EDUCATIONAL OBJECTIVES

Learners should be able to:

Become familiar with the concept of epigenomics and its role in hypertension, cardiovascular function, responses to vascular injury and early life development.

Understand the relationships between elevated copeptin, vascular dysfunction in early pregnancy and preeclampsia.

Appreciate that a normally functioning circadian system is necessary for cardiovascular health in humans and that abnormal circadian blood pressure patterns are associated with cardiovascular disease.

Understand the role of specific circadian clock proteins and of genomic influences in driving circadian rhythms of blood pressure.

Become familiar with the mechanisms by which the circadian clock interacts with dietary salt intake and angiotensin signaling in regulating blood pressure.

Become familiar with current knowledge regarding the influence of the cardiomyocyte circadian clock on cardiac physiology and pathophysiology and how aberrant regulation of this mechanism may contribute to cardiovascular disease.

Understand the effects of nocturnal dosing of antihypertensive medications on blood pressure and related cardiovascular diseases.

Understand the potential uses of ambulatory blood pressure monitoring in diagnosing and managing hypertension in children and older adults.

Become familiar with the distinct circadian blood pressure patterns that occur in African-Americans and individuals with HIV infection.

Understand how an optimally designed national hypertension control program could greatly alleviate the burden of hypertension-related morbidity and mortality while saving health care dollars.

ACCREDITATION

To request CME credit, you must sign in each day you attend and provide requested information.

The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of Alabama School of Medicine designates this live activity for a maximum 12 of AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
26th ANNUAL VASCULAR BIOLOGY & HYPERTENSION SYMPOSIUM

THURSDAY, SEPTEMBER 24, 2015

8:00-8:30 • Breakfast

EPIGENOMICS AND NOVEL BIOMARKERS
Chair: C. Roger White, PhD

8:30-9:15 • Epigenomics of hypertension
Mingyu Liang, MB, PhD

9:15-10:00 • Epigenomics of lung development and injury
Namasivayam Ambalavanan, MD

10:00-10:15 • Break

10:15-11:00 • Elevated copeptin and vascular dysfunction in early pregnancy: novel biomarkers for human preeclampsia?
Gary L. Pierce, PhD

11:00-11:45 • Does DNA methylation mediate early-life cardiovascular programming?
Ilan Kerman, PhD, MD

11:45-12:30 • Lunch

CHRONOBIOLOGY OF THE CARDIOVASCULAR SYSTEM
Chair: Jennifer S. Pollock, PhD

12:30-1:15 • The internal circadian system and cardiovascular health in humans
Steven A. Shea, PhD

1:15-2:00 • Regulation of blood pressure by circadian clock proteins
Michelle L. Gumz, PhD

2:00-2:15 • Break

2:15-3:00 • The circadian clock, salt, and angiotensin signaling in blood pressure regulation
R. Daniel Rudic, PhD

3:00-3:45 • The cardiomyocyte circadian clock: a critical modulator of cardiac form and function
Martin E. Young, DPhil

4:00-6:00 • 16th Annual Poster Session

FRIDAY, SEPTEMBER 25, 2015

8:00-8:30 • Breakfast

CIRCADIAN BLOOD PRESSURE MEASUREMENT: MECHANISMS AND IMPLICATIONS
Chair: Gary R. Cutter, PhD

8:30-9:15 • Cheap, safe, and effective: making the business case for hypertension control in populations
Andrew E. Moran, MD

9:15-10:00 • Psychosocial factors, ambulatory blood pressure, and blood pressure phenotypes
Joseph E. Schwartz, PhD

10:00-10:15 • Break

10:15-11:00 • Daily blood pressure patterns and circadian rhythm genomics
Ryan Irvin, PhD, MS

11:00-11:45 • Nocturnal dosing of antihypertensive medications - effect on blood pressure and clinical outcomes
Mahboob Rahman, MD, MS

11:45-12:30 • Lunch and Poster Session Awards

AMBULATORY BLOOD PRESSURE MONITORING IN SPECIAL POPULATIONS
Chair: Anthony Viera, MD

12:30-1:15 • Utility of ABPM in evaluating pediatric hypertension
Elaine M. Urbina, MD, MS

1:15-2:00 • Individualizing blood pressure goals in older adults: Is there a role for ambulatory blood pressure monitoring and frailty assessment?
C. Barrett Bowling, MD, MSPH

2:00-2:15 • Break

2:15-3:00 • Stress, sodium excretion, and circadian blood pressure in African Americans
Daichi Shimbo, MD

3:00-3:45 • Mechanisms influencing circadian blood pressure patterns among individuals with HIV
Shia T. Kent, PhD

Session times include 15 min Q&A