American Heart Association | American Stroke Association

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ATVB|PVD 2016

# Arteriosclerosis, Thrombosis and Vascular Biology | Peripheral Vascular Disease

## Scientific Sessions 2016

## Final Program and Abstracts

May 5-7, 2016 | Omni Nashville Hotel | Nashville, Tennessee

In Collaboration with the Council on Functional Genomics and Translational Biology and the Society of Vascular Surgery's Vascular Research Initiatives Conference.

professional.heart.org

# Program at a Glance

| | Wednesday May 4, 2016 | Thursday May 5, 2016 | | Friday May 6, 2016 | | Saturday May 7, 2016 |
|---|---|---|---|---|---|---|
| 7:00 AM | ***Separate registration may be required for the meetings listed below.*** | **Registration, Continental Breakfast, Exhbits** | **Early Career Training Session** | **Registration, Continental Breakfast, Exhibits** | **Early Career Training Session** | |
| 7:30 AM | | **8:00–10:00**<br>**Conference Opening and Plenary Session I**<br>Functional Genomics: Moving from Association to Understanding Mechanisms of Disease | | **8:00–9:30**<br>**Plenary Session III**<br>Highlights from the *ATVB Journal* | | **Registration** |
| 8:00 AM | **8:00–6:00**<br>**Vascular Research Initiative Conference 2016** | | | | | |
| 8:30 AM | | | | | | **8:30–10:30**<br>**Poster Session and Continental Breakfast** |
| 9:00 AM | | | | | | |
| 9:30 AM | | **10:00–10:20**<br>**Refreshment Break/Exhibits** | | **9:30–9:50**<br>**Refreshment Break/Exhibits** | | |
| 10:00 AM | | | | **9:50–11:35**<br>**Concurrent Session III**<br>A – Lipoprotein Metabolism and Therapeutic Targets<br>B – Blood Coagulation and Antithrombotic Therapy<br>C – Translational Science in Venous Thromboembolic Disease (VTE) | | |
| 10:30 AM | | **10:20–12:05**<br>**Concurrent Session I**<br>A – Mechanisms of Atherosclerosis<br>B – Molecular, Developmental and Cellular Biology of the Vessel Wall<br>C – Translational Science of Vascular Medicine: Vascular Dysfunction | | | | **10:30–NOON**<br>**Plenary Session V**<br>Invited Lecture Series<br>Hoeg Award Lecture<br>Keynote Lecture<br>Distinguished Lecture |
| 11:00 AM | | | | | | |
| 11:30 AM | | | | **11:35–1:10**<br>**Luncheon Workshop: Think Fast, Talk Smart: Confident, Connected and Compelling Presentations**<br>*(ticket required)*<br>**Or lunch on your own** | | |
| NOON | **NOON–6:00**<br>**KinMet** | **12:05–1:25**<br>**The Mentor of Women Award Luncheon**<br>*(ticket required)*<br>**PVD annual Business Meeting and Networking Luncheon**<br>*(ticket required)*<br>**Lunch Lecture**<br>*(sponsored by Merck)*<br>**Or lunch on your own** | | | | **NOON**<br>**Closing Remarks/Adjourn** |
| 12:30 PM | | | | | | **HDL Structure–Function Workshop**<br>**Saturday/Sunday**<br>*Separate registration required* |
| 1:00 PM | **1:00-5:00 CAAC Symposium** | **1:25–2:55**<br>**Plenary Session II**<br>Inflammation, Thrombosis and Vascular Disease | | **1:10–3:10**<br>**Plenary Session IV**<br>Young Investigator Award Competition<br>Brinkhous Prize and Page Award | | |
| 1:30 PM | | | | | | |
| 2:00 PM | | | | | | |
| 2:30 PM | | | | | | |
| 3:00 PM | **3:00–7:00**<br>**ATVB\|PVD Registration** | **2:55–3:15**<br>**Refreshment Break/Exhibits** | | **3:10–3:30**<br>**Refreshment Break/Exhibits** | | |
| 3:30 PM | | **3:15–5:00**<br>**Concurrent Session II**<br>A – Apolipoproteins and Lipid Metabolism<br>B – Immunity and Inflammation in Vascular Biology and Thrombosis<br>C – Translational Science of Vascular Medicine: Aneurysmal Disease | | **3:30–5:15**<br>**Concurrent Session IV**<br>A – Diabetes, Obesity and Metabolic Disorders<br>B – Platelet Production, Signaling and Function<br>C – Genomics, Epigenomics and Stem Cells in Vascular Disease | | |
| 4:00 PM | | | **4:30–6:30**<br>**Next-Generation Technology Bootcamp 1** | | **4:30–6:00**<br>**Next-Generation Technology Bootcamp 2** | |
| 4:30 PM | | | | | | |
| 5:00 PM | | **5:00–6:00**<br>**NHLBI Session** | | **5:15–7:15**<br>**Poster Session and Reception** | | |
| 5:30 PM | | **6:00–8:00**<br>**Poster Session and Reception** | | | | |
| 6:00 PM | | | | | | |
| 6:30 PM | | | **6:00–7:00**<br>**Moderated PVD Poster Session** | | | |
| 7:00 PM | **7:00–10:00**<br>**CAAC Reception and Dinner** | | | **7:15–10:00**<br>**Council Dinner**<br>*(ticket required)* | | |
| 7:30 PM | | | | | | |
| 8:00 PM | | | | | | |

**Legend:**

- Plenary Session
- Concurrent Session
- Poster Session
- Presentation Skills Training
- Meals/Breaks
- Other Meetings of Interest

# Contents



## Save the Date!

### ATVB 2017 Scientific Sessions

May 4–6, 2017 I Hyatt Regency I Minneapolis, Minnesota

*Next year's conference: May 4–6, 2017 ... visit professional.heart.org for more information.*

# Questions and Information

### Questions

If you have questions after reading this program, contact the American Heart Association National Center, Dallas, Texas:

| | |
|---|---|
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| Fax | 214.373.3406 |
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- If you have additional questions, please email us at scientificconferences@heart.org or call toll-free 888.242.2453

# Letter from the Chair and Vice Chair

Dear Colleague,

On behalf of the American Heart Association, the Council on Arteriosclerosis, Thrombosis and Vascular Biology, the Council on Peripheral Vascular Disease and the Council on Functional Genomics and Translational Biology, we welcome you to the ATVB/PVD 2016 Scientific Sessions in Music City, Nashville, Tennessee. Long known as the "Songwriting Capital of the World," music weaves a fundamental pattern in Nashville's cultural, business and social fabric, and live music can be seen and heard every day and night of the week. A mild, pleasant climate and lush, green, rolling hills offer a beautiful backdrop to the incredible music, exceptional dining, fantastic shopping, exciting sporting events, historical landmarks and thriving contemporary and theatrical arts scene in this amazing city. Experience the warm hospitality of the South in beautiful Nashville.

ATVB/PVD 2016 provides unique opportunities to meet with colleagues from around the world with wide-ranging research interests and expertise within the research communities of arteriosclerosis, thrombosis and vascular biology. The primary goal of this conference is to provide a forum for the timely exchange of information about new and emerging scientific research in lipids and lipoproteins, arteriosclerosis, thrombosis, vascular biology, genomics and peripheral vascular disease.

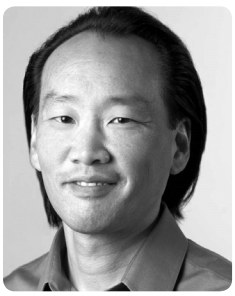
In addition to invited plenary lectures and concurrent sessions, we will have oral presentations of selected abstracts and three lively poster sessions. On Thursday, integrated translational sessions in vascular medicine developed collaboratively by the PVD and ATVB councils will address the intersection of basic and clinical sciences and provide opportunities for collaboration at the translational interface in PVD- and ATVB-related science. There are concurrent sessions and a moderated poster session centered on peripheral vascular disease themed abstracts, and a special NHLBI session on translation and product development challenges for scientists. On Friday morning, the PVD Council and the American Venous Forum have joined together to present a session on venous thromboembolic disease.

Back by popular demand, in collaboration with the Council on Functional Genomics and Translational Biology, we have two hands-on Next-Generation Technology Bootcamps. The bootcamp on Thursday will address next-generation sequencing data interpretation, and the Friday bootcamp will be on genome editing using the CRISPR/Cas9 system. Pre-registration is required to attend the bootcamps.

One of the areas of emphasis for this conference is to encourage interactions between young scientists and more senior scientists in their research area to foster dialogue and facilitate the exchange of ideas. The format of the conference, with many invited presentations as well as a dedicated focus on poster presentations, is intended to maximize a thought-provoking flow of information and discourse among scientists. The ATVB Early Career Committee has planned some exciting sessions this year, including a special Luncheon Workshop on enhancing your presentation skills. A ticket is required to attend this workshop. Be sure to check with the registration desk to see if tickets are available.

We hope you will find the ATVB/PVD 2016 Scientific Sessions an excellent educational and academic experience and a great opportunity to network with scientists from around the world who are dedicated to building healthier lives, free of cardiovascular diseases and stroke.

Sincerely,



Philip S. Tsao, PhD
Chair, ATVB/PVD 2016
Scientific Sessions

Nancy R. Webb, PhD, FAHA
Vice Chair, ATVB/PVD 2016
Scientific Sessions

***The American Heart Association is a national voluntary health agency whose mission is "Building healthier lives, free of cardiovascular diseases and stroke."***

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

***Additionally, we would like to thank the following for their generous support of ATVB/PVD 2016:***

***Merck & Co., Inc.*** ***National Heart, Lung, and Blood Institute*** ***ATVB Journal*** ***Omni Nashville Hotel***
***Arteriosclerosis, Thrombosis and Vascular Biology Council*** ***Functional Genomics and Translational Biology Council***
***Peripheral Vascular Disease Council***

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The American Heart Association is grateful to the members of the Program Committee for their dedication and leadership in planning the program.

# Program Committee

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The conference organizers gratefully acknowledge the following individuals for their assistance with the abstract grading process:

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Wei Zhou, MD

# Room Locator

| Wednesday, May 4 | |
|---|---|
| *CAAC Symposium (ticket required)* | Broadway Ballroom E |
| CAAC China Night Reception and Dinner *(ticket required)* | Cumberland 1-2 |
| CSATVB Poster Session and Reception | Cumberland 5-6 |
| KinMet 2016 | Cumberland 1-2 |
| Exhibits | Broadway Ballroom Prefunction |
| Registration | Broadway Ballroom Prefunction |
| Speaker Resource Room | Music Row Meeting Room 1 |
| Vascular Research Initiatives Conference (VRIC) 2016 *(separate registration required)* | Broadway Ballroom A-B |
| **Thursday, May 5** | |
| Communication Center | Broadway Ballroom Prefunction |
| Continental Breakfast | Broadway Ballroom Prefunction |
| Concurrent Session A | Broadway Ballroom E |
| Concurrent Session B | Broadway Ballroom A-B |
| Concurrent Session C | Broadway Ballroom C-D |
| Early Career Training | Broadway Ballroom E |
| Exhibits | Broadway Ballroom Prefunction |
| Lunch and Lecture *Sponsored by Merck* | Cumberland 5-6 |
| Mentor of Women Award Luncheon *(ticket required)* | Cumberland 1-2 |
| Moderated PVD Poster Session | Legends Ballroom Prefunction |
| Next Generation Technology Bootcamp *(ticket required)* | Cumberland 1-2 |
| Plenary Sessions | Broadway Ballroom East |
| Poster Session and Reception | Legends Ballroom |
| PVD Annual Business Meeting and Networking Luncheon *(ticket required)* | Music Row Meeting Room 5 |
| Refreshment Breaks | Broadway Ballroom Prefunction |
| Registration | Broadway Ballroom Prefunction |
| Speaker Resource Room | Music Row Meeting Room 1 |
| Special NHLBI Report | Broadway Ballroom C-D |

| Friday, May 6 | |
|---|---|
| Communication Center | Broadway Ballroom Prefunction |
| Continental Breakfast | Broadway Ballroom Prefunction |
| Concurrent Session A | Broadway Ballroom E |
| Concurrent Session B | Broadway Ballroom A-B |
| Concurrent Session C | Broadway Ballroom C-D |
| Early Career Training | Broadway Ballroom Prefunction |
| Exhibits | Broadway Ballroom Prefunction |
| Luncheon Workshop: Presentation Skills *(ticket required)* | Cumberland 1-2 |
| Next Generation Technology Bootcamp *(ticket required)* | Cumberland 1-2 |
| Plenary Sessions | Broadway Ballroom East |
| Poster Session and Reception | Legends Ballroom |
| Refreshment Breaks | Broadway Ballroom Prefunction |
| Registration | Broadway Ballroom Prefunction |
| Speaker Resource Room | Music Row Meeting Room 1 |
| Council Dinner *(ticket required)* | Broadway Ballroom East |
| **Saturday, May 7** | |
| Communication Center | Broadway Ballroom Prefunction |
| Continental Breakfast | Legends Ballroom |
| HDL Workshop 1:30–6:00 PM | Cumberland 1-2 |
| Plenary Sessions | Broadway Ballroom East |
| Poster Session | Legends Ballroom |
| Registration | Broadway Ballroom Prefunction |
| Speaker Resource Room | Music Row Meeting Room 1 |
| **Sunday, May 8** | |
| HDL Workshop 8:00 AM–12:00 PM | Cumberland 1-2 |

# General Information

This 2½-day meeting is sponsored by the Council on Arteriosclerosis, Thrombosis and Vascular Biology and the Peripheral Vascular Disease Council, in cooperation with the Council on Functional Genomics and Translational Biology and the Society for Vascular Surgery. The meeting includes diverse disciplines within the arteriosclerosis, thrombosis, vascular biology, functional genomics, peripheral vascular disease and vascular surgery research communities that allow investigators to explore areas of cross-disciplinary interests. Special lectures, discussions and oral and poster presentations are planned. The meeting provides opportunities for intense interaction among participants during sessions and breaks. We expect a broad representation from many disciplines and encourage young scientists to attend.

## Learning Objectives

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

1. Describe recent findings regarding the role and mechanism of action of triglyceride-rich lipoproteins (TGRL) in cardiovascular disease, approaches to assess TGRL proteins, the results of large genetic studies implicating TGRL in atherosclerosis, and the clinical relevance of this research.
2. Identify current controversies in the contribution of HDL-C to atherosclerosis and their clinical implications. Evaluate recent research related to HDL-C mechanisms in CVD, including HDL function assessment and implications for the prevention and treatment of atherosclerosis.
3. Review the latest research into the signaling and genetic pathways involved in vascular dysfunction and for new therapeutic options and management.
4. Describe current efforts to reverse vascular damage through medical therapy and vascular regeneration.
5. Identify novel genomic and circulating biomarkers that could be used to assess CVD risk and discuss the strengths and weaknesses of each.
6. Describe the biology of cardio-metabolic pathways and risk factors as they relate to the development and progression of cardiovascular disease and diabetes, and potential options for management.
7. Review novel mechanisms and emerging antithrombotics that reduce atherothrombosis without increasing the bleeding risk

## Exhibits

Beginning Wednesday afternoon, visit the **Exhibits**, located in the Broadway Ballroom Prefunction area. Exhibits will be open during registration hours, breaks and lunch. A **Communication Center** will also be available during Exhibit hours.

# Information for Presenters

## Speaker Resource Room

The Speaker Resource Room is located in **Music Row Meeting Room 1** on Level 2, to the right as you come up the escalator from the hotel lobby. Speakers are asked to deliver their presentations on CD-ROM, DVD-ROM or a USB storage device to the Speaker Resource Room at least three hours before the beginning of the session in which they will speak. Presenters who speak on Thursday, May 5, may check in beginning at 3 PM Wednesday, May 4, but we request that you check in before 6 PM. This will allow you time to prepare, rehearse and finalize your presentation before you submit it. ***It is imperative that you review your presentation in the Speaker Resource Room if it contains video files or was created on a Mac.*** Speakers will be directed to a preloading station where a technician will be on hand to load the presentations. Speakers may also use this room to review and practice their presentations on PCs and Mac computers. The Speaker Resource Room will be open during the following hours:

| Wednesday, May 4 | Thursday, May 5 | Friday, May 6 | Saturday, May 7 |
|---|---|---|---|
| 3:00–6:00 PM | 7:00 AM–6:00 PM | 7:00 AM–6:00 PM | 7:30–10:30 AM |

## Abstract Presentations

Abstracts presented at ATVB/PVD 2016 will be published after the conference in the online *ATVB* journal. Each conference registrant will receive a copy of the abstracts in the registration materials

Abstracts 1– 62 will be presented orally.

Abstracts 95–665 will be presented as posters as follows:

Poster Session I: Thursday, May 5, 6:00–8:00 PM (attended), abstracts 95–272.
Poster Session II: Friday, May 6, 5:15–7:15 PM (attended), abstracts 300–472.
Poster Session III: Saturday, May 7, 8:30–10:30 AM (attended), abstracts 500–665.

Abstract poster presenters are asked to comply with the set-up and tear-down schedule shown below:

| Poster Session Date | Location | Presentation Time | Attendance Time | Set-up Time | Tear-Down Time |
|---|---|---|---|---|---|
| Session I<br>Thursday, May 5 | Legends Ballroom | 6:00–8:00 PM | 6:00–8:00 PM | 11:00 AM–5:30 PM | 8:00–9:00 PM |
| Moderated<br>PVD Posters<br>Thursday, May 5 | Legends Ballroom<br>Prefunction Area | 6:00–7:00 PM | 6:00–7:00 PM | 3:30–6:30 PM | 6:30–9:00 PM |
| Session II<br>Friday, May 6 | Legends Ballroom | 5:15–7:15 PM | 5:15–7:15 PM | 11:00 AM–5:00 PM | 7:15–9:30 PM |
| Session III<br>Saturday, May 7 | Legends Ballroom | 8:30–10:30 AM | 8:30–10:30 AM | 10:00 PM Friday–<br>8:00 AM Saturday | 10:30 AM–12:30 PM |

## ePosters

In addition to the traditional poster format, abstract presenters were invited to upload their posters electronically. During the meeting, each abstract will have a QR code displayed on their poster board, which will enable attendees with smartphones to view the ePosters and, if applicable, the author's narration of the poster. ePosters are available only to attendees and may be viewed from the Communication Center, which is located in the registration area. Posters will be accessible to the general public after May 20.

# Conference Highlights – Early Career Activities and Ticketed Events

## Early Career Activities

Join us on Thursday and Friday for these Early Career sessions. The training sessions are open to all attendees, but are targeted to early career participants. *No advance registration is required, but seating is limited.*

**Thursday, May 5, 7:00–8:00 AM**
**Early Career Training Session**
**Succeeding at Every Stage: Insights from the Early Career Committee**
*Broadway Ballroom E*

This session focuses on how to achieve success in your post-doctoral fellowship, how to successfully acquire transition grants, and keys to successfully negotiating your first independent position as a scientist or physician-scientist. Each topic is led by ECC members that have been highly successful in the subject area.

**Getting Your First Grant: Insights from Study Section**
Jordan Miller, PhD, Mayo Clinic, Rochester, MN
Thomas Vallim, PhD, UCLA, Los Angeles, CA

**Building a Successful International Research Program: Perspectives from Europe**
Lars Maegdefessel, MD, PhD, Karolinska Institute, Stockholm, Sweden

**Keys to the Kingdom: Setting up and Managing your Own Lab**
Randal Westrick, PhD, University of Michigan, Ann Arbor, Michigan
Catherine Martel, PhD, Montreal Heart Institute, Montreal, Quebec, Canada

**The Importance of Mentoring and Being Mentored**
Katey Rayner, PhD, University of Ottawa Heart Institute, Ottawa, Ontario, Canada
Cynthia St. Hilaire, PhD, University of Pittsburgh, Vascular Medicine Institute, Pittsburgh, PA

**Clinical Practice and Research Lab Management: A Balancing Act**
Nick Leeper, MD, Stanford University, Palo Alto, CA
Marcel Liberman, MD, PhD, Hospital Israelita Brasileira Albert Einstein, Sao Paulo, Brazil

**Know your KangaR00: Preparing a Successful K99/R00 Application**
Gabrielle Fredman, PhD, Albany Medical College, Albany, NY

**Friday, May 6, 7:00–8:00 AM**
**Early Career Training Session**
**Speed Networking: Coffee, Careers and Communication**
*Broadway Ballroom Prefunction*

Come and network with ATVB Faculty members, both junior and senior alike. Take this opportunity to meet leaders in the field, talk about your latest research, try your elevator pitch, and get valuable career advice -- all this while sipping your morning coffee. The format will be informal and allow for interaction between many participants.

# Conference Highlights – Early Career Activities and Ticketed Events (continued)

**Thursday and Friday, May 5-6**
**Translational Science of Vascular Medicine Sessions**

On Thursday and Friday, join us for these integrated concurrent sessions that address the intersection of basic and clinical sciences, and provide opportunities for basic and clinical scientists to collaborate at the translational interface in vascular medicine. The Thursday sessions emphasize peripheral arterial disease and aneurysmal disease. On Friday morning, the PVD Council and the American Venous Forum will conduct session on Translational Science in Venous Thromboembolic Disease. These sessions include invited talks as well as oral abstract presentations.

On Thursday afternoon, there will be a session titled **Innovation to Impact: Beginning the Process** which will address translation and product development challenges for scientists. Leading the discussion will be Zorina Galis, PhD, Chief of the NHLBI Vascular Biology and Hypertension Research Branch as well as panelists from industry who will discuss bringing innovations to market. Individual consultation will be available to conference attendees on Friday morning. Reservations may be made at the AHA Membership Booth in the exhibits area.

At 6:00 PM Thursday, in the Legends Ballroom Prefunction area, there will be a moderated and innovative electronic poster session featuring PVD-related abstracts. The session is open to all conference registrants.

We're also offering two Next Generation Technology Bootcamps in Cumberland 1-2. Bootcamp 1 will be 4:30-6:30 PM Thursday and will cover next-generation sequencing data interpretation. At 4:30–6:00 PM Friday, Bootcamp 2 will be on genome editing with the CRISPR/Cas9 system. *A separate ticket is required to attend. These sessions are full; check with the ATVB|PVD registration desk to see if any tickets are available.*

## Ticketed Events

The following events are open to all attendees. A separate nonrefundable fee is required to attend these events. Tickets will be sold at the registration desk. Please check with staff at the Registration Desk for availability.

Please join us in Cumberland 1-2, located on Level 3, at 12:05 PM Thursday, May 5, for the **Mentor of Women Award Luncheon**, hosted by the ATVB Women's Leadership Committee. The featured luncheon speaker is Zorina Galis, PhD, chief of Vascular Biology and Hypertension at the National Institutes of Health/National Heart, Lung, and Blood Institute. Dr. Galis will present on **Pursuing Your Dream Biomedical Career: Sit It Out or Dance? I Hope You 'D.A.N.N.C.E.!** During the luncheon, finalists for the Junior Investigator Award for Women will be announced and the ATVB Women's Leadership Committee Mentoring Award will be presented. The luncheon is open to all attendees; however, a ticket is required. *A separate, nonrefundable $50 fee is required to attend this event.*

The **PVD Council Annual Business Meeting and Networking Luncheon** will be held in Music Row 5, located on Level 2, at 12:05 PM Thursday, May 5. Please join the PVD Council to acknowledge the 2016 recipients of the Hobson Award, the Mid-Career Investigator Award, the Young Investigator Travel Awards, recognize new FAHAs and network with colleagues. The luncheon is open to all attendees; however, a ticket is required. *A separate, nonrefundable $35 fee is required to attend this event.*

At 11:35 AM Friday, May 6, join us for a special **Luncheon Workshop: Think Fast. Talk Smart. Skills for Effective Presenting**. Presented by Matt Abrahams, a lecturer at Stanford University's Graduate School of Business, this session will show participants the necessary steps for creating clear, memorable and compelling presentations. *A separate, nonrefundable $25 fee is required to attend this event.*

Also on Friday, join your colleagues for food, drinks and entertainment at the **Council Dinner**, to be held in Broadway Ballroom East. *Tickets, if available, may be purchased at registration ($70 per person for registrants and their guests; $30 for early career/student/trainee attendees)*.

