



American Heart Association | American Stroke Association®

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ATVB | PVD
20 | 15

Arteriosclerosis, Thrombosis and Vascular Biology | Peripheral Vascular Disease

Scientific Sessions 2015

Final Program and Abstracts

May 7-9, 2015 | Hilton San Francisco Union Square Hotel | San Francisco, California

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

my.americanheart.org

Program at a Glance

	Wednesday May 6, 2015	Thursday May 7, 2015	Friday May 8, 2015	Saturday May 9, 2015	
7:00 AM	<i>Separate registration may be required for the meetings listed below.</i>	Registration, Continental Breakfast, Exhibits	Registration, Continental Breakfast, Exhibits		
7:30 AM		Early Career Training Session	Early Career Training Session		
8:00 AM	8:00–6:00 VRIC 2015	8:00–10:00 Conference Opening and Plenary Session I Functional Genomics: Enhancer Biology and Epigenetics	8:00–9:30 Plenary Session III Highlights from the <i>ATVB Journal</i>	Registration	
8:30 AM				8:30–10:30 Poster Session and Continental Breakfast	
9:00 AM					
9:30 AM			10:00–10:30 Refreshment Break/ Exhibits	9:30–10:00 Refreshment Break/ Exhibits	
10:00 AM				10:00–11:45 Concurrent Session III	
10:30 AM			10:30–12:15 Concurrent Session I A – Mechanisms of Atherosclerosis B – Molecular, Developmental and Cellular Biology of the Vessel Wall C – Translational Science of Vascular Medicine: Molecular Imaging	A – Lipoprotein Metabolism and Therapeutic Targets B – Blood Coagulation and Antithrombotic Therapy C – Aortic Aneurysm and Carotid Artery Disease	10:30–NOON Plenary Session V Invited Lecture Series Hoeg Award Lecture Keynote Lecture Distinguished Lecture
11:00 AM					
11:30 AM				11:45–1:00 The Mentor of Women Award Luncheon <i>(ticket required)</i> PVD Luncheon <i>(ticket required)</i> Or lunch on your own	
NOON			NOON–6:00 KinMet		NOON Closing Remarks/Adjourn
12:30 PM			12:15–1:15 Meet the Professor Luncheon <i>(ticket required)</i> Or lunch on your own		
1:00 PM	1:00–6:00 CAAC Symposium	1:15–2:45 Plenary Session II Inflammation, Thrombosis and Vascular Disease	1:00–3:00 Plenary Session IV Young Investigator Award Competition Brinkhous Prize and Page Award	HDL Structure–Function Workshop Saturday/Sunday <i>Separate registration required</i>	
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM		2:45–3:15 Refreshment Break/ Exhibits	3:00–3:30 Refreshment Break/ Exhibits		
3:30 PM		3:15–5:00 Concurrent Session II A – Apolipoproteins and Lipid Metabolism B – Immunity and Inflammation in Vascular Biology and Thrombosis C – Translational Science of Vascular Medicine: Mechanistic Biomarkers	3:30–5:15 Concurrent Session IV A – Diabetes, Obesity and Metabolic Disorders B – Platelet Production, Signaling and Function C – Genomics, Epigenomics and Stem Cells in Vascular Disease		
4:00 PM					
4:30 PM			4:30–6:30 Next-Generation Technology Bootcamp		
5:00 PM		5:00–5:30 Special NHLBI Report			
5:30 PM		5:30–7:30 Poster Session and Reception	5:30–7:30 Poster Session and Reception		
6:00 PM					
6:30 PM					
7:00 PM	7:00–10:00 CAAC Reception and Dinner				
7:30 PM			7:30–10:30 ATVB PVD Council Dinner <i>(ticket required)</i>		
8:00 PM					

Legend:

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

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Save the Date!

ATVB/PVD 2016 Scientific Sessions

May 4–6, 2016 | Omni Nashville | Nashville, Tennessee

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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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 2015 Scientific Sessions.

The conference 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, vascular biology, functional genomics, peripheral vascular disease, and vascular surgery. 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, there will be oral presentations of selected abstracts, and 3 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. On Friday, in collaboration with the Council on Functional Genomics and Translational Biology, a first-of-its-kind, hands-on Next-Generation Technology Bootcamp is planned that will teach attendees how to leverage and use cutting-edge genomic technologies, and specifically to use publicly available resources in their research. Pre-registration is required to attend the Bootcamp.

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.

We hope you will find the ATVB|PVD 2015 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,



Muredach P. Reilly,
MB, MS, FAHA
Chair, ATVB/PVD
2015 Scientific Sessions



Philip S. Tsao, PhD
Vice Chair, ATVB/PVD
2015 Scientific Sessions

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

***The American Heart Association thanks the ATVB and PVD Councils for their contribution
in support of the ATVB Travel Awards for Young Investigators.***

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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Alisa Wolberg, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Invited Presenters

Sonia Anand, MD, PhD, FRCPC, McMaster University, Hamilton, Ontario, Canada
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Alan Daugherty, PhD, DSc, FAHA, University of Kentucky, Lexington, Kentucky
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Esther Lutgens, MD, PhD, University of Amsterdam, Amsterdam, Netherlands
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Janet D. Sparks, PhD, FAHA, University of Rochester Medical Center, Rochester, New York
Ahmed Tawakol, MD, Massachusetts General Hospital, Boston, Massachusetts
Roger Y. Tsien, PhD, Howard Hughes Medical Institute, UCSD, San Diego, California



Invited Moderators

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Abstract Reviewers

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

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Jennifer Hall, PhD	Iraklis I. Pipinos, MD	Baohui Xu, MD, PhD
David G. Harrison, MD, FAHA	Henry Pownall, PhD	Wei Zhou, MD

Room Locator

Wednesday, May 6	
CAAC Symposium (ticket required)	Plaza Room B Lobby Level
CAAC China Night Reception and Dinner (ticket required)	Plaza Room A Lobby Level
CSATVB Poster Session and Reception	Imperial Ballroom B Ballroom Level
KinMet 2015	Plaza Room B Lobby Level
Exhibits	Yosemite Room Ballroom Level
Registration	Yosemite Room Ballroom Level
Speaker Resource Room	Yosemite Room Ballroom Level
Vascular Research Initiatives Conference (VRIC) 2015 (separate registration required)	Imperial Ballroom A Ballroom Level
Thursday, May 7	
Communication Center	Yosemite Room Ballroom Level
Continental Breakfast	Yosemite Room Ballroom Level
Concurrent Session A	Imperial Ballroom A Ballroom Level
Concurrent Session B	Imperial Ballroom B Ballroom Level
Concurrent Session C	Plaza Room A Lobby Level
Early Career Training	Imperial Ballroom A Ballroom Level
Exhibits	Yosemite Room Ballroom Level
Meet the Professor Luncheon (ticket required)	Plaza Room B Lobby Level
Moderated PVD Poster Session	Grand Ballroom B Grand Ballroom Level
Plenary Sessions	Grand Ballroom B Grand Ballroom Level
Poster Session and Reception	Grand Ballroom A Grand Ballroom Level
Refreshment Breaks	Yosemite Room Ballroom Level
Registration	Yosemite Room Ballroom Level
Speaker Resource Room	Yosemite Room Ballroom Level

Friday, May 8	
Communication Center	Yosemite Room Ballroom Level
Continental Breakfast	Yosemite Room Ballroom Level
Young Investigator Award Competition	Grand Ballroom Lower Concourse
Concurrent Session A	Imperial Ballroom A Ballroom Level
Concurrent Session B	Imperial Ballroom B Ballroom Level
Concurrent Session C	Plaza Room A Lobby Level
Early Career Training	Imperial Ballroom A Ballroom Level
Exhibits	Yosemite Room Ballroom Level
Mentor of Women Award Luncheon (ticket required)	Plaza Room B Lobby Level
Next Generation Technology Bootcamp (ticket required)	Plaza Room B Lobby Level
PVD Luncheon (ticket required)	Franciscan A Ballroom Level
Plenary Sessions	Grand Ballroom B Grand Ballroom Level
Poster Session and Reception	Grand Ballroom A Grand Ballroom Level
Refreshment Breaks	Yosemite Room Ballroom Level
Registration	Yosemite Room Ballroom Level
Speaker Resource Room	Yosemite Room Ballroom Level
ATVB/PVD Joint Council Dinner (ticket required)	Continental Ballroom 4-5 Ballroom Level
Saturday, May 9	
Communication Center	Yosemite Room Ballroom Level
Continental Breakfast	Grand Ballroom A Grand Ballroom Level
HDL Workshop 1:30–6:00 PM	Plaza A/B Lobby Level
Plenary Sessions	Grand Ballroom B Grand Ballroom Level
Poster Session	Grand Ballroom A Grand Ballroom Level
Registration	Yosemite Room Ballroom Level
Speaker Resource Room	Yosemite Room Ballroom Level
Sunday, May 10	
HDL Workshop 8:00 AM–12:00 PM	Plaza A/B Lobby Level

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 format is designed to provide 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. Review recent advances in knowledge regarding the role of LDL-C and non-HDL-C in atherosclerosis, the 2013 ACC/AHA cholesterol guidelines, and the clinical implications for improving cardiovascular outcomes.
2. 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.
3. Identify current controversies in the contribution of HDL-C to atherosclerosis and their clinical implications.
4. Evaluate recent research related to HDL-C mechanisms in cardiovascular disease including HDL-C function assessment and implications for the prevention and treatment of atherosclerosis.
5. Review the latest research into the signaling and genetic pathways involved in vascular dysfunction; the implications of such research for new therapeutic options and management; and participate in the Next Generation Technology Bootcamp on genomics.
6. Describe current efforts to reverse atherosclerotic damage through medical therapy and vascular regeneration.
7. Identify novel genomic and circulating biomarkers that could be used to assess CVD risk and discuss the strengths and weaknesses of each.
8. Describe the biology of cardiometabolic pathways and risk factors as they relate to the development and progression of cardiovascular disease and diabetes, and discuss potential options for management.
9. Review novel mechanisms and emerging antithrombotics that reduce atherothrombosis without increasing the bleeding risk.

Exhibits

Beginning Wednesday afternoon, visit the **Exhibits**, located in the Yosemite Room. 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 the **Yosemite Room**, across from the registration desk. Speakers are asked to deliver their presentations on CD-ROM, DVD-ROM or a USB storage device to the Speaker Resource Room at least 3 hours before the beginning of the session in which they will speak. Presenters who will speak on Thursday, May 7 may check in beginning at 3:00 PM on Wednesday, May 6, but we request that you check in before 6:00 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 both PCs and Mac computers. The Speaker Resource Room will be open during the following hours:

Wednesday, May 6 3:00–7:00 PM	Thursday, May 7 7:00 AM–6:00 PM	Friday, May 8 7:00 AM–6:00 PM	Saturday, May 9 7:30–10:30 AM
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Abstract Presentations

Abstracts presented at ATVB/PVD 2015 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 1–64 will be presented orally.

Abstracts 100–724 will be presented as posters as follows:

Poster Session I: Thursday, May 7, 5:30–7:30 PM (attended), abstracts 100–306.

Poster Session II: Friday, May 8, 5:30–7:30 PM (attended), abstracts 307–513.

Poster Session III: Saturday, May 9, 8:30–10:30 AM (attended), abstracts 520–724.

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

Poster Session Date	Presentation Time	Attendance Time	Set-up Time	Tear-Down Time
Session I Thursday, May 7	5:30–7:30 PM	5:30–7:30 PM	11:00 AM–4:30 PM	7:30–8:30 PM
Session II Friday, May 8	5:30–7:30 PM	5:30–7:30 PM	11:00 AM–4:30 PM	7:30–9:30 PM
Session III Saturday, May 9	8:30–10:30 AM	8:30–10:30 AM	10:00 PM Friday– 8:00 AM Saturday	10:30 AM–12:30 PM Saturday

ePosters

In addition to the traditional poster format, poster abstract presenters were invited to upload their posters electronically. During the meeting, 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.

QR Codes for ePosters

QR codes enable attendees with smartphones to view ePosters and, if applicable, the author's narration of the poster. QR codes for all ATVB/PVD ePosters will be displayed on the poster boards.

Conference Highlights – Early Career Activities and Ticketed Events

Early Career Activities

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

Thursday, May 7, 7:00–8:00 AM

Early Career Training Session

Succeeding at Every Stage: Insights from the Early Career Committee

Imperial Ballroom A

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 who have been highly successful in the subject area.

Applying for Your First Grant as PI: Tips from New Investigators

Jordan Miller, PhD, Mayo Clinic, Rochester, MN

Thomas Vallim, PhD, UCLA, Los Angeles, CA

Randal Westrick, PhD, University of Michigan, Ann Arbor, MI

Building a Successful International Research Program 1: Perspectives from Asia

Hanrui Zhang, MD, PhD, University of Pennsylvania, Philadelphia, PA

Miao Wang, PhD, Peking Union Medical College and Chinese Academy of Medical Sciences, Beijing, China

Hong Yu, PhD, Zhejiang University School of Medicine, Hangzhou, China

Xiuping Chen, PhD, University of Macau, Macau, China

Masanori Aikawa, MD, PhD, Brigham and Women's Hospital, Harvard Medical School, Boston, MA

Building a Successful International Research Program 2: Perspectives from Europe

Lars Maegdefessel, MD, PhD, Karolinska Institute, Stockholm, Sweden

Esther Lutgens, MD, PhD, University of Amsterdam, Amsterdam, Netherlands

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

"I Didn't Get My Grant: Now What?!": Response to Reviews & Common Mistakes

Katey Rayner, PhD, University of Ottawa Heart Institute, Ottawa, ON, Canada

Catherine Martel, PhD, Montreal Heart Institute, Montreal, QC, Canada

Guests from Stanford grant office:

Sofie Kleppner, PhD, Associate Dean for Postdoctoral Affairs, Stanford University

Crystal Botham, PhD, Director of Strategic Research Development, Stanford University

Know your KangaR00: Preparing a Successful K99/R00 Application

Gabrielle Fredman, PhD, Columbia University, New York, NY

Cynthia St. Hilaire, PhD, NIH/NHLBI, Bethesda, MD

Friday, May 8, 7:00–8:00 AM

Early Career Training Session

Imperial Ballroom A

Join us for an informal session and panel discussion entitled "Breaking Into Translational Research for the PhD Scientist". This informal panel discussion is led by an expert group of basic scientists who have successfully incorporated translational components into their research careers and built bridges between basic and clinical science. The goal of this session is to encourage post-docs and junior faculty in the translation from bench to bedside.

Panel:

Gary Owens, PhD, University of Virginia, Charlottesville, VA

Jennifer Hall, PhD, University of Minnesota, Minneapolis, MN

Philip S. Tsao, PhD, Stanford University School of Medicine and VA Palo Alto Health Care System, Stanford, CA

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

New in 2015

Translational Science of Vascular Medicine on Thursday (morning and afternoon) includes integrated 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 sessions emphasize Molecular Imaging and Mechanistic Biomarkers and include invited talks as well as oral abstract presentations. There will be a special report from Zorina Galis, PhD, Chief of the NHLBI Vascular Biology and Hypertension Research Branch. Her report will highlight the NHLBI Perspective on Translational Opportunities for the ATVB and PVD Communities.

Also on Thursday, in Grand Ballroom B, beginning at 5:45 PM, there will be a moderated and innovative electronic poster session featuring PVD-related abstracts. This session is open to all conference registrants.

On Friday, May 8, the **Next Generation Technology Bootcamp** will be held in Plaza Room B from 4:30-6:30 PM. This session will cover gene regulation and epigenetics (ENCODE and other computational datasets) and genome editing with the CRISPR/Cas9 system. A separate ticket is required to attend. *This session is 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.

The **Meet the Professor Luncheon** will be held in Plaza Room B, located on the Lobby Level, on Thursday, May 7, at 12:15 PM. Expert roundtables on various topics will be hosted by faculty and members of the Early Career Committee. A ticket (\$25) is required to attend. A list of participating faculty will be available at the ATVB|PVD Registration Desk.

Please join us in Plaza Room B, located on the Lobby Level, on Friday, May 8, at 11:45 AM for the **Mentor of Women Award Luncheon**, hosted by the ATVB Women's Leadership Committee. The featured luncheon speaker is Hannah Valentine, MD, Chief Officer for Scientific Workforce Diversity at the National Institutes of Health, and a senior scientist in the intramural research program. Dr. Valentine will present on **Faculty Career Flexibility – National Imperative**. 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 fee of \$45 is required to attend this event.

The **PVD Council Luncheon** will be held in Franciscan A, located on the Ballroom Level, on Friday, May 8, at 11:45 AM. Please join the PVD Council to acknowledge the 2015 recipients of the Hobson Award and the Mid-Career Investigator Award, recognize new FAHAs and network with colleagues. The luncheon is open to all attendees; however, a ticket is required. A separate, nonrefundable fee of \$35 is required to attend this event.

Also on Friday, join your colleagues for food, drinks and entertainment at the **ATVB/PVD Joint Council Dinner**, to be held in Continental Ballroom 4-5. Tickets, if available, may be purchased at Registration (\$60 per person for registrants and their guests; \$30 for early career/student/trainee attendees).



Conference Highlights – Lectures and Awards

On Saturday morning, May 9, 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 Keynote Lecture and the Distinguished Lecture.



At 10:30 AM, **Alan E. Mast, 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 in 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.

Alan Mast received a B.S. degree in biochemistry at the University of Illinois, graduating Summa Cum Laude. He enrolled in the Medical Scientist Training Program at Duke University where he obtained MD and PhD degrees and was elected into Alpha Omega Alpha. His doctoral research focused on the structure and function of the serpin superfamily of protease inhibitors. A key finding from this work was the description of the structural mechanism for the polymerization and inactivation of serpins that have now been associated with several diseases including $\alpha 1$ -antitrypsin deficiency. Dr. Mast performed residency training in Laboratory Medicine and post-doctoral research at Washington University in St. Louis where he began studies of Tissue Factor Pathway Inhibitor (TFPI). His graduate school and post-doctoral work led to receipt of the 1998 Presidential Early Career Award for Scientists and Engineers (PECASE) during the Clinton Administration. He served as Director of the Transfusion Medicine Service and Hematology and Coagulation Laboratories at the VA Medical Center in Memphis, TN and continued basic research studies of TFPI biology. He moved to Blood Center of Wisconsin in 2003 where he is currently a Senior Investigator at the Blood Research Institute. He is a recipient of an Established Investigator Award from the American Heart Association and maintains NIH-funded clinical and basic science research programs. His clinical research interests are in anemia and iron metabolism in blood donors. His basic research interests are in blood coagulation with a particular focus on TFPI.

The title of Dr. Mast's presentation is **Tissue Factor Pathway Inhibitor: Multiple Anticoagulant Activities for a Single Protein**.



The **Keynote Lecture** will be presented at 11:00 AM by **Garret A. FitzGerald, MD, FRS**. 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.

Dr. FitzGerald will lecture on **Molecular Clocks and Cardiometabolic Disease**.

Conference Highlights – Lectures and Awards (continued)



At 11:30 AM, **Roger Y. Tsien, PhD**, will present the **Distinguished Lecture on Imaging Protease Activities and H₂O₂ in Atherosclerosis, Stroke and Related Models**. Dr. Tsien is an Investigator at the Howard Hughes Medical Institute and Professor in the Departments of Pharmacology and of Chemistry and Biochemistry at the University of California, San Diego.

Dr. Tsien is a member of the National Academy of Sciences and the Royal Society. He is best known for designing and building molecules that either report or perturb signal transduction inside living cells. These molecules, created by organic synthesis or by engineering naturally fluorescent proteins, have enabled many new insights into signaling. He is now developing new ways to target contrast agents and therapeutic agents to tumors and sites of inflammation or thrombosis, based on their expression of extracellular proteases, and to highlight peripheral nerves to aid surgery.

Dr. Tsien received the Artois-Baillet-Latour Health Prize (1995), Gairdner Foundation International Award (1995), Award for Creative Invention from the American Chemical Society (2002), Heineken Prize in Biochemistry and Biophysics (2002), Wolf Prize in Medicine (shared with Robert Weinberg, 2004), Rosenstiel Award (2006), E.B. Wilson Medal of the American Society for Cell Biology (shared with M. Chalfie, 2008), and Nobel Prize in Chemistry (shared with O. Shimomura and M. Chalfie, 2008) and the Jeffrey M. Hoeg Award in 2014.



Catherine C. "Lynn" Hedrick, PhD, FAHA, is the 2015 recipient of the **Mentor of Women Award**, which will be presented at the Mentor of Women Luncheon on Friday, May 8. 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. Hedrick is a Professor in the Division of Inflammation Biology at the La Jolla Institute for Allergy and Immunology in La Jolla, California. Her research has focused on lipoproteins, atherosclerosis, and vascular biology for over 20 years. In the last several years, her research has primarily focused on monocyte development in bone marrow and the functions of monocytes in circulation, particularly in how monocytes interact with vascular endothelium. A second key current research program in her laboratory focuses on

changes that occur in T lymphocytes by cholesterol and oxidized lipids during atherosclerosis progression. Lynn has mentored over 25 graduate students and postdoctoral fellows. She has received research funding from both the National Institutes of Health and the American Heart Association, as have her many prior and current graduate students and postdoctoral fellows. She has served on numerous committees for the ATVB Council, including the Women's Leadership Committee, the ATVB Leadership Committee, the ATVB Nominations Committee, and the Program Committees for both the Scientific Sessions and ATVB Spring meeting. She was the recipient of an ATVB Special Recognition Award in Vascular Biology in 2013 and the Jeffrey M. Hoeg Award in 2014.

The **2015 ATVB Journal Early Career Investigator Awards** will be presented during Plenary Session III on Friday, May 8, from 8:00–9:30 AM. 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

Laurent Yvan-Charvet, PhD, Research Center C3M, UMR INSERM U1065/UNS, Nice, France, for his paper:

Deficiency of ATP Binding Cassette Transporter B6 in Megakaryocyte Progenitors Accelerates Atherosclerosis in Mice



Karl Link Early Career Investigator Award in Thrombosis

Judith Cosemans, PhD, Maastricht University, Maastricht, Netherlands, for her paper:

Factor XII Regulates the Pathological Process of Thrombus Formation on Ruptured Plaques



Werner Risau Early Career Investigator Award in Vascular Biology

Heidi Noels, PhD, RWTH Aachen University, Aachen, Germany, for her paper:

Deficiency of Endothelial Cxcr4 Reduces Reendothelialization and Enhances Neointimal Hyperplasia After Vascular Injury in Atherosclerosis-prone Mice

Conference Highlights – Lectures and Awards (continued)

Also on Friday, May 8, at 1:00 PM, 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 ATVB/PVD Joint Council Dinner.

ATVB Kenneth M. Brinkhous Young Investigator Prize in Thrombosis Finalists

Name	Presentation Number
Cristina Puy	42
Andrea Rothmeier	43
Lei Yuan	44
Binggang Xiang	45


ATVB Irvine H. Page Young Investigator Research Award Finalists

Name	Presentation Number
Andrew Murphy	46
Prabhakara Nagareddy	48
Fatiha Tabet	47
Thomas de Aguiar Vallim	49


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 ATVB/PVD Joint Council Dinner.

ATVB Junior Investigator Award Winner for Women Finalists

Name	Presentation Number
Alexandra Chadwick	104
Belinda Di Bartolo	103
Dalia Gaddis	20
Delphine Gomez	60
Sara McCurdy	102



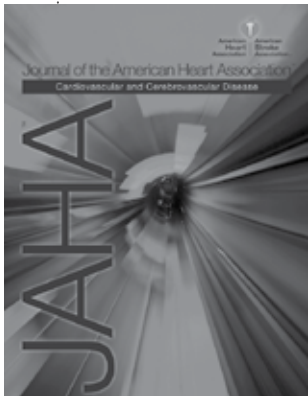
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Conference Highlights – Lectures and Awards (continued)

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
Francis Alenghat	137
Megan Brophy	307
Scott Cameron	57
Nicolle Ceneri	142
Charlene Dunaway	555
Khatuna Gabunia	146
Shuhong Hu	5
Jennie Lin	196
Kevin Mangum	63
Clint Miller	62
Paul Mueller	158
Vivek Nanda	38
My-Anh Nguyen	571
Jun Ren	236
Ismail Sergin	4
Esther Smeets	585
Yipeng Sui	531
Xiaoli Sun	166
Hagai Tavori	29
Coen van Solingen	14
Kuei-Chun Wang	427
Yiming Xu	10
Fei Yang	173
Hussein Yassine	30

The American Heart Association Council on Peripheral Vascular Disease is pleased to announce the winners of the following council sponsored awards. These awardees will be recognized during the PVD Council Luncheon and presented with the awards during the ATVB/PVD Joint 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
Jose Diaz	24

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
Shi-Fang Yan	512

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
Brittany Balint	249
Hendrik Gremmels	25
Duy Ha	40
Martin Teraa	510
Yong Wang	719

Web Resources

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.

My.americanheart.org

My AmericanHeart for Professionals 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 access to all 12 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 2015 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.



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Policy Information

Disclaimer

The Arteriosclerosis, Thrombosis and Vascular Biology/Peripheral Vascular Disease 2015 Scientific Sessions is a scientific and educational conference for the purpose of 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 2015 are embargoed for release at the time of presentation. Information may not be released before the scheduled presentation time.

No Smoking Policy

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

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.

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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.

Start planning now for ATVB/PVD 2016 Scientific Sessions in Nashville, Tennessee, May 4–6!

Submit Abstracts

Submissions Open Wednesday, October 14, 2015

Submissions Close Wednesday, January 13, 2016

Presenting your science at ATVB/PVD 2016 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 cites, 5-Year Impact Factor, *Article Influence*[®] Score, and *Eigenfactor*[®] Score among all journals in the Peripheral Vascular Disease and Hematology subject categories, according to the 2013 *Journal Citation Reports*[®] (Thomson Reuters, 2014).

Other Meetings of Interest

The following conferences/symposia are not part of the educational activities of ATVB/PVD 2015:

Vascular Research Initiatives Conference – Vascular Biology in Translation **Wednesday, May 6, San Francisco Union Square Hotel**

A separate registration fee is required to attend.

The 29th 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.

Metabolic Vascular Disease Symposium and China Night **May 6, 2015, Hilton San Francisco Union Square 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. Separate registration and fee is required to attend.

Kinetics-Metabolism 2015 **Wednesday, May 6, San Francisco Union Square Hotel**

Scientists interested in lipoprotein and cellular metabolism and kinetic modeling are invited to attend KinMet 2015. There is no additional cost to attend this meeting, and all registrants are invited to attend.

2015 Workshop on HDL Structure-Function **Saturday and Sunday, May 9–10, San Francisco Union Square Hotel**

On Saturday afternoon, May 9, immediately following ATVB/PVD 2015, plan to attend the HDL Workshop, a gathering of experts in HDL research to share and discuss current basic and clinical studies. There is no cost to attend, but registration is limited.



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Program Agenda

THURSDAY, MAY 7

7:00 AM

Yosemite Room

Registration, Continental Breakfast and Exhibits

7:00–8:00 AM

Imperial Ballroom A

**Early Career Training
Succeeding at Every Stage:
Insights from the Early Career Committee**

*Organized in cooperation with the
ATVB Early Career Committee*

**Applying for Your First Grant as PI:
Tips from New Investigators**

Jordan Miller, PhD, Mayo Clinic, Rochester, MN
Thomas Vallim, PhD, UCLA, Los Angeles, CA
Randal Westrick, PhD, University of Michigan,
Ann Arbor, MI

**Building a Successful International Research
Program 1: Perspectives from Asia**

Hanrui Zhang, MD, PhD, University of Pennsylvania,
Philadelphia, PA
Miao Wang, PhD, Peking Union Medical College and
Chinese Academy of Medical Sciences, Beijing, China
Hong Yu, PhD, Zhejiang University School of
Medicine, Hangzhou, China
Xiuping Chen, PhD, University of Macau,
Macau, China

Masanori Aikawa, MD, PhD, Brigham and Women's
Hospital, Harvard Medical School, Boston, MA

**Building a Successful International Research
Program 2: Perspectives from Europe**

Lars Maegdefessel, MD, PhD, Karolinska Institute,
Stockholm, Sweden
Esther Lutgens, MD, PhD, University of Amsterdam,
Amsterdam, Netherlands

**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

**"I Didn't Get My Grant: Now What?!": Response
to Reviews & Common Mistakes**

Katey Rayner, PhD, University of Ottawa Heart
Institute, Ottawa, ON, Canada
Catherine Martel, PhD, Montreal Heart Institute,
Montreal, QC, Canada

Guests from Stanford grant office:

Sofie Kleppner, PhD, Associate Dean for
Postdoctoral Affairs, Stanford University
Crystal Botham, PhD, Director of Strategic
Research Development, Stanford University

**Know your KangaR00: Preparing a Successful
K99/R00 Application**

Gabrielle Fredman, PhD, Columbia University,
New York, NY
Cynthia St. Hilaire, PhD, NIH/NHLBI, Bethesda, MD

8:00–8:30 AM

Grand Ballroom B

Conference Opening Welcome

Elliott Antman, MD, FAHA, Brigham and
Women's Hospital, Boston, MA, President,
American Heart Association
Muredach P. Reilly, MB, FAHA, University of
Pennsylvania, Philadelphia, PA
Michael S. Conte, MD, University of California,
San Francisco, San Francisco, CA

8:30–10:00 AM

Grand Ballroom B

Plenary Session I

**Functional Genomics: Enhancer Biology
and Epigenetics**

*Organized in cooperation with the Council on
Functional Genomics and Translational Biology*

Moderators:

Kiran Musunuru, MD, PhD, MPH,
Harvard University, Cambridge, MA
Muredach P. Reilly, MB, MS, FAHA, University of
Pennsylvania, Philadelphia, PA

8:30 **Genomic Views of Cardiovascular Regulation**

Len A. Pennacchio, PhD, Lawrence Berkeley
National Laboratory, Berkeley, CA

9:00 **Exploiting Natural Genetic Variation to
Understand Macrophage-specific Gene
Expression**

Christopher Glass, MD, PhD, FAHA, University of
California San Diego, San Diego, CA

9:30 **Epigenetic Reader Proteins and Superenhancers
in Endothelial Biology**

Jorge Plutzky, MD, Brigham and Women's Hospital,
Boston, MA

10:00–10:30 AM

Yosemite Room

**Refreshment Break
and Exhibits**

THURSDAY

Program Agenda (continued)

10:30 AM–12:15 PM

Imperial Ballroom A

Concurrent Session I A

Mechanisms of Atherosclerosis

Moderators:

Katey Rayner, PhD, University of Ottawa

Heart Institute, Ottawa, ON, Canada

Hong Wang, MD, PhD, EMBA, Temple University

School of Medicine, Philadelphia, PA

10:30 Innovative Inflammatory Mechanisms

That Drive Plaque Vulnerability

Katey Rayner, PhD, University of Ottawa Heart

Institute, Ottawa, ON, Canada

Oral Abstract Presentations

11:00 Oct4 is Re-activated in Smooth Muscle

Cells through KLF4/Hif1 α and

Hydroxymethylation Mechanisms and

Plays a Critical Role in Atherogenesis

Olga A. Cherepanova, Delphine Gomez,

Laura S. Shankman, Univ of Virginia,

Charlottesville, VA; Jason Williams, Yong-Jian

Geng, Univ of Texas, Houston, TX; Jessica J.

