PhD, Department of Physiology and Pharmacology, University of Toledo
 College of Medicine and Life Sciences, Toledo, Ohio
 Christopher T. Banek, PhD, University of Arizona, Tucson, Arizona

Poster Presentations (continued)

- P101 Interleukin 17 Signaling Mediates Cytolytic Natural Killer Cell Activation in Response to Placental Ischemia**
Denise C Cornelius, Olivia K Travis, Dakota White, Cedar H Baik, Willie L Thompson, Chelsea Giachelli, Jan M Williams, Babbette LaMarca, Univ of Miss Med Ctr, Jackson, MS
- P102 A Vegan Approach for Gestational Hypertension in African Americans**
Laura Moreno, Herzing Univ, Menomonee Falls, WI
- P103 Atherosclerotic Cardiovascular Disease Risk Reduction in High Risk Populations: A Resident Driven Quality Improvement Initiative**
Eric Y Chang, Temidayo Abe, Krystle Campbell, Hadia Ahmad, Chisom Anyanwoke, Chima Odinkemere, Nicolas Bakinde, Morehouse Sch of Med, Atlanta, GA
- P104 Activation of Endoplasmic Reticulum Stress and Thrombospondin-1 Anti-Angiogenic Mechanisms in Placentas of Hypertensive Mice**
Casandra Marc, Allahnah Achille, Nozha Raguema, CIUSSS Nord-de-l'Île-de-Montréal, Montréal, QC, Canada; Émilie Pepin, Julie Lavoie, Univ de Montréal, Montréal, QC, Canada; Mariane Bertagnolli, CIUSSS Nord-de-l'Île-de-Montréal, Montréal, QC, Canada
- P105 Sex Hormonal Changes of Calcium-Sensing Receptor and Renin-Angiotensin-Aldosterone System in Salt-Sensitive Rats via Exposure of High Salt Diets**
Charles Okechukwu, North Carolina Central Univ, Durham, NC
- P106 Elevated Fasting Glucose and Proteinuria in Offspring Born to Gestational Hypertensive African Green Monkeys**
Chelsea C Weaver, Univ of Kentucky, Lexington, KY; Jessica C Taylor, Primates Plus, LLC, Lexington, KY; Jeffrey L Osborn, Univ of Kentucky, Lexington, KY
- P107 Role for Endothelin B Receptors in the Maintenance of Heart Rate Baroreflex Function**
Bryan K Becker, Chunhua Jin, David M Pollock, Univ of Alabama Birmingham, Birmingham, AL
- P108 Identify Hypertension Risk from Health Exam Results**
Thanh Nguyen, Informatics Inst, Univ of Alabama at Birmingham, Birmingham, AL; Tongbin Zhang, Sch of 1st Clinical Medical Sciences, Sch of Information and Engineering, Wenzhou Medical Univ, Wenzhou, Zhejiang, China; Eric Zhang, Jianyi Zhang, Dept of Biomedical Engineering, Univ of Alabama at Birmingham, Birmingham, AL; Chuandi Pan, Dept of Computer Technology and Information Management, The First Affiliated Hosp of Wenzhou Medical Univ, Wenzhou, Zhejiang, China; Jake Chen, Informatics Inst, Univ of Alabama at Birmingham, Birmingham, AL
- P109 Hypertension in a Large Cohort of Patients With Lipoprotein(a) at a Tertiary Academic Center**
Samip Sheth, Marjorie Risman, Daniel Rader, Douglas Jacoby, Univ of Pennsylvania, Philadelphia, PA
- P110 Classical Dendritic Cells Mediate Hypertension by Promoting Oxidative Stress and Renal Fluid Retention**
Xiaohan Lu, Nathan Rudemiller, Jamie Privratsky, Jiafa Ren, Yi Wen, Robert Griffiths, Michael D Gunn, Steven D Crowley, Duke Univ, Durham, NC
- P111 Renal Perfusion Pressure Determines Renal Leukocyte Infiltration During Angiotensin II-Induced Hypertension in Sprague Dawley Rats**
Satoshi Shimada, Justine M Abais-Battad, Ammar J Alsheikh, Megan Stumpf, Theresa Kurth, Medical Coll of Wisconsin, Milwaukee, WI; Louise Evans, Univ of Minnesota, Minneapolis, MN; David L Mattson, Allen W Cowley Jr, Medical Coll of Wisconsin, Milwaukee, WI
- P112 Sex Differences and the Role of G Protein-Coupled Estrogen Receptor in Arterial Stiffening**
Benard O Ogola, Gabrielle L Clark, Caleb M Abshire, Nicholas R Harris, Kaylee L Gentry, Dylan Lawrence, Margaret A. Zimmerman, Carolyn L Bayer, Kristin S Miller, Sarah H. Lindsey, Tulane Sch of Med, New Orleans, LA
- P113 Anti-Hypertensive Properties of Brown Adipose Tissue**
Jie Zhang, Marko Oydanich, Koichi Nishimura, Tolga Berkman, Dorothy E Vatner, Stephen F Vatner, Rutgers Univ-New Jersey Medical Sch, Newark, NJ
- P114 Chemerin Leads to a Contraction of the Uterine Artery After Stimulation With Serotonin**
Vanessa Dela Justina, Fernanda Priviero, Augusta Univ, Augusta, GA; Victor V. Lima, Fernanda Giachini, Federal Univ of Mato Grosso, Barra do Garças, Brazil; Clinton Webb, Augusta Univ, Augusta, GA
- P115 Troponin I and Dystrophin Proteolysis by Matrix Metalloproteinase 2 Contribute to Chronic Cardiac Remodeling and Dysfunction in Renovascular Hypertension**
Juliana Montenegro Parente, Marcela Maria Mello, Ana Carolina Omoto, Rubens Fazan, Michele Mazzaron de Castro, Univ of Sao Paulo, Ribeirao Preto, Brazil
- P116 Inhibition of Ang II-Induced Mitochondrial Fission and Endoplasmic Reticulum Stress Attenuates Protein Aggregate Accumulation, Inflammation, and Senescence in Vascular Smooth Muscle Cells**
Stephanie Michelle Cicalese, Hannah Cooper, Tatsuo Kawai, Temple Univ, Philadelphia, PA; Masashi Miyao, Kyoto Univ, Kyoto, Japan; Kyle Preston, Victor Rizzo, Rosario Scalia, Satoru Eguchi, Temple Univ, Philadelphia, PA

Poster Presentations (continued)

- P117 **Successful Comprehensive Management of Labile Severe Hypertension With Zero-Salt Diet, Stress Reduction, and Antihypertensive Combination of Sacubitril-Valsartan and Nebivolol**
Alexander M Swan Jr, Htet Htet Kyaw, Htun Min Aung, Aye Mon Thida, Tracy T Swan, May Thu Tun, **Alexander Myint Swan**, Nephro HTN Renal Transplant Rx, LLC, Avenel, NJ
- P118 **Angiotensin-(1-7) Improves Cardiometabolic Function in Aged Mice**
Amanda J Miller, Sarah S Bingaman, Melissa C White, Amy C Arnold, Pennsylvania State Univ College, Hershey, PA
- P119 **Prevalence and Coincidence of Arterial Hypertension and Orthostatic Hypotension in Pre and Centenarians: Preliminary Results of Moscow Centenarian Study**
Kseniia Eruslanova, Nadejda Runichina, Julia Kotovskay, Olga Tkacheva, Rg NKC, Moscow, Russian Federation
- P120 **Leukocyte and Lymphocyte-Derived Extracellular Vesicles are Elevated in Angiotensin-Induced Hypertension**
Sabrina La Salvia, Luca Musante, Joanne Lannigan, Robert M Carey, Brant Isakson, Univ of Virginia, Charlottesville, VA; Thu H Le, Univ of Rochester, Rochester, NY; Uta Erdbrügger, Univ of Virginia, Charlottesville, VA
- P121 **A Novel Delivery of Alpha-Calcitonin Gene Related Peptide (α -CGRP) Using Alginate Microcapsules Protects Against Pressure-Overload Induced Heart Failure**
Ambrish Kumar, Univ of South Carolina Dept of Cell Biology and Anatomy, Columbia, SC; Marwa Belhaj, Univ of South Carolina, Columbia, SC; Donald J Dipette, Univ of South Carolina Dept of Internal Med, Columbia, SC; Jay D Potts, Univ of South Carolina Dept of Cell Biology and Anatomy, Columbia, SC
- P122 **Downregulation and Inhibition of PKC α Causes Increased Ca²⁺-Sensing Receptor-Mediated Vascular Relaxation in Aged Dahl Salt-Sensitive Rats**
Samuel O Odutola, Lakeesha E Bridges, Emmanuel M Awumey, North Carolina Central Univ, Durham, NC
- P123 **Traditional Chinese Herbal Qian Yang Yu Yin Granules Treat Renal Damage in Spontaneously Hypertensive Rats by Inhibiting Renal Fibrosis**
Yuan Fang, The First Clinical Medical Coll, Nanjing Univ of Chinese Med, Nanjing, China; Kang Ding, The Third Affiliated Hosp of Nanjing Univ of Chinese Med, Nanjing, China; Zhuyuan Fang, Han Wang, Biao Zhang, Affiliated Hosp of Nanjing Univ of Chinese Med, Nanjing, China
- P124 **Nlrp3 Activation by Endothelin-1 Mediates Neutrophil Recruitment in Cavernosal Tissue of DOCA/salt Mice**
Rafael Sobrano Fais, Raphael Ferreira Gomes, Carlos Wagner Wanderley, Rita de Cássia Tostes, Fernando Silva Carneiro, Ribeirao Preto Medical Sch, Ribeirao Preto, Brazil
- P125 **Determining Patient and Provider Acceptance of Therapeutic Drug Monitoring to Improve Medication Adherence**
Kevin Schesing, Shishir Sharma, Hamza Lodhi, Bryan Wu, Sandeep R Das, Bryan Elwood, Scott A Smith, Ethan A Halm, Wanpen Vongpatanasin, Univ of Texas Southwestern, Dallas, TX
- P126 **Statines Reduce Cardiac Dysfunction After Preeclamptic Pregnancy**
Kristin Kraeker, Max Delbrueck Ctr, Berlin, Germany; Till Schuette, Charite Univsmedizin, Berlin, Germany; Florian Herse, Max Delbrueck Ctr, Berlin, Germany; Michaela Golic, Charite Univsmedizin, Berlin, Germany; Anna Birukov, Dominik N Mueller, Max Delbrueck Ctr, Berlin, Germany; Ralf Dechend, Charite Univsmedizin, Berlin, Germany; Nadine Haase, Max Delbrueck Ctr, Berlin, Germany
- P127 **Serpinc1/Antithrombin III Attenuates Salt-Induced Hypertension**
Feng Wang, Yiwei Kong, Junhui Li, Hong Xue, Xuanchen Liu, Kristie Usa, Aron M Geurts, Mingyu Liang, Medical Coll of Wisconsin, Milwaukee, WI
- P128 **Increasing Pressure to Lower Blood Pressure: Assessing Blood Pressure Goals at Resident Physician Clinic**
Emily Schultz, Lien Trieu, Matthew Snyder, Sandrine Lebrun, Rebecca Mazurkiewicz, Lenox Hill Hosp, New York, NY
- P129 **White Coat Effect Causes Excessive Antihypertensive Treatment in Low Risk Patients**
Mariano Duarte, Hosp de Clinicas Facultad de Medicina UBA, Ciudad Autonoma de Buenos Aires, Argentina; Lidia Sarotto, Neurooftalmología Hosp de Clinicas Facultad de Medicina UBA, Ciudad Autonoma de Buenos Aires, Argentina; Analía Aquieri, Javier Coyle, Hosp de Clinicas Facultad de Medicina UBA, Ciudad Autonoma de Buenos Aires, Argentina; Pablo Scacchi Bernasconi, Facultad de Medicina UBA, Ciudad Autónoma de Buenos Aires, Argentina; Carlos Reyes Toso, Facultad de Medicina UBA, Ciudad Autonoma de Buenos Aires, Argentina
- P130 **Renal Endothelin-1 Contributes to Salt Sensitivity in Male Sprague-Dawley Rats Under High-Fat Conditions**
Reham H Soliman, Chunhua Jin, Crystal M Taylor, David M Pollock, Univ of Alabama at Birmingham, Birmingham, AL

Poster Presentations (continued)

- P131 A Selective Chymase Inhibitor, TEI-f00806, Eliminates the Ang II Production From Rat Ang-(1-12) in Bone Marrow Tissue**
Tomohisa Yamashita, Sarfaraz Ahmad, Kendra N Wright, Drew J Roberts, Jessica L VonCannon, Jasmina Varagic, Dept of General Surgery, Wake Forest Univ Sch of Med, Winston Salem, NC; Xuming Sun, Hao Wang, Leanne Groban, Dept of Anesthesiology, Wake Forest Univ Sch of Med, Winston Salem, NC; Carlos M Ferrario, Dept of General Surgery, Wake Forest Univ Sch of Med, Winston Salem, NC
- P132 Differential and Sex Dependent Expression of Vasopressin Receptors by B Cells, NK Cells, and Dendritic Cells**
Sabrina M Scroggins, Lydia E Sharp, Jenna M Lund, Eric J Devor, Akshaya Warriar, Wendy S Hamilton, Donna A Santillan, Mark K Santillan, Univ of Iowa, Iowa City, IA
- P133 The Impact of Cigarette Smoking-Oral Contraceptive Combination on Cardiac Remodeling in Premenopausal Female Mice**
Emna Abidi, Abdullah Kaplan, Nada Habeichi, Rana Ghali, Dina Muhieddine, Abdo Jurjus, Ahmad Husari, Fouad Zouein, American Univ of Beirut, Beirut, Lebanon
- P134 Selective Inhibition of Angiotensin-Converting Enzyme C-Domain in Combination With Sacubitril Prevents Hypertension-Associated Vascular Damage and Reduces Systolic Blood Pressure**
Rheure Alves-lopes, Augusto C Montezano, Karla B Neves, Adam Harvey, Francisco Rios, Univ of Glasgow, Glasgow, United Kingdom; Lauren Arendse, Univ of Cape Town, Cape Town, South Africa; Livia Camargo, Univ of Glasgow, Glasgow, United Kingdom; Marko Poglitsch, Attoquant Diagnostics GmbH, Vienna, Austria; Mario Ehlers, Immune Tolerance Network, San Francisco, CA; Edward Sturrock, Univ of Cape Town, Cape Town, South Africa; Rhian M Touyz, Univ of Glasgow, Glasgow, United Kingdom
- P135 Angiotensin II, But Not Methoxamine Or 5-HT, Causes ATP Release in the Rat Mesenteric Arterial Bed**
Katherine A Kummer, Gerald H Wilken, Heather Macarthur, Saint Louis Univ Sch of Med, St. Louis, MO
- P136 Comparison of Pharmacy Refill Data With Therapeutic Drug Monitoring (TDM) in Assessing Non-Adherence to Cardiovascular Drugs in Patients With Uncontrolled Hypertension**
Bryan Wu, Shishir Sharma, Hamza Lodhi, Kevin Schesing, Sandeep Das, Univ of Texas Southwestern, Dallas, TX; Nancy Brown, Vanderbilt Univ Medical Ctr, Nashville, TN; Elizabeth Moss, Ethan Halm, Wanpen Vongpatanasin, Univ of Texas Southwestern, Dallas, TX
- P137 Immune Response Factors in Patients With Arterial Hypertension, Diabetes Mellitus and Acute Coronary Syndrome**
Svetlana Glova, Sergey Shlyk, Larisa Khaisheva, Rostov State Medical Univ, Rostov - On - Don, Russian Federation
- P138 Perivascular Adipose Tissues (pvats) Home Distinct 'Active' Immune Cell Niches, Denser Than Non-pvat Adipose Tissues of Healthy Rats**
Ramya Kalyana Kumar, Cheryl E Rockwell, Stephanie W Watts, Michigan State Univ, East Lansing, MI
- P139 Cytochrome B5 Reductase 3 Biases Activation of Soluble Guanylyl Cyclase in Resistance Arteries**
Brittany G Durgin, Scott A Hahn, Univ of Pittsburgh, Pittsburgh, PA; Rafael De Cabo, Translational Gerontology Branch, Natl Inst on Aging, Baltimore, MD; Adam C Straub, Univ of Pittsburgh, Pittsburgh, PA
- P140 The Role of Pumpkin Flesh in Reducing Mean Arterial Pressure in a Genetic Rat Model for Hypertension**
Soweto Thomas, Tuskegee Univ, Tuskegee, AL
- P141 Toll Like Receptor 4 Mediated Autophagy Contributes to Hypertension-Induced Kidney Injury**
Suravi Majumder, Sathnur Basappa Pushpakumar, Gregory Weber, Utpal Sen, Univ of Louisville, Louisville, KY
- P142 Progression of Diabetic Kidney Disease in the Type 2 Diabetic Nephropathy Rat Model**
Denisha Spires, Medical Coll of Wisconsin, Milwaukee, WI; Daria Ilatovskaya, Medical Univ of South Carolina, Charleston, SC; Vladislav Levchenko, Oleg Palygin, Alexander Staruschenko, Medical Coll of Wisconsin, Milwaukee, WI
- P143 Multifaceted Roles of Gut Microbiome and Bacterial Metabolites in Pulmonary Arterial Hypertension**
Seungbum S Kim, Univ of Florida, Gainesville, FL; Jacquelyn M Walejko, Univ of Georgia, Athens, GA; Katya Rigatto, Federal Univ of Health Sciences of Porto Alegre, Porto Alegre, Brazil; Jordan Ray, Mayo Clinic, Jacksonville, FL; Marcelo B Gazzana, Marli M Knorst, Federal Univ of Rio Grande do Sul, Porto Alegre, Brazil; Elaine M Richards, Univ of Florida, Gainesville, FL; Brian Shapiro, Mayo Clinic, Jacksonville, FL; Carl J Pepine, Mohan K Raizada, Univ of Florida, Gainesville, FL
- P144 Integrin $\beta 1$ in Tubular Epithelium Protects From Acute Injury Induced Fibrosis**
Riya J Palamuttam, Vanderbilt Univ Medical Ctr, Nashville, TN; Sijo Mathew, North Dakota State Univ, Fargo, ND

Poster Presentations (continued)

- P145 Notch3 Mutation is Involved in Pulmonary Vascular Dysfunction and Development of Pulmonary Arterial Hypertension**
Hannah E Morris, Karla B Neves, Inst of Cardiovascular and Medical Sciences (ICAMS), Univ of Glasgow, Glasgow, United Kingdom; Margaret Nilsen, Strathclyde Inst of Pharmacy and Biomedical Sciences (SIPBS), Univ of Strathclyde, Glasgow, United Kingdom; Augusto C Montezano, Inst of Cardiovascular and Medical Sciences (ICAMS), Univ of Glasgow, Glasgow, United Kingdom; Anne Joutel, Inserm U1266, Inst of Psychiatry and Neurosciences of Paris, Paris, France; Mandy R MacLean, Strathclyde Inst of Pharmacy and Biomedical Sciences (SIPBS), Univ of Strathclyde, Glasgow, United Kingdom; Rhian M Touyz, Inst of Cardiovascular and Medical Sciences (ICAMS), Univ of Glasgow, Glasgow, United Kingdom
- P146 Dopaminergic Stimulation Increases Gastrin Secretion via a PKA-PPAR-Alpha Pathway**
Peng Xu, John J Gildea, Wei Yue, Univ of Virginia, Charlottesville, VA; Pedro A Jose, The George Washington Univ, Sch of Med & Health, Washington DC; Robin A Felder, Univ of Virginia, Charlottesville, VA
- P147 Changes in Renal Function Precede the Development of Hypertension in Female Mice With Systemic Lupus Erythematosus**
Elena Dent, Michael Ryan, Univ of Mississippi Medical C, Jackson, MS
- P148 Transcriptomic and Proteomic Analysis of CD4⁺ T Cells to Identify Sex Differences in Angiotensin II Signaling Pathways**
Joshua A Uhlorn, Nathaniel A Husband, Melissa J Romero-Aleshire, Caitlin K Moffett, Amy C Kelly, Paul R Langlais, Janko Nikolich-Zugich, Heddwen L Brooks, Univ of Arizona, Tucson, AZ
- P149 Factors Associated With Future Cardiovascular Disease in Women With Hypertensive Disorders of Pregnancy and Gestational Diabetes**
Ugochinyere Vivian Ukah, McGill Univ, Montreal, QC, Canada; Natalie Dayan, McGill Univ Health Ctr, Montreal, QC, Canada; Nathalie Auger, Inst Natl de Santé Publique du Québec, Montreal, QC, Canada; Robert Platt, McGill Univ, Montreal, QC, Canada
- P150 Genes of a Brown Norway Chromosome 2 Fragment Introgressed Into Hypertensive Dahl Salt-Sensitive Background Exert Pro-Inflammatory Effects When Stimulated by a High-Salt Diet**
Olga Berillo, Sofiane Ouerd, Ku-Geng Huo, Asia Rehman, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Chantal Richer, Daniel Sinnett, Sainte-Justine Univ Hosp, Montreal, QC, Canada; Anne E Kwitek, Dept of Internal Med, Univ of Iowa, Iowa, IA; Pierre Paradis, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Ernesto L Schiffrin, Lady Davis Inst for Medical Res, Jewish General Hosp, Montreal, QC, Canada
- P151 Cardiac Outcome in Offspring of Diabetic Pregnancy**
Till Schuette, Charite - Univ Med, Berlin, Germany; Kristin Kraeker, Nadine Haase, Florian Herse, Natalia Alenina, Dominik N Mueller, Michael Bader, Max Delbrueck Ctr, Berlin, Germany; Michael Schupp, Michaela Golic, Ralf Dechend, Charite - Univ Med, Berlin, Germany
- P152 Forkhead Box Subclass O Transcription Factors Differentially Regulate Soluble Guanylyl Cyclase Expression in Smooth Muscle**
Joseph Galley, Subramaniam Sanker, Megan Miller, Adam Straub, Univ of Pittsburgh, Pittsburgh, PA
- P153 Early Changes in Left-Atrial and Left-Ventricular Geometry and Function in Women After Preeclampsia as Detected by Cardiac Magnetic Resonance Imaging**
Anna Birukov, Stephanie Funk, Andras Balogh, Lajos Markó, Michaela Golic, Natalia Rakova, Nicola Wilck, Edyta Blaszczyk, Carolin Lim, Sara Weiss, ECRC, Charité Univ and MDC, Berlin, Germany; Steffen Daub, Ctr for Cardiology 1, Molecular Cardiology, Medical Ctr of the Johannes Gutenberg Univ, Mainz, Germany; Kristin Kräker, Nadine Haase, Dominik N. Müller, Florian Herse, Jeanette Schulz-Menger, Ralf Dechend, ECRC, Charité Univ and MDC, Berlin, Germany
- P154 Plasma and Placental (Pro)Renin and Soluble (Pro)Renin Receptor are Upregulated in Preeclamptic Pregnancy**
Ahmed F Pantho, Syeda H Afroze, Texas A&M Univ Coll of Med, Temple, TX; David CC Sprague, Orion Inst for Trans Med, Temple, TX; Thomas J Kuehl, Baylor Scott & White Health, Temple, TX; Lorena Amaral, Tarik Ibrahim, Babbette LaMarca, Univ of Mississippi Medical Ctr, Jackson, MS; Tsutumu Nakagawa, Faculty of Applied Biological Sciences, Gifu Univ, Gifu, Japan; David C Zawieja, Texas A&M Univ Coll of Med, Temple, TX; Mohammad N Uddin, Orion Inst for Trans Med, Temple, TX
- P155 Chronic Muscadine Grape Extract Intake Improves Diastolic Function Associated With Lower Circulating Aldosterone in Hannover Sprague Dawley Male Rats**
Fatima Ryalat, Liliya M Yamaleyeva, Nildris Cruz-Diaz, E Ann Tallant, Patricia E Gallagher, Debra I Diz, Wake Forest Univ, Winston Salem, NC
- P156 Long-Term Blood Pressure Outcomes and Costs Associated With a Barber-Pharmacist Hypertension Intervention: 10-Year Simulation of the Los Angeles Barber Trial**
Kelsey B Bryant, Columbia Univ Medical Ctr, New York, NY; Dhruv S Kazi, Beth Israel Deaconess, Boston, MA; Valy Fontil, Joanne Penko, Univ of California San Francisco, San Francisco, CA; Ciantel A Blyler, Kathleen Lynch, Joseph Ebinger, Norma B Moy, Florian Rader, Cedars-Sinai Medical Ctr, Los Angeles, CA; Kirsten Bibbins-Domingo, Univ of California San Francisco, San Francisco,

