

June 04, 2021	<a href="#">Fast super-resolution ultrasound microvessel imaging using spatiotemporal data with deep fully convolutional neural network</a>	Ultrasound localization microscopy (ULM) has been proposed to image microvasculature beyond the ultrasound diffraction limit.
January 04, 2021	<a href="#">A Protocol for Evaluating Vital Signs and Maternal-Fetal Parameters Using High-Resolution Ultrasound in Pregnant Mice</a>	Pregnancy is a unique physiological state in which two individuals coexist: the mother and the fetus.
January 01, 2019	<a href="#">Pharmacological inhibition of Notch signaling regresses pre-established abdominal aortic aneurysm</a>	Abdominal aortic aneurysm (AAA) is characterized by transmural infiltration of myeloid cells at the vascular injury site.
January 01, 2018	<a href="#">Development and growth trends in angiotensin II-induced murine dissecting abdominal aortic aneurysms</a>	Abdominal aortic aneurysms are pathological dilations that can suddenly rupture, causing more than 15,000 deaths in the U.S. annually.
January 01, 2018	<a href="#">Impairment of an Endothelial NAD + -H<sub>2</sub>S Signaling Network Is a Reversible Cause of Vascular Aging</a>	A decline in capillary density and blood flow with age is a major cause of mortality and morbidity.
November 29, 2021	<a href="#">Involvement of Endoplasmic Reticulum Stress-Mediated Activation of C/EBP Homologous Protein in Aortic Regurgitation-Induced Cardiac Remodeling in Mice</a>	Aortic regurgitation (AR) is a volume overload disease causing eccentric left ventricular (LV) hypertrophy and eventually heart failure.
November 29, 2021	<a href="#">The mitochondria-targeted antioxidant MitoQ attenuated PM2.5-induced vascular fibrosis via regulating mitophagy</a>	Short-term PM2.5 exposure is related to vascular remodeling and stiffness.
November 02, 2021	<a href="#">[18F]fluorothymidine uptake in the porcine pancreatic elastase-induced model of abdominal aortic aneurysm</a>	The porcine pancreatic elastase (PPE) model is a common preclinical model of abdominal aortic aneurysms (AAA).
November 02, 2021	<a href="#">3D-Printed Scaffolds Promote Angiogenesis by Recruiting Antigen-Specific T Cells</a>	The immune response after implantation is a primary determinant of the tissue-repair effects of three-dimensional (3D)-printed scaffolds.
November 02, 2021	<a href="#">Downregulated developmental processes in the postnatal right ventricle under the influence of a volume overload</a>	The molecular atlas of postnatal mouse ventricular development has been made available and cardiac regeneration is documented to be a downregulated pr
October 19, 2021	<a href="#">Deletion of BK channels decreased skeletal and cardiac muscle function but increased smooth muscle contraction in rats</a>	Large conductance calcium-activated potassium channel (BK channel) is widely expressed in skeletal muscle, myocardium, smooth muscle and other muscle
October 19, 2021	<a href="#">Evaluation of fine particulate matter on vascular endothelial function in vivo and in vitro</a>	Ambient fine particulate matter (PM2.5) and high-fat diet (HFD) are linked to the development of atherosclerosis.
October 19, 2021	<a href="#">Cyclic nucleotide phosphodiesterase 1C contributes to abdominal aortic aneurysm</a>	Abdominal aortic aneurysm (AAA) is characterized by aorta dilation due to wall degeneration, which mostly occurs in elderly males.
October 19, 2021	<a href="#">Silencing IL12p35 Promotes Angiotensin II-Mediated Abdominal Aortic Aneurysm through Activating the STAT4 Pathway</a>	Background and Purpose.
October 19, 2021	<a href="#">Biomechanical consequences of compromised elastic fiber integrity and matrix cross-linking on abdominal aortic aneurysmal enlargement</a>	Abdominal aortic aneurysms (AAAs) are characterized histopathologically by compromised elastic fiber integrity, lost smooth muscle cells or their func
October 19, 2021	<a href="#">Mutation of the 5'-untranslated region stem-loop mRNA structure reduces type I collagen deposition and arterial stiffness in male obese mice</a>	Arterial stiffening, a characteristic feature of obesity and type 2 diabetes, contributes to the development and progression of cardiovascular disease

October 18, 2021	<a href="#">CCL7 contributes to angiotensin II-induced abdominal aortic aneurysm by promoting macrophage infiltration and pro-inflammatory phenotype</a>	Chemokine C-C motif ligand 7 (CCL7), a member of CC chemokine subfamily, plays pivotal roles in numerous inflammatory diseases.
October 18, 2021	<a href="#">Artesunate Attenuated the Progression of Abdominal Aortic Aneurysm in a Mouse Model</a>	Background: The inflammatory reaction is an important mechanism of pathogenesis of abdominal aortic aneurysm (AAA).
October 18, 2021	<a href="#">Red Blood Cell and Endothelial eNOS Independently Regulate Circulating Nitric Oxide Metabolites and Blood Pressure</a>	Background: Current paradigms suggest that nitric oxide (NO) produced by endothelial cells (ECs) through endothelial nitric oxide synthase (eNOS) in t
October 18, 2021	<a href="#">Activation of Smad2/3 signaling by low fluid shear stress mediates artery inward remodeling</a>	Endothelial cell (EC) sensing of wall fluid shear stress (FSS) from blood flow governs vessel remodeling to maintain FSS at a specific magnitude or se
August 24, 2021	<a href="#">Ultrasensitive Carbon Nanotubes for Photoacoustic Imaging of Inflamed Atherosclerotic Plaques</a>	Disruption of vulnerable atherosclerotic plaques often leads to myocardial infarction and stroke, the leading causes of morbidity and mortality in the
August 24, 2021	<a href="#">Soluble epoxide hydrolase deletion attenuated nicotine-induced arterial stiffness via limiting the loss of SIRT1</a>	We presently show that sEH knockout repressed nicotine-induced arterial stiffness and extracellular matrix remodeling via SIRT1-induced YAP deacetylat
August 24, 2021	<a href="#">Anti-atherogenic effect of 10% supplementation of anchovy (Engraulis encrasicolus) waste protein hydrolysates in apoe-deficient mice</a>	Fish protein consumption exerts beneficial metabolic effects on human health, also correlat-ing with a decreased risk for cardiovascular disease.
