



# Vascular Discovery: From Genes to Medicine 2023

VASCULAR DISCOVERY POSTER SESSIONS  
*All poster sessions take place in Gloucester/Back Bay*

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Poster Session 1      Wednesday, May 10      6:30 – 8:00 PM

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The Interleukin-1 Signaling in Endothelial Reprogramming By Disturbed Flow

Evan Kidder, Meleah Pea, Siyuan Cheng, Satya-Priya Koppada, Suren Visvanathan, Quartina Hendrson, Xiuping Yu, Mabruka Alfaidi, LSUHSC - SHREVEPORT, SHREVEPORT, LA

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Fibromuscular Dysplasia Causing Upper Extremity Acute Limb Ischemia

Geethika Earthineni, Roland Njoh, Poplar bluff regional medical center, Poplar Bluff, MO

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Transcriptional Profiling of Vascular Smooth Muscle Cell-foam Cells in Atherosclerotic Lesions

Chingere O Ibikunle, Columbia Univ Irving Medical, New York, NY

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Loss of FLNA Function Leads to Heart Failure

Brijesh Kumar, Diana Bordalo, Rewati Tappu, Jan Haas, Karen Sonia Frese, Univ Hosp Heidelberg, Heidelberg, Germany; Marion Müller, Bad Oeynhausen; Sarah Schudy, Sabine Herch, Benjamin Meder, Univ Hosp Heidelberg, Heidelberg, Germany

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Sumo2 Regulates Oxidative Function of Adaptor Protein P66shc

Jitendra Kumar, Shravan kumar Uppulapu, sujata kumari, Univ of Iowa, Iowa City, IA; Kanika Sharma, Vikas Kumar, Univ of Nebraska, Omaha, NE; Santosh Kumar, Univ of Iowa, Iowa City, IA

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Macrophage Efferocytosis is Controlled by Epigenetic Modifications Mediated by RBPJ

Samreen Sadaf, Xinyi Zhang, Univ of Pittsburgh, Pittsburgh, PA; Partha Dutta, UNIVERSITY OF PITTSBURGH MEDICAL C, Pittsburgh, PA

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Protease Activated Receptor 2 Is Critical for Vascular Smooth Muscle Cell Transition to a Macrophage-like State

Caris A Wadding-Lee, Dept of Internal Med, Div of Cardiovascular Health and Disease, Univ of Cincinnati, Cincinnati, OH; Taylor Coughlin, Dept of Internal Med, Div of Cardiovascular Health, Univ of Cincinnati, Cincinnati, OH; Shannon M Jones, Megan Jay, Dept of Internal Med, Div of Cardiovascular Health and Disease, Univ of Cincinnati, Cincinnati, OH; Jake Lusic, Dept of Human Genetics, David Geffen Sch of Med Dept of Microbiology, Immunology and Molecular Genetics, Univ of California, Los Angeles, Los Angeles, CA; Eric Camerer, Univ Paris Cité, Inserm, PARCC, Paris, France; Mete Civelek, Ctr for Public Health Genomics, Dept of Biomedical Engineering, Univ of Virginia, Charlottesville, VA; A Phillip Owens III, Dept of Internal Med, Div of Cardiovascular Health and Disease, Univ of Cincinnati, Cincinnati, OH

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**Characterization Of Mineral Maturity in Vascular Calcification Using Phosphorus-31 Solid State Magnetic Resonance Spectroscopy**

Jingting Yao, Christian Farrar, Massachusetts General Hosp, Charlestown, MA; Elena Aikawa, BRIGHAM WOMANS HOSPITAL, Boston, MA; David E Sosnovik, Aditi Kulkarni, Jerome Ackerman, Massachusetts General Hosp, Charlestown, MA

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**Translational Profiling of Embryonic and Adult-derived Macrophages Exposed to Hypoxia**

Timur O Yarovinsky, Nicholas S Wilcox, Prakruti Pandya, Vinod S Ramgolam, Albertomaria Moro, Yinyu Wu, Stefania Nicoli, Karen K Hirschi, Jeffrey R Bender, Yale Univ Sch of Med, New Haven, CT

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**Post-gwas Functional Genomics Analysis of Abo Locus to Identify Novel Pathogenic Mechanisms For Chronic Thromboembolic Pulmonary Hypertension**

Yunshan Yue, Tsinghua Univ, school of medicine, Beijing, China; Harsh Hiwase, UPMC Vascular Med Inst, Pittsburgh, PA; Wadih El Khoury, UPMC Vascular Med Inst, Pittsburgh, PA, Pittsburgh, PA; Neil Kelly, UPMC, Pittsburgh, PA; Stephen Y Chan, UNIVERSITY OF PITTSBURGH, Pittsburgh, PA; Wei Sun, UPMC, Pittsburgh, PA

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**Regulation Of Plasma Lipoproteins and Atherosclerosis by Microrna-541-3p and Transcription Factors Znf101 and Casz1**

Abulaish Ansari, Pradeep Kumar Yada, Liye Zhou, NYU Langone, Mineola, NY; Laraib Ijaz, Amanda christiano, Sameer Ahmad, NYU Langone, Mineola, NY; Antoine Rimbart, NANTES, France; M Mahmood Hussain, NYU Winthrop, Minoela, NY

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**Myeloid Deletion of Rage Induces Insulin Resistance by Impairing Macrophage and Adipocyte Crosstalk in Obese Adipose Tissues**

Lakshmi Arivazhagan, Paul F Gugger, Raveena Vakil, Gallage H. D. Nipun Ariyaratne, NYU Langone Health, New York, NY; Ravichandran Ramasamy, NYU Grossman Medical Ctr, New York, NY; Ann Marie Schmidt, NYU Langone Health, New York, NY

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**Measuring HDL-apolipoprotein A-I Exchange By Subclass In Reconstituted And Human HDL**

Carlos Ong, Shumylla Bacha, CSU East Bay, Hayward, CA; Tomas Vaisar, UNIVERSITY WASHINGTON, Seattle, WA; Mark S Borja, CSU East Bay, Hayward, CA

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**Lipoprotein(a), Apolipoprotein(a) Size Polymorphism, and Cardiovascular Risk in Chronic Kidney Disease: Findings in The Sugar Study**

Muhammad A Khan, Univ of California Davis, Davis, CA; Hayley G Law, UNIVERSITY OF CALIFORNIA DAVIS, Davis, CA; Wei Zhang, Heejung Bang, Univ of California Davis, Davis, CA; Baback Roshanravan, UC Davis Health, Davis, CA; Ian H De Boer, UNIV WASHINGTON, Seattle, WA; Lars Berglund, UC DAVIS, Davis, CA; Enkhmaa Byambaa, UNIVERSITY OF CALIFORNIA DAVIS, Davis, CA

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**Endothelial Cell Handling of Atherogenic ApoB-carrying Lipoproteins**

Ainara G. Cabodevilla, New York Univ Grossman Sch of Med, New York, NY; Dimitrios Nasias, New York Univ Medical Ctr, New York, NY; Anna Tilp, Rufina Kore, New York Univ Grossman Sch of Med, New York, NY; Narashima Anaganti, New York Univ Long Island Sch of Med, New York, NY; Nicholas Davidson, New York Univ Long Island Sch of Med, New York, NY, St. Louis, MO; Tobias Madl, Medical Univ of Graz, Graz, Austria; M Mahmood Hussain, NYU Winthrop, Minoela, NY; Ira J Goldberg, NEW YORK UNIVERSITY, New York, NY

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**A Novel Crosstalk Between Ehbp1-mediated Cholesterol Metabolism and Inflammation In Nash**  
Bishuang Cai, Icahn Sch of Med at Mount S, New York, NY

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**Classification Of Sitosterolemia-associated Mutations in ABCG5 And ABCG8**  
Isha Chauhan, Univ of Kentucky, Lexington, KY; Brittney Poole, Univ of Florida, Gainesville, FL; Mikala Zelows, Bonnie Walton, Megan E Mutch, Gregory A Graf, Univ of Kentucky, Lexington, KY

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**Searching for Novel Regulators of the Mevalonate Pathway**  
Marcel A Chuecos, Marco De Giorgi, Christopher Walkey, Bryan Nguyen, Nelufa Y Islam, Antrix Jain, Sung Yun Jung, Anna Malovannaya, William R Lagor, Baylor Coll of Med, Houston, TX

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**Prediabetes Increases Platelet Activation Via Sod2 in Young and Middle-aged Veterans**  
Azaj Ahmed, Univ of Iowa, Iowa, IA; Alicia Eustes, Iowa City, IA; Katharine Geasland, Univ of Iowa, Iowa, IA; Jagadish Swamy, Douglas Spitz, Univ of Iowa, Iowa City, IA; Diana Jalal, Iowa City, IA; Sanjana Dayal, UNIVERSITY IOWA HEALTH CARE, Iowa City, IA

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**Bioactive Lipids in Circulation: Biomarker Of Ageing?**  
Anne-Claire Duchez, SUT Caroline, Mailys Portier, Marco Heestermans, Charles-Antoine ARTHAUD, Marie-Ange EYRAUD, Amelie Prier, Etablissement Francais du Sang, Saint Etienne, France; Justine BERTRAND-MICHEL, MetaboHUB-MetaToul, Natl Infrastructure of Metabolomics and Fluxomics, Toulouse, France; Hamzeh-Cognasse Hind, Univ of Saint Etienne, Saint Etienne, France; Fabrice COGNASSE, Etablissement Francais du Sang, Saint Etienne, France

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**A Novel Strategy to Combat the Procoagulant Phenotype in Immune Thrombotic Thrombocytopenia Using 12-LOX Inhibition**  
James Michael, Stephanie A Renna, Xuefei Zhao, Thomas Jefferson Univ, Philadelphia, PA; Satya P Kunapuli, TEMPLE UNIVERSITY SCHOOL MEDICINE, Philadelphia, PA; Peisong Ma, Thomas Jefferson Univ, Cherry Hill, NJ; Michael A Holinstat, UNIVERSITY OF MICHIGAN MEDICAL, Ann Arbor, MI; Matthew Boxer, David Maloney, Veralox Therapeutics, Frederick, MD; Steven E McKenzie, THOMAS JEFFERSON UNIV, Philadelphia, PA

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**Local Periadventitial Delivery of Dexamethasone Improves Murine Deep Vein Thrombosis Resolution**  
Aatira Vijay, Guillaume Goudot, Massachusetts General Hosp & Harvard Medical Sch, Boston, MA; Prabhaskar K Jha, Brigham and Women's hospital, Harvard Medical Sch, Boston, MA; Adam Mauskapf, Massachusetts General Hosp & Harvard Medical Sch, Boston, MA; Peter K Henke, Univ of Michigan, Ann Arbor, MI; Masanori Aikawa, Brigham and Women's Hosp, Boston, MA; Kirk P Seward, MERCATOR MEDSYSTEMS INC, San Leandro, CA; Farouc A Jaffer, Massachusetts General Hosp & Harvard Medical Sch, Boston, MA

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**Evaluation of Lipid, Lipoprotein, and Apolipoprotein Analysis By Nuclear Magnetic Resonance**  
Margaret R Diffenderfer, Marianna Fernandes, Lihong He, Sarah E Flowers, Boston Heart Diagnostics, Framingham, MA; Ernst J. Schaefer, Tufts Univ, Boston, MA

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**Endothelin-1 and Procollagen Type-1 Carboxy-terminal Propeptide are Associated with Functional Tolerance and Cardiac Structure and Function in Heart Failure with Preserved Ejection Fraction**  
Tasnim F Imran, Providence VA Medical Ctr, Lifespan Cardiovascular Inst, Warren Alpert Medical Sch of Brown Univ, Providence, RI; Thomas Garrett, Cleveland Clinic, Cleveland, OH; Laura Parra, Providence

VA Medical Ctr, Providence, RI; Daniel Arcuri, Providence VA Medical Ctr, Lifespan Cardiovascular Inst, Providence, RI; Christopher Nguyen, Providence VA Medical Ctr, Lifespan Cardiovascular Inst, Providence, RI, Cleveland, OH; MATTHEW JANKOWICH, Providence VA Medical Ctr, Lifespan Cardiovascular Inst, Providence, RI, Cleveland, OH, Providence, RI; Reza Avazmohammadi, michael atalay, Texas AM Univ, College Station, TX; Wen-Chih H Wu, PROVIDENCE VA HOSPITAL, Providence, RI; Gaurav Choudhary, PROVIDENCE VAMC, BROWN UNIVERSITY, Providence, RI

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**Glycosylation Engineered Platelet Membrane Coated Nanoparticle For Targeted Inhibition Of Vascular Restenosis**

Fengshi Li, Zhihua Rong, Changwei Liu, Peking Union Medical Coll Hosp, Beijing, China

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**LMNA Mutation-induced Endothelial Dysfunction Contributes To The Pathogenesis Of Atrial Fibrillation**

Asia Owais, Univ of Illinois Chicago, Chicago, IL; Hanna Chen, UIC, Chicago, IL; Yining Chen, Univ of Illinois at Chicago, Chicago, IL; Mahmud Arif, Univ of Illinois at Chicago, Chicago, IL, Chicgao, IL; Miles Barney, Univ of Illinois at Chicago, Chicago, IL, Chicgao, IL, Chicago, IL; Arvind Sridhar, Univ of Illinois, Chicago, Chicago, IL; Sang-Ging Ong, Univ of Illinois at Chicago, Chicago, IL; Dawood Darbar, UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, IL

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**Genome-wide Association Study of Intracranial Aneurysms Reveals Shared Heritability With Aortic Aneurysms And Atherosclerosis**

Shaunak Adkar, Stanford Univ, Palo Alto, CA; Julie Lynch, VA Salt Lake City, Salt Lake City, UT; Sharika Bamezai, Sabina Sorondo, Ryan Choi, Stanford Univ, Palo Alto, CA; Michael Levin, Univ of Pennsylvania, Philadelphia, PA; Scott M Damrauer, Universtiy of Pennsylvania, Philadelphia, PA; Saiju Pyarajan, Harvard Medical Sch, Boston, MA; Philip S Tsao, VAPAHCS - Stanford Univ, Palo Alto, CA; Stephen Skirboll, Stanford Univ, Palo Alto, CA; Nick J Leeper, STANFORD UNIVERSITY, Palo Alto, CA; Derek Klarin, Stanford Univ, Palo Alto, CA

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**Regulation Of Endotheliopathy by Chromatin-associated Long Non-coding RNA**

Zhen B Chen, CITY OF HOPE, Duarte, CA; Xiaofang Tang, Beckman Inst City Of Hope, Duarte, CA; Kiran Sriram, CITY OF HOPE, Duarte, CA; Yingjun Luo, Dongqiang Yuan, Naseeb Kaur Malhi, City of Hope, Duarte, CA; Xuejing Liu, CITY OF HOPE, Duarte, CA; Rama Natarajan, Beckman Res Instit of City of Hope, Duarte, CA

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**Is Zbp1 an Atherosclerosis Modifier Gene?**

Juying Han, CLEVELAND CLINIC FND, Cleveland, OH; Emmanuel Opoku, Cleveland Clinic, Cleveland, OH; Jonathan D Smith, CLEVELAND CLINIC FND, Cleveland, OH

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**Investigation Of Acute Distension Injury in Vein Graft Implantation Through Integrated Single-nuclei and Spatial Transcriptomic Analysis**

Marina Michaud, Emory Univ, Atlanta, GA; Lucas Mota, Harvard Univ, Boston, MA; William Pilcher, Emory Univ, Atlanta, GA; John Tomeo, Emory Univ, Atlanta, GA, Boston, MA; Tarek Aridi, Beena Thomas, BIDMC, Boston, MA; Mojtaba Bakhtiari, Emory Univ, Atlanta, GA; Mauricio Contreras, Harvard Univ, Boston, MA; Leena Pradhan-nabzdyk, BETH ISRAEL DEACONESS MEDICAL, Boston, MA; Frank LoGerfo, Patric Liang, Beth Israel Deaconess Medical Cente, Boston, MA; Manoj Bhasin, Emory Univ, Atlanta, GA

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**Apolipoprotein B Mediates Hepatic Proliferation and Cell Survival Signalling: A Crispr/cas-9 Gene Editing ApoB-knockout Study**

Qiaozhu Su, Queens Univ Belfast, BELFAST, United Kingdom; Henry Wade, Queen's Univ Belfast, Belfast, United Kingdom

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**Machine Learning to Identify Heterogeneity of Treatment Effect of Intermediate-dose Vs Standard-dose Prophylactic Anticoagulation in The Inspiration Trial**

Behnood Bikdeli, Brigham and Womens Hosp, Boston, MA; Alexandra Spicer, Univ of Wisconsin-Madison, Madison, WI; Hooman Bakhshandeh, Univ of Wisconsin-Madison, Madison, WI, Tehran, Iran, Islamic Republic of; Azita Talasaz, Virginia Commonwealth Univ, North Chesterfield, VA; Farid Rashidi, Tabriz Univ of Medical Sciences, Tabriz, Iran, Islamic Republic of; Babak Sharif-Kashani, Shahid Beheshti Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Mohammad Taghi Beigmohammadi, Tehran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Mohsen Farrokhpour, Iran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Seyed Hashem Sezavar, Iran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of, Tehran, Iran, Islamic Republic of; Pooya Payandemehr, Tehran Univ of Medical Sciences, Tehran, MA; Ali Dabbagh, Keivan Gohari Moghadam, SBMU, Tehran, Iran, Islamic Republic of; Vahid Eslami, Shahid Beheshti Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Pratik Sinha, Washington Univ Sch of Med, St Louis, MO; Samuel Goldhaber, Washington Univ Sch of Med, St Louis, MO, Boston, MA; Gregory Piazza, BWH, Boston, MA; Harlan M Krumholz, Yale Univ, New Haven, CT; Parham Sadeghipour, Yale Univ, New Haven, CT, Tehran, Iran, Islamic Republic of; Matthew M Churpek, Univ of Wisconsin- Madison, Waunakee, WI

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**Tissue Factor Pathway Inhibitor Prolongs the Initiation of Thrombin Generation and is Associated with Acute Kidney Injury In Covid-19**