Poster Presentations (continued)

- CA; Andrew E Moran, Brandon K Bellows, Columbia Univ Medical Ctr, New York, NY
- P157 **Role of P47^{phox} in Angiotensin II Induced Cardiac Hypertrophy and Fibrosis in Mice**
S Santosh Reddy, Heena Agarwal, Anant Jaiswal, Manoj Kumar Barthwal, CSIR-Central Drug Res Inst, Lucknow, India
- P158 **Preeminent Role of the Cardiorenal Axis in the Antihypertensive Response to an Arteriovenous Fistula: An *In Silico* Analysis**
John S Clemmer, W. Andrew Pruett, Robert L Hester, Thomas E Lohmeier, Univ of Mississippi Medical Ctr, Jackson, MS
- P159 **Reversing Ocular Hypertension and Blindness by Hydrogen Sulfide**
Mahavir Singh, Akash K George, Rubens P Homme, Naira Metreveli, Suresh C Tyagi, Univ of Louisville, Louisville, KY
- P160 **Dual-Specificity Protein Phosphatase 5 Regulates Renal Vessel Myogenic Response via Direct Modulating Extracellular Signal-Related Kinase and Protein Kinase C**
Wenjun Gao, Huawei Zhang, Xiaochen He, Shaoxun Wang, Guo Ya, George W Booz, Richard J Roman, Fan Fan, Univ of Mississippi Medical Ctr, Jackson, MS
- P161 **Inhibition of Progesterone Induced Blocking Factor Causes Clinical Characteristics of Preeclampsia in Sprague Dawley Rats**
Lorena M Amaral, Jesse N Cottrell, Mark W Cunningham Jr., Tarek Ibrahim, Ramana R Vaka, Babbette LaMarca, Medical Ctr-UMMC, Jackson, MS
- P162 **Placental Ischemia During Pregnancy Leads to Impaired Cardiac Function and Global Longitudinal Strain**
Bhavisha A Bakrania, Michael E Hall, Univ of Mississippi Med. Ctr, Jackson, MS; Sajid Shahul, Univ of Chicago, Chicago, IL; Joey P Granger, Univ of Mississippi Med. Ctr, Jackson, MS
- P163 **Masked Uncontrolled Hypertension in Treated Hypertensive Patients Have Heightened Out-Of-Clinic Aldosterone Levels**
Mohammed Siddiqui, Tanja Dudenbostel, Eric K Judd, Suzanne Oparil, David A Calhoun, Univ of Alabama at Birmingham, Birmingham, AL
- P164 **Sexual Dimorphic Role of CD14 in Dahl SS Hypertension**
Daniel J Fehrenbach, Justine M Abais-Battad, John Henry Dasinger, Hayley Lund, Theodore Keppel, Jeylan Zemaj, Rebekah L Gundry, Aron M Geurts, Melinda R Dwinell, David L Mattson, Medical Coll of Wisconsin, Milwaukee, WI
- P165 **Vascular Endothelial Exosomes Propagate Inflammation in Vascular Smooth Muscle Cells Through Up-Regulation of HMGB1**
Michael Boyer, Temple Univ, Philadelphia, PA; Yayoi Kimura, Tomoko Akiyama, Yokohama City Univ, Yokohama City, Japan; Satoru Eguchi, Victor Rizzo, Temple Univ, Philadelphia, PA
- P166 **Paracrine Endothelial Microrna214 Exosomes Modulate Smooth Muscle Cell Function in Pulmonary Arterial Hypertension**
Sanghamitra Sahoo, Patrick Pagano, Univ of Pittsburgh, Pittsburgh, PA
- P167 **Trends in Hypertension Prevalence, Awareness, and Control Based on the New Definition of Hypertension; A National Health and Nutrition Examination Survey-Based Study**
Olajide Buhari, Jacobi Medical Ctr/Albert Einstein Coll of Med, Bronx, NY; Adebayo Atanda, George Washington Univ Hosp, Washington DC, DC; Chioma Onyekwelu, Vidant Medical Ctr, Vidant, NC; Adam Gershon, Robert Faillace, Jacobi Medical Ctr/Albert Einstein Coll of Med, Bronx, NY
- P168 **Drug-Drug Interactions in Hospitalized Cardiac Patients and It's Clinical Management**
Kavya Reddy VI, Togari Veera Mallappa Memorial Coll of Pharmacy, Bellary, India
- P169 **Renal Denervation Attenuates a Catabolic State in Mice Fed High Salt**
Daisuke Yamazaki, Dept of Pharmacology, Faculty of Med, Kagawa Univ, Kitagun, Japan; Kento Kitada, Cardiovascular and Metabolic Disorders, Duke-NUS Medical Sch, College Rd, Singapore; Norihiko Morisawa, Div of Nephrology & Hypertension, Dept of Internal Med, Tokyo, Japan; Yoshihide Fujisawa, Life Science Res Ctr, Faculty of Med, Kagawa Univ, Kitagun, Japan; Daisuke Nakano, Dept of Pharmacology, Faculty of Med, Kagawa Univ, Kitagun, Japan; Hirofumi Hitomi, Dept of iPS Stem Cell Regenerative Med, Kansai Medical Univ, Osaka, Japan; Jens Titze, Cardiovascular and Metabolic Disorders, Duke-NUS Medical Sch, College Rd, Singapore; Akira Nishiyama, Dept of Pharmacology, Faculty of Med, Kagawa Univ, Kitagun, Japan
- P170 **Cytochrome P450 1b1-Dependent Sex Differences in Norepinephrine-Induced Hypertension**
Purnima Singh, Shubha Ranjan Dutta, Kafait U Malik, Univ of Tennessee, Memphis, TN
- P171 **Gut Microbiota-Derived Hydrogen Sulfide is Reduced in Spontaneously Hypertensive Rats**
Basak Donertas, Wendi L. Malphurs, David M. Baekey, David Julian, Jasenka Zubcevic, Univ of Florida, Gainesville, FL
- P172 **Is the Elastin Receptor Complex a Bridge Between Perivascular Adipose Tissue and the Artery?**
Paul Weber, Emma Flood, Janice Thompson, Stephanie Watts, Michigan State Univ, East Lansing, MI
- P173 **Trimethylamine N-Oxide (TMAO) Impairs Endothelium-Dependent Relaxation of the Mesenteric Artery in Lean and Db/db Mice**
Fernanda Priviero, Vanessa Dela Justina, Olufunke Arishe, Clinton Webb, Augusta Univ, Augusta, GA

Poster Presentations (continued)

- P174 **Incidence of Hyponatremia on Spironolactone in Patients With a Prior Episode of Chlorthalidone-Induce Hyponatremia**
Faris Matanes, Mohammed Siddiqui, Tanja Dudenbostel, David Calhoun, Suzanne Oparil, Univ of Alabama at Birmingham, Birmingham, AL
- P175 **Resistance Hypertension and Achievement of Target Blood Pressure**
Oksana Rekovets, Olena Torbas, Svitlana Kushnir, Galina Primak, Nina Krushinska, Yuriy Sirenko, Inst of Cardiology, Kyiv, Ukraine
- P176 **Familial Autonomic Ganglionopathy Caused by Rare CHRNA3 Genetic Variants. Novel Genetic Cause of Neurogenic Orthostatic Hypotension**
Cyndya A Shibao, John Phillips, Joy D Cogan, John H Newman, Rizwan Hamid, Jens Meiler, John A Capra, Jonathan Sheehan, Vanderbilt Univ. Medical Ctr, Nashville, TN; Yaping Yan, Baylor Coll of Med, Baylor, TX; Francesco Vetrini, Baylos Coll of Med, Baylor, TX; Bonnie Black, Karen Joos, David Robertson, Italo Biaggioni, Vanderbilt Univ. Medical Ctr, Nashville, TN
- P177 **The Dissociation of Heart Rate and Blood Pressure Masks the Regulatory Role of Heart Rate in Systemic Hemodynamics**
Muhammad Absar Anwar, Kalaimani Elango, Sherif Elsayed, Rahil Ahmed, Peter Osmond, Univ at Buffalo, Erie County Medical Ctr, Buffalo, NY; Joseph L Izzo Jr., State Univ NY at Buffalo, Buffalo, NY
- P178 **Mineralocorticoid Receptor Antagonism Improved the Metabolic Function in a Mouse Model With Chronic Kidney Disease and Obesity**
Roberto Palacios Ramirez, Benjamin Bonnard, INSERM 1138, Paris, France; **Frederic Jaisser**, INSERM DR6, Paris, France
- P179 **Time Restricted Feeding Improves Blood Pressure and Heart Rate Rhythms as Well as Activation of NOS3 and AMP Kinase in Mice on a Chronic High Fat Diet**
Paramita Pati, Dingguo Zhang, Jackson Colson, Randee Sedaka, Cardio-Renal Physiology & Med, Div of Nephrology, Univ of Alabama Birmingham, Birmingham, AL; Martin E Young, Div of Cardiovascular Disease, Dept of Med, Univ of Alabama Birmingham, Birmingham, AL; Karen L Gamble, Div of Neurobiology, Dept of Psychiatry, Univ of Alabama Birmingham, Birmingham, AL; Shannon M Bailey, Div of Molecular and Cellular Pathology, Dept of Pathology, Univ of Alabama Birmingham, Birmingham, AL; David M Pollock, Jennifer S. Pollock, Cardio-Renal Physiology & Med, Div of Nephrology, Univ of Alabama Birmingham, Birmingham, AL
- P180 **Deficiency of Sirtuin 3 Sensitizes Angiotensin II-Induced Cardiac Pericyte-Fibroblast Transition and Diastolic Dysfunction via Iron Overloading**
Han Su, Heng Zeng, Rebecca A Worsham, Jian Xiong X Chen, Univ Mississippi Medical Ctr, Jackson, MS
- P181 **Optimizing Precision of Hypertension Care to Maximize Blood Pressure Control (OPTI-BP): A Pilot Study Utilizing a Smartphone App**
Mai Mehanna, Yiqing E Chen, Yan Gong, Eileen M Handberg, Brittney Roth, Univ of Florida, Gainesville, FL; Jessica De Leon, Florida State Univ, Tallahassee, FL; Steven M Smith, Univ of Florida, Gainesville, FL; Helen Paulson, Tallahassee Memorial Hosp, Tallahassee, FL; Jose Montilla-Crespo, Univ of Florida, Jacksonville, FL; Jonathan G Harrell, Rhonda M Cooper-Dehoff, Univ of Florida, Gainesville, FL
- P182 **Quantifying Differences in Blood Pressure by Using Different Blood Pressure Cuff Sizes in Children**
Ruchi Gupta Mahajan, Kashif Iqbal, Jeffrey Kern, Flushing Hosp Medical Ctr, Flushing, NY
- P183 **Retinol Binding Protein 7, a PPAR γ Target Gene Protects Against Endothelial Dysfunction Induced by Mitochondrial Uncoupling**
Sebastiao D Silva Junior, Medical Coll of Winsconsin, Milwaukee, WI; Anand R Nair, Larry Agbor, Univ of Iowa, Iowa City, IA; Curt D Sigmund, Medical Coll of Winsconsin, Milwaukee, WI
- P184 **Exploring Sex Differences in Immune Cell Profiles of Male, Premenopausal Female, and Postmenopausal Female Mice to Understand Susceptibility to Immune Mediated Hypertension**
Megan A Sylvester, Dennis P Pollow, Josh A Uhlorn, Melissa J Romero-Aleshire, Jennifer Uhrlaub, Janko Nikolich-Zugich, Heddwen L Brooks, Univ of Arizona, Tucson, AZ
- P185 **The Effect of Anti-Interleukin-17A Biologic Therapies on Cardiovascular Outcomes in Patients With Psoriasis**
Charles D Smart, Vanderbilt Univ Sch of Med, Nashville, TN; Megan Shuey, Fernando Eliovich, Nancy Cox, Meena S Madhur, Vanderbilt Univ Medical Ctr, Nashville, TN
- P186 **Specific Knockout of Sox6 in Renin Expressing Cells Cause a Decrease in Renin Expression and Changes to Vascular Reactivity**
Luz Saavedra, Mohammad Saleem, Liang Xiao, Mingfang Ao, Jose A Gomez, Vanderbilt Univ Medical Center, Nashville, TN
- P187 **Incidence and Predictors of Diuretic-Induced Hyponatremia**
Faris Matanes, Mohammed Siddiqui, Tanja Dudenbostel, David Calhoun, Suzanne Oparil, Univ of Alabama at Birmingham, Birmingham, AL

Poster Presentations (continued)

- P188 Electrical Stimulation of Sub-Diaphragmatic Vagal Trunk Alleviates Hypertension in the SHR**
Elliott W Dirr, Ladan G Jiracek, David M Baekey, Kevin J Otto, Jasenka Zubcevic, Univ of Florida, Gainesville, FL
- P189 Human Endothelin-1 Overexpression in Mice Changed Gene Expression in Mesenteric Arteries**
Olga Berillo, Suellen C Coelho, Ku-Geng Huo, Sofiane Ouerd, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Chantal Richer, Div of Hematology-Oncology, Res Ctr, CHU Ste-Justine, Montreal, QC, Canada; Nada Mahjoub, Nathanne S Ferreira, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Daniel Sinnett, Div of Hematology-Oncology, Res Ctr, CHU Ste-Justine, Dept of Pediatrics, Faculty of Med, Univ de Montréal, Montreal, QC, Canada; Pierre Paradis, Lady Davis Inst for Medical Res, Montreal, QC, Canada; Ernesto L Schiffrin, Lady Davis Inst for Medical Res, Jewish General Hosp, Montreal, QC, Canada
- P190 Transcriptomic Data Analysis Reveals Sex-Related Differences in the Interplay Between Toll-Like Receptor 4 and Heat-Shock Protein 70 in the Aorta of Type 2 Diabetic Donors**
Amanda Almeida De Oliveira, Josemar Faustino, Kenia Pedrosa Nunes, Florida Inst of Technology, Melbourne, FL
- P191 Greater Beat-To-Beat Blood Pressure Variability is Associated With Lower Cognitive Performance Independent of Mean Blood Pressure Among Cigarette Smokers**
Rachel E Luehrs, Carinda J Linkenmeyer, Hannatu I Amaza, Christina Wong, Ryan C Ward, Gwyneth B Phillips, Alejandro P Comellas, Gary L Pierce, Karin F Hoth, The Univ of Iowa, Iowa City, IA
- P192 miR-29b Restores Endothelium Dependent Vasodilation in Dahl Salt-Sensitive Rats**
David M Jensen, Mingyu Liang, Michael Widlansky, Jingli Wang, Medical Coll of Wisconsin, Milwaukee, WI
- P192 Implications of a Simplified Hypertension Screening Approach for Low-and Middle-Income Countries**
Olive Tang, Edgar R Miller III, Lawrence Appel, Dinesh Neupane, Yifei Lu, Tammy Brady, Johns Hopkins Univ, Baltimore, MD; Andrew Moran, Columbia Univ, New York, NY; Cheryl Dennison-Himmelfarb, Kunihiro Matsushita, Johns Hopkins Univ, Baltimore, MD
- P193 A Novel Mechanism for the Pathogenesis of Preeclampsia: Cell-Free Mitochondrial DNA Mediated Toll Like Receptor 9 Activation**
Matthew Rappelt, Andreas Beyer, David Gutterman, Laura Norwood Toro, Alexa Derayunan, Jennifer McIntosh, Medical Coll of Wisconsin, Milwaukee, WI
- P194 Endothelin as a Persistent Biomarker of Hypoxia**
Juan H Morales-Loredo, David T Jones, Thomas L Resta, Nancy L Kanagy, Laura V Gonzalez Bosc, Univ of New Mexico Health Sciences Ctr, Albuquerque, NM
- P195 Overexpression of ACE2 Boosts the Therapeutic Effects of Endothelial Progenitor Cells Derived Exosomes on Hemorrhagic Stroke**
Jinju Wang, Wright State Univ, Dayton, OH; Qunwen Pan, Bin Zhao, Xiaotang Ma, Affiliated Hosp of Guangdong Medical Univ, Zhanjiang, China; **Ji C Bihl**, Wright State Univ, Dayton, OH
- P196 Hot Yoga and Hypertension: Exploration of a Novel Lifestyle Intervention**
Stacy Hunter, A Tobi Fadeyi, James Shadiow, Texas State Univ, San Marcos, TX
- P197 TRPM7 is Involved in the Effects of VEGF and EGF in Vascular Cells**
Francisco J Rios, ZhiGuo Zou, Karla B Neves, Rheure Alves-Lopes, Livia L Camargo, Augusto C Montezano, Rhian M Touyz, Univ of Glasgow, Glasgow, United Kingdom
- P198 High Glucose Degrades (PRO) Renin Receptor by Autophagy and Ubiquitin Proteasome System in Inner Medullary Collecting Duct Cells**
Tao Luo, Helmy Siragy, Div of Endocrinology and Metabolism, Univ of Virginia Health System, Charlottesville, VA
- P199 Gene Variants in Human Renal Proximal Tubule Alpha ENaC are Associated With Inverse Salt Sensitivity of Blood Pressure**
Peng Xu, Univ of Virginia, Charlottesville, VA; Charleston V Sudarikova, Daria V Ilatovskaya, Medical Univ of South Carolina, Charleston, SC; John J Gildea, Wei Yue, Katherine A Schiermeyer, Robin A Felder, Univ of Virginia, Charlottesville, VA
- P1100 Angiotensin-(1-7) Via Angiotensin Type-1 Receptor Synergies Angiotensin Type-2 Receptor Response of Nitrite Formation in Kidney Cells**
Sanket N Patel, Tahir Hussain, Univ of Houston, Houston, TX
- P1101 Hormonal Contraceptive Use, Arterial Stiffness and Renin Angiotensin System Activity in Women**
Cindy Kalenga, Sandi Dumanski, Sharanya Ramesh, Jennifer M MacRae, Kara Nerenberg, Amy Metcalfe, Darlene Sola, Sofia B Ahmed, Univ of Calgary, Calgary, AB, Canada
- P1102 Profile Characteristics of the Population Assisted in the 2018 Less Pressure Campaign of the Brazilian Hypertension Society**
Grazia M Guerra RN, Heart Inst and São Camilo Univ Ctr, São Paulo, Brazil; Teresa Bartholomeu RPE, Sch of Physical Education and Sport of the Univ of São Paulo – EEFE-USP, São Paulo, Brazil; Helio C. Salgado MD, Medical of Sch Riberão Preto of Univ of São Paulo – FMRPUSP, Riberão Preto, Brazil; Frida Plavnik MD, Brazilian Society

Poster Presentations (continued)