Connelly, Gary K. Owens, Univ of Virginia,

Charlottesville, VA

11:15 Ogg1 Plays a Protective Role in

Diet-Induced Atherosclerosis in LDLR

KO Mice

Gantsetseg Tumurkhuu, Kenichi Shimada,

Timothy R. Crother, Wenxuan Zhang, Roberta

Gottlieb, Shuang Chen, Moshe Arditi,

Cedars-Sinai Medical Ctr, Los Angeles, CA

11:30 Cholesterol Crystals Produced by

Endothelial Cells During Hyperlipidemia

Initiate Atherogenesis

Yvonne Baumer, Sara McCurdy, Tina Weatherby-

Carvalho, William A Boisvert, Univ of Hawaii,

Honolulu, HI

11:45 Macrophage p62/SQSTM1 Ameliorates

Atherosclerosis by Sequestering

Inclusion Bodies and Mediating Mitophagy

Ismail Sergin, Somashubhra Bhattacharya,

Carl J. Stokes, Washington Univ in St. Louis,

St. Louis, MO; John A. Curci, Vanderbilt Univ,

Nashville, TN; Babak Razani, Washington Univ

in St. Louis, St. Louis, MO

12:00 Disruption of Semaphorin 7A Confers

Protection against the Development

of Atherosclerosis

Shuhong Hu, Fei Yang, Chaojun Tang, Li Zhu,

Soochow Univ, Suzhou, China

10:30 AM–12:15 PM

Imperial Ballroom B

Concurrent Session I B

Molecular, Developmental and

Cellular Biology of the Vessel Wall

Moderators:

Jorge Plutzky, MD, Brigham and Women's

Hospital, Boston, MA

Lakshmi Santhanam, PhD, Johns Hopkins

University, Baltimore, MD

10:30 Dual Role of Tissue Transglutaminase in

Vascular Stiffening

Lakshmi Santhanam, PhD, Johns Hopkins

University, Baltimore, MD

Oral Abstract Presentations

11:00 Continuous Plasma S1p-dependent

Signaling by Apically Polarized S1Pr1

Supports Endothelial Barrier Function

Stephen J. Wilson, Lisa D. Wilsbacher,

Sabeen A. Kazmi, Peter Baluk, Donald M.

McDonald, Shaun R. Coughlin, Univ of California,

San Francisco, San Francisco, CA

11:15 LPA/PKD-1-HDAC7-FoxO1 Signaling-

mediated Endothelial CD36

Transcriptional Repression and

Proarteriogenic Reprogramming

Bin Ren, Medical Coll of Wisconsin, Milwaukee,

WI; Brad Best, Devi Ramakrishnan, Blood Ctr

of Wisconsin, Milwaukee, WI; Brian Walcott,

Massachusetts General Hosp, Boston, MA;

Peter Storz, Mayo Clinic, Jacksonville, FL;

Roy Silverstein, Medical Coll of Wisconsin,

Milwaukee, WI

11:30 RNA-binding Protein Quaking Maintains

Endothelial Barrier Function

Through β -catenin and VE-cadherin

Ruben G. de Bruin, Martijn J. Dane, Dae Hyun

Lee, Marko K. Roeten, Iris Schmidt, Roel Bijkerk,

Eric .P van der Veer, Hetty C de Boer, Ton J.

Rabelink, Anton Jan van Zonneveld, Janine M.

van Gils, Leiden Univ Medical Ctr, Leiden,

Netherlands

11:45 Smooth Muscle Cells Are Crucial for

Vascular Stem Cell Migration and

Vasculogenesis via Keratinocyte

Cell-derived Chemokine

Baoqi Yu, Mei Mei Wong, Claire Potter, Yanhua

Hu, King's Coll London, London, United Kingdom;

Wen Wang, Queen Mary, Univ of London, London,

United Kingdom; Qingbo Xu, King's Coll London,

London, United Kingdom

THURSDAY

Program Agenda (continued)

THURSDAY

12:00 **Endothelial Intracellular Adenosine Epigenetically Regulates Angiogenesis**
Yiming Xu, Siyuan Yan, Yong Wang, Xiaofei An, Georgia Regents Univ, Augusta, GA; Qinkai Li, Peking Univ Shenzhen Graduate Sch, Shenzhen, China; Chaodong Wu, Texas A&M Univ, College Station, TX; Yuqing Huo, Georgia Regents Univ, Augusta, GA

10:30 AM–12:15 PM

Plaza Room A

Concurrent Session I C

Translational Science of Vascular Medicine: Molecular Imaging

Organized in cooperation with the Council on Peripheral Vascular Disease

Moderators:

Michael S. Conte, MD, University of California, San Francisco, San Francisco, CA

Jonathan R. Lindner, MD, Oregon Health & Science University, Portland, OR

Ahmed Tawakol, MD, Massachusetts General Hospital, Boston, MA

Philip S. Tsao, PhD, Stanford University School of Medicine and VA Palo Alto Health Care System, Stanford, CA

10:30 **Molecular Imaging of Vascular Inflammation Using Ultrasound**
Jonathan R. Lindner, MD, Oregon Health & Science University, Portland, OR

Oral Abstract Presentations

11:00 **Suppression of Coronary Artery Stent Inflammation by Colchicine Decreases Stent Restenosis, as Assessed by Serial in vivo Optical Molecular-structural Imaging**
Eric A. Osborn, Giovanni J. Ughi, Adam Mauskopf, Massachusetts General Hosp, Boston, MA; Peter Oettgen, Beth Israel Deaconess Medical Ctr, Boston, MA; Guillermo J. Tearney, Farouc A. Jaffer, Massachusetts General Hosp, Boston, MA

11:15 **EMMPRIN-Targeted Magnetic Nanoparticles for in vivo Visualization and Regression of Acute Myocardial Infarction in a Model of Acute Coronary Artery Occlusion**
Irene Cuadrado, Maria Jose Garcia Miguel, Irene Herruzo, Mari Carmen Turpin, Ana Martin, Univ Francisco de Vitoria/Hosp Ramon y Cajal, Pozuelo de Alarcon Madrid, Spain; Paula Reventun, Marta Saura, Univ of Alcala, Alcala de Henares, Spain; Jose-Luis Zamorano, Hosp Ramon y Cajal, Madrid, Spain; **Carlos Zaragoza**, Univ Francisco de Vitoria/Hosp Ramon y Cajal, Pozuelo de Alarcon Madrid, Spain

10 11:30 **Development of Functionalized Nanoparticle Platform for Reducing Atherosclerosis**

Shobha Ghosh, Jing Wang, Jinghua Bie, Quan Yuan, Olga Zolotarskaya, Hu Yang, Virginia Commonwealth Univ, Richmond, VA

11:45 **Integrative Imaging at Atherosclerosis: Seeing the Forest and the Trees**
Ahmed Tawakol, MD, Massachusetts General Hospital, Boston, MA

12:15–1:15 PM

Plaza Room B

Meet the Professor Luncheon (ticket required)

Or lunch on your own

1:15–2:45 PM

Grand Ballroom B

Plenary Session II Inflammation, Thrombosis and Vascular Disease

Moderators:

Jordan D. Miller, PhD, Mayo Clinic, Rochester, MN
Alisa Wolberg, PhD, University of North Carolina at Chapel Hill, Chapel Hill, NC

1:15 **Contribution of RAGE to Diabetic Complications and the Ageing Vasculature**
Ann Marie Schmidt, MD, New York University Langone Medical Center, New York, NY

1:45 **Imaging Sterile and Infectious Inflammation in Blood Vessels**
Paul Kubers, PhD, University of Calgary, Calgary, Alberta, Canada

11

2:15 **Quantitative Proteomics and System Biology Analysis of Proteolytic Networks in vivo**
Christopher Overall, PhD, University of British Columbia, Vancouver, BC, Canada

12

2:45–3:15 PM

Yosemite Room

Refreshment Break and Exhibits

Program Agenda (continued)

3:15–5:00 PM

Imperial Ballroom A

Concurrent Session II A

Apolipoproteins and Lipid Metabolism

Moderators:

W. Sean Davidson, PhD, University of Cincinnati, Cincinnati, OH

Robert O. Ryan, PhD, Children's Hospital Oakland Research Institute, Oakland, CA

- 3:15 **Modulation of Plasma Triacylglycerol by Apolipoprotein A-V**
Robert O. Ryan, PhD, Children's Hospital Oakland Research Institute, Oakland, CA

Oral Abstract Presentations

- 3:45 **Identification of Linc-OSBPL6 as a Competing Endogenous RNA that Regulates Cholesterol Homeostasis** **14**
Coen van Solingen, Elizabeth J. Hennessy, Mireille Ouimet, Kaitlyn Rinehold, Maryem Hussein, Michael J. Garabedian, NYU Sch of Med, New York, NY; Daniel Teupser, Lesca M. Holdt, Inst of Lab Med, Munich, Germany; Kathryn J. Moore, NYU Sch of Med, New York, NY
- 4:00 **Proteomic Analysis of HDL from Inbred Strains of Mice Implicates APOE in Reduced Cholesterol Efflux Capacity via the ABCA1 Pathway** **15**
Nathalie Pamir, Patrick Hutchins, Graziella Ronsein, Tomas Vaisar, Univ of Washington, Seattle, WA; Catherine Reardon, Godfrey Getz, Univ of Chicago, Chicago, IL; Aldons J. Lusis, UCLA, Los Angeles, CA; Jay W. Heinecke, Univ of Washington, Seattle, WA
- 4:15 **Tribbles1 Regulates Hepatic Lipogenesis in Mice through Post-Translational Regulation of C/EBP α** **16**
Robert C. Bauer, Makoto Sasaki, Daniel M. Cohen, Jian Cui, Mikhaila A. Smith, David J. Steger, Daniel J. Rader, Univ of Pennsylvania, Philadelphia, PA
- 4:30 **SURP and G Patch Domain Containing 1 is a Novel Regulator of Cholesterol Metabolism** **17**
Marisa W. Medina, Chi-Yi Yu, Mee J. Kim, Elizabeth Theusch, Devesh Naidoo, Kristen Stevens, Yu-Lin Kuang, CHORI, Oakland, CA
- 4:45 **Adipose Specific Microsomal Triglyceride Transfer Protein Deficient Mice Are Resistant to High Fat Diet Induced Obesity** **18**
Ahmed Bakillah, M. Mahmood Hussain, SUNY Downstate Medical Ctr, Brooklyn, NY

3:15–5:00 PM

Imperial Ballroom B

Concurrent Session II B

Immunity and Inflammation in Vascular Biology and Thrombosis

Moderators:

Esther Lutgens, MD, PhD, University of Amsterdam, Amsterdam, Netherlands

Kathryn J. Moore, PhD, FAHA, New York University, New York, NY

- 3:15 **Modulation of Co-stimulation in Vascular Disease: from Mechanisms to Therapy**
Esther Lutgens, MD, PhD, University of Amsterdam, Amsterdam, Netherlands

Oral Abstract Presentations

- 3:45 **Deletion of Myeloid GSK3 α Attenuates Atherosclerosis and Promotes an M2 Macrophage Phenotype** **19**
Cameron McAlpine, Aric Huang, Abby Emdin, Nicole Banko, Daniel Berault, Yuanyuan Shi, Geoff Werstuck, McMaster Univ, Hamilton, ON, Canada
- 4:00 **Apolipoprotein A-I Influences Regulatory T Cell Development and Proliferation in Homeostasis and Atherogenesis** **20**
Dalia E. Gaddis, Amy Wu, Debbi Yoakum, La Jolla Inst, La Jolla, CA; Mary Sorci-Thomas, Medical Coll of Wisconsin, Milwaukee, WI; Catherine C. Hedrick, La Jolla Inst, La Jolla, CA
- 4:15 **B-1b Cells Secrete Atheroprotective IgM and Attenuate Atherosclerosis** **21**
Sam Morris-Rosenfeld, Heather M. Perry, Prasad Srikakulapu, Chantel McSkimming, Univ of Virginia, Charlottesville, VA; Ayelet Gonen, Thomas A. Prohaska, Sotirios Tsimikas, Joseph L. Witztum, UCSD, La Jolla, CA; Timothy P. Bender, Angela Taylor, Coleen A. McNamara, Univ of Virginia, Charlottesville, VA
- 4:30 **Monocyte Chemotactic Protein-1 and Macrophage Colony-Stimulating Factor are Strong Predictors of First-Time Myocardial Infarction in the General Population** **22**
Alexandru Schiopu, Eva Bengtsson, Isabel Goncalves, Jan Nilsson, Gunilla Nordin Fredrikson, Harry Björkbacka, Lund Univ, Malmö, Sweden
- 4:45 **Immunosuppression with FTY720 Reverses Cardiac Dysfunction to Prevent Chronic Heart Failure in Mice that Survive Diet-induced Myocardial Infarction** **23**
Fu Sang Luk, Roy Y. Kim, Kang Li, Daniel Ching, Sunil Joshi, Norman Honbo, Isabella Imhof, Bo-qing Zhu, David Lovett, Joel S. Karliner, Robert L. Raffai, Univ of California San Francisco and VA Medical Ctr, San Francisco, CA

THURSDAY

Program Agenda (continued)

THURSDAY

3:15–5:00 PM

Plaza Room A

Concurrent Session II C

Translational Science of Vascular Medicine: Mechanistic Biomarkers

Organized in cooperation with the
Council on Peripheral Vascular Disease

Moderators:

Jeffrey S. Berger, MD, MS, FAHA, FACC, New York
University School of Medicine, New York, NY

Jane E. Freedman, MD, University of Massachusetts
Medical School, Worcester, MA

Michael S. Conte, MD, University of California,
San Francisco, San Francisco, CA

Philip S. Tsao, PhD, Stanford University School of
Medicine and VA Palo Alto Health Care System,
Stanford, CA

- 3:15 **Circulating RNA as a Biomarker and Mediator of Cardiovascular Disease**
Jane E. Freedman, MD, University of Massachusetts
Medical School, Worcester, MA

Oral Abstract Presentations

- 3:45 **Resolvin D2 Reduces Thrombus Burden and Attenuates Inflammatory Signaling Pathways in a Murine Model of Venous Thrombosis** 24
Jose A. Diaz, Maxim E. Shaydakov, Univ of Michigan, Ann Arbor, MI; Anuran Chatterjee, Univ of California San Francisco, San Francisco, CA; Diana M. Farris, Nicole E. Ballard-Lipka, Angela E. Hawley, Robert E. Sigler, Peter K. Henke, Daniel D. Myers, Thomas W. Wakefield, Univ of Michigan, Ann Arbor, MI; Michael S. Conte, Univ of California San Francisco, San Francisco, CA
- 4:00 **Critical Limb Ischemia Progression is Associated with an Inflammatory Profile** 25
Hendrik Gremmels, Martin Teraa, Joost O Fledderus, Olivier G. de Jong, Univ Medical Ctr, Utrecht, Utrecht, Netherlands; Yolanda van der Graaf, Univ Medical Ctr, Utrecht (Julius Ctr), Utrecht, Netherlands; Frans L. Moll, Marianne C. Verhaar, Univ Medical Ctr, Utrecht, Utrecht, Netherlands

- 4:15 **Who is Going to Stroke? Biomarkers for the Unstable Carotid Atheroma** 26
Ulf Hedin, Ljubica Matic Perisic, Maria Jesus Iglesias, Mariette Lengquist, Anton Razuvajev, Joy Roy, Karolinska Inst, Stockholm, Sweden; Fredrik Pontén, Uppsala Univ, Uppsala, Sweden; Jacob Odeberg, Karolinska Inst, Stockholm, Sweden

- 4:30 **Platelet Activation and Thrombosis Biomarkers in Vascular Medicine**
Jeffrey S. Berger, MD, MS, FAHA, FACC, New York
University School of Medicine, New York, NY

5:00–5:30 PM

Plaza Room A

Special NHLBI Report

Moderators:

Michael S. Conte, MD, University of California,
San Francisco, San Francisco, CA

Philip S. Tsao, PhD, Stanford University School
of Medicine and VA Palo Alto Health Care
System, Stanford, CA

- 5:00 **NHLBI Perspective on Translational Opportunities for the ATVB and PVD Communities**
Zorina Galis, PhD, NIH/NHLBI, Bethesda, MD

5:30–7:30 PM

Grand Ballroom A

Poster Session I and Reception

5:45–7:00 PM

Grand Ballroom B

Moderated PVD Poster Session

Organized in cooperation with the
Council on Peripheral Vascular Disease

Moderator:

Joshua A. Beckman, MD, MS, Brigham and
Women's Hospital, Boston, MA

Program Agenda (continued)

FRIDAY, MAY 8

7:00 AM

Yosemite Room

Registration, Continental Breakfast and Exhibits

7:00–8:00 AM

Imperial Ballroom A

**Early Career Training Session
Breaking Into Translational Research
for the PhD Scientist**

*Organized in cooperation with the
ATVB Early Career Committee*

Panel:

Gary Owens, PhD, University of Virginia,
Charlottesville, VA
Jennifer Hall, PhD, University of Minnesota,
Minneapolis, MN
Philip S. Tsao, PhD, Stanford University
School of Medicine and VA Palo Alto
Health Care System, Stanford, CA

8:00–9:30 AM

Grand Ballroom B

**Plenary Session III
Highlights from the ATVB Journal**

Moderators:

Ann Marie Schmidt, MD, New York University
Langone Medical Center, New York, New York
Jie Du, PhD, Capital Medical University, Beijing
Institute of Heart, Lung and Blood Vessel
Diseases, Beijing Anzhen Hospital, Beijing, China

8:00 **ATVB Journal Report**

Alan Daugherty, PhD, DSc, FAHA, University of
Kentucky, Lexington, KY

**Presentations by the 2015 ATVB Journal Early
Career Investigator Award Recipients**

- 8:15 *Daniel Steinberg Early Career Investigator Award
in Atherosclerosis/Lipoproteins*
**Deficiency of ATP Binding Cassette Transporter
B6 in Megakaryocyte Progenitors Accelerates
Atherosclerosis in Mice**
Laurent Yvan-Charvet, PhD, Research Center C3M,
UMR INSERM U1065/UNS, Nice, France

8:30 *Karl Link Early Career Investigator Award
in Thrombosis*

**Factor XII Regulates the Pathological Process of
Thrombus Formation on Ruptured Plaques**
Judith Cosemans, PhD, Maastricht University,
Maastricht, Netherlands

8:45 *Werner Risau Early Career Investigator Award in
Vascular Biology*

**Deficiency of Endothelial Cxcr4 Reduces
Reendothelialization and Enhances Neointimal
Hyperplasia After Vascular Injury
in Atherosclerosis-prone Mice**
Heidi Noels, PhD, RWTH Aachen University,
Aachen, Germany

9:00 **Translational Research on Rho-kinase in
Cardiovascular Medicine**

Hiroaki Shimokawa, MD, PhD, FAHA, Tohoku
University Graduate School of Medicine, Sendai,

9:30–10:00 AM

Yosemite Room

**Refreshment Break
and Exhibits**

10:00–11:45 AM

Imperial Ballroom A

**Concurrent Session III A
Lipoprotein Metabolism and
Therapeutic Targets**

Moderators:

Jay Horton, MD, University of Texas Southwestern
Medical School, Dallas, TX
Jonathan D. Smith, PhD, FAHA, Cleveland Clinic,
Cleveland, OH

10:00 **Post-Transcriptional Regulation of
Fatty Acid Synthesis**

Jay Horton, MD, University of Texas Southwestern
Medical School, Dallas, TX

Oral Abstract Presentations

- 10:30 **Therapeutic Targeting of Human Lipid
Genes With in vivo CRISPR-Cas9
Genome Editing** 27
Avanthi Raghavan, Tao Chen, Nicolas
Kuperwasser, Harvard Univ, Cambridge, MA;
Qiurong Ding, Inst for Nutritional Sciences,
Shanghai, China; **Kiran Musunuru**, Harvard
Univ, Cambridge, MA

FRIDAY

Program Agenda (continued)

FRIDAY

- 10:45 **Mechanistic Studies of HDL Mimetic Peptide ATI-5261 Reveal Aspects of Class A Alpha-helix Structure that Induce Cytotoxicity and Hypertriglyceridemia In vivo: Design of Safe Analogs with Potent Anti-atherosclerosis and Anti-diabetic Actions**
John K. Bielicki, Lawrence Berkeley Natl Lab, Berkeley, CA; Vasanthy Narayanaswami, California State Univ, Long Beach, CA; Greg Hura, Lawrence Berkeley Natl Lab, Berkeley, CA; Stefanie Bittner, Juveria Tabassum, VA Palo Alto Health Care System, Stanford Univ, Palo Alto, CA; Anouar Hafiane, Jacques Genest, McGill Univ Health Ctr Royal Victoria Hosp, Montreal, QC, Canada; Jan Johansson, Artery Therapeutics, San Ramon, CA; Salman Azhar, VA Palo Alto Health Care System, Stanford Univ, Palo Alto, CA
- 11:00 **PCSK9 Association With Lipoprotein(a)**
Hagai Tavori, Ilaria Giunzioni, Oregon Health & Science Univ, Portland, OR; Calvin Yeang, Sotirios Tsimikas, Univ of California San Diego, La Jolla, CA; Michael D. Shapiro, Barton P. Duell, Sergio Fazio, Oregon Health & Science Univ, Portland, OR
- 11:15 **Apolipoprotein CIII Sialylation is a Critical Determinant of Liver Triglyceride Metabolism**
Hussein N. Yassine, Ambika Ramrakhiani, Aarushi Parekh, Ryan Walker, Michael Goran, Univ of Southern California, Los Angeles, CA; Olgica Trenchevska, Dobrin Nedelkov, Randall Nelson, Arizona State Univ, Tempe, AZ; Juraj Koska, Peter D Reaven, Carl T Hayden VAMC, Phoenix, AZ; Frances T. Yen, Univ De Lorraine, 54518 Nancy, France
- 11:30 **Functional Impact of Inflammatory Cell-Originating HDL-miR-223 Communication in vivo**
Carrie B. Wiese, Leslie A. Roteta, Wanying Zhu, Stuart R. Landstreet, **Kasey C. Vickers**, Vanderbilt Univ Sch of Med, Nashville, TN

10:00–11:45 AM

Imperial Ballroom B

Concurrent Session III B Blood Coagulation and Antithrombotic Therapy

Moderators:

Bruce Furie, MD, Harvard Medical School, Beth Israel Deaconess Medical Center, Boston, MA
Alisa Wolberg, PhD, University of North Carolina at Chapel Hill, Chapel Hill, NC

- 10:00 **Protein Disulfide Isomerases: Novel Targets for Novel Antithrombotics**
Bruce Furie, MD, Harvard Medical School, Beth Israel Deaconess Medical Center, Boston, MA

28 Oral Abstract Presentations

- 10:30 **Coagulation Factor XI and Thrombin Mediate Angiotensin II-induced Vascular Dysfunction** **32**
Moritz Ehken, Sabine Kossmann, Sven Jäckel, Kerstin Jurk, Tanja Schönfelder, Ulrich Walter, Univsmedizin der Johannes Gutenberg-Univ Mainz, Mainz, Germany; Thomas Renné, Karolinska Instt, Stockholm, Sweden; Wolfram Ruf, Thomas Münzel, Philip Wenzel, Univsmedizin der Johannes Gutenberg-Univ Mainz, Mainz, Germany
- 10:45 **Role of Epsins in Regulating LPS-Induced Sepsis** **33**
Satish Pasula, Megan L. Brophy, Kandice L. Tessneer, Scott Hahn, John McManus, Hua Zhu, Baojun Chang, Yunzhou Dong, Xiaofeng Cai, Hoogeun Song, Hao Wu, **Hong Chen**, Oklahoma Medical Res Fndn, Oklahoma City, OK
- 11:00 **Elevated Plasma CETP Activity and Hyper-procoagulant R451Q-CETP Mutation Linked to Venous Thrombosis Risk** **34**
Hiroshi Deguchi, Xiao Xu, Darlene J. Elias, **John H. Griffin**, The Scripps Res Inst, La Jolla, CA
- 11:15 **Identification of a Mouse Strain Modifier Locus for Factor V Leiden/Tissue Factor Pathway Inhibitor Dependent Thrombosis** **35**
Derrick M. Germain, Amy E. Siebert, Stephanie Verbeek, Oakland Univ, Rochester, MI; Guojing Zhu, Kärt Tomberg, Audrey Cleuren, David Siemieniak, Univ of Michigan, Ann Arbor, MI; Randal J. Westrick, Oakland Univ, Rochester, MI
- 11:30 **Concurrent Ultrasound Diagnosis and Treatment of Thrombosis Using Activated Platelet Targeted Theranostic Microbubbles** **36**
Xiaowei Wang, Yannik Gkanatsas, Jathushan Palasubramaniam, Jan David Hohmann, Christoph E Hagemeyer, **Karlheinz Peter**, Baker IDI Heart and Diabetes Inst, VIC, Australia

10:00–11:45 AM

Palza Room A

Concurrent Session III C Aortic Aneurysm and Carotid Artery Disease *Organized in cooperation with the Council on Peripheral Vascular Disease*

Moderators:

Sonia Anand, MD, PhD, FRCPC, McMaster University, Hamilton, ON, Canada
John Curci, MD, Vanderbilt University Medical Center, Nashville, TN

- 10:00 **Genetics and Pharmacogenetics in Vascular Disease**
Sonia Anand, MD, PhD, FRCPC, McMaster University, Hamilton, ON, Canada

Program Agenda (continued)

Oral Abstract Presentations

- 10:30 **A Multi-locus Genetic Risk Score for Abdominal Aortic Aneurysm** 37
Zi Ye, Erin Austion, Daniel J. Schaid, Iftikhar J. Kullo, Mayo Clinic, Rochester, MN
- 10:45 **Cyclin-Dependent Kinase Inhibitor 2B Regulates Transforming Growth Factor Beta 1 Mediated Smooth Muscle Cell Recruitment to Ischemic Blood Vessels** 38
Vivek Nanda, Kelly Downing, Yoko Kojima, Jessie Dalman, Daniel M. DiRenzo, Andrew J. Connolly, Stanford Univ Sch of Med, Stanford, CA; Lars Maegdefessel, Ljubica Perisic, Karolinska Inst, Stockholm, Sweden; Sonny Dandona, McGill Univ, Montreal, QC, Canada; Liang Guo, Harry R Davis Jr, Renu Virmani, CVPPath Inst, Gaithersburg, MD; Joshua M. Spin, Nicholas J. Leeper, Stanford Univ Sch of Med, Stanford, CA
- 11:00 **Circulating MiRNA Signature of Pet-Positive Abdominal Aortic Aneurysms: New Potential Predictors of Rupture** 39
Audrey Courtois, Betty Nusgens, Univ of Liège, Liège, Belgium; Roland Hustinx, Jean-Olivier Defraigne, Univ of Liège-Univ Hosp of Liège, Liège, Belgium; Alain Colige, Univ of Liège, Liège, Belgium; Natzli Sakalihan, Univ of Liège-Univ Hosp of Liège, Liège, Belgium
- 11:15 **Increased Expression of Transforming Growth Factor-Beta 1 in the Gastrocnemius of Patients with Peripheral Artery Disease is a Localized Response in the Ischemic Muscle** 40
Duy M. Ha, Lauren A Carpenter, George P. Casale, Julian K. Kim, Stanley A. Swanson, Panagiotis Koutakis, Evlampia Papoutsis, Iraklis I. Pipinos, Univ of Nebraska Medical Ctr, Omaha, NE
- 11:30 **Postnatal Deletion of Vascular Smooth Muscle Cell Transforming Growth Factor beta Receptor 2 in Mice Exacerbates Marfan-syndrome-associated Aortic Dilation** 41
Hao Wei, Stoyan N. Angelov, Jie Hong Hu, David A. Dichek, Univ of Washington, Seattle, WA

11:45 AM–1:00 PM

Plaza Room B

The Mentor of Women Award Luncheon (ticket required)

Faculty-Centered Flexibility — National Imperative

Hannah Valentine, MD, National Institutes of Health, Bethesda, MD

Franciscan A

PVD Luncheon (ticket required)

Or lunch on your own

1:30–3:00 PM

Grand Ballroom B

Plenary Session IV

Young Investigator Award Competition

Moderators:

Catherine C. Hedrick, PhD, FAHA, La Jolla Institute for Allergy and Immunology, La Jolla, CA
 Joseph Italiano, PhD, Brigham and Women's Hospital, Boston, MA

Kenneth M. Brinkhous Young Investigator Prize in Thrombosis Competition

- 1:00 **Platelet Polyphosphate Accelerates the Inhibition of Tissue Factor Pathway Inhibitor by Factor XIa** 42
Cristina Puy, Andrés Gruber, Erik I. Tucker, Oregon Health & Science Univ, Portland, OR; David Gailani, Vanderbilt Univ Sch of Med, Nashville, TN; Stephanie A. Smith, Sharon H. Choi, James H. Morrissey, Univ of Illinois, Urbana, IL; Owen J. McCarty, Oregon Health & Science Univ, Portland, OR
- 1:15 **Recycling Controls Procoagulant and Cell Signaling Functions of Tissue Factor** 43
Andrea S. Rothmeier, Wolfram Ruf, The Scripps Res Inst, La Jolla, CA
- 1:30 **Organ-specific Stochastic Phenotype Switching is Required for Endothelial Health** 44
Lei Yuan, Gary C. Chan, David Beeler, Lauren Janes, Katherine C. Spokes, Beth Israel Deaconess Medical Ctr, Boston, MA; Anahita Mojiri, Univ of Alberta, Edmonton, AB, Canada; William J. Adams, Brigham and Women's Hosp, Boston, MA; Tracey Sciuto, Beth Israel Deaconess Medical Ctr, Boston, MA; Guillermo Garcia-Cardena, Brigham and Women's Hosp, Boston, MA; Grietje Molema, Univ of Groningen, Groningen, Netherlands; Nadia Jahroudi, Univ of Alberta, Edmonton, AB, Canada; Philip A. Marsden, Univ of Toronto, Toronto, ON, Canada; Ann Dvorak, Erzsébet Ravasz Regan, William C. Aird, Beth Israel Deaconess Medical Ctr, Boston, MA
- 1:45 **Characterization of a Novel Integrin Binding Protein that is Essential for $\alpha\text{IIb}\beta\text{3}$ Outside-in Signaling and Hemostasis** 45
Binggang Xiang, Guoying Zhang, Shaojing Ye, Cai Huang, Univ of Kentucky, Lexington, KY; Jun Liu, Mayo Clinic in Arizona, Scottsdale, AZ; Min Tao, Changgeng Ruan, the First Affiliated Hosp of Soochow Univ, Suzhou, China; Susan Smyth, Sidney Whiteheart, Zhenyu Li, Univ of Kentucky, Lexington, KY

FRIDAY

Program Agenda (continued)

Irvine H. Page Young Investigator Research Award Competition

- 2:00 **Cellular Cholesterol Homeostasis is Altered in Murine Models of Rheumatoid Arthritis and is Linked to Enhanced Myelopoiesis** 46
 Dragana Dragoljevic, Michael J. Kraakman, Baker IDI Heart and Diabetes Inst, Melbourne, Australia; Devi Ngo, Walter and Eliza Hall Inst of Medical Res, Parkville, Australia; Alexandra Whillas, Baker IDI Heart and Diabetes Inst, Melbourne, Australia; Sharon van Doornum, Royal Melbourne Hosp, Parkville, Australia; Ian Wicks, Walter and Eliza Hall Inst of Medical Res, Parkville, Australia; Mark A. Febbraio, Jaye P. Chin-Dusting, **Andrew J. Murphy**, Baker IDI Heart and Diabetes Inst, Melbourne, Australia
- 2:15 **High-Density Lipoproteins Induce Neutrophil-miRNA Transcription and Export: Contribution to HDL-miRNA Cell to Cell Communication** 47
Fatiha Tabet, Luisa F Cuesta Torres, The Univ of New South Wales, Sydney, NSW, Australia; Carrie B. Wiese, Div of Cardiovascular Med, Vanderbilt Univ Sch of Med, Nashville, TN; Gustav Öhring, Rasmus Larsson, Philip J. Barter, The Univ of New South Wales, Sydney, NSW, Australia; Kasey C Vickers, Div of Cardiovascular Med, Vanderbilt Univ Sch of Med, Nashville, TN; Kerry-Anne Rye, The Univ of New South Wales, Sydney, NSW, Australia
- 2:30 **Myelopoiesis Following Myocardial Ischemia (MI) Involves Activation of the Nlrp3 Inflammasome by Neutrophil-Derived S100a8/a9** 48
Prabhakara R. Nagareddy, Rahul Annabathula, Shaojing Ye, Yuri M Klaychkin, Ahmed Abdel-Latif, Susan S. Smyth, Univ of Kentucky, Lexington, KY
- 2:45 **The Transcriptional Repressor MafG Regulates Cholesterol Catabolism** 49
Thomas Q. de Aguiar Vallim, Elizabeth J. Tarling, Hannah Ahn, UCLA, Los Angeles, CA; Lee R. Hagey, Casey E. Romanoski, UCSD, San Diego, CA; Richard G. Lee, Mark J. Graham, ISIS, Carlsbad, CA; Hozumi Motohashi, Masayuki Yamamoto, Tohoku Medical Megabank Organization, Sendai, Japan; Peter A. Edwards, UCLA, Los Angeles, CA

