Basic Cardiovascular Sciences
Scientific Sessions 2015:
Pathways to Cardiovascular Therapeutics

Call for Abstracts
Preliminary Program
July 13-16, 2015 | Hilton New Orleans Riverside | New Orleans, Louisiana

Sponsored by the American Heart Association’s Council on
Basic Cardiovascular Sciences

my.americanheart.org/bcvssessions
General Information

The 11th annual BCVS 2015 Conference – Pathways to Cardiovascular Therapeutics is the premier conference for molecular cardiovascular biology and disease. Sponsored by the American Heart Association Basic Cardiovascular Sciences Council, the world’s leading organization of cardiovascular scientists, the conference attracts leading researchers in fields such as microRNAs, cardiac gene and cell therapy, cardiac development and most recently tissue engineering and iPS cells.

Program Description

The fast-paced meeting includes 14 sessions during four days, including a diversity of speakers representing the best cardiovascular scientists from around the world. This year’s keynote lecture will be delivered by Dr. Eric Olson from the University of Texas Southwestern Medical Center.

The organizers continue to embrace the early career cardiovascular scientist with plans to include oral abstract presentations from such scientists throughout the program, with one session dedicated for the Young Investigator Award presentations/competition. In addition to stimulating talks, posters from submitted abstracts will be presented in three sessions. The program will include two lunch workshops targeting early career development, with one workshop focusing on different transitioning career paths for trainees and the other a speed networking event.

Organizers of this year’s conference are Drs. Asa Gustafsson (University of California San Diego), David J. Lefer (Louisiana State University) and Anthony Rosenzweig (Beth Israel Deaconess Medical Center).

Learning Objectives

At the conclusion of the conference, participants will be able to:

- Evaluate recent evidence supporting the use of cardioprotective strategies in the setting of acute myocardial infarction.
- Discuss advances in understanding the underlying mechanisms of cardiomyopathies and the development of new therapeutic approaches.
- Assess new models for the use of cardiac progenitor cells in repairing damaged cardiac tissue.
- Examine progress in the development of novel treatment strategies for heart failure.
- Identify new targets for drug discovery and opportunities to participate in the translational research required to identify new interventions and bring them into clinical trials.

Key Dates

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Jan. 5</td>
<td>Abstract and award submissions open</td>
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<tr>
<td>Feb. 25</td>
<td>Registration opens</td>
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<tr>
<td>March 16</td>
<td>Abstract submissions close</td>
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<td>March 18</td>
<td>Award submissions close</td>
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<tr>
<td>May 6</td>
<td>Deadline to become an AHA/ASA Professional Member to receive member early registration discount</td>
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<td>May 20</td>
<td>Deadline for early registration rates</td>
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<td>May 21</td>
<td>Advance registration rates apply</td>
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<td>June 3</td>
<td>Deadline to become an AHA/ASA Professional Member to receive member advance registration discount</td>
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<td>June 17</td>
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<td>June 18</td>
<td>Standard registration rates apply</td>
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<td>June 19</td>
<td>Hotel discounted rates deadline</td>
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<td>July 13–16</td>
<td>BCVS Conference</td>
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<td>Time</td>
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**Legend**
- **Oral Sessions**
- **Poster Sessions**
- **Meals/Breaks**

**Monday, July 13**
- 7:00–8:00 AM: Continental Breakfast/Registration/Exhibits

**Tuesday, July 14**
- 8:00–9:40 AM: Session 4 Regulation of Mitochondrial Function and Metabolism
- 9:40–10:00 AM: Refreshment Break/Exhibits
- 10:00–11:40 AM: Session 5 Cellular Quality Control Mechanisms
- Noon–1:30 PM: Early Career Workshop/Lunch Ticket Required

**Wednesday, July 15**
- 8:00–9:40 AM: Session 8 Cardiac Stem Cells: Renaissance of Regenerative Mechanisms
- 9:40–10:00 AM: Refreshment Break/Exhibits
- 10:00–11:40 AM: Session 9 Aging and Heart Failure
- 1:30–3:10 PM: Session 6 The Mitochondrial Calcium Microdomain in Cardiac Function and Disease
- 3:10–3:30 PM: Refreshment Break/Exhibits
- 3:30–5:10 PM: Session 7 Sources of New Myocytes in Diseased Hearts