- of Hypertension - SBH, São Paulo, Brazil; Miriam Harumi Tsunemi RME, Inst of Mathematics and Statistics, Paulista State Univ UNESP - Botucatu, São Paulo, Brazil; Luciana Angelo RPs, Insto Sedes Sapientiae, São Paulo, Brazil; Kátia De Angelis D'Avila RPE, Federal Univ of São Paulo - UNIFESP, São Paulo, Brazil; Ana Luize Berger RND, Heart Inst, São Paulo, Brazil; Leandro Brito RPE, Sch of Physical Education and Sport of the Faculty of the Univ of São Paulo - EEFE USP, São Paulo, Brazil; Evandro Evandro Cesarino MD, Medical of Scholl Riberão Preto - São Paulo Univ - FMRPUSP, Riberão Preto, Brazil; Márcia Gowdak RND, Brazilian Society of Hypertension - SBH, São Paulo, Brazil; Luiz A. Bortolotto MD, Heart Inst, São Paulo, Brazil
- P1103 **Angiotensin II Type I Receptor Agonistic Autoantibody Blockade Improves Hypertension and Immune Activation in Postpartum Preeclamptic Rats**
Mark W Cunningham Jr., Pooja Chinthakuntla, Karen Brooks, Brandon Fisher, Tarek Ibrahim, Lorena Amaral, George W. Booz, Univ of Mississippi Medical Ctr, Jackson, MS
- P1104 **The Infusion of the Soluble Prorenin Receptor Increases Blood Pressure in High-Fat Fed Male Mice**
Eva O Gattineau, Ming Gong, **Frederique B Yiannikouris**, Univ of Kentucky, Lexington, KY
- P1105 **Precise Hypertension Management by Impedance Cardiography**
Diego Marquez, Facundo Iliguez, Diego Lacunza, Hosp San Bernardo, Salta, Argentina; Marcelo Orias, Sanatorio Allende, Cordoba, Argentina; Cesar A Romero, Emory Univ Sch of Med, Atlanta, GA
- P1106 **RND3/rhoe Deficiency Results in Mitochondrial Dysfunction in Placenta With Preeclampsia Through Modulating PPAR γ Pathway**
Xiaojing Yue, Southern Medical Univ, Guangzhou, China; Xiangsheng Yang, Biotron Biosciences and Technology, Guangzhou, China; Yanlin Ma, Hainan Reproductive Medical Ctr, the Affiliated Hosp of Hainan Medical Univ, Haikou, China; Xia Chen, Liping Huang, Yanhong Yu, Southern Medical Univ, Guangzhou, China
- P1107 **Acute Psychosocial Stress Increases Circulating Inflammatory Mediators in the Humanized Sickle Cell Mouse Model**
Patrick Molina, Brandon Fox, Randee Sedaka, Bryan Becker, Malgorzata Kasztan, Davide Botta, J. Miller Allan, David Pollock, Jennifer Pollock, Univ of Alabama at Birmingham, Birmingham, AL
- P1108 **Serum Immunoglobulins are Not Necessary for Experimental Hypertension**
Yuhan Chen, Bethany Dale, Vanderbilt Univ, Nashville, TN; Matthew Alexander, Vanderbilt Univ Medical Ctr, Nashville, TN; Duncan Smart, Mingfang Ao, Meena S Madhur, Vanderbilt Univ, Nashville, TN
- P1109 **Cholesterol Regulation of Hydrogen Sulfide-Mediated Vasodilation**
Perenkita J Mendiola, Laura V Gonzalez Bosc, Nancy L Kanagy, Univ of New Mexico, Albuquerque, NM
- P1110 **Tumor Necrosis Factor Alpha Blockade Improves Natural Killer Cell Activation, Hypertension, and Mitochondrial Oxidative Stress in a Preclinical Rat Model of Preeclampsia**
Mark W Cunningham Jr., Aswathi Jayaram, Lorena A Amaral, Pooja Chinthakuntla, Karen Brooks, George Booz, Venkata Ramana Vaka, Tarek Ibrahim, Evangeline Deer, Denise C Cornelius, Babbette LaMarca, Univ of Mississippi Medical Ctr, Jackson, MS
- P1112 **Gestational Interventions and Fetal Outcomes in a Rat Model of Intrauterine Growth Restriction**
Laura E Coats, Gwendolyn K Davis, Daniel R Bamrick, Bhavisha A Bakrania, Norma B Ojeda, Barbara T Alexander, UMMC, Jackson, MS
- P1113 **P2x7 Receptor Plays a Role in Angiotensin II-Induced Hypertension and Vascular Remodeling**
Brandon Shokoples, Pierre Paradis, Lady Davis Inst, Montreal, QC, Canada; Ernesto L Schiffrin, Sir Mortimer B Davis-Jewish General Hosp, Montreal, QC, Canada
- P1114 **Impairment of Nitric Oxide Induces Volume Expansion in Normotensive Salt-Sensitivities by Activating NCC**
Conghui Wang, Chinese PLA General Hosp, Beijing, China; Fumiko Mori, The Univ of Tokyo, Tokyo, Japan; Lei Kang, Peking Univ First Hosp, Beijing, China; Nobuhiro Ayuzawa, Sayoko Ogura, The Univ of Tokyo, Tokyo, Japan; Xiangmei Chen, Chinese PLA General Hosp, Beijing, China; Toshiro Fujita, The Univ of Tokyo, Tokyo, Japan; Tatsuo Shimosawa, Intl Univ of Health and Welfare, Tokyo, Japan; Suang Suang Koid, The Univ of Tokyo, Department of Clinical Laboratory, Japan
- P1115 **Decreased Tubuloglomerular Feedback (TGF) Response in High-Fat Diet Induced Obesity**
Sumit R Monu, Hong Wang, Pablo Ortiz, Henry Ford Health System, Detroit, MI
- P1116 **Early Life Stress Induces HDAC-Dependent Expression of Pro-Oxidant Genes in the Aorta**
Thomas H Neder, Kelly A Hyndman, Univ of Alabama at Birmingham, Birmingham, AL; Dao H Ho, Tripler Army Medical Ctr, Honolulu, HI; Abdalrahman Zarzour, Medical Coll of Georgia at Augusta Univ, Augusta, GA; Alan K Johnson, Univ of Iowa, Iowa City, IA; Neal Weintraub, Medical Coll of Georgia at Augusta Univ, Augusta, GA; David M Pollock, Jennifer S Pollock, Univ of Alabama at Birmingham, Birmingham, AL

Poster Presentations (continued)

- P1117 **Dissimilarities Between and Carotid and Forearm Pressure-Decay and Windkessel Parameters: Implications for Circulatory Models**
Joseph L Izzo Jr., Muhammad Absar Anwar, Sherif Elsayed, Peter Osmond, State Univ NY at Buffalo, Buffalo, NY; Benjamin Gavish, Yazmonti, Jerusalem, Israel
- P1118 **The Role of Lateral Hypothalamic Leptin Circuitry in Autonomic Control of Cardiovascular Function**
Uday Singh, Brandon A Toth, Kenji Saito, Donald A Morgan, Jingwei Jiang, Kamal Rahmouni, Huxing Cui, Univ of Iowa, Iowa City, IA
- P1119 **Serum Gdf-15 is a Determinant Factor of Renal Vascular Resistance in Patients With Essential Hypertension**
Satoru Shichijo, Ehime Univ Graduate Sch of Med, Dept of Cardiology, Pulmonology, Hypertension & Nephrology, Toon City, Japan; Takafumi Okura, Ehime Univ Graduate Sch of Med, Dept of Community and Emergency Med, Toon City, Japan; Tomoaki Nagao, Fumikazu Kondo, Ayu Makita, Osamu Yamaguchi, Kenichi Miyoshi, Ehime Univ Graduate Sch of Med, Dept of Cardiology, Pulmonology, Hypertension & Nephrology, Toon City, Japan
- P1120 **Opioids Induce Proliferation in Vascular Smooth Muscle Cells Leading to an Increase in Myogenic Tone in Resistance Arteries**
Jeremy C Tomcho, Jonnelle Edwards, Nicole R Bearss, Cameron G McCarthy, Bina Joe, Camilla F Wenceslau, Univ of Toledo Coll of Med and Life Science, Toledo, OH
- P1121 **Identification of Renin Expressing Cells via *In Situ* Hybridization in the Brain of C57bl/6 Mice**
Javier A Gomez, Pablo Nakagawa, Medical Coll of Wisconsin, Milwaukee, WI; Justin L Grobe, Univ of Iowa, Iowa City, IA; Curt D Sigmund, Medical Coll of Wisconsin, Milwaukee, WI
- P1122 **Sympathetic Vasodilation Improves Insulin-Mediated Microvascular Recruitment in the Forearm of Obese Subjects**
Jay N Patel, Jorge E Celedonio, Emily C Smith, Suzanna Lonce, Sachin Paranjape, Luis Okamoto, Italo Biaggioni, Alfredo Gamboa, Vanderbilt Univ Medical Ctr, Nashville, TN
- P1123 **The Pharmacological Basis for Vasodilator Effect of *Sisymbrium Irio* Linn. Validates its Folkloric Use in Hypertension**
Muhammad Masood Ahmed, Faculty of Pharmacy, B.Z Univ, Multan, Pakistan; Musaddique Hussain, Sch of Med, Zhejiang Univ, Hangzhou, China; Umer Farooq, Coll of Pharmaceutical Sciences, Zhejiang Univ, Hangzhou, China; Shahid Masood Raza, Sch of Pharmacy, The Univ of Faisalabad, Faisalabad, Pakistan; Shumaila Andleeb, Abdul Majeed, Syed Nisar Hussain Shah, Faculty of Pharmacy, B.Z Univ, Multan, Pakistan
- P1124 **Nephron Deficiency and Hyperglycemic Renal Injury Using a Novel One Kidney Rat Model**
Meredith B Cobb, Wenjie Wu, Ashley C Johnson, Esinam M Attipoe, Michael R Garrett, U of Mississippi Medical Ctr, Jackson, MS
- P1125 **Serum Metabolite 1-Methylhistidine, a Marker of Red Meat and Poultry Consumption, Independently Associates With Increases in Systolic and Diastolic Blood Pressure in Middle-Aged Adults**
Alexander C Razavi, Camilo Fernandez, Lydia A Bazzano, Jiang He, Marie A. Krousel-Wood, Tulane Univ Sch of Med, New Orleans, LA; Jovia Nierenberg, Mengyao Shi, Changwei Li, Xuenan Mi, Shengxu Li, Tulane Univ Sch of Public Health and Tropical Med, New Orleans, LA; Jason Kinchen, Metabolon Inc., Durham, NC; Seamus P. Whelton, The Ciccarone Ctr for the Prevention of Heart Disease, Johns Hopkins Univ Sch of Med, Baltimore, MD; Tanika N Kelly, Tulane Univ Sch of Public Health and Tropical Med, New Orleans, LA
- P1126 **Neutrophil Extracellular Traps: New Players in Hypertension**
Matam Vijay-Kumar, Piu Saha, Beng San Yeoh, Rachel Golonka, Cameron McCarthy, Adam Spegele, Ahmed Abokor, Saroj Chakraborty, Blair Mell, Lauren Koch, Bina Joe, Univ of Toledo, Toledo, OH
- P1127 **Reverse Feeding Abolishes Circadian Blood Pressure Rhythms in Bmal1-Knockout Rats**
Megan K Rhoads, Chunhua Jin, David M Pollock, Univ of Alabama at Birmingham, Birmingham, AL
- P2001 **Nicotinamide Riboside the New Promising Drug of Myocardial Infarction Management**
Cynthia Tannous, Rana Ghali, Nada Habeichi, Abdo Jurjus, American Univ of Beirut, Beirut, Lebanon; Mathias Mericskay, Faculty of Pharmacy, Paris-Sud Univ, Paris, Lebanon; Marwan Refaat, Fouad Zouein, American Univ of Beirut, Beirut, Lebanon
- P2002 **Loss of GSTM1 is Cardioprotective Against Ischemia-Reperfusion Injury**
Yves T Wang, Keith Nehrke, Paul S Brookes, Thu H Le, Univ of Rochester, Rochester, NY
- P2003 **Loss of Trpa1 in Mice Leads to Age-Related Dilated Cardiomyopathy**
Shuangtao Ma, Chunqi Qian, Donna H. Wang, Michigan State Univ, East Lansing, MI
- P2004 **Neural Inflammation in Stellate Ganglia Mediates Lung Injury-Induced Arrhythmogenesis**
Ryan Adam, Lie Gao, Juan Hong, Irving H. Zucker, Steven J. Lisco **Hanjun Wang**, Univ of Nebraska Med Ctr, Omaha, NE

Poster Presentations (continued)

- P2005 **Antioxidant Resveratrol Attenuates Cardiac Fibrosis and Reduces Matrix Metalloproteinase-2 Activity in Heart Failure Rats**
Marina T Durand, Caisa B Orlandin, Giselle F Bonácio, Elen R Sanchez, Marília P Durão, Univ of Ribeirão Preto, Ribeirao Preto, Brazil; Renata M Lataro, Federal Univ of Santa Catarina, Florianópolis, Brazil; Leandra N Ramalho, Carlos A Silva, Jefferson H Amaral, Univ of Sao Paulo, Ribeirao Preto, Brazil; Carol B Restini, Michigan State Univ, Lansing, MI; **Helio C Salgado**, Univ of Sao Paulo, Ribeirao Preto, Brazil
- P2006 **Imbalance Between Collagen Type 1 and 3 in the Remodeling of the Extracellular Matrix Contributes to the Transition to Heart Failure**
Cibele Prado, Vanessa Amorin, Janaína Léllis, USP, Ribeirao Preto, Brazil; Elen Rizzi, UNAERP, Ribeirao Preto, Brazil; Simone Ramos, USP, Ribeirao Preto, Brazil; Flávio Meirelles, USP, Pirassununga, Brazil
- P2007 **Muscadine Grape Extract Prevents Cardiac Cell Cytotoxicity Due to Oxidative Stress by Enhancing Mitochondrial Function**
David R Soto-Pantoja, Elizabeth A Tallant, Patricia E Gallagher, Wake Forest Health Sciences, Winston Salem, NC
- P2008 **The Efficacy of Spironolactone in the Management of Uncontrolled Hypertension in Patients With Left Ventricular Hypertrophy and Diastolic Dysfunction in a Community Practice**
Naveen Raj Saxena, Vinita Srivastava, Anju Saxena, Peace Medical Ctr, Simpsonville, SC
- P2009 **Dysbiotic 1-Carbon Metabolism in Hypertensive Cardiac Remodeling**
Suresh C Tyagi, Akash K George, Mahavir Singh, Sathnur B Pushpakumar, Rubens P Homme, Naira Metreveli, Univ of Louisville, Louisville, KY
- P2010 **Silencing Epidermal Growth Factor Receptor Reduces P44/42 Mitogen-Activated Protein Kinase Signaling in the Hypothalamic Paraventricular Nucleus and Ameliorates Sympathetic Excitation in Rats With Heart Failure After Myocardial Infarction**
Yang Yu, Shun-Guang Wei, Robert M Weiss, Univ of Iowa, Iowa City, IA; Robert B Felder, Univ of Iowa and VA Medical Ctr, Iowa City, IA
- P2011 **Chronic Systemic Administration of Pro-Inflammatory Cytokines Causes Cardiovascular Dysfunction and Downregulates Brain Expression of Regulator of G-Protein Signaling-10 in Rats**
Xiaolei Chen, Yang Yu, Balyssa Bell, Yiling Cao, Ye Wang, Dept of Internal Med, Univ of Iowa Carver Coll of Med, Iowa City, IA; Robert B Felder, Dept of Internal Med, Univ of Iowa Carver Coll of Med and VA Medical Ctr, Iowa City, IA; Shun-Guang Wei, Dept of Internal Med, Univ of Iowa Carver Coll of Med, Iowa City, IA
- P2012 **Combining the Anti-Fibrotic Actions of Serelaxin With the Anti-Oxidant, N-Acetylcysteine, Abrogates Cardiac Fibrosis in an Isoprenaline-Induced Murine Model of Cardiomyopathy**
Chao Wang, Barbara K Kemp-Harper, Chrishan S Samuel, Monash Univ, Clayton, Australia
- P2013 **Genomic Identification Of Key CircRNAs In Healthy And Dilated Cardiomyopathy Human Heart**
Kunzhe Dong, Augusta Univ, Augusta, GA; Xiangqin He, Nanchang Univ, Nanchang, China; Huabo Su, Augusta Univ, Augusta, GA; Hongbo Xin, Nanchang Univ, Nanchang, China; Jiliang Zhou, Augusta Univ, Augusta, GA
- P2014 **Prolyl Endopeptidase (PEP) is the Main Angiotensin (1-7) Forming Enzyme From Angiotensin II (1-8) in the Circulation: Implications for Hypertension**
Gvantca Gulua, Peter Serfozo, Jan Wysocki, Minghao Ye, Pan Liu, Jing Jin, Northwestern Univ, Chicago, IL; Michael Bader, MDC Berlin, Berlin, Germany; Timo Myöhänen, J Arturo Garcia-Horsman, Univ of Helsinki, Helsinki, Finland; Daniel Battle, Northwestern Univ, Chicago, IL
- P2015 **Antiproliferative Effects of Monoclonal Antibodies Against (Pro)Renin Receptor in Pancreatic Ductal Adenocarcinoma**
Akira Nishiyama, Kagawa Univ Med Sch, Kagawa, Japan; Makoto Matsuyama, Shigei Medical Res Inst, Okayama, Japan; Yuki Shibayama, Kagawa Univ Med Sch, Kagawa, Japan; Akio Ebihara, Gifu Univ, Gifu, Japan; Asadur Rahman, Kagawa Univ Med Sch, Kagawa, Japan
- P2016 **Proximal Tubule-Specific Knockout of Angiotensin II Type 1a Receptors in the Kidney Augments the Natriuretic Response to Angiotensin III in Mice**
Chunling Zhao, Xiao Chun Li, Xu Chen, Xiaowen Zheng, **Jia Long Zhuo**, Univ Mississippi Medical Ctr, Jackson, MS
- P2017 **Angiotensin-Induced Constriction via Rho Kinase Activation in Pressure-Overloaded Rat Thoracic Aortas**
Yuka Terada, Katsutoshi Yayama, Kobe Gakuin Univ, Kobe, Japan
- P2018 **PRR Mediates P53 Activation in Aristolochic Acid Induced Renal Proximal Tubule Cell Injury**
Silas Allen Culver, Rebecca K McDevitt, Helmy M Siragy, Univ of Virginia, Charlottesville, VA
- P2019 **(Pro)Renin Receptor-Dependent Induction of Pro-Fibrotic Factors is Mediated by COX-2/EP4/NOX-4/Smad Pathway in Mouse Renal Collecting Duct Cells**
Alexis A Gonzalez, Cristian Reyes, Avenida Univ 330, Valparaiso, Chile

Poster Presentations (continued)

- P2020 Effect of Steroid Hormones on Catalytic Activity of Renin Angiotensin Aldosterone System Enzymes and on Cell Behaviour in Human Mesangial Cells**
Danielle Stoll, **Dulce E Casarini**, Univ Federal de Sao Paulo, Sao Paulo, Brazil
- P2021 Cutaneous Wound Healing in Diabetic Mice is Improved by Topical Mineralocorticoid Receptor Blockade**
Van Tuan Nguyen, INSERM/UMRS1138 Cordeliers Res Ctr, Paris, France; Nicolette Farman, NSERM/UMRS1138 Cordeliers Res Ctr, Paris, France; Selim Aractingi, INSERM/UMRS938 Saint-Antoine Res Ctr, Paris, France; **Frederic Jaisser**, INSERM/UMRS1138 Cordeliers Res Ctr, Paris, France
- P2022 The Jak3 Pathway is Involved in the Benefit of the Mineralocorticoid Receptor Antagonist Finerenone in Acute and Chronic Kidney Injury Following Ischemia-Reperfusion**
Frederic Jaisser, Gabriel R Estela, INSERM 1138, Paris, France; Peter Kolkhof, Bayer AG, Wuppertal, Germany; Jonatan Barrera-Chimal, Insto de Investigaciones Biomedicas, UNAM and Insto Nacional de Cardiología Ignacio Chávez, Mexico City, Mexico
- P2023 Perivascular Adipose Tissue Assists Arterial Stress Relaxation: Loss of Assistance in Obesity-Associated Hypertension**
Sara Roccabianca, Emma Flood, Hannah Garver, Gregory Fink, Stephanie W Watts, Michigan State Univ, East Lansing, MI
- P2024 Treatment of Primary Hyperaldosteronism Increases Plasma Epoxyeicosatrienoic Acids**
James M Luther, Vanderbilt Univ Med Ctr, Nashville, TN; Gail Adler, Brigham and Women's Hosp, Boston, MA; Shouzu Wei, Hui Nian, Chang Yu, Nancy J Brown, Vanderbilt Univ Med Ctr, Nashville, TN
- P2025 Primary Aldosteronism Decreases Insulin Secretion and Increases Insulin Clearance in Humans**
Gail Adler, Gillian Murray, Brigham and Women's Hosp, Boston, MA; Adina Turcu, Univ of Michigan, Ann Arbor, MI; Hui Nian, Chang Yu, Carmen Solorzano, Dungen Peng, Robert Manning, **James M Luther**, Vanderbilt Univ Med Ctr, Nashville, TN
- P2026 Involvement of Subfornical Organ Insulin Receptor Signaling in the Development of Angiotensin-II Hypertension**
Jin Kwon Jeong, Hayk Simonyan, Colin Young, The George Washington Univ, Washington, DC
- P2027 Preliminary Characterization Of The¹²⁵I-angiotensin 1-7 Binding Site In Rat Liver**
Filipe Fernandes Stoyell-conti, Sarin Itty, Mahnoor Asif, Hanna Stewart, Christy Abraham, Nova Southeastern Univ, Davie, FL; Crystal West, Georgetown Univ, Washington, DC; Robert C Speth, Nova Southeastern Univ, Davie, FL
- P2028 Paracrine And Intracellular Angiotensin II Activate Protein Kinase C, Map Kinase Erk1/2, And Nuclear Factor-κB Signaling Responses In Murine Glomerular Mesangial Cells**
Ana Paula Leite, Univ of Mississippi Medical Ctr/ Federal Univ of São Paulo, Jackson, MS; Xiao C Li, Univ of Mississippi Medical Ctr, Jackson, MS; Dulce Elena Casarini, Federal Univ of São Paulo, São Paulo, Brazil; Jia L Zhuo, Univ of Mississippi Medical Ctr, Jackson, MS
- P2029 Cytochrome P450 (CYP) 1B1-Estradiol Metabolite 2-Methoxyestradiol Protects Against Angiotensin II-induced Hypertension By Inhibiting CYP4A1 Expression <And> 20-Hydroxyeicosatetraenoic Acid (20-HETE) Production in the Female Mice**
Chi Young Song, Ji Soo Shin, Jessica Lew, Univ of Tennessee Health Science Ctr, Memphis, TN; John Falck, Univ of Texas Southwestern Medical Ctr, Dallas, TX; Kafait Malik, Univ of Tennessee Health Science Ctr, Memphis, TN
- P2030 DOCA-Salt Diminishes Brain RAS Activity in Parallel With Plasma And Renal RAS Activity – No Evidence for Selective Brain RAS Activation**
Estrellita Uijl, Liwei Ren, Erasmus MC, Rotterdam, Netherlands; Katrina M Mirabito Colafella, Monash Univ, Melbourne, Australia; Marko Poglitsch, Oliver Domenig, Attoquant Diagnostics, Vienna, Austria; Ivan Zlatev, Jae B Kim, Stephen Huang, Lauren Melton, Don Foster, Alnylam Pharmaceuticals, Cambridge, MA; A H Jan Danser, Erasmus MC, Rotterdam, Netherlands
- P2031 Control Of Antihypertensive Effect Of Small Interfering RNA Targeting Angiotensinogen**
Estrellita Uijl, Erasmus MC, Rotterdam, Netherlands; Katrina M Mirabito Colafella, Monash Univ, Melbourne, Australia; Ewout J Hoorn, Erasmus MC, Rotterdam, Netherlands; Ivan Zlatev, Jae B Kim, Stephen Huang, Lauren Melton, Don Foster, Alnylam Pharmaceuticals, Cambridge, MA; A H Jan Danser, Erasmus MC, Rotterdam, Netherlands
- P2032 Differential Response To Angiotensin II Depends on Microbial Colonization**
Ellen G Avery, Hendrik Bartolomaeus, Kristin Kraeker, András Balogh, Dominik N Müller, Nicola Wilck, Experimental and Clinical Res Ctr (Max Delbrück Ctr for Molecular Med & Charité Univsmedizin), Berlin, Germany
- P2033 Rationale For A Novel Approach To Hypertension Treatment Based On Immuno-neutralization Of Angiotensin-(1-12) Catalytic Sites With A Polyclonal Antibody**
Sarfaraz Ahmad, Kendra N Wright, Jasmina Varagic, Leanne Groban, Carlos M Ferrario, Wake Forest Univ Sch Med, Winston Salem, NC

Poster Presentations (continued)