3:00–3:30 PM
Yosemite Room
Refreshment Break and Exhibits

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

Moderators:
 Janet D. Sparks, PhD, FAHA, University of Rochester Medical Center, Rochester, NY
 Karol Watson, MD, PhD, FAHA, UCLA Medical Center, Los Angeles, CA

- 3:30 **Insulin-dependent ApoB Degradation and Hepatic Insulin Resistance**
 Janet D. Sparks, PhD, FAHA, University of Rochester Medical Center, Rochester, NY

Oral Abstract Presentations

- 4:00 **A Phase I Clinical Trial Evaluating the Safety of Allogeneic Adipose Tissue-derived Multilineage Progenitor Cells-transplantation Therapy in Homozygous Familial Hypercholesterolemia Patients** 50
Masahiro Koseki, Shizuya Yamashita, Osaka Univ Graduate Sch, Suita, Osaka, Japan
- 4:15 **LincAQPEP, an Adipocyte-Specific Intergenic Noncoding RNA, Modulates Lipid Metabolism in Human Adipocytes** 51
Xuan Zhang, Chenyi Xue, Yumiao Han, Benjamin Garcia, Raymond Soccio, Mingyao Li, Muredach P. Reilly, Univ of Pennsylvania, Philadelphia, PA
- 4:30 **Capsaicin Activates the Trpv1-camkii-ampk-sirt-1-dependent Mechanism to Trigger Brown Remodeling of White Adipocytes to Antagonize Diet-induced Obesity** 52
Baskaran Thyagarajan, Jun Ren, Padmamalini Baskaran, Univ of Wyoming, Laramie, WY
- 4:45 **Tumor Necrosis Factor-alpha Enhances Adipogenesis of Adipose Tissue-derived Mesenchymal Stem Cells during Evolution of Obesity** 53
Xiangyang Zhu, Shuangtao Ma, Alfonso Eirin, John R. Woollard, Kyra L Jordan, Hui Tang, Amir Lerman, Lilach O. Lerman, Mayo Clinic Rochester, Rochester, MN
- 5:00 **Syndesome-Based Dressings for Enhanced Wound Healing in Diabetic Ulcers** 54
 Subhamoy Das, Gunjan Singh, Anthony Monteforte, Matthew Martinez, Univ of Texas, Austin, Austin, TX; Catherine Wright, Patricia Martin, Glasgow Caledonian Univ, Glasgow, United Kingdom; Andrew Dunn, **Aaron Baker**, Univ of Texas, Austin, Austin, TX

FRIDAY

Program Agenda (continued)

3:30–5:15 PM

Imperial Ballroom B

Concurrent Session IV B

Platelet Production, Signaling and Function

Moderators:

Xiaoping Du, MD, PhD, University of Illinois at Chicago, Chicago, IL

Robert C. Flaumenhaft, MD, PhD, Harvard Medical School, Boston, MA

3:30 **Signaling of Platelet Adhesion on Receptors and New Antithrombotic Strategies**

Xiaoping Du, MD, PhD, University of Illinois at Chicago, Chicago, IL

Oral Abstract Presentations

4:00 **Chronic Loss of Serotonin Transporter Function Alters Platelet Adhesion and Spreading** 55

Kendra H. Oliver, Michael R. Dohn, Matthew T. Duvernay, Heidi Hamm, Ana Carnerio, Vanderbilt Univ, Nashville, TN

4:15 **Platelet Specific Knockout of Glucose Transporter 3 Leads to Altered Metabolism and Decreased Platelet Activation** 56

Trevor P. Fidler, Elizabeth Middleton, Jesse W. Rowley, Univ of Utah, Salt Lake City, UT; Luc Boudreau, Ctr Hospier de l'Univ Laval, Québec, QC, Canada; Robert A. Campbell, Univ of Utah, Salt Lake City, UT; Rhonda Souvenir, Univ of Iowa, Iowa City, IA; Eric Boilard, Ctr Hospier de l'Univ Laval, Quebec, QC, Canada; Andrew S. Weyrich, Univ of Utah, Salt Lake City, UT; E. Dale Abel, Univ of Iowa, Iowa City, IA

4:30 **Platelet Extracellular-signal-regulated Kinase 5 is a Redox Switch which Regulates Myocardial Infarct Expansion via Matrix Metalloproteinases** 57

Scott J. Cameron, Sara K. Ture, Deanne Mickelsen, Enakshi Chakrabarti, Kristina L. Modjeski, Michael Seaberry, David Field, Jun-ichi Abe, Craig Morrell, Univ of Rochester Medical Ctr, Rochester, NY

4:45 **Differential Signaling by CRP-Rac1-NOX1 and Thrombin-Rac1-NOX2 Axes Regulates Ros Generation and Platelet Activation** 58

Huzoor Akbar, Ohio Univ, Athens, OH; Xin Duan, Children's Hosp Medical Ctr, Univ of Cincinnati, Cincinnati, OH; Saima Saleem, Ohio Univ, Athens, OH; Ashley K. Davis, Yi Zheng, Children's Hosp Medical Ctr, Univ of Cincinnati, Cincinnati, OH

5:00 **Disparity in Protection from Thrombotic Risk Depends on Platelet Thrombin Receptor PAR4** 59

Benjamin Tourdot, Michael Holinostat, Univ of Michigan, Ann Arbor, MI

3:30–5:15 PM

Plaza Room A

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:

Lars Maegdefessl, MD, PhD, Karolinska Institute, Stockholm, Sweden

Kathleen A. Martin, PhD, Yale University School of Medicine, New Haven, CT

3:30 **TET2 is an Epigenetic Regulator of Smooth Muscle Plasticity**

Kathleen A. Martin, PhD, Yale University School of Medicine, New Haven, CT

Oral Abstract Presentations

4:00 **Histone Modification H3k4me2 Controls Vascular Smooth Muscle Cell Lineage Memory During Vascular Injury** 60

Delphine Gomez, Gary K. Owens, Univ of Virginia, Charlottesville, VA

4:15 **Deficiency of the RNA Editing Enzyme ADAR2 Impairs Inflammation, Neovascularization and Functional Recovery of Ischemic Tissues** 61

Konstantinos Stellos, Aikaterini Gatsiou, Federica Lunella, Ariane Fischer, Carolin Amrhein, Andreas Zeiher, Stefanie Dimmeler, JW Goethe Univ Frankfurt, Frankfurt am Main, Germany

4:30 **Molecular Basis of Regulatory Variation at Coronary Heart Disease-Associated Loci** 62

Clint L. Miller, Milos Pjanic, Jonathan D. Lee, Boxiang Liu, William J. Greenleaf, Stephen B. Montgomery, Thomas Quertermous, Stanford Univ, Stanford, CA

4:45 **A Regulatory Enhancer Variant at the Hypertensive GRAF3 Locus Increases SMC-Selective Expression of GRAF3 by Promoting SRF Binding** 63

Kevin Mangum, Joan Taylor, Christopher Mack, Univ of North Carolina, Chapel Hill, Chapel Hill, NC

5:00 **Methyl CpG Binding Protein 2 Inhibition by MicroRNA-22 is Required for Stem Cell Differentiation towards Smooth Muscle Cell** 64

Hanqing Zhao, Guammei Wen, William Harvey Res Insititute, London, United Kingdom; Yuan Huang, The First Affiliated Hosp, Sch of Med, Zhejiang Univ, Hangzhou, China; Xiaotian Yu, Qishan Chen, Le Anh Luong, Ye Shu, William Harvey Res Insititute, London, United Kingdom; Li Zhang, The First Affiliated Hosp, Sch of Med, Zhejiang Univ, Hangzhou, China; Qingzhong Xiao, William Harvey Res Insititute, London, United Kingdom

FRIDAY

Program Agenda (continued)

4:30–6:30 PM

Plaza Room B

Next-Generation Technology Bootcamp

Organized in cooperation with the Council on Functional Genomics and Translational Biology

Separate Registration required

Instructors/Facilitators:

Kiran Musunuru, MD, PhD, MPH, Harvard University, Cambridge, MA
Themistocles L. Assimes, MD, PhD, Stanford University, Stanford, CA
Rahul C. Deo, MD, PhD, UCSF, San Francisco, CA
Jane F. Ferguson, PhD, Vanderbilt University Medical Center, Nashville, TN
Joshua Knowles, MD, PhD, Stanford University, Stanford, CA
Matt Maurano, PhD, University of Washington, Seattle, WA
Thomas Quertermous, MD, Stanford University, Stanford, CA
Katey Rayner, PhD, University of Ottawa, Ottawa, ON, Canada

5:30–7:30 PM

Grand Ballroom A

Poster Session II and Reception

7:30–10:30 PM

Continental Ballroom 4–5

ATVB and PVD Joint Council Dinner (ticket required)

Or dinner on your own

SATURDAY, MAY 9

8:00 AM

Yosemite Room

Registration

8:30–10:30 AM

Grand Ballroom A

Poster Session III and Continental Breakfast

10:30 AM–NOON

Grand Ballroom B

Plenary Session V

Invited Lecture Series

Moderators:

Kathryn J. Moore, PhD, FAHA, New York University, New York, NY
Muredach P. Reilly, MB, MS, FAHA, University of Pennsylvania, Philadelphia, PA

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

- 10:30 **Tissue Factor Pathway Inhibitor: Multiple Anticoagulant Activities for a Single Protein**
Alan E. Mast, MD, PhD, Blood Research Institute, Blood Center of Wisconsin, Milwaukee, WI

Keynote Lecture

- 11:00 **Molecular Clocks and Cardiometabolic Disease**
Garret A. FitzGerald, MD, University of Pennsylvania, Philadelphia, PA

Distinguished Lecture

- 11:30 **Imaging Protease Activities and H₂O₂ in Atherosclerosis, Stroke, and Related Models**
Roger Y. Tsien, PhD, Howard Hughes Medical Institute, UCSD, San Diego, CA

NOON

Closing Remarks/Conference Adjourns

FRIDAY/SATURDAY

Oral Abstracts

1

Oct4 is Re-activated in Smooth Muscle Cells through KLF4/Hif1 α and Hydroxymethylation Mechanisms and Plays a Critical Role in Atherogenesis

Olga A. Cherepanova, Delphine Gomez, Laura S. Shankman, Univ of Virginia, Charlottesville, VA; Jason Williams, Yong-Jian Geng, Univ of Texas, Houston, TX; Jessica J Connelly, Gary K Owens, Univ of Virginia, Charlottesville, VA

O.A. Cherepanova: None. **D. Gomez:** None. **L.S. Shankman:** None. **J. Williams:** None. **Y. Geng:** None. **J.J. Connelly:** None. **G.K. Owens:** None.

2

Ogg1 Plays A Protective Role In Diet Induced Atherosclerosis in LDLR KO mice.

Gantsetseg Tumurkhuu, Kenichi Shimada, Timothy R. Crother, Wenxuan Zhang, Roberta Gottlieb, Shuang Chen, Moshe Arditi, Cedars-Sinai Medical Ctr, Los Angeles, CA

G. Tumurkhuu: None. **K. Shimada:** None. **T.R. Crother:** None. **W. Zhang:** None. **R. Gottlieb:** None. **S. Chen:** None. **M. Arditi:** None.

3

Cholesterol Crystals Produced by Endothelial Cells During Hyperlipidemia Initiate Atherogenesis

Yvonne Baumer, Sara McCurdy, Tina Weatherby-Carvalho, William A Boisvert, Univ of Hawaii, Honolulu, HI

Y. Baumer: None. **S. McCurdy:** None. **T. Weatherby-Carvalho:** None. **W.A. Boisvert:** None.

4

Macrophage p62/SQSTM1 Ameliorates Atherosclerosis by Sequestering Inclusion Bodies and Mediating Mitophagy

Ismail Sergin, Somashubhra Bhattacharya, Carl J Stokes, Washington Univ in St. Louis, St. Louis, MO; John A Curci, Vanderbilt Univ, Nashville, TN; Babak Razani, Washington Univ in St. Louis, St. Louis, MO

I. Sergin: None. **S. Bhattacharya:** None. **C.J. Stokes:** None. **J.A. Curci:** None. **B. Razani:** None.

5

Disruption of Semaphorin 7A Confers Protection against the Development of Atherosclerosis

Shuhong Hu, Fei Yang, Chaojun Tang, Li Zhu, Soochow Univ, Suzhou, China

S. Hu: None. **F. Yang:** None. **C. Tang:** None. **L. Zhu:** None.

6

Continuous Plasma S1p-dependent Signaling by Apically Polarized S1Pr1 Supports Endothelial Barrier Function

Stephen J Wilson, Lisa D Wilsbacher, Sabeen A Kazmi, Peter Baluk, Donald M McDonald, Shaun R Coughlin, Univ of California, San Francisco, San Francisco, CA

S.J. Wilson: None. **L.D. Wilsbacher:** None. **S.A. Kazmi:** None. **P. Baluk:** None. **D.M. McDonald:** None. **S.R. Coughlin:** None.

7

LPA/PKD-1-HDAC7-FoxO1 Signaling-mediated Endothelial CD36 Transcriptional Repression and Proarteriogenic Reprogramming

Bin Ren, Medical Coll of Wisconsin, Milwaukee, WI; Brad Best, Devi Ramakrishnan, Blood Ctr of Wisconsin, Milwaukee, WI; Brian Walcott, Massachusetts General Hosp, Boston, MA; Peter Storz, Mayo Clinic, Jacksonville, FL; Roy Silverstein, Medical Coll of Wisconsin, Milwaukee, WI

B. Ren: None. **B. Best:** None. **D. Ramakrishnan:** None. **B. Walcott:** None. **P. Storz:** None. **R. Silverstein:** None.

8

RNA-binding Protein Quaking Maintains Endothelial Barrier Function Through β -catenin and VE-cadherin

Ruben G de Bruin, Martijn J Dane, Dae Hyun Lee, Marko K Roeten, Iris Schmidt, Roel Bijkerk, Eric P van der Veer, Hetty C de Boer, Ton J Rabelink, Anton Jan van Zonneveld, **Janine M van Gils**, Leiden Univ Medical Ctr, Leiden, Netherlands

R.G. de Bruin: None. **M.J.C. Dane:** None. **D. Lee:** None. **M.K. Roeten:** None. **I. Schmidt:** None. **R. Bijkerk:** None. **E.P. van der Veer:** None. **H.C. de Boer:** None. **T.J. Rabelink:** None. **A. van Zonneveld:** None. **J.M. van Gils:** None.

9

Smooth Muscle Cells Are Crucial for Vascular Stem Cell Migration and Vasculogenesis via Keratinocyte Cell-derived Chemokine

Baoqi Yu, Mei Mei Wong, Claire Potter, Yanhua Hu, King's Coll London, London, United Kingdom; Wen Wang, Queen Mary, Univ of London, London, United Kingdom; Qingbo Xu, King's Coll London, London, United Kingdom

B. Yu: None. **M.M. Wong:** None. **C. Potter:** None. **Y. Hu:** None. **W. Wang:** None. **Q. Xu:** None.

10

Endothelial Intracellular Adenosine Epigenetically Regulates Angiogenesis

Yiming Xu, Siyuan Yan, Yong Wang, Xiaofei An, Georgia Regents Univ, Augusta, GA; Qinkai Li, Peking Univ Shenzhen Graduate Sch, Shenzhen, China; Chaodong Wu, Texas A&M Univ, College Station, TX; Yuqing Huo, Georgia Regents Univ, Augusta, GA

Y. Xu: None. **S. Yan:** None. **Y. Wang:** None. **X. An:** None. **Q. Li:** None. **C. Wu:** None. **Y. Huo:** None.

11

Suppression of Coronary Artery Stent Inflammation by Colchicine Decreases Stent Restenosis, as Assessed by Serial in vivo Optical Molecular-structural Imaging

Eric A Osborn, Giovanni J Ughi, Adam Mauskapf, Massachusetts General Hosp, Boston, MA; Peter Oettgen, Beth Israel Deaconess Medical Ctr, Boston, MA; Guillermo J Tearney, Farouc A Jaffer, Massachusetts General Hosp, Boston, MA

E.A. Osborn: None. **G.J. Ughi:** None. **A. Mauskapf:** None. **P. Oettgen:** None. **G.J. Tearney:** Other Research Support; Modest; Canon, Merck, Terumo. **F.A. Jaffer:** Other Research Support; Modest; Merck, Kowa, Siemens. Other; Modest; Boston Scientific.

12

EMMPRIN-Targeted Magnetic Nanoparticles for in vivo Visualization and Regression of Acute Myocardial Infarction in a Model of Acute Coronary Artery Occlusion

Irene Cuadrado, Maria Jose Garcia Miguel, Irene Herruzo, Mari Carmen Turpin, Ana Martin, Univ Francisco de Vitoria/Hosp Ramon y Cajal, Pozuelo de Alarcon Madrid, Spain; Paula Reventun, Marta Saura, Univ of Alcalá, Alcalá de Henares, Spain; Jose-Luis Zamorano, Hosp Ramon y Cajal, Madrid, Spain; **Carlos Zaragoza**, Univ Francisco de Vitoria/Hosp Ramon y Cajal, Pozuelo de Alarcon Madrid, Spain

I. Cuadrado: None. **M. Garcia Miguel:** None. **I. Herruzo:** None. **M. Turpin:** None. **A. Martin:** None. **P. Reventun:** None. **M. Saura:** None. **J. Zamorano:** None. **C. Zaragoza:** None.

13

Development of Functionalized Nanoparticle Platform for Reducing Atherosclerosis

Shobha Ghosh, Jing Wang, Jinghua Bie, Quan Yuan, Olga Zolotaraskaya, Hu Yang, Virginia Commonwealth Univ, Richmond, VA

S. Ghosh: None. **J. Wang:** None. **J. Bie:** None. **Q. Yuan:** None. **O. Zolotaraskaya:** None. **H. Yang:** None.

14

Identification of Linc-OSBPL6 as a Competing Endogenous RNA that Regulates Cholesterol Homeostasis

Coen van Solingen, Elizabeth J Hennessy, Mireille Ouimet, Kaitlyn Rinehold, Maryem Hussein, Michael J Garabedian, NYU Sch of Med, New York, NY; Daniel Teupser, Lesca M Holdt, Inst of Lab Med, Munich, Germany; Kathryn J Moore, NYU Sch of Med, New York, NY

C. van Solingen: None. **E.J. Hennessy:** None. **M. Ouimet:** None. **K. Rinehold:** None. **M. Hussein:** None. **M.J. Garabedian:** None. **D. Teupser:** None. **L.M. Holdt:** None. **K.J. Moore:** None.

15

Proteomic Analysis of HDL from Inbred Strains of Mice Implicates APOE in Reduced Cholesterol Efflux Capacity via the ABCA1 Pathway

Nathalie Pamir, Patrick Hutchins, Graziella Ronsein, Tomas Vaisar, Univ of Washington, Seattle, WA; Catherine Reardon, Godfrey Getz, Univ of Chicago, Chicago, IL; Aldons J. Lusis, UCLA, Los Angeles, CA; Jay W. Heinecke, Univ of Washington, Seattle, WA

N. Pamir: None. **P. Hutchins:** None. **G. Ronsein:** None. **T. Vaisar:** None. **C. Reardon:** None. **G. Getz:** None. **A.J. Lusis:** None. **J.W. Heinecke:** None.

16

Tribbles1 Regulates Hepatic Lipogenesis in Mice through Post-Translational Regulation of C/EBP α

Robert C Bauer, Makoto Sasaki, Daniel M Cohen, Jian Cui, Mikhaila A Smith, David J Steger, Daniel J Rader, Univ of Pennsylvania, Philadelphia, PA

R.C. Bauer: None. **M. Sasaki:** None. **D.M. Cohen:** None. **J. Cui:** None. **M.A. Smith:** None. **D.J. Steger:** None. **D.J. Rader:** None.

17

SURP and G Patch Domain Containing 1 is a Novel Regulator of Cholesterol Metabolism

Marisa W Medina, Chi-Yi Yu, Mee J Kim, Elizabeth Theusch, Devesh Naidoo, Kristen Stevens, Yu-Lin Kuang, CHORI, Oakland, CA

M.W. Medina: None. **C. Yu:** None. **M.J. Kim:** None. **E. Theusch:** None. **D. Naidoo:** None. **K. Stevens:** None. **Y. Kuang:** None.

18

Adipose Specific Microsomal Triglyceride Transfer Protein Deficient Mice Are Resistant To High Fat Diet Induced Obesity

Ahmed Bakillah, **M. Mahmood Hussain**, SUNY Downstate Medical Ctr, Brooklyn, NY

A. Bakillah: None. **M. Hussain:** None.

19

Deletion of Myeloid GSK3 α Attenuates Atherosclerosis and Promotes an M2 Macrophage Phenotype

Cameron McAlpine, Aric Huang, Abby Emdin, Nicole Banko, Daniel Beriault, Yuanyuan Shi, Geoff Werstuck, McMaster Univ, Hamilton, ON, Canada

C. McAlpine: None. **A. Huang:** None. **A. Emdin:** None. **N. Banko:** None. **D. Beriault:** None. **Y. Shi:** None. **G. Werstuck:** None.

20

Apolipoprotein A-I Influences Regulatory T Cell Development and Proliferation in Homeostasis and Atherogenesis

Dalia E. Gaddis, Amy Wu, Debbi Yoakum, La Jolla Inst, La Jolla, CA; Mary Sorci-Thomas, Medical Coll of Wisconsin, Milwaukee, WI; Catherine C. Hedrick, La Jolla Inst, La Jolla, CA

D.E. Gaddis: None. **A. Wu:** None. **D. Yoakum:** None. **M. Sorci-Thomas:** None. **C.C. Hedrick:** None.

21

B-1b Cells Secrete Atheroprotective IgM and Attenuate Atherosclerosis

Sam Morris-Rosenfeld, Heather M Perry, Prasad Srikakulapu, Chantel McSkimming, Univ of Virginia, Charlottesville, VA; Ayelet Gonen, Thomas A Prohaska, Sotirios Tsimikas, Joseph L Witztum, UCSD, La Jolla, CA; Timothy P Bender, Angela Taylor, Coleen A McNamara, Univ of Virginia, Charlottesville, VA

S. Morris-Rosenfeld: None. **H.M. Perry:** None. **P. Srikakulapu:** None. **C. McSkimming:** None. **A. Gonen:** None. **T.A. Prohaska:** None. **S. Tsimikas:** Employment; Modest; Isis Pharmaceuticals. **J.L. Witztum:** Consultant/Advisory Board; Modest; ISIS Pharmaceuticals, CymaBay, Intercept. **T.P. Bender:** None. **A. Taylor:** None. **C.A. McNamara:** None.

22

Monocyte Chemotactic Protein-1 and Macrophage Colony-Stimulating Factor Are Strong Predictors of First-Time Myocardial Infarction in the General Population

Alexandru Schiopu, Eva Bengtsson, Isabel Goncalves, Jan Nilsson, Gunilla Nordin Fredrikson, Harry Björkbacka, Lund Univ, Malmö, Sweden

A. Schiopu: None. **E. Bengtsson:** None. **I. Goncalves:** None. **J. Nilsson:** None. **G. Nordin Fredrikson:** None. **H. Björkbacka:** None.

23

Immunosuppression with FTY720 Reverses Cardiac Dysfunction to Prevent Chronic Heart Failure in Mice that Survive Diet-induced Myocardial Infarction

Fu Sang Luk, Roy Y. Kim, Kang Li, Daniel Ching, Sunil Joshi, Norman Honbo, Isabella Imhof, Bo-qing Zhu, David Lovett, Joel S. Karliner, Robert L. Raffai, Univ of California San Francisco and VA Medical Ctr, San Francisco, CA

F. Luk: None. **R.Y. Kim:** None. **K. Li:** None. **D. Ching:** None. **S. Joshi:** None. **N. Honbo:** None. **I. Imhof:** None. **B. Zhu:** None. **D. Lovett:** None. **J.S. Karliner:** None. **R.L. Raffai:** None.

24

Resolvin D2 Reduces Thrombus Burden and Attenuates Inflammatory Signaling Pathways in a Murine Model of Venous Thrombosis

Jose A Diaz, Maxim E Shaydakov, Univ of Michigan, Ann Arbor, MI; Anuran Chatterjee, Univ of California San Francisco, San Francisco, CA; Diana M Farris, Nicole E Ballard-Lipka, Angela E Hawley, Robert E Sigler, Peter K Henke, Daniel D Myers, Thomas W Wakefield, Univ of Michigan, Ann Arbor, MI; Michael S Conte, Univ of California San Francisco, San Francisco, CA

J.A. Diaz: None. **M.E. Shaydakov:** None. **A. Chatterjee:** None. **D.M. Farris:** None. **N.E. Ballard-Lipka:** None. **A.E. Hawley:** None. **R.E. Sigler:** None. **P.K. Henke:** None. **D.D. Myers:** None. **T.W. Wakefield:** None. **M.S. Conte:** None.

25

Critical Limb Ischemia Progression is Associated with an Inflammatory Profile

Hendrik Gremmels, Martin Teraa, Joost O. Fledderus, Olivier G de Jong, Univ Medical Ctr, Utrecht, Utrecht, Netherlands; Yolanda van der Graaf, Univ Medical Ctr, Utrecht (Julius Ctr), Utrecht, Netherlands; Frans L Moll, Marianne C Verhaar, Univ Medical Ctr, Utrecht, Utrecht, Netherlands

H. Gremmels: None. **M. Teraa:** None. **J.O. Fledderus:** None. **O.G. de Jong:** None. **Y. van der Graaf:** None. **F.L. Moll:** None. **M.C. Verhaar:** None.

26

Who is Going to Stroke? Biomarkers for the Unstable Carotid Atheroma

Ulf Hedin, Ljubica Matic Perisic, Maria Jesus Iglesias, Mariette Lengquist, Anton Razuvaev, Joy Roy, Karolinska Inst, Stockholm, Sweden; Fredrik Pontén, Uppsala Univ, Uppsala, Sweden; Jacob Odeberg, Karolinska Inst, Stockholm, Sweden

U. Hedin: None. **L. Matic Perisic:** None. **M. Iglesias:** None. **M. Lengquist:** None. **A. Razuvaev:** None. **J. Roy:** None. **F. Pontén:** None. **J. Odeberg:** None.

27

Therapeutic Targeting of Human Lipid Genes With in vivo CRISPR-Cas9 Genome Editing

Avanthi Raghavan, Tao Chen, Nicolas Kuperwasser, Harvard Univ, Cambridge, MA; Qiurong Ding, Inst for Nutritional Sciences, Shanghai, China; **Kiran Musunuru**, Harvard Univ, Cambridge, MA

A. Raghavan: None. **T. Chen:** None. **N. Kuperwasser:** None. **Q. Ding:** None. **K. Musunuru:** None.

28

Mechanistic Studies of HDL Mimetic Peptide ATI-5261 Reveal Aspects of Class A Alpha-helix Structure that Induce Cytotoxicity and Hypertriglyceridemia in vivo: Design of Safe Analogs with Potent Anti-atherosclerosis and Anti-diabetic Actions

John K Bielicki, Lawrence Berkeley Natl Lab, Berkeley, CA; Vasanthi Narayanaswami, California State Univ, Long Beach, CA; Greg Hura, Lawrence Berkeley Natl Lab, Berkeley, CA; Stefanie Bittner, Juveria Tabassum, VA Palo Alto Health Care System, Stanford Univ, Palo Alto, CA; Anouar Hafiane, Jacques Genest, McGill Univ Health Ctr Royal Victoria Hosp, Montreal, QC, Canada; Jan Johansson, Artery Therapeutics, San Ramon, CA; Salman Azhar, VA Palo Alto Health Care System, Stanford Univ, Palo Alto, CA

J.K. Bielicki: Research Grant; Modest; Artery Therapeutics. Ownership Interest; Modest; Artery Therapeutics. Consultant/Advisory Board; Modest; Artery Therapeutics. **V. Narayanaswami:** None. **G. Hura:** None. **S. Bittner:** None. **J. Tabassum:** None. **A. Hafiane:** None. **J. Genest:** None. **J. Johansson:** Ownership Interest; Significant; Artery Therapeutics. **S. Azhar:** Research Grant; Modest; Artery Therapeutics.

29

PCSK9 Association With Lipoprotein(a)

Hagai Tavori, Ilaria Giunzioni, Oregon Health & Science Univ, Portland, OR; Calvin Yeang, Sotirios Tsimikas, Univ of California San Diego, La Jolla, CA; Michael D. Shapiro, Barton P. Duell, Sergio Fazio, Oregon Health & Science Univ, Portland, OR

H. Tavori: None. **I. Giunzioni:** None. **C. Yeang:** None. **S. Tsimikas:** None. **M.D. Shapiro:** None. **B.P. Duell:** None. **S. Fazio:** None.

30

Apolipoprotein CIII Sialylation is a Critical Determinant of Liver Triglyceride Metabolism

Hussein N Yassine, Ambika Ramrakhiani, Aarushi Parekh, Ryan Walker, Michael Goran, Univ of Southern California, Los Angeles, CA; Olga Trenchevska, Dobrin Nedelkov, Randall Nelson, Arizona State Univ, Tempe, AZ; Juraj Koska, Peter D Reaven, Carl T. Hayden VAMC, Phoenix, AZ; Frances T. Yen, Univ De Lorraine, Nancy, France

H.N. Yassine: None. **A. Ramrakhiani:** None. **A. Parekh:** None. **R. Walker:** None. **M. Goran:** None. **O. Trenchevska:** None. **D. Nedelkov:** None. **R. Nelson:** None. **J. Koska:** None. **P.D. Reaven:** None. **F.T. Yen:** None.

31

Functional Impact of Inflammatory Cell-Originating HDL-miR-223 Communication in vivo

Carrie B Wiese, Leslie A Roteta, Wanying Zhu, Stuart R Landstreet, **Kasey C Vickers**, Vanderbilt Univ Sch of Med, Nashville, TN

C.B. Wiese: None. **L.A. Roteta:** None. **W. Zhu:** None. **S.R. Landstreet:** None. **K.C. Vickers:** None.

32

Coagulation Factor XI and Thrombin Mediate Angiotensin II-induced Vascular Dysfunction

Moritz Ehlken, Sabine Kossmann, Sven Jäckel, Kerstin Jurk, Tanja Schönfelder, Ulrich Walter, Univsmedizin der Johannes Gutenberg-Univ Mainz, Mainz, Germany; Thomas Renné, Karolinska Instt, Stockholm, Sweden; Wolfram Ruf, Thomas Münzel, Philip Wenzel, Univsmedizin der Johannes Gutenberg-Univ Mainz, Mainz, Germany

M. Ehlken: None. **S. Kossmann:** None. **S. Jäckel:** None. **K. Jurk:** None. **T. Schönfelder:** None. **U. Walter:** None. **T. Renné:** None. **W. Ruf:** None. **T. Münzel:** None. **P. Wenzel:** None.