Alicia S Eustes, Univ of Iowa, Iowa City, IA; Steven R Lentz, UNIVERSITY OF IOWA, Iowa City, IA; Sanjana Dayal, UNIVERSITY IOWA HEALTH CARE, Iowa City, IA

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**A Novel Humanized ACE2 Mouse Model For Evaluating COVID-19 Infection In Cardiovascular Disease**

Cadence Lee, VA, Providence, RI; Chris S Mantsounga, Sheila Sharma, OSRI-Providence VA Medical Ctr, Providence, RI; Rachel T Carley, West Greenwich, RI; Elizabeth Amelotte, West Greenwich, RI, East Greenwich, RI; Julia Pierce, West Greenwich, RI, East Greenwich, RI, Portsmouth, RI; Celia Butler, Providence VA Medical Ctr, Providence, RI; Gaurav Choudhary, PROVIDENCE VAMC, BROWN UNIVERSITY, Providence, RI; Rachel Olson, Univ of Missouri, Columbia, MO; Alan R Morrison, Alpert Medical Sch at Brown Univ, Providence, RI

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**Prothrombotic State Exists In Long-COVID Even After Mild Acute Infection**

Gokul Patil, Alicia S Eustes, Dept of Internal Med, Univ of Iowa Hosp and Clinics, Iowa City, Iowa., Iowa City, IA; Azaj Ahmed, Dept of Internal Med, Univ of Iowa Hosp and Clinics, Iowa City, Iowa., Iowa, IA; Garg Alpana, Sanjana Dayal, Dept of Internal Med, Univ of Iowa Hosp and Clinics, Iowa City, Iowa., Iowa City, IA

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**In-hospital Antiplatelet Use Is Associated With Decreased Thromboembolic Events In Covid-19 Patients**

Crystal L Yan, Beatriz Rivera Rodriguez, Sharon Andrade-Bucknor, Univ of Miami Health System, Miami, FL

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**Coronavirus Infection Induced Interferon Signaling Promotes Atherosclerotic Plaque Vulnerability**

Hanming Zhang, Yale Univ Sch of Med, New Haven, CT; Xinbo Zhang, YALE UNIVERSITY, New Haven, CT; Daniel Jovin, Yale Univ Sch of Med, New Haven, CT; Jonathan Sun, Bal K Chaube, Yale Univ, New

Haven, CT; Enric Esplugues, Yale Sch of Med, New Haven, CT; Yajaira Suarez, Yale Univ Sch of Med, Madison, CT; Carlos F Fernandez-Hernando, YALE UNIVERSITY SCHOOL MEDICINE, New Haven, CT

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**The Outcome of Aortic Dissection in Patients with Protein Energy Undernutrition, A Nationwide Analysis**

Joseph Amoah, Univ Hosp, Cleveland, OH; Michael Fatuyi, Trihealth Good Sam Hosp, Cincinnati, OH; Francisco Somoza-Cano, St. Vincent Charity Medical Ctr, Cleveland, OH; Sara Noureldin, Sammir Dekowski, Univ Hosp, Cleveland, OH

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**Vascular Smooth Muscle Cell-specific Deletion of Protein Kinase R-like Endoplasmic Reticulum Kinase Attenuates Microbiome-enhanced Abdominal Aortic Aneurysm**

Tyler W Benson, Caris Wadding-Lee, Univ of Cincinnati, Cincinnati, OH; Anthony Spuzzillo, Hebron, KY; Jess Merland, Univ. of Cincinnati, Cincinnati, OH; Seth Brunner, Univ of Cincinnati, Cincinnati, OH; Phillip P Owens III, UNIVERSITY OF CINCINNATI, Cincinnati, OH

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**Exercise Modulates Inflammatory, Cytokine, and Growth Factor Pathway Dysregulation in a Mouse Model of Aortic Dissection and Aneurysm**

Matthew D. Cahn, Jackie M. Zhang, Dept of Surgery, Univ of Maryland Sch of Med, Baltimore, MD; Fenge Ni, Ctr for Vascular and Inflammatory Diseases, Univ of Maryland Sch of Med, Baltimore, MD; Brajesh Lal, Dept of Surgery, Univ of Maryland Sch of Med, Baltimore, MD; Dudley Strickland, Ctr for Vascular and Inflammatory Diseases, Univ of Maryland Sch of Med, Baltimore, MD; Areck Ucuzian, Dept of Surgery, Univ of Maryland Sch of Med, Baltimore, MD

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**Role Of Sympathetic Nervous System in Abdominal Aortic Aneurysm Pathogenesis**

Calvin L Chao, Caitlyn Dang, Taylor K Brown, Bin Jiang, Northwestern Univ, Chicago, IL

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**Multi-transcriptomic Profiling Reveals Novel Molecular Mediators During Abdominal Aortic Aneurysm Expansion**

Ekaterina - Chernogubova, KAROLINSKA INSTITUTET, Stockholm, Sweden; Nadja Sachs, Vascular und Endovascular Surgery, Klinikum rechts der Isar, TUM, Munich, Germany; Zhiyuan Wu, Zhaolong Li, Molecular Vascular Med, Klinikum rechts der Isar, TUM, Munich, Germany; Jessica Pauli, Molecular Vascular Med, TUM, Munich, Germany; Greg Winski, Karolinska Instt, Stockholm, Sweden; Valentina Paloschi, Albert Busch, Molecular Vascular Med, Klinikum rechts der Isar, TUM, Munich, Germany; Hans-Henning Eckstein, DZHK (German Ctr for Cardiovascular Res), partner site Munich, Munich, Germany; Lars Maegdefessel, Technical Univ Munich, Munich, Germany

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**Interrogation of Endothelial Permeability in Aortic Aneurysm and Dissection Using Nanoparticle Contrast-enhanced Computed Tomography**

Laxman Devkota, Baylor Coll of Med, Houston, TX; Chen Zhang, Baylor college of medicine, Houston, TX; Prajwal Bhandari, Baylor Coll of Med, Houston, TX; Deborah Vela, TEXAS HEART INSTITUTE, Houston, TX; Zbigniew Starosolski, Baylor Coll of Med, Houston, TX; Ying H Shen, Scott A Lemaire, BAYLOR COLLEGE MEDICINE, Houston, TX; Ketan Ghaghada, Baylor Coll of Med, Houston, TX

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**A Possible Role of Apolipoprotein B In Degenerative Ascending Aortic Aneurysm Formation and Progression**

David Freiholtz, Karolinska Inst, Stockholm, Sweden; Otto Bergman, Stockholm, Sweden; Cecilia Österholm Corbascio, Karin Lång, Christian Olsson, Anders Franco-Cereceda, Karolinska Inst, Stockholm, Sweden; Per Eriksson, Anton Gisterå, Hanna M Björck, Karolinska Instt, Stockholm, Sweden

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**Smooth Muscle Cell Specific Beclin-1 Deficiency Accelerates Aortic Aneurysms In Male And Female Normolipidemic And Hypercholesterolemic Mice**

Ana Clara Frony, UNIVERSITY OF MISSOURI, COLUMBIA, MO; Aida Javidan, UNIVERSITY OF KENTUCKY, Lexington, KY; Weihua Jiang, Lihua Yang, Univ of Kentucky, Lexington, KY; Venkateswaran Subramanian, UNIVERSITY OF MISSOURI, COLUMBIA, MO

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**Myocd is a Potent Repressor of Vascular Smooth Muscle Cell Degeneration During Abdominal Aortic Aneurysm Development**

Nestor Ishimwe, Augusta Univ, Augusta, GA; Shengshuai Shan, Univ of Georgia, Augusta, GA; Zhang Wei, Augusta Univ, Augusta, GA; Ha Won Won Kim, MEDICAL COLLEGE OF GEORGIA, Augusta, GA; Neal L Weintraub, AUGUSTA UNIVERSITY, Augusta, GA; Joseph M Miano, Medical Coll of Georgia, Augusta, GA; Xiaochun Long, Augusta Univ, Augusta, GA

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**A New, Novel Shape Feature Space Classifier for Acute Type B Aortic Dissection**

David Jiang, Kameel Khabaz, Karen Yuan, Ross Milner, Luka Pocivavsek, Univ of Chicago, Chicago, IL

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**High Mobility Group Box 1 Inhibition by Antisense Oligonucleotide Attenuates Angiotensin II-induced Abdominal Aortic Aneurysm**

Shayan Mohammadmoradi, Univ of Kentucky, Lexington, KY; Hisashi Sawada, UNIVERSITY OF KENTUCKY, Lexington, KY; Sohei Ito, UNIVERSITY OF KENTUCKY, Lexington, KY; Adam E Mullick, Ionis Pharmaceuticals, Inc., Carlsbad, CA; Deborah A Howatt, UNIVERSITY OF KENTUCKY, KY; Michael Franklin, Univ of Kentucky, Lexington, KY; Hong S Lu, UNIVERSITY KENTUCKY, Lexington, KY; Alan Daugherty, UNIVERSITY OF KENTUCKY, LEXINGTON, KY

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**The Effect of Phosphodiesterase Inhibitors on Bapn Induced Aortic Dissection and Aneurysm**

Sam Tyagi, Jacob Hubbuch, Michael Franklin, Deborah A Howatt, Hisashi Sawada, Hong S Lu, Alan Daugherty, Univ of Kentucky, Lexington, KY

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**Ccr2 Inhibition Impacts Abdominal Aortic Aneurysm Rupture in Rodents**

Mohamed S Zaghloul, Washington Univ in St. Louis, St louis, MO; Santiago Elizondo-Benedetto, San Juan, Argentina; Batool Arif, Washington Univ Sch of Med, St. Louis, MO; Lisa Detering, Hannah Luehmann, Washington Univ, Saint Louis, MO; Debbie Sultan, Gyu Seong Heo, Washington Univ in St. Louis, St louis, MO; Robert J Gropler, WASHINGTON UNIV SCH OF MED, Saint Louis, MO; Yongjian Liu, WASHINGTON UNIV SCH OF MED, Saint Louis, MO, St Loui, MO; Mohamed A Zayed, WASHINGTON UNIVERSITY SCHOOL M, Saint Louis, MO

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**Intricate Roles of Myeloid-derived Thrombospondin-1 In Aortic Aneurysm and Rupture**

Ting Zhou, UW MADISON, Madison, WI; Huan Yang, Univ of Wisconsin - Madison, Madison, WI; Brian Burkel, Suzanne Ponik, UW MADISON, Madison, WI; Hong S Lu, UNIVERSITY KENTUCKY, Lexington, KY; Alan Daugherty, UNIVERSITY OF KENTUCKY, LEXINGTON, KY; Bo Liu, UW MADISON, Madison, WI

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**Association Between Sars-cov-2 Infection and Abdominal Aortic Aneurysms (AAAs)**

Baohui Xu, Toru Ikezoe, Jia Guo, Gang Li, Makoto Samura, sihai zhao, Ronald L Dalman, Stanford Univ Sch of Med, Stanford, CA

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**A20 (tnfaip3) Knockdown Protects from Abdominal Aortic Aneurysms by Limiting Extra-cellular Matrix Degradation And Maintaining Aortic Smooth Muscle Cell Mass**

Tarek Aridi, Beth Israel Deaconess Medical Ctr, Boston, MA; John Gigioli, Florida Atlantic Univ, Boca Raton, FL; Nyah Patel, Jacqueline Wade, Phillip Brennan, Keyan Roshan, Cleide Angolano, Christiane Ferran, Beth Israel Deaconess Medical Ctr, Boston, MA

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**Upregulation Of Receptor Interacting Protein Kinase-3 Augments Abdominal Aortic Aneurysms**  
Jack Bontekoe, Ting Zhou, Kartik Gupta, Huan Yang, Amelia Stranz, Div of Vascular Surgery, Univ of Wisconsin-Madison Sch of Med and Public Health, Madison, WI; Mitri K Khoury, Div of Vascular and Endovascular Surgery, Massachusetts General Hosp, Boston, MA; Zulmari Silva-Pedraza, Dept of Materials Science and Engineering, Univ of Wisconsin-Madison, Madison, WI; Qiwei Wang, Dept of Cancer Biology, Dana-Farber Cancer Inst and Dept of Biological Chemistry and Molecular Pharmacology, Harvard Medical Sch, Boston, MA; Bo Liu, Div of Vascular Surgery, Univ of Wisconsin-Madison Sch of Med and Public Health, Madison, WI

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**Outcomes Among Heart Failure Patients Hospitalized for Aortic Dissection: Insight From The National Inpatient Sample**

Bruce Adrian Casipit, Einstein Medical Ctr Philadelphia, Philadelphia, PA; Hussein Al-Sudani, Einstein Medical Ctr Montgomery, East Norriton, PA

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**Pro-Inflammatory Adventitial Fibroblast Contribute to Aortic Aneurysms In Loeys Dietz Syndrome**  
Alex R Dalal, Albert J Pedroza, Wenduo Gu, Jennifer L Kim, Olivia Mitchel, Casey Gilles, Thomas Quertermous, Paul Cheng, Michael P Fischbein, Stanford Univ, Stanford, CA

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**Vascular Smooth Muscle Cell Endoplasmic Reticulum Stress in Abdominal Aortic Aneurysm Development**

Frank Davis, Kevin Mangum, Amrita Joshi, Rachael Wasikowski, Xiangying Xing, Liam Tsoi, Johann Gudjonsson, Katherine A Gallagher, The Univ of Michigan, Ann Arbor, MI

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**Identification of MicroRNA Regulators of Cell Signalling in Marfan Aorta Using Machine Learning**  
Charlotte X Dong, Cassandra Malecki, Elizabeth N Robertson, Brett D Hambly, Richmond W Jeremy, Univ of Sydney, Sydney, Australia

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**A Retrievable Aortic Drug Delivery Stentgraft to Create a Porcine Model of Thoracic Aneurysms**

Dahlia M. Kenawy, Jordan F. Stafford, Foued Amari, The Ohio State Univ Wexner Medical Ctr, Columbus, OH; Youngjae Chun, Univ of Pittsburgh, Pittsburgh, PA; Bryan W. Tillman, The Ohio State Univ Wexner Medical Ctr, Columbus, OH

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**Development of a Phenotypic Screen With 56 Marfan Syndrome Patient-derived Fibroblasts**

Arnout Mieremet, Mitzi van Andel, Amsterdam UMC, Amsterdam, Netherlands; Yousef Morcos, Gerhard Sengle, Univ of Cologne, Cologne, Germany; Dieter Reinhardt, McGill Univ, Montreal, QC, Canada; Barbara Mulder, Aeilko Zwinderman, Maarten Groenink, Antoine Driessen, Dimitra Micha, Vivian de Waard, Amsterdam UMC, Amsterdam, Netherlands

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**Circulating FAS Is a Novel Serum-based Diagnostic Biomarker For PAD**

Wahid Y Abu-Amer, Washington Univ Sch of Med, Saint Louis, MO; Rodrigo Meade, Saint Louis, MO; Sophia Roberts, Larisa Belaygorod, Washington Univ in St. Louis, Saint Louis, MO; Mohamed Zaghoul, Washington Univ in St. Louis, St Louis, MO; Amanda Penrose, Washington Univ Sch of Med, Saint Louis, MO; Batool Arif, Washington Univ Sch of Med, St. Louis, MO; Clay F Semenkovich, WASHINGTON



UNIVERSITY, Saint Louis, MO; Mohamed A Zayed, WASHINGTON UNIVERSITY SCHOOL M, Saint Louis, MO

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**Thrombin-activated Platelet Releasate Reduces Myoblast Fusion Capacity in Muscle Cells Affected by Peripheral Artery Disease**

Edwyn Assaf, Univ of Pittsburgh, Pittsburgh, PA; Bowen Xie, Pittsburgh, PA; Susan M Shea, Richard Steinman, Univ of Pittsburgh, Pittsburgh, PA; Ulka Sachdev, UPMC, Pittsburgh, PA

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**Platelet Hyperreactivity Characterization by Aggregation and RNA-seq Informs Cardiovascular Risk**

Tessa J Barrett, NYU SCHOOL OF MEDICINE, New York, NY; Macintosh Cornwell, NYU Grossman Sch of Med, New York City, NY; Yuhe Xia, Nathaniel Smilowitz, NYU Langone Health, New York, NY; Jonathan D Newman, NEW YORK UNIVERSITY MEDICAL CENTER, New York, NY; Matthew Muller, NYU SCHOOL OF MEDICINE, New York, NY; Caron Rockman, NYU Langone Health, New York, NY; Kelly Ruggles, NYU Grossman Sch of Med, New York, NY; Deepak Voora, Judith Hochman, DUKE UNIVERSITY, Durham, NC; Jeffrey S Berger, New York Univ Sch Med, New York, NY

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***In Vitro* and *In Vivo* Assessment of Freeze-Dried Allograft Pericardium and Decellularized Allograft Pericardium for Vascular Applications**

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**Therapeutic Effects of Ginseng Gintonin in a Mouse Model of Focal Ischemic Stroke Via Inhibition of Lysophosphatidic Acid Receptors**

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**Role of Endothelial Cell-specific Knockout of the Aryl Hydrocarbon Receptor in Ischemic Limb Myopathy in Mice Subjected to Hind Limb Ischemia**

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**FHL2 Deficiency Facilitates Tissue Plasminogen Activator-mediated Thrombolysis Without Further Prolonging Bleeding Time**

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**Roles Of Tet2 In Vascular Regeneration For Peripheral Artery Disease**

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**Impaired Inflammatory Angiogenesis in the Context of Aging is the Result of the Uncoupling of Macrophage IL-1 $\beta$ -VEGF Expression and the Switch of VEGF Isoforms**

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**Physiologic Oxygen Conditions Preserve Ipsc-ec Progenitor Identity**

Katherine Hekman, Ottis Scrivner, Atlanta VA, Decatur, GA; Dylan McLaughlin, Atlanta, GA

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**Paired Immunoglobulin-like Receptor B in Macrophages Regulates the Pro-resolving Response to Efferocytosis**

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**Diosmin Enhances Endothelial Glycocalyx Integrity and Reverses Endothelial Dysfunction in Injured Blood Vessels**