- P2034 **Effects of Renal Denervation on the Course of Heart Failure and Occurrence of Renal Dysfunction in Ren-2 Transgenic Hypertensive Rats With Aorto-Caval Fistula**
Zuzana Honetschlagerova, Luděk Červenka, IKEM - PEM, Prague, Czech Republic
- P2035 **Severity of Hypertension Due to Elastin Haploinsufficiency is Sex-Dependent**
Patrick Osei Owusu, Ipsita Mohanty, Jennifer N Koch, Drexel Univ Coll of Med, Philadelphia, PA; James A McCormick, Oregon Health and Science Univ, Portland, OR
- P2036 **Effects of Angiotensin II Type 1 A Receptor (AT1aR) on Renal and Urinary Biomarkers of Acute Kidney Injury in Two Kidney One Clip (2K1C) Model of Renovascular Hypertension**
Anhar Hosawi, Sanjeev Dhakal, Wright State Univ, Dayton, OH; Unmesha Thanekar, Wright State Univ, Fairborn, OH; Laale Alawi, Harshal Sawant, Nadja Grobe, Khalid M Elased, Wright State Univ, Dayton, OH
- P2037 **G Protein-Coupled Receptor 3711 is Localized on the Nuclear Envelope**
Ines Armando, Pedro A Jose, Prasad R Konkalmatt, The George Washington Univ, Washington, DC
- P2038 **A Nobel I551F Mutant of Sodium Handling Transporter NBCe1 Has Cytosolic Retention and Diminishes Transport Activity**
Osamu Yamazaki, Teikyo Univ, Tokyo, Japan; Maho Yamashita, Keio Univ of Med, Tokyo, Japan; Jinping Li, Fumika Ochiai-Honma, Teikyo Univ, Tokyo, Japan; Tadashi Yoshida, Junichi Hirahashi, Keio Univ of Med, Tokyo, Japan; Shunya Uchida, Teikyo Univ, Tokyo, Japan; Matsuhiko Hayashi, Keio Univ of Med, Tokyo, Japan; Shigeru Shibata, Teikyo Univ, Tokyo, Japan
- P2039 **Nitric Oxide Inhibition Enhances the Protein Expression of TNF- α Receptor Type 1 in Cultured M-1 Cells With Characteristics of Renal Collecting Duct Epithelium**
Alexander Castillo, Sudha Talwar, Asim B Abdel-Mageed, Peace E Ekpo, Dewan S Majid, Tulane Univ Sch of Med, New Orleans, LA
- P2040 **Acute Effects of Weight Loss by Dehydration on Renal Function in Mixed Martial Arts**
Antonio A Pereira, Nestor Schor (in memorium), Dulce E Casarini, Univ Federal de Sao Paulo, Sao Paulo, Brazil
- P2041 **Wnt Signaling Regulates GPR3711 Expression in Human Renal Proximal Tubule Cells**
Ines Armando, Pedro A Jose, Prasad R Konkalmatt, The George Washington Univ, Washington, DC
- P2042 **Alteration of Mitochondrial Deoxyribonucleic Acid Methylation and Nuclear Transcription Factors Reduces Mitochondrial Biogenesis in Aged Hypertensive Kidney**
Sathnur Pushpakumar, Gregory Weber, Suravi Majumder, Utpal Sen, Univ of Louisville, Louisville, KY
- P2043 **Role of GRK4, a Risk Factor for Hypertension, in Breast Cancer**
Wei Yue, Jiping Wang, Katherine Schiermeyer, Peng Xu, John Gil, Robin Felder, Univ of Virginia, Charlottesville, VA
- P2044 **Renoprotective Effects of Canagliflozin in Db/db Diabetic Mice**
Unmesha Thanekar, Rupinder K. Gill, Sanjeev Dhakal, Anhar Hosawi, Khalid M. Elased, Wright State Univ, Dayton, OH
- P2045 **Genetic Disruption of *Npr1* Depletes T Regulatory Cells and Provokes High Levels of Proinflammatory Cytokines and Fibrosis in the Kidneys of Female Mutant Mice**
Venkateswara Reddy Gogulamudi, Indra Mani, Umadevi Subramanian, Kailash Nath Pandey, Tulane Som Physiology, New Orleans, LA
- P2046 **The Effect of Environmental Circadian Disruption on Kidney Injury In Spontaneously Hypertensive Stroke Prone Rats**
Atlantis Hill, Morehouse Sch of Med, Atlanta, GA
- P2047 **Human Renal Proximal Tubule Cells Cultured Under High Salt Conditions Increase Angiotensin Type 2 Receptor Abundance In Secreted Exosomes**
Nicholas C Laterza, John J Gildea, Peng Xu, Katherine A Schiermeyer, Robin A Felder, University of Virginia, Charlottesville, VA
- P2048 **Epigenetic Modification by Angiotensin II Mediates Augmentation of Intrarenal Angiotensinogen Expression**
Akemi Katsurada, Courtney M Dugas, Nicholas R Huisin, Ryosuke Sato, Dept of Physiology and Hypertension and Renal Ctr of Excellence, Tulane Univ Sch of Med, New Orleans, LA
- P2049 **Mitochondrial Respiration And Biogenesis In The Glomeruli of Dahl Ss Rats**
Regina Sultanova, Mark Domondon, Iuliia Polina, Mikhail Fomin, Medical Univ of South Carolina, Charleston, SC; Krisztian Stadler, Pennington Biomedical Res Ctr, Baton Rouge, LA; Daria Ilatovskaya, Medical Univ of South Carolina, Charleston, SC
- P2050 **The Pcornet Blood Pressure Control Laboratory**
Mark J Pletcher, Valy Fontil, UCSF, San Francisco, CA; Thomas Carton, Louisiana Public Health Inst, New Orleans, LA; Kathryn Shaw, Myra Smith, Univ of Florida, Gainesville, FL; Jonathan Todd, OCHIN, Portland, OR; Alanna M Chamberlain, Mayo Clinic, Rochester, MN; Emily O'Brien, Duke Univ, Durham, NC; Madelaine Faulkner, UCSF, San Francisco, CA; Carlos Maeztu, None, Gainesville, FL; Gregory Wozniak, Michael Rakotz, American Medical Association, Chicago, IL; Christine Shay, American Heart Association, Dallas, TX; Rhonda M Cooper DeHoff, Univ of Florida, Gainesville, FL

Poster Presentations (continued)

- P2051 Incidence of Renal Artery Damage Following Percutaneous Renal Denervation With Radio Frequency Renal Artery Ablation Systems**
Raymond R Townsend, Perelman Sch of Med, Univ of Pennsylvania, Philadelphia, PA; Antony Walton, The Alfred Hosp, Melbourne, Australia; Douglas A Hettrick, Graeme L Hickey, Medtronic, Santa Rosa, CA; Andrew S Sharp, The Royal Devon and Exeter Hosp, Exeter, United Kingdom
- P2052 Differential Association of Measures of Adiposity With 24-Hour Ambulatory Blood Pressure Control in Adults on Antihypertensive Monotherapy**
Jordana B Cohen, Ellys Funez, Debbie L Cohen, Peter P Reese, Raymond R Townsend, Univ of Pennsylvania, Philadelphia, PA
- P2053 Blood Pressure Variability is Higher When Pulse Rate is Lower, in a Large Outpatient Database**
 Amos Cahan, Uri Lerner, Maccabi Healthcare Services, Tel-Aviv, Israel; Barak Fishbain, Technion – Israel Inst of Technology, Tel-Aviv, Israel; **Michael Bursztyn**, Hadassah Univ Hosp Ctr Mt. Scopus, Jerusalem, Israel
- P2054 Experiencing the Primary Composite Cardiovascular Outcome is More Strongly Associated With Serious Adverse Events Than Intensive Treatment in the Systolic Blood Pressure Intervention Trial**
 Albert Botchway, **Michael G Buhnerkempe**, Vivek Prakash, Mohammad Al-Akchar, Oritsegbubemi Adekola, John M Flack, SIU Sch of Med, Springfield, IL
- P2055 Incremental Impact of Stressful Situations in Stage 1 vs. Stage 2 Hypertensives: Insights From a Large Digital BP Management Service and Registry**
 Giovanni Peretto, Tommaso Bordinon, Gaia Del Mauro, Martina Fabi, Eros Colombo, **Domenico Cianflone**, AMICOMED Inc, San Francisco, CA
- P2056 Effect of Ambulatory BP Load on Target Organ Damage in Youth**
Elaine M Urbina, Cincinnati Children's Hosp, Cincinnati, OH; Michael Ferguson, Boston Children's Hosp, Boston, MA; Marc Lande, Univ of Rochester Medical Ctr, Rochester, NY; Kevin Meyers, Children's Hosp of Philadelphia, Philadelphia, PA; Joshua Samuels, Univ of Texas Health Sciences Ctr, Houston, TX; Joseph T Flynn, Seattle Children's Hosp, Seattle, WA
- P2057 Oscar 2 & Spacelabs 90207/90217 Ambulatory Blood Pressure Monitors Differ from Each Other & Trained Clinicians Using a Mercury Column in the Laboratory**
V Patteson Lombardi, Patrick C Reichhold, Jennifer L Cramer, Hannah P Harkness, Natalie J DeBell, Nicholas R Dietz, Donald L Pate, Univ of Oregon, Eugene, OR
- P2058 Using Mobile Health Technology to Increase Knowledge About Hypertensive Patients Requests and Health Behaviors**
Martin H Carlsson, Dept of Med and Optometry, Linnaeus Univ, Kalmar, Sweden, Kalmar, Sweden; Gassan Darwiche, Dept of Clinical Sciences, Faculty of Med, Lund Univ, Malmö, Sweden, Lund, Sweden
- P2059 American Medical Students Have a Higher Prevalence of Stage 2 Hypertension Than the General Public: A Cross Sectional Study**
Jacek Bednarz Jr, Daniel W Mok, Jan D Zieren, Theresa M Ferguson, Jordan M Glass, Kelcie L Smith, Brian Yonish, Lincoln Memorial Univ, Harrogate, TN
- P2060 Life's Simple 7 for Cardiovascular and Total Health: How are We Doing?**
Brent Egan, Care Coordination Inst, Greenville, SC; Jiexiang Li, Coll of Charleston, Charleston, SC; Susan Sutherland, Care Coordination Inst, Greenville, SC; Daniel Jones, Univ of Mississippi Medical Ctr, Jackson, MS; Yuling Hong, Ctrs for Disease Control, Atlanta, GA; Keith Ferdinand, Tulane Univ Medical Ctr, New Orleans, LA; Angelo Sinopoli, Care Coordination Inst, Greenville, SC
- P2061 Cardiovascular Risk Profile of a Young Adult Population Assisted by a Family Healthcare Unit in Rio De Janeiro With High Risk for Obstructive Sleep Apnea Screened By Stop-Bang Questionnaire and Epworth Sleepiness Scale**
Rafael Bellotti Azevedo, Leticia Zarur Junqueira de Andrade, Leonardo Villa Leão Ferreira, Rodrigo Silva, João Victor Gonçalves de Hollanda, Fernando Bizzo Sampaio, Raquel Ebel de Castro, Stephanie Si Min Lillienwald Oei, Maria Fernanda de Miranda Reis do Rego, Elizabeth Silaid Muxfeldt, Univ Estácio de Sá- Medical Sch, Rio De Janeiro, Brazil
- P2062 Vitamin D Supplementation Improves Vascular Function in Adolescents Suffering from Orthostatic Intolerance**
Hossam A Shaltout, Wake Forest Univ, Winston Salem, NC
- P2063 Isolated Noradrenergic Failure Due Tocongenital Cyb561 Deficiency**
Cyndya A Shibao, Emily M Garland, Bonnie K Black, Vanderbilt Univ. Medical Ctr, Nashville, TN; Christopher J Mathias, Univ Coll London, London, United Kingdom; Maria B Grant, Univ of Alabama at Birmingham, Birmingham, AL; Allen W Root, John Hopkins All Children's Hosp, St. Petersburg, FL; David Robertson, Italo Biaggioni, Vanderbilt Univ. Medical Ctr, Nashville, TN
- P2064 Changes in Inflammatory Markers Monitored Across Time After Bariatric Surgery in Severely Obese Patients**
Anna Oliveras, Hosp del Mar, Barcelona, Spain; David Benito, Hosp del Mar Medical Res Inst, Barcelona, Spain; Susana Vázquez, Hosp del Mar, Barcelona, Spain; Maria Vera, Hosp del Mar Medical Res Inst, Barcelona, Spain; Sara Outon,

Poster Presentations (continued)

- Albert Goday, Laia Sans, Julio Pascual, Hosp del Mar, Barcelona, Spain; Marta Riera, Hosp del Mar Medical Res Inst, Barcelona, Spain
- P2065 **Effect of Denture-Related Stomatitis on Blood Pressure and Heart Rate Variability**
Adriana B Ribeiro, Camila B Araujo, Franklin L Bueno, Luiz E Silva, Caroline V Fortes, **Helio C Salgado**, Rubens Fazan Jr., Claudia H Silva-Lovato, Univ of Sao Paulo, Ribeirao Preto, Brazil
- P2066 **The Difference of With or Without Blood Pressure Adjustment for Pulse Wave Velocity as a Risk Factor for Cardiovascular Disease**
Hiroki Nakano, Hirofumi Tomiyama, Akira Yamashina, FMD-J Study Group, Tokyo Medical Univ, Tokyo, Japan
- P2067 **Trends in Ambulatory and Home Blood Pressure Monitoring Use for Confirmation of Hypertension or Resistant Hypertension Among the Commercially-Insured in the U.S., 2008-2017**
Steven M Smith, Raj Desai, Eric Dietrich, Haesuk Park, Univ of Florida, Gainesville, FL
- P2068 **Whole Exome Sequencing and Monogenic Hypertension in a Multiethnic Cohort of 28,000 Individuals**
Ishan Paranjpe, Kipp Johnson, Steven G Coca, Lili Chan, Cijiang He, Barbara Murphy, Jagat Narula, Ron Do, Girish N Nadkarni, Icahn Sch of Med, New York, NY
- P2069 **The Study Of Influencing Factors For Microalbuminuria With Essential Hypertension In Tibet**
Liming Zhao, Hosp of Chengdu Office of People's Government of Tibet Autonomous Region, Chengdu, China
- P2070 **Renal, Cardiovascular, and Mortality Impacts of Refractory Hypertension in Patients With Chronic Kidney Disease: Insights from the Chronic Renal Insufficiency Cohort (CRIC)**
Vivek Prakash, Michael G Buhnerkempe, Albert Botchway, Bemil Adekola, Mohammad Al-Akchar, John M Flack, SIU Sch of Med, Springfield, IL
- P2071 **β -1,3/1,6-d-glucan Of Indonesian *Ganoderma Lucidum* Mycelium Extract Reduces Systolic Blood Pressure & Inflammation In Hypertensive Patients**
Peter Sugita, PT SAHABAT LINGKUNGAN HIDUP, Surabaya, Indonesia; MR Fadlan, Djanggan Sargowo, A Rizal, Faculty of Med, Brawijaya Univ – Dr. Saiful Anwar General Hosp, Malang, Indonesia
- P2072 **Integrative Network Analysis Of Microbiome-Immune Axis In Metabolic Syndrome Patients During A Fasting Intervention**
Ellen Germaine Avery, András Balogh, Hendrik Bartolomaeus, Ulrike Löber, Experimental and Clinical Res Ctr (Max Delbrück Ctr for Molecular Med & Charité Univsmedizin), Berlin, Germany; Nico Steckhan, Charité Univsmedizin & Immanuel Krankenhaus, Berlin, Germany; Lajos Markó, Nicola Wilck, Experimental and Clinical Res Ctr (Max Delbrück Ctr for Molecular Med & Charité Univsmedizin), Berlin, Germany; Ibrahim Hamad, VIB Ctr for Inflammation Res (IRC), UHasselt, Hasselt, Belgium; Urša Šušnjar, Anja Mähler, Experimental and Clinical Res Ctr (Max Delbrück Ctr for Molecular Med & Charité Univsmedizin), Berlin, Germany; Christoph Hohmann, Immanuel Krankenhaus, Berlin, Germany; Till R Lesker, Till Strowig, Helmholtz Ctr for Infection Res, Braunschweig, Germany; Ralf Dechend, Experimental and Clinical Res Ctr (Max Delbrück Ctr for Molecular Med & Charité Univsmedizin), Berlin, Germany; Danilo Bzdok, Dept of Psychiatry, Psychotherapy, and Psychosomatics, Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen Univ, Aachen, Germany; Markus Kleinewietfeld, VIB Ctr for Inflammation Res (IRC), UHasselt, Hasselt, Belgium; Andreas Michalsen, Charité Univsmedizin & Immanuel Krankenhaus, Berlin, Germany; Dominik N Müller, Sofia K Forslund, Experimental and Clinical Res Ctr (Max Delbrück Ctr for Molecular Med & Charité Univsmedizin), Berlin, Germany
- P2073 **Blood Pressure Measurement: Should Technique Define Targets?**
Marcel Ruzicka, **Swapnil Hiremath**, Ottawa Hosp, Ottawa, ON, Canada
- P2074 **Improving Hypertension Control by Molecular Stratification of First-Line Non-Responders Using RAAS Triple-A Testing**
Marko Poglitsch, Attoquant, Vienna, Austria; Jacopo Burrello, Univ of Torino, Torino, Italy; Ashraf H Ahmed, Zeng Guo, Univ of Queensland, Brisbane, Australia; Andrea Stoller, Thilo Burkard, Univ Hosp Basel, Basel, Switzerland; Oliver Domenig, Attoquant, Vienna, Austria; Manuel Haschke, Univ Hosp Basel, Basel, Switzerland; Michael Stowasser, Univ of Queensland, Brisbane, Australia; Paolo Mulatero, University of Torino, Torino, Italy
- P3001 **Disruption of Endothelial BBSome Causes Vascular Dysfunction and Hepatosteatosis**
Jingwei Jiang, John Reho, Donald Morgan, Kamal Rahmouni, Univ of Iowa Carver Coll of Med, Iowa City, IA
- P3002 **Endoplasmic Reticulum Stress Plays a Role in Nox5 Mediated Vascular Contraction**
Augusto C Montezano, Livia L Camargo, Jithin Kuriakose, Karla B Neves, Rheure Alves-Lopes, Wendy Beattie, Francisco J Rios, Rhian M Touyz, ICAMS – Univ of Glasgow, Glasgow, United Kingdom

Poster Presentations (continued)

- P3003 miR-338-3p Down-Regulation Caused Up-Regulation of Alkaline Ceramidase 2 and Glutathione Peroxidase 3 mRNAs in Subcutaneous Small Arteries of Hypertensive Patients With Chronic Kidney Disease**
Pierre Paradis, Nada Mahjoub, Ku-Geng Huo, Olga Berillo, Lady Davis Institute for Med Res, SMBD Jewish General Hosp, McGill Univ, Montreal, QC, Canada; Chantal Richer, Div of Hematology-Oncology, Res Ctr, CHU Ste-Justine, Univ de Montréal, Montreal, QC, Canada; Júlio C. Fraulob-Aquino, Asia Rehman, Lady Davis Institute for Med Res, SMBD Jewish General Hosp, McGill Univ, Montreal, QC, Canada; Marie Briet, INSERM U1083, CNRS UMR 6214, Ctr Hospo-Univire d'Angers, Univ d'Angers, Montreal, QC, Canada; Pierre Boutouyrie, Univ Paris-Descartes, INSERM U970 and Assistance Publique-Hôpitaux de Paris, Hôpital Européen Georges Pompidou, Montreal, QC, Canada; Mark L. Lipman, Lady Davis Institute for Med Res, Dept of Med, SMBD Jewish General Hosp, McGill Univ, Montreal, QC, Canada; Daniel Sinnett, Div of Hematology-Oncology, Res Ctr, CHU Ste-Justine, Dept of Pediatrics, Faculty of Med, Univ de Montréal, Montreal, QC, Canada; Ernesto L Schiffrin, Lady Davis Institute for Med Res, Dept of Med, SMBD Jewish General Hosp, McGill Univ, Montreal, QC, Canada
- P3004 Brain Microvascular Structure During Hypertension: Temporal Changes and Recovery Support Distinct Arteriolar Mechanisms**
 Gary Baumbach, Rasna Sabharwal, Thomas Gerhold, Mark Chapleau, **Frank M Faraci**, Univ Iowa, Iowa City, IA
- P3005 P66shc Plays a Role in Aldosterone Induced Vascular Remodeling and Dysfunction**
 Sarassunta Ucci, Allegra Battistoni, Carmine Nicoletti, Antonio Filippini, Sapienza Univ of Rome, Rome, Italy; Augusto C Montezano, Univ of Glasgow, Glasgow, United Kingdom; Massimo Volpe, Sapienza Univ of Rome, Rome, Italy; Rhian M Touyz, Univ of Glasgow, Glasgow, United Kingdom; **Carmine Savoia**, Sapienza Univ of Rome, Rome, Italy
- P3006 Angiotensin-(1-7) Prevents Doxorubicin-Induced Aortic Dysfunction Through Anti-Fibrotic Mechanisms in Juvenile Male and Female Sprague Dawley Rats**
E Ann Tallant, Omeed Rahimi, Jasmina Varagic, Brian M Westwood, Wake Forest Sch of Med, Winston-Salem, NC; Patricia E Gallagher, Wake Forest Sch of Med, Winston-Salem, NC
- P3007 Effect of Anti-Hypertensive Treatment Lisinopril on Central Arterial Stiffness and Anxiety-Like Behavior in Adult Hypertensive Dahl Salt-Sensitive Rats**
Rachel C Fenner, Yulia Grigorova, Ross McDevitt, Natalia Petrashevskaya, Wen Wei, Edward Lakatta, Olga Fedorova, Samuel Ajamu, Natl Inst on Aging, Baltimore, MD
- P3008 Beta Adrenergic Receptor Activation Causes Endothelial Glycocalyx Degradation**
Olan Jackson-weaver, Jessica Friedman, Marcus Hoof, Robert Drury, Jacob Packer, Chrissy Guidry, Juan Duchesne, Laura Rodriguez, Tulane Univ, New Orleans, LA
- P3009 Stenostiffness Approach for Cardiovascular Disease Risk Assessment in Primary Prevention**
Hiroki Nakano, Hirofumi Tomiyama, Akira Yamashina, J-Babel Study Group, Tokyo Medical Univ, Tokyo, Japan
- P3010 Longitudinal Associations of Risk Factors for Cardiovascular Disease With the Progressions of Arterial Stiffness and Pressure Wave Reflection, and Their Independencies in Healthy Men**
Masatsune Fujii, Hirofumi Tomiyama, Taishiro Chikamori, Akira Yamashina, Tokyo Medical Univ, Tokyo, Japan
- P3011 Role of CD36 in Insulin Mediated Microvascular Vasodilation in African Americans**
Cyndya A Shibao, Vanderbilt Univ. Medical Ctr, Nashville, TN; Nada A Abumrad, Washington Univ in St. Louis, St. Louis, MO; Naji N Abumrad, Dena Parsa, Jorge E Celedonio, Shea K Scudder, Nicholas C Breier, Vanderbilt Univ. Medical Ctr, Nashville, TN
- P3012 Early Vascular Aging and Metabolic Status of Young People**
Maria Evseyeva, Oksana Sergeeva, Elena Fursova, Anjelika Rusidi, Vladimir Baturin, Evgenij Stetinin, Stavropol State Medical Univ, Stavropol, Russian Federation
- P3013 Infusion of Recombinant Human Thioredoxin-1 Completely Protects Against High Fat-Induced Endothelial Dysfunction in Small Mesenteric Arteries From Male C57bl6/j Mice**
Rob H Hilgers, Campbell Univ, Buies Creek, NC
- P3014 Longitudinal Association Between Early and Late Systolic Cardiac Load and the Impairment of Left Ventricular Systolic Function in It's Early Stage**
Hiroki Nakano, Hirofumi Tomiyama, Taishiro Chikamori, Akira Yamashina, Tokyo Medical Univ, Tokyo, Japan
- P3015 Association of Uric Acid and Left Ventricular Systolic Function in Healthy Middle Aged Japanese Men**
Hiroki Nakano, Hirofumi Tomiyama, Taishiro Chikamori, Akira Yamashina, Tokyo Medical Univ, Tokyo, Japan
- P3016 High Glucose Induced Diabetic Dementia is Mediated by Mitochondria Dysfunction**
 Ya Guo, Shaoxun Wang, Huawei Zhang, Wenjun Gao, **Xiaochen He**, George W. Booz, Richard J. Roman, Fan Fan, UMMC, Jackson, MS
- P3017 Associations of Metabolic Syndrome, Diabetes, and Metabolic Syndrome Plus Diabetes With Extent of Intracranial Atherosclerotic Stenosis**
Jong-Ho Park, Byoung Seok Kim, Dept of Neurology, Hanyang Univ. Myongji Hosp, Goyang,