33

Role of Epsins in Regulating LPS-Induced Sepsis

Satish Pasula, Megan L Brophy, Kandice L Tessner, Scott Hahn, John McManus, Hua Zhu, Baojun Chang, Yunzhou Dong, Xiaofeng Cai, Hoogeun Song, Hao Wu, **Hong Chen**, Oklahoma Medical Res Fndn, Oklahoma City, OK

S. Pasula: None. **M.L. Brophy:** None. **K.L. Tessner:** None. **S. Hahn:** None. **J. McManus:** None. **H. Zhu:** None. **B. Chang:** None. **Y. Dong:** None. **X. Cai:** None. **H. Song:** None. **H. Wu:** None. **H. Chen:** None.

34

Elevated Plasma CETP Activity and Hyper-procoagulant R451Q-CETP Mutation Linked to Venous Thrombosis Risk

Hiroshi Deguchi, Xiao Xu, Darlene J Elias, **John H Griffin**, The Scripps Res Inst, La Jolla, CA

H. Deguchi: None. **X. Xu:** None. **D.J. Elias:** None. **J.H. Griffin:** None.

35

Identification of a Mouse Strain Modifier Locus for Factor V Leiden/Tissue Factor Pathway Inhibitor Dependent Thrombosis

Derrick M Germain, Amy E Siebert, Stephanie Verbeek, Oakland Univ, Rochester, MI; Guojing Zhu, Kärt Tomberg, Audrey Cleuren, David Siemieniak, Univ of Michigan, Ann Arbor, MI; Randal J Westrick, Oakland Univ, Rochester, MI

D.M. Germain: None. **A.E. Siebert:** None. **S. Verbeek:** None. **G. Zhu:** None. **K. Tomberg:** None. **A. Cleuren:** None. **D. Siemieniak:** None. **R.J. Westrick:** None.

36

Concurrent Ultrasound Diagnosis and Treatment of Thrombosis Using Activated Platelet Targeted Theranostic Microbubbles

Xiaowei Wang, Yannik Gkanatsas, Jathushan Palasubramaniam, Jan David Hohmann, Christoph E Hagemeyer, **Karlheinz Peter**, Baker/DI Heart and Diabetes Inst, VIC, Australia

X. Wang: None. **Y. Gkanatsas:** None. **J. Palasubramaniam:** None. **J. Hohmann:** None. **C.E. Hagemeyer:** None. **K. Peter:** None.

37

A Multi-locus Genetic Risk Score for Abdominal Aortic Aneurysm

Zi Ye, Erin Austion, Daniel J Schaid, Iftikhar J Kullo, Mayo Clinic, Rochester, MN

Z. Ye: None. **E. Austion:** None. **D. Schaid:** None. **I.J. Kullo:** None.

38

Cyclin-Dependent Kinase Inhibitor 2B Regulates Transforming Growth Factor Beta 1 Mediated Smooth Muscle Cell Recruitment to Ischemic Blood Vessels

Vivek Nanda, Kelly Downing, Yoko Kojima, Jessie Dalman, Daniel M DiRenzo, Andrew J Connolly, Stanford Univ Sch of Med, Stanford, CA; Lars Maegdefessel, Ljubica Perisic, Karolinska Inst, Stockholm, Sweden; Sonny Dandona, McGill Univ, Montreal, QC, Canada; Liang Guo, Harry R

Davis Jr, Renu Virmani, CVPath Inst, Gaithersburg, MD; Joshua M Spin, Nicholas J Leeper, Stanford Univ Sch of Med, Stanford, CA

V. Nanda: None. **K. Downing:** None. **Y. Kojima:** None. **J. Dalman:** None. **D.M. DiRenzo:** None. **A.J. Connolly:** None. **L. Maegdefessel:** None. **L. Perisic:** None. **S. Dandona:** None. **L. Guo:** None. **H.R. Davis:** None. **R. Virmani:** None. **J.M. Spin:** None. **N.J. Leeper:** None.

39

Circulating miRNA Signature of Pet-Positive Abdominal Aortic Aneurysms: New Potential Predictors of Rupture
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A. Courtois: None. **B. Nusgens:** None. **R. Hustinx:** None. **J. Defraigne:** None. **A. Colige:** None. **N. Sakalihasan:** None.

40

Increased Expression of Transforming Growth Factor-Beta 1 in the Gastrocnemius of Patients with Peripheral Artery Disease is a Localized Response in the Ischemic Muscle

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D.M. Ha: None. **L.A. Carpenter:** None. **G.P. Casale:** None. **J.K. Kim:** None. **S.A. Swanson:** None. **P. Koutakis:** None. **E. Papoutsis:** None. **I.I. Pipinos:** None.

41

Postnatal Deletion of Vascular Smooth Muscle Cell Transforming Growth Factor beta Receptor 2 in Mice Exacerbates Marfan-syndrome-associated Aortic Dilation

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H. Wei: None. **S.N. Angelov:** None. **J. Hu:** None. **D.A. Dichek:** None.

42

Platelet Polyphosphate Accelerates the Inhibition of Tissue Factor Pathway Inhibitor by Factor XIa.

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C. Puy: None. **A. Gruber:** None. **E.I. Tucker:** None. **D. Gailani:** None. **S.A. Smith:** None. **S.H. Choi:** None. **J.H. Morrissey:** None. **O.J.T. McCarty:** None.

43

Recycling Controls Procoagulant and Cell Signaling Functions of Tissue Factor

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A.S. Rothmeier: None. **W. Ruf:** None.

44

Organ-specific Stochastic Phenotype Switching is Required for Endothelial Health

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L. Yuan: None. **G.C. Chan:** None. **D. Beeler:** None. **L. Janes:** None. **K.C. Spokes:** None. **A. Mojiri:** None. **W.J. Adams:** None. **T. Sciuto:** None. **G. Garcia-Cardena:** None. **G. Molema:** None. **N. Jahroudi:** None. **P.A. Marsden:** None. **A. Dvorak:** None. **E.R. Regan:** None. **W.C. Aird:** None.

45

Characterization of a Novel Integrin Binding Protein that is Essential for $\alpha\text{IIb}\beta\text{3}$ Outside-in Signaling and Hemostasis

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B. Xiang: None. **G. Zhang:** None. **S. Ye:** None. **C. Huang:** None. **J. Liu:** None. **M. Tao:** None. **C. Ruan:** None. **S. Smyth:** None. **S. Whiteheart:** None. **Z. Li:** None.

46

Cellular Cholesterol Homeostasis is Altered in Murine Models of Rheumatoid Arthritis and is Linked to Enhanced Myelopoiesis

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47

High-Density Lipoproteins Induce Neutrophil-miRNA Transcription and Export: Contribution to HDL-miRNA Cell to Cell Communication

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F. Tabet: None. **L.F. Cuesta Torres:** None. **C.B. Wiese:** None. **G. Öhrling:** None. **R. Larsson:** None. **P.J. Barter:** None. **K.C. Vickers:** None. **K. Rye:** None.

48

Myelopoiesis Following Myocardial Ischemia (MI) Involves Activation of the Nlrp3 Inflammasome by Neutrophil-Derived S100a8/a9

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P.R. Nagareddy: None. **R. Annabathula:** None. **S. Ye:** None. **Y.M. Klaychkin:** None. **A. Abdel-Latif:** None. **S.S. Smyth:** None.

49

The Transcriptional Repressor MafG Regulates Cholesterol Catabolism

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T.Q. de Aguiar Vallim: None. **E.J. Tarling:** None. **H. Ahn:** None. **L.R. Hagey:** None. **C.E. Romanoski:** None. **R.G. Lee:** Employment; Significant; ISIS. Ownership Interest;

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50

A Phase I Clinical Trial Evaluating the Safety of With Allogeneic Adipose Tissue-derived Multilineage Progenitor Cells-transplantation Therapy in Homozygous Familial Hypercholesterolemia Patients
Masahiro Koseki, Shizuya Yamashita, Osaka Univ Graduate Sch, Suita, Osaka, Japan
M. Koseki: None. **S. Yamashita:** None.

51

LincAQPEP, an Adipocyte-Specific Intergenic Noncoding RNA, Modulates Lipid Metabolism in Human Adipocytes
Xuan Zhang, Chenyi Xue, Yumiao Han, Benjamin Garcia, Raymond Soccio, Mingyao Li, Muredach P Reilly, Univ of Pennsylvania, Philadelphia, PA
X. Zhang: None. **C. Xue:** None. **Y. Han:** None. **B. Garcia:** None. **R. Soccio:** None. **M. Li:** None. **M.P. Reilly:** None.

52

Capsaicin Activates the Trpv1-camkii-ampk-sirt1-dependent Mechanism to Trigger Brown Remodeling of White Adipocytes to Antagonize Diet-induced Obesity
Baskaran Thyagarajan, Jun Ren, Padmamalini Baskaran, Univ of Wyoming, Laramie, WY
B. Thyagarajan: None. **J. Ren:** None. **P. Baskaran:** None.

53

Tumor Necrosis Factor-alpha Enhances Adipogenesis of Adipose Tissue-derived Mesenchymal Stem Cells during Evolution of Obesity
Xiangyang Zhu, Shuangtao Ma, Alfonso Eirin, John R. Woollard, Kyra L. Jordan, Hui Tang, Amir Lerman, Lilach O. Lerman, Mayo Clinic Rochester, Rochester, MN
X. Zhu: None. **S. Ma:** None. **A. Eirin:** None. **J.R. Woollard:** None. **K.L. Jordan:** None. **H. Tang:** None. **A. Lerman:** None. **L.O. Lerman:** None.

54

Syndesome-Based Dressings for Enhanced Wound Healing in Diabetic Ulcers
Subhamoy Das, Gunjan Singh, Anthony Monteforte, Matthew Martinez, Univ of Texas, Austin, TX; Catherine Wright, Patricia Martin, Glasgow Caledonian Univ, Glasgow, United Kingdom; Andrew Dunn, **Aaron Baker,** Univ of Texas, Austin, TX
S. Das: None. **G. Singh:** None. **A. Monteforte:** None. **M. Martinez:** None. **C. Wright:** None. **P. Martin:** None. **A. Dunn:** None. **A. Baker:** None.

55

Chronic Loss of Serotonin Transporter Function Alters Platelet Adhesion and Spreading
Kendra H Oliver, Michael R Dohn, Matthew T Duvernay, Heidi Hamm, Ana Carnerio, Vanderbilt Univ, Nashville, TN
K.H. Oliver: None. **M. Dohn:** None. **M. Duvernay:** None. **H. Hamm:** None. **A. Carnerio:** None.

56

Platelet Specific Knockout of Glucose Transporter 3 Leads to Altered Metabolism and Decreased Platelet Activation
Trevor P Fidler, Elizabeth Middleton, Jesse W. Rowley, Univ of Utah, Salt Lake City, UT; Luc Boudreau, Ctr Hospier de l'Univ Laval, Québec, QC, Canada; Robert A. Campbell, Univ of Utah, Salt Lake City, UT; Rhonda Souvenir, Univ of Iowa, Iowa City, IA; Eric Boilard, Ctr Hospier de l'Univ Laval, Quebec, QC, Canada; Andrew S. Weyrich, Univ of Utah, Salt Lake City, UT; E. Dale Abel, Univ of Iowa, Iowa City, IA
T.P. Fidler: None. **E. Middleton:** None. **J.W. Rowley:** None. **L. Boudreau:** None. **R.A. Campbell:** None. **R. Souvenir:** None. **E. Boilard:** None. **A.S. Weyrich:** None. **E.D. Abel:** None.

57

Platelet Extracellular-signal-regulated Kinase 5 is a Redox Switch which Regulates Myocardial Infarct Expansion via Matrix Metalloproteinases
Scott J Cameron, Sara K Ture, Deanne Mickelsen, Enakshi Chakrabarti, Kristina L Modjeski, Michael Seaberry, David Field, Jun-ichi Abe, Craig Morrell, Univ of Rochester Medical Ctr, Rochester, NY
S.J. Cameron: None. **S.K. Ture:** None. **D. Mickelsen:** None. **E. Chakrabarti:** None. **K.L. Modjeski:** None. **M. Seaberry:** None. **D. Field:** None. **J. Abe:** None. **C. Morrell:** None.

58

Differential Signaling by CRP-Rac1-NOX1 and Thrombin-Rac1-NOX2 Axes Regulates Ros Generation and Platelet Activation
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H. Akbar: None. **X. Duan:** None. **S. Saleem:** None. **A.K. Davis:** None. **Y. Zheng:** None.

59

Disparity in Protection from Thrombotic Risk Depends on Platelet Thrombin Receptor PAR4
Benjamin Tourdot, Michael Holinostat, Univ of Michigan, Ann Arbor, MI
B. Tourdot: None. **M. Holinostat:** Research Grant; Significant; R01 MD007880.

60

Histone Modification H3k4me2 Controls Vascular Smooth Muscle Cell Lineage Memory during Vascular Injury
Delphine Gomez, Gary K Owens, Univ of Virginia, Charlottesville, VA
D. Gomez: None. **G.K. Owens:** None.

61

Deficiency of the RNA Editing Enzyme ADAR2 Impairs Inflammation, Neovascularization and Functional Recovery of Ischemic Tissues
Konstantinos Stellos, Aikaterini Gatsiou, Federica Lunella, Ariane Fischer, Carolin Amrhein, Andreas Zeiher, Stefanie Dimmeler, J.W. Goethe Univ Frankfurt, Frankfurt am Main, Germany
K. Stellos: None. **A. Gatsiou:** None. **F. Lunella:** None. **A. Fischer:** None. **C. Amrhein:** None. **A. Zeiher:** None. **S. Dimmeler:** None.

62

Molecular Basis of Regulatory Variation at Coronary Heart Disease-Associated Loci
Clint L Miller, Milos Pjanic, Jonathan D Lee, Boxiang Liu, William J Greenleaf, Stephen B Montgomery, Thomas Quertermous, Stanford Univ, Stanford, CA
C.L. Miller: None. **M. Pjanic:** None. **J.D. Lee:** None. **B. Liu:** None. **W.J. Greenleaf:** None. **S.B. Montgomery:** None. **T. Quertermous:** None.

63

A Regulatory Enhancer Variant at the Hypertensive GRAF3 Locus Increases SMC-Selective Expression of GRAF3 by Promoting SRF Binding
Kevin Mangum, Joan Taylor, Christopher Mack, Univ of North Carolina, Chapel Hill, Chapel Hill, NC
K. Mangum: None. **J. Taylor:** None. **C. Mack:** None.

Methyl CpG Binding Protein 2 Inhibition by MicroRNA-22 is Required for Stem Cell Differentiation Towards Smooth Muscle Cell

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H. Zhao: None. **G. Wen:** None. **Y. Huang:** None. **X. Yu:** None. **Q. Chen:** None. **L. Luong:** None. **Y. Shu:** None. **L. Zhang:** None. **Q. Xiao:** None.

Poster Abstracts

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Cd98 Modulates Atherosclerotic Plaque Morphology by Regulating Smooth Muscle Cell Proliferation via the P-38 Map Kinase Pathway

Sara McCurdy, Yvonne Baumer, Franz Hess, William A Boisvert, Univ of Hawaii, John A. Burns Sch of Med, Honolulu, HI

S. McCurdy: None. **Y. Baumer:** None. **F. Hess:** None. **W.A. Boisvert:** None.

103

HDL Improves Cholesterol and Glucose Homeostasis and Reduces Atherosclerosis in TRAIL-/-ApoE-/- mice

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B.A. Di Bartolo: None. **S.P. Cartland:** None. **M. Vellozzi:** None. **K. Rye:** None. **M.M. Kavurma:** None.

104

NMR Analyses of the Structural and Oligomeric Properties of the C-terminal Transmembrane Domain of SR-BI in Detergent Micelles

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A.C. Chadwick: None. **D.R. Jensen:** None. **F.C. Peterson:** None. **B.F. Volkman:** None. **D. Sahoo:** None.

586

Renal Impairment, Carotid Plaque Burden and Stenosis: Only Partly Explained by Homocysteine

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J. Spence: None.

110

The Separation of Serum Amyloid A from HDL is Mediated by Heparan Sulfate Through Histidine Dependent Interactions: HDL Function is Enhanced but Amyloid-Fibrils may be the "Price to Pay"...

John B Ancsin, Univ of Chicago, Chicago, IL; Kim Munro, Shui-Pang Tam, Queen's Univ, Kingston, ON, Canada; Michael H Davidson, Univ of Chicago, Chicago, IL

J.B. Ancsin: None. **K. Munro:** None. **S. Tam:** None. **M.H. Davidson:** None.

111

HDL-apolipoprotein A-I Exchange Is Impaired in the Metabolic Syndrome

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M.S. Borja: None. **B. Hammerson:** None. **O.V. Savinova:** None. **G.C. Shearer:** None. **M.N. Oda:** Ownership Interest; Modest; MNO is cofounder of Seer Biologics, Inc., which could stand to benefit from the research described here.. Other; Modest; MNO has filed a patent describing the assay through Children's Hospital Oakland in 2011..

112

Nitrated Apolipoprotein Ai/apolipoprotein Ai Ratio Is Increased in Diabetic Patients With Coronary Artery Disease

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X. Chen: None. **A. Bakillah:** None. **L. Zhou:** None. **F. Hoepfner:** None. **M. Jacob:** None. **X. Pan:** None. **X. Jiang:** None. **J. Lazar:** None. **A. Schlitt:** None. **M. Hussain:** None.

113

Phospholipid Physical State Determines the Efficiency of Cholesteryl Ester Transfer by Cholesteryl Ester Transfer Protein between Discoidal High Density Lipoproteins

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A.D. Dergunov: Research Grant; Modest; RFBR #13-04-00474. **D.Y. Litvinov:** None. **M.S. Vlasov:** None.

114

Serum Amyloid A Plays an Important Role in Making HDL Lose Its Anti-inflammatory Effect on Adipocytes

Chang Yeop Han, Myriam E Guevara, Hao Wei, Chongren Tang, Mohamed Omer, Shari Wang, Univ of Washington, Seattle, WA; Maria C de Beer, Coll of Med and , Univ of Kentucky Medical Ctr., Lexington, KY; Frederick C de Beer, Univ of Kentucky Medical Ctr, Lexington, KY; William RA Osborne, Keith B Elkon, Alan Chait, Univ of Washington, Seattle, WA

C. Han: None. **M.E. Guevara:** None. **H. Wei:** None. **C. Tang:** None. **M. Omer:** None. **S. Wang:** None. **M.C. de Beer:** None. **F.C. de Beer:** None. **W.R. Osborne:** None. **K.B. Elkon:** None. **A. Chait:** None.

115

Microsomal Triglyceride Transfer Protein Is a Major Determinant of Plasma Ceramide And Sphingomyelin but Not of Hexosylceramide and Lactosylceramide

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J. Iqbal: None. **M.T. Walsh:** None. **S.M. Hammad:** None. **M. Cuchel:** None. **P. Tarugi:** None. **R.A. Hegele:** None. **N.O. Davidson:** None. **D.J. Rader:** None. **R.L. Klein:** None. **M. Hussain:** None.

116

Mechanism of ApoA-I Attenuation of Inflammation Associated with Atherosclerosis

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N. Nuradin: None. **R.D. Pollard**: None. **M. Zabalawi**: None. **B. Pulp**: None. **M.G. Sorci-Thomas**: None. **M.J. Thomas**: None.

117

The Impact of Apolipoprotein B Depletion Methods on HDL Subspecies Distribution and Function

Amy Sanghavi Shah, Anna Heink, Cincinnati Children's Hosp Medical Ctr, Cincinnati, OH; W Sean Davidson, Univ of Cincinnati, Cincinnati, OH

A.S. Shah: None. **A. Heink**: None. **W.S. Davidson**: None.

118

Phospholipid Transfer Protein, High Density Lipoprotein Particle Concentration and Cardiovascular Disease Risk

Tomas Vaisar, Patrick Hutchins, Chongren Tang, University of Washington, Seattle, WA; Bryan Prazen, Insilicos, Seattle, WA; Xue-Qiao Zhao, Jay W Heinecke, University of Washington, Seattle, WA

T. Vaisar: None. **P. Hutchins**: None. **C. Tang**: None. **B. Prazen**: None. **X. Zhao**: None. **J.W. Heinecke**: None.

119

Identifying and Quantifying Six ApoA-I HDL Subspecies by a Novel Modified Sandwich ELISA

Rain Yamamoto, Jeremy D Furtado, Frank M Sacks, Harvard Sch of Public Health, Boston, MA

R. Yamamoto: None. **J.D. Furtado**: None. **F.M. Sacks**: None.

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Inhibitory Effects of Cholesterol on Lysophosphatidylcholine Metabolism in Human Monocytes

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I. Fernandez-Ruiz: None. **C. Aluganti Narasimhulu**: None. **B. Sengupta**: None. **S. Parthasarathy**: None.

121

Pro-inflammatory Cytokine Ifng Modulates Hepatic Sortilin Expression and Lipid Metabolism.

John Pirault, Konstantinos Polyzos, Daniel F Ketelhuth, Göran K Hansson, Karolinska Inst, Stockholm, Sweden

J. Pirault: None. **K. Polyzos**: None. **D.F.J. Ketelhuth**: None. **G.K. Hansson**: None.

122

Ceramide Activation of Macrophage RhoA/Rho Kinase/LIM Kinase Signaling Impairs Aggregated LDL Degradation and Foam Cell Formation

Rajesh K Singh, Abigail S Haka, Inna Grosheva, Alexandra Brumfield, Yuquan Xiong, Timothy Hla, Frederick R Maxfield, Weill Cornell Medical Coll, New York, NY

R.K. Singh: None. **A.S. Haka**: None. **I. Grosheva**: None. **A. Brumfield**: None. **Y. Xiong**: None. **T. Hla**: None. **F.R. Maxfield**: None.

123

The Immunoproteasome Does Not Influence Macrophage Differentiation but Survival of Differentiated Macrophages

Feilong Wang, Lisa Nesbitt, Amir Lerman, Joerg Herrmann, Mayo Clinic, Rochester, MN

F. Wang: None. **L. Nesbitt**: None. **A. Lerman**: None. **J. Herrmann**: None.

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HDL Particles and HDL Functions

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B.F. Asztalos: Research Grant; Significant; Boston Heart Diagnostics. Consultant/Advisory Board; Significant; Boston Heart Diagnostics. **K.V. Horvath**: Employment; Significant; Boston Heart Diagnostics. Ownership Interest; Significant; Boston Heart Diagnostics. **A. Goldfine**: None. **E.J. Schaefer**: None.

125

Small Dense LDL ApoB Is Catabolized More Slowly Than Large LDL ApoB in Subjects With Combined Hyperlipidemia, and Rosuvastatin Enhances Its Clearance

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126

Effects of Rosuvastatin on the Protein Composition of Lipoprotein Subfractions

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S.M. Gordon: None. **G. Kemeh**: None. **M.B. Fessler**: None. **A.T. Remaley**: None.

127

Effects of miR-33 Antagonism on Glucose and Triglyceride Metabolism in Nonhuman Primates.

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J.D. Layne: None. **A.L. McDaniel**: None. **S.M. Marshall**: None. **K. Kavanagh**: None. **C.C. Esau**: None. **K.J. Moore**: None. **R.E. Temel**: None.

128

Recombinant Lecithin Cholesterol Acyltransferase Generates Mature High Density Lipoprotein with Increased Capacity to Efflux Cholesterol via ABCG1 in Cynomolgus Monkeys

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129

Effects of a Proprotein Convertase Subtilisin/Kexin Type 9 Inhibitor, Alirocumab, on Lipid and Lipoprotein Metabolism in Normal Subjects

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G. Reyes-Soffer: Research Grant; Modest; Sanofi. Honoraria; Modest; Genzyme, Inc. Consultant/Advisory Board; Modest; Genzyme, Inc. **M. Pavlyha:** None. **C. Ngai:** None. **P. Ippolito:** None. **S. Holleran:** None. **R. Ramakrishnan:** None. **W. Karmally:** None. **D. Donovan:** None. **L. Cowan:** Employment; Modest; Sanofi, Inc. **W. Sasiela:** Employment; Significant; Regeneron Inc. **H. Surks:** Employment; Significant; Sanofi, Inc. **J. Rey:** Employment; Significant; Sanofi, Inc. **H. Ginsberg:** Research Grant; Modest; Merck, Inc.. Other Research Support; Modest; Merck, Inc., Genzyme, Inc.. Honoraria; Modest; Merck, Inc. Consultant/Advisory Board; Modest; Merck, Inc, Sanofi, Inc, Amgen, Inc..

130

Hypercholesterolemia Suppresses Carotid Artery Endothelial NOS3 Expression via Epigenetic Mechanisms

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131

Restoration of ER Stress and Induction of FGF15/19 Independently Rescue ABCG5 ABCG8 Sterol Transporter

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132

CETP Deficiency in Rabbits Protects High Fat High Cholesterol Diet Induced Atherosclerosis

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133

Inhibition of ATP-Binding Cassette Transporter A1 Protein Degradation Promotes HDL Cholesterol Efflux Capacity and Reverse Cholesterol Transport and Reduces Atherosclerosis in Mice

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134

Myeloid Disabled Homolog 2 (Dab2) Controls Liver Inflammation and Atherosclerosis

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136

Identification of Melanoregulin as Novel Marker for Atherosclerosis

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137

Skap2 Modulates Macrophage Polarization and Regulates Atherosclerosis

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138

Cigarette Smoke and Monocytes Induce Endothelial Dysfunction

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139

Vascular Endothelin-1 Activity Increases with Age in Hypertensive Patients

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140

Nuclear Targeting Apelin Induces Phenotypic Transition of Vascular Smooth Muscle Cells

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141

The Role of Macrophage Epsins in the Regulation of LRP-1 in Atherosclerosis

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142

Rac2 Modulates Macrophage IL-1 β Production, Atherosclerotic Plaque Inflammation, and Calcific Atherosclerosis

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143

Macropinocytosis Mediates Enzymatically Modified LDL (ELDL)-Induced Murine Smooth Muscle Cell Formation: A Role for RAGE In ELDL Endocytosis and Upregulation of Scavenger Receptor LOX1

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144

Zebrafish Larvae: A Model System for Early Stage Atherosclerosis?

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145

Endothelial Dysfunction: A Key Determinant of Ventricular Dysfunction in End-Stage Renal Disease

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146

Administration of Interleukin-19 Halts Progression of Pre-formed Plaque, Polarizes Macrophage, and Increases Macrophage Lipid Uptake.

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147

Characterization of the Immune Response to Aortic Aneurysm in a Murine Model

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148

Stat2 Deficiency Does Not Protect From Atherosclerosis in *Ldlr* Knockout Mice Fed a Western Diet

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149

Relationship between Epicardial Fat Thickness and Underlying Coronary Atherosclerotic Plaque Size and Burden

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150

Identification of SYNPO2, SYNM, LMOD1, PDLIM7 and PLN as Novel Markers of Smooth Muscle Cells in Atherosclerosis

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151

Lysine Residues at Positions 4 and 7 on Nef are Critical for Interaction with Calnexin and Drive Inhibition of Cholesterol Transporter: ATP-Binding Cassette A1

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152

A Novel Targeted Proteomics Approach Discovers Biomarkers for Human Atherosclerosis

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E. Ingelsson: None. **J. Årnlöv:** None. **B. Lindahl:** Research Grant; Modest; Roche Diagnostics. Speakers Bureau; Modest; Thermo-Fischer. Consultant/Advisory Board; Modest; Roche Diagnostics, Radiometer Medical, bioMérieux Clinical Diagnostics, Philips Healthcare, Fiomi Diagnostics. **A. Siegbahn:** None. **J. Sundström:** None. **L. Lind:** None.

153

CCL22/ Macrophage-derived Chemokine Expression in the Setting of Atherosclerosis

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154

Atherosclerosis-specific CD4 T Cells Use the Chemokine CCL5 and Its Receptor CCR5 to Home to Mature Atherosclerotic Lesions in Mice

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155

MicroRNA-146a Suppression of NF- κ B-driven Monocyte/Macrophage Activation and Atherosclerosis is Regulated by Cellular ApoE Expression

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156

Development of a New Bioactivatable Fluorescent Probe for the Study of the Proteolytic Activities Degrading Apolipoprotein A-I in vitro and in vivo

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157

Leukadherins: A Novel Agonist Approach to Treat Atherosclerosis via Mac-1 Activation

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158

PPAP2B Expression Regulates the Development of Atherosclerosis

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159

Sex Differences in the Association of Lipoprotein(a) with Subclinical Atherosclerosis in a South Asian Population

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161

Susceptibility to Activation of Human Monocytes in Asymptomatic Atherosclerosis

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162

Detection of N-alpha-acetyltransferase Activity Towards Endogenous Inhibitor of Nitric Oxide Synthase Asymmetric Dimethylarginine in the Liver and Kidneys

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163

Induction of Lysosomal Biogenesis in Macrophages Reduces Atherosclerosis in an Autophagy-dependent Manner

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164

Identification of Genetic Regulators of the Atherosclerosis-Associated Metabolite Trimethylamine-N-Oxide in the Diversity Outbred Mice Population

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T.L. Smallwood: None. **K. Jung:** None. **L. Zhao:** None. **K. Hua:** None. **B. Bennett:** None. **D. Pomp:** None.

165

Microrna-486 Regulates Fibroblast-to-myofibroblast Transition in Human Aortic Valve Interstitial Cells

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166

Activation of Integrin α 5 Mediated by Flow Requires Its Translocation to Membrane Lipid Raft in Vascular Endothelial Cells

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167

High Dietary Fructose Does not Exacerbate the Detrimental Consequences of a HF Diet on Basilar Artery Function

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168

The Acceleration of Foam Cell Formation by Chlamydia Pneumoniae Requires Nlrp3 Inflammasome Activation and Il-1 Signaling

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169

Impaired Shear Stress-induced Endothelial Nitric Oxide Production in High Glucose Condition is Restored by Inhibition via NADPH Consumption by Polyol Pathway Activation

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171

Deficiency of the Co-stimulatory Molecule Cd27 Impairs Treg Development and Exacerbates Atherosclerosis.

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172

Product of Lipid Oxidation During Inflammation is a New Potent Ligand for β 2 Integrin-mediated Macrophage Migration

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173

Upregulation of Sema7A Induced by Disturbed Flow Contributes to the Development of Atherosclerosis

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174

MicroRNA-216a Induces a Premature Senescent-Like Phenotype and Regulates Angiogenic Activity in Human Vascular Endothelial Cells

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175

Lack of Macrophage GLUT1-Mediated Glucose Metabolism Increases Atherosclerotic Lesion Instability

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176

Dietary PUFAs Enhance Macrophage Autophagy, Attenuate NLRP3 Inflammasome Activation, and Reduce Atherosclerosis

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177

Ticagrelor, but not Clopidogrel, Protects the Heart Against Reperfusion Injury and Improves Remodeling After Myocardial Infarction

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Rac-1 as a New Target to Modulate Endothelial Function and Platelet Aggregation in Diabetes Mellitus

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179

Ischemic Stroke in Atrial Fibrillation: 30-day Outcomes and Factors Associated with Severity

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180

Risks and Predictors of Ischemic/bleeding Complications in Cardiac Patients Undergoing Elective Non-cardiac Surgery - An Analysis of the Prague-14 Study

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181

Sub-picomolar Amounts of Coagulation Factor XIa Promote Spatial Clot Growth and Thrombin Generation Inside Propagating Clot

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Low Ankle-Brachial Index Is Associated With Rapid Renal Function Decline in Atrial Fibrillation Patients

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183

Genetic Determinants of CD39 Expression and Platelet Aggregation

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184

Pulmonary Microvascular Thrombosis Enhances Extravasation via Myeloid Hypoxia-Inducible Factors

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C.E. Evans: None. **C. Branco-Price**: None. **A. Prodger**: None. **A. Palazon**: None. **P. Tyrakis**: None. **H. Rundqvist**: None. **P. Bendahl**: None. **M. Belting**: None. **R.S. Johnson**: None.