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**Finasteride Delays Atherosclerosis Progression and Reduces Hepatic Inflammation in Low-density Lipoprotein Receptor-deficient Mice**

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**Liver Specific Deletion of Insulin Receptor Increases Biliary Cholesterol Secretion Independently of Plasma Clearance of HDL**

Garrett Anspach, Ailing Ji, Gregory A Graf, Univ of Kentucky, Lexington, KY

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**Evolution of Mutation-driven Clonal Hematopoiesis Over 20 Years Is Associated with Low High-density Lipoprotein-cholesterol And Insulin Resistance in Patients With Obesity**

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**Adipose Tissue Phosphatidylcholine Remodeling Modulates Insulin Signaling**

Mulin He, Xian-Cheng Jiang, Zhiqiang Li, SUNY Downstate Health Sciences Univ, Brooklyn, NY

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**Association Between Dietary Inflammatory Index and Metabolic Syndrome Among Middle-aged Women**

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**Reverse Serine Hydroxymethyltransferase 2 Activity in Atherosclerosis and Nonalcoholic Fatty Liver Disease**

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**Metabolic Basis of Vascular Smooth Muscle Cell Phenotypic Switching and Atherosclerosis**

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**Altered Epha2 Signaling in Non-alcoholic Fatty Liver Disease Progression**

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**Novel Arteriovenous Graft Platform for Pancreatic Islet Xenotransplantation**

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**Rspo2 Overexpression Attenuates Hepatic Lipid Accumulation and Atherosclerosis**

Bhupesh Singla, Ravi Varma Aithabathula, Naveed Pervaiz, Frederick Ekuban, Ishita Kathuria, Maxwell Gyamfi, UTHSC, Memphis, TN

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**Hyperhomocysteinemia Drives Smooth Muscle Cell Phenotypic Modulation and Atherosclerosis**

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**Gclm-dependent Gsh Synthesis Regulates Efferocytosis During Atherosclerosis**

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**Survival and Patency of Saphenous Vein Grafts Using a Reverse-xenograft Model**

S. Christopher Frontario, Ryan Bird, Nakul Rao, Thomas Hoffmann, Brendan Hammond, Saahil Patel, Robert Pergolizzi, Thomas Bernik, Englewood Health, Englewood, NJ

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**Clearance of Senescent Cells Reduces Osteogenic and Fibrogenic Signaling in Fibrocalcific Aortic Valve Stenosis**

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**Aorta In Pathologies May Function as an Immune Organ by Upregulating Secretomes for Immune Cell Activation, Differentiation and Trans-differentiation**

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**Endothelial RNA-binding Protein Elavl1 (HuR) Regulates Post-transcriptional Regulation of Genes Involved in Immune Responses to Increase Cd8 T Cells in the Atherosclerotic Intima**

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**A Novel Model for Tracking Endothelial-derived Extracellular Vesicles in Murine Atherosclerotic Disease**

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**Functional And Molecular Effects of Catalase Haploinsufficiency in Early And Advanced Atherosclerosis**

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**Endothelial Cells Communicate with Surrounding Vascular Cells Via Bidirectional and Polarized Secretion of Extracellular Vesicular Cargo: Implications For Atherosclerotic Plaque Development**

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**Inhibiting Thrombospondin-1 Activation of Transforming Growth Factor Beta Under Oscillatory Shear Stress Decreases Connective Tissue Growth Factor and Neurogenic Locus Notch Homolog Protein 1**  
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**Novel Role Of Endothelial Cd47 in The Regulation of Pathogenesis of Atherosclerosis**  
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**FFAR4 Regulates Macrophage Metabolism and Foam Cell Formation**  
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**$\gamma$ -carboxylated Growth Arrest Specific Protein 6 Differentially Induces Calcification in Human Aortic Valves**  
Mandy E Turner, Shinsuke Ito, Brigham and Women's Hosp and Harvard Medical Sch, Boston, MA; Joost K Hoekstra, Univ Medical Ctr Utrecht, Utrecht, Netherlands; Mark C Blaser, Kentaro Mikami, Cassandra L Clift, Sasha A Singh, Brigham and Women's Hosp and Harvard Medical Sch, Boston, MA; Masanori Aikawa, Brigham and Women's Hosp, Boston, MA; Elena Aikawa, Brigham and Women's Hosp and Harvard Medical Sch, Boston, MA

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**Study Of ADAR1 Implicates RNA Editing in Vascular Smooth Muscle Cells as a Mechanism of Coronary Artery Disease Risk**  
Chad S Weldy, Qin Li, Drew Galls, Hongchao Guo, Amruta Bhate, Paul P Cheng, Disha Sharma, Räsänen Markus, Li Y Daniel, João P. Monteiro, Brian T Palmisano, Wenduo Gu, Ramendra K Kundu, Trieu Nguyen, Jin Billy Li, Thomas Quertermous, Stanford Univ, Stanford, CA

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**Immunomodulatory Biomaterials (IMB) For the Disruption of Chronic Inflammation in Diabetic Foot Ulcers**  
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**Endothelial Transcription Factor EB Protects Against Doxorubicin-induced Endothelial Toxicity and Cardiac Dysfunction**  
Wa Du, Dept of Cancer Biology, Univ of Cincinnati Coll of Med, Cincinnati, OH; Wei Huang, Dept of Pathology and Lab Med, Univ of Cincinnati Coll of Med, Cincinnati, OH; Madison Ringer, Khayla Slep, Dept of Cancer Biology, Univ of Cincinnati Coll of Med, Cincinnati, OH; Guo-Chang Fan, Dept of Pharmacology & Systems Physiology, Univ of Cincinnati Coll of Med, Cincinnati, OH; Richard C Becker, Dept of Internal Med, Div of Cardiovascular Health and Diseases, Univ of Cincinnati Coll of Med, Cincinnati, OH; Yi-gang Wang, Dept of Pathology and Lab Med, Univ of Cincinnati Coll of

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**Type VIII Collagen Mediates Dynamic Changes in Endothelial Cell Mechanotype During Inflammatory Endothelial-to-Mesenchymal Transition**

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**Ume (Prunus Mume) Attenuates Angiotensin II-related Hypertension and Vascular Inflammation**

Ryohei Kuroda, The Univ of Tokyo, Tokyo, Japan; Keisuke Okuno, Ambler, PA; Keiichi Torimoto, Stephanie M Cicalese, Temple Univ, Philadelphia, PA; Yoshiharu Okuno, Natl Inst of Technology, Wakayama Coll, Gobo, Japan; Ryohei Kono, Osaka Kawasaki Rehabilitation Univ, Kaizuka, Japan; Shinsuke Marumoto, Kindai Univ, Osaka, Japan; Tomoki N Hashimoto, Barrow Neurological Inst, Phoenix, AZ; Hiroto Utsunomiya, Osaka Kawasaki Rehabilitation Univ, Kaizuka, Japan; Satoru Eguchi, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, Philadelphia, PA

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**High-dimensional Analysis of Circulating Blood Cells Reveals Distinct Granulocyte Activation and NETosis Profiles In COVID-19**

Sirima Kraisin, Pier Andrée Penttila, Reena Chinnaraj, Cato Jacobs, Joost Wauters, KU Leuven, Leuven, Belgium; CONTAGIOUS Consortium; Kimberly Martinod, KU Leuven, Leuven, Belgium

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**Developing A Human Bone Marrow Organoid Culture System to Study The Diabetic Immune System**

Tammy T Nguyen, Zinger Yang Loureiro, Anand Desai, Tiffany DeSouza, Lyne Khair, Amruta Samant, Haley Cirka, Univ of Massachusetts, Worcester, MA; Louis M Messina, UMass Medical Sch, Worcester, MA; Silvia Corvera, Univ of Massachusetts, Worcester, MA

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**Neonatal Mesenchymal Cells Promote Recovery of Infarcted Myocardium Through Immune Modulation of CD44 Mediated Foxp3 Tregulatory Cells After Vascular Infusion**

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**Management of Retroperitoneal Fibrosis with Endovascular Aneurysm Repair in Patients Refractory to Medical Management**

Sherif Sultan, Yogesh Acharya, Galway Univ Hosp, Galway, Ireland; Niamh Hynes, CORRIB-CURAM-Vascular group, Univ of Galway, Galway, Ireland., Galway, Ireland

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**Myocardial Infarction Accelerates Melanoma Tumor Growth and Metastasis**

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**Cross-omics Identified That Early Hyperlipidemia Increased S-adenosylhomocysteine-hypomethylation and 24 Proinflammatory Metabolites May Synergize in Trained Immunity**

Keman Xu, Temple Univ, Philadelphia, PA; Fatma Saaoud, Temple Univ, Bryn Mawr, PA; Ying Shao, Temple Univ, Philadelphia, PA; Yifan Lu, TEMPLE, Huntingdon Valley, PA; Huaqing Zhao, Temple Univ, Philadelphia, PA; Kaifu Chen, Harvard Medical Sch, Boston, MA; Xiaohua Jiang, Temple Uni Lewis Katz Sch of Med, Philadelphia, PA; Hong Wang, TEMPLE UNIVERSITY SCHOOL MEDICINE, Philadelphia, PA; Xiaofeng Yang, TEMPLE UNIVERSITY KATZ SCHOOL MED, Philadelphia, PA

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**Multiscale Model Reveals Importance of Cumulative Vascular Smooth Muscle Cell Responses in Aortic Hypercontractility**

Shannon M Flanary, Seokwon Jo, Emilyn Alejandro, Victor Barocas, Univ of Minnesota, Minneapolis, MN

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**Role Of Mitochondrial Dynamics in Vascular Smooth Muscle Cell Death**

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**Active Elastic Fiber Formation In The Vascular Wall Of Chronic Aortic Dissections**

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**Pharmacologic Blockade of Sodium-glucose Cotransporter-2 Inhibits Vascular Smooth Muscle Cell Calcification**

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**Resident Vascular Adventitial Progenitor Cells of Smooth Muscle Cell-lineage Adopt Profibrotic Phenotype and Contribute to Cardiac Fibrosis.**

Sizhao Lu, Allison Dubner, Austin Jolly, Tysen Noble, Raphael Nemenoff, Karen Moulton, Mary CM Weiser-Evans, Univ of Colorado Anschutz Medical Campus, Aurora, CO

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**Altered Gene Expression and Impaired Repair Functions of Circulating Endothelial Colony-Forming Cells from Diabetic Patients**

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**Endogenous Activation of Cd45 Can Induce Endothelial to Mesenchymal Transition in Human Endothelial Cells**

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**Beta-catenin C-terminus Signaling Drives Sphingosine-1-phosphate Receptor-1 Expression in Smooth Muscle Cells to Promote Vascular Remodeling**

Gustavo H Oliveira de Paula, Gaia Ressa, Smitha Jayakumar, Vanessa Almonte, Dippal Parikh, Albert Einstein Coll of Med, New York, NY; Tomas Valenta, Konrad Basler, Univ of Zurich, Zurich, Switzerland; Timothy Hla, Harvard Medical Sch, Boston, MA; Dario F Riascos-Bernal, Nicholas Sibinga, Albert Einstein Coll of Med, New York, NY

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**Corticosterone-mediated Associations Between Neighborhood Environment Perceptions and Lysosomal Acid Lipase Levels - Data from The Washington, D.C. Cardiovascular Health and Needs Assessment**

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**Functional Characterization of a Ccm2 Mutation Associated with Coronary Artery Disease**

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**Association Between Vasomotor Symptoms and Arterial Stiffness Among Women in Menopausal Transition**

Hye Rin Choi, Kangbuk samsung hospital, Seoul, Korea, Republic of; Yoosoo Chang, Kangbuk Samsung Hosp, Sungkyunkwan Univ, Sch of Med, Seoul, Korea, Republic of; Ria Kwon, Ga-young Lim, Eunkyo Park, Kangbuk samsung hospital, Seoul, Korea, Republic of; Seungho Ryu, Kangbuk Samsung Hosp, Sungkyunkwan Univ, Sch of Med, Seoul, Korea, Republic of

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**Sexual Dimorphism and Elabela Expression in Peripheral Artery Disease**

Sholeh Rezaee, Augusta, GA; Edie Threlkeld, Sahar Emami Naeini, Bidhan Bhandari, William Meeks, Avery Meeks, Augusta Univ, Augusta, GA; Abdelrahman Zaied, Medical Coll of Georgia at AU, AUGUSTA, GA; Silvia Leanhart, Medical Coll of Georgia at AU, AUGUSTA, GA, Augusta, GA; Lauren Brewer, Adeleigh Hamilton, Medical Coll of Georgia, Marietta, GA; David C Hess, MEDICAL COLLEGE GEORGIA, Augusta, GA; Brian H Annex, MEDICAL COLLEGE GEORGIA, Augusta, GA, Augusta, GA; Evila Da Silva Lopes Salle, Augusta Univ, Augusta, GA; Babak Baban, Augusta Univ, Augusta, GA, Augusta, GA

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**Loss Of Nuclear Receptor Subfamily 4 Group A 1 (NR4A1) Results in Impaired Post-thrombotic Vein Wall Remodeling by Promoting a Dysregulated Antifibrinolytic Phenotype in Monocytes**

Sriganesh B Sharma, Catherine E Luke, Qing Cai, Mattea Pellerito, Univ of Michigan, Ann Arbor, MI; Farouc A Jaffer, Massachusetts General Hosp, Boston, MA; Andrea T Obi, Peter K Henke, Univ of Michigan, Ann Arbor, MI

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**The Accuracy Of ICD-10 Discharge Diagnosis Codes for Identification of Isolated Sub-Segmental Pulmonary Embolism: A PE-EHR+ Substudy**

Antoine Bejjani, Brigham and Women's Hosp, Boston, MA; Candrika Dini Khairani, Brigham and Womens Hosp, Boston, MA; Ying-Chih Lo, Brigham and Women's Hosp, Boston, MA; David Jimenez, Stefano Barco, Brigham and Women's Hosp, Boston, MA, Madrid; Shiwani Mahajan, Yale Univ Sch of Med, New Haven, CT; Cesar Caraballo, Yale Sch of Med, New Haven, CT; Erik Klok, Leiden Univ, Leiden; Eric A Secemsky, BIDMC, Boston, MA; Ayaz Aghayev, Brigham and Women's Hosp, Boston, MA; Andetta Hunsaker, Brigham and Women's Hosp, Boston, MA, Boston, MA; Mohamad A Hussain, Abena Appah-Sampong, Brigham and Women's Hosp, Boston, MA; Rohan Khera, Yale Sch of Med, New

Haven, CT; Samuel Goldhaber, Yale Sch of Med, New Haven, CT, Boston, MA; Li Zhou, Manuel Monreal, Brigham and Women's Hosp, Boston, MA; Harlan M Krumholz, Yale Univ, New Haven, CT; Gregory Piazza, BWH, Boston, MA; Behnood Bikdeli, Brigham and Womens Hosp, Boston, MA

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**Adult But Not Neonatal Platelets Promotes Monocyte Trafficking in Neonatal Mice**

Preeti Maurya, Chen Li, Sara Ture, Kathleen Elaine McGrath, Jim Palis, Univ of Rochester, Rochester, NY; Craig Morrell, UNIVERISTY ROCHESTER, Rochester, NY

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Poster Session 2      Thursday, May 11      6:00 – 7:30 PM

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**Interferon-induced Transmembrane Protein 3 (ifitm3) Mediates Platelet Functions During Inflammatory Stress**

Meenakshi Banerjee, Univ of Utah, Salt Lake City, UT; Matthew T Rondina, UNIVERSITY UTAH, Salt Lake City, UT

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**Plasticity Of The Tumor Vasculature Is Induced By Tumor Cells Via Cell Surface Receptor Tetherin**

Caitlin Bell, Sharika Bamezais, Stanford Univ Sch of Med, Stanford, CA; Wei Feng Ma, CHARLOTTESVILLE, VA; Nicolas Gabriel Lopez, Stanford, Redwood City, CA; Richard Baylis, Massachusetts General Hosp, Boston, MA; Lingfeng Luo, Stanford Univ, Redwood City, CA; Clint L Miller, Nicholas Leeper, Univ Of Virginia, Charlottesville

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**Ageing-related Activation Of Platelet Mtor Promotes Platelet Hyperreactivity And Thrombosis**

Irina Portier, Bhanu Kanth Manne, Yasuhiro Kosaka, Univ of Utah, Salt Lake City, UT; Frederik Denorme, Univ of Utah, Salt Lake Cty, UT; Ozgun Babur, Univ of Massachusetts Boston, Boston, MA; Phillip A. Wilmarth, Joseph E Aslan, Oregon Health and Science Univ, Portland, OR; Matthew T Rondina, Robert Campbell, Univ of Utah, Salt Lake City, UT

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**Impaired Macrophage Interleukin-1 $\beta$ -Dependent Wound Healing In The Context Of Diabetes**

Sheila Sharma, Brown Univ-OSRI, Providence, RI; Chris S Mantsounga, OSRI-Providence VA Medical Ctr, Providence, RI; Cadence Lee, VA, Providence, RI; Jade Neverson, VA Medical Ctr, Providence, RI; Julia Pierce, VA Medical Ctr, Providence, RI, Portsmouth, RI; Elizabeth Amelotte, VA Medical Ctr, Providence, RI, Portsmouth, RI, East Greenwich, RI; Rachel T Carley, VA Medical Ctr, Providence, RI, Portsmouth, RI, East Greenwich, RI, West Greenwich, RI; Celia Butler, Providence VA Medical Ctr, Providence, RI; Gaurav Choudhary, PROVIDENCE VAMC, BROWN UNIVERSITY, Providence, RI; Alan R Morrison, Alpert Medical Sch at Brown Univ, Providence, RI

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**Carnitine Palmitoyltransferase 1a Modulates Hepatic And Lipoprotein Metabolism**

Mikala Zelows, Univ of Kentucky, Lexington, KY; Rupinder Kaur, Charles River Labs, Philadelphia, PA; Douglas Harrison, Univ of Kentucky, Lexington, KY; Qinglin Wu, Labcorp, Morrisville, NC; Irina Shalaurova, LabCorp, inc, Cary, NC; Samir Softic, Gregory Allen Graf, Robert N Helsley, Univ of Kentucky, Lexington, KY