Poster Presentations (continued)

- Korea, Republic of; Junyoung Lee, Dept of Biostatistics, Coll of Med, Korea Univ, Seoul, Korea, Republic of
- P3018 **Sirt3 Depletion in Human Essential Hypertension is Linked to Vascular Inflammation and Oxidative Stress While Endothelial Specific Sirt3 Depletion in Mice Promotes Vascular Dysfunction and Increases Hypertension**
Anna Dikalova, Arvind Pandey, Liang Xiao, Marcos G Lopez, Frederic T Billings, Vanderbilt Univ Medical Ctr, Nashville, TN; Eric Verdin, Gladstone Insts, Univ of California, San Francisco, CA; Johan Auwerx, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland; David G Harrison, Sergey Dikalov, Vanderbilt Univ Medical Ctr, Nashville, TN
- P3019 **Endothelial Epithelial Sodium Channel is a Novel Mediator of Early Macrovascular and Microvascular Stiffening That Precedes Kidney Injury in Diet-Induced Obesity**
Annayya Aroor, Xiong Youxin, Guanghong Jia, Javad Habibi, Yang Yan, Camila Manrique, Guido Lastra, Chen Dongqing, Sun Zhe, Luis Martinez-Lemus, Francisco Ramirez-Perez, Michael Hill, Vincent DeMarco, Frederic Jaisser, James Sowers, Adam Whaley-Connell, Univ of Missouri, Columbia, MO
- P3020 **Therapeutic Induction of Renal Lymphatic Expansion Attenuates Blood Pressure in Mice With L-NAME Hypertension**
Dakshnapriya Balasubramanian, Emily Marisa Luera, Bethany L Goodlett, Gaurav Baranwal, Joseph M. Rutkowski, Brett M. Mitchell, Texas A and M Univ HSC, College Station, TX
- P3021 **Trimethylamine but Not Trimethylamine N-Oxide Increases Blood Pressure in Rats, Affects Viability of Vascular Smooth Muscle Cells and Degrades Protein Structure**
Marek Konop, Kinga Jaworska, Klaudia Bielińska, Medical Univ of Warsaw, Warsaw, Poland; Anna Bielak-Zmijewska, Grażyna Mosieniak, Ewa Sikora, Nencki Inst of Experimental Biology, Polish Acad of Sciences, Warsaw, Poland; Marta Pilz, Ladislav Derzsi, Krzysztof Sozanski, Robert Holyst, Inst of Physical Chemistry, Polish Acad of Sciences, Warsaw, Poland; **Marcin Ufnal**, Medical Univ of Warsaw, Warsaw, Poland
- P3022 **Pentoxifylline Exerts Antiinflammatory And Antioxidant Effects, Inhibits MMP-2 Activity And Attenuates Renovascular Hypertension-Induced Vascular Alterations**
Elen Rizzi Sanchez, Gisele Bonacio, Univ of Ribeirao Preto, Ribeirao Preto, Brazil; Rose Ines Matos Batista, Faculdade de Medicina de Ribeirao Preto, Ribeirao Preto, Brazil; Vitoria Tomazelli Garcia, Bruna R Gonçalves, Thais R Victorino, Renata Dellalibera-Jovilliano, Suzelei C Franca, Univ of Ribeirao Preto, Ribeirao Preto, Brazil; Jose Eduardo Tanus-Santos, Faculdade de Medicina de Ribeirao Preto, Ribeirao Preto, Brazil
- P3023 **Contribution of Transcription Factor EB-mediated Autophagy in Vascular Smooth Muscle Cell Dedifferentiation and Neointimal Injury**
Yun-Ting Wang, Xiang Li, Bradley K McConnell, Univ of Houston, Houston, TX; Pin-Lan Li, Virginia Commonwealth Univ, Richmond, VA; **Yang Zhang**, Univ of Houston, Houston, TX
- P3024 **Tangential Wall Stress in the Thoracic Aorta Affects the Structure And Function of Associated Perivascular Adipose Tissue**
Andres Contreras, Stephanie W Watts, Adam Lauver, Hannah Garver, Gregory D Fink, Michigan State University, East Lansing, MI
- P3025 **Secretion of Pro-inflammatory Cytokines by Activated T Cells Cultured in Pvat-conditioned Media From Dahl S Rats on a High Fat Diet Occurs Early During Development of Hypertension**
Yining Jin, Sheng Liu, Kimberly E Guzman, Ramya K Kumar, Hannah Garver, Stephanie W Watts, Greg D Fink, Cheryl E Rockwell, Michigan State Univ, East Lansing, MI
- P3026 **Impact of Dietary Electrolytes on Post-Nephrectomy Blood Pressure, Proteinuria and Renal Function**
Alicia A McDonough, Hillmin Lei, Taylor S Priver, Brandon E McFarlin, Scotti . Smith, Nuria Pastor-Soler, Donna L Ralph, USC Keck Sch Med, Los Angeles, CA
- P3027 **Response to Exercise Dictates Metabolic and Microbial Effects of a High-Salt Diet With Aging**
Lauren G Koch, Youjie Zhang, Adam C Spegele, Tyler Doty, Blair Mell, Xi Cheng, Ji-Youn Yeo, Bina Joe, Univ of Toledo, Toledo, OH
- P3028 **Conditional Knockout of Acid Ceramidase in Collecting Ducts Exacerbates Salt Sensitivity of Blood Pressure With High Fat Diet**
Weili Wang, Pin-Lan Li, Joseph Ritter, **Ningjun Li**, Virginia Commonwealth Univ, Richmond, VA
- P3029 **A Randomized Controlled Trial Evaluating a Novel Just-In-Time Contextual Mobile Application Intervention to Reduce Sodium Intake in Hypertension: The Lowsalt4life Trial**
Michael P. Dorsch, Univ of Michigan, Coll of Pharmacy, Ann Arbor, MI; Maria L Cornellier, Armella D Poggi, Feriha Bilgen, Peiyu Chen, Cindy Wu, Univ of Michigan, Frankel Cardiovascular Ctr, Ann Arbor, MI; Lawrence C An, Scott L Hummel, Univ of Michigan, Medical Sch, Ann Arbor, MI
- P3030 **Lower 24- Hour Urinary Sodium Excretion is Associated With Hypertension Control: The 2010 Heart Follow-Up Study**
Tali Elfassy, Univ of Miami, Miami, FL; Shadi Chamany, Katherine Bartley, New York City Dept of Health and Mental Hygiene, Long Island City, NY; Stella Yi, New York Univ, New York City, NY; Sonia Angell, New York City Dept of Health and Mental Hygiene, Long Island City, NY

Poster Presentations (continued)

- P3032 Low-Salt and Minimal Sugar-Sweetened Beverage Intake May Not Improve Hypertension Control**
Kausik Umanath, Clare Hassett, Ruicong She, Indra Adrianato, Albert Levin, Pablo Ortiz, Jerry Yee, Henry Ford Hosp, Detroit, MI
- P3033 Sodium Induced Dopamine D1 Receptor (D1R) Plasma Membrane Recruitment Involves Protein Phosphatase 2a (PP2A) and Aminopeptidase N (APN)**
Micah J Mallory, Peng Xu, Katherine A Schiermeyer, John J Gildea, Robin A Felder, Univ of Virginia, Charlottesville, VA
- P3034 Female Mice are Protected Against Renal Inflammation and Salt-Sensitive Hypertension During Diabetes**
Justin Z Shen, Adela Hernandez, Ellen A Bernstein, Luciana C Veiras, Zakir Khan, DuoYao Cao, Cedars-Sinai Medical Ctr, Los Angeles, CA; Alicia A McDonough, USC Keck Sch of Med, Los Angeles, CA; Kenneth E Bernstein, Jorge F Giani, Cedars-Sinai Medical Ctr, Los Angeles, CA
- P3035 Role of T Cells in Sex Differences in Blood Pressure Elevation and Adipose Tissue Expansion Following Chronic High Fat Diet Feeding in Dahl Rats**
Ahmed A Elmarakby, Riyaz Mohamed, Lindsey Ramirez, Elizabeth Snyder, Jennifer Sullivan, Augusta Univ, Augusta, GA
- P3036 Calcitonin Gene Related Peptide Release From Afferent Nerve Fibers of the Skin is Influenced by Salt Intake**
Tilman Ditting, Kristina Rodionova, Univ of Erlangen, Paracelsus Private Medical Sch Nuremberg, Erlangen, Germany; Peter Reeh, Univ of Erlangen, Erlangen, Germany; Christian Ott, Univ of Erlangen, Paracelsus Private Medical Sch Nuremberg, Erlangen, Germany; Roland Schmieder, Mario Schiffer, Kerstin Amann, Univ of Erlangen, Erlangen, Germany; Roland Veelken, Univ of Erlangen, Paracelsus Private Medical Sch Nuremberg, Erlangen, Germany
- P3037 Timing of Food Intake Controls Diurnal Blood Pressure Rhythm in Mice**
Dingguo Zhang, Chunhua Jin, Megan Rhodes, Rawan Almutlaq, Bryan Becker, Univ of Alabama at Birmingham, Birmingham, AL; Joshua Speed, Univ of Mississippi Medical Ctr, Jackson, MS; David Pollock, Univ of Alabama at Birmingham, Birmingham, AL
- P3038 Reduced Renal Responsiveness and Altered Fluid Volume in an African Green Monkey (*Chlorocebus Aethiops Sabaeus*) Preeclampsia Model**
Mark K Santillan, Sabrina M Scroggins, Univ of Iowa, Iowa City, IA; Chelsea C Weaver, Univ of Kentucky, Lexington, KY; Donna A Santillan, Univ of Iowa, Iowa City, IA; Jessica C Taylor, Primates Plus, LLC, Lexington, KY; Jeffrey L Osborn, Univ of Kentucky and Primates Plus, LLC, Lexington, KY
- P3039 Altered Maternal and Fetal Vasopressin Receptors in Response to Hypertensive Stress in Pregnancy**
Donna A Santillan, Lauren A Davis, Eric J Devor, Lydia E Sharp, Wendy S Hamilton, Debra S Brandt, Kellie M Thomas, Mark K Santillan, Sabrina M Scroggins, Univ of Iowa, Iowa City, IA
- P3041 Maternal Hypertension Sensitizes Post Weaning High Fat Diet Elicited Hypertension in Adult Offspring**
Baojian Xue, Terry G Beltz, Fang Guo, Alan Kim Johnson, Univ Iowa, Iowa City, IA
- P3042 Novel Peptide B7-33 and It's Lipidated Derivative Protect Cytotrophoblasts From Preeclampsia Phenotype in a Cellular Model of the Syndrome**
Syeda H Afroze, Ahmed F Pantho, Texas A&M Univ Coll of Med, Temple, TX; David CC Sprague, Orion Inst for Trans Med, Temple, TX; Thomas J Kuehl, Baylor Scott & White Health, Temple, TX; Ross Bathgate, Florey Inst of Neuroscience and Mental Health, Univ of Melbourne, Victoria, Australia; David C Zawieja, Texas A&M Univ Coll of Med, Temple, TX; Mohammed A Hossain, Florey Inst of Neuroscience and Mental Health, Univ of Melbourne, Victoria, Australia; Mohammad N Uddin, Orion Inst for Trans Med, Temple, TX
- P3044 Second Trimester Severe Fetal Growth Restriction Preceding Preterm Severe Hypertensive Disorder in Pregnancy**
Andrea D Shields, Richard Wagner, Jacqueline Battistelli, Baylor Coll of Med, San Antonio, TX; Viviana de Assis, United States Air Force, San Antonio, TX
- P3045 The ELP-VEGF Fusion Protein is Bioavailable After Subcutaneous Administration and Prevents Increased Blood Pressure In Response To Placental Ischemia**
Omar C Logue, Adrian C Eddy, Kyle Moore, Heather Chapman, Eric M George, Gene L Bidwell III, University of MS Medical Center, Jackson, MS
- P3046 Elevated Free Fatty Acids During Pregnancy Promote Vascular Impairment, Uteroplacental Dysfunction And Angiogenic Imbalance In Rats**
Jeremy W Duncan, Jessica L Bradshaw, Frank T Spradley, Joey P Granger, Univ of Mississippi Med Ctr, Jackson, MS
- P3047 Soluble Guanylyl Cyclase Stimulators And Activators Inhibit Hypoxia-induced Placental Sftt-1 Levels**
Bijalben Patel, Bhavisha Bakrania, Joey Granger, Univ of Mississippi Medical Ctr, Jackson, MS

Poster Presentations (continued)

- P3048 **The 5-HT₇ Receptor is Essential for 5-HT-Induced Hypotension in the Doca Salt Hypertensive Rat**
Bridget Seitz, Gregory Fink, Stephanie Watts, Michigan State Univ, East Lansing, MI
- P3049 **A Novel Mobile App's Reliability, End User Satisfaction, and Changes in Dash Diet Eating Patterns Over 8 Weeks**
Susan Steigerwalt, Scott Hummel, Univ of Michigan, Ann Arbor, MI; Kristin DiFilippo, Univ of Illinois, Urbana-Champaign, IL; Margaret Scisney-Matlock, Univ of Michigan, Ann Arbor, MI
- P3050 **The Effects of Sacubitril/Valsartan on Blood Pressure: Experiences From a Community-Based Heart Failure Center**
Keem Patel, Franciscan Health, Indianapolis, IN; Varun Dobariya, Kathleen Kioussopoulos, Vijay Rao, Susan Nicoson, Teresa Stickford, Franciscan Health, Indianapolis, IN; Ashley Titus, Atul R Chugh, Franciscan Health, Indianapolis, IN
- P3051 **Are Black Hypertensive Patients Receiving Guideline-Recommended Medications?**
Gregory Wozniak, Jianing Yang, Michael Rakotz, American Medical Association, Chicago, IL
- P3052 **A Muscadine Grape Extract Improves Hypertension-Induced Aortic Damage in Conjunction With a Reduction in Fibrosis, Oxidative Stress, and Inflammation**
Patricia E Gallagher, Pooja D Patil, Jasmina Varagic, Brian M Westwood, Wake Forest Sch of Med, Winston Salem, NC; E Ann Tallant, Wake Forest Sch of Med, Winston-Salem, NC
- P3053 **Cardiorespiratory Fitness and Cardiovascular Outcomes in Patients With Resistant Hypertension Participating in Cardiac Rehabilitation**
Luke Joseph Laffin, Asad Khan, Cleveland Clinic Fndn, Cleveland, OH; Katherine Lang, Case Western Reserve Sch of Med, Cleveland, OH; Erik H Van Iterson, Cleveland Clinic Fndn, Cleveland, OH
- P3054 **A Cultural Dance Program Proves Efficacious for Hypertension Control: A Randomized Controlled Trial**
Joseph Keawe'aimoku Kaholokula, Tricia M Mabellos, So Yung Choi, Todd B Seto, Univ of Hawaii, Honolulu, HI; Thomas Wills, Univ of Hawaii Cancer Ctr, Honolulu, HI; Mapuana de Silva, Halau Mohala 'Ilima, Honolulu, HI; Adrienne Dillard, Kula No Na Po'e Hawaii, Honolulu, HI; Joseph Gonsalves, Hui No Ke Ola Pono, Wailuku, HI; A Aukahi Austin Seabury, I Ola Lahui, Honolulu, HI; J Kahaulahilahi Vegas, Waianae Coast Comprehensive Health Ctr, Waianae, HI; Stacy L Haumea, Univ of Hawaii, Honolulu, HI; Donna-Marie Palakiko, Ke Ola Mamo, Honolulu, HI; Mele A Look, Univ of Hawaii, Honolulu, HI
- P3055 **Effects of Lactotripeptides on Tele-Monitoring Home Blood Pressure in Prehypertension: A Randomized, Double-Blind, Placebo-Controlled, Crossover Study**
Masatsune Fujii, Hirofumi Tomiyama, Taishiro Chikamori, Tokyo Medical Univ, Tokyo, Japan
- P3056 **The Effect of Device Guided Slow Breathing With Biofeedback on Pulse Transit Time and Respiratory Sinus Arrhythmia**
Thomas Mengden, Kerckhoff Klinik, Bad Nauheim, Germany; Martin Bachler, Ait Austrian Inst of Techn Gmbh, Wien, Austria; Christopher C Mayer, Ait Austrian Inst of Techn Gmbh, Vienna, Austria; Ines Mikisek, Ines Mikisek Coaching, Frankfurt am Main, Germany; Walter Sehnert, Clinical Res Inst, Dortmund, Germany; Siegfried Wassertheurer, Ait Austrian Inst of Techn Gmbh, Vienna, Austria
- P3057 **Slow Breathing Training Reduces Blood Pressure in Healthy Normotensive Subjects**
Alfredo Gamboa, Emily C Smith, Sachin Paranjape, Katrina M Nelson, Andre Diedrich, Gurjeet Birdee, Vanderbilt Univ Medical Ctr, Nashville, TN
- P3058 **Significant Reduction of Visceral Adiposity in Hypertensive Participants of Doctor-Supervised, Intense Weight Loss Program**
Gerald Dembrowski, Jessica Barnes, 20 Lighter Program, Boca Raton, FL
- P3059 **ACE S: A Novel Angiotension Based Marjer for Monitoring Pharmacologic Activity of ACE Inhibitors in Hypertension Patients**
Oliver Domenig, Attoquant Diagnostics GmbH, Vienna, Austria; Ashraf H Ahmed, Zeng Guo, Endocrine Hypertension Res Ctr, Univ of Queensland Diamantina Inst, Princess Alexandra Hosp, Brisbane, Australia; Andrea Stoller, Thilo Burkard, Univ Hosp Basel, Clinical Pharmacology and Toxicology, Basel, Switzerland; Manuel Haschke, Clinical Pharmacology & Toxicology, Dept of General Internal Med, Univ Hosp Bern, Bern, Switzerland; Michael Stowasser, Endocrine Hypertension Res Ctr, Univ of Queensland Diamantina Inst, Princess Alexandra Hosp, Brisbane, Australia; Marko Poglitsch, Attoquant Diagnostics GmbH, Vienna, Austria
- P3060 **Cardiovascular Regulatory Actions of Apelin in Normotensive Rats: Central versus Peripheral Effects**
Lirong Guo, Jilin Univ, Sch of Nursing, Changchun, China; Sayaman Islam Niloy, Stephen T O'Rourke, Chengwen Sun, North Dakota State Univ, Fargo, ND

Poster Presentations (continued)

- P3061 **Elective Electroencephalography Monitoring During Tilt Table Testing in the Diagnosis of Syncope and Non-Syncopal Fainting**
James A S Muldowney III, Vanderbilt Heart and Vascular Inst, Nashville, TN; Purnima Sharma, Vanderbilt Univ Medical Ctr, Nashville, TN; **Luis E Okamoto**, Divs of Clinical Pharmacology, Vanderbilt Univ Medical Ctr, Nashville, TN; Hasan H Sonmez Turk, Amanda Peltier, Dept of Neurology, Vanderbilt Univ Medical Ctr, Nashville, TN; Cyndya A Shibao, Italo Biaggioni, Divs of Clinical Pharmacology, Vanderbilt Univ Medical Ctr, Nashville, TN
- P3062 **Single-nucleus Rna-sequencing Reveals Cell-specific Transcriptome Changes in the Hypothalamic Arcuate Nucleus in Response to Prolonged High-fat Diet**
Guorui Deng, Lisa Morselli, Sarah Sapouckey, Valerie Wagner, Anne Kwitek, Huxing Cui, Justin Grobe, University of Iowa, Iowa City, IA
- P3063 **Reduced 5-HT_{3R} Signaling in the Nodose Ganglia Neurons of Adult SHR**
Alan Araujo, David Baekey, Guillaume de Lartigue, Jasenka Zubcevic, UNIVERSITY OF FLORIDA, Gainesville, FL