August 09, 2021	<a href="#">A Thrombin-Responsive Nanoprobe for in Vivo Visualization of Thrombus Formation through Three-Dimensional Optical/Computed Tomography Hybrid Imaging</a>	Early spontaneous detection of thrombin activation benefits precise theranostics for thrombotic vascular disease.
August 09, 2021	<a href="#">Bioinspired therapeutic platform based on extracellular vesicles for prevention of arterial wall remodeling in hypertension</a>	Arterial stiffness due to the vessel remodeling is closely linked to raised blood pressure, and its physiopathologic mechanism is still not fully unde
July 07, 2021	<a href="#">Senolytic agents lessen the severity of abdominal aortic aneurysm in aged mice</a>	Age is a major risk factor for abdominal aortic aneurysm (AAA), for which treatment options are limited to surgical intervention for large AAA and wat
July 07, 2021	<a href="#">In vivo photoacoustic imaging for monitoring treatment outcome of corneal neovascularization with metformin eye drops</a>	Corneal neovascularization (CNV) compromises corneal avascularity and visual acuity.
June 28, 2021	<a href="#">Chronic stimulation of group II metabotropic glutamate receptors in the medulla oblongata attenuates hypertension development in spontaneously hypertensive rats</a>	Baroreflex dysfunction is partly implicated in hypertension and one responsible region is the dorsal medulla oblongata including the nucleus tractus s
June 25, 2021	<a href="#">Aortic disease in Marfan syndrome is caused by overactivation of sGC-PRKG signaling by NO</a>	Thoracic aortic aneurysm, as occurs in Marfan syndrome, is generally asymptomatic until dissection or rupture, requiring surgical intervention as the
June 25, 2021	<a href="#">Contrast enhanced ultrasound molecular imaging of activated platelets in the progression of atherosclerosis using microbubbles bearing the von Willebrand factor A1 domain</a>	Platelet endothelial interactions have been linked to increased inflammatory activation and a prothrombotic state in atherosclerosis.
June 10, 2021	<a href="#">Doxorubicin induces arterial stiffness: A comprehensive in vivo and ex vivo evaluation of vascular toxicity in mice</a>	Arterial stiffness is an important predictor of cardiovascular risk.

June 10, 2021	<a href="#">Mst1/2 Kinases Inhibitor, XMU-MP-1, Attenuates Angiotensin II-Induced Ascending Aortic Expansion in Hypercholesterolemic Mice</a>	Background: Ascending and abdominal aortic aneurysms (AAs) are asymptomatic, permanent dilations of the aorta with surgical intervention as the current
June 10, 2021	<a href="#">Systemic delivery of targeted nanotherapeutic reverses angiotensin II-induced abdominal aortic aneurysms in mice</a>	Abdominal aortic aneurysm (AAA) disease causes dilation of the aorta, leading to aortic rupture and death if not treated early.
June 09, 2021	<a href="#">Gelatin coating promotes in situ endothelialization of electrospun polycaprolactone vascular grafts</a>	Rapid endothelialization is crucial for in situ tissue engineering vascular grafts to prevent graft failure in the long-term.
June 09, 2021	<a href="#">Stiffness of aortic arch and carotid arteries increases in ApoE-knockout mice with high-fat diet: Evidence from echocardiography</a>	Arterial stiffness is an effective predictor of atherosclerosis.
June 09, 2021	<a href="#">Chemerin-9 Attenuates Experimental Abdominal Aortic Aneurysm Formation in ApoE<sup>-/-</sup> Mice</a>	Chronic inflammation plays an essential role in the pathogenesis of abdominal aortic aneurysm (AAA), a progressive segmental abdominal aortic dilation
June 07, 2021	<a href="#">Three-dimensional visualization and improved quantification with super-resolution ultrasound imaging - Validation framework for analysis of microvascular morphology using a chicken embryo model</a>	The purpose of this study was to improve the morphological analysis of microvascular networks depicted in three-dimensional (3D) super-resolution ultr
June 07, 2021	<a href="#">SNF5 promotes IL-1<math>\beta</math> expression via H3K4me1 in atherosclerosis induced by homocysteine</a>	Homocysteine (Hcy) is a strong and independent risk factor of atherosclerosis.
June 07, 2021	<a href="#">Loxl4 abrogation does not exaggerate angiotensin ii-induced thoracic or abdominal aortic aneurysm in mice</a>	It has been shown that thoracic aortic aneurysm and dissection (TAAD) could be a Mendelian trait caused by a single gene mutation.
June 04, 2021	<a href="#">Measurement of total liver blood flow in intact anesthetized rats using ultrasound imaging</a>	This short report describes the measurement of total liver blood flow in commonly used laboratory rats using the relatively non-invasive approach of u
June 04, 2021	<a href="#">The effect of hypoxia-mimicking responses on improving the regeneration of artificial vascular grafts</a>	Cellular transition to hypoxia following tissue injury, has been shown to improve angiogenesis and regeneration in multiple tissues.
June 04, 2021	<a href="#">Rolipram prevents the formation of abdominal aortic aneurysm (Aaa) in mice: pde4b as a target in AAA</a>	Abdominal aortic aneurysm (AAA) is a common life-threatening condition characterized by exacerbated inflammation and the generation of reactive oxygen
June 04, 2021	<a href="#">Activation of angiotensin type 2 receptor attenuates testosterone-induced hypertension and uterine vascular resistance in pregnant rats†</a>	Preeclampsia is a pregnancy-related hypertensive disorder with unclear mechanisms.