185

Using the Platelet Proteome to Identify Novel Biomarkers in Heart Failure With Preserved Ejection Fraction

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186

Novel Secondary Multifocal No-Reflow Phenomenon Associated with Activated Leukocyte-induced Microcirculatory Obstruction

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187

Paraoxonase-2 Regulates Blood Coagulation through Endothelial Redox-Signaling and Inflammation

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J. Ebert: None. **P. Wilgenbus**: None. **S. Horke**: None.

188

Selective Inhibition of Vascular Smooth Muscle Cell Migration by Targeting Plasminogen Activator Inhibitor-1

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N. Goyal: None. **Z. Weng**: None. **P. Fish**: None. **T. Strawn**: None. **S. Myears**: None. **Y. Ji**: None. **J. Wu**: None. **W.P. Fay**: None.

189

The Zinc-finger Protein 148(zfp148) Modulates Smooth Muscle Marker Genes via Interaction With Nf-1 in Vascular Disease

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190

Purinergic Control of Tissue Factor Transcription in Human Coronary Artery Endothelial Cells: New AP-1 Site and Negative Regulator

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191

Immobilized ApoA-I and High Density Lipoproteins are Anti-thrombotic and Inhibit Smooth Muscle Cell Attachment and Proliferation

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192

Neurotrophin 3 Mediates the Fibrogenic Response to Pro-inflammatory Stimulation in Human Aortic Valve Interstitial Cells

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193

Analysis of Platelet Lysate Hydrogel and Fibrinogen Gel Intramuscular Injection on Neo-Angiogenesis in Ischemic Limbs

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194

Inhibition of Epigenetic Reader BRD4 Mitigates Intimal Hyperplasia Following Angioplasty in Rat Carotid Arteries

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195

Endothelin Converting Enzyme-1 (ECE1) is Essential in Adult Normal Physiology

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196

Modulation of Inflammatory Macrophage Phenotype Through Alternative Splicing

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J. Lin: None. **H. Zhang:** None. **C. Xue:** None. **L. Qu:** None. **M. Li:** None. **M. Reilly:** None.

197

Statin Therapy Is Associated With Higher *MTHFR* Methylation Levels in a Stroke Cohort

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M. MacLeod: None. **O. Pogoryelova:** None. **G. Horgan:** None. **P. Haggarty:** None.

198

Familial Hypercholesterolemia and Intra-Cranial Aneurysm: A Novel Phenotypic and Genetic Association

Arvind K Pandey, Jason R Becker, Vanderbilt Univ, Nashville, TN

A.K. Pandey: None. **J.R. Becker:** None.

199

Type 2 Diabetes Impairs Wound Healing By DNMT1-dependent Reduction of Hematopoietic Stem Cell Differentiation towards Monocytes/Macrophages and Skewing of the M1/M2 Polarization

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200

Vascular Stem Cell Migration in Response to Monocyte Chemoattractant Protein-1 Promotes Neointima Lesion Formation

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201

A New Multimodal Contrast Agent for Molecular Imaging of Adhesion Molecules Expressed in Atherosclerosis

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M. Ahmed: None. **B. Gustafsson:** None. **K. Caidahl:** None.

202

The Role of Neutrophil Extracellular Traps in the Pathogenesis of Pulmonary Hypertension.

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203

Redox Regulation of MKP-1 and the Functional Reprogramming of Monocyte-Derived Macrophages by Metabolic Stress

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H. Kim: None. **S. Tavakoli:** None. **R. Asmis:** None.

204

Conjugated Linoleic Acid Induces an Atheroprotective Macrophage MΦ2 Phenotype and Limits Foam Cell Formation

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205

Ouabain Activates the NF-κB Pathway in Macrophages via Na/K-ATPase/TLR4 Complex Leading to Pro-Inflammatory Cytokine Production

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206

Endothelium-derived 5-methoxytryptophan Protects Endothelial VE-cadherin and Barrier Function by Inhibiting p38 Mitogen-activated Protein Kinase Activation

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207

Reduced Vascular Density in Human Adipose Tissue in Diabetes is Associated with Reduced Angiogenesis and De-differentiation of Endothelial Cells

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208

The Interaction of Neutrophils and Interferon Gamma Promotes Post-infarct Survival in a Mouse Model of Myocardial Infarction

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Adipose-derived HMGB1 Induces Inflammation and Insulin Resistance in Human Endothelial Cells

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D.A. Franco: None. **C. Burciu:** None. **S. Sinha:** None. **P.D. Reaven:** None.

210

Biosynthesis of D-series Resolvin by Isolated Vascular Cells and Tissues

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S.R. Komshian: None. **A. Chatterjee:** None. **B. Wu:** None. **G. Mottola:** None. **M. Chen:** None. **M.S. Conte:** None.

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IL-35 Suppresses Endothelial Cell Activation by Inhibiting Histone H3K14 Acetylation and AP-1

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Role of Monocytes and Inflammation in Vascular Endothelial Dysfunction in Mice With Heart Failure After Myocardial Infarction

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Myofilament Ca²⁺ Sensitization and Site-specific Phosphorylation of Contractile Proteins Following Myocardial Infarction: A Novel Role for Mast Cells

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Balancing Innate Immunity Activation and Death Signals for Vascular Regeneration

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A Systemic Inflammation-Induced Mouse Model of Cerebral Microbleeds

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The Effect of Fisetin on Lipopolysaccharide-induced Inflammation and MMP Activity in Mouse Peritoneal Macrophages

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Quaking Post-Transcriptionally Guides Monocyte Adhesion and Differentiation into the Pro-Inflammatory Macrophage

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Dynamics of Blood Leukocytes Following ST Segment Elevation Myocardial Infarction

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J. Yuan: None. **F. Chu:** None. **Y. Yao:** None. **J. Xu:** None. **M. Wang:** None.

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IFN- γ Plays an Essential Role in Accelerating Cardiovascular Disease of Recipients With MHC Class II-mismatched Allografts.

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J. Zhou: None. **L. Qin:** None. **T. Yi:** None. **R. Ali:** None. **Q. Li:** None. **Y. Jiao:** None. **G. Li:** None. **J. Zhang:** None. **M. Sadeghi:** None. **J. Pober:** None. **G. Tellides:** None.

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Deficiency in Triggering Receptor Expressed in Myeloid Cells-1 Substantially Attenuates Atherosclerotic Lesion Development

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D. Zysset: None. **B. Weber:** None. **S. Rihs:** None. **S. Freigang:** None. **Y. Banz:** None. **L. Saurer:** None. **C. Mueller:** None.

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A Single Nucleotide Polymorphism of p27^{Kip1} Associated with Vein Graft Patency Regulates Proliferation of Cells Derived from the Outer, but not the Inner, Venous Wall

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222

SCARA5 and Suprabasin are Hub Genes of Co-expression Network Modules Associated with Peripheral Vein Graft Patency

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Inhibition of STAT3 Phosphorylation by Sulforaphane Reduces Adhesion Molecule Expression in Vascular Endothelial Cell

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H.Y. Ahn: None. **Y.S. Cho:** None. **C.H. Kim:** None.

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Detoxification versus Healthy Aging: Aryl Hydrocarbon Receptor Deficiency Improves Vessel Functionality and Increases Healthy Lifespan

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J. Altschmied: None. **A. Eckers:** None. **S. Jakob:** None. **C. Heiss:** None. **C. Goy:** None. **V. Brinkmann:** None. **N. Ventura:** None. **J. Haendeler:** None.

225

Parallel and Divergent Patterns of Gene Expression in Human Arteriovenous Fistula Maturation and Stenosis
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E. Benrashid: None. **J. Yerxa:** None. **K.A. Lucas:** None. **M.A. Gabr:** None. **J. Haley:** None. **S. Serrano:** None. **C.C. McCoy:** None. **J.C. Otto:** None. **J.H. Lawson:** None.

226

Neuronal Nitric Oxide Synthase Maintains Endothelial NO Release after Inhibition of NADPH Oxidase 4

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C. Brunssen: None. **C. Eickholt:** None. **H. Langbein:** None. **H. Langbein:** None. **M. Brux:** None. **C. Goettsch:** None. **W. Goettsch:** None. **H. Morawietz:** None.

227

TGF- β /Smad3 Promotes Smooth Muscle Cell De-differentiation and Proliferation Through Crosstalk with the Wnt/ β -Catenin Pathway

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228

Histology and Pathophysiology Study of Renal Aneurysm

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229

Collagen Inhibitory Peptide R1R2 Mediates Vascular Remodeling by Decreasing Inflammation and Smooth Muscle Cell Activation

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H. Chiang: None.

230

Protein Farnesylation Inhibitor Tipifarnib Prevents Development of Chronic Hypoxia-induced Pulmonary Hypertension

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L. Duluc: None. **B. Ahmetaj-Shala:** None. **J. Mitchell:** None. **V.B. Abdul-Salam:** None. **R. Edwards:** None. **L. Aldabbous:** None. **L. Iannone:** None. **O.D. Dubois:** None. **E.M. Storck:** None. **E.W. Tate:** None. **L. Zhao:** None. **M. Wilkins:** None. **B. Wojciak-Stothard:** None.

231

Role of SDF-1 α -induced Double Reciprocal E-Selectin/Ligand Pairs in Mediating Recruitment of Endothelial Progenitor Cells to Ischemic Wounds

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Z. Liu: None. **R. Tian:** None. **Y. Li:** None. **H. Shao:** None. **O.C. Velazquez:** None.

232

E-selectin-targeting Microparticle-mediated Delivery of MicroRNAs for the Treatment of Atherosclerosis

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233

Intra-arterial Uridine 5'-triphosphate (UTP) Increases Macrophage/Monocyte Recruitment in the Developing Collateral After Femoral Artery Ligation

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234

Ramp2 Is a Novel Flow-sensitive Gene Both In vitro and in vivo

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235

Plasma Levels of Cyclophilin A Correlate with Circulating Inflammatory Cytokines in Patients with Pulmonary Hypertension

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236

Vascular Smooth Muscle Cells Stimulate Re-endothelialization Through Protein Kinase C-delta-dependent Release Of CXCL7 and Recruitment of Circulating Angiogenic Cells

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J. Ren: None. **Q. Wang:** None. **M. Parlato:** None. **S. Morgan:** None. **J. Giles:** None. **J. Greenberg:** None. **W. Murphy:** None. **B. Liu:** None.

237

Role of Runx2 in Vascular Responses to Angiotensin II-Induced Hypertension

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M. Ribeiro: None. **L.A. Smith:** None. **N.M. Thalji:** None. **C.M. Roos:** None. **J.D. Miller:** None.

238

Distinct Vascular Effects of Celecoxib and Rofecoxib in vivo

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E. Ricciotti: None. **T. Grosser:** None. **G.R. Grant:** None. **S. Liu:** None. **J.A. Lawson:** None. **R. Assoian:** None. **G.A. FitzGerald:** None.

239

Olfactomedin 2 Regulates Vascular Smooth Muscle Cell Phenotypic Modulation by Mediating the Interaction Between Runx2 and SRF

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N. Shi: None. **X. Cui:** None. **S. Chen:** None.

240

RhoGTPases and RNAi: A Large-scale Screen Using Ecis® to Measure Endothelial Integrity in Real-time

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241

Endothelial Function is Preserved with Endoscopic Vein Harvest for Lower Extremity Bypass

Adam R Wheeler, Daniel E Kendrick, Matthew T Allemang, Andre F Gosling, Anil Nagavalli, Ann H Kim, Alfred Hausladen, Vikram S Kashyap, Univ Hosp Case Medical Ctr, Cleveland, OH

A.R.C. Wheeler: None. **D.E. Kendrick:** None. **M.T. Allemang:** None. **A.F. Gosling:** None. **A. Nagavalli:** None. **A.H. Kim:** None. **A. Hausladen:** None. **V.S. Kashyap:** None.

242

A Novel Transient Receptor Potential Ion Channel Vanilloid 4 Agonist Inhibits Monocytes Adhesion and Atherosclerosis via eNOS Activation

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S. Xu: None. **B. Liu:** None. **F.Q. Jin:** None. **M. Yin:** None. **M. Koroleva:** None. **M. Mastrangelo:** None. **Z. Jin:** None.

243

Cyp2j2 Gene Delivery Inhibited Adventitial Remodeling via Attenuated Oxidative Stress

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X. Xu: None. **J. Chen:** None. **D. Wang:** None.

244

Arterial Calcification Decreases Functional Recovery in a Murine Model of Hindlimb Ischemia.

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S.L. Zettervall: None. **S. Monk:** None. **X. Wang:** None. **T. Lin:** None. **R.J. Guzman:** None.

245

Prevention of Glyceryl Trinitrate Tolerance by Flavonoids

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L. Zhang: None. **S.W. Leung:** None. **R.Y. Man:** None.

246

Thoracic versus Abdominal Aortic Stiffness in Young and Old Non-Human Primates

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X. Zhao: None. **Z. Sun:** None. **Y. Zhu:** None. **T. McNulty:** None. **R. Colman:** None. **D.E. Vatner:** None. **G.A. Meininger:** None. **S.F. Vatner:** None.

247

Adipose-derived Stem Cells Suppress Aortic Inflammation and Aneurysm Expansion through Paracrine Mediated Mechanisms in an Elastase-induced Murine Model

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M.P. Murphy: None. **J. Xie:** None. **T. Jones:** None. **D. Feng:** None. **T.G. Cook:** None. **C.M. Babbey:** None. **K.L. March:** None.

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Adipose Stromal Cells Mitigate Excessive Aortic Inflammation and Aortic Aneurysm Expansion through Paracrine Factors in an Elastase-induced Murine Abdominal Aortic Aneurysm Model

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249

Thoracic Aortic Dilation in Patients with Bicuspid Aortic Valves is Marked by Accelerated Vascular Smooth Muscle Cell Aging

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B. Balint: None. **H. Yin:** None. **Z. Nong:** None. **S. Fox:** None. **S. Rogers:** None. **C. O'Neil:** None. **A. Watson:** None. **J. Arpino:** None. **L. Chase:** None. **M.M.W. Chu:** None. **G. Pickering:** None.

250

Oxidative Stress Mediated Increase of HMGB-1 and RAGE cContributes to Ascending Aortic Aneurysm Development in vivo.

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G. Ferrari: None. **E.K. Lai:** None. **J.B. Grau:** None. **R.J. Levy:** None. **R.C. Gorman:** None. **J.H. Gorman:** None. **J.E. Bavaria:** None. **E. Branchetti:** None.

251

Selective Deletion of Smad4 in Smooth Muscle Cells Causes Thoracic Aortic Aneurysm in Mice

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252

Elastin-derived Peptides Induce M1 Macrophage Polarization Promoting Abdominal Aortic Aneurysm Formation

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253

Vibrational Photoacoustic Imaging of Lipid in Murine Abdominal Aortic Aneurysms and Atherosclerosis

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G.S. Sangha: None. **E.H. Phillips:** None. **R. Li:** None. **J. Cheng:** None. **C.J. Goergen:** None.

254

Sirtuin-1 Activation Has no Effect on Aortic Root Dilatation in Marfan Mice

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S. Hibender: None. **A. ter Braake:** None. **M. Groenink:** None. **A.H. Zwinderman:** None. **B.J.M. Mulder:** None. **C.J.M. de Vries:** None. **V. de Waard:** None.

255

Loss of Alk5 in Smooth Muscle Cells (SMCs) Causes Aortic Aneurysms Through an Aberrant Tgfr2 Signal

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P. Yang: None. **C. Fu:** None. **M. Hong:** None. **B. Schmit:** None. **K. DeSart:** None. **S.P. Oh:** None. **S.A. Berceci:** None. **Z. Jiang:** None.

256

Decreased Serum MiR-155 Expression is Associated with Increased Tumor Necrosis Factor-Alpha Levels in Patients with Abdominal Aortic Aneurysm

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A.M. Afkhami: None. **A.T. Nguyen:** None. **K.M. Samadzadeh:** None. **A. Rona:** None. **K.C. Chun:** None. **E.S. Lee:** None.

257

Pilot Study of the Safety and Feasibility of the Treatment of Paclitaxel Associated to a Cholesterol-Rich Nanoemulsion in Patients With Aortic Atherosclerotic Disease

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R.C. Maranhao: None. **A.A. Shiozaki:** None. **T. Senra:** None. **A.T. Morikawa:** None. **D.F. Deus:** None. **A.T. Paladino-Filho:** None. **I.M.F. Pinto:** None.

258

Significant Predictors of Survival Following Endovascular Abdominal Aortic Aneurysm Repair

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A.Y. Mousa: None. **M. Broce:** None. **M. Yacoub:** None. **M. Bates:** None. **A. AbuRahma:** None.

259

Aneurysm Development in Patients With a Bicuspid Aortic Valve Is Not Associated With Transforming Growth Factor- β Activation

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V. Paloschi: None.

260

Identification of Micrnas Specifically Expressed in Isolated Cells of Human Abdominal Aortic Aneurysm

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F. Pinet: None. **R. Spear:** None. **D. Hot:** None. **B. Staels:** None. **M. Chwastyniak:** None. **P. Amouyel:** None. **S. Haulon:** None.

261

Neutrophil Elastase Derived Fibrin Degradation Products are Increased in the Plasma of Patients with Abdominal Aortic Aneurysms and Correlate to the Intraluminal Thrombus Volume

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J. Roy: None. **A. Silveira:** None. **M. Liljeqvist Lindquist:** None. **M. Folkesson:** None. **S. Frebelius:** None. **R. Hultgren:** None. **J. Engstrom:** None. **J. Swedenborg:** None. **P. Eriksson:** None.

262

Association of Lipoprotein Subclasses with Arterial Stiffness in a High Risk Working Population: The Baptist Employee Healthy Heart Study (BEHHS)

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M. Aziz: None. **E. Aneni:** None. **E. Oni:** None. **L. Roberson:** None. **S. Shaharyar:** None. **S.S. Ali:** None. **O. Jamal:** None. **M.A. Latif:** None. **A. Younus:** None. **R. Ahmad:** None. **R. Malik:** None. **O. Ogunmoroti:** None. **S.A. Khan:** None. **J. Post:** None. **D.D. Campo:** None. **H. Guzman:** None. **R. Cury:** None. **A.S. Agatston:** None. **E. Veledar:** None. **J. Fialkow:** None. **T. Feldman:** None. **K. Nasir:** None.

263

Evaluation of Survival Benefit of Statins in Patients with Pulmonary Hypertension and Chronic Obstructive Pulmonary Disease: A Propensity Score Matching Study

Luise Holzhauser, Ninel Hovnanian, Parham Eshtehardi, Khalid Mojadidi, David Goodman-Meza, Mohan Pamerla, Albert Einstein Coll of Med, Jacobi Medical Ctr, Bronx, NY; Ronald Zolty, Albert Einstein Coll of Med, Montefiore Medical Ctr, Bronx, NY

L. Holzhauser: None. **N. Hovnanian:** None. **P. Eshtehardi:** None. **K. Mojadidi:** None. **D. Goodman-Meza:** None. **M. Pamerla:** None. **R. Zolty:** None.

264

Circulating Tnnt3k Levels Are Useful Diagnosis Biomarker for Acute Ischemic Myocardial Diseases

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Z. Lai: None.

265

Lipoprotein (a) Predicts Carotid Plaque, Extent of Coronary Artery Disease and Improves Discrimination and Risk Reclassification Beyond Conventional Risk Factors

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E.M. Ooi: None. **P.R. Barrett:** None. **G.F. Watts:** None. **B.M. McQuillan:** None. **J.P. Beilby:** None. **P.L. Thompson:** None. **J. Hung:** None.

266

N-Acetyl-Cysteine Can Alter the Endothelial Cell Lipid Microenvironment

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267

CD93: A Novel Myocardial Infarction- Associated Protein with Glucose Regulatory Properties in Humans and Mice

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268

Adiponectin Ameliorates Palmitate Acid Induced Endothelial Inflammation in Endothelial Cells

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X. Chen: None. **W. Zhao:** None. **X. Zhang:** None. **C. Wu:** None.

269

Exendin-4 Prevents Glucose-induced Secretion of Tissue Transglutaminase-2 from Cardiac Microvascular Endothelial Cells: Potential Role in the Prevention of Matrix Remodeling in Diabetes

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A.S. Shihab: None. **V.A. Richardson:** None. **B.B. Dokken:** Speakers Bureau; Modest; Takeda, Astra Zeneca.

270

IkB Kinase β Signaling in Adipose Progenitor Cells Promotes Obesity and Metabolic Disorders

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R.N. Helsley: None. **Y. Sui:** None. **Z. Liu:** None. **S. Park:** None. **C. Zhou:** None.

271

Id3 Promotes Obesity-Induced Inflammatory Macrophage Accumulation Through Proliferation of MCP-1-Producing Adipocyte Progenitor Cells

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J.L. Kaplan: None. **M.A. Marshall:** None. **C. McSkimming:** None. **D.B. Harmon:** None. **J. Garmey:** None. **S. Oldham:** None. **P. Hallowell:** None. **C.A. McNamara:** None.

272

Chronic Hyperlipidemia Alters the Population of Endothelial Progenitor Cells in Bone Marrow and Peripheral Circulation via Both ROS-dependent and Independent Mechanisms

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D.Z. Liu: None. **Y. Cui:** None. **J.Z. Liu:** None. **L. Liu:** None. **X. Li:** None. **Y. Xiao:** None. **J. Zhang:** None. **X. Xie:** None. **H. Hao:** None. **G. He:** None. **S. Parthasarathy:** None. **H. Zhu:** None.

273

HDL Particle Concentration Inversely Associates with Incident Metabolic Syndrome in the Multiethnic Dallas Heart Study

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P. Mani: None. **I.J. Neeland:** None. **D.K. McGuire:** Honoraria; Modest; Roche, Eli Lilly, Merck, AstraZeneca. **C. Ayers:** None. **A. Khera:** None. **A. Rohatgi:** Research Grant; Significant; Merck. Speakers Bureau; Modest; AstraZeneca.

274

Toll-like Receptor 4 Antagonism Significantly Improves Wound Healing in Diabetic-Ischaemic Wounds in-vitro and in-vivo

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M.J. Portou: None. **X. Shiwen:** None. **D. Abraham:** None. **G. Hamilton:** None. **D. Baker:** None. **J. Tsui:** None.

275

Association Between Pulse Pressure and A1c

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M.G. Negussie: None. **O.S. Randall:** None.

276

Postprandial Effects on Monocyte Phenotype in Obese Humans With Metabolic Syndrome

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H. Wu: None. **I. Khan:** None. **Y. Pokharel:** None. **R. Dadu:** None. **D. Lewis:** None. **R. Hoogveen:** None. **C. Ballantyne:** None.

277

Perivascular Adipose Adiponectin Correlates with Symptom Status of Patients Undergoing Carotid Endarterectomy

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G. Sharma: None. **M. Tao:** None. **K. Ding:** None. **D. Yu:** None. **W. King:** None. **G. Deyneko:** None. **X. Wang:** None. **A. Longchamp:** None. **F.J. Schoen:** None. **C. Ozaki:** None. **M.E. Semel:** None.

278

Vascular Anatomic and Physiologic Relationships with Local Adipose Phenotype in Chronic Kidney Disease Patients

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G. Sharma: None. **M. Tao:** None. **K. Ding:** None. **A. Longchamp:** None. **N. Hamburg:** None. **J.N. Palmisano:** None. **L.M. Dember:** None. **S.A. Berceci:** None. **C. Ozaki:** None. **J.A. Vita:** None.

279

Resolvin D2 and Maresin 1 Modulate Vascular Inflammation, Cell Migration and Macrophage Polarization in a Mouse Model of Arterial Injury

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D. Akagi: None. **M. Chen:** None. **R. Toy:** None. **G. Mottola:** None. **A. Chatterjee:** None. **M.S. Conte:** None.

280

Neointimal Hyperplasia in Allogeneic and Autologous Venous Grafts Appears Homogenous

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A. Busch: None. **E. Hartmann:** None. **N. Wagner:** None. **S. Ergün:** None. **R. Kickuth:** None. **R. Kellersmann:** None. **L. Maegdefessel:** None. **U. Lorenz:** None.

281

Local MicroRNA Modulation Using a Novel Anti-mir-21-eluting Stent Effectively Prevents In-stent Restenosis

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E. Chernogubova: None. **D. Wang:** None. **T. Deuse:** None. **M. Stubbendorff:** None. **R.G. Erben:** None. **S.M. Eken:** None. **H. Jin:** None. **C. Heeger:** None. **B. Behnisch:** None. **H. Reichenpurner:** None. **R.C. Robbins:** None. **J.M. Spin:** None. **P.S. Tsao:** None. **S. Schrepfer:** None. **L. Maegdefessel:** None.

282

Biomarkers of Muscle Damage in Patients with Peripheral Artery Disease

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K. Cluff: None. **H. Mehraein:** None. **K. Howard:** None. **P. Koutakis:** None. **G.P. Casale:** None. **I.I. Pipinos:** None. **J. Subbiah:** None.

283

p27^{kip1} Dose Affects Collateralization Through Arterial Wall Cells

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G.A. Eliahoo: None. **O. Bates:** None. **T.C. Cox:** None. **G.L. Tang:** None.

284

Testosterone Replacement Attenuates Hyperplasia Development in an Androgen Deficient Model of Vascular Injury Independent of Matrix Metalloproteinase Regulation

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B.M. Freeman: None. **D.J.H. Mountain**: None. **T.C. Brock**: None. **J.R. Chapman**: None. **S.S. Kirkpatrick**: None. **J.D. Arnold**: None. **S.L. Stevens**: None. **M.H. Goldman**: None. **M.B. Freeman**: None. **F.A. Klein**: None. **O.H. Grandas**: None.

285

Rapid Change In Red Blood Cell PUFA Composition With High-dose Fish Oil Supplementation In Patients With Peripheral Artery Disease (PAD)

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M. Grenon: None. **H. Alley**: None. **C. Hall**: None. **S. Perez**: None. **W. Gasper**: None. **W. Harris**: None. **M.S. Conte**: None. **C. Owens**: None.

286

The Role of Gut Microbiota in Neointimal Hyperplasia After Vascular Injury

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K.J. Ho: None. **L. Xiong**: None. **N. Hubert**: None. **A. Nadimpalli**: None. **E.B. Chang**: None. **M.R. Kibbe**: None.

287

Statin Therapy and Future Adverse Limb Outcomes in Diabetic Patients with Peripheral Artery Disease: a Nationwide Population-based Study
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C. Hsu: None. **Y. Chen**: None. **P. Huang**: None. **H. Leu**: None. **J. Chen**: None. **S. Lin**: None.

288

Role of Cilostazol in Preventing Instent Restenosis Among Patients With Peripheral Arterial Disease: A Meta-analysis

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O. Iftikhar: None. **K. Oliveros**: None. **A. Tafur**: None. **A. Casanegra**: None.

289

Abnormal Gait Pattern at Comfortable and Fast Walking Speed in Patients With Peripheral Arterial Disease

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T. Kakahana: None. **O. Ito**: None. **Y. Sekiguchi**: None. **D. Ito**: None. **Y. Matsumoto**: None. **K. Kawamura**: None. **H. Goto**: None. **T. Ishihara**: None. **M. Kohzuki**: None.

290

Lower Limb Revascularization of Patients with Peripheral Artery Disease Reduces Human Enterovirus Infection of the Gastrocnemius

Julian Kim, George Casale, Zhen Zhu, Stanley Swanson, Panagiotis Koutakis, Iraklis Pipinos, U. of Nebraska Medical Ctr, Omaha, NE

J. Kim: None. **G. Casale**: None. **Z. Zhu**: None. **S. Swanson**: None. **P. Koutakis**: None. **I. Pipinos**: None.

291

Multiple Mechanisms for the Inhibition of Intimal Hyperplasia by Herpes Simplex Virus Strain R7020

Sue McCormick, Christopher L. Skelly, Univ of Chicago, Chicago, IL

S. McCormick: None. **C.L. Skelly**: Other; Modest; Founder Maji Therapeutics.

292

Microparticle-encapsulated miRNAs Are Associated With Peripheral Artery Disease

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A. Mitchell: None. **W. Gray**: None. **S. Hayek**: None. **K. Rooney**: None. **M. Awad**: None. **A. Quyyumi**: None. **C. Searles**: None.

293

Clinical Predictors of Endothelial Function in Human Saphenous Vein

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M.J. Osgood: None. **K. Hocking**: None. **E.S. Wise**: None. **K.W. Sexton**: None. **P. Komalavilas**: None. **J. Cheung-Flynn**: None. **C. Brophy**: None.

294

Inhibiting Myeloperoxidase Restores Collateralization in Ischemic Hindlimbs in Diabetes

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D. Wehrauch: None. **J.G. Krolkowski**: None. **D.W. Jones**: None. **H. Zhang**: None. **K.A. Pritchard**: None.

295

Magnetic Resonance Imaging Characterization of Peripheral Arterial Chronic Total Occlusions With MicroCT and Histologic Validation

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T. Roy: None. **G. Liu**: None. **X. Qi**: None. **A. Dueck**: None. **G. Wright**: None.

296

Turbulence in Saphenous Vein Bypass Grafts by Duplex Ultrasound Imaging

Katelyn C Koons, Johns Hopkins Univ, Baltimore, MD; Chandra M Sehgal, Eric K Shang, Paul J Foley III, Yana Etkin, Julia T Davis, Ronald M Fairman, **Benjamin M Jackson**, Univ of Pennsylvania, Philadelphia, PA

K.C. Koons: None. **C.M. Sehgal**: None. **E.K. Shang**: None. **P.J. Foley**: None. **Y. Etkin**: None. **J.T. Davis**: None. **R.M. Fairman**: None. **B.M. Jackson**: None.

297

SPECT/CT Imaging of Regional Foot Perfusion Provides a Quantitative Index for Evaluation of Targeted Revascularization in the Diabetic Foot

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M.R. Stacy: Research Grant; Significant; American Heart Association. **X. Papademetris**: None. **B. Sumpio**:

None. **B.E. Sumpio:** None. **C. Mena:** None. **A.J. Sinusas:** None.

299

Nitric Oxide Synthase Inhibition Attenuates the Formation of Notch-mediated Brain Arteriovenous Malformations

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R.A. Wang: None. **L. Huang:** None. **M.A. Nystoriak:** None. **M.F. Navedo:** None.

300

A Biodegradable Wrap for Peri-vascular Delivery of Pro-resolving Lipid Mediators

Bian Wu, Kevin D Lance, Anuran Chatterjee, Giorgio Mottola, Mian Chen, Sevan R Komshian, Tejal A Desai, Michael S Conte, Univ of California, San Francisco, San Francisco, CA

B. Wu: None. **K.D. Lance:** None. **A. Chatterjee:** None. **G. Mottola:** None. **M. Chen:** None. **S.R. Komshian:** None. **T.A. Desai:** None. **M.S. Conte:** None.

301

Resistin is an Independent Indicator of Inflammation in Patients Undergoing Carotid Interventions

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M.C. Zuniga: None. **E. Hitchner:** None. **G. Raghuraman:** None. **W. Zhou:** None.

302

Coronary Endothelial Dysfunction Is Associated With Increased Risk of Venous Thromboembolism

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M. Prasad: None. **M. Reriani:** None. **R. McBane:** None. **L.O. Lerman:** None. **A. Lerman:** None.

303

Risk Factors for Venous Thromboembolism (VTE) among Patients with Neurologic Disease and Leg Paresis: A Population-based Case-control Study.

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304

Varicose Vein Development in Mice Is Blocked by Ator- and Rosuvastatin

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J. Eschrich: None. **R. Meyer:** None. **L. Pfisterer:** None. **M. Hecker:** None. **T. Korff:** None.