**Thursday, July 16**
- 8:00–9:40 AM: Session 13 Exploring the Functional Importance of Non-myocytes in Heart Failure
- Noon–1:30 PM: Early Career Workshop/Lunch Ticket Required

**Legend**
- **Oral Sessions**
- **Poster Sessions**
- **Meals/Breaks**
Target Audience

The program will be of special interest to basic cardiovascular scientists, molecular/cellular biologists, physiologists, translational investigators, clinical trialists, practicing cardiologists, cardiovascular nurses and pharmacists. In addition, the symposium will be of great value to scientists and executives of pharmaceutical companies and biotechnology firms who are in the cardiovascular space.

Continuing Medical Education

Continuing Medical Education Accreditation — Physicians

The American Heart Association is accredited by the Accreditation Council for Continuing Medical Education (ASSME) to provide continuing medical education for physicians.

Continuing Medical Education Accreditation — Physician Assistants

The American Association of Physician Assistants (AAPA) accepts credit from AOACCME, Prescribed credit from the American Academy of Family Physicians AAFP, and the American Medical Association AMA PRA Category 1 Credit™ from organization accredited by ACCME.

Continuing Education Accreditation — Pharmacists

The American Heart Association is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

Registration

Registration will open on Wednesday, Feb. 25. For more information on conference registration, go to my.americanheart.org/bcvsessions. AHA/ASA council members pay significantly discounted registration fees. Visit my.americanheart.org/membership, (Promo code WFJ002ZZ) to qualify for membership savings.

Conference Venue/Hotel Reservations

Experience the best the Crescent City has to offer from the beautiful Hilton New Orleans Riverside. Located on the banks of the Mississippi, this full-service New Orleans French Quarter hotel is adjacent to the Convention Center, Riverwalk Marketplace and countless French Quarter attractions and restaurants. Enjoy the expansive health club and dine within legendary restaurants. The AHA has arranged reduced rates for conference attendees, beginning at $129 per night. The rate will be honored by the hotel July 11–16, 2015 based on availability. Rooms will be available on a first-come, first-served basis until all are filled or until June 19, 2015. After this date, reservations may be at the prevailing rate and will be subject to availability. The guest room rate doesn’t include applicable taxes. Guests booking with the AHA group will have discounted access to the hotel's fitness facilities and complimentary wireless internet in their rooms.

To take advantage of the reduced rates, call (800) HILTONS (toll free) or (504) 561-0500, or contact the Hilton at msynh-reservations@hilton.com and ask for the group rate for the American Heart Association July 2015 conference (Group Code BCV). The rates can’t be changed at check-in or check-out for guests who don’t identify their affiliation with the AHA when they make their reservations.

Hilton New Orleans Riverside
Two Poydras Street
New Orleans, Louisiana 70130
Phone: (504) 561-0500

Abstract Submission

Interested investigators are invited to submit abstracts that will be selected for oral or poster presentation. The deadline for electronic submission of abstracts is 5 pm CST Monday, March 16, 2015. A processing fee of $50 (USD) will be charged for each abstract you submit. Abstracts accepted for presentation at the conference will be published in the online issue of the AHA journal Circulation Research following the conference.

Abstract presentations are embargoed for release at the date and time of presentation or time of AHA news event. Information may not be released before the scheduled presentation time.

Become an AHA/ASA Professional Member and save on registration. (Promo code WFJ002ZZ)
my.americanheart.org/membership
Abstracts may be submitted in these categories:

- Cardiac Regeneration, Stem Cells and Tissue Engineering
- Cell Death Mechanisms, Apoptosis, Necrosis and Autophagy
- Clinical/Translational Research
- Contractility and Calcium-Handling
- Genetics and Genomics of Cardiovascular Disease
- Growth and Development
- Heart Failure Biology
- Mechanisms of Myocardial Fibrosis and Remodeling
- Mitochondria and Metabolism
- Modeling iPs and Embryonic Stem Cells
- Myocardial Ischemia and Cardioprotection
- Signal Transduction Pathways
- Systems Approach to Cardiovascular Biology
- Transcriptional and Epigenetic Regulation of Gene Expression

To submit your abstract, go to my.americanheart.org/bcvssessions.