June 04, 2021	<a href="#">Inhibition of NOX1 Mitigates Blood Pressure Increases in Elastin Insufficiency</a>	Elastin (ELN) insufficiency leads to the cardiovascular hallmarks of the contiguous gene deletion disorder, Williams–Beuren syndrome, including hypert
May 28, 2021	<a href="#">Accelerated atherosclerosis caused by serum amyloid A response in lungs of ApoE<sup>-/-</sup> mice</a>	Airway exposure to eg particulate matter is associated with cardiovascular disease including atherosclerosis.
May 28, 2021	<a href="#">Chemotherapy-induced acute vascular injury involves intracellular generation of ROS via activation of the acid sphingomyelinase pathway</a>	Several categories of chemotherapy confer substantial risk for late-term vascular morbidity and mortality.

March 25, 2021	<a href="#">Acute glucose influx-induced mitochondrial hyperpolarization inactivates myosin phosphatase as a novel mechanism of vascular smooth muscle contraction</a>	It is well-established that long-term exposure of the vasculature to metabolic disturbances leads to abnormal vascular tone, while the physiological r
March 12, 2021	<a href="#">Histone citrullination as a novel biomarker and target to inhibit progression of abdominal aortic aneurysms</a>	Neutrophil extracellular traps (NETs) have been implicated in the pathogenesis of abdominal aortic aneurysms (AAAs).
March 08, 2021	<a href="#">Sonopermeation Enhances Uptake and Therapeutic Effect of Free and Encapsulated Cabazitaxel</a>	Delivery of drugs and nanomedicines to tumors is often heterogeneous and insufficient and, thus, of limited efficacy.
March 01, 2021	<a href="#">Analysis of Syk/PECAM-1 signaling pathway in low shear stress induced atherosclerosis based on ultrasound imaging</a>	Background and Objective: Low shear stress (LSS) has been demonstrated to be involved in function of vascular endothelial cells.
March 01, 2021	<a href="#">Animal Model Dependent Response to Pentagalloyl Glucose in Murine Abdominal Aortic Injury</a>	Abdominal aortic aneurysms (AAAs) are a local dilation of the aorta and are associated with significant mortality due to rupture and treatment complic
March 01, 2021	<a href="#">P-Selectin Glycoprotein Ligand-1 Deficiency Protects Against Aortic Aneurysm Formation Induced by DOCA Plus Salt</a>	Purpose: P-selectin glycoprotein ligand-1 (PSGL-1) acts as a crucial regulator for the inflammatory cells infiltration by mediating the adhesion of le
March 01, 2021	<a href="#">Digestive n-6 Lipid Oxidation, a Key Trigger of Vascular Dysfunction and Atherosclerosis in the Western Diet: Protective Effects of Apple Polyphenols</a>	Scope: A main risk factor of atherosclerosis is a Western diet (WD) rich in n-6 polyunsaturated fatty acids (PUFAs) sensitive to oxidation.
March 01, 2021	<a href="#">A Dual Role of Heme Oxygenase-1 in Angiotensin II-Induced Abdominal Aortic Aneurysm in the Normolipidemic Mice</a>	Abdominal aortic aneurysm (AAA) bears a high risk of rupture and sudden death of the patient.
February 23, 2021	<a href="#">Developmental origins of mechanical homeostasis in the aorta</a>	Background: Mechanical homeostasis promotes proper aortic structure and function.
February 22, 2021	<a href="#">Aortic Strain Correlates With Elastin Fragmentation in Fibrillin-1 Hypomorphic Mice</a>	Background: Diagnosis requires that clinicians communicate and share patient information in an efficient manner.
February 19, 2021	<a href="#">Ultrasound molecular imaging of atherosclerosis for early diagnosis and therapeutic evaluation through leucocyte-like multiple targeted microbubbles</a>	Cardiovascular diseases resulting from atherosclerosis have become a serious threat to human health.
January 18, 2021	<a href="#">TRPV5 attenuates abdominal aortic aneurysm in mice by regulating KLF4-dependent phenotype switch of aortic vascular smooth muscle cells</a>	Abdominal aortic aneurysm (AAA) is a fatal vascular disease with insidious symptoms. However, the mechanism behind its development remains unclear.
January 18, 2021	<a href="#">Bone marrow-derived mesenchymal stem cells microvesicles stabilize atherosclerotic plaques by inhibiting NLRP3-mediated macrophage pyroptosis</a>	Rupture of atherosclerotic plaques constitutes the major cause of thrombosis and acute ischemic coronary syndrome.
January 14, 2021	<a href="#">Assessing model mismatch and model selection in a Bayesian uncertainty quantification analysis of a fluid-dynamics model of pulmonary blood circulation</a>	This study uses Bayesian inference to quantify the uncertainty of model parameters and haemodynamic predictions in a one-dimensional pulmonary circula
January 14, 2021	<a href="#">CFTR plays an important role in the regulation of vascular resistance and high-fructose/salt-diet induced hypertension in mice</a>	Background: The pathophysiological roles of cystic fibrosis transmembrane-conductance regulator (CFTR) Cl <sup>-</sup> channels in the regulation of blood pressur

January 14, 2021	<a href="#">A validated mouse model capable of recapitulating the protective effects of female sex hormones on ascending aortic aneurysms and dissections (AADs)</a>	Fewer females develop AADs (ascending aortic aneurysms and dissections) and the reasons for this protection remain poorly understood.
January 14, 2021	<a href="#">Thick PCL Fibers Improving Host Remodeling of PGS-PCL Composite Grafts Implanted in Rat Common Carotid Arteries</a>	Vasculopathy and the consequential ischemia are major medical challenges. Grafting is an effective treatment to vascular occlusion.