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**Short Stapled ApoC-II Mimetic Peptides Activate Lipoprotein Lipase And Decrease Plasma Triglycerides In Mouse Models**

Denis Sviridov, NHLBI, Rockville, MD; Amaury Dasseux, Anna T Wolska, Natl Insts of Health, Bethesda, MD; Mart Reimund, Milton Pryor, Rockville, MD; Steve Drake, Alan Remaley, Natl Insts of Health, Bethesda, MD

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**Normalization Of Erythrocyte Morphology In Scarb1-/- Mice By Bacterial Serum Opacity Factor Is Dependent On HDL-free Cholesterol**

Corina Rosales, METHODIST HOSP RESEARCH INSTITUTE, Houston, TX; Ziji Wang, Houston, TX; Dedipya Yelamanchili, houston methodist hospital, HOUSTON, TX; Antonio M Gotto Jr., WEILL CORNELL MEDICAL COLLEGE, New York, NY; Baiba K Gillard, HOUSTON METHODIST RESEARCH INST, Houston, TX; Henry J Pownall, HOUSTON METHODIST RES INST, Houston, TX

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**The Role Of Peroxisomes And Bile Acid-initiated Signaling In Vascular Smooth Muscle Cell Phenotype**

Claire Marie Holden, Emory Univ, Atlanta, GA; Bethany Bogan, Snellville, GA; Felipe Paredes, Emory Univ, Atlanta, GA; Alejandra San Martin, EMORY UNIVERSITY, Atlanta, GA

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**A Novel PIP2-dependent Pathway Maintains Cellular Cholesterol Homeostasis**

Mariam Khan, Ashutosh Prince, Cleveland State Univ, Cleveland, OH; Kalash Neupane, Cleveland State Univ, Cleveland, OH; Kailash Gulshan, Cleveland State Univ, Cleveland, OH

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**Statin Dose Is Associated With Improved HDL Anti-inflammatory Capacity In Cardiac And Vascular Surgery Patients; Possible Mechanism For Statin Mediated Enhancement Of The Association Between Higher HDL And Less Kidney Injury After Surgery**

Zoe M Leuthner, Alabama Coll of Osteopathic Med, Dothan, AL; Patricia G Yancey, Macrae F Linton, Loren E Smith, Vanderbilt Univ Medical Ctr, Nashville, TN

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**Effect Of Total Sphingomyelin Synthase Activity On Low Density Lipoprotein Catabolism**

Zhiqiang Li, Mulin He, SUNY Downstate Health Sciences Univ, Brooklyn, NY; Xian C Jiang Jr., SUNY DOWNSTATE MEDICAL CTR, Brooklyn, NY

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**Gene Editing Targeting *Angptl3* By SlugCas9 Ameliorates Lipid Metabolism And Atherosclerosis In Familial Hypercholesterolemia**

Ye Yin, Fudan Univ, Shanghai, China; Zhixing Li, NYU Langone Health, New York, NY; Hong Xu, Children's Hosp of Fudan Univ, shanghai, China; Qian Shen, Children's Hosp of Fudan Univ, Shanghai, China; Baowei Ji, Children's Hosp of Fudan Univ, shanghai, China; Yongming Wang, Fudan Univ, shanghai, China; Junbo Ge, ZHONGSHAN HOSPITAL FUDAN UNIVERSITY, Shanghai

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**Gestational Changes In Lipoprotein Assembly And Secretion In Human And Mouse Placenta**

Titli Nargis, Dept of Fndns of Med, NYU Long Island Sch of Med, Mineola, NY; Xinhua Lin, Dept of Pediatrics, NYU Long Island Sch of Med, Mineola, NY; Elena Giordano, Food Science Dept, Rutgers Ctr for Lipid Res and Inst of Food Nutrition and Health, Rutgers Univ, New Brunswick, NJ; Laraib Ijaz, Sarah Suhail, Dept of Fndns of Med, NYU Long Island Sch of Med, Mineola, NY; Ellen M Gurzenda, Dept of Pediatrics, NYU Long Island Sch of Med, Mineola, NY; Daniel Kiefer, Dept of Obstetrics and Gynecology, NYU Long Island Sch of Med, Mineola, NY; Loredana Quadro, Food Science Dept, Rutgers Ctr for Lipid Res and Inst of Food Nutrition and Health, Rutgers Univ, New Brunswick, NJ; Nazeeh Hanna, Dept of Pediatrics, NYU Long Island Sch of Med, Mineola, NY; Mahmood M Hussain, Dept of Fndns of Med, NYU Long Island Sch of Med, Mineola, NY

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**Atorvastatin Versus Placebo In Icu Patients With Covid19: Ninety-day Results Of The INSPIRATION-S Trial**

Azita Talasaz, North Chesterfield, VA; Parham Sadeghipour, Tehran, Iran, Islamic Republic of; Babak Sharif-Kashani, Shahid Beheshti Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Farid Rashidi, Tabriz Univ of Medical Sciences, Tabriz, Iran, Islamic Republic of; Mohammad Taghi Beigmohammadi, Tehran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Keivan Gohari Moghadam, Somayeh Rezaian, Shariati Hosp, Tehran, Iran, Islamic Republic of; Ali Dabbagh, SBMU, Tehran, Iran, Islamic Republic of; Seyed Hashem Sezavar, SBMU, Tehran, Iran, Islamic Republic of, Tehran, Iran, Islamic Republic of; Gregory Piazza, BWH, Boston, MA; Mohsen Farrokhpour, Iran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Hooman Bakhshandeh, Iran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of, Tehran, Iran, Islamic Republic of; Atefeh Abedini, Masih-Daneshvari Hosp, Tehran, Iran, Islamic Republic of; Rasoul Aliannejad, Masih-Daneshvari Hosp, Tehran, Iran, Islamic Republic of, Iran, Islamic Republic of; Taghi Riahi, iums, tehran, Iran, Islamic Republic of; Mehdi Yadollahzadeh, Iran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Somayeh Lookzadeh, Shahid Beheshti Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; parisa rezaeifar, Shahid Beheshti Univ of Medical Sciences, Tehran, Iran, Islamic Republic of, Tabriz, Iran, Islamic Republic of; Samira Matin, Ouria Tahamtan, Tabriz Univ of Medical Sciences, Tabriz, Iran, Islamic Republic of; Keyhan Mohammadi, Elnaz Zoghi, Tehran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Hossein Hosseini, Tehran Univ of Medical Sciences, Iran, Iran, Islamic Republic of; Seyed Masoud Mousavian, Homa Abri, Pardis Sadeghipour, Iran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; elahé baghizadeh, Tehran, Iran, Islamic Republic of; Farnaz Rafiee, Tehran, Iran, Islamic Republic of, Tehran, Iran, Islamic Republic of; sepehr jamalkhani, Iran Univ of Medical Science, Tehran, Iran, Islamic Republic of; Maryam Aghakouchakzadeh, Iran Univ of Medical Science, Tehran, Iran, Islamic Republic of, Tehran, Iran, Islamic Republic of; Vahid Eslami, Shahid Beheshti Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Pooya Payandemehr, Tehran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; David Jimenez, Tehran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of, Madrid; Sanjum Sethi, Sahil Ashwin Parikh, Columbia Univ Medical Ctr, New York, NY; Manuel Monreal, Univ Católica San Antonio de Murcia, Murcia, Spain; majid maleki, Univ Católica San Antonio de Murcia, Murcia, Spain, tehran, Iran, Islamic Republic of; majid maleki, Univ Católica San Antonio de Murcia, Murcia, Spain, tehran, Iran, Islamic Republic of, tehran, Iran, Islamic Republic of; Saeed Sadeghian, Tehran Univ of Medical Sciences, Tehran, Iran, Islamic Republic of; Stefano Barco, Univ Hosp Zurich, Zurich, Switzerland; Bob Siegerink, Univ Hosp Zurich, Zurich, Switzerland, leiden; Gregory Piazza, BWH, Boston, MA; Ajay J Kirtane, Columbia Univ Medical Ctr, New York, NY; Benjamin W Van Tassell, VIRGINIA COMMONWEALTH UNIVERSITY, Midlothian, VA; Gregg Stone, Mount Sinai Medical Ctr, New York City, NY; Erik Klok, Leiden Univ, Leiden; Gregory Lip, Univ of Liverpool, Liverpool; Samuel Goldhaber, Univ of Liverpool, Liverpool, Boston, MA; Harlan M Krumholz, Yale Univ, New Haven, CT; Behnood Bikdeli, Brigham and Womens Hosp, Boston, MA

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**Effect Of Antiplatelets, Ace-i, And Statins On Post-covid-19 Cardiovascular Complications**

Huy Ho, Johnny Nolan, HCA Florida Citrus Hosp, Inverness, FL; Nishant K Nerella, CITRUS CARDIOLOGY CONSULTANTS, Hernando, FL; Suman Pasupuleti, CITRUS CARDIOLOGY CONSULTANTS, Hernando, FL, Hernando, FL; Olugbenga Oyesanmi, HCA Florida Citrus Hosp, Inverness, FL

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**Sars-cov2 Infection Leads To Pulmonary Vascular Remodeling In Transgenic Mice Expressing Human ACE2 In Vascular Cells**

Angèle Frisdal, SORBONNE UNIVERSITE U1166, Paris, France; Serban Morosan, Univ of Life Science, Virology Dept, Veterinary Faculty, Iasi, Romania; Christelle Enond, SORBONNE UNIVERSITE UMS28, Paris, France; Stéphane Sylvain Marot, Anne-Geneviève Marcelin, SORBONNE UNIVERSITE Inst Pierre Louis d'Epidémiologie et de Santé Publique, Paris, France; Stéphane Hatem, Sophie Nadaud, SORBONNE UNIVERSITE U1166, Paris, France

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**Liberation Of Soluble Urokinase Plasminogen Receptor (supar) Occurs In Response To Coronavirus Infection But Not To Influenza Virus Infection**

Sriganesh B Sharma, Kiran Kumar, Weisheng Wu, Salim S Hayek, Univ of Michigan, Ann Arbor, MI; Bethany B Moore, Univ. of Michigan, Ann Arbor, MI; Andrea T Obi, UNIVERSITY OF MICHIGAN, Ann Arbor, MI

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**In-hospital Statin Use Is Not Associated With Lower Mortality In Patients Hospitalized With Covid-19**

Crystal L Yan, Beatriz Rivera Rodriguez, Sharon Andrade-Bucknor, Univ of Miami Health System, Miami, FL

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**SGLT2i Ameliorates Endothelial Dysfunction Associated With The Common *ALDH2* Alcohol Flushing Variant**

Hongchao Guo, Stanford Cardiovascular Inst, Palo Alto, CA; Xuan Yu, Stanford Univ, Palo Alto, CA; Yu Liu, Stanford Univ, Palo Alto, CA, Stanford, CA; David T Paik, Stanford Univ, Menlo Park, CA; Johanne M Justesen, Stanford Univ, Palo Alto, CA; Mark Chandy, Stanford Cardiovascular Inst, Palo Alto, CA; James W Jahng, Stanford Univ, Redwood City, CA; Tiejun Zhang, Weijun Wu, Stanford Cardiovascular Inst, Palo Alto, CA; Freeborn Rwere, Dept of Anesthesiology, Palo Alto, CA; Suman Pokhrel, Dept of Chemical and Systems Biology, Palo Alto, CA; Rabindra Shivnaraine, Greenstone Biosciences, Palo Alto, CA; souhrid mukherjee, Stanford Cardiovascular Inst, Palo Alto, CA; Daniel Simon, Dept of Anesthesiology, Palo Alto, CA; Amit Manhas, Angela Zhang, Stanford Univ, Palo Alto, CA; Che- Hong Chen, Manuel Rivas, Eric R Gross, STANFORD UNIVERSITY, Stanford, CA; Daria Mochly Rosen, STANFORD UNIVERSITY SCHOOL MEDICINE, Stanford, CA; Joseph C Wu, STANFORD UNIV SCH OF MEDICINE, Stanford, CA

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**DUSP2 Dysregulation By TSP1-CD47 Signaling May Contribute To Maladaptive Aortic Remodeling In Hypertension And Hypertensive Heart Disease Progression**

Zoe H Haines, St George's, Univ of London, London, United Kingdom; Patrick Sun, Univ of Chicago, Chicago, IL; Guy St Whitley, St George's, Univ of London, London, United Kingdom; Daniel Meijles, St. George's, Univ of London, London, United Kingdom; Bohdan B Khomtchouk, Indiana Univ, Indianapolis, IN

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**Ultramarathon Induces Metabolite Changes Associated With Pathophysiology Of Cardiovascular Diseases- In Silico And In Vivo Analysis**

Zofia Wicik, Mikołaj Marszałek, Andrzej Ciechanowicz, Disha Keshwani, Medical Univ of Warsaw, Warsaw, Poland; Ceren Egiletten, Warsaw, Poland; Szczepan Wiecha, Instytucie Fizjologii Człowieka na AWF w Krakowie, Warsaw, Poland; Lukasz Malek, Narodowy Instytut Kardiologii im. Stefana kardynata Wyszyńskiego – Państwowy Instytut Badawczy, Warsaw, Poland; Magdalena Kucia, Marek Antoni Postula, Medical Univ of Warsaw, Warsaw, Poland

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**Arachidonic Acid Synergizes With Aspirin In Cardioprotection Following Acute Myocardial Infarction**

Shaletanati Talabieke, Jianfeng Yang, Fuwai Hosp, Chinese Acad of Medical Sciences & Peking Union Medical Coll, Beijing, China; Miao Wang, CHINESE ACADEMY OF MEDICAL SCIENCES, Beijing

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**Genomic Structural Equation Modeling To Identify Shared And Distinct Genetic Drivers Of Cardiovascular Disease**

Anthony Angueira, Perelman Sch of Med, Philadelphia, PA; Michael Levin, Univ of Pennsylvania, Philadelphia, PA; VA Million Veteran Program; Matt Bown, UNIVERSITY OF LEICESTER, Leicester; Greg Jones, Univ of Otago, Otago, New Zealand; Tanmoy Roychowdhury, Univ of Otago, Otago, New

Zealand, Yonkers, NY; Philip S Tsao, VAPAHCS - Stanford Univ, Palo Alto, CA; Derek Klarin, Stanford Univ, Mountain View, CA; Scott M Damrauer, University of Pennsylvania, Philadelphia, PA

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**Epigenetic Regulation Of Endothelial Anoctamin1 In Pulmonary Arterial Hypertension**

Natalie D'Silva, Providence Veterans Affairs Medical Ctr and Warren Alpert Medical Sch of Brown Univ, Providence, RI; Eric Wang, Alexander Vang, Providence Veterans Affairs Medical Ctr, Providence, RI; Naohiro Yano, Warren Alpert Medical Sch of Brown Univ and Rhode Island Hosp, Providence, RI; Alexandra Zimmer, Providence Veterans Affairs Medical Ctr and Warren Alpert Medical Sch of Brown Univ, Providence, RI; Alexey Fedulov, Warren Alpert Medical Sch of Brown Univ and Rhode Island Hosp, Providence, RI; Peng Zhang, Gaurav Choudhary, Providence Veterans Affairs Medical Ctr and Warren Alpert Medical Sch of Brown Univ, Providence, RI

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**O-GlcNAcylation Enhances Angiogenic Transdifferentiation And Vascular Regeneration**

Alexander J Lu, Houston Methodist, Houston, TX; John P Cooke, HOUSTON METHODIST RESEARCH INS, Houston, TX; Li Lai, HOUSTON METHODIST RESEARCH INSTITUT, Houston, TX

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**Integrating Single-nuclei And Spatial Transcriptome Analysis To Identify Early Injury Pathways Following Arterial Venous Bypass**

Lucas Mota, Beth Israel Deaconess Medical Ctr, Boston, MA; Marina E Michaud, William J Pilcher, Emory Univ, Atlanta, GA; John N Tomeo, Tarek Aridi, Beth Israel Deaconess Medical Ctr, Boston, MA; Beena E Thomas, Emory Univ, Atlanta, GA; Mojtaba Bakhtiari, Mauricio Contreras, Leena Pradhan-Nabzdyk, Beth Israel Deaconess Medical Ctr, Boston, MA; Frank W LoGerfo, HARVARD MEDICAL SCHOOL BIDMC, Boston, MA; Manoj Bhasin, Emory Univ, Atlanta, GA; Patric Liang, Beth Israel Deaconess Medical Center, Boston, MA

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**Epigenome Editing Of The AGT Gene As A Therapeutic Approach For Cardiovascular Disorders**

Lauren C Testa, Univ of Pennsylvania, Philadelphia, PA; Kiran Musunuru, Xiao Wang, UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA

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**Macrophage Rac1 As A Transcriptional Co-factor For NF- $\kappa$ B-driven IL-1 $\beta$  Expression And Consequent Atherosclerotic Calcification**

Rachel Carley, Brown Univ, Providence, RI; Cadence Lee, VA, Providence, RI; Joshua M Berus, Brown Univ, Providence, RI; Chris S Mantsounga, OSRI-Providence VA Medical Ctr, Providence, RI; Sheila Sharma, Brown Univ-OSRI, Providence, RI; Olivya Caballero, Brown Univ, Providence, RI; Julia Pierce, Brown Univ, Providence, RI, Portsmouth, RI; Elizabeth Amelotte, Brown Univ, Providence, RI, Portsmouth, RI, East Greenwich, RI; Abigail Healy, Crystal Parry, Edy Pineda, Providence VA, Providence, RI; Celia Butler, Providence VA Medical Ctr, Providence, RI; Gaurav Choudhary, PROVIDENCE VAMC, BROWN UNIVERSITY, Providence, RI; Alan R Morrison, Alpert Medical Sch at Brown Univ, Providence, RI

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**Platelet Depletion Alters Monocyte Recruitment And Phenotype Of Plaques In Diet-induced Obesity And Glucose Intolerance On Atherosclerosis Regression**

Maria Laskou, Ada Weinstock, Ozlem Kireccibasi, Bianca Scolaro, Carmen Nikain, Edward Fisher, NYU Langone Health, New York, NY