305

Development of an Antidote-Controlled RNA Probe for Molecular Thrombi Imaging

Kady-Ann Steen-Burrell, Bethany Powell Gray, Bruce Sullenger, Duke Univ Medical Ctr, Durham, NC

K. Steen-Burrell: None. **B. Powell Gray:** None. **B. Sullenger:** None.

306

A Protective Role of IL-1 beta in Abdominal Aortic Aneurysms

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M. Ruhlman: None. **J. Carson:** None. **W. Xiong:** None. **M. Dale:** None. **T. Meisinger:** None. **B.T. Baxter:** None.

307

Role of Epsins in Regulating LPS-Induced Sepsis

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S. Pasula: None. **M.L. Brophy:** None. **K.L. Tessneer:** None. **S. Hahn:** None. **J. McManus:** None. **H. Zhu:** None. **B. Chang:** None. **Y. Dong:** None. **X. Cai:** None. **H. Song:** None. **H. Wu:** None. **H. Chen:** None.

308

Corticosteroid Therapy Benefits Septic Mice With Adrenal Insufficiency but Harms Septic Mice Without Adrenal Insufficiency

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J. Ai: None. **L. Guo:** None. **Z. Zheng:** None. **S. Wang:** None. **X. Li:** None.

309

Twelve Year Followup for Managing Coronary Artery Disease Using a Nutrigenomics Based Diet and Supplement Program With Quarterly Assessment of Biomarkers

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S.R. Gundry: Consultant/Advisory Board; Modest; SINGULEX.

310

Oxidized LDL-binding Cationic Peptides and Proteins in Inflammation and Atherosclerosis: Novel Insights

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C. Aluganti Narasimhulu: None. **K. Selvarajan:** None. **K. Burge:** None. **S. Parthasarathy:** None.

311

Network Analysis of Pathways Associated with Genetic Regulation of Trimethylamine-N-Oxide

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B. Bennett: None. **T.L. Smallwood:** None. **G. Wright:** None. **M. Bostrom:** None.

312

Amyloids of Oxidized Apolipoprotein A-I Induce Amyloid Fibril Formation in Intact Apolipoprotein A-I

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G.K.L. Chan: None. **A. Witkowski:** None. **G. Cavigiolio:** None.

313

Perinatal Growth Restriction Decreases Hepatic RNA Editing of Apolipoprotein B in Male Rat Offspring

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A. Devarajan: None. **S. Thamocharan:** None. **C. Valburg:** None. **S. Devaskar:** None. **W. Freije:** None.

314

HIV infection induces Structural and Functional Changes in High Density Lipoproteins

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M.O. Siegel: None. **D. Sviridov:** None. **M. Bukrinsky:** None. **M.L. Fitzgerald:** None.

315

Inflamed HDL Loses Its Anti-inflammatory Properties on Adipocytes: Role of Interaction of Serum Amyloid A with the Extracellular Matrix

Chang Yeop Han, Chongren Tang, Mohamed Omer, Shari Wang, Tomas Vaisar, Univ of Washington, Seattle, WA; Thomas N Wight, Benaroya Res Inst, Seattle, WA; William RA Osborne, Alan Chait, Univ of Washington, Seattle, WA

C. Han: None. **C. Tang:** None. **M. Omer:** None. **S. Wang:** None. **T. Vaisar:** None. **T.N. Wight:** None. **W.R. Osborne:** None. **A. Chait:** None.

316

Paraoxonase 1 (PON1) Promotes the Cholesterol Efflux and Regulates the Reverse Cholesterol Transport (RCT) Souade Ikhlef, Hicham Berrougui, Abdelouahed Khalil, Univ de Sherbrooke, Sherbrooke, QC, Canada

S. Ikhlef: None. **H. Berrougui:** None. **A. Khalil:** None.

317

CETP Alters Routes of Total and HDL-derived Cholesterol Elimination in Mice

Jianing Li, Ailing Ji, Yuhuan Wang, Sonja Pijut, Deneys Van der Westhuzen, Gregory Graf, Univ of Kentucky, Lexington, KY

J. Li: None. **A. Ji:** None. **Y. Wang:** None. **S. Pijut:** None. **D. Van der Westhuzen:** None. **G. Graf:** None.

318

ApoE Modulates the Kinetics of HDL ApoA-I in Humans

Allyson Morton, Liyun Wang, Jeremy D Furtado, Frank M Sacks, Harvard Sch of Public Health, Boston, MA

A. Morton: None. **L. Wang:** None. **J.D. Furtado:** None. **F.M. Sacks:** None.

319

Design of Novel Chimeras to Provide Insight Into Structure/Function Activity of Apolipoprotein E3 and Apolipoprotein A1

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M. Lek: None. **N. Ibe:** None. **W. Beck:** None. **J.K. Bielicki:** None. **P.M.M. Weers:** None. **V. Narayanaswami:** None.

320

Procollagen C-Endopeptidase Enhancer Protein 2 Enhances SR-BI Mediated HDL Cholesterol Uptake and Reduces Atherosclerosis in Mice

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R.D. Pollard: None. **C.N. Blesso:** None. **M. Zabalawi:** None. **B. Fulp:** None. **M. Gerelus:** None. **E.L. Lyons:** None. **X. Zhu:** None. **N. Nuradin:** None. **X. Li:** None. **O.L. Francone:** None. **D. Sahoo:** None. **M.J. Thomas:** None.

321

Lymphatic derived HDL Is an Effective Donor for the Trans-Intestinal Cholesterol Efflux Pathway That Is Impaired During Insulin Resistance

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R. Mangat: None. **F. Borthwick:** None. **D.F. Vine:** None. **S.D. Proctor:** Research Grant; Significant; Independent Investigator Research Grant from Merck.

322

HDL Dynamics in Circulation: Complexity of Protein Distribution and Metabolism Across HDL Size

Sasha Singh, Brigham and Women's Hosp, Boston, MA; Allison Andraski, Harvard Sch of Public Health, Boston, MA; Brett Pieper, Wilson Goh, Brigham and Women's Hosp, Boston, MA; Frank M. Sacks, Harvard Sch of Public Health, Boston, MA; Masanori Aikawa, Brigham and Women's Hosp, Boston, MA

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323

ABCA1 Expression Promotes ApoAI Acidification on the Plasma Membrane via Recruitment of Vacuolar ATPase

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S. Wang: None. **G. Brubaker:** None. **J.D. Smith:** None.

324

The Apolipoprotein A-IV T347S Polymorphism is Associated with Severe Hepatic Steatosis in Obese Subjects Undergoing Bariatric Surgery

Janet K. Sawyer, Adolfo Z. Fernandez, Lawrence L. Rudel, **Richard B. Weinberg**, Wake Forest Sch of Med, Winston Salem, NC

J.K. Sawyer: None. **A.Z. Fernandez:** None. **L.L. Rudel:** None. **R.B. Weinberg:** None.

325

Response Gene to Complement 32 Deficiency Protects Against Hepatic Steatosis by Inhibiting Lipogenesis in Mice

Xiaobing Cui, Junna Luan, Shiyu Chen, The Univ of Georgia, Athens, GA

X. Cui: None. **J. Luan:** None. **S. Chen:** None.

326

Streptococcal Serum Opacity Factor Product, Cholesteryl Ester Rich Particles, Induce Cholesterol Ester Metabolism and Bile Acid Secretion after Uptake by Human Huh7 Hepatocytes

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B.K. Gillard: Research Grant; Significant; HL056865. **P.J. Rodriguez:** Research Grant; Significant; HL056865. **D.W. Fields:** None. **J.L. Raya:** None. **W.R. Lagor:** None. **H.S. Courtney:** None. **A.M. Gotto:** None. **H.J. Pownall:** Research Grant; Significant; HL056865.

327

Liver X Receptors (LXR) Modulate the Negative Effects on Endothelial Progenitors Cells after Feeding a High Cholesterol Diet

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A. Rasheed: None. **C.L. Cummins:** None.

328

ABCG1 Has a Critical Role in Pulmonary Type 2 Cells and Surfactant Lipid Metabolism

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329

CRISPR/Cas-mediated Gene Editing in Human iPSC-derived Macrophage Reveals Lysosomal Acid Lipase Functions in Human Macrophages

Hanrui Zhang, Wenjun Li, Christine Hinkle, Xuan Zhang, Robert Bauer, Junichiro Tohyama, Kevin Patel, Kevin Trindade, Jennie Lin, John Millar, Jeffrey Billheimer, Wenli Yang, Edward Morrissey, Michael C Phillips, Daniel J Rader, Muredach P Reilly, Univ of Pennsylvania, Philadelphia, PA
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330

Ezetimibe Prevents Atherogenesis Through Increased Catabolism and Fecal Excretion of LDL-cholesterol and Reduced Atherosclerotic Plaque Inflammation in Apolipoprotein E Knock-out Mice Fed a Paigen Diet

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331

Effects of Statins on Adiponectin Receptor Expression on Circulating Monocytes in Hypertensive and Dyslipidemic Subjects

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332

Coronary Artery Disease-Protective Variant A43T in APOC3 Alters Circulating ApoC-III Levels In vivo

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S.A. Khetarpal: None. **A. Varshini:** None. **D.B. Larach:** None. **J. Tabita-Martinez:** None. **J.T. McParland:** None. **M.G. McCoy:** None. **D. Kiss:** None. **P. Zanoni:** None. **M. Mucksavage:** None. **J.S. Millar:** None. **M. Cuchel:** None. **S. Lund-Katz:** None. **M.C. Phillips:** None. **S. Kathiresan:** None. **D.J. Rader:** None.

333

Protective Role of Gut Microbiota *Akkermansia muciphila* Against Development of Atherosclerosis in Mice

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334

The LXR β Selective Agonist, VTP-38443, Significantly Decreases Plaque Cholesterol Ester Content and Inflammation in a Murine Model of Accelerated Atherosclerosis

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335

Atheroma-specific Delivery of Synthetic High-density Lipoprotein Containing Sphingosine-1-phosphate for Modulation of Vascular Inflammation.

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336

Increased Circulating Betatrophin Concentrations in Patients with Coronary Heart Disease

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337

Berberine Attenuates Hyperlipidemia in Mice by a Novel Underlying Mechanism Involving Trib1

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338

Effects of RVX-208 a Selective Bromodomain Extra-terminal Protein Inhibitor Beyond Raising ApoA-I/HDL.

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339

Hyperhomocysteinemia Reduces Large HDL Particle and EL Expression via Hypomethylation Related Mechanism in Mice

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340

The Expression and Function of Apol6 in Atherosclerotic Plaques of Apoe^{-/-} Mouse Aorta Tissue

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341

Role of Cell-to-Cell Communication in Subendothelial Cell Functions

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342

Naturally Occurring Modified Forms of LDL

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343

Association Between Electrocardiographic Parameters and Coronary Atherosclerotic Burden in Symptomatic Patients Without History of Coronary Artery Disease

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344

Association Between Serum Retinol Binding Protein -4 Level and Coronary Artery Disease: A Meta Analysis

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345

A Proteomic Study of Human and Mouse Plaques Supports Involvement of Proteolysis, Extracellular Matrix, and Cytoskeleton in Atherosclerotic Plaque Rupture

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346

9p21.3 Coronary Artery Disease Risk Variants Disrupt Tead Transcription Factor Binding and Tead-dependent Tgfb β Induction of P16 Expression

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347

Water-soluble Components of Sesame Oil Reduces Inflammation and Atherosclerosis

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348

TNF α -induced Expression of Adamts7 Affects Primary Mouse Smooth Muscle Cell Migration ex vivo

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Cui: None. **M.A. Smith:** None. **K. Ou:** None. **X. Zheng:**

None. **M.S. Parmacek:** None. **D.J. Rader:** None. **M.P.**

Reilly: None.

349

Sgk1 Is a Pivotal Player in Vascular Inflammation and Atherogenesis

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O. Borst: Research Grant; Significant; Deutsche Forschungsgemeinschaft.

350

The Pro-atherosclerotic Milieu Converts a Sub-population of Murine Peripheral T Regulatory Cells to a Non-suppressive Th1-like Foxp3+IFN γ + Phenotype.

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351

Mechano-sensitive Ppap2b Regulates Endothelial Responses to Athero-relevant Hemodynamic Forces

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None. **M. Civelek:** None. **A.J. Lusis:** None. **G. Dai:**

None. **H. Jo:** None. **Y. Fang:** None.

352

Adventitial Stem Cell Progenitors Express Neural Stem Cell Markers

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353

Elastase-Activated Stress Response of Vascular Cells

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354

Lower Circulating Levels of Tumor Necrosis Factor Related Apoptosis-inducing Ligand (TRAIL) are

Associated with Increased Sub-clinical Coronary Atherosclerosis among Smokers
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355

Dyslipidemia, Obesity, Insulin Resistance and Atherosclerosis in LDL-Receptor Deficient Rats

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356

IKK-Beta Deletion Alleviates the Atherogenetic Effect of Intermittent Hypoxia Induced Macrophage Foam Cell Formation

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357

Intimal Smooth Muscle Cells Are Vascular Tissue Specific Innate Immune Effector Cell

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358

Targeting of Heparin Binding EGF-like Growth Factor (HB-EGF) Efficiently Inhibits Atherosclerosis

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359

CD4+ Natural Killer T Cells Promote Atherosclerosis via Cytotoxic Mechanism

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360

Reduction of Atherosclerotic Lesions by the Chemotherapeutic Agent Carmustine Associated to a Lipid Nanoemulsion

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361

Activation of Wnt Pathway in Macrophages During Atherosclerosis Regression

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362

Ccn1 Induction and Its Role in the Neointima Formation-induced by Carotid Artery Ligation in Mice

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363

Aortic Walls From Cadavers With Atherosclerosis Show Autoimmune Reactions: Exudation of Proteoglycans, Globulins And Interleukin-17, and Infiltration of Plasma Cells.

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364

Pioglitazone Inhibition of Vascular Smooth Muscle Cell Proliferation is Associated with Activation of AMP-activated Protein Kinase but not Peroxisome Proliferator-Activated Receptor Gamma

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365

Adiponectin has Greater Association with Left Ventricular Mass Index and Coronary Artery Calcification Score in Lean Compared to Overweight-Obese Subjects: The CARDIA Study

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366

Gender Differences Exist in Carotid Arterial Plaque Composition Among Men and Women with Carotid or Coronary Artery Disease and Elevated ApoB Levels
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367

Pcsk6 Is a Key Protease Modulating Smooth Muscle Cell Activation in Vascular Remodeling and Plaque Vulnerability
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368

Inhibition of Ido-mediated Tryptophan Metabolism Aggravates Atherosclerosis in Hypercholesterolemic Mice
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K.A. Polyzos: None. **O. Ovchinnikova:** None. **M. Berg:** None. **R. Baumgartner:** None. **H. Agardh:** None. **J. Pirault:** None. **A. Gisterå:** None. **A. Assinger:** None. **A. Laguna Fernandez:** None. **M. Bäck:** None. **G.K. Hansson:** Ownership Interest; Modest; Holds patents on the use of 3-HAA for the prevention and treatment of hyperlipidemia and its complications. **D.F.J. Ketelhuth:** Ownership Interest; Modest; Holds patents on the use of 3-HAA for the prevention and treatment of hyperlipidemia and its complications.

369

Protein Kinase C Epsilon-dependent Nox Activation Mediates Resistin-induced Cardiovascular Disease
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370

Dendritic Cells Express Triggering Receptor Expressed on Myeloid Cells-1 and Correlate with Plaque Stability in Symptomatic and Asymptomatic Patients with Carotid Stenosis
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371

HDL Anti-Oxidant Capacity is Altered by Brief Exposures to Ambient Particulate Matter
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372

Tumor Necrosis Factor- α Regulates Triggering Receptor Expressed on Myeloid Cells-1-dependent Matrix Metalloproteinases in the Carotid Plaques of Symptomatic Patients with Carotid Stenosis
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373

Transgenic Overexpression of Alanine-glyoxylate Aminotransferase 2 Lowers Tissue Levels of Asymmetric Dimethylarginine and Improves Endothelial Function in Mouse Aortas
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374

Does Aortic Stiffness Precede, Follow or Occur Simultaneously with Aortic Atherosclerosis?
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375

Alkaline Phosphatase-driven Vascular Calcification Interacts with Hypercholesterolemia and Leads to Severe Coronary Atherosclerosis and Heart Failure in Mice
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376

Traf-stop-hdl-nanoparticles Reduce Atherosclerosis

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377

Retrograde Shear Stress does not Alter Endothelial Function in Healthy Subjects

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378

Contribution of Unfolded Protein Response in Arsenic-Induced Endothelial Activation and Atherosclerosis

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S.D. Sithu: None. **N.S. Wickramasinghe**: None. **E. Vladyskovskaya**: None. **P. Haberzettl**: None. **A. Agarwal**: None. **M. Winner**: None. **S.E. D'Souza**: None. **S. Srivastava**: None.

379

Introducing Stress-Based Quantitative Plaque Vulnerability Index for Patients with Coronary Artery Disease

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380

Vascular Pcsk9: A Mediator for Atherogenesis Independent of LDL Receptor

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381

Disturbed Flow Promotes Adhesion of Neutrophil-derived Microvesicles to Endothelial Cells

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382

Lipin-1 Links Pro-inflammatory Responses and Foam Cell Formation by Oxidized-Low Density Lipoprotein-Elicited Macrophages

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383

A Functional Polymorphism T29C in Transforming Growth Factor Beta 1 Gene is Associated with the Severity of Coronary Artery Disease

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384

Association between Renin Angiotensin System Gene Polymorphisms and Severity of Coronary Artery Disease and Restenosis after Coronary Artery Stenting

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385

Factor XII Knockout or Knockdown in Rat Produces Robust Antithrombotic Efficacy With No Bleeding

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386

Thrombin Inhibition by Dabigatran Reduces the Amount of Pro-Inflammatory CD11c-Positive Macrophages in Visceral Adipose Tissue of Low-Density Lipoprotein Receptor-Deficient Mice

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K. Feldmann: None. **M. Grandoch**: None. **S. Lehr**: None. **J.W. Fischer**: Research Grant; Modest; Boehringer Ingelheim. Other Research Support; Modest; Boehringer Ingelheim.

387

Bioengineering L-605 Cobalt Chromium Cardiovascular Stent Biomaterial With Plasma Activated Coating, for Proactive Biocompatibility

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388

Body Mass Index Predicts Major Bleeding Risks in Patients on Warfarin

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389

Coronary Endothelial Dysfunction Is Associated With Increased Risk of Bleeding Events

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390

Use of Eptifibatide in patients with ventricular assist devices and Bleeding outcomes

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391

Platelet CD40L Affects Thrombus Formation via Phosphatidylinositol 3-kinase β , But Not Via CD40 or IKK α

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392

Effect of HDL on Platelet Apoptosis and Aggregation

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393

Reticulon-4B Protects Against Endoplasmic Reticulum Stress Induced Platelet Apoptosis and Hyperactivation in Diabetes

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394

Murine Cre/flox Studies Indicate Yolk Sac Derived Macrophages Are the Cellular Source of FXIIIa

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395

Elevated Von Willebrand Factor in an in vitro Model of Fabry Disease

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396

Nanoscale Extracellular Matrix Alters Endothelial Function Under Disturbed Flow

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397

The Interaction of Integrin beta1 to Galpha13 Mediates RhoA Inhibition and Cell Migration

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398

Inhibition of Tissue Factor Reduces Thrombosis and Inflammation Without Increased Bleeding in a Mouse Model of Ischemic Stroke

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399

Oxidized Phospholipids Regulate Inflammatory Gene Transcription via Bromodomain Containing 4 (BRD4) In Vascular Endothelial Cells

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400

Mesenchymal Stem Cell Exosomes Mediate Angiogenesis via NFkB Signaling

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401

The Lineage-specific Transcription Factor PU.1 Prevents Heterochromatinization of Macrophage-specific Genes During Hematopoietic Differentiation

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402

Plasminogen Inhibits Sdf-1-induced Cxcr4 Internalization In Bone Marrow-derived Mononuclear Cells

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403

E-selectin Transfer by Recombinant Adeno-associated Virus Improves Angiogenesis in a Murine Model of Hindlimb Ischemia

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D. Horkan: None. **Y. Li**: None. **Z. Liu**: None. **O. Velazquez**: None.

404

The Role of 20-HETE in the Regulation of Endothelial Progenitor Cell Stemness

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405

Functional Characterization of Coronary Artery Disease (CAD) Associated SNPs at the ADAMTS7 Locus

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406

Molecular Characterization and Definition of an in vitro Hierarchy of Endothelial Colony Forming Cells

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407

Use of a Previously Validated Blood-based Test Demonstrates Increased Diagnostic Accuracy as

Measured by AUC over Usual Care in the Evaluation of Obstructive Coronary Artery Disease in Males and Females.

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408

Identifying the Molecular Basis of Monocyte Development Using Enhancer Profiling

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409

CD163-TWEAK Interaction Regulates Tissue Regeneration After Ischemic Injury

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410

Human SR-BI/SR-BII Overexpression Enhances LPS-induced Liver and Kidney Inflammation and Acute Organ Injury

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411

Decreased Circulating and Neutrophil Mediated Vegf Release in Stable Long-term Cardiac Transplant Recipients

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412

Radio Protective P105 Deficiency Aggravates Vein Graft Disease And Lesion Instability via Increased Inflammatory Responses

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413

Designed Ankyrin Repeat Proteins Against Activation Specific Binding Sites of The Leukocyte Integrin $\alpha\beta 2$: Novel Strategies in Vascular Inflammation

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414

Key Role of STAT4 Deficiency in the Hematopoietic Compartment on Insulin Resistance and Adipose Tissue Inflammation

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415

Resolvin D1 Limits 5-lipoxygenase Nuclear Localization and Leukotriene B4 Synthesis by Inhibiting a Calcium-activated Kinase Pathway

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416

G Protein-coupled Receptor 15 is Associated with Inflammation, Smoking and Ischemia

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417

Endosome-Based Activation of Non-Canonical NF- κ B Signaling by Complement Membrane Attack Complexes

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418

Microfibrillar-Associated Protein 4 Deficiency Reduces Size and Incidence Rate of Angiotensin II Induced Abdominal Aortic Aneurysms in Mice

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419

Carbon Monoxide Mediated Vasoprotection Involves Vagal Nerve Signaling

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420

Exploring the Role of TNF α in TLR4-NLPR3 Inflammasome-driven Inflammation in Humans

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421

The NLRC4 Variant rs385076 Affects PU.1 Transcription Factor Binding, NLRC4 Isoform Expression and Circulating Interleukin-18 Concentrations

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422

Metabolic Regulation by miR-33 in Macrophages Controls Immune Effector Responses

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423

CC-Chemokine Class Inhibition Attenuates Inflammatory Induced Pathological Angiogenesis Whilst Preserving Ischaemia Driven Physiological Angiogenesis

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A. Ridiandries: None. **J.T.M. Tan:** None. **H.C.G. Prosser:** None. **C. Hawkins:** None. **C.A. Bursill:** None.

424

Hyper-Inflammatory Macrophages in Coronary Artery Disease and Rheumatoid Arthritis; A Signature of CCL18, Krüppel-like Factor 2 and 4 and Oxidative Stress Response Genes

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T. Shirai: None. **B. Schaeffgen:** None. **R.R. Nazarewicz:** None. **B.B. Wallis:** None. **T.L. Assimes:** None. **D.G. Harrison:** None. **J.J. Goronzy:** None. **C.M. Weyand:** None.

425

Lycopene Modulates T Lymphocyte Function by Modulating Th1 Responses and Treg Lymphocyte Population

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L.M. Mills: None. **H. Wilson:** None. **F. Thies:** None.

426

Abdominal Aorta Dilatation and Aneurysm in Kawasaki Disease Vasculitis Mouse Model: Role of IL-1 Signaling Daiko Wakita, Ceders-Sinai Medical Ctr, Los Angeles, CA;

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D. Wakita: None. **Y. Kurashima:** None. **Y. Lee:** None. **K. Shimada:** None. **S. Chen:** None. **T.R. Crother:** None. **T.J. Lehman:** None. **M.C. Fishbein:** None. **M. Arditi:** None.

427

Flow Regulation of YAP/TAZ in Endothelial Inflammation and Atherosclerosis

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K. Wang: None. **P. Nguyen:** None. **E. Limqueco:** None. **Y. Li:** None. **S. Chien:** None.

428

Inhibition of Autophagy Impedes Angiogenesis Following Muscle Ischemia, and Disrupts Proliferation and Differentiation in Cultured Myoblasts

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J. Xu: None. **T.Y. Wang:** None. **X. Cui:** None. **U. Sachdev:** None.

429

HuR and microRNA-128 Competitively Regulate Vascular Endothelial Growth Factor C to Modulate Inflammatory Lymphangiogenesis

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B.D. Young: None. **J. Zhang:** None. **A. Mohan:** None. **N.D. Robinson:** None. **L. James:** None. **V. Ramgolam:** None. **T.O. Yarovinsky:** None. **A.R. Morrison:** None. **J.R. Bender:** None.

430

A Novel Tram Stent Method in the Treatment of Coronary Bifurcation Lesions

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M. Arokiaraj: None.

431

Conversion of Tumor Microvessels into a Hierarchical and Vasoreactive Network, and Suppression of Metastases, by Fibroblast Growth Factor 9

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J. Arpino: None. **H. Yin:** None. **M.J. Frontini:** None. **Z. Nong:** None. **C. O'Neil:** None. **Y. Xu:** None. **B. Balint:** None. **A.D. Ward:** None. **S. Chakrabarti:** None. **C.G. Ellis:** None. **R. Gros:** None. **J. Pickering:** None.

432

The Atypical Cadherin Fat1 Suppresses Mitochondrial Function to Control Vascular Smooth Muscle Cell Growth After Vascular Injury

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L. Cao: None. **D.F. Riascos Bernal:** None. **P. Chinnasamy:** None. **C.M. Dunaway:** None. **M.A. Pujato:** None. **A. Fiser:** None. **N.E.S. Sibinga:** None.

433

Coronary Artery Ectasia in Patients with Obstructive Coronary Artery Disease

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434

Formin Dependent Regulation of Adherens Junction Assembly

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I. Mumal: None. **J.W. Copeland:** None.

435

Differential mRNA and MicroRNA Expression is Influenced by Race in Hypertensive and Non-hypertensive Women

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D.F. Dluzen: None. **N. Noren Hooten:** None. **Y. Zhang:** None. **K.D. Jacob:** None. **A.B. Zonderman:** None. **M.K. Evans:** None.

436

Deregulation of Xbp1 Expression Contributes to Impaired Cardiac Vegf Expression and Angiogenesis During Progression From Cardiac Hypertrophy to Failure in vivo

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Q. Duan: None. **C. Chen:** None. **P. Wang:** None. **L. Ni:** None. **L. Yang:** None. **D. Wang:** None.

437

Dysregulation of Cardiovascular Homeostasis by Proton Pump Inhibitors: Safety Concerns

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Y.T. Ghebremariam: Ownership Interest; Modest; Dr. Ghebremariam is an inventor on a patent owned by Stanford University on small molecule modulators of the NOS/DDAH pathway. Ownership Interest; Significant; Dr. Ghebremariam is a co-founder of Altitude Pharmaceuticals; a biotechnology Company developing products that regulate the nitric oxide (NOS)/DDAH pathway. **J. Cooke:** Ownership Interest; Modest; Dr. Cooke is an inventor on a patent owned by Stanford University on small molecule modulators of the NOS/DDAH pathway. Ownership Interest; Significant; Dr. Cooke is a co-founder of Altitude Pharmaceuticals; a Biotechnology Company developing products that regulate the nitric oxide (NOS)/DDAH pathway. **F. Khan:** None. **R. Thakker:** None. **P. Chang:** None. **N. Shah:** Research Grant; Modest; Dr. Shah received grant from the Translational Research and Applied Medicine (TRAM) Program in the Department of Medicine at Stanford University. **K. Nead:** None. **N. Leeper:** Research Grant; Modest; Dr. Leeper received grant from the Translational Research and Applied Medicine (TRAM) Program in the Department of Medicine at Stanford University.

438

Regulation of Ischemia-induced Neovascularization by 20-HETE Involves Bone Marrow-derived EPC.

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439

Biomechanical Stimulation Promotes Translocation of Nuclear Factor of Activated T-cells 5 Into The Nucleus of Vascular Smooth Muscle Cells

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M. Hödebeck: None. **M. Hecker:** None. **T. Korff:** None.

440

Increased Migration and Proliferation of Human Venous Valve Wall Smooth Muscle Cells are Mediated by FGF2

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S. Kikuchi: None. **L. Chen:** None. **T.N. Wight:** Research Grant; Modest; R41 HL106967. **N. Azuma:** None. **M. Sobel:** Research Grant; Modest; Department of Veterans Affairs, Veterans Health Administration Merit Review Agency. **T. Sasajima:** None. **A.W. Clowes:** Research Grant; Significant; R01 HL30946. **R.D. Kenagy:** None.

441

Rgs5 Controls Myogenic Responses of Vascular Smooth Muscle Cells

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C. Arnold: None. **A. Feldner:** None. **G. Genové:** None. **S. Schorpp-Kistner:** None. **P. Angel:** None. **T. Wieland:** None. **M. Hecker:** None. **T. Korff:** None.

442

YY1 (Yin Yang Factor 1) Is Induced in Injured Vessel Wall Including Aortic Aneurysms and Suppresses Vascular Smooth Muscle Cell Differentiation Through Disrupting Myocardin-mediated Transcriptional Regulation

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J. Zheng: None. **F. Liu:** None. **M. Yang:** None. **X. Dai:** None. **H. Li:** None. **J. Zhou:** None. **L. Li:** None.

443

Red Blood Cell Microparticles Mediate Transfer of Functional miR-451 to Endothelial Cells in vitro

Adam Mitchell, Warren Gray, Kim Rooney, Islam Mohamed, Emory Univ, Decatur, GA; Arshed Quyyumi, John Roback, Emory Univ, Atlanta, GA; Charles Searles, Emory Univ, Decatur, GA

A. Mitchell: None. **W. Gray:** None. **K. Rooney:** None. **I. Mohamed:** None. **A. Quyyumi:** None. **J. Roback:** None. **C. Searles:** None.

444

Differential Contribution of Oxygenases in Glycerol-Induced Acute Renal Failure in the Rats

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M. Newaz: None.

445

Beraprost, a Prostacyclin Analogue, Inhibits Human Vascular Smooth Muscle Cell Migration via Activation of Exchange Protein Activated by cAMP (Epac)

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J.S. McKean: None. **D. Shewan:** None. **G. Gibson:** None. **G.F. Nixon:** None.

446

Ebp50 Regulates Oxidative Stress Through Skp2 and Foxo1

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V. Procaccia: None. **K.L. Leslie:** None. **E.Z. Malik:** None. **A. Bisello:** None.

447

β-cyclodextrin Reduces Cholesterol Crystal-induced Inflammation Through Modulating Complement Activation

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T. Espevik: None. **S.S. Bakke:** None. **N. Niyonzima:** None. **J.K. Damås:** None. **L. Ryan:** None. **E. Latz:** None. **T.E. Mollnes:** None.

448

Isolation and Characterization of Lesion Specific Cells Harvested in vivo During Percutaneous Coronary Intervention

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T.B. Smith: None. **J.B. Pollett:** None. **W.J. Carothers:** None. **D. Lasorda:** None.

449

ApoA-I Suppresses Neointimal Hyperplasia Following Stent Deployment and Modulates Neointimal Cellular Phenotype

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L.Z. Vanags: None. **J.T.M. Tan:** None. **S.G. Wise:** None. **Z. Ali:** None. **C.A. Bursill:** None.

450

Tumor Necrosis Factor Disrupts Endothelial Surface Glycocalyx Imaged by High-pressure Freezing, Freeze Substitution TEM

Chang Xu, Joe Austin II, Brad Hack, Patrick Cunningham, Univ of Chicago, Chicago, IL
C. Xu: None. **J. Austin:** None. **B. Hack:** None. **P. Cunningham:** None.