January 04, 2021	<a href="#">Specific inhibition of SHP2 suppressed abdominal aortic aneurysm formation in mice by augmenting the immunosuppressive function of MDSCs</a>	Aims: To address the roles of SHP2 in regulating angiotensin II (Ang II) induced abdominal aortic aneurysm (AAA) and the potential molecular mechanism
January 04, 2021	<a href="#">Vascular protective effect of aspirin and rivaroxaban upon endothelial denudation of the mouse carotid artery</a>	While in recent trials the dual pathway inhibition with aspirin plus rivaroxaban has shown to be efficacious in patients with atherosclerotic cardiova
January 04, 2021	<a href="#">Inhibition of transforming growth factor-<math>\beta</math> signaling in myeloid cells ameliorates aortic aneurysmal formation in Marfan syndrome</a>	Increased transforming growth factor- $\beta$ (TGF- $\beta$ ) signaling contributes to the pathophysiology of aortic aneurysm in Marfan syndrome (MFS).
January 04, 2021	<a href="#">Effects of different positions of intravascular stent implantation in stenosed vessels on in-stent restenosis: An experimental and numerical simulation study</a>	Percutaneous coronary intervention (PCI) has been widely used in the treatment of atherosclerosis, while in-stent restenosis (ISR) has not been comple
January 04, 2021	<a href="#">Daphnetin suppresses experimental abdominal aortic aneurysms in mice via inhibition of aortic mural inflammation</a>	Rupture of abdominal aortic aneurysm (AAA) is a devastating event that can be prevented by inhibiting the growth of small aneurysms.
January 04, 2021	<a href="#">Early Gestational Exposure to Inhaled Ozone Impairs Maternal Uterine Artery and Cardiac Function</a>	Exposure to air pollutants such as ozone (O <sub>3</sub> ) is associated with adverse pregnancy outcomes, including higher incidence of gestational hypertension, p
January 04, 2021	<a href="#">Effects of Braiding Parameters on Tissue Engineered Vascular Graft Development</a>	Tissue engineered vascular grafts (TEVGs) using scaffolds fabricated from braided poly(glycolic acid) (PGA) fibers coated with poly(glycerol sebacate)
January 04, 2021	<a href="#">Sex differences in the time course and mechanisms of vascular and cardiac aging in mice: role of the smooth muscle cell mineralocorticoid receptor</a>	Aging is associated with heart and vascular dysfunction that contributes to cardiovascular disease (CVD) risk.
January 04, 2021	<a href="#">Factor Xa inhibitor rivaroxaban suppresses experimental abdominal aortic aneurysm progression via attenuating aortic inflammation</a>	Objective: Rivaroxaban is a specific factor Xa (FXa) inhibitor for venous thromboembolism treatment.
January 04, 2021	<a href="#">Bimodal Imaging-Visible Nanomedicine Integrating CXCR4 and VEGFa Genes Directs Synergistic Reendothelialization of Endothelial Progenitor Cells</a>	A major challenge to treat vascular endothelial injury is the restoration of endothelium integrity in which endothelial progenitor cells (EPCs) plays
November 03, 2020	<a href="#">Potential role of intermittent functioning of baroreflexes in the etiology of hypertension in spontaneously hypertensive rats</a>	The spontaneously hypertensive rat (SHR) is a genetic model of primary hypertension with an etiology that includes sympathetic overdrive.
November 03, 2020	<a href="#">Macrophage pyroptosis is mediated by immunoproteasome subunit <math>\beta</math>5i (LMP7) in abdominal aortic aneurysm</a>	Macrophages contribute to abdominal aortic aneurysm (AAA), but the effect of macrophage on AAA formation is not totally understood.
November 03, 2020	<a href="#">Aortic Stiffness and Diastolic Dysfunction in Sprague Dawley Rats Consuming Short-Term Fructose Plus High Salt Diet</a>	Introduction: High fructose and salt consumption continues to be prevalent in western society.

November 03, 2020	<a href="#">In vivo measurement of flow-mediated vasodilation in living rats using high-resolution ultrasound</a>	In humans, endothelial vasodilator function serves as a surrogate marker for cardiovascular health and is measured as changes in conduit artery diameter
October 16, 2020	<a href="#">Age-dependent characterization of carotid and cerebral artery geometries in a transgenic mouse model of sickle cell anemia using ultrasound and microcomputed tomography</a>	To define morphological changes in carotid and cerebral arteries in sickle cell transgenic mice (SS) as they age, a combination of ultrasound and micro
October 16, 2020	<a href="#">Ultrasound Assessment of the Relation between Local Hemodynamic Parameters and Plaque Morphology</a>	Mechanical factors, especially wall shear stress (WSS) and circumferential strain (CS), play an important role in the progression and rupture of ather
October 16, 2020	<a href="#">A novel biodegradable external stent regulates vein graft remodeling via the Hippo-YAP and mTOR signaling pathways</a>	Coronary artery bypass graft (CABG) has been confirmed to effectively improve the prognosis of coronary artery disease, which is a major public health
October 16, 2020	<a href="#">Fluid shear stress modulates endothelial inflammation by targeting LIMS2</a>	Mechanosensitive genes regulate multiple cardiovascular pathophysiological processes and disorders; however, the role of flow-sensitive genes in ather
October 16, 2020	<a href="#">A single exposure to eucalyptus smoke sensitizes rats to the postprandial cardiovascular effects of a high carbohydrate oral load</a>	Objective: Previous studies have shown that air pollution exposure primes the body to heightened responses to everyday stressors of the cardiovascular
October 16, 2020	<a href="#">Functional Role of Second Heart Field-derived Smooth Muscle Cells in Thoracic Aortopathies in Mice</a>	Changes in soil physical properties due to traditional methods of puddling for lowland rice ( <i>Oryza sativa</i> L.) production and post-rice legumes was inv
October 16, 2020	<a href="#">Artery to vein configuration of arteriovenous fistula improves hemodynamics to increase maturation and patency</a>	Arteriovenous fistulae (AVF) are the preferred mode of hemodialysis access, but 60% of conventional [vein-to-artery (V-A)] AVF fail to mature, and onl
October 16, 2020	<a href="#">Platelet membrane-functionalized nanoparticles with improved targeting ability and lower hemorrhagic risk for thrombolysis therapy</a>	Intravenous injection of thrombolytic drugs is the most effective strategy for the treatment of thrombotic diseases.