## NEW in 2016!

On Thursday, join us for a complimentary lunch* while learning the latest advances in ATVB/PVD services and technologies. **An Update on Arterial Thrombosis Pathophysiology and Management** will be presented Thursday, beginning at 12:05 PM in Cumberland 5-6. *No preregistration is required, but seating is limited.*

** Lunch provided to attendees by the American Heart Association. This event is supported by Merck and is not part of the official ATVB/PVD conference as planned by the ATVB/PVD Program Committee.*

# Conference Highlights – Lectures and Awards

On Saturday morning, May 7, plan to attend the **Invited Lecture Series** featuring the Jeffrey M. Hoeg Arteriosclerosis, Thrombosis and Vascular Biology Award for Basic Science and Clinical Research Lecture, the Distinguished Lecture and the Keynote Lecture.

At 10:30 AM, **Esther Lutgens, MD, PhD**, will present this year's **Jeffrey M. Hoeg Award Lecture**. This lecture was established in 1999 to honor Jeffrey M. Hoeg, MD, for his contribution to furthering the understanding of the pathophysiology of atherosclerosis and the development of treatment strategies for its prevention through both basic science and clinical research efforts.

Dr. Lutgens studied Medicine at the University of Maastricht in the Netherlands. At the same time, she earned a PhD in Experimental Vascular Pathology with Professor Mat Daemen. In 2001, she obtained a stipend from NWO, and did her post-doctoral fellowships at Harvard University in Boston, MA, with Professor Peter Libby, and at Dartmouth University in Hanover, NH, with Professor Michael Simons.

After her return to the Netherlands, she obtained multiple grants to set up her own laboratory on Experimental Vascular Immuno-pathology within the Cardiovascular Research Institute Maastricht. She became an Established Investigator of the Dutch Heart Foundation in 2009, and obtained a Sofja Kovalevskaja fellowship in Germany, which enabled her to open a second laboratory within the Institute for Cardiovascular Prevention (LMU, Munich) headed by Professor Christian Weber.

In 2012, she was appointed as a full professor at the Academic Medical Center in Amsterdam, the Netherlands, where she is co-heading the Experimental Vascular Biology lab together with Professor Menno de Winther.

The current focus of her research is the role of immune-modulation in atherosclerosis, and she has published numerous papers in this field in established journals such as *ATVB*, *Circulation*, *Experimental Medicine*, *Blood* and *Nature Medicine*.

In 2013, she obtained the prestigious VICI grant (NWO), and in 2016 she received an ERC (European Research Council) consolidator grant, which allows her to design, test and optimize small molecule inhibitors against co-stimulatory molecules to treat atherosclerosis.

The title of Dr. Lutgens presentation is I**mmune Checkpoint Regulators in Atherosclerosi**s.

The **Keynote Lecture** will be presented at 11:00 AM by **Göran K. Hansson, MD, PhD**. Dr. Hansson is Professor of Cardiovascular Research at Karolinska Institute and works in the Department of Medicine at Karolinska University Hospital and its Center for Molecular Medicine.

Dr. Hansson received his MD and PhD at Gothenburg University School of Medicine in Sweden, was a postdoctoral fellow at the University of Washington in Seattle, WA, and has been Professor of Cell Biology at Gothenburg University and Leducq Visiting Professor at Harvard Medical School in Boston, MA.

Since July 1, 2015, Dr. Hansson has been the Secretary General of the Royal Swedish Academy of Sciences. He also serves as Vice Chairman of the Board of Directors of the Nobel Foundation and has been a member of the Nobel Assembly at Karolinska Institute since 1997. He chaired its Nobel Committee 2004-2006 and was its secretary and Director of the Medical Nobel Institute 2009-2014. He is a member of Academia Europaea and has received several awards and honorary doctorates for his contributions to medicine.

Dr. Hansson´s research deals with immune and inflammatory mechanisms in atherosclerosis. He discovered that atherosclerosis involves a local inflammatory immune response in the artery wall, that low-density lipoprotein (LDL) can act as an autoantigen, and that immunosuppressive drugs inhibit arterial restenosis, a principle used in current therapy. He is currently working on T cell differentiation, immunoregulatory mechanisms, and atheroprotective immunity. Dr. Hansson has published 410 scientific papers (including original papers, reviews, and chapters), supervised 24 PhD students and 18 postdoctoral fellows.

Dr. Hansson will lecture on **Immunometabolic Regulation in Atherosclerosis**.

# Conference Highlights – Lectures and Awards (continued)

Photo by:
Sabina Louise Pierce

At 11:30 AM, **Garret A. FitzGerald, MD, FAHA**, will present the **Distinguished Lecture on Molecular Clocks and Cardiometabolic Disease**. Dr. FitzGerald is the McNeil Professor in Translational Medicine and Therapeutics at the University of Pennsylvania in Philadelphia, where he chairs the Department of Pharmacology and directs the Institute for Translational Medicine and Therapeutics.

Dr. FitzGerald's research has been characterized by an integrative approach to elucidating the mechanisms of drug action, drawing on work in cells, model organisms and humans. His work contributed substantially to the development of low-dose aspirin for cardioprotection. FitzGerald's group was the first to predict and then mechanistically explain the cardiovascular hazard from NSAIDs. He has also discovered many products of lipid peroxidation and established their utility as indices of oxidant stress in vivo. His laboratory was the first to discover a molecular clock in the cardiovascular system and has studied the importance of peripheral clocks in the regulation of cardiovascular and metabolic function. Dr. FitzGerald has received the Boyle, Coakley, Harvey and St. Patrick's Day medals, the Lucian, Scheele and Hunter Awards and the Cameron, Taylor, Herz, Lefoulon-Delalande, and Schottstein Prizes. He is a member of the Institute of Medicine and a Fellow of the American Academy of the Arts and Sciences and of the Royal Society.

**Muredach P. Reilly, MBBCh, MSCE, FAHA**, is the 2016 recipient of the **Mentor of Women Award**, which will be presented at the Mentor of Women Luncheon on Thursday, May 5. This award is presented annually to a member of the ATVB Council who has shown exceptional support of the careers of women in the fields of arteriosclerosis, thrombosis and vascular biology on an individual and global basis through mentoring and advocacy. This award is sponsored by the ATVB Women's Leadership Committee.

Dr. Reilly is a cardiologist and Professor of Medicine at Columbia University, and Director-designate, Irving Institute for Clinical and Translational Research, home of Columbia University's NIH CTSA Award. He has expertise in clinical cardiovascular medicine, human genetics and functional genomics, epidemiology and mechanistic translational research. His group is dedicated to translational and genomic studies and focuses on novel mechanisms of human atherosclerosis, the role on innate immunity in promoting cardio-metabolic disease, the functions of adipose tissue inflammation in insulin resistance and atherosclerotic risk, and genomic and transcriptomic discovery in human cardio-metabolic disorders. Dr. Reilly is committed to mentoring students, post-doctoral scientists and clinical residents and fellows and has done so for over 10 years. Of his 49 past or current trainees, the majority are women and over 90% remain in academic medicine. Dr. Reilly has received funding from the National Institute of Health and the American Heart Association as well as from Industry collaborations. He has served on numerous committees for the AHA and the ATVB Council including the ATVB Leadership Committee, the ATVB Early Career Committee and Chair of ATVB Conference Program Committee. He serves on the editorial board of the *ATVB* journal and has received a special recognition award in atherosclerosis from the ATVB Council of the AHA.

The **2016 *ATVB* Journal Young Investigator Awards** will be presented during Plenary Session III at 8:00-9:30 AM Friday, May 6. These investigators will also present their award-winning research during the Poster Session on Thursday evening

**Daniel Steinberg Early Career Investigator Award in Atherosclerosis/Lipoproteins**
Jenny C. Link, PhD, University of California-Los Angeles, Los Angeles, California, for her paper:

*Increased HDL Cholesterol Levels in Mice with XX Versus XY Sex Chromosomes*

**Karl Link Early Career Investigator Award in Thrombosis**
Lars Maegdefessel, MD, PhD, Karolinska Institute, Stockholm, Sweden, for his paper:

*Local microRNA Modulation Using a Novel anti-miR-21-eluting Stent Effectively Prevents Experimental In-stent Restenosis*

**Werner Risau Early Career Investigator Award in Vascular Biology**
Thomas Hoefer, PhD, Baker IDI Heart and Diabetes Institute, Melbourne, Australia, for his paper:

*Drug-free Platelets can Act as Seeds for Aggregate Formation During Antiplatelet Therapy*

# Conference Highlights – Lectures and Awards (continued)

At 1:10 OM Friday, finalists for the **Kenneth M. Brinkhous Young Investigator Prize in Thrombosis** and the **Irvine H. Page Young Investigator Research Award** will present their abstracts. The Brinkhous Prize recognizes outstanding endeavors by new investigators in fundamental and applied research in thrombosis. The Page Award encourages investigators to continue careers in arteriosclerosis and vascular biology and recognizes talented investigators at an early or beginning point in their careers. The winners of these competitions will be announced during the Council Dinner

### ATVB Kenneth M. Brinkhous Young Investigator Prize in Thrombosis Finalists

| Name | Presentation Number |
|---|---|
| Sudipta Biswas, PhD | 40 |
| Kyungho Kim, PhD | 41 |
| Colin A. Kretz, PhD | 42 |
| Jeremy P. Wood, PhD | 43 |

### ATVB Irvine H. Page Young Investigator Research Award Finalists

| Name | Presentation Number |
|---|---|
| Gabrielle Fredman, PhD | 44 |
| Claudia Goettsch, PhD | 45 |
| Rebecca A. Haeusler, PhD | 46 |
| Eric P. van der Veer, PhD | 47 |

The **Junior Investigator Award for Women** is sponsored by the ATVB Women's Leadership Committee and helps recruit and retain women in the field of arteriosclerosis, thrombosis and vascular biology by recognizing excellent research being conducted by women. The finalists will present their abstracts during the Thursday poster session, and the winner will be announced during the Council Dinner.

### ATVB Junior Investigator Award Winner for Women Finalists

| Name | Presentation Number |
|---|---|
| Amy C. Burke, BMSc | 95 |
| Rebecca C. Schugar, PhD | 96 |
| Htet W. Khine, MD | 97 |
| Anastasia Sacharidou, PhD | 98 |
| Aditi Upadhye, BS | 99 |

# Conference Highlights – Lectures and Awards (continued)

The **ATVB Travel Awards for Young Investigators** encourage and support the efforts of early career investigators in cardiovascular research and encourage participation in ATVB and AHA activities by providing travel funds to attend the ATVB/PVD Scientific Sessions, present research in oral or poster format and engage in discussion with senior investigators.

### ATVB Travel Awards for Young Investigators Winners

| Name | Presentation Number |
|---|---|
| Yasir Alsiraj, MS | 100 |
| Tessa J. Barrett, PhD | 49 |
| Prameladevi Chinnasamy, MS | 637 |
| Matthew DeBerge, PhD | 581 |
| Brittany G. Durgin, MS | 640 |
| Steven J. Forrester, MS | 9 |
| Makenzie L. Fulmer, BS | 643 |
| Detao Gao, PhD | 389 |
| Scott M. Gordon, PhD | 15 |
| Anthony D. Gromovsky, BS | 227 |
| Duy Ha, BS | 116 |
| Abigail L. Healy, BS | 650 |
| Robert N. Helsley, BSc | 612 |
| Geerte Hoeke, MSc | 425 |
| Linzhang Huang, PhD | 624 |
| Alastair G. Kerr, DPhil Candidate | 228 |
| Nobuhiro Kikuchi, MD | 62 |
| Zeyneb Kurt, PhD | 374 |
| John T. Melchior, PhD | 27 |
| Kim Ramil C. Montaniel, BA | 7 |
| Alexandra A. Newman, MS | 254 |
| Kaitlyn Rinehold, MSc | 594 |
| Toshihiro Sakurai, PhD | 430 |
| Hisashi Sawada, MD | 307 |
| Xiao Yu Tian, PhD | 22 |
| Shuhui Wang, MD, PhD | 549 |
| Yuqi Zhao, PhD | 58 |
| Liye Zhou, MS | 202 |

The American Heart Association Council on Peripheral Vascular Disease is pleased to announce the winner of the following council-sponsored awards. On Friday, these awardees will be recognized during the PVD Council Luncheon, and presented with the awards during the Council Dinner

**Robert W. Hobson II, MD, Early Career Investigator Award**. This award recognizes an outstanding early career investigator in the field of vascular and endovascular medicine, vascular surgery or vascular biology. Dr. Hobson is a founding member of the PVD Council and an established, well-respected clinician-investigator in vascular diseases.

### PVD Robert W. Hobson II, MD, Early Career Investigator Award Winner

| Name | Presentation Number |
|---|---|
| Alicia N. Lyle, PhD | 11 |

**PVD Mid-Career Investigator Award** recognizes investigators who are at the mid-level of their careers and are actively involved in research related to peripheral vascular disease.

### PVD Mid-Career Investigator Award Winner

| Name | Presentation Number |
|---|---|
| Zhenheng Guo, PhD | 316 |

# Conference Highlights – Lectures and Awards (continued)

By providing travel support to early career investigators who wish to attend the Annual ATVB/PVD Scientific Sessions, the **PVD Travel Award for Young Investigators** honors outstanding new researchers, facilitates active participation in the annual meeting and highlights the benefits of ongoing membership in the AHA at the early career level.

### PVD Travel Award for Young Investigators Winners

| Name | Presentation Number |
|---|---|
| Mohammad M. Ansari, MD | 311 |
| Daniel L. Hess, BS | 510 |
| Victoria N. Osinski, BS | 182 |
| Olivia R. Palmer, MS | 131 |
| Habibunnabi Ashiqur Rahman, PhD | 257 |
| Zheng Xu, BS | 54 |
| Mohamed A. Zayed, PhD | 327 |

The American Heart Association Council on Functional Genomics and Translational Biology is pleased to announce the recipient of the FGTB Travel Award for Young Investigators. This award supports the efforts of early career investigators in cardiovascular research and encourages participation in FGTB Council and AHA activities by providing travel funds to attend the ATVB/PVD Scientific Sessions, present research in oral or poster format and engage in discussion with senior investigators.The following awardee will be recognized during the Joint Council Dinner on Friday.

### FGTB Travel Award for Young Investigators Winner

| Name | Presentation Number |
|---|---|
| Sylvia T. Nurnberg, PhD | 574 |

# Web Resources

***HealthJobsPLUS for Professionals***
The American Heart Association, in partnership with Lippincott Williams & Wilkins (a Wolters Kluwer business), is proud to offer *HealthJobsPlus.com*. *HealthJobsPlus.com* provides a first-rate source for those seeking and posting jobs by connecting qualified healthcare professionals with top-notch employers.

***Professional.heart.org***
Professional Heart Daily is the American Heart Association/American Stroke Association's powerful Internet resource for healthcare professionals devoted to the fight against cardiovascular disease and stroke. Depending on the level of membership selected, AHA/ASA Professional Members may have free access to all 11 AHA scientific journals, biweekly clinical updates, core clinical textbooks, a continually updated drug database and much more. Also available from this site are links to the ATVB|PVD 2016 Scientific Sessions website, Science News, and the AHA's Professional Online Network..

***learn.heart.org***
This website is where healthcare professionals can complete the conference evaluation and claim CME/CE credits after the meeting. Also available on learn.heart.org are podcasts, online courses, satellite broadcasts and webcasts.

***Twitter***
Use Twitter to tweet your questions/comments during the meeting or just talk about what is happening at ATVB/PVD 2016. Use hashtag: - #atvbpvd16.

# Venue and Transportation

Welcome to Music City, Nashville, Tennessee. Long known as the "Songwriting Capital of the World," music weaves a fundamental pattern in Nashville's cultural, business and social fabric, and live music can be seen and heard every day and night of the week. A mild, pleasant climate and lush, green, rolling hills offer a beautiful backdrop to the incredible music, exceptional dining, fantastic shopping, exciting sporting events, historical landmarks, and thriving contemporary and theatrical arts scene in this amazing city. Experience the warm hospitality of the South in beautiful Nashville.



## Ground Transportation

A variety of transportation services are available at the Nashville International Airport (BNA). Downtown Nashville is approximately 10 miles or 15 minutes from the Nashville Airport.

## Taxi Service

Taxi service is available curbside outside of baggage claim. The flat rate to the downtown area is $25, plus an additional passenger charge of $1 when accompanying original passenger and proceeding to same destination.

## Public Transportation

For just $1.70, you can ride the Nashville MTA bus route 18 Airport/Elm Hill Pike between the Nashville International Airport and Downtown Music City. Travel time takes about 20 minutes on the express route and 30-45 minutes on the local route. Visit nashvillemta.org or call 615-862-5950 for more information on schedules and pickup locations.

## Parking

The Music City Center is home to the largest parking operation in downtown Nashville with reasonable rates and 24-hour roving security.

Omni Nashville Hotel parking is available daily as follows:

- Self-park at Music City Center Garage (only available for Omni Nashville Hotel Guests with voucher obtained from Front Desk)
- $34 Overnight Rate: Valet with in and out privileges at Omni Nashville Hotel

## Ground Transportation in Nashville

- Cabs: available in downtown Nashville.
- App-based ride-sharing services Lyft and Uber operate in Nashville.
- Music City Circuit: a free circulator bus operating Monday-Saturday with three routes in downtown Nashville.
- Joyride Nashville: golf cart rides from point to point in downtown Nashville.
- Nashville B-Cycle: walk/bike – for the more athletic, downtown Nashville is an easy walk and there are also bicycles for rent.

## Other Transportation Around Downtown Nashville

- Downtown Circulator: Nashville's new clean diesel hybrid Downtown Circulator offers travelers a free and convenient way to get around downtown and The Gulch. The Green Circuit takes you between The Gulch and Riverfront Station. The Blue Circuit runs south to north serving key destinations between the Schermerhorn Symphony Center and Bicentennial Mall. The Purple Circuit runs primarily south of Broadway along Hermitage and Second Avenues and serves key destinations between Riverfront Station and the Richard H. Fulton Complex. It's a great new way for locals and visitors alike to move around the downtown area with ease. Visit the Downtown Circulator website (nashvillemta.org) for circuit maps and schedule.
- Trolley Tour: Enjoy a hop-on hop-off sightseeing trolley tour around downtown Nashville. This tour is great for first-timers to Nashville, for those who have a limited amount of time and want to get acquainted with this fantastic city, or as transportation between locations for a full day of sightseeing. You will get the chance to hop off and explore points of interest such as: Historic Downtown Nashville, the Ryman Auditorium, the State Capitol, TPAC, the State Museum, Bicentennial Park, the Parthenon, the West End, Hillsboro Village, Music Row, The Gulch, the Frist Museum, and the Country Music Hall of Fame and Museum. Approximately $22 per adult. Visit graylinetn.com or call (800) 251-1864

# Policy Information



## Disclaimer

The Arteriosclerosis, Thrombosis and Vascular Biology/Peripheral Vascular Disease 2016 Scientific Sessions is a scientific and educational conference for exchanging and discussing research results and scientific developments in the field of cerebrovascular disease. Accordingly, the American Heart Association cannot and does not offer any assurance or warranty of the accuracy, truthfulness or originality of the information presented at the conference.

## Embargo Guidelines

Abstracts, lectures and presentations in ATVB/PVD 2016 are embargoed for release at the time of presentation. Information may not be released before the scheduled presentation time.

## Photography/Recording Policy

No person may record any portion of the AHA Scientific Sessions, scientific conferences and the AHA/ASA International Stroke Conference, whether by video; still or digital photography; audio; or any other recording or reproduction mechanism. This includes recording of presentations and supporting A/V materials and of poster presentations and supporting poster materials.

Additionally, science information shared by investigators during a meeting is confidential and often unpublished data. Taking photos of or recording the content of meeting room slides is also prohibited and is considered intellectual piracy and unethical. Attendees who ignore this policy will be asked to leave the educational session and are at risk of losing their badge credentials.

The AHA will take photographs and video during its conferences and may display, reproduce and/or distribute them in AHA educational, news or promotional material, whether in print, electronic or other media, including the AHA website. Your registration for an AHA conference is your grant to the AHA the right to use your name, image and biography for such purposes as well as any other purpose. All photographs and/or videos become the property of AHA.

## No Smoking Policy

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

## Seating/Badge Requirement

Seating is on a first-come, first-served 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 symposium. 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.

## Americans with Disabilities Act (ADA)

We encourage participation by all individuals. If you have a disability, advance notification of any special needs will help us to serve you better. Please indicate what your needs are at the time of registration. We cannot ensure the availability of appropriate accommodations without prior notification.

*Please Note: The American Heart Association shall not be liable for cancellation of the ATVB/PVD 2016 Scientific Sessions caused by labor strikes, civil disorders, fires, weather conditions, or other acts of God for any damages or losses resulting from such cancellations.*

# Other Meetings of Interest

*The following conferences/symposia are not part of the educational activities of ATVB/PVD 2016.*

**Vascular Research Initiatives Conference**
**May 4, 2016, Omni Nashville Hotel**
*A separate registration fee is required to attend.*

The 30th annual Vascular Research Initiatives Conference (VRIC), presented by Society for Vascular Surgery® (SVS), is a one-day session preceding the main ATVB/PVD meeting, uniquely designed to foster interaction among top scientists of diverse disciplines who are investigating peripheral vascular disease and its treatments. The conference also is dedicated to stimulating and encouraging interest in research among trainees who are aspiring academic vascular surgeons.

**Vanderbilt Cardiovascular Symposium 2016 State of the Art: Cardiac and Peripheral Vascular Disease Research**
**May 4, 2016, 208 Light Hall, Vanderbilt University**
This symposium, sponsored by Vanderbilt University School of Medicine, includes experts in the field of Cardiac and Peripheral Vascular Disease. The symposium begins at 11:00 AM on Wednesday, May 4 (registration opens at 10:30 AM). There is no cost to attend.

**Chinese American Academy of Cardiology Symposium**
**May 4, 2016, Omni Nashville Hotel**
*A separate registration fee is required to attend.*

This event is hosted by the Chinese American Academy of Cardiology and the Major Program on Vascular biology by National Science Foundation of China. Join us to promote cardiovascular research excellence and collaboration. There is no cost to attend the symposium; however, a separate registration and fee is required to attend the reception and dinner.

**Kinetics-Metabolism 2016**
**May 4, 2016, Omni Nashville Hotel**
Scientists interested in lipoprotein and cellular metabolism and kinetic modeling are invited to attend KinMet 2016. This informal meeting will provide a forum for all researchers, including postgraduate students, to present some preliminary data, a complete research study, or to discuss issues related to experimental design and analysis. There is no additional cost to attend this meeting, and all registrants are invited to attend.