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**FDA-approved Drug For Alcoholism Reduces Atherosclerosis By Inhibiting Pyroptotic Executor Gasdermin D (GsdmD)**

C. Alicia Traugher, Cleveland State Univ, Cleveland, OH; Emmanuel Opoku, Cleveland Clinic, Cleveland, OH; Mariam Khan, Kalash Neupane, Cleveland State Univ, Cleveland, OH; Jonathan Smith, Cleveland Clinic, Cleveland, OH; Kailash Gulshan, Cleveland State Univ, Cleveland, OH

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**Metabolic Syndrome Induced Metabolomic Alterations In A Porcine Model Of Chronic Myocardial Ischemia**

Mark Broadwin, Rhode Island Hosp, Providence, RI; Dwight Harris, Boston, MA; Debolina Banerjee, Rhode Island Hosp, Providence, RI; Madigan Stanley, Rhode Island Hosp, Providence, RI, Providence, RI; frank sellke, Rhode Island Hosp, Providence, RI, Providence, RI, providence, RI; Anny Usheva, Rhode Island Hosp, Providence, RI

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**Role Of Retinoid X Receptor In Regulating Pcsk9 Transcription In The Liver And Atherosclerosis**

Mayank Choubey, Xiang Wang, Munichandra Tirumalasetty, NYU Long Island Sch of Med, Mineola, NY; Pradeep K Yadav, NYU Winthrop Hosp, Mineola, NY; Abulaish Ansari, Sujith Rajan, NYU Long Island Sch of Med, Mineola, NY; Wenquan Hu, NYU Long Island Sch of Med, mineola, NY; M Mahmood Hussain, NYU Winthrop, Minoela, NY; Qing R Miao, NYU Long Island Sch of Med, Mineola, NY

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**Relationship Between Diabetes, Glucose Control, And Vascular Health: Findings From The American Heart Association Cardiometabolic Health Strategically Focused Research Network**

Michael Garshick, NYU Langone Health, New York, NY; Tessa A Barrett, NYU SCHOOL OF MEDICINE, New York, NY; Manila Jindal, NYU Langone Medical Ctr, Franklin Square, NY; Jonathan D Newman, NEW YORK UNIVERSITY MEDICAL CENTER, New York, NY; Maja Fadzhan, NEW YORK UNIVERSITY MEDICAL CENTER, New York, NY, New York, NY; Cindy Bredefeld, Natalie Levy, NYU Langone Hosp-Long Island, Mineola, NY; Adedoyin Akinlonu, New York, NY; Adriana Heguy, New York, NY, New York, NY; Kamelia Drenkova, Florencia Schlamp, New York, NY, New York, NY, New York, NY; Chiara Giannarelli, NYU Langone Health, New York, NY; Edward A Fisher, NYU LANGONE MEDICAL CENTER, New York, NY; Ira Jay Goldberg, Jeffrey Berger, NYU, New York, NY

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**Anaconda Right Coronary Artery**

Muhammad S Khan, UHS Wilson Medical Ctr, Vestal, NY; Owais Ahmed, UHS Wilson Medical Ctr, Johnson City, NY; Somto Nwaedozie, MARSHFIE;D CLINIC, Marshfield, WI

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**BAFF Neutralization Impairs The Regression Of Insulin Resistance In Diabetic Mice By Modulating The Innate Immune Response**

Melissa D Lempicki, East Carolina Univ, Greenville, NC; Jake Gray, Univ of Texas at San Antonio, San Antonio, TX; Bradley Whittaker, East Carolina Univ, Greenville, NC; Coleen A McNamara, Univ of Virginia, Charlottesville, VA; Akshaya K Meher, East Carolina Univ, Greenville, NC

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**Effectiveness Of The Ratio Of L-cysteine To L-glutathione In Serum For Prediction Of Cardiovascular Events**

Nobuyuki Masaki, Yuki Ishinoda, Takeshi Adachi, Natl Defense Medical Coll, Tokorozawa, Japan

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**Bone Marrow-derived Macrophage (BMDM) Extracellular Vesicles (EVs) From Diabetes Impair Angiogenesis In Ischemic Hind Limb Of Diabetic Mice**

Ramesh Nimma, Raquel López-Díez, Gautham Yepuri, Vikas Kumar, Lakshmi Arivazhagan, Raveena Vakil, Sangeeta Bhallamudi, Hediye Erdjument-Bromage, Thomas Neubert, New York Univ, New York, NY; Ravichandran Ramasamy, NYU Grossman Medical Ctr, New York, NY; Ann Marie Schmidt, NYU SCHOOL OF MEDICINE, New York, NY

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**Complement Component 4 Suppression Accompanies Abatement Of Liver Steatosis In Hepatocyte-specific Angiotensinogen Deficient Mice**

Alex Pettey, Univ of Kentucky, Lexington, KY; Hisashi Sawada, UNIVERSITY OF KENTUCKY, Lexington, KY; Dien Ye Sr., Univ of Kentucky, Lexington, KY; Congqing Wu, UNIVERSITY OF KENTUCKY, Lexington, KY; Alan Daugherty, UNIVERSITY OF KENTUCKY, LEXINGTON, KY; Hong S Lu, UNIVERSITY KENTUCKY, Lexington, KY

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**Cholesterol Excretion In Whole-body And Liver-specific ABCG5 ABCG8-deficient Mice**

Erika Savage, Garrett Anspach, Univ of Kentucky, Lexington, KY; Rupinder Kaur, Univ of Kentucky, Lexington, KY; Corissa Cady, Univ of Kentucky, Lexington, KY; Gregory A Graf, UNIVERSITY KENTUCKY, Lexington, KY

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**Role Of Pcp2 In Adipose Tissue Remodeling And Lipoprotein Metabolism**

Michael J Thomas, Hao Xu, MEDICAL COLLEGE WISCONSIN, Milwaukee, WI; Mary G Sorci Thomas, MEDICAL COLLEGE OF WISCONSIN, Milwaukee, WI

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**Growth Hormone-releasing Hormone Agonist Attenuates Vascular Calcification and Vascular Injury in Diabetic Db/db Mice**

Hao-Lin Ren, Dalian Medical Univ, Dalian, China; Ruiping Cai, Ruize Xue, Yaoxia Zhang, SHENYANG MEDICAL UNIVERSITY, Shenyang, China; Xianyang Zhang, Miami VA Medical Ctr, Miami, FL; Renzhi Cai, miami VA Medical Ctr, Miami, FL; Wei Sha, Miami VA Medical Ctr, Miami, FL; Andrew V Schally, Univ of Miami Miller Sch of Med, Miami, FL; Ming S Zhou, SHENYANG MEDICAL UNIVERSITY, Shenyang, China

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**Map Kinase Phosphatase-5 Deficiency Impairs Efferocytosis And Exacerbates Late-Stage Atherosclerosis**

Margaret Baldini, Masahi Azuma, Andrea Palos-Jasso, Dan Shan, Rajika Roy, Temple Univ, Philadelphia, PA; Walter J Koch, TEMPLE UNIVERSITY SCHOOL MEDIC, Philadelphia, PA; Anton M Bennett, Yale Univ Sch of Med, New Haven, CT; Jun Yu, TEMPLE UNIVERSITY SOM, Philadelphia, PA

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**Biliverdin Reductase B Is A Plasma Biomarker For Intraplaque Hemorrhage And A Predictor Of Ischemic Stroke In Symptomatic Carotid Stenosis**

Melody Chernaly, Karolinska Instt, Solna, Sweden; David Marlevi, Maria Jesus Iglesias Mareque, KTH, Solna, Sweden; Mariette Lengquist, KAROLINSKA INSTITUTET, Stockholm, Sweden; Malin Kronqvist, KAROLINSKA INSTITUTET, Stockholm, Sweden, Stockholm, Sweden; Daniel Bos, Erasmus MC Univ Medical Cente, Rotterdam; Dianne H.K van Dam - Nolen, Dept of Radiology and Nuclear Med, Erasmus MC, Univ Medical Ctr Rotterdam, Rotterdam, Netherlands; Anja van der Kolk, UMC Utrecht, Utrecht; Jeroen Hendrikse, Dept of Radiology, Univ Medical Ctr Utrecht, Utrecht, Netherlands; Mohamed Kassem, Dept of Radiology and Nuclear Med, CARIM Sch for Cardiovascular Diseases, Maastricht Univ Medical Ctr, Maastricht, Netherlands; Ljubica Matic, Karolinska Inst, Solna, Stockholm, Sweden; Jacob Odeberg, KTH, Stockholm, Sweden; Margreet R De Vries, LUMC, Leiden; M E Kooi, MUMC, Maastricht; Ulf Hedin, KAROLINSKA INSTITUTE, Stockholm, Sweden

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**Contribution Of Smooth Muscle-derived Vascular Progenitor Cells To Atherosclerosis**

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Nisha Khatiwada, Zhongkui Hong, Texas Tech Univ, Lubbock, TX

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Veronica O'Brien, Zeqin Lian, Xiao-Yuan Dai Perrard, Antu Antony, Baylor Coll of Med, Houston, TX; Xueying Peng, Hangzhou First People's Hosp, Hangzhou, Zhejiang; Lu Xu, Jing Ni, Baylor Coll of Med, Houston, TX; Bingqian Zhang, Houston, TX; Anum Saeed, Univ of Pittsburgh Medical Ctr, Pittsburgh, PA; Xiaoming Jia, Aliza Hussain, BAYLOR COLLEGE OF MEDICINE, Houston, TX; Ron C Hoogeveen, BAYLOR COLLEGE MEDICINE, Houston, TX; Christie M Ballantyne, BAYLOR COLLEGE MEDICINE, Houston, TX; Huaizhu Wu, BAYLOR COLLEGE OF MEDICINE, Houston, TX

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**Integrative Single-cell Meta-analysis Reveals Disease-relevant Vascular Cell States and Markers in Human Atherosclerosis**  
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**Targeting The Local Inflammation In Atherosclerosis Using An *Ex-vivo* Perfusion System Of Human Coronary Arteries**

Isabella Hetherington, Jeffrey VanWye, Ishani Wickramage, Max Raggio, Hana Totary-Jain, Univ of South Florida, Tampa, FL

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Lingfeng Luo, Yoko Kojima, Zhongde Ye, Nick J Leeper, Dept of Surgery, Stanford Cardiovascular Inst, Stanford Univ, Palo Alto, CA

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**Histone Demethylase JARID1c Regulates T<sub>H</sub>17 T-cells In Diabetic Wounds By Increasing IL-6 Expression In Plasmacytoid Dendritic Cells**

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Monika Chaszczewska-Markowska, Hirsfeld Inst of Immunology and Experimental Therapy, Wroclaw, Poland; Agnieszka Antonczyk, Wrocław Univ of Environmental and Life Sciences, Wrocław, Poland; Katarzyna Gorna, Hirsfeld Inst of Immunology and Experimental Therapy, Wroclaw, Poland; Zdzislaw Kielbowicz, Wrocław Univ of Environmental and Life Sciences, Wrocław, Poland; Katarzyna Bogunia-Kubik, Hirsfeld Inst of Immunology and Experimental Therapy, Wroclaw, Poland; Przemysław Prządka, Wrocław Univ of Environmental and Life Sciences, Wrocław, Poland

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Shumin Wang, CVRI, Univ of Rochester, Rochester, NY; Meera Singh, Hongmei Yang, Univ of Rochester, Rochester, NY; Craig Morrell, UNIVERISTY ROCHESTER, Rochester, NY; Laith Awad Mohamad, Univ of Rochester, Rochester, NY; Jasmine Jiayuan Xu, CVRI, Univ of Rochester, Rochester, NY; Tiffany Nguyen, Sara Ture, Alicia Tyrell, Univ of Rochester, Rochester, NY; Sanjay B Maggirwar, The George Washington Univ, Washington, DC, NY; Giovanni Schifitto, UNIVERSITY OF ROCHESTER, Rochester, NY; Jinjiang Pang, AAB CVRI UNIVERSITY ROCHESTER, Rochester, NY

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Debolina Banerjee, Hang Xing, Jun Feng, Frank Sellke, Brown Univ, Rhode Island Hosp, Providence, RI

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Alishba Maira, Residential, Bronx, NY; Dario F Riascos Bernal, Nicholas Sibinga, Albert Einstein Coll of Med, Bronx, NY

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**High-dimensional Proteogenomics Of Human Carotid Atherosclerosis Reveals Significant Diversity Of Smooth Muscle Cells Within Plaques**

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Bal Krishna Chaube, Mahnaz Sahraei, Kathryn Citrin, Yale Univ, New Haven, CT; Abhishek K Singh, Wen Ding, YALE UNIVERSITY, New Haven, CT; Richard Pierce, Rebecca Cardone, Richard kibbey, Yale Univ, New Haven, CT; Carlos Fernandez-Hernando, YALE UNIVERSITY SCHOOL MEDICINE, New Haven, CT; Yajaira Suarez, Yale Univ Sch of Med, New Haven, CT

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Inhibition Of Tirna-gly-gcc Ameliorates Neointimal Formation Via Cbx3-mediated Vascular Smooth Muscle Cells Phenotypic Switching

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Hui Liu, Kevin Kim, Anna Naumova, Univ of Washington, Seattle, WA; Gale L Tang, VA PSHCS Univ of Washington, Seattle, WA

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Sigmar1 Deficiency Promotes Inflammatory Signals By Altering Nitric Oxide Bioavailability And Mitochondrial Redox Balance In Vascular Endothelial Cells

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Michelle L Roberts, Justin Westhoff, Jingli Wang, Rong Ying, Susanne M Cabrera, Michael E Widlansky, Medical Coll of Wisconsin, Milwaukee, WI

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Miguel Gabriel Rojas, Univ of Miami, Coral Gables, FL

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Saagar C Bakshi, Emory Univ Sch of Med, Georgia Inst of Technology, Atlanta, GA; Gian Rivera-Crespo, David N Ku, Georgia Inst of Technology, Atlanta, GA

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**Localised Anticoagulation Via Gene Therapy: Towards Prevention Of Cardioembolic Stroke**

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Marcin A Sowa, Tricia T Wang, Florencia Schlamp, Macintosh Cornwell, Hanane El Bannoudi, Bash Hannah, Robert Clancy, Kelly Ruggles, Jill Buyon, NYU Grossman Sch of Med, New York, NY; Deepak Voora, Duke Univ, Durham, NC; Tessa J Barrett, Jeffrey S Berger, NYU Grossman Sch of Med, New York, NY

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**A Prediction Model For Left Ventricular Thrombus Persistence/recurrence: Based On A Prospective Study And A Retrospective Study**

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**Protein Energy Undernutrition Is Associated With Increased Mortality In Patients Admitted For Abdominal Aortic Aneurysm Rupture.**

Joseph Amoah, Sara Noureldin, Univ Hosp, Cleveland, OH; Francisco Somoza-Cano, St. Vincent Charity Medical Ctr, Cleveland, OH; Michael Fatuyi, Sammir Dekowski, Trihealth Good Sam Hosp, Cincinnati, OH

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**Covid Infection Increases Mortality In Patients Admitted For Acute Aortic Dissection.**

Joseph Amoah, Sara Noureldin, Univ Hosp, Cleveland, OH; Francisco Somoza-Cano, St. Vincent Charity Medical Ctr, Cleveland, OH; Michael Fatuyi, Sammir Dekowski, Trihealth Good Sam Hosp, Cincinnati, OH

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**Microtubule-stabilizing Drug Epophilone D Protects Mice From Angiotensin II-induced Abdominal Aortic Aneurysmal Rupture**

Ana Clara Silva Pires Frony, Univ of Missouri, Columbia, MO; Aida Javidan, UNIVERSITY OF KENTUCKY, Lexington, KY; Weihua Jiang, Lihua Yang, Univ of Kentucky, Lexington, KY; Venkateswaran Subramanian, UNIVERSITY OF MISSOURI, COLUMBIA, MO

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Sidra Kalsoom, Ashish Jain, Muhammad Adnan Zaman, Asfand Yar Butt, Cyril Nathaniel, Conemaugh Memorial Medical Ctr, Johnstown, PA

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**Late Adult Presentation Of Anomalous Left Coronary Artery From The Pulmonary Artery Syndrome: The Utility Of Cardiac Computed Tomography In The Diagnostic Evaluation Of Cardiac Patients**

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**Angiotensin Ii Type 1a Receptor Deletion In Vascular Smooth Muscle Cells Prevent Abdominal Aortic Aneurysm Formation Induced By Angiotensin Ii Plus  $\beta$ -aminopropionitrile**

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Sherif Sultan, Yogesh Acharya, Galway Univ Hosp, Galway, Ireland; Niamh Hynes, CORRIB-CURAM-Vascular group, Univ of Galway, Galway, Ireland., Galway, Ireland

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Sherif Sultan, Yogesh Acharya, Galway Univ Hosp, Galway, Ireland; Niamh Hynes, CORRIB-CURAM-Vascular group, Univ of Galway, Galway, Ireland., Galway, Ireland

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Kaileen Fei, Qunsheng Dai, Duke Univ, Durham, NC; Derek Peters, Duke Univ, New Hill, NC; Yueyuan Xu, Brianna Garrett, Duke Univ, Durham, NC; James Otto, Duke Univ, Chapel Hill, NC; Christopher D Kontos, DUKE UNIVERSITY MEDICAL CENTER, Durham, NC; Yarui Diao, Kevin Southerland, Duke Univ, Durham, NC

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Emma Fletcher, Baylor Univ, Waco, TX; Dimitrios Miserlis, UT Austin Dell Medical Sch, Austin, TX; Kristina Sorokolet, Cassandra Bradley, Dylan Wilburn, Evlampia Papoutsis, Trevor Wilkinson, Andrew Ring, Panagiotis Koutakis, Baylor Univ, Waco, TX

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**Mini-swine Model Of Hindlimb Ischemia On A Background Of Metabolic Syndrome Mimics Peripheral Artery Disease And Claudication**