September 09, 2020	<a href="#">A mouse model of stenosis distal to an arteriovenous fistula recapitulates human central venous stenosis</a>	Objective: Central venous stenosis (CVS) is a major cause of arteriovenous fistula (AVF) failure.
September 09, 2020	<a href="#">GSK2593074A blocks progression of existing abdominal aortic dilation</a>	Objective: Receptor interacting proteins kinase 1 and 3 (RIPK1 and RIPK3) have been shown to play essential roles in the pathogenesis of abdominal aor
September 09, 2020	<a href="#">Lin28a up-regulation is associated with the formation of restenosis via promoting proliferation and migration of vascular smooth muscle cells</a>	To explore the potential role of Lin28a in the development of restenosis after percutaneous transluminal angioplasty, double-balloon injury surgery an
September 09, 2020	<a href="#">A bi-layered tubular scaffold for effective anti-coagulant in vascular tissue engineering</a>	Acute coagulation is one of the vexed problems in transplantation of small-diameter artificial blood vessel.
September 09, 2020	<a href="#">Hyaluronan promotes the regeneration of vascular smooth muscle with potent contractile function in rapidly biodegradable vascular grafts</a>	The regeneration of smooth muscle with physiological functions has been a key challenge in vascular tissue engineering.
September 09, 2020	<a href="#">Slow degrading poly(glycerol sebacate) derivatives improve vascular graft remodeling in a rat carotid artery interposition model</a>	Porous synthetic grafts made of poly (glycerol sebacate) (PGS) can transform into autologous vascular conduits in vivo upon degradation of PGS.

September 01, 2020	<a href="#">Photochemical Tissue Passivation of Arteriovenous Grafts Prevents Long-term Development of Intimal Hyperplasia in a Swine Model</a>	Background: The autologous vein remains the standard conduit for lower extremity and coronary artery bypass grafting despite a 30%-50% 5-y failure rate
July 01, 2020	<a href="#">miR-374b-5p is increased in deep vein thrombosis and negatively targets IL-10</a>	Background: Deep venous thrombosis (DVT) is one of the most common venous thromboembolic (VTE) disorders and the third leading cardiovascular complica
June 01, 2020	<a href="#">Construction of vascular graft with circumferentially oriented microchannels for improving artery regeneration</a>	Design and fabrication of scaffolds with three-dimensional (3D) topological cues inducing regeneration of the neo-tissue comparable to native one rema
May 01, 2020	<a href="#">Motor transmission defects with sex differences in a new mouse model of mild spinal muscular atrophy</a>	Background: Mouse models of mild spinal muscular atrophy (SMA) have been extremely challenging to generate.
April 01, 2020	<a href="#">TRAIL-expressing cell membrane nanovesicles as an anti-inflammatory platform for rheumatoid arthritis therapy</a>	Rheumatoid arthritis (RA) is one of the most common chronic autoimmune diseases.
March 30, 2020	<a href="#">Management of metabolic syndrome and reduction in body weight in type II diabetic mice by inhibiting glycosphingolipid synthesis</a>	Metabolic syndrome is defined by hyperlipidemia and cardiovascular complications.
March 01, 2020	<a href="#">Therapeutic Antibody Against Phosphorylcholine Preserves Coronary Function and Attenuates Vascular 18F-FDG Uptake in Atherosclerotic Mice</a>	This study showed that treatment with a therapeutic monoclonal immunoglobulin-G1 antibody against phosphorylcholine on oxidized phospholipids preserve
March 01, 2020	<a href="#">PM2.5-induced inflammation and lipidome alteration associated with the development of atherosclerosis based on a targeted lipidomic analysis</a>	Epidemiological studies have confirmed that PM2.5 could contribute to the development of atherosclerosis accompanied with lipids dysregulation.
February 01, 2020	<a href="#">Effects of the different-sized external stents on vein graft intimal hyperplasia and inflammation</a>	Background: The poor long-term patency ratio of vein grafts prevents patients from benefiting from coronary artery bypass graft (CABG).
February 01, 2020	<a href="#">Design and characterization of a porous pouch to prevent peritoneal adhesions during in vivo vascular graft maturation</a>	Vein grafts for coronary artery bypass are not available in more than 30% of patients due to prior use or systemic vascular diseases.
February 01, 2020	<a href="#">Evolution of metallic cardiovascular stent materials: A comparative study among stainless steel, magnesium and zinc</a>	A cardiovascular stent is a small mesh tube that expands a narrowed or blocked coronary artery.
February 01, 2020	<a href="#">Tissue-Engineered Vascular Grafts with Advanced Mechanical Strength from Human iPSCs</a>	Vascular smooth muscle cells (VSMCs) can be derived in large numbers from human induced pluripotent stem cells (hiPSCs) for producing tissue-engineere
January 01, 2020	<a href="#">Intermedin 1-53 Ameliorates Homocysteine-Promoted Atherosclerotic Calcification by Inhibiting Endoplasmic Reticulum Stress</a>	Aim: Vascular calcification (VC) is thought to be an independent predictor of cardiovascular morbidity and mortality.
January 01, 2020	<a href="#">BOLD-MRI demonstrates acute placental and fetal organ hypoperfusion with fetal brain sparing in response to phenylephrine but not ephedrine</a>	Introduction: We previously reported blood oxygen level dependent MRI (BOLD-MRI) for monitoring placental and fetal hemodynamic changes in mice follow
January 01, 2020	<a href="#">Nck1, But Not Nck2, Mediates Disturbed Flow Induced p21 Activated Kinase Activation and Endothelial Permeability</a>	BACKGROUND: Alteration in hemodynamic shear stress at atheroprone sites promotes endothelial paracellular pore formation and permeability.

January 01, 2020	<a href="#">IKK Epsilon Deficiency Attenuates Angiotensin II-Induced Abdominal Aortic Aneurysm Formation in Mice by Inhibiting Inflammation, Oxidative Stress, and Apoptosis</a>	Abdominal aortic aneurysm (AAA) is a vascular disorder that is considered a chronic inflammatory disease.