**Workshop on HDL Structure-Function**
**May 7-8, Omni Nashville Hotel**
This workshop is an intimate and informal gathering of experts in HDL research. Its focus includes controversial and emerging topics in HDL structure and function, bringing experienced and young scientists together in an open forum. The objective of the meeting is to encourage lively debate and dialogue. There is no cost to attend, but registration is limited.

## Start planning now for ATVB/PVD 2017 Scientific Sessions in Minneapolis, Minnesota, May 4-6!

**Submit Abstracts**
Submission Opens Wednesday, Oct. 19, 2016
Submission Closes Wednesday, Jan. 18, 2017

Presenting your science at ATVB/PVD 2017 offers you many benefits, including:

- **Networking with Leaders**: Attend ATVB/PVD and discuss your findings with research scientists and physicians within the arteriosclerosis, thrombosis, vascular biology, functional genomics, peripheral vascular disease, and vascular surgery research communities.
- **Connecting with your peers.** *"The ATVB/PVD meeting highlights the latest science related to atherosclerosis, thrombosis, vascular biology and vascular medicine and at the same time provides an unprecedented opportunity to network with senior and emerging basic, translational, and clinical investigators in cardiovascular science."* — Phil Tsao, PhD, Conference Vice-Chair
- **Accepted abstracts are published** in *Arteriosclerosis, Thrombosis, and Vascular Biology* (*ATVB*), an American Heart Association journal. ***ATVB*** is top-ranked for total cities, 5-Year Impact Factor, Article Influence® Score, and Eigenfactor® Score among all journals in the Peripheral Vascular Disease and Hematology Categories, according to the 2015 Journal Citation Reports® Science Edition (Thomson Reuters, 2015): 6.008 Impact Factor, 0.05899 Eigenfactor® Score

# Program Agenda

## THURSDAY, MAY 5

**7:00 AM**
*Broadway Ballroom Prefunction*
**Registration, Continental Breakfast and Exhibits**
*Breakfast provided by the Omni Nashville Hotel*

**7:00–8:00 AM**
*Broadway Ballroom E*
**Early Career Training**
**Succeeding at Every Stage: Insights from the Early Career Committee**
*Organized in cooperation with the ATVB Early Career Committee*

**Getting Your First Grant: Insights from Study Section**
Jordan Miller, PhD, Mayo Clinic, Rochester, MN
Thomas Vallim, PhD, UCLA, Los Angeles, CA

**Building a Successful International Research Program: Perspectives from Europe**
Lars Maegdefessel, MD, PhD, Karolinska Institute, Stockholm, Sweden

**Keys to the Kingdom: Setting up and Managing your Own Lab**
Randal Westrick, PhD, University of Michigan, Ann Arbor, MI
Catherine Martel, PhD, Montreal Heart Institute, Montreal, Quebec

**The Importance of Mentoring and Being Mentored**
Katey Rayner, PhD, University of Ottawa Heart Institute, Ottawa, ON
Cynthia St. Hilaire, PhD, University of Pittsburgh, Vascular Medicine Institute, Pittsburgh, PA

**Clinical Practice and Research Lab Management: A Balancing Act**
Nick Leeper, MD, Stanford University, Palo Alto, CA
Marcel Liberman, MD PhD, Hospital Israelita Brasileira Albert Einstein, Brazil

**Know your KangaR00: Preparing a SuccessfulK99/R00 Application**
Gabrielle Fredman, PhD, Albany Medical College, Center for Cardiovascular Sciences, Albany NY

**8:00–8:30 AM**
*Broadway Ballroom East*
**Conference Opening Welcome**
Mark Creager, MD, FAHA, Dartmouth-Hitchcock Medical Center, Lebanon, NH, and President, American Heart Association
Philip S. Tsao, PhD, Stanford University School of Medicine and VA Palo Alto Health Care System, Stanford, CA
Joshua A. Beckman, MD, MS, FACC, FAHA, Vanderbilt University Medical Center, Nashville, TN

**8:30-10:00 AM**
*Broadway Ballroom East*
**Plenary Session I**
**Functional Genomics: Moving From Association to Understanding**
*Organized in cooperation with the Council on Functional Genomics and Translational Biology*

**Moderators:**
Jennifer Hall, PhD, FAHA, University of Minnesota, Minneapolis, MN
Muredach P. Reilly, MBBCh, MSCE, FAHA, Columbia University, New York, NY

8:30 **Ten Years and Hundreds of Novel Cardiovascular Loci: What Now?**
Erik Ingelsson, MD, PhD, FAHA, Uppsala University, Stockholm, Sweden

9:00 **TBD**
Howard J. Jacob, PhD, HudsonAlpha Institute for Biotechnology, Huntsville, AL

9:30 **From Locus Association to Mechanism of Gene Causality**
Thomas Quetermous, MD, Stanford University, Stanford, CA

**10:00–10:20 AM**
*Broadway Ballroom Prefunction*
**Refreshment Break and Exhibits**

**10:20 AM–12:05 PM**
*Broadway Ballroom E*
**Concurrent Session I A**
**Mechanisms of Atherosclerosis**

**Moderators:**
Aldons J. Lusis, PhD, University of California Los Angeles, Los Angeles, CA
Jonathan D. Smith, PhD, FAHA, Cleveland Clinic, Cleveland, OH

10:20 **Genes Regulating Macrophage Growth and Survival in Atherosclerotic Lesions**
Aldons J. Lusis, PhD, University of California Los Angeles, Los Angeles, CA

### Oral Abstract Presentations

10:50 **Atherosclerosis Regression is Dependent Upon Newly Recruited Ly6c$^{high}$ Circulating Monocytes and their STAT6-Mediated M2 Polarization** 1
**Karishma Rahman**, NYU Sch of Med, New York, NY; Yuliya Vengrenyuk, Mount Sinai Sch of Med, New York, NY; Natasha Girgis, Janssen Res & Development, Pharmaceutical Companies of Johnson & Johnson, Spring House, PA; Noemi Rotllan Vila, Yale Sch of Med, New Haven, CT; Jianhua Liu, Mount Sinai Sch of Med, New York, NY; Kathryn J Moore, P'ng Loke, Edward A. Fisher, NYU Sch of Med, New York, NY

11:05 **Loss of *Rictor* in Macrophages Suppresses Their Viability and Reduces Atherosclerosis in LDLR Null Mice** 2
**Vladimir R. Babaev**, Lei Ding, Youmin Zhang, James M. May, MacRae F. Linton, Vanderbilt Univ, Nashville, TN

11:20 **Targeting Macrophage Necroptosis for Therapeutic and Diagnostic Interventions to Treat Atherosclerosis** 3
**Denuja Karunakaran**, Michele Geoffrion, Lihui Wei, Wei Gan, Univ of Ottawa Heart Inst, Ottawa, ON, Canada; Ljubica Perisic, Lars Maegdefessel, Ulf Hedin, Karolinska Inst, Stockholm, Sweden; Subash Sad, Univ of Ottawa, Ottawa, ON, Canada; Terrence Ruddy, Univ of Ottawa Heart Inst, Ottawa, ON, Canada; Liang Guo, Frank Kolodgie, Renu Virmani, CVPath Inst, Gaithersburg, MD; Katey J. Rayner, Univ of Ottawa Heart Inst, Ottawa, ON, Canada

11:35 **Enhancing the Ability of Macrophages to Orchestrate Selective Autophagy and Lysosomal Biogenesis Protects Against Atherosclerosis** 4
**Ismail Sergin**, Somashubhra Bhattacharya, Xiangyu Zhang, Trent D Evans, Babak Dehestani, Roy Emanuel, Babak Razani, Washington Univ in St. Louis, St. Louis, MO

11:50 **Lipid Droplet Associated Hydrolase: a New Player in Cholesterol Mobilization from Foam Cells** 5
**Younghwa Goo**, Albany Medical Coll, Albany, NY; Pradip Saha, Larry Chan, Baylor Coll of Med, Houston, TX; Antoni Paul, Albany Medical Coll, Albany, NY

**10:20 AM–12:05 PM**
*Broadway Ballroom A-B*
**Concurrent Session I B**
**Molecular, Developmental and Cellular Biology of the Vessel Wall**

**Moderators:**
Jason Fish, PhD, University of Toronto, Toronto, ON, Canada
J. Geoffrey Pickering, MD, PhD, FRCPC, FAHA, Robarts Research Institute, London, ON, Canada

10:20 **Regulation of Vascular Inflammation by microRNAs**
Jason Fish, PhD, University of Toronto, Toronto, Ontario, Canada

### Oral Abstract Presentations

10:50 **The RNA-Binding Protein ADAR2 Controls Interleukin-6-induced Endothelial Cell Pro-inflammatory Response By Regulating MicroRNA Biogenesis** 6
Aikaterini Gatsiou, Federica F Lunella, Carolin Amrhein, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Stefan Guenther, Claudia Garcia Gonzalez, Andre Schneider, Thomas Braun, Max-Planck Inst, Bad Nauheim, Germany; Andreas M. Zeiher, Stefanie Dimmeler, **Konstantinos Stellos**, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany

11:05 **AntagomiR-762 Prevents and Reverses Angiotensin II Induced Aortic Stiffening** 7
**Kim Ramil C. Montaniel**, Jing Wu, Vanderbilt Unversity, Nashville, TN; Matthew R. Bersi, Yale Univ, New Haven, CT; Liang Xiao, Hana A. Itani, Kasey C. Vickers, Vanderbilt Unversity, Nashville, TN; Jay D. Humhrey, Yale Univ, New Haven, CT; David G. Harrison, Vanderbilt Unversity, Nashville, TN

11:20 **The Membrane-associated Guanylate Kinase Ww and Pdz Domain-containing Protein 1 magi1 is Required for Disturbed Flow-induced Endothelial Inflammation and Atherosclerotic Plaque Formation** 8
Ikjae Shin, Jong Hak Won, Kyung Ae Ko, Ji-Hyun Shin, Elena McBeath, Tamlyn Thomas, Carolyn Giancursio, Quintana-Quezada RA, Jack Taunton, Hiroshi Hosokawa, Naoki Mochizuki, Edward T.H. YEH, Jun-ichi Abe, Keigi Fujiwara, **Nhat Tu Le**, MD Anderson Cancer Center, Houston, TX

11:35 **Involvement of Caveolin-1 in Vascular Remodeling and Inflammation Induced by Angiotensin II** 9
**Steven J Forrester**, Tatsuo Kawai, Katherine J. Elliott, Takashi Obama, Takehiko Takayanagi, Kevin Crawford, Satoru Eguchi, Victor Rizzo, Temple Univ, Philadelphia, PA

11:50 **The Matrix Crosslinking Enzyme Lysyl Oxidase Like-2 as a Target to Reverse Vascular Stiffness** 10
**Jochen Steppan**, Ivy Wang, Yehudit Bergman, Siqi Tan, Sandeep Jandu, Sean Melucci, Dan E. Berkowitz, Lakshmi Santhanam, Johns Hopkins Univ, Baltimore, MD

**10:20 AM–12:05 PM**
*Broadway Ballroom C-D*
**Concurrent Session I C**
**Translational Science of Vascular Medicine: Vascular Dysfunction**
*Organized in cooperation with the Council on Peripheral Vascular Disease*

**Moderators:**
Iris Z. Jaffe, MD, PhD, Tufts University School of Medicine, Boston, MA
Joshua A. Beckman, MD, MS, FAHA, FACC, Vanderbilt University Medical Center, Nashville, TN

10:20 **A Key Driver Gene for Hypertension Drives Vascular Inflammation and Dysfunction: Role of LNK/SH2B3 in Mice and Men**
Meenakshi S. Madhur, Vanderbilt University School of Medicine, Nashville, TN

10:50 **Vascular Dysfunction and Rising Blood Pressure with Aging: An Epigenetic Mechanism with Translational Implications**
Iris Z. Jaffe, MD, PhD, Tufts University School of Medicine, Boston, MA

**Oral Abstract Presentations**

11:20 **The Role of Human Osteopontin Isoforms in Post-Ischemic Neovascularization** 11
**Alicia N. Lyle**, Courtney M Caroti, Grace Sang Hee Lee, Giji Joseph, Saghar Harirforoosh, Joseph Vereen, Daiana Weiss, W. Robert Taylor, Emory Univ, Atlanta, GA

11:35 **Nanotechnology-enabled Anti-mir-320 Therapy For Inhibiting Pathological Vasoconstriction** 12
**Thomas A. Werfel**, Kyle M. Hocking, Kameron V. Kilchrist, Colleen Brophy, Craig L. Duvall, Vanderbilt Univ, Nashville, TN

11:50 **Targeting the PERK Pathway of ER Stress Response for Endothelium Protection and Restenosis Prevention: *A Paradigm for Developing Anti-thrombogenic Stents*** 13
**Bowen Wang**, Mengxue Zhang, Xudong Shi, Lian-Wang Guo, Michael Hoffmann, Craig Kent, Univ of Wisconsin Madison, Madison, WI

**12:05–1:25 PM**
*Cumberland 1-2 (Level 3)*
**The Mentor of Women Award Luncheon (ticket required)**

**Pursuing Your Dream Biomedical Career: Sit It Out or Dance? I Hope You 'D.A.N.N.C.E.!'**
Zorina Galis, PhD, NIH/NHLBI, Bethesda, Maryland

**12:05–1:25 PM**
*Music Row 5 (Level 2)*
**PVD Annual Business Meeting and Networking Luncheon (ticket required)**

**12:05-1:25 pm**
*Cumberland 5-6 (Level 3)*
**An Update on Arterial Thrombosis Pathophysiology and Management**
*Supported by Merck; Lunch provided by AHA*
*This event is not part of the official ATVB/PVD conference*

**Or lunch on your own**

**1:25–2:55 PM**
*Broadway Ballroom East*
**Plenary Session II**
**Inflammation, Thrombosis and Vascular Disease**

**Moderators:**
Lars Maegdefessel, MD, PhD, Karolinska Institute, Stockholm, Sweden
David G. Harrison, MD, FAHA, Vanderbilt University School of Medicine, Nashville, TN

1:25 **Oxidized Phospholipids: New Insights Into Their Roles in Atherosclerosis and Lp(a)**
Joseph L. Witztum, MD, FAHA, University of California, San Diego, La Jolla, CA

1:55 **NETs Fueling Cardiovascular and Thrombotic Disease**
Denisa D. Wagner, PhD, FAHA, Boston Children's Hospital, Harvard Medical School, Boston, MA

2:25 **Patient-specific Blood Phenotypes in a Hemodynamic Context**
Scott Diamond, PhD, University of Pennsylvania, Philadelphia, PA

**2:55–3:15 PM**
*Broadway Ballroom Prefunction*
**Refreshment Break and Exhibits**

**3:15–5:00 PM**
*Broadway Ballroom E*
**Concurrent Session II A**
**Apolipoproteins and Lipid Metabolism**

**Moderators:**
Gordon A. Francis, MD, FRCPC, University of British Columbia and St. Paul's Hospital, Vancouver, BC, Canada
Daisy Sahoo, PhD, Medical College of Wisconsin, Milwaukee, WI

3:15 **Quantitation and Mechanisms of Smooth Muscle Foam Cell Formation in Human and Mouse Atherosclerosis**
Gordon A. Francis, MD, FRCPC, University of British Columbia and St. Paul's Hospital, Vancouver, BC, Canada

**Oral Abstract Presentations**

3:45 **The Anti-atherosclerosis ABCA1 Agonist CS6253 Confer Glucose Control by Improved Pancreas Beta-cell Insulin Secretion and Enhanced Peripheral Insulin Utility** 14
John K. Bielicki, Lawrence Berkeley Natl Lab, Berkeley, CA; Anouar Hafiane, Jacques Genest, Cardiovascular Genetics Lab, Cardiology Div, Montreal, QC, Canada; **Jan O. Johansson**, Artery Therapeutics, San Ramon, CA; Stefanie Bittner, Geriatric Res, Education and Clinical Ctr, Palo Alto, CA; Jie Hu, Juveri Tabassum, Salman Azhar, Geriatric Res, Education, and Clinical Ctr, Palo Alto, CA

4:00 **Identification of a High Density Lipoprotein Proteomic Signature Associated with Atherosclerosis Severity in Humans** 15
**Scott M. Gordon**, Natl Insts of Health, Bethesda, MD; Tiange Cui, George Mason Univ, Fairfax, VA; Denis Sviridov, Natl Insts of Health, Bethesda, MD; Ancha Baranova, George Mason Univ, Fairfax, VA; Marcus Chen, Alan T Remaley, Natl Insts of Health, Bethesda, MD

4:15 **BcrKinase is a Novel Akt Kinase that Modulates Scavenger Receptor BI- and PDZK1-dependent Actions of HDL in Endothelium** 16
**Anastasia Sacharidou**, Wan-Ru Lee, Philip E. Shaul, Chieko Mineo, UT Southwestern Medical Ctr, Dallas, TX

4:30 ***APOC3* A43T Variant Promotes ApoC-III Catabolism and Accelerates TG-rich Lipoprotein Clearance in Mice and Humans** 17
**Sumeet A. Khetarpal**, John S. Millar, Amritha Varshini, Cecilia Vitali, Univ of Pennsylvania, Philadelphia, PA; Xuemei Zeng, Univ of Pittsburgh, Pittsburgh, PA; Paolo Zanoni, Univ of Pennsylvania, Philadelphia, PA; Zhiyuan Sun, Univ of Pittsburgh, Pittsburgh, PA; David Nguyen, James T. McParland, Mary G. McCoy, Univ of Pennsylvania, Philadelphia, PA; Pradeep Natarajan, Massachusetts General Hosp, Boston, MA; Marina Cuchel, Leland Mayne, S. Walter Englander, Sissel Lund-Katz, Michael C. Phillips, Univ of Pennsylvania, Philadelphia, PA; Nathan A. Yates, Univ of Pittsburgh, Pittsburgh, PA; Sekar Kathiresan, Massachusetts General Hosp, Boston, MA; Daniel J. Rader, Univ of Pennsylvania, Philadelphia, PA

4:45 **Bempedoic Acid Lowers Low Density Lipoprotein-Cholesterol and Attenuates Aortic Atherosclerosis in LDL Receptor-Deficient ($LDLR^{+/-}$ and $LDLR^{-/-}$) Yucatan Miniature Pigs** 18
**Amy C. Burke**, Dawn E. Telford, Brian G. Sutherland, Jane .Y Edwards, Cynthia G. Sawyez, Univ of Western Ontario, London, ON, Canada; Roger S Newton, Esperion Therapeutics Inc., Ann Arbor, MI; Murray W. Huff, Univ of Western Ontario, London, ON, Canada

**3:15–5:00 PM**
*Broadway Ballroom A-B*
**Concurrent Session II B**
**Immunity and Inflammation in Vascular Biology and Thrombosis**

**Moderators:**
Timothy T. Hla, PhD, Cornell University, Weill Cornell Medical College, New York, NY
Hong Wang, MD, PhD, EMBA, FAHA, Temple University School of Medicine, Philadelphia, PA

3:15 **Chaperone-dependent Signaling of Sphingosine 1-phosphate**
Timothy T. Hla, PhD, Cornell University, Weill Cornell Medical College, New York, NY

**Oral Abstract Presentations**

3:45 **Role of Adenosine-to-Inosine RNA Editing of *Alu* Elements in Human Vascular Inflammatory Diseases** 19
**Konstantinos Stellos**, Aikaterini Gatsiou, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Kimon Stamatelopoulos, Alexandra Hosp, Univ of Athens, Athens, Greece; Ljubica Perisic, Karolinska Inst, Stockholm, Sweden; David John, Federica F. Lunella, Nicolas Jae, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Oliver Rossbach, Univ of Giessen, Giessen, Germany; Carolin Amrhein, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Frangiska Sigala, Hippocratio General Hosp, Univ of Athens, Athens, Greece; Reinier A. Boon, Boris Fuertig, Yosif Manavski, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Xintian You, Max Delbrück Ctr for Molecular Med Berlin-Buch, Berlin, Germany; Shizuka Uchida, Till Keller, Jes-Niels Boeckel, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Anders Franco-

Cereceda, Lars Maegdefessel, Karolinska Inst, Stockholm, Sweden; Wei Chen, Max Delbrück Ctr for Molecular Med Berlin-Buch, Berlin, Germany; Harald Schwalbe, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Albrecht Bindereif, Univ of Giessen, Frankfurt am Main, Germany; Per Eriksson, Ulf Hedin, Karolinska Inst, Stockholm, Germany; Andreas M. Zeiher, Stefanie Dimmeler, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany

4:00 **Nogo-B Controls Inflammation by Regulating Autophagy in Macrophage** 20
Bo Tao, **Jun Yu**, Yale Univ Sch of Med, New Haven, CT

4:15 **A Natural Repertoire of T Cells Recognizing ApoB-100 is Generated Early in Life and is Progressively Depleted During Atherosclerotic Disease** 21
**Dennis Wolf**, Teresa Gerhardt, Jacqueline Miller, Sara McArdle, Takayuki Kimura, La Jolla Inst for Allergy and Immunology, San Diego, CA; Marc Jenkins, Univ of Minnesota Medical Sch, Minneapolis, MN; Klaus Ley, La Jolla Inst for Allergy and Immunology, San Diego, CA

4:30 **Absence of Circadian Gene Bmal in Macrophage Enhances Atherosclerosis** 22
**Xiao Yu Tian**, Yuhong Huang, Chinese Univ of Hong Kong, Hong Kong, Hong Kong; Wing Tak Wong, Houston Methodist Res Inst, Houston, TX; Ajay Chawla, Univ of California San Francisco, San Francisco, CA; Yu Huang, Chinese Univ of Hong Kong, Hong Kong, Hong Kong

4:45 **Microrna302-367 Sphingosine 1 Phosphate Receptor 1 Pathway Prevents Tumor Growth Via Restricting Angiogenesis and Enhancing Vascular Stability** 23
**Jinjiang Pi,** Shanghai East Hosp affiliated to Tongji Univ school of medicine, Shanghai, China; Ting Tao, Jiaotong Univ, Sch of Med, Shanghai, China; Tao Zhuang, Huimin Sun, Xiaoli Chen, Yixin Shen, Zuoren Yu, Shanghai East Hosp affiliated to Tongji Univ school of medicine, Shanghai, China; Helen He Zhu, Wei-qiang Gao, Jiaotong Univ Sch of Med, Shanghai, China; Yuanzhen Suo, Shanghai Jiao Tong Univ, Shanghai, China; Xunbin Wei, Jiaotong Univ Sch of Med, Shanghai, China; Xiangjian Zheng, Centenary Inst, Camperdown, Australia; Ying Tian, Temple Univ Sch of Med, Philadelphia, PA; Edward Morrisey, Univ of Pennsylvania, Philadelphia, PA; Lin Zhang, Yuzhen Zhang, Shanghai East Hosp affiliated to Tongji Univ school of medicine, Shanghai, China

**3:15–5:00 PM**
*Broadway Ballroom C-D*
**Concurrent Session II C**
**Translational Science of Vascular Medicine: Aneurysmal Disease**
*Organized in cooperation with the Council on Peripheral Vascular Disease*

**Moderators:**
Christine T.N. Pham, MD, Washington University School of Medicine, St. Louis, MO
Michael S. Conte, MD, FAHA, FACS, University of California, San Francisco, San Francisco, CA

3:15 **Inflammatory Responses in Abdominal Aortic Aneurysm: Emerging Targets for Therapy?**
Christine T.N. Pham, MD, Washington University School of Medicine, St. Louis, MO