Awards

The Council on Basic Cardiovascular Sciences proudly sponsors the following awards and invites Council members to apply. The deadline for applying for awards is at 5 PM CST Wednesday, March 18, 2015. For detailed instructions, eligibility requirements and award criteria, visit the conference website at my.americanheart.org/bcvssessions.

New Investigator Travel Award encourages and supports the efforts of early career investigators by providing travel funds to attend the BCVS conference, present research in oral or poster format and engage in discussion with senior investigators. Up to 20 competitive awards of $500 each will be presented to qualified new investigators from those who are accepted to present abstracts.

Outstanding Early Career Investigator Award recognizes up to three finalists who will be selected based on the originality, quality and the impact of the work presented in their abstract and curriculum vitae. The finalists will present a 10 minute oral review of their abstract followed by 5 minutes of questions and answers. The winner will receive $1,500 and the runners-up $1,000 each.

Cardiovascular Outreach Award encourages minority early career investigators and students to participate in the conference. Although preference will be given to investigators and trainees with a successful research abstract, a submission is not required for consideration. Up to 10 awards of $500 each will be presented to qualified applicants.

Preliminary Program

Monday, July 13

1:45–2:05 PM
Welcome Remarks

2:05–3:45 PM
Session 1: Novel Signaling Networks in the Heart
2:05 Non-GPCR Roles for GRKs in the Heart
2:25 RhoA Kinase and Cardiac Signaling
2:45 S-Nitrosylation can control Biased GPCR Signaling
3:05 Kif5 in the Heart can influence Systemic Metabolism
3:25 Mechanistic insights from genetic discoveries in dilated heart failure syndromes

3:45–4:30 PM
Session 2: Keynote Lecture
3:45 New Insights into Muscle Development, Disease and Regeneration

4:50–6:30 PM
Session 3: Exercise and Cardiovascular Disease
4:50 Cardiovascular effects of exercise: clinical insights from imaging and novel biomarkers
5:10 PI3Kinase signaling in the benefits of exercise
5:30 Non-coding RNA basis of physiological hypertrophy
5:50 NO pathways and the protective effects of exercise
6:10 Exercise activates cardiac progenitor cells

6:30–8:00 PM
Poster Session 1

Tuesday, July 14

8:00–9:40 AM
Session 4: Regulation of Mitochondrial Function and Metabolism
8:00 Insulin Signaling in the Regulation of Cardiac Hypertrophy
8:20 Pathways of Metabolic Adaptation in Heart Failure
8:40 Epigenetic Modification and Metabolism
9:00 Regulation of Mitochondrial Dynamics
9:20 Mitochondrial Derived Vesicles

10:00–11:40 AM
Session 5: Cellular Quality Control Mechanisms
10:00 Chaperone Mediated Autophagy
10:20 Alternative Autophagy
10:40 Parkin-Mediated Mitophagy
11:00 Proteotoxicity
11:20 Beige is the New Black: Regulation of Adaptive Thermogenesis In Vivo
1:30–3:10 PM

**Session 6: The Mitochondrial Calcium Microdomain in Cardiac Function and Disease**

1:30 Calcium Movement in Cardiac Mitochondria
1:50 Mitochondrial Calcium Control of Cellular Energetics
2:10 Mitochondrial signaling in Cardiac Arrhythmias
2:30 Mitochondrial Calcium Uniporter
2:50 Mitochondrial Calcium Exchange in MI and Heart Failure

3:30–5:10 PM

**Session 7: Sources of New Myocytes in Diseased Hearts**

3:30 Myocyte Derived New Myocytes
3:50 Embryonic Stem Cell derived New Myocytes
4:10 Bone Stem Cell Derived New Myocytes
4:30 Mesenchymal Stem Cell Derived New Myocytes
4:50 Induced Pluripotent Stem Cell Derived New Myocytes