January 01, 2020	<a href="#">Human Umbilical Cord Mesenchymal Stem Cells Attenuate Abdominal Aortic Aneurysm Progression in Sprague Dawley Rats: Implication of Vascular Smooth Muscle Cell Phenotypic Modulation</a>	Abdominal aortic aneurysm (AAA) is life-threatening for which efficient non-surgical treatment strategy has not been available so far.
January 01, 2020	<a href="#">Effects of Klotho supplementation on hyperoxia-induced renal injury in a rodent model of postnatal nephrogenesis</a>	Background: Hyperoxia (HO) causes kidney injury in preterm infants; however, whether these effects are modifiable is unknown.
January 01, 2020	<a href="#">Intravenous Administration of Allogenic Cell-Derived Microvesicles of Healthy Origins Defends Against Atherosclerotic Cardiovascular Disease Development by a Direct Action on Endothelial Progenitor Cells</a>	Atherosclerosis and cardiovascular disease development is the outcome of intermediate processes where endothelial dysfunction and vascular inflammation
January 01, 2020	<a href="#">Increased uterine artery blood flow in hypoxic murine pregnancy is not sufficient to prevent fetal growth restriction†</a>	Incomplete maternal vascular responses to pregnancy contribute to pregnancy complications including intrauterine growth restriction (IUGR) and preecl
January 01, 2020	<a href="#">Multimodality Imaging-Based Characterization of Regional Material Properties in a Murine Model of Aortic Dissection</a>	Chronic infusion of angiotensin-II in atheroprone (ApoE <sup>-/-</sup> ) mice provides a reproducible model of dissection in the suprarenal abdominal aorta, often
January 01, 2020	<a href="#">Hydrogen sulfide stimulates xanthine oxidoreductase conversion to nitrite reductase and formation of NO</a>	Cardiovascular disease is the leading cause of death and disability worldwide with increased oxidative stress and reduced NO bioavailability serving a
January 01, 2020	<a href="#">Medial calcification in the arterial wall of smooth muscle cell specific Smpd1 transgenic mice: A ceramide mediated vasculopathy</a>	Arterial medial calcification (AMC) is associated with crystallization of hydroxyapatite in the extracellular matrix and arterial smooth muscle cells
January 01, 2020	<a href="#">Increased AT2R expression is induced by AT1R autoantibody via two axes, Klf-5/IRF-1 and circErbB4/miR-29a-5p. to promote VSMC migration</a>	Vascular remodeling can be caused by angiotensin II type 1 receptor (AT1R) autoantibody (AT1-AA), although the related mechanism remains unknown.
January 01, 2020	<a href="#">A 6-month systems toxicology inhalation study in ApoE <sup>-/-</sup> mice demonstrates reduced cardiovascular effects of E-vapor aerosols compared with cigarette smoke</a>	Smoking cigarettes is harmful to the cardiovascular system.
January 01, 2020	<a href="#">Label-free photoacoustic and ultrasound imaging for murine atherosclerosis characterization</a>	Dual-modality photoacoustic tomography (PAT) and 4D ultrasound (4DUS) imaging have shown promise for cardiovascular applications, but their use in mur
January 01, 2020	<a href="#">Acute and chronic vascular effects of inhaled crotonaldehyde in mice: Role of TRPA1</a>	Although crotonaldehyde (CR) is an abundant $\alpha,\beta$ -unsaturated aldehyde in mainstream cigarette smoke (MCS), the cardiovascular toxicity of inhaled CR is
January 01, 2020	<a href="#">Mild carotid stenosis creates gradual, progressive, lifelong brain, and eye damage: An experimental laboratory rat model</a>	In humans, carotid stenosis of 70% and above might be the cause of clinical symptoms such as transient ischemic attack and stroke.
January 01, 2020	<a href="#">Assessment of ICAM-1 N-glycoforms in mouse and human models of endothelial dysfunction</a>	Endothelial dysfunction is a critical event in vascular inflammation characterized, in part, by elevated surface expression of adhesion molecules such

January 01, 2020	<a href="#">Mechanism of angiogenesis promotion with Shexiang Baoxin Pills by regulating function and signaling pathway of endothelial cells through macrophages</a>	Background and aims: "Shexiang Baoxin Pill" (SBP), a commonly used traditional Chinese medicine, has been used to treat angina, myocardial infarction
January 01, 2020	<a href="#">Ultrasound monitoring of magnet-guided delivery of mesenchymal stem cells labeled with magnetic lipid-polymer hybrid nanobubbles</a>	Mesenchymal stem cells labeled with positively charged magnetic lipid-polymer hybrid nanobubbles could be tracked for magnet-guided delivery onto the
January 01, 2020	<a href="#">Ultrasound/Optical Dual Modality Imaging for Evaluation of Vulnerable Atherosclerotic Plaques with Osteopontin Targeted Nanoparticles</a>	Because of the high mortality of coronary atherosclerotic heart diseases, it is necessary to develop novel early detection methods for vulnerable athe
January 01, 2020	<a href="#">Runx2 (Runt-Related Transcription Factor 2)-Mediated Microcalcification Is a Novel Pathological Characteristic and Potential Mediator of Abdominal Aortic Aneurysm</a>	OBJECTIVE: Abdominal aortic aneurysms (AAAs) are highly lethal diseases without effective clinical predictors and therapeutic targets.
January 01, 2020	<a href="#">Neonatal hyperoxia exposure induces aortic biomechanical alterations and cardiac dysfunction in juvenile rats</a>	Supplemental oxygen (O <sub>2</sub> ) therapy in preterm infants impairs lung development, but the impact of O <sub>2</sub> on long-term systemic vascular structure and functi
January 01, 2020	<a href="#">Loss of ADAMTS19 causes progressive non-syndromic heart valve disease</a>	Valvular heart disease is observed in approximately 2% of the general population <sup>1</sup> .
January 01, 2020	<a href="#">Dysbiotic 1 carbon metabolism in cardiac muscle remodeling</a>	Unless there is a genetic defect/mutation/deletion in a gene, the causation of a given disease is chronic dysregulation of gut metabolism.