3:45 **The Unique Challenges of Developing Novel Therapies for Abdominal Aortic Aneurysms**
John A. Curci, MD, FACS, Vanderbilt University Medical Center, Nashville, TN

### Oral Abstract Presentations

4:15 **NETosis is Associated with Abdominal Aortic Aneurysm Rupture** 24
**Sean J. English**, Hassan Albadawi, Hyung-Jin Yoo, Massachusetts General Hosp, Boston, MA; Kimberly Martinod, Boston Children's Hosp, Boston, MA; Jose A. Diaz, Univ of Michigan Health System, Ann Arbor, MI; Akshaya Meher, Gilbert R. Upchurch Jr, Univ of Virginia, Charlottesville, VA; Denisa Wagner, Boston Children's Hosp, Boston, MA; Michael T. Watkins, Massachusetts General Hosp, Boston, MA

4:30 **Inducible Depletion of Calpain-2 Attenuates Angiotensin II-induced Cytoskeletal Structural Protein Destruction During Abdominal Aortic Aneurysm Development in Mice** 25
Latha Muniappan, Aida Javidan, Weihua Jiang, Jessica J. Moorleghen, Anju Balakrishnan, Deborah A. Howatt, **Venkateswaran Subramanian**, University of Kentucky, Lexington, KY

4:45 **Low Plasma Mir-155 Levels and RhoA Activation Correlates with Small AAA Expansion** 26
**Eugene S. Lee**, Univ of California, Davis, Sacramento, CA; Anthony Nguyen, Paramita Ghosh, Angelica Rona, Arash Afkhami, Sacramento VA Medical Ctr, Mather, CA

**4:30–6:30 PM**
*Cumberland 1-2 (Level 3)*
**Next-Generation Technology Bootcamp 1 Sequencing Data Interpretation**
*Organized in cooperation with the Council on Functional Genomics and Translational Biology.*
***Separate registration required.***

**Instructors/Facilitators:**
Pankaj Arora, MD, University of Alabama at Birmingham, Birmingham, AL
Alexandra Chadwick, PhD, Medical College of Wisconsin, Milwaukee, WI
Jane F. Ferguson, PhD, Vanderbilt University Medical Center, Nashville, TN
Sumeet Khetarpal, MS, University of Pennsylvania, Philadelphia, PA
Jennie Lin, MD, University of Pennsylvania, Philadelphia, PA
Kiran Musunuru, MD, PhD, MPH, FAHA, University of Pennsylvania, Philadelphia, PA
Sylvia T. Nurnberg, PhD, University of Pennsylvania, Philadelphia, PA
Xuan Zhang, PhD, Columbia University, New York, NY

**5:00–6:00 PM**
*Broadway Ballroom C-D*
**Innovation to Impact: Beginning the Process**

**Turning Discovery in Health: the NIH Translation Paradigm**
Zorina Galis, PhD, NHLBI, Bethesda, MD

**Bringing Your Innovations to Market**
TBD

**Panelists:**
Marc Charette, PhD, NHLBI, Bethesda, MD
Joseph Berglund, PhD, Medtronic Cardiovascular, Coronary & Renal Denervation
Chad Johnson, PhD, Cook Regentec, Indianapolis, IN

**6:00–7:00 PM**
*Legends Ballroom Prefunction*
**Moderated PVD Poster Session**
*Organized in cooperation with the Council on Peripheral Vascular Disease*

**Facilitator:**
TBD

**6:00-8:00 PM**
*Legends Ballroom*
**Poster Session I and Reception**
*Reception sponsored by the ATVB Journal*

## FRIDAY, MAY 6

**7:00 AM**
*Broadway Ballroom Prefunction*
**Registration, Continental Breakfast and Exhibits**

**7:00–8:00 AM**
*Broadway Ballroom Prefunction*
**Early Career Training Session Speed Networking: Coffee, Careers and Communication**
*Organized in cooperation with the ATVB Early Career Committee*

**8:00–9:30 AM**
*Broadway Ballroom East*
**Plenary Session III**
**Highlights form the *ATVB* Journal**

**Moderators:**
Nigel Mackman, PhD, FAHA, University of North Carolina, Chapel Hill, NC
Katey Rayner, PhD, University of Ottawa Heart Institute, Ottawa, ON, Canada

8:00 ***ATVB* Journal Report**
Alan Daugherty, PhD, DSc, FAHA, University of Kentucky, Lexington, KY

**Presentations by the 2016 *ATVB* Journal Early Career Investigator Award Recipients**

8:15 *Daniel Steinberg Early Career Investigator Award in Atherosclerosis/Lipoproteins*
**Increased HDL Cholesterol Levels in Mice with XX Versus XY Sex Chromosomes**
Jenny C. Link, PhD, University of California-Los Angeles, Los Angeles, CA

8:30 *Karl Link Career Investigator Award in Thrombosis*
**Local microRNA Modulation Using a Novel anti-miR-21-eluting Stent Effectively Prevents Experimental In-stent Restenosis**
Lars Maegdefessel, MD, PhD, Karolinska Institute, Stockholm, Sweden

8:45 *Werner Risau Early Career Investigator Award in Vascular Biology*
**Drug-free Platelets can Act as Seeds for Aggregate Formation During Antiplatelet Therapy**
Thomas Hoefer, PhD, Baker IDI Heart and Diabetes Institute, Melbourne, Australia

9:00 **RAGE Signal Transduction: Mechanisms of Obesity, Diabetes and its Complications**
Ann Marie Schmidt, MD, New York University Langone Medical Center, New York, NY

**9:30–9:50 AM**
*Broadway Bllroom Prefunction*
**Refreshment Break and Exhibits**

**9:50–11:35 AM**
*Broadway Ballroom E*
**Concurrent Session III A**
**Lipoprotein Metabolism and Therapeutic Targets**

**Moderators:**
Frank Sacks, MD, FAHA, Harvard University, Boston, MA
Kerry Anne Rye, PhD, FAHA, University of New South Wales, Kensington, NSW, Australia

9:50 **Apolipoprotein C-III: Mechanisms That Connect Basic Science, Metabolism and Population Science**
Frank Sacks, MD, FAHA, Harvard University, Boston, MA

### Oral Abstract Presentations

10:20 **Structure of Lipid-Free and Lipid-bound Apolipoprotein A-I Determined by Stable Isotope-assisted Cross-linking and Small Angle X-ray Scattering** 27
**John T. Melchior,** Jamie C. Morris, Ryan G. Walker, Univ of Cincinnati, Cincinnati, OH; Martin K. Jones, Jere P. Segrest, Univeristy of Alabama at Birmingham, Birmingham, AL; Thomas B. Thompson, W. Sean Davidson, Univ of Cincinnati, Cincinnati, OH

10:35 **Adiponectin Stimulates Cholesterol Efflux Efficiently in Human THP-1 Macrophages and Modulates HDL-apoA-I Biogenesis** 28
**Karina Gasbarrino**, Anouar Hafiane, McGill Univ, Montreal, QC, Canada; Jacques Genest, McGill Univ Health Ctr, Montreal, QC, Canada; Stella Styliani Daskalopoulou, McGill Univ, Montreal, QC, Canada

10:50 **Alpha-1-antitrypsin Protects High Density Lipoprotein from Functional Inactivation by Elastase** 29
**Scott M. Gordon**, Denis Sviridov, Toshihiro Sakurai, Lita Freeman, Alan T. Remaley, Natl Insts of Health, Bethesda, MD

11:05 **ApoE and ApoCIII Interact to Modulate the Metabolism of HDL ApoA-I in Humans** 30
**Allyson Morton**, Harvard Sch of Public Health, Boston, MA; Carlos O Mendivil, Univ de los Andes, Bogota, Colombia; Liyun Wang, Roche Pharmaceuticals, Shanghai, China; Jeremy D. Furtado, Frank M. Sacks, Harvard Sch of Public Health, Boston, MA

11:20 **Resolvin D1 Attenuates PDGF-induced Vascular Smooth Muscle Cell Migration via the cAMP Pathway** 31
**Giorgio Mottola**, Bian Wu, Anuran Chatterjee, Mian Chen, Michael S. Conte, UCSF, San Francisco, CA

**9:50–11:35 AM**
*Broadway Ballroom A-B*
**Concurrent Session III B**
**Blood Coagulation and Antithrombotic Therapy**

**Moderators:**
Heyu Ni, MD, PhD, University of Toronto, St. Michael's Hospital, Toronto, Ontario, Canada
Alisa Wolberg, PhD, University of North Carolina, Chapel Hill, NC

9:50 **Fibronectin in Hemostasis and Thrombosis — Old Questions and New Discoveries**
Heyu Ni, MD, PhD, University of Toronto, St. Michael's Hospital, Toronto, ON, Canada

### Oral Abstract Presentations

10:20 **Analysis of Serum Clopidogrel Active Metabolite Concentration Identifies Novel Genetic Variants Associated With Clopidogrel Pharmacokinetics** 32
**Joshua D. Backman**, Joshua P. Lewis, Richard B. Horenstein, Univ of Maryland-Baltimore, Baltimore, MD; Michael A. Pacanowski, FDA, Silver Spring, MD; William D. Figg, Natl Cancer Inst, Bethesda, MD; Alan R. Shuldiner, Jeffrey R O'Connell, Laura M. Yerges-Armstrong, Univ of Maryland-Baltimore, Baltimore, MD

10:35 **Platelet 12-lipoxygenase is a Key Regulator of Platelet Reactivity and Thrombus Formation In Vivo** 33
Reheman Adili, Katherine Mast, Univ of Michigan, Ann Arbor, MI; Theodore R Holman, Univ of California Santa Cruz, Ann Arbor, MI; **Michael Holinstat**, Univ of Michigan, Ann Arbor, MI

10:50 **Impact of Thrombomodulin and Thrombin-activatable Fibrinolysis Inhibitor on the Anti-coagulant and Pro-fibrinolytic Effects of Rivaroxaban** 34
**Justin J. Garabon**, Michael B. Boffa, Univ of Windsor, Windsor, ON, Canada

11:05 **DVT Inflammation Assessed by 18F-FDG-PET/CT Predicts Subsequent Vein Wall Scarring** 35
**Chase W. Kessinger**, Amhed Tawakol, Gregory R. Wojtkiewicz, MGH/Harvard Medical Sch, Boston, MA; Peter K. Henke, Univ of Michigan, Ann Arbor, MI; Ralph Weissleder, Farouc A. Jaffer, MGH/Harvard Medical Sch, Boston, MA

FRIDAY

11:20 **Alpha 2-antiplasmin Prevents the Resolution of Deep Vein Thrombosis** 36
**Satish Singh**, Aiilyan K. Houng, Samantha Howard, B. Tyler Emerson, Guy L. Reed, Univ of Tennessee Health Science Ctr, Memphis, TN

**9:50–11:35 AM**
*Broadway Ballroom C-D*
**Concurrent Session III C**
**Translational Science in Venous Thromboembolic Disease**
*Organized in cooperation with the Council on Peripheral Vascular Disease and the American Venous Forum*

**Moderators:**
José A. Diaz, MD, University of Michigan, Ann Arbor, MI
Aruna Pradhan, MD, MPH, Brigham and Women's Hospital, Boston, MA

9:50 **Clinical and Hemodynamic Insight into the Mechanisms of Initiation of Venous Thrombosis**
Fedor Lurie, MD, PHD, Jobst Vascular Institute, Toledo, OH

10:20 **Animal Models of VT: Where Are We?**
José A. Diaz, MD, University of Michigan, Ann Arbor, MI

**Oral Abstract Presentations**

10:50 **Measure of Appropriateness in the Placement of Intravenacaval Filters Among Guidelines from Major Medical Societies** 37
**Braghadheeswar Thyagarajan**, Shil Patel, Natalie Swergold, Sayee Sundar Alagusundaramoorthy, Isha Verma, Thomas Baker, Margaret Eng, Monmouth Medical Ctr, Long Branch, NJ

11:05 **Integration of Different Platelet Activity Assays into a Reproducible Platelet Score** 38
**Jeffrey S. Berger**, Emilie Montenont, Liza Karotkin, Nicole M Allen, Michael A. Nardi, Jinfeng Xu, Yu Guo, Judith S. Hochman, New York University Schl Med, New York, NY

11:20 **Platelet Reactivity to Prostaglandin E2 is a Novel Modifiable Risk Factor for St-Elevation Myocardial Infarction** 39
Eitan A. Friedman, Elias V. Haddad, Valentinas Joksas, Shi Huang, Meng Xu, **Olivier Boutaud**, Vanderbilt Univ, Nashville, TN

**11:35 AM–1:10 PM**
*Cumberland 1-2 (Level 3)*
**Luncheon Workshop**
**(ticket required)**

**Think Fast, Talk Smart: Skills for Effective Presenting**
Matt F. Abrahams, Stanford Graduate School of Business, Stanford, CA

**Or lunch on your own**

**1:10–3:10 PM**
*Broadway Ballroom East*
**Plenary Session IV**
**Young Investigator Award Competition**

**Moderators:**
Joseph Italiano, PhD, Brigham and Women's Hospital, Boston, MA
Jonathan D. Smith, PhD, FAHA, Cleveland Clinic, Cleveland, OH

**Kenneth M. Brinkhous Young Investigator Prize in Thrombosis Competition**

1:10 **Prothrombotic Role of Platelet Tlr2 in Hyperlipidemia** 40
**Sudipta Biswas**, Cleveland Clinic Fndn Learner Res Inst, Cleveland, OH; Liang Xin, Case Western Reserve Univ, Cleveland, OH; Soumya Panigrahi, Alejandro Zimman, Valentin Yakubenko, Tatiana Byzova, Cleveland Clinic Fndn Learner Res Inst, Cleveland, OH; Robert Salomon, Case Western Reserve Univ, Cleveland, OH; Eugene Podrez, Cleveland Clinic Fndn Learner Res Inst, Cleveland, OH

1:25 **Platelet Dream Plays A Critical Role During Thrombogenesis In Mice** 41
**Kyungho Kim**, Alan Tseng, Andrew Barazia, Univ of Ilinois at Chicago, Chicago, IL; Joseph E. Italiano, Brigham and Women's Hosp and Harvard Medical Sch, Boston, MA; Jaehyung Cho, Univ of Ilinois at Chicago, Chicago, IL

1:40 **Genetic Ablation of TMEM16F Exhibits Strain-specific Lethality in Mice** 42
**Colin A. Kretz**, Univ of Michigan, Ann Arbor, MI; Gary Gilbert, Brigham and Women's Hosp, Boston, MA; David Ginsburg, Univ of Michigan, Ann Arbor, MI

1:55 **Prothrombinase Assembled with Factor V Leiden is Resistant to Inhibition by Tissue Factor Pathway Inhibitor α Lowering the Procoagulant Threshold for Initiation of Coagulation** 43
**Jeremy P. Woo**d, Lisa M. Baumann Kreuziger, Susan A. Maroney, Blood Ctr of Wisconsin, Milwaukee, WI; Rodney M. Camire, Univ of Pennsylvania, Philadelphia, PA; Alan E. Mast, Blood Ctr of Wisconsin, Milwaukee, WI

FRIDAY

### Irvine H. Page Young Investigator Research Award Competition

2:10 **Atherosclerosis Progression is Associated With a Decrease in Pro-Resolving Mediators and Can Be Mitigated with Restoring Resolvin D1** 44
**Gabrielle Fredman**, Albany Medical Coll, Albany, NY; Jason Hellmann, Brigham and Women's Hosp/Harvard Medical Sch, Boston, MA; Jonathan Proto, Columbia Univ, New York, NY; Romain Colas, Matthew Spite, Brigham and Women's Hosp/Harvard Medical Sch, Boston, MA; Ira Tabas, Columbia Univ, New York, NY

2:25 **Sortilin Regulates Arterial Calcification in Atherosclerotic Mice and Associates with Cardiovascular Risk in Humans** 45
**Claudia Goettsch**, Joshua Hutcheson, Hiroshi Iwata, Sumihiko Hagita, Peter Libby, Masanori Aikawa, Brigham and Women's Hosp, Harvard Medical Sch, Boston, MA; Pawel Szulc, Univ of Lyon, Lyon, France; Elena Aikawa, Brigham and Women's Hosp, Harvard Medical Sch, Boston, MA

2:40 **Bile Acid Synthesis and 12-Hydroxylation are Increased, and Bile Acid Transport is Impaired in Human Obesity** 46
**Rebecca Haeusler,** Columbia Univ, New York, NY; Stefania Camastra, Monica Nannipieri, Brenno Astiarraga, Univ of Pisa Sch of Med, Pisa, Italy; Jose Castro-Perez, Dan Xie, Liangsu Wang, Manu Chakravarthy, Merck Res Labs, Kenilworth, NJ; Ele Ferrannini, CNR Inst of Clinical Physiology, Pisa, Italy

2:55 **Quaking Post-Transcriptionally Promotes Differentiation of Monocytes into Pro-Atherogenic Macrophages by Controling pre-mRNA Splicing and Gene Expression** 47
Ruben G. de Bruin, Leiden Univ Medical Ctr, Leiden, Netherlands; Lily Shiue, Univ of California Santa Cruz, Santa Cruz, CA; Jurrien Prins, Hetty C. de Boer, Leiden Univ Medical Ctr, Leiden, Netherlands; Anjana Djaramshi, Maastricht Univ Medical Ctr, Maastricht, Netherlands; W. Samuel Fagg, Univ of California Santa Cruz, Santa Cruz, CA; Janine M. van Gils, Leiden Univ Medical Ctr, Leiden, Netherlands; Sol Katzman, John P. Donahue, Univ of California Santa Cruz, Santa Cruz, CA; Hilde van Esch, Leuven Univ Hosp, Leuven, Belgium; Ton J Rabelink, Leiden Univ Medical Ctr, Leiden, Netherlands; Hilal Kazan, Antalya Intl Univ, Antalya, Turkey; Erik A. Biessen, Maastricht Univ Medical Ctr, Maastricht, Netherlands; Manuel Ares Jr., Univ of California Santa Cruz, Santa Cruz, CA; Anton Jan van Zonneveld, **Eric P. van der Veer**, Leiden Univ Medical Ctr, Leiden, Netherlands

**3:10–3:30 PM**
*Broadway Ballroom Prefunction*
**Refreshment Break and Exhibits**

**3:30–5:15 PM**
*Broadway Ballroom E*
**Concurrent Session IV A**
**Diabetes, Obesity and Metabolic Disorders**

**Moderators:**
Lisa Junitti-Berggren, MD, PhD, Karolinska Institutet, Stockholm, Sweden
Katey Rayner, PhD, University of Ottawa Heart Institute, Ottawa, ON, Canada

3:30 **Apolipoprotein CIII Links Insulin Resistance to Islet-cell Dysfunction**
Lisa Junitti-Berggren, MD, PhD, Karolinska Institutet, Stockholm, Sweden

### Oral Abstract Presentations

4:00 **Administration of Gut Bacteria Expressing N-acyl Phosphatidylethanolamine Reduces Steatohepatitis In LDLR-/- Mice Fed a Western Diet** 48
**Linda S. Zhang**, Zhongyi Chen, Youming Zhang, Lei Ding, Patricia G. Yancey, Arion Kennedy, MacRae F. Linton, Alyssa Hasty, Sean S. Davies, Vanderbilt Univ, Nashville, TN

4:15 **Elevating Apolipoprotein A-I Levels Promotes Atherosclerosis Regression in Diabetic Mice by Inhibiting Proliferation of Bone Marrow Monocyte Precursors** 49
**Tessa J. Barrett**, Emilie Distel, Yoscar Ogando, Yaritzy M. Astudillo, NYU Sch of Med, New York, NY; Jianhua Liu, Mount Sinai Sch of Med, New York, NY; Ira J. Goldberg, NYU Sch of Med, New York, NY; Andrew J. Murphy, Baker IDI Heart and Diabetes Inst, Melbourne, Australia; Edward A. Fisher, NYU Sch of Med, New York, NY

4:30 **Procollagen C-endopeptidase Enhancer protein 2 (PCPE2) Deficiency Profoundly Affects Adipose Distribution in Mice and Humans and Links HDL Metabolism to Adipocyte Biology** 50
Sushma Kaul, Elisa Maruko, Hao Xu, Medical Coll of Wisconsin, Milwaukee, WI; Mete Civelek, Univeristy of Virginia, Charlottesville, VA; Craig Glastonbury, Kerrin S. Small, King's Coll London, London, United Kingdom; Geesje M. Dallinga-Thie, Academic Medical Ctr of the Univ van Amsterdam, Amsterdam Zuid-Oost, Netherlands; Michael J. Thomas, Medical Coll of Wisconsin, Milwaukee, WI; Ira Goldberg, New York Univ, New York, NY; **Mary Sorci-Thomas**, Medical Coll of Wisconsin, Milwaukee, WI

4:45 **Allograft Inflammatory Factor-1 Deficiency Prevents Obesity and Insulin Resistance by Promoting Brown and Beige Adipocyte Thermogenic Programs** 51
Prameladevi Chinnasamy, Aparna Srinivasan, Albert Einstein Coll of Med, Bronx, NY; Isabel Casimiro, Univ of Chicago, Chicago, IL; Dario F. Riascos-Bernal, **Nicholas E. Sibinga**, Albert Einstein Coll of Med, Bronx, NY1

5:00 **Efficacy and Safety of Mipomersen in Patients with Familial Hypercholesterolemia and Inadequately Controlled LDL-C Levels** 52
**Christie Ballantyne**, Baylor Coll of Med, Houston, TX; Alberico L. Catapano, Univ of Milan, Milan, Italy; Michael Davidson, Univ of Chicago, Chicago, IL; Robert Mittleman, Ironwood Pharmaceuticals, Cambridge, MA; Patrick M. Moriarty, Univ of Kansas, Kansas City, KS; Raul D. Santos, Univ of Sao Paulo, Sao Paulo, Brazil; Charlotte Sensinger, Samarita de Banerjee, Genzyme, Cambridge, MA; Walter Singleton, Brenda F Baker, Ionis Pharmaceuticals, Inc, Carlsbad, CA; Handrean Soran, Central Manchester Univ Hosp NHS Fndn Trust, Manchester, United Kingdom; Sotorios Tsimikas, Univ of California, San Diego, San Diego, CA; John J Kastelein, Univ of Amsterdam, Amsterdam, Netherlands

**3:30–5:15 PM**
*Broadway Ballroom A-B*
**Concurrent Session IV B**
**Platelet Production, Signaling and Function**

**Moderators:**
Zhenyu Li, MD, PhD, University of Kentucky, Lexington, KY
TBD

3:30 **A Vesicular Trafficking Protein VPS33B Regulates Platelet Function and Inflammation**
Zhenyu Li, MD, PhD, University of Kentucky, Lexington, KY

### Oral Abstract Presentations

4:00 **Role of Serotonin through $5HT_{2A}$ in alphaIIbBeta3 Outside-in Activation** 53
**Kendra H. Oliver,** Matthew Duvernay, Heidi E. Hamm, Ana M. Carneiro, Vanderbilt Univ, Nashville, TN

4:15 **Differential Regulation of NADPH-oxidases 1 and 2 and a Common Syk/PLC/Calcium-dependent ROS Signaling Pathway Mediating Platelet Activation** 54
**Zheng Xu**, Univ of Illinois at Chicago, Chicago, IL