5:10–6:40 PM

**Poster Session 2**

Wednesday, July 15

8:00–9:40 AM

**Session 8: Cardiac Stem Cells: Renaissance of Regenerative Mechanisms**

8:00 Regulation of Cardiomyocyte Cell Cycle
8:20 Proliferation of Cardiac Myocytes in Preadolescence and Injury
8:40 C-kit Positive Cardiac Progenitor Cells
9:00 Metabolism and Stem Cell Function
9:20 Exosomes in Cardiac Repair

10:00–11:40 AM

**Session 9: Aging and Heart Failure**

10:00 GDF11 and Age-related Heart Disease
10:20 MicroRNAs and Cardiovascular Aging
10:40 Popeye Domain Containing (Popdc) Genes and the Aging Cardiac Pacemaker
11:00 IGF1 Isoforms, Sirt1, and Cardiovascular Aging
11:20 Cardiac Progenitor Cells and Aging

1:30–2:15 PM

**Session 10: Outstanding Early Career Investigator Award Finalists**

2:15–3:55 PM

**Session 11: Heart Failure with Preserved Ejection Fraction**

2:15 HFpEF: Insights from the Clinic and Metabolomic Profiling

2:35 Multiple Etiologies and Approaches to HFpEF
2:55 Titin’s role(s) in Diastolic Dysfunction and Heart Failure
3:15 Cardiomyocyte Proteostasis and Diastolic Dysfunction
3:35 Diet-induced Diastolic Dysfunction

4:15–5:35 PM

**Session 12: Moving Novel Targets from Bench to Bedside: Academic-Industry Collaboration**

4:15 How do we evaluate novel therapeutic strategies for heart failure?
4:35 Targeting Fibrosis in Heart Disease
4:55 Beginning With the End in Mind: Clinical Strategies for Moving from Bench to Bedside
5:15 What can we learn from the recent success of the PARADIGM trial about how we should approach heart failure therapies?

5:35–7:05 PM

**Poster Session 3**

7:05 PM

**BCVS Council Dinner**

Thursday, July 16

8:00–9:40 AM

**Session 13: Exploring the Functional Importance of Non-myocytes in Heart Failure**

8:00 What makes a myofibroblast?
8:20 Fibrotic Signaling in the Heart: Small Molecule Targeting of TNNI3K
8:40 Molecular Characterization and Small Molecule Targeting of Pathways Leading to Myocardial Fibrosis
9:00 A Functional Role for Inflammatory T-cells in the Initiation and Progression of Myocardial Fibrosis
9:20 TGF-beta and Endoglin Signaling in Non-myocyte Cells of the Heart

9:40–11:20 AM

**Session 14: Epigenomics/genetics of Cardiac Development and Disease**

9:40 Chromatin Remodeling
10:00 Global Regulation of Chromatin Accessibility in Cardiac Development
10:20 Proteogenomic Dissection of Cardiac Chromatin and Disease Implications
10:40 Reversible Histone Acetylation
11:00 Bromodomain-harboring Acetylation Readers

11:20 AM

**Adjourn**
Program Committee

Asa Gustafsson, PhD, Co-Chair
Skaggs School of Pharmacy and Pharmaceutical Sciences
University of California San Diego
La Jolla, California

David Lefer, PhD, Co-Chair
Louisiana State University Health Sciences Center
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Burns C. Blaxall, PhD, FAHA
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Contact Information

If you have questions after reading this program, contact the American Heart Association National Center:
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Fax: (214) 706-5255
Email: scientificconferences@heart.org
Website: my.americanheart.org/bcvssessions

Professional Membership

Customer Service

Lippincott Williams & Wilkins
Telephone: (800) 787-8984 (toll free)
(301) 223-2307
Email: ahaonline@LWW.com
Cardiovascular diseases and stroke afflict people of all races, ethnicities, genders, religions, ages, sexual orientations, national origins and disabilities. The American Heart Association is committed to ensuring that our workforce and volunteers reflect the world’s diverse population. We know that such diversity will enrich us with the talent, energy, perspective and inspiration we need to achieve our mission: building healthier lives, free of cardiovascular diseases and stroke.

Submit your best science by Monday, March 16, 2015 and plan to join your colleagues in New Orleans!