January 01, 2020	<a href="#">Hyperdynamic circulatory syndrome in a mouse model transgenic for SerpinB3</a>	Introduction and objectives: SerpinB3 is a cysteine protease inhibitor involved in several biological activities.
January 01, 2020	<a href="#">Persistence of Intraluminal Thrombus Makes Saccular Aneurysm More Biologically Active than Fusiform in an Experimental Rat Model</a>	Introduction: Saccular aneurysms are thought to have a worse prognosis than fusiform aneurysms in humans, due to hemodynamic reasons.
January 01, 2020	<a href="#">Loss of PARP-1 attenuates diabetic arteriosclerotic calcification via Stat1/Runx2 axis</a>	Accelerated atherosclerotic calcification is responsible for plaque burden, especially in diabetes.
January 01, 2020	<a href="#">Mitochondria-targeted antioxidant mitoquinone attenuates liver inflammation and fibrosis in cirrhotic rats</a>	In liver cirrhosis, oxidative stress plays a major role in promoting liver inflammation and fibrosis.
January 01, 2020	<a href="#">Natriuretic Peptide Receptor 2 Locus Contributes to Carotid Remodeling</a>	BACKGROUND: Carotid artery intima/media thickness (IMT) is a hallmark trait associated with future cardiovascular events.
January 01, 2020	<a href="#">Targeting endothelial thioredoxin-interacting protein (TXNIP) protects from metabolic disorder-related impairment of vascular function and post-ischemic revascularisation</a>	Introduction: Although thioredoxin-interacting protein (TXNIP) is involved in a variety of biological functions, the contribution of endothelial TXNIP
January 01, 2020	<a href="#">Exercise preconditioning protects against acute cardiac injury induced by lipopolysaccharide through general control nonderepressible 2 kinase</a>	Exercise preconditioning may protect against cardiac injury induced by lipopolysaccharide (LPS), but the mechanism is unresolved.
January 01, 2020	<a href="#">Measurement of Pulse Propagation Velocity, Distensibility and Strain in an Abdominal Aortic Aneurysm Mouse Model</a>	An abdominal aortic aneurysm (AAA) is defined as a localized dilation of the abdominal aorta that exceeds the maximal intraluminal diameter (MILD) by

January 01, 2020	<a href="#">Different degradation rates of nanofiber vascular grafts in small and large animal models</a>	Nanofiber vascular grafts have been shown to create neovessels made of autologous tissue, by in vivo scaffold biodegradation over time.
January 01, 2020	<a href="#">Cancer During Pregnancy: The Role of Vascular Toxicity in Chemotherapy-Induced Placental Toxicity</a>	Breast cancer is diagnosed in ~0.3% of pregnant women.
January 01, 2020	<a href="#">Melatonin protects against thoracic aortic aneurysm and dissection through SIRT1 dependent regulation of oxidative stress and vascular smooth muscle cell loss</a>	Melatonin functions as an endogenous protective molecule in multiple vascular diseases, whereas its effects on thoracic aortic aneurysm and dissection
January 01, 2020	<a href="#">AT2R agonist NP 6A4 mitigates aortic stiffness and proteolytic activity in mouse model of aneurysm</a>	Clinical and experimental studies show that angiotensin II (AngII) promotes vascular pathology via activation of AngII type 1 receptors (AT1Rs).
January 01, 2020	<a href="#">Non-invasive ultrasound detection of cerebrovascular changes in a mouse model of TBI</a>	carotid arteries of mice exposed to a controlled cortical impact.
January 01, 2020	<a href="#">Activated Endothelial TGFβ1 Signaling Promotes Venous Thrombus Nonresolution in Mice Via Endothelin-1</a>	RATIONALE: Chronic thromboembolic pulmonary hypertension (CTEPH) is characterized by defective thrombus resolution, pulmonary artery obstruction, and
January 01, 2020	<a href="#">Abnormal Lysosomal Positioning and Small Extracellular Vesicle Secretion in Arterial Stiffening and Calcification of Mice Lacking Mucolipin 1 Gene</a>	Recent studies have shown that arterial medial calcification is mediated by abnormal release of exosomes/small extracellular vesicles from vascular sm
January 01, 2020	<a href="#">PKM2 Activator TEPP-46 Attenuates Thoracic Aortic Aneurysm and Dissection by Inhibiting NLRP3 Inflammasome-Mediated IL-1β Secretion</a>	Background: The development of thoracic aortic aneurysm and dissection (TAAD) is mediated by inflammasome activation, which exacerbates the secretion
January 01, 2020	<a href="#">17-Hydroxyprogesterone caproate improves T cells and NK cells in response to placental ischemia: new mechanisms of action for an old drug</a>	Preeclampsia (PE) is new onset hypertension during pregnancy associated with increased uterine artery resistance (UARI) and an imbalance among CD4 + T
January 01, 2020	<a href="#">Dermal exposure to the UV filter benzophenone-3 during early pregnancy affects fetal growth and sex ratio of the progeny in mice</a>	The aim of this study was to analyze whether dermal exposure to benzophenone 3 (BP-3) during pregnancy affects critical parameters of pregnancy, and w
January 01, 2020	<a href="#">Local Delivery of Dual MicroRNAs in Trilayered Electrospun Grafts for Vascular Regeneration</a>	Globally growing problems related to cardiovascular diseases lead to a considerable need for synthetic vascular grafts.
January 01, 2020	<a href="#">A durable murine model of spleen transplantation with arterial and venous anastomoses</a>	The spleen is a large lymphoid organ located in the abdomen that filters blood and regulates the immune system.