4:30 **Traf3 Negatively Regulates Platelet Activation and Thrombosis** 55
**Rui Zhang**, Guoying Zhang, Binggang Xiang, Univ of Kentucky, Lexington, Lexington, KY; Ping Xie, Rutgers Univ, Piscataway, NJ; Zhenyu Li, Univ of Kentucky, Lexington, Lexington, KY

4:45 **Coagulation Factor XI Promotes Distal Platelet Activation and Single Platelet Consumption in the Bloodstream Under Shear Flow** 56
Jenya Zilberman-Rudenko, Chantal Wiesenekker, Asako Itakura, **Owen J. McCarty**, Oregon Health & Science Univ, Portland, OR

5:00 **Podoplanin-clec-2-mediated Platelet Release Protects Vascular Stability in the Mouse Developing Brain** 57
Jianxin Fu, **Lijun Xia**, Oklahoma Medical Res Fndn, Oklahoma City, OK

**3:30–5:15 PM**
*Broadway Ballroom C-D*
**Concurrent Session IV C**
**Genomics, Epigenomics and Stem Cells in Vascular Disease**
*Organized in cooperation with the Council on Functional Genomics and Translational Biology*

**Moderators:**
Jonathan D. Brown, MD, Vanderbilt University School of Medicine, Nashville, TN
Sylvia T. Nurnberg, PhD, University of Pennsylvania, Philadelphia, PA

3:30 **TBD**
Jonathan D. Brown, MD, Vanderbilt University School of Medicine, Nashville, TN

### Oral Abstract Presentations

4:00 **Network-based Identification and Prioritization of Key Regulators of Coronary Artery Disease Loci** 58
**Yuqi Zhao**, UCLA, Los Angeles, CA; Jing Chen, Johannes M. Freudenberg, GSK, Collegeville, PA; Qingying Meng, UCLA, Los Angeles, CA; CARDIoGRAM Consortium; Deepak K. Rajpal, GSK, Collegeville, PA; Xia Yang, UCLA, Los Angeles, CA

4:15 **MicroRNAs Function to Limit Vascular Development Flexibility** 59
**Stefania Nicoli,** Yale Cardiovascular Res Ctr, New Haven, CT

4:30 **Shear Stress Maintains Endocardial Phenotype In Ipsc Derived Endocardial Cells** 60
**Mark Vander Roes**t, Camryn Johnson, H. Scott Baldwin, W. David Merryman, Vanderbilt Univ, Nasvhille, TN

4:45 **Hedgehog-Responsive Stem Cell Antigen 1 Positive Cells Contribute to Vascular Smooth Muscle Cell Accumulation Following Vascular Injury** 61
**Emma Fitzpatrick**, Dublin City Univ, Dublin, Ireland; Jay-Christian Helt, Univ of Rochester Med Ctr, Rochester, NY; Roya Hakimjavadi, Paul A. Cahill, Dublin City Univ, Dublin, Ireland; Eileen M. Redmond, Univ of Rochester Med Ctr, Rochester, NY

5:00 **Selenoprotein P Promotes Vascular Smooth Muscle Cell Proliferation and Pulmonary Hypertension – A Possible Novel Therapeutic Target** 62
**Nobuhiro Kikuchi**, Kimio Satoh, Junichi Omura, Taijyu Satoh, Ryo Kurosawa, Masamichi Nogi, Tomohiro Otsuki, Kazuhiko Numano, Katsuya Kozu, Kota Suzuki, Shinichiro Sunamura, Shunsuke Tatebe, Tatsuo Aoki, Koichiro Sugimura, Hiroaki Shimokawa, Tohoku Univ, Aobaku, Sendai, Miyagi, Japan

**4:30– 6:00 PM**
*Cumberland 1-2 (Level 3)*
**Next-Generation Technology Bootcamp 2: Genome Editing with the CRISPR/Cas9 System**
*Organized in cooperation with the Council on Functional Genomics and Translational Biology*
***Separate Registration required.***

**Instructors/Facilitators:**
Pankaj Arora, MD, University of Alabama at Birmingham, Birmingham, AL
Alexandra Chadwick, PhD, Medical College of Wisconsin, Milwaukee, WI
Jane F. Ferguson, PhD, Vanderbilt University Medical Center, Nashville, TN
Sumeet Khetarpal, MS, University of Pennsylvania, Philadelphia, PA
Jennie Lin, MD, University of Pennsylvania, Philadelphia, PA
Kiran Musunuru, MD, PhD, MPH, FAHA, University of Pennsylvania, Philadelphia, PA
Sylvia T. Nuerenberg, PhD, University of Pennsylvania, Philadelphia, PA
Xuan Zhang, PhD, Columbia University, New York, NY

**5:15–7:15 PM**
*Legends Ballroom*
**Poster Session II and Reception**

**7:15–10:30 PM**
*Broadway Ballroom East*
**Council Dinner (ticket required)**

**Or dinner on your own**

## SATURDAY, MAY 7

**8:00 AM**
*Broadway Ballroom Prefunction*
**Registration**

**8:30–10:30 AM**
*Legends Ballroom*
**Poster Session III and Continental Breakfast**

**10:30 AM–NOON**
*Broadway Ballroom East*
**Plenary Session V**
**Invited Lecture Series**

**Moderators:**
Kathryn J. Moore, PhD, New York University, New York, NY
Philip S. Tsao, PhD, Conference Chair, Stanford University School of Medicine and VA Palo Alto Health Care System, Stanford, CA

**Jeffrey M. Hoeg Arteriosclerosis, Thrombosis and Vascular Biology Award for Basic Science and Clinical Research Lecture**

10:30 **Immune Checkpoint Regulators in Atherosclerosis**
Esther Lutgens, MD, PhD, University of Amsterdam, Amsterdam, Netherlands

**Keynote Lecture**

11:00 **Immunometabolic Regulation in Atherosclerosis**
Göran K. Hansson, MD, PhD, Karolinska Hospital, Stockholm, Sweden

**Distinguished Lecture**

11:30 **Molecular Clocks and Cardiometabolic Disease**
Garret A. FitzGerald, MD, FAHA, University of Pennsylvania, Philadelphia, PA

**NOON**
**Closing Remarks/Conference Adjourns**

# Oral Abstract Presentations

1
Atherosclerosis Regression is Dependent upon Newly Recruited Ly6c$^{high}$ Circulating Monocytes and Their STAT6-Mediated M2 Polarization
**Karishma Rahman**, NYU Sch of Med, New York, NY; Yuliya Vengrenyuk, Mount Sinai Sch of Med, New York, NY; Natasha Girgis, Janssen Res & Development, Pharmaceutical Companies of Johnson & Johnson, Spring House, PA; Noemi Rotllan Vila, Yale Sch of Med, New Haven, CT; Jianhua Liu, Mount Sinai Sch of Med, New York, NY; Kathryn J Moore, P'ng Loke, Edward A. Fisher, NYU Sch of Med, New York, NY

2
Loss of *Rictor* in Macrophages Suppresses Their Viability and Reduces Atherosclerosis in LDLR Null Mice
**Vladimir R. Babaev**, Lei Ding, Youmin Zhang, James M May, MacRae F. Linton, Vanderbilt Univ, Nashville, TN

3
Targeting Macrophage Necroptosis for Therapeutic and Diagnostic Interventions to Treat Atherosclerosis
**Denuja Karunakaran**, Michele Geoffrion, Lihui Wei, Wei Gan, Univ of Ottawa Heart Inst, Ottawa, ON, Canada; Ljubica Perisic, Lars Maegdefessel, Ulf Hedin, Karolinska Inst, Stockholm, Sweden; Subash Sad, Univ of Ottawa, Ottawa, ON, Canada; Terrence Ruddy, Univ of Ottawa Heart Inst, Ottawa, ON, Canada; Liang Guo, Frank Kolodgie, Renu Virmani, CVPath Inst, Gaithersburg, MD; Katey J Rayner, Univ of Ottawa Heart Inst, Ottawa, ON, Canada

4
Enhancing the Ability of Macrophages to Orchestrate Selective Autophagy and Lysosomal Biogenesis Protects Against Atherosclerosis
**Ismail Sergin**, Somashubhra Bhattacharya, Xiangyu Zhang, Trent D Evans, Babak Dehestani, Roy Emanuel, Babak Razani, Washington Univ in St. Louis, St. Louis, MO

5
Lipid Droplet Associated Hydrolase: A New Player in Cholesterol Mobilization from Foam Cells
**Younghwa Goo**, Albany Medical Coll, Albany, NY; Pradip Saha, Larry Chan, Baylor Coll of Med, Houston, TX; Antoni Paul, Albany Medical Coll, Albany, NY

*This research has received full or partial funding support from the American Heart Association.*

6
The RNA-binding Protein ADAR2 Controls Interleukin-6-induced Endothelial Cell Pro-inflammatory Response by Regulating MicroRNA Biogenesis
Aikaterini Gatsiou, Federica F Lunella, Carolin Amrhein, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Stefan Guenther, Claudia Garcia Gonzalez, Andre Schneider, Thomas Braun, Max-Planck Inst, Bad Nauheim, Germany; Andreas M Zeiher, Stefanie Dimmeler, **Konstantinos Stellos**, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany

7
AntagomiR-762 Prevents and Reverses Angiotensin II Induced Aortic Stiffening
**Kim Ramil C Montaniel**, Jing Wu, Vanderbilt Unversity, Nashville, TN; Matthew R Bersi, Yale Univ, New Haven, CT; Liang Xiao, Hana A Itani, Kasey C Vickers, Vanderbilt Unversity, Nashville, TN; Jay D Humphrey, Yale Univ, New Haven, CT; David G Harrison, Vanderbilt Unversity, Nashville, TN

*This research has received full or partial funding support from the American Heart Association.*

8
The Membrane-associated Guanylate Kinase Ww and Pdz Domain-containing Protein 1 magi1 is required for Disturbed Flow-induced Endothelial Inflammation and Atherosclerotic Plaque Formation
Ikjae Shin, Jong Hak Won, Kyung Ae Ko, Ji-Hyun Shin, Elena McBeath, Tamlyn Thomas, Carolyn Giancursio, Quintana-Quezada RA, Jack Taunton, Hiroshi Hosokawa, Naoki Mochizuki, Edward T.H. YEH, Jun-ichi Abe, Keigi Fujiwara, **Nhat tu LE**, MD Anderson Cancer Ctr, Houston, TX

*This research has received full or partial funding support from the American Heart Association.*

9
Involvement of Caveolin-1 in Vascular Remodeling and Inflammation Induced by Angiotensin II
**Steven J Forrester**, Tatsuo Kawai, Katherine J Elliott, Takashi Obama, Takehiko Takayanagi, Kevin Crawford, Satoru Eguchi, Victor Rizzo, Temple Univ, Philadelphia, PA

*This research has received full or partial funding support from the American Heart Association.*

10
The Matrix Crosslinking Enzyme Lysyl Oxidase Like-2 as a Target to Reverse Vascular Stiffness
**Jochen Steppan**, Ivy Wang, Yehudit Bergman, Siqi Tan, Sandeep Jandu, Sean Melucci, Dan E Berkowitz, Lakshmi Santhanam, Johns Hopkins Univ, Baltimore, MD

11
The Role of Human Osteopontin Isoforms in Post-Ischemic Neovascularization
**Alicia N Lyle**, Courtney M Caroti, Grace Sang Hee Lee, Giji Joseph, Saghar Harirforoosh, Joseph Vereen, Daiana Weiss, W. Robert Taylor, Emory Univ, Atlanta, GA

12
Nanotechnology-enabled Anti-mir-320 Therapy for Inhibiting Pathological Vasoconstriction
**Thomas A Werfel**, Kyle M Hocking, Kameron V Kilchrist, Colleen Brophy, Craig L Duvall, Vanderbilt Univ, Nashville, TN

13
Targeting the PERK Pathway of ER Stress Response for Endothelium Protection and Restenosis Prevention: *A Paradigm for Developing Anti-thrombogenic Stents*
**Bowen Wang**, Mengxue Zhang, Xudong Shi, Lian-Wang Guo, Michael Hoffmann, Craig Kent, Univ of Wisconsin Madison, Madison, WI

*This research has received full or partial funding support from the American Heart Association.*

14
The Anti-atherosclerosis ABCA1 Agonist CS6253 Confer Glucose Control by Improved Pancreas Beta-cell Insulin Secretion and Enhanced Peripheral Insulin Utility
John K Bielicki, Lawrence Berkeley Natl Lab, Berkeley, CA; Anouar Hafiane, Jacques Genest, Cardiovascular Genetics Lab, Cardiology Div, Montreal, QC, Canada; **Jan O Johansson**, Artery Therapeutics, San Ramon, CA; Stefanie Bittner, Geriatric Res, Education and Clinical Ctr, Palo Alto, CA; Jie Hu, Juveri Tabassum, Salman Azhar, Geriatric Res, Education, and Clinical Ctr, Palo Alto, CA

15
Identification of a High Density Lipoprotein Proteomic Signature Associated With Atherosclerosis Severity in Humans
**Scott M Gordon**, Natl Insts of Health, Bethesda, MD; Tiange Cui, George Mason Univ, Fairfax, VA; Denis Sviridov, Natl Insts of Health, Bethesda, MD; Ancha Baranova, George Mason Univ, Fairfax, VA; Marcus Chen, Alan T Remaley, Natl Insts of Health, Bethesda, MD

16
BcrKinase is a Novel Akt Kinase That Modulates Scavenger Receptor BI- and PDZK1-dependent Actions of HDL in Endothelium
**Anastasia Sacharidou**, Wan-Ru Lee, Philip E Shaul, Chieko Mineo, UT Southwestern Medical Ctr, Dallas, TX

17
APOC3 A43T Variant Promotes ApoC-III Catabolism and Accelerates TG-rich Lipoprotein Clearance in Mice and Humans
**Sumeet A. Khetarpal**, John S Millar, Amritha Varshini, Cecilia Vitali, Univ of Pennsylvania, Philadelphia, PA; Xuemei Zeng, Univ of Pittsburgh, Pittsburgh, PA; Paolo Zanoni, Univ of Pennsylvania, Philadelphia, PA; Zhiyuan Sun, Univ of Pittsburgh, Pittsburgh, PA; David Nguyen, James T McParland, Mary G McCoy, Univ of Pennsylvania, Philadelphia, PA; Pradeep Natarajan, Massachusetts General Hosp, Boston, MA; Marina Cuchel, Leland Mayne, S. Walter Englander, Sissel Lund-Katz, Michael C. Phillips, Univ of Pennsylvania, Philadelphia, PA; Nathan A Yates, Univ of Pittsburgh, Pittsburgh, PA; Sekar Kathiresan, Massachusetts General Hosp, Boston, MA; Daniel J Rader, Univ of Pennsylvania, Philadelphia, PA

18
Bempedoic Acid Lowers Low Density Lipoprotein-Cholesterol and Attenuates Aortic Atherosclerosis in LDL Receptor-**Deficient (*LDLR*$^{+/-}$ and *LDLR*$^{-/-}$) Yucatan Miniature Pigs**
**Amy C Burke**, Dawn E Telford, Brian G Sutherland, Jane Y Edwards, Cynthia G Sawyez, Univ of Western Ontario, London, ON, Canada; Roger S Newton, Esperion Therapeutics Inc., Ann Arbor, MI; Murray W Huff, Univ of Western Ontario, London, ON, Canada

19
Role of Adenosine-to-Inosine RNA Editing of Alu Elements in Human Vascular Inflammatory Diseases
**Konstantinos Stellos**, Aikaterini Gatsiou, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Kimon Stamatelopoulos, Alexandra Hosp, Univ of Athens, Athens, Greece; Ljubica Perisic, Karolinska Inst, Stockholm, Sweden; David John, Federica F Lunella, Nicolas Jae, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Oliver Rossbach, Univ of Giessen, Giessen, Germany; Carolin Amrhein, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Frangiska Sigala, Hippocratio General Hosp, Univ of Athens, Athens, Greece; Reinier A Boon, Boris Fuertig, Yosif Manavski, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Xintian You, Max Delbrück Ctr for Molecular Med Berlin-Buch, Berlin, Germany; Shizuka Uchida, Till Keller, Jes-Niels Boeckel, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Anders Franco-Cereceda, Lars Maegdefessel, Karolinska Inst, Stockholm, Sweden; Wei Chen, Max Delbrück Ctr for Molecular Med Berlin-Buch, Berlin, Germany; Harald Schwalbe, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany; Albrecht Bindereif, Univ of Giessen, Frankfurt am Main, Germany; Per Eriksson, Ulf Hedin, Karolinska Inst, Stockholm, Germany; Andreas M Zeiher, Stefanie Dimmeler, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany

20
Nogo-B Controls Inflammation by Regulating Autophagy in Macrophage
Bo Tao, **Jun Yu**, Yale Univ Sch of Med, New Haven, CT

*This research has received full or partial funding support from the American Heart Association.*

21
A Natural Repertoire of T Cells Recognizing ApoB-100 is Generated Early in Life and is Progressively Depleted during Atherosclerotic Disease
**Dennis Wolf**, Teresa Gerhardt, Jacqueline Miller, Sara McArdle, Takayuki Kimura, La Jolla Inst for Allergy and Immunology, San Diego, CA; Marc Jenkins, Univ of Minnesota Medical Sch, Minneapolis, MN; Klaus Ley, La Jolla Inst for Allergy and Immunology, San Diego, CA

22
Absence of Circadian Gene Bmal in Macrophage Enhances Atherosclerosis
**Xiao Yu Tian**, Yuhong Huang, Chinese Univ of Hong Kong, Hong Kong, Hong Kong; Wing Tak Wong, Houston Methodist Res Inst, Houston, TX; Ajay Chawla, Univ of California San Francisco, San Francisco, CA; Yu Huang, Chinese Univ of Hong Kong, Hong Kong, Hong Kong

23
Microrna302-367 Sphingosine 1 Phosphate Receptor 1 Pathway Prevents Tumor Growth via Restricting Angiogenesis and Enhancing Vascular Stability
**Jinjiang Pi**, Shanghai East Hosp Affiliated to Tongji Univ Sch of Med, Shanghai, China; Ting Tao, Jiaotong Univ, Sch of Med, Shanghai, China; Tao Zhuang, Huimin Sun, Xiaoli Chen, Yixin Shen, Zuoren Yu, Shanghai East Hosp Affiliated to Tongji Univ Sch of Med, Shanghai, China; Helen He Zhu, Wei-qiang Gao, Jiaotong Univ Sch of Med, Shanghai, China; Yuanzhen Suo, Shanghai Jiao Tong Univ, Shanghai, China; Xunbin Wei, Jiaotong Univ Sch of Med, Shanghai, China; Xiangjian Zheng, Centenary Inst, Camperdown, Australia; Ying Tian, Temple Univ Sch of Med, Philadelphia, PA; Edward Morrisey, Univ of Pennsylvania, Philadelphia, PA; Lin Zhang, Yuzhen Zhang, Shanghai East Hosp Affiliated to Tongji Univ Sch of Med, Shanghai, China

24
NETosis is Associated with Abdominal Aortic Aneurysm Rupture
**Sean J English**, Hassan Albadawi, Hyung-Jin Yoo, Massachusetts General Hosp, Boston, MA; Kimberly Martinod, Boston Children's Hosp, Boston, MA; Jose A Diaz, Univ of Michigan Health System, Ann Arbor, MI; Akshaya Meher, Gilbert R Upchurch Jr, Univ of Virginia,

Charlottesville, VA; Denisa Wagner, Boston Children's Hosp, Boston, MA; Michael T Watkins, Massachusetts General Hosp, Boston, MA

25
Inducible Depletion of Calpain-2 Attenuates Angiotensin II-induced Cytoskeletal Structural Protein Destruction During Abdominal Aortic Aneurysm Development in Mice
Latha Muniappan, Aida Javidan, Weihua Jiang, Jessica J Moorleghen, Anju Balakrishnan, Deborah A Howatt, **Venkateswaran Subramanian**, Univ of Kentucky, Lexington, KY

*This research has received full or partial funding support from the American Heart Association.*

26
Low Plasma Mir-155 Levels and RhoA Activation Correlates with Small AAA Expansion
**Eugene S Lee**, Univ of California, Davis, Sacramento, CA; Anthony Nguyen, Paramita Ghosh, Angelica Rona, Arash Afkhami, Sacramento VA Medical Ctr, Mather, CA

27
Structure of Lipid-free and Lipid-bound Apolipoprotein A-I Determined by Stable Isotope-assisted Cross-linking and Small Angle X-ray Scattering
**John T Melchior**, Jamie C Morris, Ryan G Walker, Univ of Cincinnati, Cincinnati, OH; Martin K. Jones, Jere P. Segrest, Univeristy of Alabama at Birmingham, Birmingham, AL; Thomas B. Thompson, W. Sean Davidson, Univ of Cincinnati, Cincinnati, OH

28
Adiponectin Stimulates Cholesterol Efflux Efficiently in Human THP-1 Macrophages and Modulates HDL-apoA-I Biogenesis
**Karina Gasbarrino**, Anouar Hafiane, McGill Univ, Montreal, QC, Canada; Jacques Genest, McGill Univ Health Ctr, Montreal, QC, Canada; Stella Styliani Daskalopoulou, McGill Univ, Montreal, QC, Canada

29
Alpha-1-antitrypsin Protects High Density Lipoprotein from Functional Inactivation by Elastase
**Scott M Gordon**, Denis Sviridov, Toshihiro Sakurai, Lita Freeman, Alan T Remaley, Natl Insts of Health, Bethesda, MD

30
ApoE and ApoCIII Interact to Modulate the Metabolism of HDL ApoA-I in Humans
**Allyson Morton**, Harvard Sch of Public Health, Boston, MA; Carlos O Mendivil, Univ de los Andes, Bogota, Colombia; Liyun Wang, Roche Pharmaceuticals, Shanghai, China; Jeremy D Furtado, Frank M Sacks, Harvard Sch of Public Health, Boston, MA

31
Resolvin D1 Attenuates PDGF-induced Vascular Smooth Muscle Cell Migration via the cAMP Pathway
**Giorgio Mottola**, Bian Wu, Anuran Chatterjee, Mian Chen, Michael S Conte, UCSF, San Francisco, CA

*This research has received full or partial funding support from the American Heart Association.*

32
Analysis of Serum Clopidogrel Active Metabolite Concentration Identifies Novel Genetic Variants Associated With Clopidogrel Pharmacokinetics
**Joshua D Backman**, Joshua P Lewis, Richard B Horenstein, Univ of Maryland-Baltimore, Baltimore, MD; Michael A Pacanowski, FDA, Silver Spring, MD; William D Figg, Natl Cancer Inst, Bethesda, MD; Alan R Shuldiner, Jeffrey R O'Connell, Laura M Yerges-Armstrong, Univ of Maryland-Baltimore, Baltimore, MD

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Platelet 12-lipoxygenase is a Key Regulator of Platelet Reactivity and Thrombus Formation in vivo
Reheman Adili, Katherine Mast, Univ of Michigan, Ann Arbor, MI; Theodore R Holman, Univ of California Santa Cruz, Ann Arbor, MI; **Michael Holinstat**, Univ of Michigan, Ann Arbor, MI

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Impact of Thrombomodulin and Thrombin-activatable Fibrinolysis Inhibitor on the Anti-coagulant and Pro-fibrinolytic Effects of Rivaroxaban
**Justin J Garabon**, Michael B Boffa, Univ of Windsor, Windsor, ON, Canada