Ali H Hakim, Al-Murtadha Al-Gahmi, Sara Cartwright, Univ of Nebraska Medical Ctr, Omaha, NE; zhen zhu, university of nebraska medical cent, Omaha, NE; Shuai Li, Univ of Nebraska Med Ctr, Omaha, NE; Molly Schieber, Univ of Nebraska Medical Cent, Omaha, NE; Julian K Kim, UNIV NEBRASKA MEDICAL CENTER, Omaha, NE; George Casale, Univ of Nebraska Medical Cent, Omaha, NE; MARK A CARLSON, Univ of Nebraska Medical Cent, Omaha, NE, Omaha, NE; Iraklis I Pipinos, UNIV NEBRASKA MEDICAL CTR, Omaha, NE

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**Satellite Cell Increase Vascular Growth Through Paracrine Signaling Mechanisms**

Tao Yu, Dong Gun Oh, Christopher Jean-Baptiste, Beyonce Brice, Tianjiao Ren, Laura M Hansen, EMORY UNIVERSITY, Atlanta, GA

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**Short Term High Consumption Of Aspartame Does Not Increase Infarct Volume And Stroke Mortality In Mouse Models Of Focal Ischemic Stroke**

Soonkyu Kwon, Dongguk university, Goyang, Korea, Republic of; Inyeong Park, Gyeonggi-do; Seungbum Choi, DONGGUK UNIVERSITY ILSAN HOSPITAL, Goyang; Dong-Eog E Kim, DONGGUK UNIV ILSAN HOSP, Goyang

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**Leukadherine-1 Improves Neovascularization In A Mouse Model Of Hindlimb Ischemia**

Roberta Lassance-Soares, Gustavo Falero-Diaz, Univ of Miami, Miami, FL; Roberto I Vazquez-Padron, UNIVERSITY OF MIAMI, Miami, FL; Vineet Gupta, RUSH UNIVERSITY MEDICAL CENTER, Chicago, IL

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**Evaluating The Diagnostic Ability Of Six Different Artificial Neural Networks From The Subcellular Microenvironment To The Clinical Manifestation**

Dimitrios Miserlis, Univ of Texas Austin Dell Medical Sch, Austin, TX; Yuvaraj Munian, Univ of Texas at San Antonio, San Antonio, TX; Emma Fletcher, Baylor Univ, Waco, TX; Josh Crapps, Pedro Teixeira, Lucas Ferrer, Joseph DuBose, William T Bohannon, Peter Monteleone, Univ of Texas Austin Dell Medical Sch, Austin, TX; Miltiadis Alamaniotis, Univ of Texas at San Antonio, San Antonio, TX; Panagiotis Koutakis, Baylor Univ, Hewitt, TX

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**Predictors Of Complications And Extended Length Of Stay Following Percutaneous Transluminal Renal Artery Angioplasty**

Ahmad Mustafa, Chapman Wei, Shahkar Khan, Radu Grovu, Taqi Rizvi, Aneeqa Javed, Danyal Khan, Jessica Bjorklund, Suzanne El-Sayegh, James Lafferty, Mitchell Weinberg, Staten Island Univ Hosp | Northwell Health, Staten Island, NY

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**MicroRNA-1282 As A Cis-Antisense Regulator Of Angiogenesis In Diabetic Critical Limb Ischemia**

Madhur Sachan, Shruti Rawal, Winona Wu, Camila Vaz, Brigham and Women's Hosp, Boston, MA; Michael McCoy, Takeda Pharmaceuticals Inc, Cambridge, MA; Henry Cheng, Walden Biosciences, Cambridge, MA; Daniel Perez-Cremades, Univ of Valencia, Valencia; Philip P Goodney, DARTMOUTH HITCHCOCK MEDICAL CENTER, Lebanon, NH; Mark A Creager, DARTMOUTH-HITCHCOCK MEDICAL CENTER, Lebanon, NH; Marc S. Sebatine, Brigham and Women's Hosp, Boston, MA; Marc P Bonaca, CPC Clinical Res, Aurora, CO; Mark W Feinberg, BRIGHAM AND WOMENS HOSPITAL, Boston, MA

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**Vasculogenic Mesodermal Cells Derived From Induced Pluripotent Stem Cells Improve Limb Perfusion And Decrease Necrosis in Murine Models of Hindlimb Ischemia**

Humraaz Samra, Indiana Univ, Indianapolis, IN; Michael Ingram, Teresa Doiron, Justin King, Indianapolis, IN; Leni Moldovan, IUPUI AND VAMC, Indianapolis, IN; Chang-Hyun Gil, Indiana Univ Sch of Med, Carmel, IN; Jennifer Stashevsky, Indiana Univ Sch of Med, Indianapolis, IN; Madelyn Fairbairn, Sadie Welch, Indiana Univ, Indianapolis, IN; Dave Mann, Matt George, Vascugen Inc., Madison, WI; Mervin Yoder, Indiana Univ, Indianapolis, IN; Steven J Miller, INDIANA UNIVERSITY SCHOOL MEDICINE, Indianapolis, IN; Michael P Murphy, Indiana Univ, Indianapolis, IN

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**Microvessel Oxidative Stress And Damage And Its Relation To Muscle Degeneration And Fibrosis In The Ischemic Limbs Of Patients With Peripheral Artery Disease**

Molly Schieber, Shuai Li, Matthew Fuglestad, Christina Shields, Julian K Kim, Univ of Nebraska Medical Ctr, Omaha, NE; Ulka Sachdev, UPMC, Pittsburgh, PA; Iraklis I Pipinos, George Casale, Univ of Nebraska Medical Ctr, Omaha, NE

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**Ceramide Signaling Potentiates Microvascular Endothelial Dysfunction In Patients With Coronary Artery Disease**

Gopika SenthilKumar, Henry Bordas-Murphy, Brian Lindemer, Julie K Freed, Medical Coll of Wisconsin, Milwaukee, WI

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**Vascular And Muscle Recovery In Pre-clinical Model Of Peripheral Vascular Disease Using Intramuscular Estrogen Related Receptor Gamma Gene Therapy**

Danesh H Sopariwala, Andrea S Rios, UHealth, Houston, TX; Addison Saley, Rice Univ, Houston, TX; Ashok Kumar, Univ of Houston, Houston, TX; Vihang A Narkar, UT McGOVERN MEDICAL SCHOOL HOUSTON, Houston, TX

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**A Novel Retrievable Drug Delivery Stentgraft To Enhance Paclitaxel Delivery For Restenosis**

Jordan F Stafford, The Ohio State Univ, Columbus, OH; Dahlia Kenawy, Foued Amari, Columbus, OH; Saami K Yazdani, Wake Forest Univ, Winston Salem, NC; Bryan Tillman Sr., Ohio State Univ, Columbus, OH

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**Loss Of Endothelial Bag3 Does Not Worsen Ischemia Induced Myopathy**

Zoe S Terwilliger, Makenzie G. Kolasa, East Carolina Univ, Greenville, NC; Thomas Green, Reema Karnekar, Ananya Pentakota, greenville, NC; Espen Spangenburg, Dean Yamaguchi, Joseph McClung, EAST CAROLINA UNIVERSITY, Greenville, NC

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**Monocyte Toll-like Receptor 4 (tlr4) Signaling Is Essential For Post Thrombotic Upa Expression**

Sriganesh Sharma, Kiran Kumar, Univ of Michigan, Ann Arbor, MI; Sharika Bamezai, Mountain View, CA; Oscar Yesid Moreno Rocha, Sabrina Rocco, Kevin Dale Mangum, Univ of Michigan, Ann Arbor, MI; Catherine Luke, Hartland High Sch, Howell, MI; Katherine A Gallagher, Univ of Michigan, Ann Arbor, MI; Bethany Moore, Univ. of Michigan, Ann Arbor, MI; Peter Henke, Andrea T Obi, Univ of Michigan, Ann Arbor, MI

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**Technique For Testing Drug-coated Balloons In Deep Veins In Vivo**

Oscar Y Moreno Rocha, Kiran Kumar, Sabrina Rocco, Sriganesh Sharma, Catherine Luke, Laura Durham, Amber Clay, Univ of Michigan, Ann Arbor, MI; Sharika Bamezai, Mountain View, CA; Daniel D Myers Jr., UNIVERSITY MICHIGAN, Ann Arbor, MI; Thomas Wakefield, Univ Of MICHIGAN, PROf Surgery,

Ann Arbor, MI; Peter Henke, university of michigan, ann arbor, MI; Andrea T Obi, UNIVERSITY OF MICHIGAN, Ann Arbor, MI

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**Genetics Of Physical Activity And Risk Of Cardiovascular Disease**

Gina Biagetti, John Depaolo, Gabrielle Shakt, Anthony Angueria, Renae Judy, Univ of Pennsylvania, Philadelphia, PA; Jennifer E Huffman, Boston VA Healthcare System, Jamaica Plain, MA; Catherine Tcheandjieu, Stanford school of Med, San francisco, CA; Themistocles L Assimes, Derek Klarin, STANFORD UNIVERSITY, Palo Alto, CA; Benjamin F Voight, UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA; Marijana Vujkovic, Univ of Pennsylvania, Philadelphia, PA; Philip S Tsao, VAPAHCS - Stanford Univ, Palo Alto, CA; Kyong-Mi Chang, Crescenz VA Medical Ctr, Philadelphia, PA; Julie Lynch, VA Salt Lake City, Bedford, MA; Michael Levin, Univ of Pennsylvania, Philadelphia, PA; Scott M Damrauer, Universtiy of Pennsylvania, Philadelphia, PA

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**Ischemic Heart Disease Mortality And Systemic Lupus Erythematosus**

Kristina Terrani, Univ of Arizona Coll of Med, Tucson, AZ; Ramzi Ibrahim, Faryal Razzaq, Univ of Arizona, Tucson, AZ; Adam Habib, Leavenworth, KS; Mohammed Salih, The Heart Hosp - Baylor Univ, Plano, TX; Justin Z Lee, Cleveland Clinic, Cleveland, OH

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**Variants of *Neurocan*, a Nonalcoholic Fatty Liver Disease Risk Allele, are Associated with Plaque Development in the Carotid Artery Over 5 Years and Metabolic Factors**

Hiroaki Ikezaki, KYUSHU UNIVERSITY, Fukuoka, Japan; Ernst Schaefer, Masayuki Murata, Nobuyuki Shimono, Fukuoka, Japan

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**Genetic Basis Of Thoracic Aortic Aneurysms In A Large Unselected Clinical Population**

Hannah S Mirshahi, Jeremy S Haley, Diane T Smelser, Evan J Ryer, James R Elmore, David J Carey, Geisinger, Danville, PA

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**Ambulatory Percutaneous Coronary Angioplasty: A Resource For Low-income Countries.**

Licurgo J Cruz Sr., HOMS, Santiago, Dominican Republic; Anthony Gutierrez, Pontificia Univ Catolica Madre y Maestra, Santiago, Dominican Republic; Ka Wu, HOMS, Santiago, Dominican Republic; Helio Grullon, Yanely Lopez, Pontificia Univ Catolica Madre y Maestra, Santiago, Dominican Republic

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**Perivascular Accumulation Of CD45+ Cells In The Lungs Of Female *BMPR2<sup>+ / R899X</sup>* Mutant Mice May Be A Factor To Sex-linked Pulmonary Arterial Hypertension**

Omar Loya, Univ of Illinois Chicago, Chicago, IL; Ejehi Erewele, Chicago; Maricela Castellon, UIC, Chicago, IL; Suellen Darc D Oliveira, Univ of Illinois at Chicago, Chicago, IL

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**Netrin-1 Induces Cytoskeletal-mediated Rewiring Of Mitochondrial Metabolism And Immunity**

Yannick Cyr, NYU Langone Health, New York, NY; Yue Xing, NYU Langone Health Ctr, New York, NY; Alexandra Newman, New York Univ, New York, NY; Gabrielle Pilla, New York Univ, New York, NY, New York, NY; Fazli Bozal, NYU Sch of Med, Long Island City, NY; Coen van Solingen, NYU Sch of Med, Long Island City, NY, new york, NY; Emily Brown, NYU Grossman Sch of Med, New York, NY; Tracy Zhang, NYU Langone, Corona, NY; Shruti Naik, NYU Langone Health, New York, NY; Kathryn J Moore, NEW YORK UNIV MEDICAL CTR, New York, NY

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**Manipulating Bile Acid Production Using Genome Editing To Modulate Cardio-metabolic Disease**  
Kelsey E Jarrett, Elizabeth J Tarling, Thomas A Vallim, UCLA, Los Angeles, CA

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**The Histone Demethylase JMJD3 Regulates Smooth Muscle Differentiation And Is Associated With Blood Pressure**

Kevin Mangum, Amrita Joshi, Sonya Wolf, Emily Barrett, Jadie Moon, Bethany Moore, Univ of Michigan, Ann Arbor, MI; Andrea T Obi, UNIVERSITY OF MICHIGAN, Ann Arbor, MI; Frank Davis, The Univ of Michigan, Ann Arbor, MI; Katherine A Gallagher, UNIVERSITY MICHIGAN, Ann Arbor, MI

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**Impact Of Resident Macrophages On Fibrosis And Lymphatic Growth During Autoimmune Valvular Carditis**

Victoria Osinski, Alyssa Peck, Jessica Faragher, Jennifer Auger, Bryce Binstadt, Univ of Minnesota, Minneapolis, MN

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**Temporal Profile Of Catheter-directed Thrombolysis On Post-thrombotic Syndrome Outcomes In Iliofemoral DVT Patients: Post-hoc Analysis Of ATTRACT Trial**

Wenzhu Li, MGH, Boston, USA; Ruijin Hosp, Shanghai, China; Ido Weinberg, Hang Lee, Rachel Rosovsky, Massachusetts General Hosp, Boston, MA; Guy L Reed, Univ of Arizona, Phoenix, AZ; Peter Libby, BRIGHAM AND WOMENS HOSPITAL, Boston, MA; Ahmed A Tawakol, Massachusetts General Hosp, Boston, MA; Peter Henke, university of michigan, ann arbor, MI; Farouc A Jaffer, MASSACHUSETTS GENERAL HOSPITAL, Boston, MA

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**Impact Of Iron Deficiency Anemia On Venous Thromboembolic Diseases: A National Inpatient Sample Analysis**

Dhairya Nanavaty, Ankushi Sanghvi, Nishant Patel, Sohrab Singh, The Brooklyn Hosp Ctr, Brooklyn, NY; Pradeep Kumar Devarakonda, Suganya Manoharan, Saikrishna Patibandla, dishang Bhavsar, Cesar Ayala Rodriguez, Sarath Reddy, The Brooklyn Hosp Ctr, Brooklyn, NY

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**Thoracobifemoral Bypass Exhibits Hemodynamic Superiority Compared With Axillobifemoral Bypass For Infraarenal Aortic Occlusion**

Angela Giese, Univ of Chicago Med, Chicago, IL; Willa Li, Dept of Surgery, Univ of Chicago Med, Chicago, IL; David Jiang, Luka Pocivavsek, Univ of Chicago Med, Chicago, IL

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**Validating Noninvasive Indices Of Thoracic Aortic Dissection With Magnetic Resonance Elastography**

Faisal Fakhouri, King Saud Univ, Riyadh, Saudi Arabia; Arunark Kolipaka, Brian Raterman, THE OHIO STATE UNIVERSITY, Columbus, OH; Dakota Gonring, Adnan Hiran, Doran S Mix, Univ of Rochester Medical Ctr, Rochester, NY

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**Myeloid Kruppel-like Factor 14 Mediates Sexual Dimorphism Of Abdominal Aortic Aneurysm Via Estrogen Receptor  $\beta$**

Huilun Wang, Guizhen Zhao, Lin Chang, Jifeng Zhang, Yanhong Guo, Univ of Michigan, Ann Arbor, MI; Y. Eugene Chen, Univ of Michigan, Ann Arbor, MI

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**Sivelestat Attenuates Angii-induced Abdominal Aortic Aneurysms In Apolipoprotein E-deficient Mice**

Yoshiko Hada, Haruhito A. Uchida, Shugo Okamoto, OKAYAMA UNIVERSITY, Okayama, Japan; Nozomu Otaka, OKAYAMA UNIVERSITY, Okayama; Katsuyoshi Katayama, Yasuhiro Onishi, Rika Takemoto, Hidemi Takeuchi, Ryoko Umebayashi, Jun Wada, OKAYAMA UNIVERSITY, Okayama, Japan

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**CCR2+ Macrophages Are Elevated In Individuals With Aortic Aneurysmal And Occlusive Disease**

Shahab Hafezi, Washington Univ in St. Louis, Saint Louis, MO; Batool Arif, Washington Univ Sch of Med, St. Louis, MO; Mohamed Zaghoul, Chieh-Yu Lin, Washington Univ in St. Louis, St Louis, MO; Yongjian Liu, St Loui, MO; Robert J Gropler, WASHINGTON UNIV SCH OF MED, Saint Louis, MO; Mohamed A Zayed, WASHINGTON UNIVERSITY SCHOOL M, Saint Louis, MO

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**The Matricellular Protein Ccn1 Induces Aortic Aneurysms In Mice**

Fan-E Mo, NATIONAL CHENG KUNG UNIVERSITY, Tainan, Taiwan

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**Androgen Promotes Aortic Aneurysms Via Suppressing PD-1 In Male Mice**

Xufang Mu, Univ of Kentucky, Lexington, KY; Shu Liu, UNIV OF KENTUCKY, Lexington, KY; Zhuoran Wang, Kai Jiang, Univ of Kentucky, Lexington, KY; Timothy McClintock, Lexington, KY; Arnold Stromberg, Alejandro Tezanos, Univ of Kentucky, Lexington, KY; Ming C Gong, Zhenheng Guo, UNIV OF KENTUCKY, Lexington, KY

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**A Fluid Structure Interaction Workflow For Studying Aortic Dissections**

Blessing Nnate, Univ of Chicago, Chicago, IL; Kameel Khabaz, Sanjeev Dhara, Univ of Chicago, Irvine, CA; Nhung Nguyen, Willa Li, Univ of Chicago, Chicago, IL; Luka Pocivavsek

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**A Model Of Aortic Arch Stenting For Dissection Repair Using Finite Element Analysis And Computational Fluid Dynamics**