American Heart Association®

Hypertension

September 10–13, 2020
Hilton Riverside New Orleans
New Orleans, LA

#Hypertension20
professional.heart.org/hypertensionsessions



Author Index

Abais-Battad, Justine M.	P111, 152, P164
Abdel-Mageed, Asim B.	P2039
Abe, Temidayo	P103
Abidi, Emna	P133
Abkin, Eric	086
Abokor, Ahmed	P1126
Abraham, Christy	P2027
Abshire, Caleb M.	P112
Abumrad, Nada A.	P3011
Abumrad, Naji N.	P3011
Achille, Allahnah	P104
Adam, Ryan	P2004
Adekola, Bemil	P2070
Adekola, Oritsegbubemi	P2054
Adkins, Steven	100
Adler, Gail	P2024, P2025
Adrianato, Indra	123, P3032
Afroze, Syeda H.	P154, P3042
Agarwal, Heena	P157
Agarwal, Priyanka	116
Agbor, Larry	P183
Agbor, Larry N.	065
Aguilar, Mibel	101
Ahmad, Hadia	P103
Ahmad, Sarfaraz	P131, P2033
Ahmed, Ashraf H.	P2074, P3059
Ahmed, Muhammad Masood	P1123
Ahmed, Rahil	P177
Ahmed, S Faisal	074
Ahmed, Sofia B.	031, P1101
Ahn, Sung Ji	050
Aisicovich, Maia	091
Ajamu, Samuel	048 , P3007
Akiyama, Tomoko	P165
Al-Akchar, Mohammad	P2054, P2070
Alawi, Laale	P2036
Alblas van der Meer, Maaike	147
Alenina, Natalia	P151
Alexander, Barbara T.	P1112
Alexander, Matthew	P1108
Alexander, Matthew R.	021
Allan, J. Miller	P1107
Almeida De Oliveira, Amanda	P190
Almutlaq, Rawan	P3037
Alsheikh, Ammar J.	P111, 152
Álvarez, Sara	027
Alves-Lopes, Rheure	052, 074, 089, P134 , P197, P3002
Amann, Kerstin	044, P3036
Amaral, Jefferson H.	P2005
Amaral, Lorena	P154, P1103
Amaral, Lorena A.	P1110
Amaral, Lorena M.	P161
Amaza, Hannatu I.	P191
Amjad, S Basith	074
Ammous, Farah	057
Amorin, Vanessa	P2006
An, Lawrence C.	P3029
Andleeb, Shumaila	P1123
Andrade, Leticia Z.	P2061
Angell, Sonia	P3030
Angelo, Luciana	P1102
Anistan, Yoland-Marie	039
Anrather, Josef	050
Antonelli, Giorgia	058
Antonova, Galina	121
Anwar, Muhammad Absar	P177 , P1117
Anyanwoke, Chisom	P103
Ao, Mingfang	P186, P1108
Appel, Lawrence	P192
Appel, Lawrence J.	025, 047
Aquiere, Analia	P129
Aractingi, Selim	P2021
Araujo, Alan	P3063
Araujo, Camila B.	P2065
Arendse, Lauren	P134
Arishe, Olufunke	P173
Arita, Danielle Y.	073
Armaignac, Donna	013
Armando, Ines	076, 134 , P2037, P2041
Arnold, Amy C.	P118
Aroor, Annayya	009 , P3019
Arroyo, Alyssa A.	053
Ashraf, Usman	132
Asico, Laureano	134
Asico, Laureano D.	076
Asif, Mahnoor	P2027
Atanda, Adebayo	P167
Attipoe, Esinam M.	P1124
Auer, Paul W.	040
Auger, Nathalie	P149
Aung, Htun Min	P117
Austin Seabury, A. Aukahi	P3054
Auwerx, Johan	P3018
Avery, Ellen G.	P2032 , P2072
Awadallah, Nora	084
Awan, Fazli R.	068
Awumey, Emmanuel M.	P122
Aydin, Atakan	039
Aysola, Rama	028
Ayuzawa, Nobuhiro	P1114
Azar, Silvia H.	036
Azevedo, Rafael B.	P2061
Bachler, Martin	P3056
Bader, Michael	039, P151, P2014
Baekey, David	084, P3063
Baekey, David M.	P188
Baekey, David M.	P171
Bähring, Sylvia	039
Baik, Cedar H.	017, P101
Bailey, Shannon M.	P179
Bakinde, Nicolas	P103
Bakrania, Bhavisha	P3047
Bakrania, Bhavisha A.	P162 , P1112
Balasubramanian, Dakshnapriya	143 , P3020
Balasubramanian, Priya	135
Balogh, Andras	P153
Balogh, András	P2032, P2072
Bamrick, Daniel R.	P1112
Banegas, Jose R.	029
Baranwal, Gaurav	143, P3020
Barnes, Jessica	P3058
Barrera-Chimal, Jonatan	P2022
Bartholomeu, Teresa	P1102
Barthwal, Manoj Kumar	P157
Bartley, Katherine	P3030
Bartolomaeus, Hendrik	P2032, P2072
Bathgate, Ross	P3042
Batista, Rose Ines Matos	P3022
Battle, Daniel	099, P2014
Battistelli, Jacqueline	P3044
Battistoni, Allegra	P3005
Baturin, Vladimir	P3012
Baumbach, Gary	P3004
Bayer, Carolyn L.	P112
Bazzano, Lydia A.	P1125
Beach, Jennifer L.	103
Bearss, Nicole	125
Bearss, Nicole R.	122, P1120
Beattie, Wendy	P3002
Becker, Bryan	P1107, P3037
Becker, Bryan K.	P107
Bednarz, Jacek	P2059
Beissner, Florian	041
Belhaj, Marwa	P121
Belin de Chantemele, Eric J.	007, 121
Bell, Balyssa	P2011
Bellows, Brandon K.	P156
Beltz, Terry G.	P3041
Benito, David	027, P2064
Benizri, Nissim	148
Berenji, Navid	056
Berger, Ana L. Duenhas.	P1102
Berillo, Olga	008 , P150 , P189 , P3003
Berkman, Tolga	P113
Bernstein, Ellen A.	P3034
Bernstein, Kenneth E.	P3034
Berry, Colin	089
Bertagnolli, Mariane	P104 , 148
Berton, Chiara	058
Betz, Alexandria M.	030
Beyer, Andreas	P193
Bhatt, Chintan	013
Bi, Qianqian	085
Biaggioni, Italo	043, P176, P1122, P2063, P3061
Bibbins-Domingo, Kirsten	P156
Bidwell, Gene L.	P3045
Bielak-Zmijewska, Anna	P3021
Bielińska, Klaudia	P3021
Bier, Ariel	024
Bihl, Ji C.	P195
Bilgen, Feriha	P3029
Billings, Frederic T.	P3018
Bingaman, Sarah S.	P118
Birdie, Gurjeet	P3057
Birukov, Anna	P126, P153
Bisogni, Valeria	058
Black, Bonnie	P176
Black, Bonnie K.	043, P2063
Blackburn, Gavin	058
Blaszczuk, Edyta	P153
Blyler, Ciantel A.	P156
Böhm, Michael	109
Bonacio, Gisele	P3022
Bonácio, Giselle F.	P2005
Bonnard, Benjamin	010 , P178
Booth, Lindsey	045
Booz, George	P1110
Booz, George W.	P160, P1103, P3016
Bordignon, Tommaso	P2055
Bortolotto, Luiz A.	P1102
Botchway, Albert	P2054, P2070
Botta, Davide	P1107
Bouhrara, Mustapha	048
Boutouyrie, Pierre	P3003
Bowles, Teylor	151
Boyer, Michael	P165
Bradley, David S.	100
Bradshaw, Jessica L.	P3046
Brady, Tammy	P192
Brandt, Debra S.	030, 149, P3039

Author Index (continued)

- Breier, Nicholas C. P3011
 Bridges, Lakeesha E. P122
 Briet, Marie P3003
 Brito, Leandro P1102
 Brookes, Paul S. P2002
 Brooks, Danielle 038
 Brooks, Heddwyn L. P148, P184
 Brooks, Karen P1103, P1110
 Brown, Nancy P136
 Brown, Nancy J. 107, P2024
 Bruder-Nascimento, Thiago **121**
 Bryant, Kelsey B. **P156**
 Bueno, Franklin L. P2065
 Bueno Silva, Carla 084
 Buhari, Olajide **P167**
 Buhnerkempe, Michael G. ... **P2054**, P2070
 Buonafine, Mathieu 010
 Burkard, Thilo P2074, P3059
 Burlingham, William J. 127
 Burrello, Jacopo P2074
 Bursztyn, Michael **P2053**
 Bzdok, Danilo P2072
 Cahan, Amos P2053
 Caillon, Antoine **023**, 126
 Calhoun, David P174, P187
 Calhoun, David A. 104, P163
 Camargo, Livia P134
 Camargo, Livia L. 011, **068**,
 089, P197, P3002
 Campbell, Krystle P103
 Cao, DuoYao P3034
 Cao, Yiling **022**, P2011
 Capra, John A. P176
 Carey, Robert M. P120
 Carlsson, Martin H. **P2058**
 Carneiro, Fernando S. P124
 Carnevale, Daniela **020**, **094**
 Carnevale, Lorenzo 020, 094
 Carnevale, Raimondo 094
 Carrillo-Sepulveda, Maria A. **115**
 Carton, Thomas P2050
 Casarini, Dulce E. ... **P2020**, P2028, **P2040**
 Cassis, Lisa A. 100
 Castillo, Alexander P2039
 Castro, Michele M. P115
 Castro, Raquel E. P2061
 Celedonio, Jorge E. 043, P1122, P3011
 Ceolotto, Giulio 058
 Cesari, Maurizio 058
 Chai, Siew Yeen 131
 Chakraborty, Saroj 066, P1126
 Chamany, Shadi P3030
 Chamberlain, Alanna M. P2050
 Chan, Lili P2068
 Chang, Eric Y. **P103**
 Chapleau, Mark P3004
 CHAPMAN, HEATHER P3045
 Chappell, Mark C. **129**
 Chaudhary, Parul 055, **060**, 086
 Chelius, Thomas 035, 116
 Chelvaretnam, Sharenaya 131
 Chen, Jake P108
 Chen, Jian X. 102
 Chen, Jian Xiong X. P180
 Chen, Peiyu P3029
 Chen, Weiqin 121
 Chen, Xia P1106
 Chen, Xiangmei P1114
 Chen, Xiaolei **P2011**
 Chen, Xu 077, 102, P2016
 Chen, Yanting 096
 Chen, Yiqing E. 026, P181
 Chen, Yuhan **P1108**
 Cheng, Xi 125, P3027
 Chikamori, Taishiro P3010, P3014,
 P3015, P3055
 Chinthakuntla, Pooja P1103, P1110
 Choi, So Yung P3054
 Chugh, Atul R. P3050
 Cianflone, Domenico **P2055**
 Cicalese, Stephanie M. **P116**
 Cifelli, Giuseppe 020, 094
 Cipollini, Virginia 050
 Claggett, Adrienne 107
 Clark, Gabrielle L. P112
 Clark, Karen C. **053**
 Clemmer, John S. **P158**
 Coats, Laura E. **P1112**
 Cobb, Meredith B. **P1124**
 Coca, Steven G. P2068
 Coelho, Suellen C. 008, P189
 Coffman, Thomas M. 070
 Cogan, Joy D. P176
 Cohen, Debbie L. P2052
 Cohen, Jordana B. **P2052**
 Colombo, Eros P2055
 Colon-Perez, Luis 084
 Colson, Jackson P179
 Comellas, Alejandro P. P191
 Contreras, Andres **P3024**
 Contreras, Andres G. 113
 Cooper, Hannah P116, **118**
 Cooper DeHoff, Rhonda M. P2050
 Cooper-Dehoff, Rhonda M. 026, **032**, P181
 Cordero, Jose 139
 Cornejo, Manuel A. **061**
 Cornelius, Denise C. 017, **P101**, P1110
 Cornellier, Maria L. P3029
 Cortez, Ricardo 146
 Cottrell, Jesse N. P161
 Cowley, Allen 035, 116
 Cowley, Allen W. P111
 Cox, Nancy P185
 Coyle, Javier P129
 Cramer, Jennifer L. P2057
 Crandall, Craig G. 043
 Cross, Jennifer 037
 Crowley, Steven D. P110
 Cruz-Diaz, Nildris P155
 Cui, Huxing P1118, P3062
 Culver, Silas A. **P2018**
 Cunningham, Mark W. **P1103**, **P1110**
 Cunningham Jr., Mark W. P161
 Dahlen, Shelby **092**
 Dai, Xuemei 090, 137
 Dale, Bethany P1108
 Dale, Bethany L. 021
 Dalmasso, Carolina 016, **138**
 Danser, A.H. Jan 097, P2030, P2031
 Danser, Jan 147
 Darwiche, Gassan P2058
 Das, Sandeep P136
 Das, Sandeep R. P125
 Das, Sankalp 013
 da Silva, Alexandre A. **090**, 137
 Dasinger, John Henry P164
 Dasinger, John Henry H. **152**
 Daub, Steffen P153
 D'Avila, Kátia D. Lobo. P1102
 Davis, Debbie R. 120
 Davis, Gwendolyn K. P1112
 Davis, Lauren A. P3039
 Dayan, Natalie P149
 de Assis, Viviana P3044
 DeBell, Natalie J. P2057
 De Cabo, Rafael P139
 Dechend, Ralf P126, P151,
 P153, P2072
 Deer, Evangeline P1110
 Dejhansathit, Siroj 003
 de la Cruz, Juan J. 029
 Dela Justina, Vanessa **P114**, P173
 de Lartigue, Guillaume P3063
 De La Sierra, Alejandro **029**
 Del Borgo, Mark 101
 De Leon, Jessica P181
 Del Gaudio, Ilaria 069
 Dellalibera-Jovilliano, Renata P3022
 Delles, Christian 058
 Del Mauro, Gaia P2055
 DeMarco, Vincent 009, P3019
 Dembrowski, Gerald **P3058**
 de Morais, Sharon D. **042**
 Deng, Guorui **P3062**
 Dennison-Himmelfarb, Cheryl P192
 Dent, Elena **P147**
 Denton, Kate M. **045**
 Derayunan, Alexa P193
 Derzsi, Ladislav P3021
 Desai, Raj P2067
 de Silva, Mapuana P3054
 Desimine, Victoria L. 012
 Devor, Eric J. P132, P3039
 Dhakal, Sanjeev P2036, P2044
 Diedrich, André 041
 Diedrich, Andre 043, P3057
 Diep, Henry 114
 Dietrich, Eric P2067
 Dietz, Nicholas R. P2057
 DiFilippo, Kristin P3049
 Dikalov, Sergey P3018
 Dikalova, Anna **P3018**
 Dillard, Adrienne P3054
 Di Lorenzo, Annarita **069**
 Ding, Kang P123
 Dipette, Donald J. P121
 Dirr, Elliott W. **P188**
 Dissanayake, Lashodya **133**
 Ditting, Tilmann 044, P3036
 Diz, Debra I. P155
 Do, Ron P2068
 Dobariya, Varun P3050
 do Carmo, Jussara M. **137**
 Docarmo, Jussara M. 090
 Domenig, Oliver P2030, P2074, **P3059**
 Domondon, Mark P2049
 Donertas, Basak 084, **P171**
 Dong, Kunzhe **P2013**
 Dongqing, Chen 009, P3019
 Donner, Daniel 059
 Dorsch, Michael P. **P3029**
 Dotto, Andrea 064
 Doty, Tyler P3027
 Drummond, Grant 059

Author Index (continued)

Drummond, Grant R.	114, 119	Faraco, Giuseppe	050	Gallagher, Patricia E.	129, P155,
Drury, Robert	P3008	Farman, Nicolette	P2021		P2007, P3006, P3052
Du, Xiao-Jun	059	Farooq, Umer	P1123	Galley, Joseph	P152
Duarte, Mariano	P129	Faulkner, Jessica L.	007	Gamble, Karen L.	P179
DuBose, Lyndsey E.	149	Faulkner, Madelaine	P2050	Gamboa, Alfredo043, P1122, P3057	
Duchesne, Juan	P3008	Faura, Anna 027		Gamboa, Jorge L.	107
Dudenbostel, Tanja	104, P163,	Faustino, Josemar	P190	Gao, Lie 088, P2004	
.....	P174, P187	Fazan, Rubens P115		Gao, Wenjun 130, 145, P160 , P3016	
Dugas, Courtney M.	P2048	Fazan Jr., Rubens P2065		García, Silvia I. 091	
Dumanski, Sandi 031, P1101		Fedrova, Olga 048, P3007		Garcia, Vitoria Tomazelli P3022	
Dumas, John P. 151		Fehrenbach, Daniel J. 152, P164		Garcia-Bonilla, Lidia 050	
Duncan, Jeremy W. P3046		Felder, Robert B. 022, P2010		Garcia-Horsman, J. Arturo P2014	
Duncan, Marilyn J. 111		Felder, Robert B. P2011		Garcia-Pedraza, Jose A. 079	
Dunne, Michael 089		Felder, Robin P2043		Gardner, Jason D. 046	
Durairajpandian, Vishnuprabu 132		Felder, Robin A. P146, P199,		Garland, Emily M. P2063	
Durand, Marina T. P2005		 P2047, P3033		Garrelids, Ingrid M. 097	
Durão, Marília P. L. P2005		Feng, Yumei 062, 140		Garrett, Michael R. P1124	
Durgin, Brittany G. P139		Fenner, Rachel 048		Garver, Hannah 113, P2023,	
Dutta, Shubha R. P170		Fenner, Rachel C. P3007		 P3024, P3025	
Dwinell, Melinda R. P164		Ferdinand, Keith P2060		Garvin, Jeffrey L. 080	
Eaton, Andrew J. 079		Ferens, Dorota 063		Garza, Amanda E. 038	
Ebihara, Akio P2015		Ferguson, Michael 110, P2056		Gaspari, Tracey A. 131	
Ebinger, Joseph P156		Ferguson, Theresa M. P2059		Gatineau, Eva O. P1104	
Eddy, Adrian C. P3045		Ferland, David J. 113		Gava, Fabio N. 090, 137	
Edwards, Jonnelle 125 , P1120		Fernandez, Camilo P1125		Gavish, Benjamin P1117	
Edwards, Jonnelle M. 122		Fernández-Celis, Amaya 010		Gazzana, Marcelo B. P143	
Egan, Brent P2060		Feroz, Mohammed A. 073		Gentry, Kaylee L. P112	
Egan, Brent M. 001		Ferraro, Carlos M. P131, P2033		George, Akash K. P159, P2009	
Eguchi, Satoru P116, 118, P165		Ferreira, Leonardo V. P2061		GEORGE, ERIC M. P3045	
Ehlers, Mario P134		Ferreira, Nathanne S. P189		Gerhold, Thomas P3004	
Ehmke, Heimo 041		Fiedler, April 059		Gerlach, Darius A. 041	
Ekpo, Peace E. P2039		Filippini, Antonio P3005		Gershon, Adam P167	
Elango, Kalaimani P177		Finemore, Meghan J. 119		Geurts, Aron 040, 093	
Elased, Khalid M. P2036, P2044		Fink, Greg D. P3025		Geurts, Aron M. P127, P164	
Elfassy, Tali P3030		Fink, Gregory P2023, P3048		Ghali, Rana P133, P2001	
El Hachem, Maria 104		Fink, Gregory D. 113, P3024		Giachelli, Chelsea 017, P101	
Elijovich, Fernando 021, P185		Fishbain, Barak P2053		Giachini, Fernanda P114	
Elliott, Kathy 118		Fishbein, Kenneth 048		Giam, Beverly 059	
Elmarakby, Ahmed A. P3035		Fisher, Brandon P1103		Giani, Jorge F. P3034	
El-Osta, Sam 059		Flack, John M. P2054, P2070		Gil, John P2043	
Elsayed, Sherif P177, P1117		Flett, Martyn 074		Gildea, John J. P146, P199,	
Elwood, Bryan P125		Flögel, Ulrich 124		 P2047, P3033	
Engelhaupt, Madison 143		Flood, Emma P172, P2023		Gill, Rupinder K. P2044	
Ercu, Maria 039		Flynn, Joseph T. 110, P2056		Glass, Jordan M. P2059	
Erdbrügger, Uta P120		Fomin, Mikhail P2049		Glova, Svetlana P137	
Eruslanova, Kseniia P119		Fonner, Clifford 028		Goday, Albert 027, P2064	
Červenka, Luděk P2034		Fonseca, Vivian A. 073		Gogulamudi, Venkateswara R. P2045	
Estela, Gabriel R. P2022		Fontil, Vally P156, P2050		Golic, Michaela P126, P151, P153	
Evandro Cesarino, Evandro P1102		Ford, Thomas J. 089		Gollasch, Maik 039	
Evans, Louise P111		Forslund, Sofia 039		Golonka, Rachel P1126	
Evseyeva, Maria P3012		Forslund, Sofia K. P2072		Gomes, Raphael F. P124	
Fabi, Martina P2055		Fortes, Caroline V. P2065		Gomez, Javier 098	
Fadeyi, A. Tobi P196		Foster, Don P2030, P2031		Gomez, Javier A. P1121	
Fadlan, MR P2071		Fox, Brandon P1107		Gomez, Jose A. P186	
Fahrmeier, Franziska 044		Frame, Alissa A. 055, 086		Gonçalves, Bruna R. M. P3022	
Fahy, Martin 109		Franca, Suzelei C. P3022		Gong, Ming P1104	
Faillace, Robert P167		Franco, Martha 142		Gong, Ming C. 111	
Fais, Rafael S. P124		Fraulob-Aquino, Júlio C. P3003		Gong, Yan 026, P181	
Falck, Aaron 107		Freyberg, Zachary 134		Gonsalves, Joseph P3054	
Falck, John P2029		Friedman, Jessica P3008		Gonzalez, Alexis A. P2019	
Fan, Fan 051, 130 , 145, P160, P3016		Fujii, Masatsune P3010, P3055		Gonzalez Bosc, Laura V. 127,	
Fan, Jun 117		Fujisawa, Yoshihide P169		 P194, P1109	
Fan, Letao 145		Fujita, Toshiro P1114		Goodlett, Bethany L. 143, P3020	
Fang, Shi 065, 120		Funez, Elkys P2052		Gorostidi, Manuel 029	
Fang, Yuan P123		Funk, Stephanie P153		Gowdak, Márcia P1102	
Fang, Zhuyuan P123		Fursova, Elena P3012		Granger, Joey P3047	
Faraci, Frank M. P3004		Galla, Sarah 125		Granger, Joey P. P162, P3046	
				Grant, Maria B. P2063	

Author Index (continued)