35
DVT Inflammation Assessed by 18F-FDG-PET/CT Predicts Subsequent Vein Wall Scarring
**Chase W Kessinger**, Ahmed Tawakol, Gregory R Wojtkiewicz, MGH/Harvard Medical Sch, Boston, MA; Peter K Henke, Univ of Michigan, Ann Arbor, MI; Ralph Weissleder, Farouc A Jaffer, MGH/Harvard Medical Sch, Boston, MA

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Alpha 2-antiplasmin Prevents the Resolution of Deep Vein Thrombosis
Satish Singh, Aiilyan K Houng, Samantha Howard, B Tyler Emerson, **Guy L Reed**, Univ of Tennessee Health Science Ctr, Memphis, TN

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Measure of Appropriateness in the Placement of Intravenacaval Filters Among Guidelines From Major Medical Societies
**Braghadheeswar Thyagarajan**, Shil Patel, Natalie Swergold, Sayee Sundar Alagusundaramoorthy, Isha Verma, Thomas Baker, Margaret Eng, Monmouth Medical Ctr, Long Branch, NJ

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Integration of Different Platelet Activity Assays Into a Reproducible Platelet Score
**Jeffrey S Berger**, Emilie Montenont, Liza Karotkin, Nicole M Allen, Michael A. Nardi, Jinfeng Xu, Yu Guo, Judith S Hochman, New York Univ Schl Med, New York, NY

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Platelet Reactivity to Prostaglandin E2 is a Novel Modifiable Risk Factor for St-Elevation Myocardial Infarction

Eitan A. Friedman, Elias V. Haddad, Valentinas Joksas, Shi Huang, Meng Xu, **Olivier Boutaud**, Vanderbilt Univ, Nashville, TN

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Prothrombotic Role of Platelet Tlr2 in Hyperlipidemia
**Sudipta Biswas**, Cleveland Clinic Fndn Learner Res Inst, Cleveland, OH; Liang Xin, Case Western Reserve Univ, Cleveland, OH; Soumya Panigrahi, Alejandro Zimman, Valentin Yakubenko, Tatiana Byzova, Cleveland Clinic Fndn Learner Res Inst, Cleveland, OH; Robert Salomon, Case Western Reserve Univ, Cleveland, OH; Eugene Podrez, Cleveland Clinic Fndn Learner Res Inst, Cleveland, OH

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Platelet Dream Plays a Critical Role During Thrombogenesis in Mice
**Kyungho Kim**, Alan Tseng, Andrew Barazia, Univ of Ilinois at Chicago, Chicago, IL; Joseph E. Italiano, Brigham and Women's Hosp and Harvard Medical Sch, Boston, MA; Jaehyung Cho, Univ of Ilinois at Chicago, Chicago, IL

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42
Genetic Ablation of TMEM16F Exhibits Strain-specific Lethality in Mice
**Colin A Kretz**, Univ of Michigan, Ann Arbor, MI; Gary Gilbert, Brigham and Women's Hosp, Boston, MA; David Ginsburg, Univ of Michigan, Ann Arbor, MI

43
Prothrombinase Assembled with Factor V Leiden is Resistant to Inhibition by Tissue Factor Pathway Inhibitor α Lowering the Procoagulant Threshold for Initiation of Coagulation
**Jeremy P Wood**, Lisa M. Baumann Kreuziger, Susan A. Maroney, Blood Ctr of Wisconsin, Milwaukee, WI; Rodney M. Camire, Univ of Pennsylvania, Philadelphia, PA; Alan E. Mast, Blood Ctr of Wisconsin, Milwaukee, WI

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Atherosclerosis Progression is Associated with a Decrease in Pro-Resolving Mediators and Can Be Mitigated With Restoring Resolvin D1
**Gabrielle Fredman**, Albany Medical Coll, Albany, NY; Jason Hellmann, Brigham and Women's Hosp/Harvard Medical Sch, Boston, MA; Jonathan Proto, Columbia Univ, New York, NY; Romain Colas, Matthew Spite, Brigham and Women's Hosp/Harvard Medical Sch, Boston, MA; Ira Tabas, Columbia Univ, New York, NY

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Sortilin Regulates Arterial Calcification in Atherosclerotic Mice and Associates With Cardiovascular Risk in Humans
**Claudia Goettsch**, Joshua Hutcheson, Hiroshi Iwata, Sumihiko Hagita, Peter Libby, Masanori Aikawa, Brigham and Women's Hosp, Harvard Medical Sch, Boston, MA; Pawel Szulc, Univ of Lyon, Lyon, France; Elena Aikawa, Brigham and Women's Hosp, Harvard Medical Sch, Boston, MA

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Bile Acid Synthesis and 12-Hydroxylation are Increased, and Bile Acid Transport is Impaired in Human Obesity
**Rebecca Haeusler**, Columbia Univ, New York, NY; Stefania Camastra, Monica Nannipieri, Brenno Astiarraga, Univ of Pisa Sch of Med, Pisa, Italy; Jose Castro-Perez, Dan Xie, Liangsu Wang, Manu Chakravarthy, Merck Res Labs, Kenilworth, NJ; Ele Ferrannini, CNR Inst of Clinical Physiology, Pisa, Italy

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Quaking Post-Transcriptionally Promotes Differentiation of Monocytes Into Pro-Atherogenic Macrophages by Controling Pre-mRNA Splicing and Gene Expression
Ruben G de Bruin, Leiden Univ Medical Ctr, Leiden, Netherlands; Lily Shiue, Univ of California Santa Cruz, Santa Cruz, CA; Jurrien Prins, Hetty C de Boer, Leiden Univ Medical Ctr, Leiden, Netherlands; Anjana Djaramshi, Maastricht Univ Medical Ctr, Maastricht, Netherlands; W. Samuel Fagg, Univ of California Santa Cruz, Santa Cruz, CA; Janine M van Gils, Leiden Univ Medical Ctr, Leiden, Netherlands; Sol Katzman, John P Donahue, Univ of California Santa Cruz, Santa Cruz, CA; Hilde van Esch, Leuven Univ Hosp, Leuven, Belgium; Ton J Rabelink, Leiden Univ Medical Ctr, Leiden, Netherlands; Hilal Kazan, Antalya Intl Univ, Antalya, Turkey; Erik A Biessen, Maastricht Univ Medical Ctr, Maastricht, Netherlands; Manuel Ares Jr., Univ of California Santa Cruz, Santa Cruz, CA; Anton Jan van Zonneveld, **Eric P van der Veer**, Leiden Univ Medical Ctr, Leiden, Netherlands

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Administration of Gut Bacteria Expressing N-acyl Phosphatidylethanolamine Reduces Steatohepatitis in LDLR-/- Mice Fed a Western Diet
**Linda S Zhang**, Zhongyi Chen, Youming Zhang, Lei Ding, Patricia G Yancey, Arion Kennedy, MacRae F Linton, Alyssa Hasty, Sean S Davies, Vanderbilt Univ, Nashville, TN

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Elevating Apolipoprotein A-I Levels Promotes Atherosclerosis Regression in Diabetic Mice by Inhibiting Proliferation of Bone Marrow Monocyte Precursors
**Tessa J Barrett**, Emilie Distel, Yoscar Ogando, Yaritzy M Astudillo, NYU Sch of Med, New York, NY; Jianhua Liu, Mount Sinai Sch of Med, New York, NY; Ira J Goldberg, NYU Sch of Med, New York, NY; Andrew J Murphy, Baker IDI Heart and Diabetes Inst, Melbourne, Australia; Edward A Fisher, NYU Sch of Med, New York, NY

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Procollagen C-endopeptidase Enhancer protein 2 (PCPE2) Deficiency Profoundly Affects Adipose Distribution in Mice and Humans and Links HDL Metabolism to Adipocyte Biology
Sushma Kaul, Elisa Maruko, Hao Xu, Medical Coll of Wisconsin, Milwaukee, WI; Mete Civelek, Univeristy of Virginia, Charlottesville, VA; Craig Glastonbury, Kerrin S Small, King's Coll London, London, United Kingdom; Geesje M Dallinga-Thie, Academic Medical Ctr of the Univ van Amsterdam, Amsterdam Zuid-Oost, Netherlands; Michael J Thomas, Medical Coll of Wisconsin, Milwaukee, WI; Ira Goldberg, New York Univ, New York, NY; **Mary Sorci-Thomas**, Medical Coll of Wisconsin, Milwaukee, WI

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Allograft Inflammatory Factor-1 Deficiency Prevents Obesity and Insulin Resistance by Promoting Brown and Beige Adipocyte Thermogenic Programs

Prameladevi Chinnasamy, Aparna Srinivasan, Albert Einstein Coll of Med, Bronx, NY; Isabel Casimiro, Univ of Chicago, Chicago, IL; Dario F. Riascos-Bernal, **Nicholas E Sibinga**, Albert Einstein Coll of Med, Bronx, NY

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Efficacy and Safety of Mipomersen in Patients with Familial Hypercholesterolemia and Inadequately Controlled LDL-C Levels
**Christie Ballantyne**, Baylor Coll of Med, Houston, TX; Alberico L Catapano, Univ of Milan, Milan, Italy; Michael Davidson, Univ of Chicago, Chicago, IL; Robert Mittleman, Ironwood Pharmaceuticals, Cambridge, MA; Patrick M Moriarty, Univ of Kansas, Kansas City, KS; Raul D Santos, Univ of Sao Paulo, Sao Paulo, Brazil; Charlotte Sensinger, Samarita de Banerjee, Genzyme, Cambridge, MA; Walter Singleton, Brenda F Baker, Ionis Pharmaceuticals, Inc, Carlsbad, CA; Handrean Soran, Central Manchester Univ Hosp NHS Fndn Trust, Manchester, United Kingdom; Sotorios Tsimikas, Univ of California, San Diego, San Diego, CA; John J Kastelein, Univ of Amsterdam, Amsterdam, Netherlands

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Role of Serotonin through 5HT2A in alphaIIbBeta3 Outside-in Activation
**Kendra H Oliver**, Matthew Duvernay, Heidi E Hamm, Ana M. Carneiro, Vanderbilt Univ, Nashville, TN

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Differential Regulation of NADPH-oxidases 1 and 2 and a Common Syk/PLC/Calcium-dependent ROS Signaling Pathway Mediating Platelet Activation
**Zheng Xu**, Univ of Illinois at Chicago, Chicago, IL

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Traf3 Negatively Regulates Platelet Activation and Thrombosis
**Rui Zhang**, Guoying Zhang, Binggang Xiang, Univ of Kentucky, Lexington, Lexington, KY; Ping Xie, Rutgers Univ, Piscataway, NJ; Zhenyu Li, Univ of Kentucky, Lexington, Lexington, KY

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Coagulation Factor XI Promotes Distal Platelet Activation and Single Platelet Consumption in the Bloodstream Under **Shear Flow**
Jenya Zilberman-Rudenko, Chantal Wiesenekker, Asako Itakura, **Owen J McCarty**, Oregon Health & Science Univ, Portland, OR

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**Podoplanin-clec-2-mediated Platelet Release Protects Vascular Stability in the Mouse Developing Brain**
Jianxin Fu, **Lijun Xia**, Oklahoma Medical Res Fndn, Oklahoma City, OK

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Network-based Identification and Prioritization of Key Regulators of Coronary Artery Disease Loci
**Yuqi Zhao**, UCLA, Los Angeles, CA; Jing Chen, Johannes M Freudenberg, GSK, Collegeville, PA; Qingying Meng, UCLA, Los Angeles, CA; CARDIoGRAM Consortium; Deepak K Rajpal, GSK, Collegeville, PA; Xia Yang, UCLA, Los Angeles, CA

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MicroRNAs Function to Limit Vascular Development Flexibility
**Stefania Nicoli**, Yale Cardiovascular Res Ctr, New Haven, CT

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Shear Stress Maintains Endocardial Phenotype in Ipsc Derived Endocardial Cells
**Mark Vander Roest**, Camryn Johnson, H. Scott Baldwin, W. David Merryman, Vanderbilt Univ, Nasvhille, TN

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Hedgehog-Responsive Stem Cell Antigen 1 Positive Cells Contribute To Vascular Smooth Muscle Cell Accumulation Following Vascular Injury
**Emma Fitzpatrick**, Dublin City Univ, Dublin, Ireland; Jay-Christian Helt, Univ of Rochester Med Ctr, Rochester, NY; Roya Hakimjavadi, Paul A Cahill, Dublin City Univ, Dublin, Ireland; Eileen M Redmond, Univ of Rochester Med Ctr, Rochester, NY

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Selenoprotein P Promotes Vascular Smooth Muscle Cell Proliferation and Pulmonary Hypertension -A Possible Novel Therapeutic Target-
**Nobuhiro Kikuchi**, Kimio Satoh, Junichi Omura, Taijyu Satoh, Ryo Kurosawa, Masamichi Nogi, Tomohiro Otsuki, Kazuhiko Numano, Katsuya Kozu, Kota Suzuki, Shinichiro Sunamura, Shunsuke Tatebe, Tatsuo Aoki, Koichiro Sugimura, Hiroaki Shimokawa, Tohoku Univ, Aobaku, Sendai, Miyagi, Japan

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**Increased High-density Lipoprotein Cholesterol Levels in Mice with XX versus XY Sex Chromosomes**

Jenny C. Link, Xuqi Chen, Christopher Prien, Mark S. Borja, Bradley Hammerson, Michael N. Oda, Arthur P. Arnold, and Karen Reue

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**Local microRNA Modulation Using a Novel anti-miR-21-eluting Stent Effectively Prevents Experimental In--stent Restenosis**

Dong Wang[1,2], Tobias Deuse[1,2,3], Mandy Stubbendorff[1,2], Ekaterina Chernogubova[4], Reinhold G. Erben[5], Suzanne M. Eken[4], Hong Jin[4], Christian Heeger[6], Boris Behnisch[7], Hermann Reichenspurner[3], Robert C. Robbins[8], Joshua M. Spin, Philip S. Tsao[9], Sonja Schrepfer[1,2,8] and **Lars Maegdefessel[4]**

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**Drug-free platelets can act as seeds for aggregate formation during antiplatelet therapy**

**Thomas Hoefer[1]**, Paul C. Armstrong[1], Michaela Finsterbusch[1], Melissa V. Chan[1], Nicholas S. Kirkby[2] and Timothy D. Warner[1]

[1]The William Harvey Research Inst, Barts and the London School of Medicine and Dentistry, Queen Mary Univ of London, Charterhouse Square, London, UK; [2]National Heart and Lung Institute, Imperial College London, London, UK

# Poster Abstract Presentations

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Naringenin Supplementation of a Low-Fat Diet Enhances the Reversal of Metabolic Dysfunction, Promotes Atherosclerosis Regression and Improves Lesion Pathology in *Ldlr*$^{-/-}$ Mice

**Amy C Burke**, Brian G Sutherland, Cynthia G Sawyez, Dawn E Telford, Murray W Huff, Univ of Western Ontario, London, ON, Canada

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The Role of Flavin Monooxygenase 3 (FMO3) in Dietary Choline- and Cholesterol-Driven Atherosclerosis

**Rebecca C Schugar**, Anthony D Gromovsky, Amanda L Brown, Amy C Burrows, Daniel L Ferguson, Cleveland Clinic, Cleveland, OH; Mark J Graham, Rosanne M Crooke, Richard G Lee, Ionis Pharmaceuticals Inc, Carlsbad, CA; Zeneng Wang, Stanley L Hazen, J. Mark Brown, Cleveland Clinic, Cleveland, OH

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Association of the Serum Myeloperoxidase/High-Density Lipoprotein Particle Ratio and Incident Cardiovascular Events in a Multi-Ethnic Population: Observations From the Dallas Heart Study

**Htet W Khine**, John F Teiber, Robert W Haley, Amit Khera, Anand Rohatgi, UT Southwestern Medical Ctr, Dallas, TX

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Antiphospholipid Antibodies Induce Thrombosis by Activating Endothelial PP2A via ApoER2-Dab2-PSD95 Complex Formation

**Anastasia Sacharidou**, Philip Shaul, Chieko Mineo, UT Southwestern Medical Ctr, Dallas, TX

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Cxcr4 Mediates B-1 Cell Localization in the Bone Marrow and Production of Atheroprotective Igm Antibody

**Aditi Upadhye**, Chantel McSkimming, Angela Taylor, Coleen McNamara, Univ of Virginia, Charlottesville, VA

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An XY Sex Chromosome Complement in Females Confers Susceptibility and Rupture of Angiotensin II-induced Abdominal Aortic Aneurysms in Hypercholesterolemic Female Mice

**Yasir Alsiraj**, Sean Thatcher, Eric Blalock, Kuey Chen, Richard Charnigo, Alan Daugherty, Lisa Cassis, Univ of Kentucky, Lexington, KY

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Characteristics of Angiotensin II-induced Abdominal Aortic Aneurysms in Selected Mouse Strains Expressing PCSK9D377Y

**Anju Balakrishnan**, Deborah A Howatt, Alan Daugherty, Hong Lu, Univ of Kentucky, Lexington, KY

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Number of Reentry Tears Influences Flap Motion and Flow Reversal in an *in vitro* Model of Type B Aortic Dissection

**Joav Birjiniuk**, Emory Univ Sch of Med, Atlanta, GA; Mark Young, Medtronic, Inc., Santa Rosa, CA; Lucas H Timmins, Bradley G Leshnower, John N Oshinski, Emory Univ Sch of Med, Atlanta, GA; David N Ku, Georgia Inst of Technology, Atlanta, GA; Ravi K Veeraswamy, Emory Univ Sch of Med, Atlanta, GA

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Circulating sRAGE is Elevated in Patients with Marfan Syndrome and Decreases After Surgical Replacement of Diseased Aortic Segments

Eric K Lai, Daniel J Wytowich, Giovanni Ferrari, Joseph E Bavaria, Reed E Pyeritz, **Emanuela Branchetti**, Univ of Pennsylvania, Philadelphia, PA

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Cilnidipine Attenuated Angiotensin II-induced Abdominal Aortic Aneurysms in Apolipoprotein E-deficient Mice via Its Anti-oxidative Stress Effect
**Yuki Kakio**, Haruhito A Uchida, Ryoko Umebayashi, Jun Wada, Okayama Univ Grad Schl of Med, Okayama, Japan

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Increased Dynamic Mechanical Energy Dissipation in Human Abdominal Aortic Aneurysm
**Doran S Mix**, Ibrahima Bah, Sandra A Toth, Michael C Stoner, Adam J Doyle, Jennifer L Ellis, Roan Glocker, Mark R Buckley, Michael Richards, Univ of Rochester Medical Ctr, Rochester, NY

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Characterizing Aortic Wall Dynamics in Murine Models of Abdominal Aortic Aneurysms Using Ultrasound Imaging
**Arvin H Soepriatna**, Frederick W Damen, Pavlos P Vlachos, Craig J Goergen, Purdue Univ, West Lafayette, IN

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Depletion of Plasmacytoid Dendritic Cells Inhibits Experimental Abdominal Aortic Aneurysms
**Baohui Xu**, Haojun Xuan, Naoki Fujimura, Sara A Michie, Ronald L Dalman, Stanford Univ Sch of Med, Stanford, CA

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Alcohol-related Diagnoses are Associated with High Mortality in Patients with Peripheral Arterial Disease
**Mohamed Abdel-Aal Ahmed**, Anuradha Mendu, Scott H Stewart, Siva Harsha Yedlapati, Univ at Buffalo, Buffalo, NY

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Statins Have a Dose-dependent Effect on Amputation Risk and Survival in Peripheral Arterial Disease (PAD) Patients
**Shipra Arya**, Anjali Khakharia, Zachary O Binney, Emory Univ, Atlanta, GA; Randall R Demartino, Mayo Clinic, Rochester, MN; Luke P Brewster, Emory Univ, Atlanta, GA; Philip P Goodney, Geisel Sch of Med Dartmouth-Hitchcock, Lebanon, NH; Peter W Wilson, Emory Univ, Atlanta, GA

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Carotid Plaque Instability is Associated with an Increase in the Serum Ratio of circularRNA-284 to microRNA-221
**Hernan Bazan**, Ashton Brooks, Ochsner Clinic, New Orleans, LA; Daniel Lightell, Jr, Tulane Sch of Med, New Orleans, LA; T. Cooper Woods, Tulane Univ, New Orleans, LA

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Statin Treatment Ameliorated HIV- Nef Induced Vascular Dysfunction in Transgenic Mice
**Sarvesh Chelvanambi**, Noelle Dahl, Xingjuan Chen, Alexander G Obukhov, Matthias Clauss, Indiana Univ, Indianapolis, IN

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Low Plasma Low-density Lipoprotein Cholesterol Level as a Risk Factor for Cancer in Patients With Newly Diagnosed Coronary Artery Disease
**Xiaofeng Chen**, Jianjun Jiang, Haihua Yang, Bing Wang, Yinsheng Xue, Taizhou Hosp, Wenzhou Medical Univ, Taizhou, Zhejiang Province, China; Xiaowei Liu, Lijiang Tang, Zhejiang Hosp, Hangzhou, Zhejiang Province, China

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Platelet and Monocyte Activity in Carotid Artery Stenosis Treated with Carotid Endarterectomy
**Arvind Reddy Devanabanda**, Caron Rockman, Nicole Allen, Maya Rubin, Binita Shah, Mark Adelman, Jeffrey Berger, New York Univ, New York, NY

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Is Routine Patching Necessary Following Carotid Endarterectomy (CEA)?
**Nicholas J Gargiulo III**, The Brookdale Univ Hosp and Medical Ctr, Old Bethpage, NY

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Revascularization but Not Supervised Exercise Therapy Prevents Progression of Fibrosis in the Gastrocnemius of Patients With Peripheral Artery Disease While Improving Limb Function
**Duy Ha**, George Casale, Alicia Luis, Kevin Harkins, Reagan Huber, Tanmayee Chengalasetty, Ruby Hickman, Mina Hanna, Stanley Swanson, Holly DeSpiegelaere, Iraklis Pipinos, Univ of Nebraska Medical Ctr, Omaha, NE

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Development of a Hybrid Cryogel-coated Prosthetic Vascular Graft for Delivery of Targeted Gene Therapies
**Cindy Huynh**, Beth Israel Deaconess Medical Ctr, Harvard Medical Sch, Boston, MA; Ting-Yu Shih, Harvard Univ, Cambridge, MA; Amruta Samant, Beth Israel Deaconess Medical Ctr, Harvard Medical Sch, Boston, MA; Saif G Pathan, David W Nelson, BioSurfaces, Inc., Ashland, MA; David J Mooney, Harvard Univ, Cambridge, MA; Leena Pradhan-Nabzdyk, Frank W LoGerfo, Beth Israel Deaconess Medical Ctr, Harvard Medical Sch, Boston, MA

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Impaired Cardiac Sestrin2 Signaling in Response to Ischemic Insults with Aging
Nanhu Quan, Wangqing Sun, Lin Wang, Dongyang Chu, Xu Chen, Courtney A Cates, **Ji Li**, Univ of Mississippi Medical Ctr, Jackson, MS

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Prevalence and Impact of Patent Foramen Ovale in Patients with Obstructive Sleep Apnea
Phillip Camp, Abinash Achrekar, **Umar Malik**, Warren Laskey, Univ of New Mexico, Albuquerque, NM

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Effects of Tethering Branches on Limb Flexion-induced Deformations of the Human Femoropopliteal Artery
**William Poulson**, Alexey Kamenskiy, Paul Deegan, Carol Lomneth, Jason MacTaggart, Univ of Nebraska Medical Ctr, Omaha, NE