Kayla Polcari, The Univ of Chicago, Chicago, IL; Ziga Donik, The Univ of Maribor, Maribor, Slovenia; Willa Li, The Univ of Chicago, Chicago, IL; Janez Kramberger, The Univ of Maribor, Maribor, Slovenia; Luka Pocivavsek, The Univ of Chicago, Chicago, IL

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**Peak Wall Rupture Index Is Associated With Time-to-rupture In Abdominal Aortic Aneurysms Independently Of Size And Sex**

Antti Siika, Mareia Talvitie, Moritz Lindquist Liljeqvist, Marko Bogdanovic, Rebecka Hultgren, Joy Roy, Karolinska Inst, Stockholm, Sweden; T Christian Gasser, KTH - Royal Inst of Technology, Stockholm, Sweden

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**Marfan Syndrome Mice Fed On High Fat Diet Have An Altered Metabolism**

Carmen Yap, Siyu Li, Myrthe Hoogeland, Iris Bakker, Amsterdam Medical Ctr, Amsterdam, Netherlands; Sander Kooijman, Leiden Univ Medical Ctr, Amsterdam, Netherlands; Vivian De Waard, Amsterdam Medical Ctr, Amsterdam, Netherlands

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**Efficacy Of Induced Pluripotent Stem Cell-derived Endothelial Cell Therapy Is Impaired By Chronic Nicotine Exposure In A Murine Model Of Peripheral Artery Disease**

Alex Ho Pang Chan, Stanford Univ, Palo Alto, CA; Caroline Hu, PAVIR, Palo Alto, CA; Gladys Chiang, Veterans Affairs Palo Alto Health Care System, Palo Alto, CA; Ngan F Huang, STANFORD UNIVERSITY, Stanford, CA

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**E-selectin-Overexpressing Mesenchymal Stem Cell-based Therapy Augments Cutaneous Wound Healing In Ischemic Limbs**

Carlos T Huerta, Yulexi Ortiz, Yan Li, Antoine Ribieras, Francesca Voza, Nga Le, Univ of Miami, Miami, FL; Zhao-Jun Liu, Univ of Miami Miller, Miami, FL; Omaidia Caridad Velazquez, Univ of Miami Miller Sch of Med, Miami, FL

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**Enabling Non-invasive Cell Tracking For Patient-specific Vascular Endothelial Cells**

Bin Jiang, NORTHWESTERN UNIVERSITY, Chicago, IL; Nancy Rivera, NORTHWESTERN UNIVERSITY, Evanston, IL; Sara Alharbi, Xiaomin Zhang, NORTHWESTERN UNIVERSITY, Chicago, IL; Guillermo A Ameer, Chicago, IL

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**Microbe-derived Butyrate Activation Of Free Fatty Acid Receptor-3 Reduces Neointimal Hyperplasia After Arterial Injury By Regulating Immune Response Transcription Networks In Endothelial Cells**

Jonathan Jung, Sarbjeet Niraula, James Du, Vivek Pamulapati, Jae Woong Jang, Liqun Xiong, M Luisa Iruela-Arispe, Northwestern Univ - Feinberg Sch of Med, Chicago, IL; Michael R MacArthur, Princeton Univ, Princeton, NJ; Karen J Ho, Northwestern Univ - Feinberg Sch of Med, Chicago, IL

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**TRAIL-TRAIL-R Ligation Regulates EC-pericyte Crosstalk To Generate Stable Microvessel Networks In Ischemia**

Sian P Cartland, Heart Res Inst, The Univ of Sydney, Newtown, Australia; Manisha Patil, Heart Res Inst, The Univ of Sydney, Sydney, Australia; Lauren Boccanfuso, Elaina Kelland, Heart Res Inst, Sydney, Australia; Ralph Patrick, Inst of Molecular Biosciences, The Univ of Queensland, Brisbane, Australia; Pradeep Manuneechi Cholan, Heart Res Inst, The Univ of Sydney, Sydney, Australia; Peter Su, Heart Res Inst and Univ of Technology, Sydney, Australia; Imala Alwis, Heart Res Inst, The Univ of Sydney, Sydney, Australia; Ruth Ganss, Harry Perkins Inst of Medical Res, Nedlands, Australia; Richard P Harvey, Victor Chang Cardiac Res Inst and Sch of Clinical Med, Univ of New South Wales, Sydney, Australia; Thomas S Griffith, Univ of Minnesota, Minneapolis, MN; Joseph Powell, Garvan Inst of Medical Res, Sydney, Australia; Sanjay Patel, Heart Res Inst and Royal Prince Alfred Hosp, Sydney, Australia; Mary M Kavurma, Heart Res Inst, The Univ of Sydney, Sydney, Australia

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**Patients With High Bleeding Risk In A Randomized Controlled Trial Of Alert-based Computerized Decision Support For Stroke Prevention In Atrial Fibrillation: An AF-ALERT II Substudy**

Candrika Dini Khairani, Brigham and Womens Hosp, Boston, MA; Antoine Bejjani, Andre Armero, Nicole D Porio, Darsiya Krishnathasan, Anthony Tristani, Brigham and Women's Hosp, Boston, MA; Julia Davies, Brigham and Womens Hosp, Boston, MA; Samuel Goldhaber, Gregory Piazza, Brigham and Women's Hosp, Boston, MA

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**Sex Differences In The Skeletal Muscle Transcriptome And Proteome Of Chronic Limb Threatening Ischemia Patients**

Makenzie G Kolasa, EAST CAROLINA UNIVERSITY, Greenville, NC; Dean Yamaguchi, Kelsey Fisher-Wellman, Zoe Terwilliger, Greenville, NC; Ananya Pentakota, Greenville, NC; Tonya Zeczycki, ECU, Greenville, NC; Salvatore T Scali, Scott A Berceci, UNIVERSITY OF FLORIDA, Gainesville, FL; Kerri O'Malley, Reema Karnekar, Patricia Brophy, EAST CAROLINA UNIVERSITY, Greenville, NC; Thomas Green, Meek Myoung, Espen Spangenburg, Adam Amorese, EAST CAROLINA UNIVERSITY, Greenville, NC; Brian H Annex, Augusta, GA; Kyoungrae Kim, Univ of Florida, Gainesville, FL; Terence E Ryan, Univ of Florida, Gainesville, FL; Joseph McClung, EAST CAROLINA UNIVERSITY, Greenville, NC

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**Percutaneous Transhepatic Approach To Patent Foramen Ovale Closure In A Patient With Congenital Inferior Vena Cava Interruption**

Somto Nwaedozi, MARSHFIE;D CLINIC, MARSHFIELD, WI; Deepa Soodi, Marshfield, WI; Param Sharma, marshfield clinic, Marshfield, WI; Sudhakar Girotra, MARSHFIE;D CLINIC, MARSHFIELD, WI; Milind Shah, Marshfield Clinic, Marshfield, WI

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**Effects Of Cyclic Peptide Lxw7 Coating On Short Term Vascular Graft Patency Using A Porcine (*Sus Scrofa*) Model**

Matthew Vuoncino, Dake Hao, Christopher Pivetti, UC Davis, Sacramento, CA; Elan Sherazee, Nataliya Bahatyrevich, Sacramento, CA; Brendon Bagley, Amory Koch, David Grant Medical Ctr, Fairfield, CA; Emily Byrd, Zoe Saenz, Monalisa Hassan, Su Yeon Lee, UC Davis, Sacramento, CA; Timothy Guenther, Aijun Wang, Univ of Wisconsin, Madison, WI; Mimmie Kwong, UC Davis, Sacramento, CA

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**Intraoperative Three-dimensional Localization Of Endovascular Stent Relative To Preoperative Computerized Tomography Images Using Spatially-tracked Ultrasound**

William R. Warner, Xiaoyao Fan, Dartmouth Coll, Hanover, NH; Richard J Powell, Kirthi S. Bellamkonda, Dartmouth-Hitchcock Medical Ctr, Lebanon, NH; Keith D. Paulsen, Dartmouth Coll, Hanover, NH

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**Type 2 Cytokines Promote Angiogenesis In Ischemic Muscle Via Endothelial Il-4 $\alpha$  Signaling**

Huixian Li, Wing Tak Wong, The Chinese Univ of Hong Kong, Hong Kong, Hong Kong

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**Distinct Fibroadipogenic Progenitor Populations And Trajectories Characterize Regenerative And Non-regenerative Responses In The Ischemic Limb**

Yueyuan Xu, Duke Univ, Durham, NC; Derek Peters, Duke Univ, New Hill, NC; Kaileen Fei, Qunsheng Dai, Brianna Garrett, Duke Univ, Durham, NC; James Otto, Chapel Hill, NC; Christopher D Kontos, DUKE UNIVERSITY MEDICAL CENTER, Durham, NC; Yarui Diao, Kevin Southerland, Duke Univ, Durham, NC

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**Mechanistic And Therapeutic Implications Of A Non-canonical Amino Acid Starvation Response In Restenosis Post Angioplasty**

Li Yin, Univ of Virginia, Charlottesville, VA; Takuro Shirasu, Japan; Zain Islam, Eric W Kent, Univ of Virginia, Charlottesville, VA; Nicholas Hoyt, Washington, DC; Quang Le, Univ of Virginia, Charlottesville, VA; Yitao Huang, Univ of Virginia, Charlottesville, VA, Charlottesville, VA; Mengxue Zhang, Paranjay Patel, Univ of Virginia, Charlottesville, VA, Charlottesville, VA, Chicago, IL; JungEun Ahn, Guo Lian-Wang, Bowen Wang, Univ of Virginia, Charlottesville, VA

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**Ischemic Rescue By Transplantation Of Vascular Progenitor Cells Isolated From Fat**

Liming Zhao, Stanford Univ, Stanford, CA; Andrew Lee, Peking Univ, Peking, China, China; Koki Sasagawa, Stanford, Stanford, CA; Jan Sokol, Yuting Wang, Stanford Univ, Stanford, CA; Xianxi Huang, Palo Alto, CA; Thomas Ambrosi, Rahul Sinha, Malachia Hoover, Stanford Univ, Stanford, CA; Irving Weissman, Stanford, CA; Joseph C Wu, STANFORD UNIV SCH OF MEDICINE, Stanford, CA; Derrick Wan, Stanford Univ, Stanford, CA; Jun Xiao, Huazhong Univ of Science and Technology, Huazhong, China; Michael Longaker, Patricia K Nguyen, Stanford Univ, Stanford, CA; Charles Chan, Stanford, Stanford, CA

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**Activation Of Yes-associated Protein(yap)/pdz-binding Motif (taz) Signaling By Angiotensin II Contributes To Hypertensive Cardiacand Vascular Remodeling**

Qian Xu, Kunping Zhuo, Xiaotian Zhang, SHENYANG MEDICAL UNIVERSITY, Shenyang, China; Haolin Ren, Dalian Medical Univ, Dalian, China; Lu Zhang, Limin Liu, MingSheng Zhou, SHENYANG MEDICAL UNIVERSITY, Shenyang, China

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**Heterozygous Tissue Factor Deficiency Protects Against Factor VII Activation And Consumption In A Murine Endotoxemia Model**

Marisa A Brake, Sol Schulman, Beth Israel Deaconess Medical Ctr, Boston, MA

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**Using Bicarbonate Based Purge Solution As The Sole Anticoagulation Strategy In Impella 5.5—a Novel Approach**

Anupam Halder, Univ of Pittsburgh Medical Ctr, Harrisburg, PA; Kripa Rajak, UPMC, Harrisburg, PA; Rohan Goswami, Mayo Clinic, Jacksonville, FL; Anas Atrash, UPMC Harrisburg, Harrisburg, PA

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**Effect Of Tumor-derived Extracellular Vesicles On Platelet Function**

Regina Komal Kottana, Anne-Laure Papa, George Washington Univ, Washington, DC

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**Biochemical And Structural Regulation Of The Enzymatic Degradation Of Blood Clots**

Rebecca Risman, Victoria Percoco, Mitali Shroff, Rutgers Univ, Piscataway, NJ; Brittany Bannish, Univ of Central Oklahoma, Edmond, OK; Valerie Tutwiler, Rutgers Univ, Piscataway, NJ

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**Association Between Left Ventricular Ejection Fraction And Thrombus Resolution: Based On A Prospective Study In Patients With Left Ventricular Thrombus Treated By Rivaroxaban**

Qing Yang, Fuwai Hosp, Chinese Acad of Medical Sciences & Pecking Union Medical Coll, Beijing, China; Yan Liang

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**Hsf-1 Enhances Cardioprotective Potential Of Stem Cells Via Exosome Biogenesis And Their Mirna Cargo Enrichment.**

Sameer A Guru, luriechildrens, Chicago, IL; Progyaparamita Saha, Chicago, IL; Rachana Mishra, Zhi-Dong Ge, Ling Chen, Northwestern Univ, Chicago, IL; Antariksh Tulshyan, Univ of Maryland Coll Park, Maryland, IL; Lydia Simms, luriechildrens, Chicago, IL; Emily Ciolak, luriechildrens, Chicago, IL, Elk Grove Village, IL; Jeanette Bailey, luriechildrens, Chicago, IL; Swetha Krishnan, luriechildrens, Chicago, IL, Chicago, IL; Artur Stefanowicz, Lurie Childrens Hosp, Chicago, IL; Vivek Mehta, luriechildrens, Chicago, IL; Agata Bilewska, Lurie Childrens Hosp of Chicago, Chicago, IL; Fu xuebin, luriechildrens, chicago, IL; Muthu Kumar Gunasekran, luriechildrens, Chicago, IL; Sunjay Kaushal, Ann and Robert H. Lurie Childrens, Chicago, IL; Sudhish Sharma, Northwestern Univ, Chicago, IL

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**A Congenital Right Coronary-Pulmonary Artery Fistula In A 61-Year-Old Man; An Uncommon Cause Of Ischemia**

Sidra Kalsoom, Muhammad Adnan Zaman, Conemaugh Memorial Medical Ctr, Johnstown, PA; Muhammad Shoaib Khan, UHS Wilson Medical Ctr, Johnson City, NY; Dinesh Sharma, Conemaugh Memorial Medical Ctr, Johnstown, PA



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**Automated Platform For Large Scale Structural Simulations Of Atherosclerotic Lesions**

Ross Straughan, BWH, Harvard Medical Sch, Boston, MA; Karim Kadry, MIT, Cambridge, MA; Elazer R Edelman, MASSACHUSETTS INSTITUTE TECHNOLOGY, Cambridge, MA; Farhad R Nezami, BWH, Harvard Medical Sch, Boston, MA

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**A Novel Strategy For Reducing Future Events In Myocardial Infarction Survivors**

Yunjia Zhang, Elias Glaros, Sch of Biomedical Sciences, Univ of New South Wales, Sydney, Kensington, Australia; Tzong Hung, Biological Resources Imaging Lab, Univ of New South Wales, Sydney, Kensington, Australia; Richard Zhang, Sch of Biomedical Sciences, Univ of New South Wales, Sydney, Kensington, Australia; Benjamin S Rayner, Children's Cancer Inst, Sydney, New South Wales, Australia; Ben Wu, Jacqueline Ku, Blake J Cochran, Matt Devalaraja, Sch of Biomedical Sciences, Univ of New South Wales, Sydney, Kensington, Australia; Shane Thomas, Sch of Pathology, Univ of New South Wales, Sydney, Kensington, Australia; Kerry Anne Rye, Sch of Biomedical Sciences, Univ of New South Wales, Sydney, Kensington, Australia

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**Racial Difference In Acute Myocardial Infarction-Mortality During Covid-19**

Maan A Awad, West Virginia Univ Hosp, Morgantown, WV; Harshith Thyagaturu, West Virginia Univ, Morgantown, WV; Karthik Gonuguntla, West virginia university, Morgantown, WV; Muchi Ditah Ditah Chobufo, Interfaith Medical Ctr, Brooklyn, NY; Sudarshan balla, Interfaith Medical Ctr, Brooklyn, NY, Morgantown, WV; Marcelino Mederos Liriano, Matthew J Santer, West Virginia Univ Hosp, Morgantown, WV

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**Alteration Of Circulating Ace2-network Related Micrnas In Patients With Covid-19**

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**RNA Interference To Knock Down Endothelial Von Willebrand Factor Protects Against Endothelial Infection By SARS-CoV-2**

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**Development Of A New Humanized Ace2 Mouse Model**

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**Molecular Mechanisms of Covid-19 in the Lungs and Heart: Insights from Spatial Transcriptomics**

Stefan Veizades, Emmanouil G Solomonidis, Ziwen Li, Rainha Passi, Bronwyn Berkeley, Katherine R Stewart, Daniel Perez-Vicencio, Anna K Barton, Univ of Edinburgh, Edinburgh, United Kingdom; Stephanie Sellers, James Hogg Res Ctr, Vancouver, BC, Canada; Nicholas L Mills, David Newby, Marc R Dweck, David A Dorward, Christopher D Lucas, Andrew H Baker, Mairi Brittan, Univ of Edinburgh, Edinburgh, United Kingdom

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**Inflammatory Macrophages Dictate Fibroblast Function Via Epigenetic Reprogramming In Diabetic Wounds**

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**Cardiac Myxoma Tumor Dynamics—a Mathematical Monte Carlo Simulation As A Basis For Tumor Vaccine**

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**Neointima Abating Yet Endothelium Preserving—An Adventitia-localized Nanoformulation To Inhibit The Epigenetic Writer Dot1L**

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**Cell Populations In Pre-access Veins And Arteriovenous Fistulas: A Single Cell Perspective**

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**Venous Smooth Muscle Cell Reprogramming During Arteriovenous Fistula Maturation**

Chunhui Wang, Wei Zhang, Medical Coll of Georgia at Augusta Univ, augusta, GA; Weichang Zhang, New Haven, CT; Huidong Shi, Medical Coll of Georgia at Augusta Univ, AUGUSTA, GA; Kunzhe Dong, Augusta Univ, Martinez, GA; Harold Singer, ALBANY MEDICAL COLLEGE, Albany, NY; Alan Dardik, Yale Univ, New Haven, CT; Xiaochun Long, Augusta Univ, Augusta, GA

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**ESAM Deficiency-related Coronary Microvascular Dysfunction Contributes To Left Ventricle Diastolic Dysfunction In HFpEF**