Greene, Andrew	040	Hilgers, Rob H.	P3013	Jaisser, Frederic	009, 010, P178 , P2021, P2022 , P3019
Gregersen, Nerine	039	Hill, Atlantis	P2046	Jaiswal, Anant	P157
Griffin, Ashley	151	Hill, Michael	009, P3019	Jama, Hamdi	059
Griffiths, Robert	P110	Hines, Anika L.	002	Jankowska-Gan, Ewa	127
Grigorova, Yulia	048, P3007	Hirahashi, Junichi	P2038	Jarajapu, Yagna P.	100
Groban, Leanne	P131, P2033	Hiremath, Swapnil	P2073	Jaworska, Kinga	P3021
Grobe, Justin	P3062	Hitomi, Hirofumi	P169	Jayaram, Aswathi	P1110
Grobe, Justin L.	053, 098, P1121	Ho, Dao H.	P1116	Jelinic, Maria	114
Grobe, Nadja	P2036	Hodge, Russell	039	Jensen, David M.	P192
Grossman, Ehud	024	Hoff, Alex	041	Jeong, Jin Kwon	P2026
Grzeskowiak, Michael Z.	056	Hoffmann, Fabian	041	Jia, Guanghong	009, P3019
Gu, Yan	085	Hohmann, Christoph	P2072	Jiang, Jingwei	P1118, P3001
Guerra, Grazia M.	P1102	Hollanda, João Victor G.	P2061	Jiang, Shan	144
Guidry, Chrissy	P3008	Holmes, Henry R.	032	Jin, Chunhua	P107, P130, P1127, P3037
Gulua, Gvantca	P2014	Homme, Rubens P.	P159, P2009	Jin, Jing	P2014
Gundry, Rebekah L.	P164	Honetschlagerova, Zuzana	P2034	Jin, Yining	P3025
Gunn, Michael D.	P110	Hong, Juan	P2004	Jiracek, Ladan G.	P188
Guo, Deng-Fu	067, 136	Hong, Nancy	080	Joe, Bina	066, 122, 125, P1120, P1126, P3027
Guo, Fang	P3041	Hong, Yuling	P2060	Johnson, Alan K.	P1116, P3041
Guo, Lirong	P3060	Hood, Katie Y.	011	Johnson, Ashley C.	P1124
Guo, Ya	130, P3016	Hoof, Marcus	P3008	Johnson, Chad	059
Guo, Yan	127	Hoorn, Ewout J.	P2031	Johnson, Kipp	P2068
Guo, Zeng	P2074, P3059	Horlock, Duncan	059	Jones, Daniel	P2060
Guo, Zhenheng	111	Hosawi, Anhar	P2036, P2044	Jones, David T.	127 , P194
Guterman, David	P193	Hossain, Mohammed A.	P3042	Jones-Muhammad, Maria A.	014
Guzman, Kimberly E.	P3025	Hoth, Karin F.	P191	Joo, Woo S.	150
Haase, Nadine	P126, P151, P153	Hou, Tianfei	111	Joos, Karen	P176
Habeichi, Nada	P133, P2001	Howell, Nancy L.	081	Jordan, Jens	041
Habermann, Ralf	043	Ho Wong, Tai M.	027	Jose, Pedro A.	076, 134, P146, P2037, P2041
Habibi, Javad	009, P3019	Holyst, Robert	P3021	Joshi, Shrinidh	100
Haddow, Laura	074, 089	Hu, Chunyan	065, 078	Joutel, Anne	052, P145
Hahn, Scott A.	P139	Huang, Liping	P1106	Judd, Eric K.	P163
Halberg, Franz	036	Huang, Stephen	P2030, P2031	Julian, David	P171
Hall, Delton	135	Hübner, Norbert	039	Juraschek, Stephen P.	047, 103
Hall, John E.	090, 137	Huisingh, Nicholas R.	P2048	Jurjus, Abdo	P133, P2001
Hall, Michael E.	P162	Hummel, Scott	P3049	Kaholokula, Joseph K.	P3054
Halm, Ethan	P136	Hummel, Scott L.	P3029	Kalenga, Cindy	P1101
Halm, Ethan A.	P125	Hunt, Jessica	076	Kalenga, Cindy Z.	031
Hamad, Ibrahim	P2072	Hunter, Stacy	P196	Kalyana Kumar, Ramya	P138
Hamid, Rizwan	P176	Huo, Ku-Geng	P150, P189, P3003	Kanagy, Nancy L.	P194, P1109
Hamilton, Wendy S.	P132, P3039	Husari, Ahmad	P133	Kandzari, David E.	109
Handberg, Eileen M.	026, 032, P181	Husband, Nathaniel A.	P148	Kang, Lei	P1114
Haney, Chad	099	Hussain, Misbah	068	Kaplan, Abdullah	P133
Harkness, Hannah P.	P2057	Hussain, Musaddique	P1123	Kapusta, Daniel R.	087
Harrell, Jonathan G.	P181	Hussain, Tahir	P1100	Kardia, Sharon L. R.	057
Harris, Nicholas R.	P112	Hyndman, Kelly A.	082, P1116	Kario, Kazuomi	109
Harrison, David G.	P3018	Iacobucci, Roberta	020	Kasai, Takatoshi	106
Harvey, Adam	P134	Iadecola, Costantino	050	Kasztan, Malgorzata	P1107
Harvey, Adam P.	011	Ibarrola, Jaime	010	Katsurada, Akemi	P2048
Haschke, Manuel	P2074, P3059	Ibrahim, Tarek	P161, P1103, P1110	Katsurada, Kenichi	088
Hassett, Clare	123, P3032	Ibrahim, Tarik	P154	Kawai, Tatsuo	P116, 118
Haumea, Stacy L.	P3054	Ikizler, T. Alp	107	Kaye, David	059
Hayashi, Matsuhiko	P2038	Ilatovskaya, Daria	P142, P2049	Kazi, Dhruv S.	P156
He, Cijiang	P2068	Ilatovskaya, Daria V.	P199	Keeley, Ellen C.	026, 032
He, Jiang	P1125	Iliguez, Facundo	P1105	Kehoe, Patrick G.	062
He, Xiangqin	P2013	Iodice, Daniele	020	Kelly, Amy C.	P148
He, Xiaochen	130, 145, P160, P3016	Iqbal, Kashif	P182	Kelly, Tanika N.	P1125
Head, Geoffrey	045	Irish, Jonathan M.	021	Kemp, Brandon A.	081
Heiss, Gerardo	025	Isakson, Brant	P120	Kemp-Harper, Barbara K.	119, P2012
Hering, Lydia	124	Ishak, Anthony	103	Kennard, Simone	007, 121
Hernandez, Adela	P3034	Ishiwata, Sayaki	106	Keppel, Theodore	P164
Herse, Florian	P126, P151, P153	Iskander, Geina	143	Kern, Jeffrey	P182
Hester, Robert L.	P158	Itty, Sarin	P2027	Khaisheva, Larisa	P137
Hettrick, Douglas A.	P2051	Izzo, Joseph L.	P177, P1117	Khan, Asad	108, P3053
Heuser, Arnd	039	Jackson, Carmilya	017		
Heusser, Karsten	041	Jackson-weaver, Olan	P3008		
Hickey, Graeme L.	P2051	Jacoby, Douglas	P109		
Higashiyama, Aya	006	Jaffe, Iris Z.	007		

Author Index (continued)

Khan, Zakir	P3034	Lannigan, Joanne	P120	Liu, Pan	P2014
Khashab, Rawan	024	Lantz, Benjamin J.	127	Liu, Pengyuan	035, 040
Kidambi, Srividya	035, 116	Larkin, Riley	084	Liu, Ruisheng	054, 144
Kidd, Alexa M.	039	La Salvia, Sabrina	P120	Liu, Sheng	P3025
Kim, Byoung Seok	P3017	Lastra, Guido	009, P3019	Liu, Xiaoli	085
Kim, Jae B.	P2030, P2031	Laterza, Renata M.	P2005	Liu, Xuanchen	P127
Kim, Seungbum	032	Laterza, Nicholas C.	P2047	Liu, Xuebo	120
Kim, Seungbum S.	P143	Latham, Patricia	076	liu, Yong	035, 040
Kimura, Yayoi	P165	Laud, Purushottam	035, 116	Löber, Ulrike	P2072
Kinchen, Jason	P1125	Lauder, Lucas	109	Lodhi, Hamza	P125, P136
Kioussopoulos, Kathleen	P3050	Lauver, Adam	P3024	LOGUE, OMAR C.	P3045
Kiriazis, Helen	059	Lavoie, Julie	P104, 148	Lohmeier, Thomas E.	P158
Kitada, Kento	P169	Lawrence, Dylan	P112	Lombardi, V.P.	P2057
Kleinewietfeld, Markus	P2072	Lazartigues, Eric	046, 087	Lonce, Suzanna	P1122
Klussmann, Enno	039	Le, Thu H.	P120, P2002	Look, Mele A.	P3054
Knorst, Marli M.	P143	Leachman, Jacqueline	138	Loosen, Sonja	044
Koch, Jennifer N.	P2035	Leachman, Jacqueline R.	016	Loou, Lei	139
Koch, Lauren	P1126	Lebrun, Sandrine	P128	Lopez, Marcos G.	P3018
Koch, Lauren G.	122, P3027	Lee, Boma	074	López-Andrés, Natalia	010
Kohan, Donald	078	Lee, John S.	036	Loria, Analia	138
Kohan, Donald E.	095	Lee, Jong Y.	036	Loria, Analia S.	016
Koid, Suang S.	P1114	Lee, Junyoung	P3017	Love, Sydney	143
Kokubo, Yoshihiro	006	Lee, Mary S.	036	Lu, Ko-Ting	065, 098, 120
Kolkhof, Peter	P2022	Leelaviwat, Natnicha	003	Lu, Xiaohan	P110
Koller, Beverly H.	070	Lefante, John	073	Lu, Xifeng	097
Konatham, Sunitha	143	Lefer, David J.	087	Lu, Yifei	025, P192
Kondo, Fumikazu	P1119	Lei, Hillmin	P3026	Lucas-Herald, Angela	074
Kong, Yiwei	P127	Leite, Ana P. Oliveira.	P2028	Luehrs, Rachel E.	P191
Konkalmatt, Prasad	076, 134	Léllis, Janaína	P2006	Luera, Emily M.	P3020
Konkalmatt, Prasad R.	P2037, P2041	Lembo, Giuseppe	020, 094	Luft, Friedrich C.	039
Konop, Marek	P3021	Lenzini, Livia	058	Lumey, L.H.	004
Kotchen, Theodore	035, 116	Lerco, Silvia	058	Lund, Hayley	152, P164
Kotovskay, Julia	P119	Lerner, Uri	P2053	Lund, Jenna M.	P132
Kraeker, Kristin	P126, P151, P2032	Lesker, Till R.	P2072	Luo, Renfei	096, 112
Kräker, Kristin	P153	Levchenko, Vladislav	133, P142	Luo, Tao	P198
Kriegel, Alison J.	093	Levin, Albert	123, P3032	Luther, James M.	P2024, P2025
Kronsbein, Hendrik	041	Lew, Jessica	P2029	Lymperopoulos, Anastasios	012
Krousel-Wood, Marie A.	P1125	Lewis, Caitlin V.	119	Lynch, Kathleen	P156
Krushinska, Nina	P175	L. Faulkner, Jessica	121	Ma, Shuangtao	P2003
Kuehl, Thomas J.	P154, P3042	Li, Changwei	139, P1125	Ma, Xiaotang	P195
Kulthinee, Supaporn	142	Li, Chihua	004	Ma, Yanlin	P1106
Kumar, Ambrish	P121	Li, Hongbao	015	Maass, Philipp	039
Kumar, Megha	076, 134	Li, Jiaying	005	Mabellos, Tricia M. U.	P3054
Kumar, Perna	034	Li, Jiexiang	P2060	Macarthur, Heather	P135
Kumar, Ramya K.	P3025	Li, Jinping	P2038	Mackay, Charles	059
Kumar, Veena	062	Li, Junhui	P127	MacLean, Mandy R.	P145
Kumarasamy, Sivarajan	132	Li, Ningjun	P3028	MacQuaide, Niall	089
Kummer, Katherine A.	P135	Li, Pin-Lan	P3023, P3028	MacRae, Jennifer M.	031, P1101
Kuriakose, Jithin	P3002	Li, Qian	032	Maddie, Nicole	115
Kurth, Theresa	P111	Li, Shengxu	P1125	Madhur, Meena S.	021, P185, P1108
Kushnir, Svitlana	P175	Li, Xiang	P3023	Maeztu, Carlos	P2050
Kussie, Paul	150	Li, Xiao C.	077, 102, P2016, P2028	Mahajan, Ruchi Gupta	P182
Kwitek, Anne	P3062	Li, Yifang	063	Mahfoud, Felix	109
Kwitek, Anne E.	053, P150	Li, Yingchuan	035	Mahjoub, Nada	008, P189, P3003
Kwon, Hyung-Min	049	Li, Zhen	087	Mähler, Anja	P2072
Kyaw, Htet Htet	P117	Liang, Eugene	040	Mahmoud, Ahmad	008, 126
Lacunza, Diego	P1105	Liang, Lirong	139	Maiolino, Giuseppe	058
Laffin, Luke J.	108, P3053	Liang, Mingyu	035, 040,	Majeed, Abdul	P1123
Lakatta, Edward	048, P3007		116, P127, P192	Majid, Dewan S.	P2039
Lakshmipathi, Jayalakshmi	078	Liao, Xinxue	005	Majumder, Suravi	P141, P2042
LaMarca, Babbette	P101, P154,	Liebowitz, Avshalom	024	Makita, Ayu	P1119
.....	P161, P1110	Lieu, Maggie	119	Malek, Jacob A.	053
Lambert, Gavin	059	Lim, Carolin	P153	Malik, Kafait	P2029
Landa, Maria S.	091	Lindsey, Sarah	072	Malik, Kafait U.	P170
Lande, Marc	110, P2056	Lindsey, Sarah H.	P112	Mallory, Micah J.	P3033
Lane, Diane	050	Linkenmeyer, Carinda J.	P191	Malphurs, Wendi	084
Lang, Katherine	108, P3053	Lipman, Mark L.	P3003	Malphurs, Wendi L.	P171
Langlais, Paul R.	P148	Lisco, Steven J.	P2004	Mambungu, Cindy	107

Author Index (continued)

- Manders, Noah 028
 Mani, Indra P2045
 Maning, Jennifer 012
 Manning, Robert P2025
 Manrique, Camila 009, P3019
 Manuel, Jorge 041
 Marc, Casandra P104, 148
 Maris, Stephen 038
 Marko, Lajos 039
 Markó, Lajos P153, P2072
 Marques, Francine **059**
 Marquez, Diego **P1105**
 Martinez-Lemus, Luis P3019
 Martínez-Martínez, Ernesto 010
 Mary, Sheon 058
 Maskey, Dipak 141
 Matanes, Faris **P174, P187**
 Mathew, Sijo **P144**
 Mathias, Christopher J. P2063
 Mathis, Keisa W. **075**
 Matsumoto, Hiroki 106
 Matsushita, Kunihiro **025**, P192
 Matsuyama, Makoto P2015
 Mattson, David 035, 116
 Mattson, David L. P111, 152, P164
 Mauvais-Jarvis, Frank 073
 May, Clive 045
 Mayer, Christopher C. P3056
 Mazurkiewicz, Rebecca P128
 McCardle, Zoe 045
 McCarthy, Cameron P1126
 Mccarthy, Cameron G. **066**, 122,
 125, P1120
 McConnell, Bradley K. P3023
 McCormick, James A. P2035
 McCrink, Katie A. 012
 McDevitt, Rebecca K. P2018
 McDevitt, Ross P3007
 McDonough, Alicia A. **P3026**, P3034
 McFarlin, Brandon E. P3026
 McIntosh, Jennifer P193
 Mehanna, Mai **P181**
 Meiler, Jens P176
 Meincke, Casee R. 030
 Meirelles, Flávio P2006
 Mell, Blair 125, P1126, P3027
 Mello, Marcela M. Blascke de. P115
 Melo, Ana Clara 129
 Meltan, Lauren P2030, P2031
 Mendez, Mariela **141**
 Mendiola, Perenkita J. **P1109**
 Mengden, Thomas P3056
 Mericskay, Mathias P2001
 Metcalfe, Amy 031, P1101
 Metreveli, Naira P159, P2009
 Meyers, Kevin 110, P2056
 Mi, Xuenan P1125
 Michalsen, Andreas P2072
 Michos, Erin D. 047
 Mikisek, Ines P3056
 Miller, Amanda J. **P118**
 Miller, Edgar R. 047, P192
 Miller, Edger 025
 Miller, Kristin S. P112
 Miller, Megan P152
 Mirabito Colafella, Katrina M. P2030,
 P2031
 Mironova, Elena 082
 Mishra, Manoj 040
 Mitchell, Brett M. 143, P3020
 Miyamoto, Yoshihiro 006
 Miyao, Masashi P116, 118
 Miyoshi, Kenichi P1119
 Moak, Sydney P. 090, 137
 Moffett, Caitlin K. P148
 Mohamed, Riyaz P3035
 Mohanty, Ipsita P2035
 Mok, Daniel W. P2059
 Molé Illas, Rosana 039
 Molina, Patrick **P1107**
 Montezano, Augusto 058, 074
 Montezano, Augusto C. 011, 052, 068,
 **089**, P134, P145,
 P197, **P3002**, P3005
 Montilla-Crespo, Jose P181
 Monu, Sumit R. **P1115**
 MOORE, KYLE P3045
 Morales, Jessica 075
 Morales-Loredo, Juan H. **P194**
 Moran, Andrew 025, P192
 Moran, Andrew E. P156
 Moreau, Kerrie L. 071
 Moreira, Jesse D. **086**
 Moreno, Laura **P102**
 Morgan, Donald P3001
 Morgan, Donald A. **083**, 136, P1118
 Mori, Fumiko P1114
 Morisawa, Norihiko P169
 Moritz, Karen 045
 Morris, Hannah 052
 Morris, Hannah E. **P145**
 Morris, Tamara M. 046
 Morselli, Lisa P3062
 Mosieniak, Grażyna P3021
 Mosley, Thomas H. 057
 Moss, Elizabeth P136
 Mounce, Sophia 138
 Mountford, Simon J. 131
 Moy, Norma B. P156
 Mueller, Dominik N. P126, P151
 Muhieddine, Dina P133
 Mukamal, Kenneth J. 103
 Mukohda, Masashi 065, 120
 Mulatero, Paolo P2074
 Muldowney, James A. 043
 Muldowney, James AS P3061
 Müller, Dominik N. 039, P153,
 P2032, P2072
 Munyura, Yannick 035
 Murphy, Barbara P2068
 Murray, Gillian P2025
 Musante, Luca P120
 Musso, Natale **064**
 Muxfeldt, Elizabeth S. P2061
 Myöhänen, Timo P2014
 Nadkarni, Girish N. P2068
 Nagao, Tomoaki P1119
 Nair, Anand 098
 Nair, Anand R. 065, P183
 Nair, Anand R. 120
 Nakagawa, Pablo **098**, P1121
 Nakagawa, Tsutumu P154
 Nakano, Daisuke 061, P169
 Nakano, Hiroki **P2066, P3009**,
 **P3014, P3015**
 Nam, Ki-Woong 049
 Nandi, Shyam 088
 Narula, Jagat P2068
 Nasci, Victoria L. **093**
 Navar, L.Gabriel 142
 Navar, Luis G. 146
 Neder, Thomas H. **P1116**
 Nehrke, Keith P2002
 Nelson, Katrina M. P3057
 Nerenberg, Kara 031, P1101
 Neuman, Rugina **147**
 Neupane, Dinesh P192
 Neves, Karla B. 011, **052**, 089,
 P134, P145, P197, P3002
 Newman, John H. P176
 Nguyen, Jordan 063
 Nguyen, Thanh **P108**
 Nguyen, Van Tuan P2021
 Nian, Hui P2024, P2025
 Nichol, Sarah E. F. 011
 Nicoletti, Carmine P3005
 Nicoson, Susan P3050
 Nierenberg, Jovia P1125
 Nikolich-Zugich, Janko P148, P184
 Niloy, Sayaman Islam P3060
 Nilsen, Margaret P145
 Nishimura, Koichi P113
 Nishiyama, Akira 061, P169, **P2015**
 Nist, Kayla M. 086
 Norwood Toro, Laura P193
 Nuckols, Virginia R. **149**
 Oakes, Joshua M. 046
 O'Brien, Emily P2050
 Ochiai-Honma, Fumika P2038
 Odinkemere, Chima P103
 Odutola, Samuel O. **P122**
 Oei, Stephanie S. P2061
 Offermanns, Stefan 008
 Ogola, Benard 072
 Ogola, Benard O. **P112**
 Ogura, Sayoko P1114
 Ojeda, Norma B. P1112
 Okamoto, Luis P1122
 Okamoto, Luis E. **043**
 Okamoto, Luis E. **P3061**
 Okechukwu, Charles **P105**
 Okura, Takafumi P1119
 Oliveras, Anna **027, P2064**
 Oliveros, Rene 056
 Omoto, Ana C. M. 090
 Omoto, Ana C. Mieke. P115
 Onyekwelu, Chioma P167
 Oparil, Suzanne 104, P163, P174, P187
 Orias, Marcelo P1105
 Orlandin, Caisa B. P2005
 O'Rourke, Stephen T. P3060
 Ortiz, Pablo 123, P1115, P3032
 Ortiz, Pablo A. 079
 Ortiz, Rudy M. 061
 Ortiz-Capisano, M. Cecilia 141
 Osborn, Jeffrey L. P106, P3038
 Osei Owusu, Patrick **P2035**
 Osmond, Peter P177, P1117
 Otanwa, Adokole J. J. 065
 O'Toole, Stuart 074
 Ott, Christian 044, P3036
 Otto, Kevin J. P188
 Ouerd, Sofiane P150, P189
 Outon, Sara 027, P2064

Author Index (continued)

Oydanich, Marko	P113	Pino Reyes, Jose Antonio	084	Reeh, Peter	P3036
Packer, Jacob	P3008	Pirro, Nancy T.	129	Reese, Peter P.	P2052
Padia, Shetal H.	081	Platt, Robert	P149	Refaat, Marwan	P2001
Pagano, Patrick	P166	Plavnik, Frida	P1102	Rego, Maria Fernanda d.	P2061
Palacios Ramirez, Roberto	P178	Plebani, Mario	058	Rehman, Asia	P150, P3003
Palakiko, Donna-Marie	P3054	Pletcher, Mark J.	P2050	Reho, John	P3001
Palamuttam, Riya J.	P144	Pocock, Stuart	109	Reho, John J.	067
Palei, Ana C.	150	Poggi, Armella D.	P3029	Reichhold, Patrick C.	P2057
Pallante, Fabio	020, 094	Poglitsch, Marko	P134, P2030, P2074 , P3059	Rekovets, Oksana	P175
Palygin, Oleg	133, P142	Pojoga, Luminita H.	038	Ren, Jiawei	P110
Pan, Chuandi	P108	Polina, Iuliia	P2049	Ren, Liwei	P2030
Pan, Qunwen	P195	Pollard, Celina M.	012	Resta, Thomas L.	P194
Pan, Xiaoqing	035	Pollock, David	P1107, P3037	Restini, Carol B. A.	P2005
Pandey, Arvind	P3018	Pollock, David M.	P107, P130, P179, P1116, P1127	Reyes, Cristian	P2019
Pandey, Kailash N.	034, P2045	Pollock, Jennifer	P1107	Reyes Toso, Carlos	P129
Pantho, Ahmed F.	P154 , P3042	Pollock, Jennifer S.	082, P179, P1116	Rhoads, Megan K.	P1127
Paradis, Pierre	008, 023, 126, P150, P189, P1113, P3003	Pollow, Dennis P.	P184	Rhodes, Megan	P3037
Paranjape, Sachin	043, P1122, P3057	Poon, Carrie	050	Ribeiro, Adriana B.	P2065
Paranjpe, Ishan	P2068	Popova, Elena	039	Ricardo, Sharon D.	063
Parente, Juliana M.	P115	Potthoff, Matthew J.	083	Richards, Elain M.	032
Park, Haesuk	P2067	Potts, Jay D.	P121	Richards, Elaine	015, 019
Park, Jin-Ho	049	Prado, Cibeles	P2006	Richards, Elaine M.	P143
Park, Jong-Ho	P3017	Prakash, Vivek	P2054, P2070	Richer, Chantal	P150, P189, P3003
Parker, Barbara M.	012	Preissner, Robert	039	Richfield, Owen	146
Parsa, Dena	P3011	Preston, Kyle	P116, 118	Riera, Marta	027, P2064
Pascual, Julio	027, P2064	Prieto, Minolfa C.	073	Rigatto, Katya	P143
Pashova, Antoniya	074	Primak, Galina	P175	Rios, Francisco	P134
Passaglia, Patricia	089	Priver, Taylor S.	P3026	Rios, Francisco J.	011 , 068, 089, P197 , P3002
Pastor-Soler, Nuria	P3026	Priviero, Fernanda	P114, P173	Risman, Marjorie	P109
Pate, Donald L.	P2057	Privratsky, Jamie	P110	Ritter, Joseph	P3028
Patel, Bijalben	P3047	Pruett, W. Andrew	P158	Rizal, A	P2071
Patel, Jay N.	P1122	Puleo, Franco	086	Rizzi, Elen	P2006
Patel, Kaushik	088	Puleo, Franco J.	055	Rizzi Sanchez, Elen	P3022
Patel, Keem	P3050	Pushpakumar, Sathnur	P2042	Rizzo, Victor	P116, 118, P165
Patel, Sanket N.	P1100	Pushpakumar, Sathnur B.	P141, P2009	Roberts, Drew J.	P131
Pati, Paramita	P179	Qian, Chunqi	P2003	Roberts, Michelle	035
Patil, Pooja D.	P3052	Quelle, Frederick W.	120	Robertson, David	P176, P2063
Paulson, Helen	P181	Racchumi, Gianfranco	050	Roccabianca, Sara	P2023
Pedrosa Nunes, Kenia	P190	Rader, Daniel	P109	Rockwell, Cheryl E.	P138, P3025
Peltier, Amanda	P3061	Rader, Florian	P156	Rodionova, Kristina	044, P3036
Peltier, Amanda C.	043	Raguema, Nozha	P104, 148	Rodriguez, Laura	P3008
Peng, Dungneg	P2025	Rahimi, Omeed	P3006	Roman, Richard J.	130, 145, P160, P3016
Peng, Kexin	112	Rahman, Asadur	P2015	Romero, Cesar A	P1105
Penko, Joanne	P156	Rahmouni, Kamal	067, 083, 136, P1118, P3001	Romero-Aleshire, Melissa J.	P148, P184
Pepin, Émilie	P104	Raizada, Mohan	015, 019	Root, Allen W.	P2063
Pépin, Émilie	148	Raizada, Mohan K.	032, P143	Rosales, Carla B.	073
Pepine, Carl	015, 019	Rakotz, Michael	P2050, P3051	Rossi, Gian Paolo	058
Pepine, Carl J.	026, 032, P143	Rakova, Natalia	P153	Rossitto, Giacomo	058
Pereira, Antonio A. J.	P2040	Ralph, Donna L.	P3026	Roth, Brittney	P181
Peres Diaz, Ludmila S.	091	Ramalho, Leandra N. Z.	P2005	Rouabhi, Mohamed	136
Peretto, Giovanni	P2055	Ramesh, Sharanya	P1101	Roy, Shaunak	122 , 125
Perez, Arianna	012	Ramirez, Lindsey	P3035	Rubens, Muni	013
Perrotta, Marialuisa	020, 094	Ramirez-Perez, Francisco	P3019	Rubera, Isabelle	077
Perrotta, Sara	020, 094	Ramkumar, Nirupama	095	Rubinelli, Luisa	069
Persand, Dhandevi	115	Ramos, Simone	P2006	Rudemiller, Nathan	P110
Persson, Erik	054	Rao, Sridhar	040	Rui, Shumin	004
Petrashkevskaya, Natalia	P3007	Rao, Vijay	P3050	Ruilope, Luis M.	029
Petrie, Mark C.	058	Rappelt, Matthew	P193	Rump, Lars C.	124
Pezeshkian, Kevin	033, 105	Ratliff, Scott M.	057	Runichina, Nadejda	P119
Pham, Son	056	Ray, Jordan	P143	Rusidi, Anjelika	P3012
Phillips, Gwyneth B. N.	P191	Raza, Shahid Masood	P1123	Rutkowski, Joseph M.	143, P3020
Phillips, John	P176	Razavi, Alexander C.	P1125	Ruzicka, Marcel	P2073
Phillips, Sarah	059	Reckelhoff, Jane F.	018	Ryalat, Fatima	P155
Pierce, Gary L.	030, 149, P191	Reddy, Kavya	P168	Ryan, Michael	128, P147
Pilz, Marta	P3021	Reddy, S. Santosh	P157	Saavedra, Luz	P186
Pinar, Anita A.	063			Sabharwal, Rasna	P3004
Pinato, Alessio	058			Saha, Piu	P1126