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Use of Machine Learning to Accurately Predict Adverse Events in Patients With Peripheral Artery Disease Using Electronic Health Record Data
**Elsie G Ross**, Nicholas Leeper, Nigam Shah, Stanford Univ, Stanford, CA

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P53 Silenced Human Cd34+ Cells Show Increased Survival and Maturity in High Glucose and Better Collateral Vessel Formation Property Than Wild Type Cells
Nabanita Kundu, Cleyton Domingues, **Sabyasachi Sen**, George Washington Univ, Washington, DC

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Association Between Low Bone Mineral Density and Risk of Peripheral Vascular Disease: A Systematic Review and Meta-analysis
**Sikarin Upala**, Anawin Sanguankeo, Bassett Medical Ctr, Cooperstown, NY

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Vitamin D3-Induced Arterial Calcification Decreases Functional Recovery and Limb Perfusion in a Murine Model of Hindlimb Ischemia
**Sara L Zettervall**, Stephanie Monk, Xue-Lin Wang, Yujun Cai, Tonghui Lin, Raul J. Guzman, Beth Israel Deaconess Medical Ctr, Boston, MA

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Differential Effects of Respectively Blocking Two BET Bromodomains on Vascular Smooth Muscle Cell Phenotype Transformation
**Mengxue Zhang**, Bowen Wang, Craig Kent, Lian-Wang Guo, Univ of Wisconsin-Madison, Madison, WI

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Induction of miR-21 Increases Fibrous Cap Stability in Vulnerable Atherosclerotic Lesions
**Hong Jin**, Yuhuang Li, Alexandra Bäcklund, Albert Busch, Suzanne M Eken, Ekaterina Chernogubova, Peter Gustafsson, Ljubica Perisic, Karolinska Inst, Solna, Sweden; Isabel Schellinger, Uwe Raaz, Georg-August-Univ Göttingen, Göttingen, Germany; Philip S Tsao, Stanford Univ, Palo Alto, CA; Göran K Hansson, Gabrielle Paulsson-Berne, Ulf Hedin, Lars Maegdefessel, Karolinska Inst, Solna, Sweden

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Risk Factors for Hospital-associated Venous Thromboembolism in Critically-ill Children with Cardiac Disease Undergoing Cardiothoracic Surgery or Cardiac Catheter-based Therapeutic Intervention
**Christie Atchison**, Univ of South Florida Morsani Coll of Med, Tampa, FL; Ernest Amankwah, Jean Wilhelm, Shilpa Arkilar, Arabela Stock, All Children's Hosp Johns Hopkins Med, St Petersburg, FL; Brian Branchford, Univ of Colorado Children's Hosp, Aurora, CO; Clifford Takemoto, Michael Streiff, Johns Hopkins Univ, Baltimore, MD; Irmel Ayala, All Children's Hosp Johns Hopkins Med, St Petersburg, FL; Allen Everett, Johns Hopkins Univ, Baltimore, MD; Gary Stapleton, Marshall Jacobs, Jeff Jacobs, Neil Goldenberg, All Children's Hosp Johns Hopkins Med, St Petersburg, FL

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Overexpression of P110alpha Induces Vascular Malformation in Mouse Tail, Feet and Ears
**Vladimir R. Babaev**, Jeremy A. Brooksbank, Lei Ding, Youmin Zhang, James M. May, MacRae F. Linton, Vanderbilt Univ, Nashville, TN

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Il-6 Mediates Vein Wall Response to Thrombosis in a Model Dependent Manner
**Andrea T Obi**, Andrew Kimball, Megan Elfline, Catherine Luke, Jose Diaz, Thomas W Wakefield, Peter K Henke, Univ of Michigan, Ann Arbor, MI

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Methods Behind Thrombus Size Variability in Murine IVC Ligation Model Revealed: Insights From MRI
**Olivia R Palmer**, Jose A Diaz, Joan M Greve, Univ of Michigan, Ann Arbor, MI

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Biomarkers of Cardiovascular Toxicity Following Benzene Exposure
**Wesley Abplanalp**, Natasha DeJarnett, Daniel Riggs, Xiaoping Li, Daniel Conklin, Zhengzhi Xie, Sanjay Srivastava, Aruni Bhatnagar, Timothy O'Toole, Univ of Louisville, Louisville, KY

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Mechanistic Insights Into Bradykinin and Thromboxane Receptors Heterodimerization in Vascular Smooth Muscle Cells
**Oula K Dagher**, Miran A Jaffa, Aïda Habib, Fuad N Ziyadeh, American Univ of Beirut, Beirut, Lebanon; Louis M Luttrell, Medical Univ of South Carolina, Charleston, SC; Ayad A Jaffa, American Univ of Beirut, Beirut, Lebanon

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Hypoxia in Coronary Plaque Enhance Thrombogenic Potential of Activated Macrophages
**Kazunari Maekawa**, Atsushi Yamashita, Eriko Nakamura, Yujiro Asada, Univ of Miyazaki, Miyazaki, Japan

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Endothelial Dysfunction in Acute Graft-versus-host Disease After Allogeneic Hematopoietic Cell Transplantation. *In vitro* Evidence of the Protective Effect of Defibrotide
**Enrique Mir**, Marta Palomo, Enric Carreras, Josep Carreras Leukaemia Res Inst, Barcelona, Spain; Maribel Diaz-Ricart, Inst d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Hosp Clinic, Univ de Barcelona, Barcelona, Spain; Montse Rovira, Hosp Clinic de Barcelona, Barcelona, Spain; Ginés Escolar, Inst d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Hosp Clinic, Univ de Barcelona, Barcelona, Spain

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Apoptosis of Smooth Muscle Cells Induced by Lipids Isolated from Carotid Plaques
**Gayatri Raghuraman**, Mary C Zuniga, Brittanie D Baughman, VA Palo Alto Health Care System, Palo Alto, CA; Lixin Wang, Fudan Univ, Shanghai, China; Wei Zhou, VA Palo Alto Health Care System, Palo Alto, CA

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Thromboinflammatory Response in Patients Undergoing Transcatheter Aortic Valve Replacement Using the Sapien Xt or CoreValve
**Travis R Sexton**, John Liu, Susan S Smyth, Univ of Kentucky, Lexington, KY

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Magnesium Lithospermate B Inhibits Blood Coagulation and Platelet Aggregation: Novel Mechanism of a Traditional Drug for Cardiovascular Diseases
Yiming Wang, Dan Zhang, Xiaohong Xu, Xi Lei, St. Michael's Hosp, Toronto, ON, Canada; Yiping Wang, Lijiang Xuan, Jian Ding, Shanghai Inst of Materia Medica, Chinese Acad of Science, Shanghai, China; **Heyu Ni**, St. Michael's Hosp; Univ of Toronto; Canadian Blood Services, Toronto, ON, Canada

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Anti-thrombin Perfluorocarbon Nanoparticles Decrease Clot Burden in a Murine Model of Venous Thrombosis
**Chandu Vemuri**, Batool Arif, Susannah A Grathwohl, John S Allen, Washington Univ in St. Louis, St. Louis, MO; Peter K Henke, Washington Univ in St. Louis, St. Louis, MI; Samuel A Wickline, Washington Univ in St. Louis, St. Louis, MO

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Characterizing the Mechanisms of Factor VIII Binding to Low-density Lipoprotein Receptor-related Protein 1
**Patricia Young**, Univ of Maryland Baltimore, Baltimore, MD

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**Jessica Morales**, Univ of Puerto Rico, San Juan, PR; Fiorella Reyes, Octavio Santiago, Univ Central del Caribe, Bayamon, PR; Camila Trinidad, Medical Sciences Campus, San Juan, PR; Marilene Kelly, Univ of Puerto Rico, Mayaguez, PR; Anthony V Washington, Univ of Puerto Rico, San Juan, PR

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**Alex Helkin**, David Bruch, SUNY Upstate Medical Ctr and Dept of Veterans Affairs Healthcare Network Upstate New York at Syracuse, Syracuse, NY; David R Wilson, Rebecca Bader, Syracuse Univ, Syracuse, NY; Kristopher G Maier, SUNY Upstate Medical Ctr and Dept of Veterans Affairs Healthcare Network Upstate New York at Syracuse, Syracuse, NY; Vivian Gahtan, SUNY Upstate Medical Ctr, Dept of Veterans Affairs Healthcare Network Upstate New York at Syracuse, and Syracuse Biomaterials Inst, Syracuse, NY

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**Kristen Leslie**, Yi Xie, Allison Ostriker, Kathleen Martin, Yale Univ, New Haven, CT

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Dan Yu, Baltimore VA Medical Ctr, Baltimore, MD; Charles Drucker, Univerity of Maryland Sch of Med, Baltimore, MD; Rajabrata Sarkar, Dudley K. Strickland, Univ of Maryland Sch of Med, Baltimore, MD; **Thomas S Monahan**, Baltimore VA Medical Ctr, Baltimore, MD

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**Victoria Osinski**, Univ of Virginia, Charlottesville, VA; Jennifer Kirby, Univ of Virginia Health System, Charlottesville, VA; Swapnil Sonkusare, Mete Civelek, Coleen McNamara, Univ of Virginia, Charlottesville, VA

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**Noel M Phan**, Arick Park, Ting Zhou, David Scott, Qiwei Wang, Paul Tang, Daniel S. Greenspan, Bo Liu, Univ of Wisconsin-Madison, Madison, WI

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**Keiji Tanigaki**, UT Southwestern Medical Ctr, Dalla, TX

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**Jimmy Berbée**, Rosa van den Berg, Sander Kooijman, Ashna Ramkisoensing, Claudia P Coomans, Johanna H Meijer, Nienke R Biermasz, Patrick C Rensen, Leiden Univ Medical Ctr, Leiden, Netherlands

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**Alison X Xie**, Jakovin J Lee, Ken D McCarthy, UNC-Chapel Hill, Chapel Hill, NC

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**Aditya D Hendrani**, Union Memorial Hosp, Baltimore, MD; Renato Quispe, Seth S Martin, Johns Hopkins Ciccarone Ctr for the Prevention of Heart Disease, Baltimore, MD; Krishnaji R Kulkarni, Atherotech Diagnostics Lab, Birmingham, AL; Peter P Toth, CGH Medical Ctr, Sterling, IL; Parag H Joshi, Univ of Texas Southwestern Medical Ctr, Dallas, TX; Steven R Jones, Johns Hopkins Ciccarone Ctr for the Prevention of Heart Disease, Baltimore, MD

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**Wenliang Song**, Bridgeport Hosp of Yale New Haven Health, Bridgeport, CT; Jing Du, Li Qin, Yale Sch of Med, New Haven, CT; Stuart Zarich, Sachin Majumdar, Bridgeport Hosp of Yale New Haven Health, Bridgeport, CT; John Hwa, Yale Sch of Med, New Haven, CT

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**Jizhong Cheng**, Ming Liang, Jinlong Luo, Baylor Coll of Med, Houston, TX; Jie Du, Beijing Anzhen Hosp of the Capital Medical Univ, Beijing, China

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**Golrokh Malihi**, Washington Univ in St. Louis, Balwin, MO

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David Henson, **Vincent J Venditto**, Univ of Kentucky, Lexington, KY

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**Baskaran Thyagarajan**, Sara Cisneros, Ross Cook, Padmamalini Baskaran, Univ of Wyoming, Laramie, WY

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Bindu Ramachandran, John Stabley, Abraham Behrmann, Su-Li Cheng, Megan Mead, UT Southwestern Medical Ctr, Dallas, TX; Bart Williams, Van Andel Res Inst, Grand Rapids, MI; **Dwight A Towler**, UT Southwestern Medical Ctr, Dallas, TX

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**Morgan Salmon**, Anna Z. Fashandi, Michael D. Spinosa, Ashish K. Sharma, Gary K. Owens, Univ of Virginia Medical Ctr, Charlottesville, VA; Juanita L. Merchant, Univ of Michigan at Ann Arbor, Ann Arbor, VA; Zendra E. Zehner, Virginia Commonwealth Univ Medical Coll of Virginia Campus, Richmond, VA; Gilbert R. Upchurch Jr., Gorav Ailawadi, Univ of Virginia Medical Ctr, Charlottesville, VA

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**Muriel G Blin**, Richard Bachelier, Samantha Fernandez, Benjamin Guillet, Karim Fallague, Stéphane Robert, Aix Marseille Univ, Marseille, France; Christophe Heymes, Toulouse III-Paul Sabatier Univ, Toulouse, France; Nathalie Bardin, Marcel Blot-Chabaud, Francoise Dignat-George, Aurélie S Leroyer, Aix Marseille Univ, Marseille, France

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**Lei Cai**, Joseph D. Layne, Sierra M. Paxton, Courtney R. Burkett, Univ of Kentucky, Lexington, KY; Richard Lee, Isis

Pharmaceuticals, Carlsbad, CA; Ryan E. Temel, Univ of Kentucky, Lexington, KY

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**Kenan Demircioglu**, Feyza Aksu, Mustafa Caliskan, Yusuf Yılmaz, Istanbul Medeniyet Univ, Faculty of Med, Istanbul, Turkey

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**Prabhatchandra Dube**, Univ Of Toledo, Toledo, OH

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**Talin Ebrahimian**, Maryam Heidari, David Simon, Jewish General Hosp, Montreal, QC, Canada; Hojatollah Vali, Craig A. Mandato, McGill Univ, Montreal, QC, Canada; Stephanie Lehoux, Jewish General Hosp, Montreal, QC, Canada

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**Collins Ezeuka**, Emory Univ, Atlanta, GA

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**Alexandra C Finney**, Jonette M. Green, Mohammad A. Rana, Steven D. Funk, James G. Traylor Jr., A. Wayne Orr, Louisiana State Univ Health Sciences Ctr, Shreveport, Shreveport, LA

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**Stephen P Gray**, Elyse DiMarco, Phyllis Chew, Kit Kennedy, Mark E Cooper, Baker IDI Heart & Diabetes Inst, Melbourne, Australia; Kathy Griendling, Emory Univ, Atlanta, GA; Harald Schmidt, Maastricht Univ, Maastricht, Netherlands; Karin Jandeleit-Dahm, Baker IDI Heart & Diabetes Inst, Melbourne, Australia

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Chao Zhang, **Xingjian Hu**, Hong Shi, Wenconghui Wu, Yulan Qing, Case Western Reserve Univ, Cleveland, OH; Bernard Perbal, Intl CCN Society, Paris, France; Nianguo Dong, Huazhong Univ of Science and Technology, Wuhan, China; Zhiyong Lin, Case Western Reserve Univ, Cleveland, OH

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**Natalia Jarzebska**, Roman N. Rodionov, Technische Univ Dresden, Dresden, Germany; Dmitri Burdin, Saint-Petersburg State Univ, Saint Petersburg, Russian Federation; Silke Brilloff, Vladimir T. Todorov, Technische Univ Dresden, Dresden, Germany; Jens Martens-Lobenhoffer, Otto-von-Guericke Univ, Magdeburg, Germany; Anja Hofmann, Henning Morawietz, Technische Univ Dresden, Dresden, Germany; Anton Demyanov, Inst of highly pure biopreparations, Saint-Petersburg, Russian Federation; Karl Hilgers, Nada Cordasic, Johannes Jacobi, Friedrich-Alexander-Univ, Erlangen, Germany; Renke Maas, Otto-von-Guericke Univ, Magdeburg, Germany; YingJie Chen, Univ of Minnesota, Minnesota, MN; Stefanie M. Bode-Böger, Otto-von-Guericke Univ, Magdeburg, Germany; Christian P. Hugo, Bernd Hohenstein, Norbert Weiss, Technische Univ Dresden, Dresden, Germany

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Liang Bai, **Enqi Liu**, Xi'an Jiaotong Univ, Xi'an, China

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Branimir Popovic, Doug Feck III, **Shanmugam Nagarajan**, Univ of Pittsburgh, Pittsburgh, PA

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**Amanda I Pacheco**, Anthony V. Washington, Univ of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico; Marieli Gonzalez, Natl Insts of Health, Baltimore, MD

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Anthony Marco Corbo, Filippo Romanelli, Yuan Huang, Eduard I Dedkov, NYIT Coll of Osteopathic Med, Old Westbury, NY; Jose Luis Millan, Sanford Burnham Prebys Medical Discovery Inst, La Jolla, CA; Alexei Y Savinov, Sanford Res, Sioux Falls, SD; **Olga V Savinova**, NYIT Coll of Osteopathic Med, Old Westbury, NY

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**Rai Ajit K Srivastava**, Gemphire Therapeutics Inc, Northville, MI; Joseph A Cornicelli, Charles River Labs, Wilmington, MA; Bruce E Markham, Diapin Therapeutics, Ann Arbor, MI; Charles L Bisgaier, Gemphire Therapeutics Inc, Northville, MI

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Roger Sarduy, Victor Brito, Yosdel Soto, Ctr of Molecular Immunology, Havana, Cuba; Livan Delgado-Roche, Ctr of Marine Bioproducts, Havana, Cuba; Tania Griñán, Justo Viera, Jordan González, Ctr of Molecular Immunology, Havana, Cuba; Sylvie Marleau, Univ de Montreal, Montreal, QC, Canada; **Ana M Vázquez**, Ctr of Molecular Immunology, Havana, Cuba

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**Liping Yang**, Paul Mueller, Manjula Sunkara, Andrew Morris, Susan Smyth, Univ of Kentucky, Lexington, KY

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**Xiangyu Zhang**, Soumashubhra Bhattacharya, Ismail Sergin, Trent Evans, Babak Razani, Washington Univ Sch of Med, St. Louis, MO

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**Francisco E Ramirez**, Jill Siebold, Nedley Clinic, Weimar, CA; Linda Ivy, Walla Walla Univ, College Place, WA; Kathelyn Antuna, Albert Sanchez, Weimar Inst, Weimar, CA; Neil Nedley, Nedley Clinic, Weimar, CA

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**Francisco E Ramirez**, Jill Siebold, Nedley Clinic, Weimar, CA; Kathelyn Antuna, Albert Sanchez, Weimar Inst, Weimar, CA; Neil Nedley, Nedley Clinic, Weimar, CA

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**Danielle Hyatt**, Francis J Alenghat, Univ of Chicago, Chicago, IL

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**Hua Tang**, Sichuan Medical Univ, Luzhou, China; Hao Lin, Univ of Electronic Science and Technology of China, Chengdu, China

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**Hanna M Björck**, Lei Du, Valentina Paloschi, Shohreh Maleki, Karolinska Instt, Stockholm, Sweden; Silvia Pulignani, Natl Res Council, Pisa, Italy; MIBAVA Leducq Consortium; Anders Franco-Cereceda, Per Eriksson, Karolinska Instt, Stockholm, Sweden

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**Jenny Lutshumba**, Shu Liu, Zhenheng Guo, Ming C. Gong, Univ of Kentucky, Lexington, KY

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**Preeti Maurya**, Sukka Santosh Reddy, Anant Jaiswal, Manoj Kumar Barthwal, CSIR-Central Drug Res Inst, Lucknow, India

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**Hidemi Takeuchi**, Haruhito Uchida, Okayama Univ Grad Schl of Med, Okayama, Japan; Michihiro Okuyama, Okayama Univ Hosp, Okayama, Japan; Ryoko Umebayashi, Yuki Kakio, Yuka Okuyama, Jun Wada, Okayama Univ Grad Schl of Med, Okayama, Japan

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**Hao Yin**, Oula Akawi, Robarts Res Inst, Western Univ, London, ON, Canada; Stephanie A Fox, London Health Sciences Ctr, Western Univ, London, ON, Canada; Fuyan Li, Caroline O'Neil, Robarts Res Inst, Western Univ, London, ON, Canada; Jorge Wong, London Health Sciences Ctr, Western Univ, London, ON, Canada; John-Michael Arpino, Brittany Balint, Alanna Watson, Robarts Res Inst, Western Univ, London, ON, Canada; L. Ray Guo, MacKenzie A Quantz, A. Dave Nagpal, Bob Kiaii, Michael W Chu, London Health Sciences Ctr, Western Univ, London, ON, Canada; J. Geoffrey Pickering, Robarts Res Inst, London Health Sciences Ctr, Western Univ, London, ON, Canada

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**Nicole Allen**, Yu Guo, Adriana Perez, Edna Bissoon, Matthew Cambria, Maya Rubin, Gabriel Lerner, Mark Adelman, Caron B. Rockman, Jeffrey S. Berger, NYU Medical Ctr, New York, NY

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**Mohammad M Ansari**, Metro Heart &Vascular Ins., Metro Health Hosp, Wyoming, MI; Daniel Garcia, Ochsner Clinic Fndn, New Orleans, LA

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**Yazan Daaboul**, Serge Korjian, Lebanese American Univ, Jbeil, Lebanon; Balsam El-Ghoul, Salam Samad, North Hosp Ctr, Northern Lebanon, Lebanon; Pascale Salameh, Lebanese Univ, Beirut, Lebanon; Georges Dahdah, North Hosp Ctr, Northern Lebanon, Lebanon; Essa Hariri, Anthony Mansour, Lebanese American Univ, Jbeil, Lebanon; Kathryn Spielman, Tufts Univ, Boston, MA; Jacques Blacher, Michel Safar, Ctr de Diagnostic, Hop Hotel-Dieu, Paris, France; Sola Aoun Bahous, Lebanese American Univ, Jbeil, Lebanon

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**Andrew Harrington**, Nicole Ilonzo, Thais Polanco, Kevin Yang, Selena Goss, Sean Alcantara, Michael Dudkiewicz, John C Lantis, Mount Sinai St. Luke's Hosp and Mount Sinai West Hosp, New York, NY

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**Daniel L Hess**, Olga A Cherepanova, Brian H Annex, Gary K Owens, Univ of Virginia, Charlottesville, VA

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**Sarah Kiani**, Usman Salahuddin, Haekyung Jeon Slaughter, Atif Mohammad, Emmanouil S. Brilakis, Subhash Banerjee, UT Southwestern, Dallas, TX

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**Yuhuang Li**, Hong Jin, Ljubica Perisic, Ekaterina Chernogubova, Alexandra Bäcklund, Peter Gustafsson, Olivera Werngren, Albert Busch, Suzanne Eken, Changyan Sun, Göran K Hansson, Gabrielle Paulsson-Berne, Ulf Hedin, Claes Bergmark, Lars Maegdefessel, Karolinska Instt, Stockholm, Sweden

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**Nelson A Lopez Sr.**, Hosp San Jose, Popayan, Colombia

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**Waqas A Malick**, Caron B Rockman, Yu Guo, Jinfeng Xu, Mark A Adelman, Jeffrey S Berger, NYU Sch of Med, New York, NY

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**Anastassia Pokutta-Paskaleva**, Emory Univ, Atlanta, GA; Rudolph L. Gleason, Georgia Inst of Technology, Atlanta, GA; Luke P. Brewster, Emory Univ, Atlanta, GA

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**Jerad Rogers**, Balakumar Jayakumar, Jeremy Patterson, Kim Cluff, Wichita State Univ, Wichita, KS

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**Cynthia St. Hilaire**, Univ of Pittsburgh, Pittsburgh, PA; Hui Jin, Yuting Huang, Dan Yang, Alejandra Negro, Avram Walts, Yangtengyu Liu, Jean-Michel Davaine, Robin Schwartzbeck, Natl Heart, Lung, and Blood Inst, Bethesda, MD; Zhen Yu, Natl Heart, Lung, and Blood Inst, bethesda, MD; Natalia Dmitrieva, Natl Heart, Lung, and Blood Inst, Bethesda, MD; Danielle Donahue, Natl Inst of Neurological Disorders and Stroke, Bethesda, MD; Guibin Chen, Manfred Boehm, Natl Heart, Lung, and Blood Inst, Bethesda, MD