451

Oxygen Regulation of Human Coronary Artery Smooth Muscle Cell Proliferation and Migration

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M. Yang: None. **T. Kamishima:** None. **C. Dart:** None. **J.M. Quayle:** None.

452

Hyperglycemia and Oxidative Stress Impair Fluid Shear Stress-mediated Endothelial Nitric Oxide Synthase Phosphorylation and Activation via Disrupting Adherens Junctions

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M. Yin: None. **S. Xu:** None. **C. Wong:** None. **M.A. Mastrangelo:** None. **Z. Jin:** None.

453

Hydrogen Sulfide Increases Endothelial Permeability through Sulfane Sulfur Modification of Occludin

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S. Yuan: None. **A. Yurdagul:** None. **A. Orr:** None. **C. Kevil:** Research Grant; Significant; NIH Grant, Faraday and Innolyzer sponsored research. Ownership Interest; Significant; Theravasc Inc, Innolyzer LLC.

454

An XX Sex Chromosome Complement, in the Presence of Testosterone, Markedly Promotes Angiotensin II-Induced Abdominal Aortic Aneurysms in Hypercholesterolemic Male Mice

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Y. Alsiraj: None. **S. Thatcher:** None. **L. Cassis:** None.

455

Systemic, But Not Smooth Muscle Cell-Specific, TGF- β Blockade Exacerbates Angiotensin II-Induced Abdominal Aortic Pathology

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S.N. Angelov: None. **J.H. Hu:** None. **N. Airhart:** None. **M. Jaffe:** None. **L. Du:** None. **D.A. Dichek:** None.

456

Hypercholesterolemia Induced by a PCSK9 Gain-of-function Mutation Augments AngII-induced AAAs in C57BL/6 Mice

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A. Balakrishnan: None. **D.A. Howatt:** None. **L.A. Cassia:** None. **A. Daugherty:** None. **H. Lu:** None.

457

Mirnas 362-3p, 194 and 9b-1 In Aaa and Popliteal Aneurysm Pathogenesis

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A. Busch: None. **A. Zerneck:** None. **M. Busch:** None. **L. Maegdefessel:** None. **U. Lorenz:** None.

458

Loss of Smooth Muscle α -actin in Mice Results in Thoracic Aortic Aneurysms via Increased Reactive Oxygen Species, Increased Nox4, and Increased Angiotensin II type 1 Receptor-Mediated Signaling

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J. Chen: None. **C. Kwartler:** None. **C.L. Papke:** None. **A. Peters:** None. **L. Ringuette:** None. **J. Cao:** None. **S. Wang:** None. **C. Villamizar:** None. **K.L. Byanova:** None. **R. Madonna:** None. **P. Kee:** None. **Y. Geng:** None. **A.R. Brasier:** None. **E.C. Davis:** None. **S. Prakash:** None. **D.M. Milewicz:** None.

459

Surgery for Small Asymptomatic Abdominal Aortic Aneurysms

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G. Filardo: None. **J.T. Powell:** None. **M.A.M. Martinez:** None. **D.J. Ballard:** None.

460

Three Dimensional Quantification of Angiotensin II-Induced Abdominal Aortic Aneurysms Using High Frequency Ultrasound

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A.R. Adelsperger: None. **A. Yrineo:** None. **E. Phillips:** None. **F. Damen:** None. **A.N. Blaize:** None. **C. Babbey:** None. **M. Murphey:** None. **C. Goergen:** None.

461

Cilnidipine Attenuated Angiotensin II-induced Abdominal Aortic Aneurysms in Apolipoprotein E-deficient Mice

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Y. Kakio: None. **H.A. Uchida:** None. **R. Umabayashi:** None. **J. Wada:** None.

462

Reductions of ApoB-containing Lipoproteins Prevented the Progression of Established Abdominal Aortic Aneurysms in AngII Infused Mice

Jing Liu, Hong Lu, Jessica Moorleghen, Deborah Howatt, Anju Balakrishnan, Lisa Cassia, Alan Daugherty, Univ of Kentucky, Lexington, KY

J. Liu: None. **H. Lu:** None. **J. Moorleghen:** None. **D. Howatt:** None. **A. Balakrishnan:** None. **L. Cassia:** None. **A. Daugherty:** None.

463

Induction of Smooth Muscle-specific Deletion of Low-Density Lipoprotein Receptor-Related Protein 1 in Adult Mice Augments Angiotensin II Vascular Pathologies

Debra L Rateri, Anju Balakrishnan, Deborah A. Howatt, Jessica J. Moorleghen, Lisa A. Cassis, Univ of Kentucky, Lexington, KY; Selen C. Muratoglu, Dudley K. Strickland, Univ of Maryland Sch of Med, Baltimore, MD; Alan Daugherty, Univ of Kentucky, Lexington, KY

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464

Novel Anti-Medin Antibodies Detect Medin Amyloid Deposits in the Aorta of Patients with Thoracic Aneurysms or Marfan Syndrome

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P. Shughrue: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences. **L. Alexander**: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences. **J. Higaki**: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences. **R. Barbour**: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences. **J. Salmans**: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences. **D. Schenk**: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences. **G. Kinney**: Employment; Significant; I am a full time employee of Prothena Biosciences. Ownership Interest; Significant; I hold stock in Prothena Biosciences.

465

Inducible Depletion of Calpain-2 Attenuates Angiotensin II-induced Abdominal Aortic Aneurysms in Male LDL Receptor Deficient Mice

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466

Metabolome Profile of Experimental Abdominal Aortic Abdominal Aneurysms

Xin Wang, Ronald L Dalman, Haojun Xuan, Naoki Fujimura, Hongping Deng, Yasunori Iida, Michael P Snyder, Baohui Xu, Stanford Univ Sch of Med, Stanford, CA

X. Wang: None. **R.L. Dalman**: None. **H. Xuan**: None. **N. Fujimura**: None. **H. Deng**: None. **Y. Iida**: None. **M.P. Snyder**: None. **B. Xu**: None.

467

Differences in Susceptibility to Abdominal Aortic Aneurysms Between 129/SvEv and C57Bl/6 Mice

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468

HIF-1 α Mediates Initiation and Progression of Experimental Abdominal Aortic Aneurysms

Baohui Xu, Naoki Fujimura, Hongping Deng, Haojun Xuan, Yuko Furusho, Keith J Glover, Mary Gerritsen, Geoffrey C Gurtner, Sara A Michie, Ronald L Dalman, Stanford Univ Sch of Med, Stanford, CA

B. Xu: None. **N. Fujimura**: None. **H. Deng**: None. **H. Xuan**: None. **Y. Furusho**: None. **K.J. Glover**: None. **M. Gerritsen**: None. **G.C. Gurtner**: None. **S.A. Michie**: None. **R.L. Dalman**: None.

469

Relationship of Heart Rate and Physical Activity with Cardiovascular Risk Factors in a Multi-ethnic Population

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A. Grandinetti: None. **J.K. Kaholokula**: None.

470

Statin Treatment in Patients with Acute Myocardial Infarction According to Left Ventricular Systolic Function

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S. Kim: None. **H. Kim**: None. **M. Im**: None. **J. Seo**: None. **W. Chung**: None. **J. Zo**: None. **M. Kim**: None. **H. Lee**: None.

471

Impact of Enrichment Strategies for Future Clinical Trials Assessing PCSK-9 Inhibitors Efficacy in Primary Prevention Settings

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K. Nasir: None. **E. Veledar**: None.

472

Prevalence of Fredrickson-Levy Dyslipidemia Phenotypes at Extreme HDL-C Levels: The Very Large Database of Lipids (VLDL-9B)

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473

Development of High-throughput ABCA1, ABCG1 and SR-BI Mediated HDL Efflux Assays

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C. Storey: None. **C. Tang**: None.

474

Effects of Race on Endothelial Function in Type 2 Diabetes

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V. Brar: None. **A.E. Berdy:** None. **J.A. Panza:** None. **U. Campia:** None.

475

Catechol-O-Methyl Transferase Methylation and Blood Pressure in Children Treated With Second-generation Antipsychotics

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A.T. Cote: None. **K.V. Hookenson:** None. **R.E. Aleliunas:** None. **C. Sable:** None. **C. Panagiotopoulos:** None. **A.M. Devlin:** None.

476

Glucagon Like Peptide -1 Receptor Activation Does Not Affect Re-endothelialization But Reduces Intimal Hyperplasia via Direct Effects on Smooth Muscle Cells in a Non-diabetic Model of Arterial Injury

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L. Eriksson: None. **R. Saxelin:** None. **S. Röhl:** None. **J. Roy:** None. **K. Caidahl:** None. **T. Nyström:** None. **U. Hedin:** None. **A. Razuvaev:** None.

477

Adipocyte Twist-1 Deficiency Exacerbates Weight Gain, Glucose Intolerance and Adipose Tissue Inflammation in Females

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B.A. Haynes: None. **M.A. Hatcher:** None. **L.M. Glenn:** None. **A. James:** None. **A.D. Dobrian:** None.

478

FGF23 Expression in Cardiac Fibroblasts Is Augmented by S100/Calgranulins-Mediated Inflammation and Associated With Cardiac Hypertrophy, but Not in Angiotensin II-Induced Cardiac Hypertrophy

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M. Hofmann Bowman: None. **B. Gardner:** None. **J. Earley:** None. **D.L. Rateri:** None. **A. Daugherty:** None. **L. Yan:** None.

479

Orotic Acid Induces Hypertension Associated With Impaired Endothelial Nitric Oxide Synthesis

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Y. Choi: None. **B. Lee:** None.

480

Exacerbation of Arterial Stiffness in Obese Adiponectin Deficient Mice

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M. Murali: None. **C. Taylor:** None. **P. Zahradka:** None. **J. Wigle:** None.

481

Diabetic Hyperglycemia Accelerates Atherosclerosis by Driving Adaptive Immunity in Mice with Similar Hyperlipidemia

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482

Signaling Lipid Lysophosphatidic Acid Is a Critical Link to Diet-induced Obesity, Cellular Bioenergetics and Breast Cancer Angiogenesis

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L. Dong: None. **Y. Yuan:** None. **I. Aguilera-Barrantes:** None. **Y. Chen:** None. **A. Sturich:** None. **R. Yuan:** None. **S. Wu:** None. **R. Silverstein:** None. **B. Ren:** None.

483

Non-redundant and Opposing Roles of Group X and Group V Secretory Phospholipase A2s on Pancreatic Beta-cell Function

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P. Shridas: None. **V.P. Noffsinger:** None. **N.R. Webb:** None.

484

Platelet Specific Deletion of Opa-1 Reveals Gender Dimorphic Effects on Platelet Dysfunction and Thrombus Formation in Mice

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485

CD44 Deficiency Protects Against Diet-Induced Obesity and Reduces Adipose Tissue Inflammation in Mice

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486

Genetic Deletion of Akt2 and AMPK accentuates Insulin Resistance-Induced Cardiac Contractile Anomalies

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Q. Wang: None. **M.R. Kandadi:** None. **J. Ren:** None.

487

Saturated FFA Induced NF- κ B Activation Is Independent of IKK/ $\text{I}\kappa\text{B}\alpha$ in Aortic Endothelial Cells

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488

Dipeptidyl Peptidase-4 Links Metabolic Regulation With Innate Immune Signaling

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489

Dual Role of Connexin37 in the Control of Vascular Inflammation and Smooth Muscle Cell Proliferation During Intimal Hyperplasia in Mice

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F. Allagnat: None. **J. Corpataux:** None. **J. Haefliger:** None. **S. Deglise:** None.

491

Detection of Subclinical Coronary Artery Disease by Calcium Score in Patients With Atrial Fibrillation: Potential Clinical Implications

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K. Chaikriangkrai: None. **M. Valderrabano:** None. **S. Khaleel Bala:** None. **S. Alchalabi:** None. **E. Graviss:** None. **F. Nabi:** None. **J. Mahmarian:** None. **S. Chang:** None.

492

Atherogenic Dyslipidemia in Patients with Transient Ischemic Attack

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493

Syndesomes: An Syndecan-4 Based Therapeutic for Effective Revascularization in Peripheral Ischemia in Diabetes

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494

The Impact of Renal Insufficiency on Carotid Artery Disease Regression in an Academic Medical Center

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K. Domakonda: None. **D. Basu:** None. **I. Halickman:** None. **E. Iliadis:** None.

495

Body Mass Index is Associated with Progression of Carotid Intima-Media Thickness in Black, but not in White Young Adults: The Bogalusa Heart Study.

Camilo Fernández Alonso, Rupert Barshop, Patrycja Galazka, Shengxu Li, Wei Chen, Gerald S Berenson, Tulane Univ Health Sciences Ctr, New Orleans, LA

C. Fernández Alonso: None. **R. Barshop:** None. **P. Galazka:** None. **S. Li:** None. **W. Chen:** None. **G.S. Berenson:** None.

496

All Trans Retinoic Acid ePTFE Grafts Inhibit Intimal Formation in a Rat Aortic Interposition Graft Model

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E.K. Gregory: None. **A.R. Webb:** None. **J.M. Vercammen:** None. **M.E. Flynn:** None. **G.A. Ameer:** None. **M.R. Kibbe:** None.

497

5-Methoxytryptophan Protects Against Vascular Remodeling

Yen-Chun Ho, Meng-Ling Wu, Chen-Hsuan Su, Cheng-Chin Kuo, Kenneth K. Wu, Shaw-Fang Yet, Natl Health Res Insts, Miaoli County, Taiwan

Y. Ho: None. **M. Wu:** None. **C. Su:** None. **C. Kuo:** None. **K.K. Wu:** None. **S. Yet:** None.

498

Combinatorial Extracellular Matrix Microarrays for Probing Endothelial Differentiation of Human Induced Pluripotent Stem Cells

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L. Hou: None. **J. Coller:** None. **V. Natu:** None. **N. Huang:** None.

499

Lower Diastolic Wall Strain Is Associated With Percutaneous Coronary Intervention in Patients With Normal Left Ventricular Systolic Function

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M. Kang: None. **S. Kim:** None. **J. Choi:** None. **H. Mun:** None. **S. Choi:** None. **J. Cho:** None. **N. Lee:** None.

500

Vitamin D Supplementation Attenuates ADAM-12-mediated Proliferation of Carotid Artery Smooth Muscle Cells of Hypercholesterolemic Swine

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V. Kansal: None. **E.B. Patterson:** None.

501

Irregular Distribution and Accumulation of Desmin in Gastrocnemius Myofibers in Association With Abnormal Myofiber Morphology and Impaired Limb Function in a Mouse Model of Chronic, Hindlimb Ischemia

Panagiotis Koutakis, Stanley A Swanson, Zhen Zhu, Evlampia Papoutsis, Dimitrios Miserlis, Julian Kyung-Soo Kim, Iraklis I Pipinos, George P Casale, Univ of Nebraska at Medical Ctr, Omaha, NE

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502

Smokers Have Significantly Increased Rates of Intraoperative Microembolization Detected on Transcranial Doppler with Carotid Angioplasty/Stenting Compared to Endarterectomy Procedure in Preliminary Study

Jennifer Li, Christian Pina, Daniel Alicea, Chiara Giannarelli, Venkatesh Mani, Ageliki Vouyouka, Prakash Krishnan, Rami Tadros, Juan Badimon, Zahi Fayad, Jose Wiley, Peter Faries, Icahn Sch of Med at Mount Sinai, New York, NY

J. Li: None. **C. Pina:** None. **D. Alicea:** None. **C. Giannarelli:** Research Grant; Significant; NIH-NHLBI K23HL111339. **V. Mani:** Consultant/Advisory Board; Modest; Tursiop Technologies. **A. Vouyouka:** None. **P. Krishnan:** Speakers Bureau; Modest; AstraZeneca, Daiichi-Sankyo Co., Ltd. Consultant/Advisory Board; Modest; Abbott Laboratories; Covidien. **R. Tadros:** None. **J. Badimon:** None. **Z. Fayad:** Consultant/Advisory Board; Modest; Cerenis Therapeutics. **J. Wiley:** Consultant/Advisory Board; Modest; Abbott Laboratories, AngioDynamics. **P. Faries:** Consultant/Advisory Board; Modest; Covidien, Medtronic, Inc, Merck & Co., Inc.

503

Osteoporosis and Arterial Calcification: Are These Processes Related?

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M. Miralles: None. **M. Arrebola:** None. **E. Plana:** None. **I. Sanchez-Nevarez:** None.

504

Cystatin-C Risk-Stratifies Patients for Acute Kidney Injury and 1-Year Major Vascular Events Following Contrast-Enhanced CT Imaging in the Emergency Care Setting

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A.M. Mitchell: Research Grant; Significant; AHA Mentored Clinical and Population Award. **J.A. Kline:** Research Grant; Significant; Ikaria, NIH. Ownership Interest; Modest; CP Diagnostics. Consultant/Advisory Board; Modest; Janessen, Genentech, Diagnostica Stego. **R.Y. Williams:** None. **D.P. Basile:** Employment; Significant; Spouse employed by Eli Lilly. **S.D. Teague:** Consultant/Advisory Board; Modest; 3DR. **B.A. Molitoris:** None.

505

Effect of Angiotensin II Infusion on Renal TNF α and IL6 mRNA Expression in Male Adiponectin Deficient Mice

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J. Pamidimukkala: None. **X. Wang:** None. **E. Yu:** None. **J. Phan:** None.

506

Changes in Vascular Function from Pre-conception to Post-partum Among Mongolian Women

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E. Davaasambuu: None. **C. Shufelt:** None. **J. Stuart:** None. **N. Bairey Merz:** None. **G. Fitzmaurice:** None. **J. Rich-Edwards:** None.

507

Plasma Cyclophilin A as a Useful Biomarker for Effective Percutaneous Transluminal Pulmonary Angioplasty in Chronic Thromboembolic Pulmonary Hypertension

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K. Satoh: None. **K. Sugimura:** None. **T. Aoki:** None. **S. Tatebe:** None. **T. Shimizu:** None. **S. Ikeda:** None. **N. Yaoita:** None. **S. Kudo:** None. **K. Suzuki:** None. **J. Omura:** None. **N. Kikuchi:** None. **T. Satoh:** None. **R. Kurosawa:** None. **S. Sunamura:** None. **T. Otsuki:** None. **H. Shimokawa:** None.

508

Pyruvate Induction of Glyoxalase 1 in Porcine Brain Post-cardiac Arrest: Enhanced Methylglyoxal and Glutamate Detoxification

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G.F. Scott: None.

509

Accurate Measurement of Carotid Lumen Diameter and Narrowing Utilizing Ultrasound

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A.M. Sharma: None. **T. Araki:** None. **K. Kumar:** None. **N. Ikeda:** None. **F. Lavra:** None. **J. Rajan:** None. **L. Saba:** None. **A. Nicolaides:** None. **J. Laird:** None. **S. Shafique:** None. **J.S. Suri:** None.

510

Effect of Repetitive Intra-Arterial Infusion of Bone Marrow Mononuclear Cells in Patients With No-Option Limb Ischemia: The Randomized, Double-Blind, Placebo-Controlled JUVENTAS Trial

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511

Ephrin-B2 Is Essential for Ischemic Recovery following Femoral Artery Occlusion in Mice

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R.A. Wang: None. **Y. Lin:** None. **W. Jiang:** None. **J. Youn:** None. **W. Gong:** None. **J.R. Fineman:** None. **A.W. Bollen:** None. **H. Cai:** None.

512

RAGE-dependent Down-regulation of Glyoxalase-1 Impairs Inflammatory Response and Angiogenesis in Hind Limb Ischemia in Diabetic Mice

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S. Yan: None. **X. Shen:** None. **R. Rosario:** None. **A. Schmidt:** None.

513

Evaluation of Proinflammatory Effects of Low Dose Angiotensin II Infusion in Intact Female Mice and Adiponectin Deficient Mice

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E. Yu: None. **X. Wang:** None. **J. Pamidimukkala:** None.

520

High-density Lipoprotein Inhibits Human M1 Macrophage Polarisation through the Redistribution of Caveolin-1

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M.K.S. Lee: None. **X. Moore:** None. **Y. Fu:** None. **A. Al-sharea:** None. **D. Dragoljeic:** None. **M. Fernandez-Rojo:**

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521

Impact of Insulin-resistance, Body Mass Index and Dietary Fat Intakes on Apolipoprotein B-48 Kinetic

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J. Drouin-Chartier: None. **A.J. Tremblay:** None. **J. Hogue:** None. **B. Lamarche:** None. **P. Couture:** None.

522

Scavenger Receptor-BI's Cholesterol Transport Functions are Dependent on its Extracellular Tryptophan Residues

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R.L. Holme: None. **J.J. Miller:** None. **D. Sahoo:** None.

523

Regulation of Pancreatic β -cell Gene Expression and Function by ABCA1 and ABCG1

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L. Hou: None. **F. Tabet:** None. **B. Cochran:** None. **M. Westerterp:** None. **A. Tall:** None. **P. Barter:** None. **K. Rye:** None.

524

Role of Transmembrane Protein 55B in Insulin Signaling and Hepatic Lipid Metabolism

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M.J. Kim: None. **D. Naidoo:** None. **D. Hu:** None. **J.J. Woo:** None. **R.M. Krauss:** None. **M.W. Medina:** None.

525

Transplanted LRP1-Deficient Periaortic Adipose Tissue Accelerates Atherosclerosis in Carotid Arteries of LDL Receptor Knockout Mice

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D.G. Kuhel: None.

527

Decay of Hepatic and Serum Apolipoprotein(a) Levels is Slower than ApolipoproteinB Following Inhibition of Lipid Synthesis

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H.Y. Zhang: Employment; Significant; Eli Lilly and Company. **A.K. Nosie:** Employment; Significant; Eli Lilly and Company. **W. Ni:** Employment; Significant; Eli Lilly and Company. **M.C. Kowala:** Employment; Significant; Eli Lilly and Company. **M.K. Mosior:** Employment; Significant; Eli Lilly and Company. **L.F. Michael:** Employment; Significant; Eli Lilly and Company.

528

ApoA-I Mimetic Peptide Treatment Improves Left Ventricular Diastolic Dysfunction and Decreases Iron Content in Coronary Plaques in Rabbits

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W. Nachar: None. **D. Busseuil:** None. **Y. Shi:** None. **T. Mihalache-Avram:** None. **M. Mecteau:** None. **G. Brand:** None. **G. Theberge-Julien:** None. **É. Rhéaume:** None. **J. Tardif:** None.

529

High-dimensional Genetic Analysis of Lipoprotein Composition and Size in the Mouse

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B.W. Parks: None. **B. Bennett:** None. **C. Pan:** None. **R.M. Krauss:** None. **P.S. Gargolovich:** None. **T.G. Kirchgessner:** None. **A.J. Lusis:** None.

530

A Cluster of Proteins Implicated in Kidney Disease Are Increased in HDL of Hemodialysis Subjects

Baohai Shao, Ian de Boer, Philip S. Mayer, Leila Zelnick, Maryam Afkarian, Jay W. Heinecke, Jonathan Himmelfarb, Univ of Washington, Seattle, WA

B. Shao: None. **I. de Boer:** None. **P.S. Mayer:** None. **L. Zelnick:** None. **M. Afkarian:** None. **J.W. Heinecke:** None. **J. Himmelfarb:** None.

531

Intestinal Pregnane X Receptor Links Xenobiotic Exposure and Hypercholesterolemia

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Y. Sui: None. **R. Helsley:** None. **S. Park:** None. **X. Song:** None. **C. Zhou:** None.

532

The Receptor for Advanced Glycation End Products (RAGE) Suppresses Macrophage Cholesterol Transport in Diabetes

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G. Daffu: None. **X. Shen:** None. **A. Abedini:** None. **L. Senatus:** None. **C. Hurtado del Pozo:** None. **R. Rosario:** None. **F. Song:** None. **R. Friedman:** None. **R. Ramasamy:** None. **A. Schmidt:** None.

533

Salicylate Restores Macrophage Cholesterol Homeostasis via Activation of AMP-Activated Protein Kinase

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M.D. Fullerton: None. **C.P. McGregor:** None. **N.D. LeBlond:** None. **S.A. Snider:** None. **R.J. Ford:** None. **R.C. Austin:** None. **G.R. Steinberg:** None. **B.E. Kemp:** None.

534

Abca1 Mediates Macrophage Deposition of Cholesterol Into the Extracellular Matrix

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X. Jin: None. **S.R. Freeman:** None. **B. Vaisman:** None. **Y. Liu:** None. **J. Chang:** None. **N. Varsano:** None. **L. Addadi:** None. **A. Remaley:** None. **H.S. Kruth:** None.

535

Lipid Phosphate Phosphatase 3: A Novel Mediator of Heart Failure Development and Progression

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M. Panchatcharam: None. **B. Maxey:** None. **A. Day:** None. **D. Escalante-Alcalde:** None. **S. Miriyala:** None.

536

Lysosome Insufficiency in Atherosclerosis Prone DBA/2 Mouse Macrophages Associated With Impaired Autolysosome Formation and Lipid Drop Clearance

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P. Robinet: None. **J.D. Smith:** None.

537

Characterization of the Lipase Stimulating Domain for Apolipoprotein A-V and the Development of a Therapeutic Peptide for the Treatment of Hypertriglyceridemia

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J.D. Janizek: None. **K. Munro:** None. **M.H. Davidson:** None. **J.B. Ancsin:** None.

538

A PCSK9 Antibody that Blocks Binding to LDLR while Allowing Normal PCSK9 Inactivation by Furin is Afforded a Reduced Clearance Rate and a Longer Duration of Effect in Mice

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T.P. Beyer: Employment; Significant; Eli Lilly and Company. **P.I. Eacho:** Consultant/Advisory Board; Modest; Eli Lilly and Company. Other; Significant; Retired Eli Lilly and Company. **K.M. Schroeder:** Employment; Significant; Eli Lilly and Company. **R.J. Hansen:** Employment; Significant; Eli Lilly and Company. **V.J. Wroblewski:** Employment; Significant; Eli Lilly and Company. **B. Han:** Employment; Significant; Eli Lilly and Company. **R.T. Pickard:** Employment; Significant; Eli Lilly and Company. **M.C. Kowala:** Employment; Significant; Eli Lilly and Company.

539

Oxidized Linoleic Acid Modulates Plasma Lipids and Associated Apolipoproteins in C57bl Mice

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G. Ainsworth: None. **H. Mahini:** None. **M. Garelnabi:** Other Research Support; Modest; Genentech A Member of the Roche Group.

540

Correlation of Improved Cholesterol Efflux Capacity of High Density Lipoprotein With Survival and Allograft Vasculopathy in Cardiac Transplant Recipients

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CA; Lee R Goldberg, Jeffrey Billheimer, Daniel J Rader, Univ of Pennsylvania, Philadelphia, PA

A. Javaheri: None. **P. Zamani:** None. **M. Molina:** None. **A. Rodrigues:** None. **S. Chambers:** None. **P. Stutman:** None. **W. Maslanek:** None. **M. Williams:** None. **D. Lukmanova:** None. **A. Picataggi:** None. **S. Lilly:** None. **P.S. Heeger:** None. **M.H. Sayegh:** None. **A.K. Chandraker:** None. **R.C. Sarling:** None. **D.M. Briscoe:** None. **K.P. Daly:** None. **J. Stehlik:** None. **D. Ikle:** None. **J. Christie:** None. **Y. Woo:** None. **L.R. Goldberg:** None. **J. Billheimer:** None. **D.J. Rader:** Ownership Interest; Significant; Founder Vascular Strategies.

541

SmgGDS as a Crucial Mediator of the Inhibitory Effects of Statins on Cardiac Hypertrophy and Fibrosis -Novel Mechanism of the Pleiotropic Effects of Statins-

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S. Kudo: None. **K. Satoh:** None. **M. Nogi:** None. **K. Suzuki:** None. **S. Sunamura:** None. **J. Omura:** None. **N. Kikuchi:** None. **R. Kurosawa:** None. **T. Satoh:** None. **T. Minami:** None. **S. Ikeda:** None. **H. Shimokawa:** None.

542

The Effects of Soluble Epoxide Hydrolase Inhibition in Atherogenesis and Atherosclerotic Progression

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D. Li: None. **X. Zhang:** None. **Y. Zhu:** None.

543

Impact of Eplerenone on Vascular Function in LOX-1 Overexpressing Mice on High-Fat Diet

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C. Brunssen: None. **J. Rissler:** None. **H. Langbein:** None. **A. Hofmann:** None. **A. Frenzel:** None. **A. Deussen:** None. **M. Peitzsch:** None. **P. Cimalla:** None. **E. Koch:** None. **G. Eisenhofer:** None. **T. Sawamura:** None. **H. Morawietz:** None.

544

A Novel Peroxisome Proliferator Response Element Modulates LDL-receptor Transcription in Response to PPAR Agonists.

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545

Suppression of Atherosclerosis by Synthetic REV-ERB Agonist

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546

SR-BI Functions on Plasma HDL Homeostasis -low Plasma pre β HDL Level in SR-BI Null Mice by 2D PAGE Analysis

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M. Tsujita: None. **T. Yokota:** None. **N. Akita:** None. **Y. Maekawa:** None. **J. Yamamoto:** None. **A.T. Remaley:** None. **S. Yokoyama:** None.

547

A Novel Abetalipoproteinemia Missense Mutation Highlights the Importance of N-terminal β -barrel in Microsomal Triglyceride Transfer Protein Function

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M. Walsh: None. **J. Iqbal:** None. **J. Josekutty:** None. **J. Soh:** None. **E. Di Leo:** None. **E. Ozaydin:** None. **M. Gunduz:** None. **P. Tarugi:** None. **M. Hussain:** None.

548

Association Between Serum Omentin-1 Level and Coronary Artery Disease: A Meta-Analysis

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P. Agasthi: None. **S. Aloor:** None. **M. Axiyan:** None. **A. Onwuanyi:** None.

549

Loss of Macrophage Akt2/Akt3 or Akt1/Akt2 Decreases Cell Survival and Suppresses Early Atherosclerosis in Ldlr Null Mice

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V.R. Babaev: None. **L. Ding:** None. **Y. Zhang:** None. **J.M. May:** None. **M.F. Linton:** None.

550

Regulation of Macrophage Functions by a Synthetic ROR Ligand

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C. Billon: None. **T. Burris:** None.

551

Deficiency of Hepatic Nuclear Factor 4 Alpha Results in Impaired Metabolism of Endogenous Methylarginines and Beta-aminoisobutyric Acid - A Novel Mechanism of Cardiovascular Complications in Patients With Type 2 Diabetes?

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D.V. Burdin: None. **A.A. Kolobov:** None. **A.V. Demyanov:** None. **A.A. Soshnev:** None. **C.N. Broker:** None. **N. Samusik:** None. **S. Brillhoff:** None. **J. Martens-Lobenhoffer:** None. **T. Reetz:** None. **R. Maas:** None. **S.M. Bode-Böger:** None. **F. Gonzalez:** None. **N. Weiss:** None. **R.N. Rodionov:** None.

552

IL-17C-Producing Aortic Smooth Muscle Cells Play a Pro-Atherogenic Role Via the Recruitment of Inflammatory IL-17A+ T Cells

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M.J. Butcher: None. **E.V. Galkina:** None.

553

Siglec-1 (CD169) on Monocytes/Macrophages: A New Receptor For Extracellular Self-RNA in Triggering Inflammatory Responses via the Sheddase TACE/ADAM17

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H.A. Cabrera-Fuentes: None. **K.T. Preissner:** None. **W.A. Boisvert:** None.

554

Vascular Lesion Formation is Attenuated by Genetic Deletion of Hyaluronan Synthase 3

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L.S. Dick: None. **S. Homann:** None. **J. Mueller:** None. **M. Grandoch:** None. **J.W. Fischer:** None.