Author Index (continued)

- Sahoo, Sanghamitra **P166**
 Saito, Kenji P1118
 Salami, Joseph 013
 Saleem, Mohammad P186
 Saleh, Langeza 147
 Salgado, Helio C. P1102, **P2005, P2065**
 Sampaio, Fernando B. P2061
 Samuel, Chrisan 101
 Samuel, Chrisan S. **063**, 119, 131, P2012
 Samuels, Joshua 110, P2056
 Sanchez, Elen R. P2005
 Sanchez, Jorge 028
 Sanker, Subramaniam P152
 Sans, Laia P2064
 Santillan, Donna A. 030, P132,
 149, P3038, **P3039**
 Santillan, Mark K. **030**, P132,
 149, **P3038**, P3039
 Santisteban, Monica M. **050**
 Sapouckey, Sarah P3062
 Sarafian, Raquel D. 089
 Sargowo, Djanggan P2071
 Sarotto, Lidia P129
 Sato, Akihiro 106
 Sato, Ryosuke **P2048**
 Satou, Ryosuke 062
 Savoia, Carmine **P3005**
 Sawant, Harshal P2036
 Saxena, Anju P2008
 Saxena, Anshul **013**
 Saxena, Naveen R. **P2008**
 Scacchi Bernasconi, Pablo P129
 Scalia, Rosario P116, 118
 Schächterle, Carolin 039
 Schaeffer, Samantha 050
 Schesing, Kevin **P125**, P136
 Schiermeyer, Katherine P2043
 Schiermeyer, Katherine A. P199,
 P2047, P3033
 Schiffer, Mario 044, P3036
 Schiffrin, Ernesto L. 008, 023, 126,
 P150, P189, P1113, P3003
 Schlaich, Markus 045
 Schmieder, Roland 044, P3036
 Schmieder, Roland E. 109
 Schor (in memorium), Nestor P2040
 Schreckenberger, Zachary 066
 Schuette, Till P126, **P151**
 Schultz, Emily **P128**
 Schultz, Harold D. 042
 Schulze, Arndt 099
 Schulz-Menger, Jeanette P153
 Schuman, Mariano L. 091
 Schupp, Michael P151
 Schwab, Susan 069
 Scisney-Matlock, Margaret P3049
 Scroggins, Sabrina M. 030, **P132**,
 P3038, P3039
 Scudder, Shea K. P3011
 Seccia, Teresa M. 058
 Sedaka, Randee **082**, P179, P1107
 Segarra, Steven 050
 Segura, Julian 029
 Sehnert, Walter P3056
 Seitz, Bridget **P3048**
 Sen, Utpal P141, P2042
 Serfozo, Peter P2014
 Sergeeva, Oksana P3012
 Seto, Todd B. P3054
 Seungbum, Kim 019
 Shadiow, James P196
 Shah, Nirav **028**
 Shah, Syed Nisar Hussain P1123
 Shahanoor, Ziasmin 050
 Shahul, Sajid P162
 Shaltout, Hossam A. **P2062**
 Shan, Jiang 054
 Shao, Qingmei 014
 Shao, Weijian 142
 Shapero, Brian P143
 Sharanya, Ramesh 031
 Sharma, Neeru **088**
 Sharma, Purnima P3061
 Sharma, Shishir P125, P136
 Sharp, Andrew S. P. P2051
 Sharp, Lydia E. P132, P3039
 Shaw, Kathryn P2050
 Shawky, Noha M. **018**
 Shay, Christine P2050
 She, Ruicong 123, P3032
 Sheehan, Jonathan P176
 Shehadeh, Lina A. 012
 Shen, Justin Z. Y. **P3034**
 Shen, Luqi 139
 Shen, Matthew 063, 131
 Shen, Xiao Z. 085
 Shen, Ye 139
 Shen, Zhongyi 064
 Sheth, Samip **P109**
 Shi, Mengyao P1125
 Shi, Peng **085**
 Shibao, Cyndya A. 043, **P176**,
 **P2063, P3011**
 Shibao, Cyndya A. P3061
 Shibata, Shigeru P2038
 Shibayama, Yuki P2015
 Shichijo, Satoru **P1119**
 Shields, Andrea D. **P3044**
 Shihata, Waled 059
 Shimada, Satoshi **P111**
 Shimosawa, Tatsuo P1114
 Shin, Ji Soo P2029
 Shitara, Jun 106
 Shlyk, Sergey P137
 Shoemaker, Robin C. **P3040**
 Shokoples, Brandon **P1113**
 Shuey, Megan P185
 Siddiqui, Mohammed 104, **P163**,
 P174, P187
 Sigmund, Curt D. ... 065, 098, P183, P1121
 Sigmund, Curt D. 120
 Sikora, Ewa P3021
 Silva, Carlos A. A. P2005
 Silva, Luiz E. V. P2065
 Silva, Rodrigo P2061
 Silva Junior, Sebastiao D. **P183**
 Silva-Lovato, Claudia H. P2065
 Simonyan, Hayk P2026
 Singh, Harshil 045
 Singh, Mahavir **P159**, P2009
 Singh, Purnima **P170**
 Singh, Reetu 045
 Singh, Uday **P1118**
 Sinnett, Daniel P150, P189, P3003
 Sinopoli, Angelo P2060
 Siragy, Helmy P198
 Siragy, Helmy M. P2018
 Sirenko, Yuriy P175
 Smart, Charles D. **P185**
 Smart, Duncan P1108
 Smith, Emily C. 043, P1122, P3057
 Smith, Godfrey 089
 Smith, Jennifer A. 057
 Smith, Kelcie L. P2059
 Smith, Myra P2050
 Smith, Scott A. P125
 Smith, Scotti D. P3026
 Smith, Steven M. ... 026, 032, P181, **P2067**
 Snelson, Matthew 059
 Snyder, Elizabeth P3035
 Snyder, Matthew P128
 Sobey, Christopher G. 114
 Sofat, Reece 037
 Sola, Darlene P1101
 Sola, Darlene Y. 031
 Soleimani, Manoocher 077
 Soliman, Reham H. **P130**
 Solorzano, Carmen P2025
 Song, Chi Young **P2029**
 Sonmezturk, Hasan H. P3061
 Soto-Pantoja, David R. **P2007**
 Souza, Lucas A. **062**
 Sowers, James 009, P3019
 Sozanski, Krzysztof P3021
 Sparks, Matthew A. 070
 Speed, Joshua P3037
 Spegele, Adam P1126
 Spegele, Adam C. 122, P3027
 Spencer, Richard 048
 Spencer, Shauna-Kay 151
 Speth, Robert C. P2027
 Spires, Denisha 133, **P142**
 Spradley, Frank T. **150**, P3046
 Sprague, David C. P154, P3042
 Srivastava, Vinita P2008
 Stadler, Krisztian P2049
 Staruschenko, Alexander 133, P142
 Stctetinin, Evgenij P3012
 Steckhan, Nico P2072
 Stegbauer, Johannes **124**
 Steigerwalt, Susan **P3049**
 Steven, Mairi 074
 Stevens, Bruce R. **019**
 Stewart, Hanna P2027
 Stickford, Teresa P3050
 Stockand, James D. 082
 Stoll, Danielle P2020
 Stoller, Andrea P2074, P3059
 Stowasser, Michael P2074, P3059
 Stoyell-conti, Filipe F. **P2027**
 Straub, Adam P152
 Straub, Adam C. P139
 Stroud, Amy K. 030, 149
 Strowig, Till P2072
 Stuart, Deborah 078, 095
 Study Group, FMD-J P2066
 Study Group, J-Babel P3009
 Stumpf, Megan P111
 Sturrock, Edward P134
 Su, Han **P180**
 Su, Huabo P2013
 Su, Wen 111
 Subramanian, Madhan **135**
 Subramanian, Umadevi P2045

Author Index (continued)

Suda, Shoko	106	Treesaranuwattana, Thitinan	038	Wang, Conghui	P1114
Sudarikova, Charleston V.	P199	Trieu, Lien	P128	Wang, Donna	033, 105
Sugita, Peter	P2071	Tsioufis, Konstantinos	109	Wang, Donna H.	P2003
Sullivan, Jennifer	P3035	Tsunemi, Miriam H.	P1102	Wang, Fei	096, 112
Sultanova, Regina	P2049	Tsvetkov, Dmitry	039	Wang, Feng	P127
Sun, Chengwen	P3060	Tsyganov, Kirill	059	Wang, Han	P123
Sun, Xuming	P131	Tun, May Thu	P117	Wang, Hanjun	P2004
Sun, Yuan	097	Turcu, Adina	P2025	Wang, Hao	P131
Sun, Zhongjie	117	Tyagi, Suresh C.	P159	Wang, Hong	P1115
Sutherland, Susan	P2060	Tyagi, Suresh C.	P2009	Wang, Jia-Sheng	139
Sutherland, Susan E.	001	Ucci, Sarassunta	P3005	Wang, Jingli	P192
Sutton, Sarah	028	Uchida, Shunya	P2038	Wang, Jinju	P195
Swan, Alexander M.	P117	Uddin, Mohammad N.	P154, P3042	Wang, Jiping	P2043
Swan, Alexander Myint	P117	Ufnal, Marcin	P3021	Wang, Lei	144
Swan, Tracy T.	P117	Uhlorn, Josh A.	P184	Wang, Ling	033, 105
Sylvester, Megan A.	P184	Uhlorn, Joshua A.	P148	Wang, Shaoxun	051, 130,
Szczepanski, Jamie	151	Uhrlaub, Jennifer	P184		145, P160, P3016
Tallant, Ann	129	Ujil, Estrellita	P2030, P2031	Wang, Shirley	117
Tallant, E. A.	P155, P3052	Ukah, Ugochinyere Vivian	P149	Wang, Tao	035, 116
Tallant, E. Ann	P3006	Umanath, Kausik	123, P3032	Wang, Weili	P3028
Tallant, Elizabeth A.	P2007	Šušnjar, Urša	P2072	Wang, Yan	101
Talwar, Sudha	P2039	Urbina, Elaine M.	110, P2056	Wang, Ye	022, P2011
Tan, Adelene Y.	150	Usa, Kristie	P127	Wang, Yu	068
Tang, Olive	025, P192	Vaka, Ramana R.	P161	Wang, Yun-Ting	P3023
Tank, Jens	041	Vaka, Venkata R.	P1110	Wang, Yves T.	P2002
Tannous, Cynthia	P2001	Valaiyapathi, Badhma	104	Ward, Ryan C.	P191
Tantisattamo, Ekamol	003	van den Berg, Sjoerd	147	Warrier, Akshaya	P132
Tanus-Santos, Jose E.	P3022	van den Meiracker, Ton	147	Warrington, Junie P.	014
Tate, Winter	143	Van Iterson, Erik H.	108, P3053	Wassertheurer, Siegfried	P3056
Tauc, Michel	077	Varagic, Jasmina	P131, P2033,	Watanabe, Makoto	006
Taylor, Bradley K.	016		P3006, P3052	Watts, Stephanie	P172, P3048
Taylor, Crystal M.	P130	Vasam, Goutham	100	Watts, Stephanie W.	113, P138,
Taylor, Erin	128	Vatner, Dorothy E.	P113		P2023, P3024, P3025
Taylor, Jessica C.	P106, P3038	Vatner, Stephen F.	P113	Weaver, Chelsea C.	P106 , P3038
Temme, Sebastian	124	Vázquez, Susana	027, P2064	Webb, Clinton	P114, P173
Terada, Yuka	P2017	Veelken, Roland	044, P3036	Weber, Gregory	P141, P2042
Thanekar, Unmesha	P2036, P2044	Vegas, J. Kahaulahilahi	P3054	Weber, Michael A.	109
Thatcher, Sean E.	100	Veiras, Luciana C.	P3034	Weber, Paul	P172
Thethi, Tina K.	073	Veledar, Emir	013	Wedgeworth, Sophie	143
Thida, Aye Mon	P117	Vera, Maria	P2064	Wei, Bo	085
Thomas, Kellie M.	P3039	Verdin, Eric	P3018	Wei, Jin	054 , 144
Thomas, Soweto	P140	Vetrini, Francesco	P176	Wei, Shouzu	P2024
Thompson, Janice	P172	Victorino, Thais R.	P3022	Wei, Shun-Guang	022, P2010, P2011
Thompson, Philip E.	131	Vijay-Kumar, Matam	P1126	Wei, Wen	P3007
Thompson, Rachael	014	Villanueva, Matthew	026	Weintraub, Neal	P1116
Thompson, Willie L.	P101	Vinh, Antony	059, 114	Weiss, Robert M.	P2010
Thorpe, Roland J.	002	Vinson, Ruth M.	018	Weiss, Sara	P153
Titus, Ashley	P3050	Vinyoles, Ernest	029	Welsh, Paul	058
Titze, Jens	P169	Visniauskas, Bruna	073	Wen, Yi	P110
Tkacheva, Olga	P119	Visser, Willy	147	Wenceslau, Camilla F.	066, 122,
Toblli, Jorge E.	091	V. Lima, Victor	P114		125, P1120
Todd, Jonathan	P2050	Volpe, Massimo	P3005	Wenner, Megan M.	071
Todiras, Mihail	039	VonCannon, Jessica L.	P131	Wertz, Shelby L.	012
Tomcho, Jeremy C.	122, 125, P1120	Vongpatanasin, Wanpen	P125, P136	West, Crystal	P2027
Tomiya, Hirofumi	P2066, P3009, P3010,	Vutthikraivit, Possawat	003	Westwood, Brian M.	P3006, P3052
P3014, P3015, P3055		Wadsack, Christian	069	Whaley-Connell, Adam	009, P3019
Torbas, Olena	P175	Wagner, Richard	P3044	Wharton, Whitney	062
Torres, Gonzalo	084	Wagner, Valerie	P3062	Wheatley, Will	095
Tostes, Rita d.	P124	Wagner, Valerie A.	053	Whelton, Seamus P.	P1125
Toth, Brandon A.	P1118	Wainford, Richard D.	055, 060, 086	White, Dakota	P101
Touyz, Rhian	074	Walejko, Jacquelyn M.	P143	White, Melissa C.	P118
Touyz, Rhian M.	011, 052, 058,	Wallace, Kedra	151	Widdop, Robert	101
.....	068, 089, P134,	Walsh, Stephen B.	037	Widdop, Robert E.	119, 131
.....	P145, P197, P3002, P3005	Walter, Stephan	039	Widlansky, Michael	P192
Townsend, Raymond R.	109, P2051 , P2052	Walton, Antony	P2051	Wilck, Nicola	P153, P2032, P2072
Tran, Vivian	114	Wan, Elizabeth	037	Wilken, Gerald H.	P135
Travis, Olivia K.	017 , P101	Wanderley, Carlos W.	P124	Williams, Jan M.	017, P101, 151
Trebak, Fatima	062	Wang, Chao	085, P2012	Wills, Thomas	P3054

Author Index (continued)

Wogsland, Cara E.	021	Yang, Almira	116	Zhang, Eric	P108
Wong, Christina	P191	Yang, Chun	035	Zhang, Huawei	145, P160, P3016
Worker, Caleb J.	140	Yang, Jianing	P3051	Zhang, Jianyi	P108
Worsham, Rebecca A.	P180	Yang, Kevin T.	112	Zhang, Jie	054, P113, 144
Wozniak, Gregory	P2050, P3051	Yang, Nianxin	080	Zhang, Ruiyuan	139
Wright, Kendra N.	P131, P2033	Yang, Tao	015, 084	Zhang, Shao Yang	098
Wu, Bryan	P125, P136	Yang, Tianxin	096, 112	Zhang, Tongbin	P108
Wu, Cindy	P3029	Yang, Ting	070	Zhang, Yang	P3023
Wu, Jing	065, 120	Yang, Wei	062	Zhang, Youjie	122, P3027
Wu, Wenjie	P1124	Yang, Xiangsheng	P1106	Zhao, Bin	P195
Wysocki, Jan	099, P2014	Yayama, Katsutoshi	P2017	Zhao, Chunling	077, 102, P2016
Xia, Huijing	087	Ye, Minghao	P2014	ZHAO, Liming	P2069
Xiao, Liang	P186, P3018	Yee, Jerry	123, P3032	Zhao, Long	112
Xie, Shiyang	096, 112	Yeo, Ji-Youn	P3027	Zhao, Ming	099
Xie, Zhong-Ru	139	Yeoh, Beng San	P1126	Zhao, Wei	057
Xin, Hongbo	P2013	Yi, Stella	P3030	Zhe, Sun	009, P3019
Xiong, Zhenyu	005	Yiannikouris, Frederique B.	P1104	Zheng, Xiaowen	077, 102, P2016
Xu, Chuanming	096, 112	Yonish, Brian	P2059	Zhou, Jiliang	P2013
Xu, Jiaxi	046	Yoshida, Tadashi	P2038	Zhou, Xiang	057
Xu, Ke	032	Young, Colin	P2026	Zhou, Xinzhou	077
Xu, Peng	P146, P199,	Young, Martin E.	P179	Zhu, Dongmin	077
.....	P2043, P2047, P3033	Young-Stubbs, Cassandra	075	Zhu, Mingyu	119
Xu, Xiu	016, 138	Youxin, Xiong	P3019	Zhuang, Xiaodong	005
Xue, Baojian	P3041	Yu, Chang	P2024, P2025	Zhuo, Jia L.	077, 102, P2016, P2028
Xue, Hong	P127	Yu, Yang	022, P2010, P2011	Ziemann, Mark	059
Ya, Guo	145, P160	Yu, Yanhong	P1106	Zieren, Jan D.	P2059
Yakoub, Mina	124	Yue, Wei	P146, P199, P2043	Zimmerman, Margaret	072
Yamaguchi, Osamu	P1119	Yue, Xiaojing	P1106	Zimmerman, Margaret A.	P112
Yamaleyeva, Liliya M.	P155	Yue, Xinping	046	Zlatev, Ivan	P2030, P2031
Yamashina, Akira	P2066, P3009,	Zanatay, Mario	098	Zou, Chang-Jiang	112
.....	P3010, P3014, P3015	Zarzour, Abdalrahman	P1116	Zou, ZhiGuo	011, P197
Yamashita, Maho	P2038	Zawieja, David C.	P154, P3042	Zouein, Fouad	P133, P2001
Yamashita, Tomohisa	P131	Zemaj, Jeylan	152, P164	Zubcevic, Jasenka	P171, P188, P3063
Yamazaki, Daisuke	P169	zeng, Heng	P180	Zucker, Irving H.	042, P2004
Yamazaki, Osamu	P2038	Zhang, Biao	P123	Zühlke, Kerstin	39
Yan, Yang	009, P3019	Zhang, Bin	104		
Yan, Yaping	P176	Zhang, Dingguo	P179, P3037		



American
Heart
Association®

Membership provides you...

- Savings on registration for AHA Scientific Meetings
- The opportunity to apply for AHA research grants (only members can apply)
- Savings on OnDemand Sessions and Stroke programs
- Access to all 11 AHA scientific journals online
- 50+ opportunities annually for networking
- Complimentary/discounted online education offerings for CME/CE credit
- The path to becoming a Fellow of the American Heart Association (FAHA)
- Volunteer opportunities such as becoming peer reviewers, journal reviewers and more!
- And our newest benefit – the Jobs and Career Resources center that gives you access to healthcare positions in a wide variety of organizations.

Learn more and join us at
professional.heart.org/membership

American Heart Association®

Scientific Sessions



18.8 billion media impressions worldwide



Late-Breaking Science



15.5 hours of FIT/Early Career programming



26 Basic, Clinical, and Population science communities



3 Frontiers in Science Summits



State of the Art Cardiovascular Care



Cardiovascular Clinical Nursing Symposium



Abstract oral and poster sessions



CME and MOC credits available

Key Dates

Deadline for EARLY
Registration Rates
Tuesday, Sept. 10

Deadline for ADVANCE
Registration Rates
Tuesday, Oct. 15

STANDARD Registration
Rates Apply
Wednesday, Oct. 16

Scientific Sessions 2019
Philadelphia, PA
Saturday, Nov. 16 -
Monday, Nov. 18

Register TODAY! [ScientificSessions.org](https://www.scientificsessions.org)

#AHA19