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**Kaoru Tateno**, Yoshihide Fujimoto, Hiroshi Hasegawa, Toshio Nagai, Yoshio Kobayashi, Chiba Univ Graduate Sch of Med, Chiba, Japan

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**Nadav Teich**, Tel Aviv Sourasky Medical Ctr, Tel-Aviv, Israel; Benjamin Medalion, Belinson Medical Ctr, Petach Tiqva, Israel; Dmitry Pevni, Rephael Mohr, Amir Kramer, Yosef Paz, Nachum Nesher, Yanai Ben-gal, Tel Aviv Sourasky Medical Ctr, Tel-Aviv, Israel

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**Yung-Chun Wang**, Univ of Georgia, Athens, GA

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**Atsushi Yamashita**, Eiji Furukoji, Sayaka Moriguchi-Goto, Mio Kojima, Miyazaki Univ, Miyazaki, Japan; Chihiro Sugita, Kyusyu Univ of Health and Welfare, Nobeoka, Japan; Yuichiro Sato, Yujiro Asada, Miyazaki Univ, Miyazaki, Japan

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**Yasutaka Kawamura**, Awa Regional Medical Ctr, Chiba, Japan; So Nakaji, Nobuto Hirata, Kameda Medical Ctr, Chiba, Japan

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**Hema Kothari**, Univ of Virginia Health System, Charlottesville, VA; Rit Vatsyayan, Vijaya Mohan Rao, Univ of Texas Health Science Ctr, Tyler, TX

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**Walter Kraft**, Thomas Jefferson Univ, Philadelphia, PA; Jocelyn Gilmartin, Derek L Chappell, Merck & Co., Inc., Kenilworth, NJ; Srikanth Nagalla, Uhlas P Naik, Thomas Jefferson Univ, Philadelphia, PA; Rebecca E Wrishko, Sandra Zhang, Matt S Anderson, Merck & Co., Inc., Kenilworth, NJ

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**Yi Yao**, Jia-Hui Zhang, Chen He, Yuan-Liang Ma, Xiao-Fang Tang, Ying Song, Jing-Jing Xu, Ru Liu, Jin-Qing Yuan, State Key Lab of Cardiovascular Disease, Fuwai Hosp, Natl Ctr for Cardiovascular Diseases, Chinese Acad of Medical Sciences and Peking Union Medical Coll, Bejing, China

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**Abhishek Jain**, Andries D. van der Meer, Anne-Laure Papa, Riccardo Barrile, Wyss Inst at Harvard Univ, Boston, MA; Angela Lai, Carnegie Mellon Univ, Pittsburgh, PA; Benjamin L. Schlechter, Beth Israel Deaconess Medical Ctr at Harvard Medical Sch, Boston, MA; Monicah A. Otieno, Calvert S. Louden, Janssen Pharmaceutical Res and Development, Spring House, PA; Geraldine A. Hamilton, Emulate Inc, Cambridge, MA; Alan D. Michelson, Andrew L. Frelinger III, Boston Children's Hosp, Boston, MA; Donald E. Ingber, Wyss Inst at Harvard Univ, Boston, MA

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**Justin J Kang**, Liming Shu, Karl C Desch, Peter F Bodary, James A Shayman, Univ of Michigan, Ann Arbor, MI

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**Jeremy Lagrange**, Yvonne Weihert, Thomas Münzel, Susanne Karbach, Philip Wenzel, Univ Medical Ctr Mainz, Mainz, Germany

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**Qing Li**, Yuejin Yang, Fuwai Hosp, Beijing, China

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**Andreea Milasan**, Montreal Heart Inst, Montreal, QC, Canada; Nicolas Tessandier, Ctr de Recherche du Ctr Hospier Univire de Québec, Québec, QC, Canada; Sisareuth Tan, Alain Brisson, Inst de Chimie & Biologie des Membranes & des Nano-objets, Pessac, France; Eric Boilard, Ctr de Recherche du Ctr Hospier Univire de Québec, Quebec, QC, Canada; Catherine Martel, Montreal Heart Inst, Montreal, QC, Canada

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David E. Hall, Adrien Mann, Shannon M. Jones, Univ of Cincinnati, Cincinnati, OH; Nigel Mackman, Univ of North Carolina at Chapel Hill, Chapel Hill, NC; **A. Phillip Owens III**, Univ of Cincinnati, Cincinnati, OH

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**A. Valance Washington**, Univ of Puerto Rico, San Juan, PR

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**Jianbo Wu**, Univ of Missouri, Columbia, MO; Yan Yang, Lamei Xiao, Ni Chen, Yongjie Li, Xin Deng, Liqun Wang, Ningbo Pang, Sichuan Medical Univ, Luzhou, China; Hongmin Sun, Univ of Missouri, Columbia, MO

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Lipoproteins Transport Functional Non-human Small RNAs that Regulate Gene Networks Spanning Inflammation and Lipid Metabolism
**Ryan M Allen**, Shilin Zhao, Quanhu Sheng, MacRae F Linton, Kasey C Vickers, Vanderbilt Univ, Nashville, TN

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Metabolism of Multiple Apolipoproteins Across HDL Size in Humans
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Andrzej Witkowski, Gary K Chan, Nancy J Li, Children's Hosp Oakland Res Inst, Oakland, CA; Rui Lu, Shinji Yokoyama, Chubu Univ, Kasugai, Japan; **Giorgio Cavigiolio**, Children's Hosp Oakland Res Inst, Oakland, CA

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**Dongmei Cheng**, Wake Forest Sch of Med, Winston-Salem, NC; Xu Xu, Weill Cornell Medical Coll, New York, NY; Elena Boudyguina, Trang Simon, Zhiyong Deng, Melissa VerHague, Caleb Lord, Wake Forest Sch of Med, Winston-Salem, NC; J. Mark Brown, Cleveland Clinic Lerner Res Inst, Cleveland, OH; Ann-Hwee Lee, Weill Cornell Medical Coll, New York, NY; Richard B. Weinberg, John S. Parks, Wake Forest Sch of Med, Winston-Salem, NC

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The Molecular Interaction of Apolipoprotein A-I Containing High Density Lipoproteins with Lecithin: Cholesterol Acyl Transferase
**Allison Cooke**, John T. Melchior, Jamie C. Morris, Rong Huang, Univ of Cincinnati, Cincinnati, OH; W. Gray Jerome, Vanderbilt Univ, Nashville, TN; W. Sean Davidson, Univ of Cincinnati, Cincinnati, OH

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Cellular Pip2 is Effluxed By Abca1 to Apoa1 and Pip2 Is Carried on Hdl That Can be Delivered to Target Tissues via Sr-b1
**Kailash Gulshan**, Greg Brubaker, Heather Conger, Shuhui Wang, Renliang Zhang, Stanley L Hazen, Jonathan D Smith, Cleveland Clinic, Cleveland, OH

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Enhancement of Rat Lymphatic Lipid Transport by Glucose Ingestion
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Strenuous Exercise and Quercetin Intake Differentially Modulate PCSK9 and ANGPLT4 in Normal C57BL6 Mice
**Halleh Mahini**, Dhuha Alsayrafi, Tong Wu, Mahdi Garelnabi, Univ of Massachusetts Lowell, Lowell, MA

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**Jackson McAiney**, Corey Scipione, Daniel Simard, James Gauld, Michael Boffa, Marlys Koschinsky, Univ Of Windsor, Windsor, ON, Canada

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**Debi Swertfeger**, Hailong Li, Cincinnati Children's Hosp, Cincinnati, OH; Sandra Rebholz, Univ of Cincinnati, Cincinnati, OH; Amy S. Shah, Cincinnati Children's Hosp, Cincinnati, OH; W Sean Davidson, Univ of Cincinnati, Cincinnati, OH; L Jason Lu, Cincinnati Children's Hosp, Cincinnati, OH

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**Shuhui Wang**, Gregory Brubaker, Jonathan D. Smith, Cleveland Clinic, Cleveland, OH

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**Peggy Robinet**, Jonathan D Smith, Cleveland Clinic Fndn, Cleveland, OH

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Thomas Q de Aguiar Vallim, David J. Merriott, Joan Cheng, Angela Cheng, Univ of California, Los Angeles, Los Angeles, CA; Angel Baldan, David A. Ford, Saint Louis Univ, St. Louis, MO; Christopher N. Goulbourne, Univ of Columbia, New York, NY; **Elizabeth J Tarling**, Univ of California, Los Angeles, Los Angeles, CA

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End Stage Human Aneurysm Disease in Different Arterial Positions is Similar, Aneurysm Induction in Mouse Models is Not
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**Mei-Zhen Cui**, Feng Hao, Dong An, Fuqiang Zhang, Xuemin Xu, Univ of Tennessee, Knoxville, TN

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**Jessica L. Fetterman**, Monica Holbrook, Brittany D. Berk, Robert M. Weisbrod, Elica Inagaki, Erika A. Linder, Rosa Breton-Romero, Boston Univ Sch of Med, Boston, MA; Rachel Keith, Aruni Bhatnagar, Univ of Louisville, Louisville, KY; Naomi M. Hamburg, Boston Univ Sch of Med, Boston, MA

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**Andrew Holt**, Danielle Martin, Patti Shaver, Shaquria Adderley, Joshua Stone, Chintamani Joshi, Jake Francisco, Bob Lust, Brian Shewchuk, David Tulis, ECU, Greenville, NC
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**Tatsuo Kawai**, Steven J Forrester, Kunie Eguchi, Victor Rizzo, Satoru Eguchi, Temple Univ Sch of Med, Philadelphia, PA; Hang Fai Kwok, Univ of Macau, Taipa, Macau, China; Gillian Murphy, Univ of Cambridge, Cambridge, United Kingdom; Armando Rossello, Univ of Pisa, Pisa, Italy

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**Martin Landsberger**, Jens Ackermann, Stephan B Felix, Univ Med Greifswald, Greifswald, Germany; Johannes B Dahm, Heart and Vascular Ctr Neu-Bethlehem, Goettingen, Germany

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**Ka Hou Lao**, Dario Ummarino, Ajay Shah, Lingfang Zeng, King's Coll London, London, United Kingdom
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**Islam Mohamed**, Sheena Thomas, Kimberly Rooney, Roy Sutliff, Nick Willett, Charles Searles, Emory Univ, Decatur, GA

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Inflammasome-induced Endothelial Microparticles Exert Detrimental Effects on Recipient Vascular Cells
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**Hideto Sano**, Yuko Suzuki, Hiroki Tanaka, Takayuki Iwaki, Tetsumei Urano, Hamamatsu Univ Sch of Med, Hamamatsu, Japan

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**Qqilong Wang**, Zhonglin Xie, Huaiping Zhu, Ye Ding, Ming-Hui Zou, Georgia State Univ, Atlanta, GA

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Cystathionine γ-Lyase Modulates Flow-dependent Vascular Remodeling
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Non-reversed Increase In Shear Stress Magnitude Enhances Global Endothelial Cell Dna Methylation And Limits Extent of Collateral Artery Growth Following Femoral Arterial Ligation
**Joshua L Heuslein**, Richard J Price, Univ of Virginia, Charlottesville, VA

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Inhibition of MicroRNA-199a-5p Enhances Perfusion Recovery and Arteriogenesis Following Femoral Arterial Ligation
**Joshua L. Heuslein**, Richard J. Price, Univ of Virginia, Charlottesville, VA

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**Claire Molony**, Mariana Di Luca, Dublin City Univ, Dublin, Ireland; Jennifer McIntyre, Dublin Inst of Technology, Dublin, Ireland; Bryan Hennelly, Maynooth Univ, Maynooth, Ireland; Hugh J Byrne, Dublin Inst of Technology, Dublin, Ireland; Paul A Cahill, Dublin City Univ, Dublin, Ireland

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**Sylvia T Nurnberg**, Stephanie Testa, Joebert Rosal, Susannah Elwyn, Wei Zhao, Daniel J Rader, Univ of Pennsylvania, Philadelphia, PA

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**Jason A Brandon**, Julia Vandra, Margo Ubele, Susan Smyth, Univ of Kentucky, Lexington, KY
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**Claire M Buchta**, Chantel C McSkimming, Angela M Taylor, Coleen A McNamara, Univ of Virginia, Charlottesville, VA

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**Yiliang Chen**, Wenxin Huang, Moua Yang, Roy Silverstein, Blood Res Inst of Wisconsin, Milwaukee, WI

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Graft-Derived IL-6 Amplifies Proliferation and Survival of Effector T Cells that Drive Alloimmune-Mediated Vascular Rejection
Anna von Rossum, Kevin Rey, Winnie Enns, Rajan Cheema, Grace E MacEwan, Sukh Manku, **Jonathan C Choy**, Simon Fraser Univ, Burnaby, BC, Canada

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**Rosanna W.S. Chung**, Per Leanderson, Anna K Lundberg, Lena Jonasson, Linköping Univ, Linköping, Sweden

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**Matthew DeBerge**, Xin Yi Yeap, Daniel Procissi, Northwestern Univ, Chicago, IL; Ira Tabas, Columbia Univ, New York, NY; Edward Thorp, Northwestern Univ, Chicago, IL

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**Caitlin C Fermoyle**, Carolyn M Roos, Grace Casaclang-Verzosa, Bin Zhang, Jordan D Miller, Mayo Clinic, Rochester, MN

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Post-infarct Survival Depends on the Interplay of Monocytes, Neutrophils And Interferon Gamma in a Mouse Model of Myocardial Infarction
**Stefanie Finger**, Maike Knorr, Sabine Kossmann, Tanja Schönfelder, Susanne Karbach, Rebecca Schüler, Thomas Münzel, Philip Wenzel, Univ Medical Ctr of the Johannes Gutenberg-Univ, Mainz, Germany

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Smooth Muscle Cell-derived IL-17C Plays an Atherogenic Role via the Recruitment of Pro-inflammatory IL-17A$^{+}$ T Cells to the Aorta
Matthew J Butcher, Tayab C Waseem, **Elena V Galkina**, Eastern Virginia Medical Sch, Norfolk, VA

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**Bronson A Haynes**, Eric J Lehrer, Giann J Bhatt, Ryan W Huyck, Ashley N James, Anca D Dobrian, Eastern Virginia Medical Sch, Norfolk, VA

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**Thomas Jansen**, Swenja Kröller-Schön, Eberhard Schulz, Thomas Münzel, Univsmedizin Mainz, Mainz, Germany

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**Susanne Karbach**, Nives Hörmann, Sven Jäckel, Tanja Schönfelder, Rebecca Schüler, Stefanie Finger, Sabine Kossmann, Maike Knorr, Moritz Brandt, Eivor Wilms, Inês Brandão, Ari Waisman, Thomas Münzel, Univ Medical Ctr

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**Allison E Norlander**, Mohamed A Saleh, Arvind Pandey, Hana A Itani, Vanderbilt Univ, Nashville, TN; Jing Wu, Univ of Iowa, Iowa City, IA; Bethany Dale, David G Harrison, Meena S Madhur, Vanderbilt Univ, Nashville, TN

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**Kaitlyn Rinehold**, Coen vanSolingen, Elizabeth J. Hennessy, Kathryn J. Moore, NYU Medical Ctr, New York, NY

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**Alison Schroer**, W. David Merryman, Vanderbilt Univ, Nasvhille, TN

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**Shalina Taylor**, Jan-Renier Moonen, Kazuya Miyagawa, Mingxia Gu, Silin Sa, Jan Hennigs, Lingli Wang, Marlene Rabinovitch, Stanford Univ, Stanford, CA

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**Dennis Wolf**, Nathaly Anto Michel, Ingo Hilgendorf, Christoph Bode, Andreas Zirlik, Univ Heart Ctr Freiburg, University of Freiburg, Germany

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Heng Zhang, Zhenhua Zhai, Yao Li, Yueping Shi, **Ming-sheng Zhou Sr.**, Liaoning Medical Univ, Jinzhou, China

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Elucidating the Genetic Determinants of Extreme High-density Lipoprotein Phenotypes Using Next-generation Sequencing
**Jacqueline S Dron**, Jian Wang, Adam D McIntyre, John F Robinson, Matthew R Ban, Henian Cao, Robarts Res Inst, Western Univ, London, ON, Canada; David Rhainds, Guillaume Lettre, Marie-Pierre Dubé, Jean-Claude Tardif, Montréal Heart Inst, Univ de Montréal, Montréal, QC, Canada; Robert A Hegele, Robarts Res Inst, Western Univ, London, ON, Canada

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**Jan K Hennigs**, Caiyun Grace Li, Kazuya Miyagawa, Matthew Roughley, Matthew V Elliott, Aiqin Cao, Isabel Diebold, Lingli Wang, Marlene Rabinovitch, Stanford Univ, Stanford, CA

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**Masahiro Koseki**, Ayami Saga, Takuya Kobayashi, Masumi Asaji, Takeshi Okada, Ryota Kawase, Koichi Tomita, Keigo Osuga, Sachiko Ezoe, Osaka Univ Graduate Sch, Suita, Osaka, Japan; Makoto Nishida, Osaka Univ, Toyonaka, Osaka, Japan; Yasushi Sakata, Shizuya Yamashita, Osaka Univ Graduate Sch, Suita, Osaka, Japan

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**Ana M Blazquez-Medela**, Medet Jumabay, Kristina I. Bostrom, UCLA, Los Angeles, CA

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**Elizabeth Castro Rivera**, Univ Central del Caribe, Bayamon, PR; Abdías Díaz Rosado, Anthony V Washington, Univ of Puerto Rico- Rio Piedras, San Juan, PR

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Modulating VEGFR3 Signaling by Epsins Regulates Lymphatic Dysfuntion in Diabetes
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Induction of Lysosomal Biogenesis in Adipose Tissue Macrophages Attenuates Inflammation and Cardiometabolic Disease
**Trent D Evans**, Ismail Sergin, Xiangyu Zhang, Somashubhra Bhattacharya, Babak Dehestani, Babak Razani, Washington Univ in St. Louis, St. Louis, MO

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Holly M Smith, Vanderbilt Univ Medical Ctr, Nashville, TN; Muredach P Reilly, Univ of Pennsylvania, Philadelphia, PA; **Jane F Ferguson**, Vanderbilt Univ Medical Ctr, Nashville, TN

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Ineffective Suppression of Adipocyte Lipolysis in Metabolic Syndrome: An *in vivo* Test for Adipocyte Insulin Resistance
**Jennifer Lynn Ford**, The Pennsylvania State Univ, University Park, PA; Raymond C Boston, Univ of Pennsylvania Sch of Veterinary Med, New Bolton Center, PA; Rachel E Walker, Gregory C Shearer, The Pennsylvania State Univ, University Park, PA

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**Robert N Helsley**, Yipeng Sui, Se-Hyung Park, Zun Liu, Univ of Kentucky, Lexington, KY; Richard G. Lee, Ionis Pharmaceuticals, Inc., Carlsbad, CA; Beibei Zhu, Philip A. Kern, Changcheng Zhou, Univ of Kentucky, Lexington, KY

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TRAIL Deletion in Mice Promotes Vascular Insulin Resistance
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**Hadii M Mamudu**, Timir Paul, Liang Wang, Sreenivas P. Veeranki, Hemang B Panchal, Arsham Alamian, Pooja Subedi, Matthew Budoff, East Tennessee State Univ, Johnson City, TN

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Abraham Behrmann, Jeffrey McDonald, Megan Mead, Bindu Ramachandran, Su-Li Cheng, John Stabley, UT Southwestern Medical Ctr, Dallas, TX; Bart Williams, Van Andel Res Inst, Grand Rapids, MI; **Dwight A Towler**, UT Southwestern Medical Ctr, Dallas, TX

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**Wing Tak Wong**, Shuangtao Ma, Houston Methodist Res Inst, Houston, TX; Yu Huang, Xiaoyu Tian, Chinese Univ of Hong Kong, Hong Kong, Hong Kong

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Alpha Keto Acids Decompose Peroxides and Prevents Oxidation of Lipoproteins
**Chandrakala Aluganti Narasimhulu**, Kathryn Young Burge, Yu Yuan, Sampath Parthasarathy, The Univ of Central Florida, Orlando, FL

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**Marcel den Hoed**, Lisa Conrad, Manoj Bandaru, Anastasia Emmanouilidou, Petter Ranefall, Carolina Wählby, Anders Larsson, Erik Ingelsson, Uppsala Univ, Uppsala, Sweden

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**Lidiya G. Dimova**, Jan Freark de Boer, Henkjan J Verkade, Uwe J Tietge, Univ Medical Ctr Groningen, Groningen, Netherlands

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High-density Lipoprotein Cholesterol Efflux Does Not Predict Cardiovascular Risk in Hemodialysis Patients
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**Ron C Hoogeveen**, Baylor Coll of Med, Houston, TX; Mingyuan Shao, Kathy Wolski, Rishi Puri, Cleveland Clinic, Cleveland, OH; Christie M Ballantyne, Baylor Coll of Med, Houston, TX; Stephen J Nicholls, Cleveland Clinic, Cleveland, OH

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**Linzhang Huang**, Ken Chambliss, Mohamed Ahmed, Chieko Mineo, Philip W Shaul, UT Southwestern Medical Ctr, Dallas, TX

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**Sangderk Lee**, Univ of Kentucky, Lexington, KY; Richard Lee, Mark Graham, Ionis Pharmaceuticals, Carlsbard, CA; Lihua Yang, Seonwook Kim, Seongu Kim, Debra Rateri, Ryan Temel, Univ of Kentucky, Lexington, KY; Aldons Lusis, Judith Berliner, UCLA, Los Angeles, CA

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Xin Li, Yuqi Cui, Tao Tan, The Ohio State Univ Medical Ctr, Columbus, OH; Chandrakala Narasimhulu, Univ of Central Florida Coll of Med, Orlando, FL; Yuan Xiao, Jia Zhang, Hong Hao, Lingjuan Liu, Jianjie Ma, The Ohio State Univ Medical Ctr, Columbus, OH; Catherine Verfaillie, Univ of Leuven, Leuven, Belgium; Sampath Parthasarathy, Univ of Central Florida Coll of Med, Orlando, FL; Hua Zhu, **Zhenguo Liu**, The Ohio State Univ Medical Ctr, Columbus, OH

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**Chinedu C Ochin**, Mahdi Garelnabi, Univ of Massachusetts Lowell, Lowell, MA

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**Shailendra B Patel**, Univ of Cincinnati, Cincinnati, OH

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**Sonja Pijut**, Yuhuan Wang, Lisa Bennett, Univ of Kentucky, Lexington, KY; Richard Lee, Ionis Pharmaceuticals, Carlsbad, CA; Gregory Graf, Univ of Kentucky, Lexington, KY

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Novel Chimeric Anti-proteoglycan Antibody Inhibits Arterial Retention of Proatherogenic Lipoproteins in a Rat Model of Insulin Resistance
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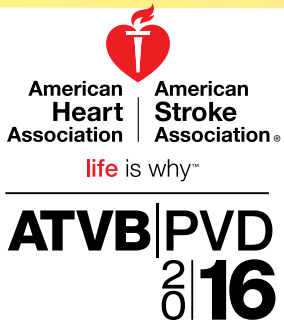


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