555

The Atypical Cadherin Fat1 Interacts With the Intermediate Filament Vimentin in Vascular Smooth Muscle Cells and Limits Atherosclerosis

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C.M. Dunaway: None. **P. Chinnasamy:** None. **L. Cao:** None. **D.F. Riascos Bernal:** None. **N.E.S. Sibinga:** None.

556

Targeted Screening Reveals microRNAs of Therapeutic Interest in Radiotherapy-Induced Vascular Disease

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S.M. Eken: None. **T. Christersdottir:** None. **J. Pirault:** None. **H. Jin:** None. **E. Chernogubova:** None. **Y. Li:** None. **G. Korzunowicz:** None. **H. Winter:** None. **G.K. Hansson:** None. **M.T.G. Halle:** None. **L. Maegdefessel:** None.

557

Gene Polymorphisms in IL-10, INF- γ and TGF- β are Associated with Early-Onset Coronary Artery Disease and Microvascular Function.

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558

Neutrophils-derived-microvesicle Could Play a Role in the Early Stage of Atherosclerosis

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559

FTY720 Protects Against Diet Induced Coronary Artery Disease and Myocardial Infarction in Diabetic SR-B1^{-/-} ApoE-Hypomorphic Mice

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L.A. Gonzalez-Jara: None. G. Werstuck: None. B. Trigatti: None.

560

Association of Female Gender with Arterial Stiffness in Patients With End-Stage Renal Disease

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I. Guajardo: None. M. Claire: None. P. Ganz: None. C.A. Peralta: None. R. Dubin: None.

561

A Novel Integrin Modulating Arg-Gly-Asp(RGD)-Peptide-Coated Stent Reduces Neoatherosclerosis in a Rabbit Model

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562

Evidence of Protozoan Biofilm Communities in Atheromatous Debris

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R. Heuser: None. S.E. Fry: Employment; Significant; Fry Laboratories, LLC. J. Ellis: Employment; Significant; Fry Laboratories, LLC. R. Schwartz: None. D.L. Martinez: Employment; Significant; Fry Laboratories, LLC. M.A. Shabilla: Employment; Significant; Fry Laboratories, LLC. A.M. Henonburg: Employment; Significant; Fry Laboratories, LLC. B. Schwartz: None.

563

Activated Circulating Intermediate Monocytes are Associated with Subclinical Coronary Plaque in Apparently Healthy Middle-Aged Men

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B.G. Kral: None. L. Gama: None. D.M. Becker: None. L.R. Yanek: None. E.K. Fishman: None. D. Vaidya: None. L.C. Becker: None.

564

CD146 Deficiency Leads to Accelerated Atherosclerosis in Mice

Muriel G Blin, Richard Bachelier, Samantha Fernandez, Benjamin Guillet, Karim Fallague, Stéphane Robert, Nathalie Bardin, Marcel Blot-Chabaud, Françoise Dignat-George, Aurelie S Leroyer, Aix-Marseille Univ, Marseille, France

M.G. Blin: None. R. Bachelier: None. S. Fernandez: None. B. Guillet: None. K. Fallague: None. S. Robert: None. N. Bardin: None. M. Blot-Chabaud: None. F. Dignat-George: None. A.S. Leroyer: None.

565

Ambient Fine Particulate Matter Decreases Endothelial Progenitor Cells Through Reactive Oxygen Species-mediated Apoptosis

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Y. Cui: None. X. Xie: None. J.Z. Liu: None. F. Jia: None. J. He: None. H. Hao: None. Y. Liu: None. P.J. Cowan: None. H. Zhu: None. Q. Sun: None. Z. Liu: None.

566

Experimental Investigation of Blood Flow in the Femoral Bifurcated Artery

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A. Lotfi: None. Z. Lawler: None. O. Jan: None. T. Barber: None. A. Simmons: None.

567

Atg1611 Expression in Carotid Atherosclerotic Plaques Is Associated With Plaque Vulnerability

Joelle Magné, Peter Gustafsson, Hong Jin, Lars Maegdefessel, Kjell Hulténby, Annika Wernerson, Per Eriksson, Anders Franco-Cereceda, Karolinska Instt, Stockholm, Sweden; Petri Kovanen, Wihuri Res Inst., Helsinki, Finland; Isabel Gonçalves, Experimental Cardiovascular Res Group, Malmö, Sweden; Ewa Ehrenborg, Karolinska Instt, Stockholm, Sweden

J. Magné: None. P. Gustafsson: None. H. Jin: None. L. Maegdefessel: None. K. Hulténby: None. A. Wernerson: None. P. Eriksson: None. A. Franco-Cereceda: None. P. Kovanen: None. I. Gonçalves: None. E. Ehrenborg: None.

568

ApoE^{-/-} Mice Lacking Hemopexin Develop Aggravated Atherosclerosis via Mechanisms That Include Altered High Density Lipoprotein Inflammatory Properties and Macrophage Function

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569

Lymphatic Function Is Impaired Before Atherosclerosis Onset in a Model of Atherosclerosis-prone Mice

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A. Milasan: None. M. Clavet-Lanthier: None. G. Mayer: None. C. Martel: None.

570

Deficiency of Inhibitory Fcγ Receptor II Does Not Exacerbate Atherosclerosis

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S. Nagarajan: None. X. Zhu: None. H. Ng: None.

571

Atherogenic Macrophages Transfer microRNA-containing Exosomes to Naïve Cells and Promote Macrophage Migration

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M. Nguyen: None. D. Karunakaran: None. K. Rayner: None.

572

Relationship of Aortic Stiffness Measured by Cardiac MRI with Left Ventricular Geometry and Function

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Y. Ohyama: None. **K. Rezzadeh:** None. **B. Ambale-Venkatesh:** None. **K. Yoneyama:** None. **A. Redheuil:** None. **W. Yu:** None. **C. Wu:** None. **D. Bluemke:** None. **J. Lima:** None.

573

Endothelial $\alpha 5$ Integrins Regulate OxLDL-Induced Fibronectin Deposition, Proinflammatory Gene Expression, and Early Atherosclerosis

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A. Yurdagul: None. **J. Green:** None. **W. Orr:** Research Grant; Significant; NIH R01 HL098435.

574

Whole Body and Hepatocyte-specific Deletion of Bmal1 Induces Hyperlipidemia and Enhances Atherosclerosis

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575

NEDDylation Promotes Endothelial Dysfunction: A Role for HDAC2

Deepesh Pandey, Daijiro Hori, Jae H Kim, Yehudit Bergman, Dan E Berkowitz, Lewis H Romer, Johns Hopkins Univ, Baltimore, MD
D. Pandey: Research Grant; Significant; AHA POSTDOC FELLOWSHIP 13POST16810011, NIH R01 HL089668. **D. Hori:** None. **J.H. Kim:** None. **Y. Bergman:** None. **D.E. Berkowitz:** None. **L.H. Romer:** None.

576

Gender Differences in Carotid Artery Plaque Composition Do Not Exist in Response to Lipid Lowering Therapy at Two Years Among Men and Women with Carotid or Coronary Artery Disease and Elevated ApoB Levels

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577

Medical Marijuana Use: Effect on Lipid Metabolism and Atherosclerosis

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578

Spotty Calcification as a Marker of Vulnerable Plaque: Novel Findings From *in vivo* Study in Survivors of Cardiac Arrest and *in vitro* Study in Autopsied Patients of Sudden Cardiac Death

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579

Lack of Interleukin-19 Exacerbates Experimental Atherosclerosis

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M. Ray: None. **J. Richards:** None. **K. Gabunia:** None. **S. Kelemen:** None. **M. Autieri:** None.

580

Regulation of Inflammatory Gene Expression by Angiotensin II-induced KLF4 in Vascular Smooth Muscle Cells

Wen Jin, **Marpadga A Reddy**, Zhuo Chen, Sadhan Das, Linda Lanting, Lingxiao Zhang, Mei Wang, Rama Natarajan, Beckman Res Inst., Duarte, CA
W. Jin: None. **M.A. Reddy:** None. **Z. Chen:** None. **S. Das:** None. **L. Lanting:** None. **L. Zhang:** None. **M. Wang:** None. **R. Natarajan:** None.

581

Lipid Peroxide Derived Dicarboxylic Acids Induce Atherosclerotic Calcification

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A. Riad: None. **C.A. Narasimhulu:** None. **D. Litvinov:** None. **X. Jiang:** None. **I.F. Ruiz:** None. **S. Parthasarathy:** None.

582

Overexpression of Mnsod Reduces Aortic Valve Calcification Through Repression of Pro-osteogenic Signaling

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583

Receptor for Advanced Glycation End Products (Ager) and Diaphanous-1 (*Drf1*) Suppress Macrophage Reverse Transendothelial Migration and Regression of Diabetic Atherosclerosis

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584

The Association of Psychosocial Risk Factors with Subclinical Atherosclerosis in South Asians

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B. Shah: None. **S. Shah:** None. **N. Kandula:** None. **A. Kanaya:** Research Grant; Modest; NIH grant #1R01 HL093009, NIH/ NCRR UCSF-CTSI Grant Number UL1 RR024131.

585

E3 ubiquitin-protein Ligase Casitas B Lineage Lymphoma b Deficiency Aggravates Atherosclerosis

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E. Smeets: None. **T. Seijkens:** None. **M. den Toom:** None. **S. Meiler:** None. **E. Lutgens:** None.

587

Leukocyte Calpain Deficiency Reduces Angiotensin II-induced Inflammation and Atherosclerosis in Hypercholesterolemic Mice

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D. Howatt: None. **A. Balakrishnan:** None. **J. Moorleghen:** None. **D. Rateri:** None. **H. Uchida:** None. **J. Takano:** None. **T. Saido:** None. **A. Chishti:** None. **L. Baud:** None. **V. Subramanian:** None.

588

Cap Inflammation Leads to Large Plaque Cap Stress Decrease and Strain Increase: MRI-PET/CT-Based FSI Modeling

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589

Macrophage SR-BI Binds GST-Pi and Suppresses Cell Apoptosis in Atherosclerosis

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H. Tao: None. **P.G. Yancey:** None. **J.L. Blakemore:** None. **Y. Zhang:** None. **L. Ding:** None. **S.S. Davies:** None. **K.C. Vickers:** None. **M.F. Linton:** None.

590

Loss of Myeloid Cell Prostaglandin E Receptor 4 Does Not Alter Diabetes-Accelerated Atherosclerosis in a Murine Model of Type 1 Diabetes

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591

Increased Retention of LDL From Type 1 Diabetic Patients in an Atherosclerosis-prone Area of the Murine Arterial Wall

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592

Rapamycin Increases the Thrombogenic Potential of Neutrophil Extracellular Traps (NETs): Potential Mechanism of Prothrombotic Drug-Eluting Stents

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D.K. Robinson: None. **L.D. Healy:** None. **T.T. Chu:** None. **H. Oldenkamp:** None. **C. Garcia Puy:** None. **A. Gruber:** None. **O.J.T. McCarty:** None.

594

Characterization of Anti-thrombotic and Anti-inflammatory Properties of New Synthetic, Protamine Reversible Low Molecular Weight Heparin

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K. Chandarajoti: None. **E.M. Sparkenbaugh:** None. **N.S. Key:** None. **Y. Xu:** None. **B. Cooley:** None. **J. Liu:** None. **R. Pawlinski:** None.

595

Proof-of-concept Studies for Sirna-mediated Gene Silencing for Coagulation Factors in Rat and Rabbit

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596

Platelet inhibition by Ticagrelor in African American versus Caucasian patients after Percutaneous Coronary Intervention

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597

Plasma Fibrin Clot Strength in Patients With Diabetes Mellitus Measured by Thrombelastography

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B. Maatman: None. **G. Schmeisser:** None. **J. Owens:** None. **D. Flockhart:** None. **R.P. Kreutz:** Consultant/Advisory Board; Modest; Coramed LLC.

598

A Platelet Glycoprotein Ib-IX-specific 14-3-3/Rac1/LIMK1 Signaling Pathway Promotes Thrombin-Induced Platelet Activation

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599

Lighting Up P2Y12 Oligomers: Insights into the Role of Oligomerization in P2Y12 Function

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600

Novel Assays to Determine in vivo Platelet Activation

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601

Circulating Platelet Aggregate Damages Endothelial Cells in Culture

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602

Cardiac Complications During the Early Phase of Pneumonia Increase Long-term Mortality and Incidence of Cardiovascular Events.

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C. Calvieri: None. **R. Cangemi:** None. **M. Falcone:** None. **T. Bucci:** None. **A. Farcomeni:** None. **G. Taliani:** None. **G. Betazzoni:** None. **G. Scarpellini:** None. **F. Violi:** None.

603

Nestin+ Cells Regulate Bone Marrow Egress of Inflammatory Cells and Their Infiltration in the Aorta in Atherosclerosis

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R. Del Toro: None. **S. Mendez-Ferrer:** None.

605

Activation of NLRP3 Inflammasome Complex Regulates the Onset of Hypoxia Induced Thrombosis

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N. Gupta: None. **M. Sharma:** None. **T. Chatterjee:** None. **T. Tyagi:** None. **A. Sahu:** None. **A. Prabhakar:** None. **M. Ashraf:** None.

606

Antithrombin Nanoparticle Therapy Safely Restores Endothelial Barrier Integrity and Reduces Vessel Hypercoagulability in Atherosclerotic Mice

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R.U. Palekar: None. **A.P. Jallouk:** None. **H. Pan:** None. **S.A. Wickline:** Ownership Interest; Significant; Acuplaq, LLC.

607

Kininogen Regulates Thrombin Generation in a Mouse Model of Sickle Cell Disease

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608

A locus on Chromosome 6 in Diversity Outbred Mice Suggests Osteogenic Regulation of Dystrophic Cardiac Calcinosi

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M. Elnagheeb: None. **T. Smallwood:** None. **A. O'Connor:** None. **B. Bennett:** None.

609

Comparing the Pro-angiogenic Properties of Induced Endothelial Cells and Induced Pluripotent Stem Cell Derived Endothelial Cells in a Murine Hindlimb Ischaemia Model

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Z.E. Clayton: None. **S.G. Yuen:** None. **S. Sadeghipour:** None. **J.D. Hywood:** None. **S. Abraham:** None. **W.J. Wong:** None. **J.P. Cooke:** None. **S. Patel:** None.

610

Microrna-146a Accumulates in the Atherosclerotic Plaque but Decreases in Circulation of Patients With ST Segment Elevation MI

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W.D. Gray: None. **F.E. Corrigan:** None. **A. Mitchell:** None. **T. Alexy:** None. **K. Rooney:** None. **Y. Garcia-Bengochea:** None. **C. Devireddy:** None. **W. Jaber:** None. **H. Liberman:** None. **A. Finn:** None. **C. Searles:** None. **G. Kumar:** None.

611

AP-1 and ETS Family Transcription Factors Co-localize at Enhancers in Human Aortic Endothelial Cells

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N.T. Hogan: None. **C.E. Romanoski:** None. **M.T. Lam:** None. **C.K. Glass:** None.

612

Regulation of Bone Marrow Stem/Progenitor Cell Mobilization by Leptin

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Y.P.R. Jarajapu: None. **G. Vasam:** None.

613

Fibroblast Growth Factor 2 Modulates Endotheliogenesis of Human Adipose Tissue Derived Stem Cells

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614

1,25-dihydroxyvitamin D Enhances Vegf-stimulated Porcine Adipose-derived Mesenchymal Stem Cells Toward the Endothelial Phenotype Involving Wnt/ β -catenin Pathway

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Y. Llamas: None. **S. Almalki:** None. **D.K. Agrawal:** None.

615

Assessment of Bone Marrow-derived Progenitor Cells in Coronary Artery Disease in Relation to Cytokine Profile

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616

Diminished K Channel Inhibition Impairs Serotonin-Mediated Vasoconstriction in the Middle Cerebral Arteries From the Fawn Hooded Hypertensive Rat

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617

Phenotype as a Basis for Selection of BM-MS-C Derived SMCs for Regenerative Repair of Abdominal Aortic Aneurysms

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G. Swaminathan: None. **I. Stoilov**: None. **I. Bratz**: None. **R.P. Mecham**: None. **A. Ramamurthi**: None.

618

Circulating Angiogenic Cell Function is Inhibited by Cortisol in Vitro and Associated with Stress and Cortisol in Vivo

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620

Water as a Universal Biosensor for Inflammation, Insulin Resistance and Dyslipidemia

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621

Homocysteine Activates T Cells by Enhancing Endoplasmic Reticulum-mitochondria Coupling and Increasing Mitochondrial Respiration

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622

Inflammation and Arterial Compliance: A Paradox? The Bogalusa Heart Study

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623

The Contribution of Hiv to Brain Arterial Remodeling: A Case-control Study

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624

Resolvin E1 Inhibits Thromboxane-Induced Contraction of Rat Aorta and Human Pulmonary Artery

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M. Jannaway: None. **C. Torrens**: None. **J.A. Warner**: None. **A.P. Sampson**: None.

625

Adipose-Associated Mediators Correlate with Anatomic and Physiologic Adaptations Following Fistula Placement: The Hemodialysis Fistula Maturation (HFM) Study

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C.S. Kuppler: None. **G. Sharma**: None. **Y. He**: None. **M. Tao**: None. **L. Dember**: None. **C. Ozaki**: None. **S.A. Berceci**: None.

626

Vascular Endothelial HSP60 and Von Willebrand Factor Induction Are Both Involved in Promoting Fatty-Streak Formation in ApoE Null Mice

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T. Chen: None. **M. Chen**: None. **T. Chen**: None. **S. Liu**: None. **C. Hsu**: None. **K.M. Lin**: None.

627

Regulation of Nuclear Factor of Activated T Cells by BMP-Binding Endothelial Regulator Signaling

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628

Circulating Microparticles From Patients With Valvular Heart Disease and Cardiac Surgery Inhibit Endothelium Dependent Vasodilation.

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J. Ou: None. **L. Fu**: None. **X. Hu**: None. **Z. Lin**: None. **F. Chang**: None. **Z. Ou**: None. **Z. Wang**: None.

629

Sensing Nutrient Overload: The Role of the Endothelium

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K. Preston: None. **R. Scalia**: None.

630

Broad-spectrum Inhibition of the CC-Chemokine Class Accelerates Wound Healing.

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A. Ridiandries: None. **J.T.M. Tan:** None. **C.A. Bursill:** None.

631

Evaluation of Risk Factors for Cardiovascular Disease in Rheumatoid Arthritis

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632

Premature Aortic and Carotid Stiffness in Systemic Lupus Erythematosus: Which One is First or Worse?

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P. Roldan: None. **E. Greene:** None. **P. Roldan:** None. **R. Rodriguez:** None. **C. Roldan:** None.

633

B Cells in Artery Tertiary Lymphoid Organs of Aged Apolipoprotein-e Deficient Mice

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634

Hypercholesterolemia Increases the Incidence of Colorectal Neoplasia by Impairing Hematopoietic Stem Cell Differentiation Towards Nkt and $\gamma\delta$ T Cells

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635

CD40-Filamin A Interactions Are Required for Translocation of CD40 to Lipid Rafts In Endothelial Cells and for Endothelial Cell Activation

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C.M. van Tiel: None. **P. Burger:** None. **N. Zelcer:** None. **P.L. Hordijk:** None. **J.D. van Buul:** None. **E. Lutgens:** None.

636

Gut Microflora Influences Pathology in the Kawasaki Disease (KD) Vasculitis Mouse Model

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637

Hyperhomocysteinemia-mediated sCD40L induction and CD16⁺CD40⁺ Monocyte Differentiation in Chronic Kidney Disease

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J. Yang: None. **E.T. Choi:** None. **S.P. Kunapuli:** None. **X. Yang:** None. **H. Wang:** None.

638

Flow Modulates the Endothelial Expression of Neuronal Guidance Cues

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639

Carnosine Supplementation Promotes Revascularization in Mouse model of Hindlimb Ischemia

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A.A. Boakye: None. **D. Conklin:** None. **L. Guo:** None. **D. Zhang:** None. **J. McCracken:** None. **A. Bhatnagar:** None. **S.P. Baba:** None.

640

PASMC Hyperproliferation and Metabolic Shift in a Model of Pulmonary Overcirculation

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J. Boehme: None. **K. Tormos:** None. **J. Fineman:** None. **E. Maltepe:** None.

641

Hypotrophic Vascular Remodeling Associates With Vascular Calcification *in vivo* in Vitamin D₃-stimulated Leptin-deficient *ob/ob* Mice

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L.S. Carmo: None. **Y.E. Almeida:** None. **M. Liberman:** None.

642

Wy14643 and Fenofibrate Reduce Acetylcholine-induced Contractions in Spontaneously Hypertensive Rat Aortae

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H. Chen: None. **S.W. Leung:** None. **R.Y. Man:** None.

643

Impaired Integrin β 3 Delays Endothelial Cell Regeneration and Contributes to Arteriovenous Graft Failure in mice

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M. Liang: None. **A. Liang:** None. **Y. Wang:** None. **J. Dong:** None. **J. Du:** None. **J. Cheng:** None.

644

Role of Micro RNA LET-7F in Cigarette Smoke-Induced Impairment of Neovascularization

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645

Heparin's Effects on Vascular Cells Require Transmembrane Receptor 184A

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646

Locked Nucleic Acid miR-143 Ameliorates Aortic Valve Functions in a ROS-Mediated Murine Model of Aortic Valve Sclerosis

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647

Identification of Platelet Derived Growth Factors A, B, C and D Specific Role in Vascular Remodeling

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648

Reduced Expression of Phosphoprotein Enriched in Astrocytes-15 (PEA-15) Increases Neointimal Hyperplasia

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649

Dedicator of Cytokinesis 2 is Essential for the Initiation of Transforming Growth Factor-Beta-Induced Smooth Muscle Differentiation

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650

Characterization of Microparticles Formed by ABCA1

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651

It Takes Two to Grow: Angiogenesis Requires Sufficient VEGF Responses Plus Correct Spatio-temporal Organization of Redox Signaling by PON2

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652

Coronary Capillaries in Ischemic Congestive Heart Failure in Rats Exhibit Significant Morphological Disorder

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653

The Role of "Saposin-Like Domain" in Wnt Signaling

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654

XBP1 Splicing is Involved in Endothelial and Smooth Muscle Cells Interaction

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655

Increased Nadph-Oxidase Activity Is Associated With Reduced Telomere Length in the Human Vascular Wall: The Influence of Oxidative Stress on Biological Aging

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656

Lipid Phosphate Phosphatase-3 Mediated Inflammation and Angiogenesis

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657

Resolvin D1 Attenuates Vascular Smooth Muscle Cell Migration via the cAMP Pathway

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658

Beta-Catenin C-terminal Signaling Suppresses p53 in Vascular Smooth Muscle Cells and is Essential for Arteriogenesis

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659

Inhibition of vWF Secretion with Novel G alpha12 N-terminal alpha-SNAP Binding Domain Peptide Increases Survival in Septic Rodents

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660

Inhibition of 14q32 "AngiomiR" MicroRNA-494 Reduces Atherosclerotic Lesion Formation, Increases Plaque Stability and Lowers Cholesterol Levels

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661

Tie2 Deficiency Leads to Lymphatic Defects and Resistance to High-fat Diet Induced Obesity

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662

X-box Binding Protein 1 Splicing Promotes Wound Healing via Modulating Endothelial Nitric Oxide Synthase

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663

The Effects of Hypoxia and Metabolic Inhibitors on Cellular ATP and ATP/ADP ratio in Human Coronary Artery Smooth Muscle cells

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664

Cerebrovascular Events in Patients Undergoing Endovascular Aortic Repair (EVAR) versus Open Aortic Repair (OAR) for Abdominal Aortic Aneurysm (AAA): A Pooled Meta-Analysis of 10,409 Patients

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665

Conditional Deficiency of Myeloid Cell Hif-2 α Activity Promotes Aneurysmal Aortic Degeneration

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667

The Role of Aortic Wall-Nuclear Factor- κ B (NF- κ B) Signaling in Formation of Dissecting Aortic Aneurysms

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668

The Role of IL-27 Receptor Signaling in the Development of Abdominal Aortic Aneurysm

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669

Matricellular Protein CCN3 Mitigates the Progression of Abdominal Aortic Aneurysm

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670

Finite Element Analysis-derived Peak Wall Rupture Index Can Predict Rupture in Abdominal Aortic Aneurysms

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671

Glucagon-like Peptide-1 Inhibits Abdominal Aortic Aneurysm Development

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672

Histopathological Comparison of Ascending Aortic Aneurysm: Bicuspid versus Tricuspid Aortic Valve Patients

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673

Ace Inhibitor Treatment Applied to Aortic Remodeling Associated With Aortic Constriction and Aneurysm Formation in Acta2^{-/-} Mice

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675

Abdominal Aortic Aneurysm Rupture Often Occur Outside the Maximal Diameter Area and is Preceded by Rapid Local Growth

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676

Microrna-30 and Cthrc1: Translating Aging into Vascular Stiffness and Abdominal Aortic Aneurysm

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677

Inhibition of Receptor-interacting Protein Kinase 1 With Necrostatin-1 and -1s Ameliorates Aneurysm Progression in the Elastase-induced Mouse Model of Abdominal Aortic Aneurysms (AAAs)

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678

Thoracic Aortic Dissection in Hypertensive Myh11r247c Mice Is Regulated by Gsk3 β Signaling Pathway.

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679

Modeling Thoracic Aortic Aneurysm of Bicuspid Aortic Valve Patients with Induced Pluripotent Stem Cells Reveals Distinct Phenotypes of Smooth Muscle Cells from Different Lineages

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680

What Matters Most, Statin Intensity or Achieved LDL? - Evaluating Concordance of AHA/ACC Guidelines for Statin Use with Practice Outcomes at Stanford Hospital & Clinics

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681

The Effects of a Sustained-Release N-acetylcysteine Prodrug on Vascular Inflammation in Experimental Atherosclerosis

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682

Pharmacological Inhibition of COX and LOX Pathways Leads to Substrate Rediversion: A Novel Plasma Lipidomics Assay to Screen Drugs in Human Blood

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683

Serum Myeloperoxidase/Paraoxonase 1 Ratio Predicts Recurrent Coronary Artery Disease

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684

Principal Component Analysis Identifies Lipoprotein Subfractions Associated with Coronary Artery Calcification in a Young High Cardiometabolic Risk Population: The Baptist Employee Healthy Heart Study

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685

Wnt5a/JNK Signaling Mediates Endothelial Insulin Resistance in Human Diabetes

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686

Intervention with Naringenin Enhances Weight Loss, Potentiates Improvements in Metabolic Dysregulation and Halts Progression of Atherosclerosis Induced by a High-Fat Diet in LDLR^{-/-} Mice.

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687

Paracrine Function of Extracellular microRNA-191 in Diabetes Associated Impaired Wound Healing

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688

Trans-10, Cis-12 Conjugated Linoleic Acid Induces a Lipodystrophic Phenotype and Browning of White Adipose Tissue in a Mouse Model of the Metabolic Syndrome

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689

Cystathionine-Beta-Synthase Deficiency Induces Cardiac Hypertrophy and Contributes to Diminished Fatty Acid Oxidation in Mice with Diet-Induced Obesity

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691

Arv1 Deletion Alters Fat Storage via Adipose-Extrinsic Mechanisms

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692

Therapeutic Inhibition of miR-33 Does Not Promote Obesity, Insulin Resistance or Hepatic Lipid Accumulation

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693

TLR3 Modulates Inflammation and Lipolysis in Visceral Adipose Tissue in High Fat Diet-fed Mice

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694

The Impact of Glucose-Lowering Therapy and Lifestyle-Related Factors on Vascular Disease Risk Reduction in Younger and Older Adults: National Trend and New Evidence from Big Data

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695

Low-density Lipoprotein Receptor-related Protein in the Endothelium Regulates Metabolic Responses

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696

Surgical Injury Induces Local and Distant Adipose Tissue Browning

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Protein Sumoylation in the Adipocyte Modulates Inflammatory Responses, Diabetes and Cardiovascular Disease

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W. Min: None. **L. Shao:** None. **J. Zhou:** None. **Q. Huang:** None.

698

Increases Reticulated Platelets due to Enhanced Proliferation and Expansion of Bone Marrow Megakaryocyte Progenitors Accelerates Atherosclerosis in Diabetes

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699

Mitochondrial Aldehyde Dehydrogenase (aldh-2) Protects Against Lipopolysaccharide-induced Myocardial Contractile Dysfunction by Suppression of ER Stress via Regulation of Autophagy

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700

Accelerated Glycolysis in Adipose Tissue Macrophages Triggers Hif-1 α in Obesity and Promotes Insulin Resistance.

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701

Differential Expression of Epicardial Fat MiRNA Targets in Patients with Coronary Artery Disease

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702

Walnut Treatment Reduces Specific Pro-inflammatory Lipid Mediators While Increasing Anti-inflammatory Ones: An RCT subanalysis

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703

High Density Lipoproteins Rescue Diabetes-Impaired Angiogenesis via Scavenger Receptor Class B Type I

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704

Glycation of Vitronectin Inhibits VEGF-induced Angiogenesis by Uncoupling VEGF Receptor-2- α v β 3 Integrin Cross-talk

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705

Coronary Artery Calcification and Cardiovascular Risk Factors in South Asians

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706

HDL and ApoA-I Inhibit Palmitate-induced Lipid Raft Trafficking of TLR4 and Inflammatory Cytokines Expression in Adipocytes

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707

Microrna-34a Impairs Angiogenesis and Endothelial Progenitor Cell Functions in Aging via Suppression of Gtp Cyclohydrolase I/sirt 1 Pathway

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708

Changes in Carotid Plaque Lipid Content in Subjects Who Continued and Discontinued Statin Therapy

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709

Aging Determines Different Osteochondrogenic Protein Expression Profile Associated With Increased Calcification and Elastocalcinosis in Diabetic Patients Submitted to Amputation

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710

A Novel Mechanism by Which CPI-17 Is Down-regulated in Cultured Vascular Smooth Muscle Cells and Tissues by TNF α and in C57BL/6 Mice by Lipopolysaccharide

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711

In Hospital Complications After PCI After Insertion of DES versus BMS in the United States

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712

Screening of Thrombolytic Agents in vivo Using a Novel Zebrafish Model of Ischemic Stroke Induced by Photochemical Thrombosis

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713

Effects of Demographics and Clinical Risk Factors on Human Femoropopliteal Artery Histopathology

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714

Lipid Disorders Might Be Affected to Develop Critical Limb Ischemia in PAD Patients

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715

Cytochrome P450 1B1 Gene Disruption Prevents Neointimal Growth in Wire-Injured Carotid Artery of Male Mice

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716

Echocardiographic Evidence of Systemic Atherosclerosis and Long-Term Outcomes in Patients with Non-Hemorrhagic Stroke

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717

An Association between Frontal Non-hemorrhagic Stroke and Atrial Fibrillation.

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718

The Association of Erectile Dysfunction with Carotid Intima Media Thickness and Endothelial Dysfunction: A Meta-Analysis

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719

PFKFB3 Mediated Glycolysis in Vascular Smooth Muscle Cells Is Essential for Arterial Neointima Formation

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720

Edaravone Reduces Kidney Damage Induced by Myonephropathic Metabolic Syndrome in Rats

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721

More Severe Brain Damage Found in Cholesterol-embolic Stroke Compared with Clot-embolic Stroke

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722

Treatment of Acute and Chronic Limb Ischemia with Intermedin (IMD) in Mouse Models

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723

Agonist of Growth Hormone Releasing Hormone Enhances Angiogenic Therapy by Mesenchymal Stem Cells

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724

Effect of Arterial Calcification on Lower Extremity Ischemia Score is Independent of Occlusive Disease

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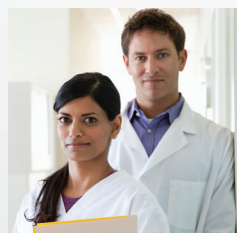


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