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**Spinning Disk Confocal Intravital Imaging Revealed Platelet And Neutrophil Dynamics In Microvascular Obstruction Following Ischemia-reperfusion Injury And Their Synergistic Interventions**

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**Exercise-stimulated Resolvin Biosynthesis In Adipose Tissue Is Prevented By High Fat Diet-induced Adrenergic Insufficiency**

Jason Hellmann, Ernesto Pena Calderin, Will Lynch, Jing-Juan Zheng, Univ of Louisville, Louisville, KY; Brian Sansbury, Louisville, KY; Matthew R Spite, HARVARD MEDICAL SCHOOL, Boston, MA; Aruni Bhatnagar, Univ of Louisville, Louisville, KY; Bradford G Hill, Univ Of Louisville, Louisville, KY

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**Ligands Of The Receptor For Advanced Glycation End Products (Rage) Induce Trained Immunity In Mouse Bone Marrow-derived Macrophages (Bmdms)**

Vikas Kumar, Lander Egaña-Gorroño, Paul F. Gugger, Ramesh Nimma, Ann Marie Schmidt, NYU Grossman Sch of Med, New York, NY

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**Lung Microbiome Dysbiosis in Schistosomiasis-associated Pulmonary Arterial Hypertension**

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**Caspase-4/11 Promotes A High-fat Diet And Chronic Kidney Disease-accelerated Vascular Inflammation Via Novel Caspase-4/11-il-1b Two-step Trained Immunity**

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**Lactobacillus *Plantarum* 299v Supplementation Does Not Acutely Improve Endothelium Dependent Vasodilation**

Emily Wendel, Michael Aljadah, Medical Coll of Wisconsin, Milwaukee, WI; Michael E Widlansky, MEDICAL COLLEGE OF WISCONSIN, Milwaukee, WI

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**Angiogenic Blood Vessels Reconfigure/ Attenuate Hypoxic Tumor Microenvironments In A Quantitative *In Vitro* Model**

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**The Critical Role Of Intergenic Enhancers In Myocardin Transcription *In Vivo***

Jaser Doja, Susan Griffin, Orazio Slivano, William Bryant, Augusta Univ, Augusta, GA; Qing Lyu, Chongqing Inst of Green and Intelligent Technology, Chongqing, China; Xiaochun Long, Joseph M Miano, Augusta Univ, Augusta, GA

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**Cardiac Cysteine And Glycine Rich Protein 3 Induces Renal Myogenesis Leading To CKD**

Yoshio Funahashi, Jessica Hebert, Adam Munhall, Tahnee Groat, Michael P Hutchens, Oregon Health and Science Univ, Portland, OR

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**Divergent Roles For Endothelial Cell Marcks In Endothelial Cell Regeneration And Signaling After Arterial Injury And Ischemia**

Georg J Furtmüller, Subhradip Mukhopadhyay, Olivia P Eichelberger, Yvetan Moreau, Jathiya Bailey, Rajabrata Sarkar, Univ of Maryland Sch of Med, Baltimore, MD

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**Mechanical Tension Decreases Fibrillin-1 Calcium Binding And Stiffness**

Stephen Haller, Andrew Dudley, Univ of Nebraska Medical Ctr, Omaha, NE

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**Disrupting Neointimal Formation in Mouse And Human Vascular Tissues Through Targeting Connexin 43**

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**The Chromatin Remodeler Brg1 Drives Adventitial Progenitor Cell Myofibroblast Differentiation And Vascular Fibrosis**

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**In Vitro Implication Of Mechanisms Mediating Ultrasound-enhanced Vascular Permeability**

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**Targeting Metabolic Alterations To Boost Smooth Muscle Cell Differentiation And Prevent Moyamoya-like Cerebrovascular Disease**

Callie Kwartler, UTHSC-HOUSTON, Houston, TX; Anita Kaw, Houston, TX; Suravi Majumder, UTHealth, Houston, Houston, TX; Amelie C Pinard, UTHealth, Houston, TX; Jamie Mae Wright, UT HEALTH, Houston, TX; Caroline Kernell, UTHealth, Houston, TX; Dianna M Milewicz, Univ of Texas Health Science, Houston, TX

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**Protecting The Saphenous Vein Endothelium During Bypass Surgery**

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**Spatiotemporal Transcriptomics Analysis Of Central Venous Stenosis Suggests TNF-alpha As A Potential Therapeutic Target In Chronic Kidney Disease Rats**

Saran Lotfollahzadeh, Boston Univ Sch of Med, Brighton, MA; Esha Shafiq, Najla Elzinad, Boston Univ, Boston, MA; Vipul Chitalia, Boston, MA

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**Volumetric Ultrasound Analysis of the Abdominal Aorta Enhances Strain Assessment in Mice**

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**Endothelial And Smooth Muscle Cell Interaction In The Maintenance Of Pathological Muscularization In Pulmonary Hypertension**

Fatima Zahra Saddouk, Andrew kuzemczak, YALE UNIVERSITY., New Haven, CT; Junichi Saito, Yale Univ, East Haven, CT; Daniel Greif, Yale Univ Sch of Med, New Haven, CT

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**Plasminogen Activator Inhibitor-1 (PAI-1) Increases Mitochondrial Membrane Potential In Vascular Smooth Muscle Cells And Coronary Arteries**

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**Injury Induced Connexin 43 Expression Plays A Role In Vascular Endothelial Wound Healing**

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**Wnt16 Promotes Smooth Muscle Mitochondrial Function And Contractile Phenotype Via Taz (Wwtr1) Relays, Limiting Aneurysmal Dilatation Of Ascending Aorta**

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**Smooth Muscle Cell-specific MMP-3 Deletion Reduces Osteogenic Transformation and Medial Artery Calcification**

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**Essential Roles of Prdm16 In Repression Of Venous Marker In The Artery**

Michael Thompson, CINCINNATI CHILDRENS HOSPITAL, Cincinnati, OH; Masahide Sakabe, CCHMC, Cincinnati, OH; Mei Xin, CINCINNATI CHILDRENS HOSPITAL, Cincinnati, OH

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**The Proangiogenic Effect Of Extracellular Camp Through Notch Independent Mechanism**

Jasmine Xu, Aab Cardiovascular Res Inst, Rochester, NY; Shumin Wang, CVRI, Univ of Rochester, Rochester, NY; Yishuai Zhang, Aab CVRI in URM, Rochester, NY; Chen Yan, Univ of Rochester, Rochester, NY

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**Endothelial Glucocorticoid Receptor Deficiency Affects Arteriovenous Fistula Maturation**

Weichang Zhang, Yale Univ, New Haven, CT; Luis Gonzalez, Carly Thaxton, Yuichi Ohashi, yukihiko aoyagi, Hamden, CT; Yangzhouyun Xie, New Haven, CT; Yujun Cai, Yale Sch of Med, New Haven, CT; Chang Shu, The Second Xiangya Hosp of Central South Univ, New Haven, CT; Julie Goodwin, Alan Dardik, Yale Univ, New Haven, CT

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**Identification And Functional Characterization of Novel MicroRNAs Targeting Epsins For Angiogenesis And Vascular Remodeling**

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**A Silent Inferior Wall ST Segment Elevation Myocardial Infarction**

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**Disrupted Interaction Between Neutrophils And Regulatory T-cells In Patients With Coronary Artery Disease**

Maike Schneider, Camilla Skoglund, Linköping Univ, Linköping, Sweden; Anna Lundberg, Inst for medicine and health, Linköping, Sweden; Rosanna W Chung, LINKOPING UNIVERSITY HOSPITAL, Linköping, Sweden; Lena Jonasson, Linköping Univ, Linköping, Sweden

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**CHROMR Governs Interferon Signaling And Cholesterol Homeostasis In Human Atherosclerotic Plaque**

Coen van Solingen, Yannick Cyr, Jose Gabriel Barcia Duran, Morgane Gourvest, Tracy Zhang, Chiara Giannarelli, Kathryn J Moore, NYU Langone Health, New York, NY

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**Transgelin Deficiency Is Associated With Elevated Low-density Lipoprotein Cholesterol And Atherogenesis In Mice.**

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**Time Restricted Feeding Regulates Cholesterol Efflux And Atherosclerosis In Macrophage-specific Bmal1 Deficient Mice**

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**Novel Human Variants Of SR-B1 Impact HDL-cholesterol Clearance**

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**Short Hydrocarbon-Stapled Apolipoprotein E Mimetic Peptides Enhance Lipoprotein Uptake**

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**Use Of Extracellular Substrates By Alveolar Type 2 Pneumocytes For Surfactant Lipid Synthesis.**  
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**HDL Apolipoproteomic Score, Cardiometabolic Risk, And Exercise Training**

Juan S. Miranda Maravi, Charles S. Schwartz, Prasun K Dev, Univ of South Carolina, Columbia, SC; Jacob L Barber, Beth Israel Deaconess, Jamaica Plain, MA; Riley J Reasons, Univ of South Carolina, Columbia, SC; Ryan W Pearce, Michael J Mcphaul, Quest Diagnostics Cardiometabolic Ctr of Excellence, Cleveland, OH; Robert E Gerszten, Beth Israel Deaconess Medical Ctr, Boston, MA; Anand Rohatgi, UT Southwestern Medical Ctr, Dallas, TX; Claude Bouchard, Pennington Biomedical Res Ctr, Baton Rouge, LA; Timothy S Collier, Quest Diagnostics Cardiometabolic Ctr of Excellence, Cleveland, OH; Mark A Sarzynski, Univ of South Carolina, Columbia, SC

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**ApoA-I/SR-BI Double Knockout Mice Plasma Is Rich In Very Large HDL With High Free Cholesterol**

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**Development Of An In Vitro Model For The Study Of Polarized Surfactant Lipid Secretion In Pulmonary Type 2 Cells**

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**Incorporation Of Phosphatidylserine Enhanced Anti-inflammatory Effects Of Synthetic High Density Lipoproteins**

Minzhi Yu, Kristen H Dorsey, Anna Schwendeman, Univ of Michigan, Ann Arbor, MI

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**Improved Myocardial Blood Flow And Arteriogenesis With Calpain Inhibition May Be Mediated By Vascular Endothelial Growth Factor And Fibroblast Growth Factor Angiogenic Pathways In A Large-animal Model Of Metabolic Syndrome And Chronic Myocardial Ischemia**

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**Hepatic Oxalate Overproduction As A Driver And Therapeutic Target In NASH And Atherosclerosis**

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**A New Volumetric Quantification Method for Atherosclerosis Using Histological Sections**

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**Glp-2 Predicts Cardiovascular Outcomes In Patients With Myocardial Infarction And Increases Atherosclerosis In Mice**

Maximillian Sausen, Robert Mertens, Luis Quintana, Marcia Rueckbeil, Paul Idel, Nadim Tabaza, Naresh Ganesh, Susanne Just, Maria Arrivas, Julia Moellmann, Jens Spießhoefer, Univ Hosp Aachen, Aachen, Germany; Moritz B Biener, UNIVERSITY HOSPITAL HEIDELBERG, Heidelberg; Evangelos Giannitsis, Univ of Heidelberg, Heidelberg; Hugo Katus, Univ of Heidelberg, Heidelberg, Heidelberg; Daniel J Drucker, Univ of Toronto; Nikolaus Marx, UNIVERSITY HOSPITAL AACHEN, Aachen; Michael Lehrke, Univ of Aachen, Aachen; Florian Kahles, Univ Hosp Aachen, Aachen, Germany

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**Inhibitory And Metabolic Effects Of Diabetes On Yolk Sac-derived Endothelial-macrophage Progenitors In Postnatal Murine Tissues**

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**PTEN Protects Against Vascular Smooth Muscle Cell Pro-inflammatory Dedifferentiation Through Metabolic Rewiring**

Sizhao Lu, Austin Jolly, Allison Dubner, Tysen Noble, Raphael Nemenoff, Karen Moulton, Mary CM Weiser-Evans, Univ of Colorado Anschutz Medical Campus, Aurora, CO

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**Loss of Smooth Muscle Cell Nogo-B Protects from Atherosclerosis Plaque Development**

Andrea Palos-Jasso, Dan Shan, Margaret Baldini, Temple Univ Lewis Katz Sch of Med, Philadelphia, PA; Xin Tian, Yale Univ Sch of Med, New Haven, CT; Jun Yu, Temple Univ Lewis Katz Sch of Med, Philadelphia, PA

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**Circulating Proteomics And Endothelial Cell Phenotype In Patients With Type 2 Diabetes Mellitus (T2DM)**

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**Cardio-renal Effect of Dapagliflozin Alone Versus Dapagliflozin- Saxagliptin Combination In Type 2 Diabetes (t2dm) Subjects**

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**The Mechanism of Impaired Coronary Collateral Growth In Metabolic Syndromes**

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**Endothelial-specific Nck1 Deletion Reduces Proinflammatory Endothelial Activation And Atherosclerosis Without Affecting Ischemic Angiogenesis**

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**Serine Hydroxymethyltransferase 2 Regulates Mitochondrial Function And Ceramide Metabolism In Macrophages During Atherosclerosis**

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**Long Noncoding RNA Regulation Of Inflammation In Atherosclerosis**

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**Gene Co-expression And Meta-analysis Of Human Coronary Artery Disease Identified A Novel Mechanism Of Macrophage Activation Through Lncrna SPANXA2-OT1/mir-338/IL-8 Triad**

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**Blockade Of IL-6 Signaling Alleviates Atherosclerosis in Tet2 Deficient Clonal Hematopoiesis**

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**Genetic Deletion of Neutrophil Elastase Does Not Alter Lesions in Mice with Atherosclerosis Induced by Aav8-mediated Over-expression of PCSK9**

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**Atherosclerosis Is A Smooth Muscle Cell-driven Tumor-like Disease**

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**Accurate Quantification Of Peptides In The Renin Angiotensin Aldosterone System By Mass Spectrometry**

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**Dioxin-induced Smooth Muscle Cell Phenotypic Modulation And Atherosclerosis Worsens In The Absence Of AHR**

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**Autophagy Activation Promotes Atherosclerosis Regression**

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**Epha2 Ligand-dependent And Ligand-independent Signaling in Vascular Smooth Muscle Cell Proliferation And Migration**

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**The Development of New Therapies Targeting Pneumonia-accelerated Atherosclerosis**

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**Murine Atherosclerosis Data Integration: The Sum Is Greater Than The Parts**

Yihua Wang, Molecular Cardiology Res Inst, Boston, MA; Megan M Shuey, Vanderbilt Univ Medical Ctr, Boston, MA; Rachel Xiang, Natl Cancer Inst, Bethesda, MD; Joshua A Beckman, UT Southwestern, Dallas, TX; Quinn Wells, VANDERBILT UNIVERSITY, Nashville, TN; Iris Z Jaffe, TUFTS MEDICAL CENTER, Boston, MA

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**Implementation Of Ribosomal Tagging Strategies To Analyze Smooth Muscle Specific Rna Expression In Mouse Models Of Atherosclerosis**

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**Specific Removal of Oxidized Cholesterol with a Cyclodextrin Dimer Drug Candidate Towards Reversing Atherosclerosis**

Daniel Montgomery Clemens, Amelia Anderson, Darren Dinh, Prerna Bhargava, Fadzai Teramayji, Ana Silberg, Keivan Sadrerafi, Noah Rosenberg, Cyclarity Therapeutics, Inc., Novato, CA; Milo Malanga, Carbohyde Co., Budapest, Hungary; Rebeca Garcia-Fandiño, Ángel Piñeiro, Univ de Santiago de Compostela, Santiago de Compostela, Spain; Matthew O'Connor, Cyclarity Therapeutics, Inc., Novato, CA

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**Plasma Carotenoids Are Not Independent Determinants of Subclinical Atherosclerosis in Coronary And Carotid Arteries**

Jan Neelissen, Lena Jonasson, Per Leanderson, Linköping Univ, Linköping, Sweden; Rosanna W Chung, LINKOPING UNIVERSITY HOSPITAL, Linköping, Sweden

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**IL-19 is a Lymphokine That Induces Prox1-dependent Lymphangiogenesis and Permeability**

Amanda Peluzzo, Tani Leigh, Sheri E Kelemen, Amanda St. Paul, Cali Corbett, Michael Autieri, Temple Univ LKSOM, Philadelphia, PA

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**Pharmacovigilance Analysis of FDA Adverse Event Reporting System (FAERS) Events For Inclisiran**

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**Effects Of Canagliflozin On Myocardial Microvascular Density, Oxidative Stress, And Proteomic Profile**

Sharif A Sabe, Cynthia M. Xu, Mohamed Sabra, Dwight D. Harris, Mark Broadwin, Debolina Banerjee, M. Ruhul Abid, Frank W. Sellke, Cardiovascular Res Ctr, Alpert Medical Sch of Brown Univ and Rhode Island Hosp, Providence, RI

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**Genetically Proxied Inhibition Of L-2-Hydroxyglutarate Dehydrogenase Reduces The Risk Of Coronary Artery Disease: A Mendelian Randomization And Network Medicine Study**

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**Elabela Ameliorates Atherogenesis Through Restoring The M1/M2 Macrophage Balance In Apoe<sup>-/-</sup> Mice**

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**Cerebral Small Vessel Disease in Children With Sickle Cell Disease**

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**Impact Of Healthcare Coverage on Ischemic Heart Disease Mortality**

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**Integration of Population Genetic and Human Knockout Studies with Smooth Muscle Cell Lineage Tracing in Mouse Models Identifies Novel Targets for Atherosclerosis And Cardiovascular Risk.**

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**A Middle-aged Female with Myocardial Infarction in The Setting Of Spontaneous Coronary Artery Dissection**

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**Smooth Muscle Cell Estrogen Receptor Alpha Deletion Protects Against Aging-associated Arterial Stiffness in Females**

Jennifer J DuPont, Casey Turner, Gregory Martin, TUFTS MEDICAL CENTER, Boston, MA; Zhe Sun, Michael Hill, Univ of Missouri, Columbia, MO

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**Positional Transcriptomics Defines Regionally Restricted Sex-specific Differences of The Vessel Wall**

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