January 01, 2020	<a href="#">Targeted Repair of Vascular Injury by Adipose Derived Stem Cells Modified with P Selectin Binding Peptide</a>	Percutaneous coronary intervention for coronary artery disease treatment often results in pathological vascular injury, characterized by P-selectin ov
January 01, 2020	<a href="#">Trophoblast-induced spiral artery remodelling and uteroplacental haemodynamics in pregnant rats with increased blood pressure induced by heme oxygenase inhibition</a>	Introduction: The aim of the present study was to determine the contribution of the heme oxygenase (HO) system to the adaptation of the uteroplacental

January 01, 2020	<a href="#">Improvement of Endothelial Dysfunction of Berberine in Atherosclerotic Mice and Mechanism Exploring through TMT-Based Proteomics</a>	Atherosclerosis is a multifactorial vascular disease triggered by disordered lipid metabolism, characterized by chronic inflammatory injury, and initi
January 01, 2020	<a href="#">Intrauterine exposure to chronic hypoxia in the rat leads to progressive diastolic function and increased aortic stiffness from early postnatal developmental stages</a>	Aim: We sought to explore whether fetal hypoxia exposure, an insult of placental insufficiency, is associated with left ventricular dysfunction and in
January 01, 2020	<a href="#">mTORC1 Deficiency Modifies Volume Homeostatic Responses to Dietary Sodium in a Sex-Specific Manner</a>	Mechanistic target of rapamycin (mTOR) pathway plays a role in features common to both excess salt/aldosterone and cardiovascular/renal diseases.
December 30, 2020	<a href="#">Inhibition of the Akt1-mTORC1 Axis Alters Venous Remodeling to Improve Arteriovenous Fistula Patency</a>	Arteriovenous fistulae (AVF) are the most common access created for hemodialysis, but up to 60% do not sustain dialysis within a year, suggesting a ne
December 27, 2019	<a href="#">The pro-atherogenic response to disturbed blood flow is increased by a western diet, but not by old age</a>	Atherogenic remodeling often occurs at arterial locations with disturbed blood flow (i.e., low or oscillatory) and both aging and western diet (WD) in
December 14, 2019	<a href="#">In vivo characterization of doxycycline-mediated protection of aortic function and structure in a mouse model of Marfan syndrome-associated aortic aneurysm</a>	Aortic aneurysm is the most life-threatening complication in Marfan syndrome (MFS) patients.
November 01, 2019	<a href="#">Negative regulation of eNOS-NO signaling by over-SUMOylation of PPAR<math>\gamma</math> contributes to insulin resistance and dysfunction of vascular endothelium in rats</a>	SUMOylation of peroxisome proliferator-activated receptor gamma (PPAR $\gamma$ ) plays important regulatory role in its transcriptional activity.
November 01, 2019	<a href="#">Behavior, body composition, and vascular phenotype of homocystinuric mice on methionine restricted diet or enzyme replacement therapy</a>	Classic homocystinuria (HCU) is an inherited disorder characterized by elevated homocysteine (Hcy) in plasma and tissues resulting from cystathionine
November 01, 2019	<a href="#">Loss of flow responsive Tie1 results in Impaired Aortic valve remodeling</a>	The mechanisms regulating endothelial cell response to hemodynamic forces required for heart valve development, especially valve remodeling, remain
November 01, 2019	<a href="#">"Females Are Not Just 'Protected' Males": Sex-Specific Vulnerabilities in Placenta and Brain after Prenatal Immune Disruption</a>	Current perceptions of genetic and environmental vulnerabilities in the developing fetus are biased toward male outcomes.
October 01, 2019	<a href="#">Pioglitazone downregulates Twist-1 expression in the kidney and protects renal function of Zucker diabetic fatty rats</a>	Aims: Renal interstitial fibrosis and glomerulosclerosis are the characteristic presentation of diabetic nephropathy progression.
October 01, 2019	<a href="#">Elevated luteinizing hormone contributes to atherosclerosis formation by inhibiting nitric oxide synthesis via PI3K/Akt pathway</a>	Background: The contentious effects of estrogen therapy on the risk of postmenopausal cardiovascular disease (CVD) indicate that this type of atherosc
October 01, 2019	<a href="#">Regulation of the inflammatory response by vascular grafts modified with Aspirin-Triggered Resolvin D1 promotes blood vessel regeneration</a>	The unabated inflammatory response is often the cause for inhibited vascular regeneration of transplanted small-diameter vascular grafts (diameter
October 01, 2019	<a href="#">Scavenger receptor A1 attenuates aortic dissection via promoting efferocytosis in macrophages</a>	Macrophage class A1 scavenger receptor (SR-A1) is a pattern recognition receptor with an anti-inflammatory feature in cardiovascular diseases.
September 01, 2019	<a href="#">Increased mitochondrial NADPH oxidase 4 (NOX4) expression in aging is a causative factor in aortic stiffening</a>	Aging is characterized by increased aortic stiffness, an early, independent predictor and cause of cardiovascular disease.

August 06, 2019	<a href="#">Mitochondrial transplantation ameliorates acute limb ischemia</a>	Objective: Acute limb ischemia (ALI), the most challenging form of ischemia-reperfusion injury (IRI) in skeletal muscle tissue, leads to decreased ske
May 01, 2019	<a href="#">Z-Ligustilide protects vascular endothelial cells from oxidative stress and rescues high fat diet-induced atherosclerosis by activating multiple NRF2 downstream genes</a>	Background and aims: Oxidative stress-induced endothelial dysfunction is considered to exert a vital role in the development of atherosclerotic corona
April 22, 2019	<a href="#">Strain Mapping From Four-Dimensional Ultrasound Reveals Complex Remodeling in Dissecting Murine Abdominal Aortic Aneurysms</a>	Current in vivo abdominal aortic aneurysm (AAA) imaging approaches tend to focus on maximum diameter but do not measure three-dimensional (3D) vascula
March 01, 2019	<a href="#">Mas receptor deficiency augments angiotensin II-induced atherosclerosis and aortic aneurysm ruptures in hypercholesterolemic male mice</a>	Clinical Relevance: Results from this study suggest a novel mode of intervening in the renin-angiotensin system to treat vascular diseases, namely, by
February 27, 2019	<a href="#">Fluid dynamics and forces in the HH25 avian embryonic outflow tract</a>	The embryonic outflow tract (OFT) eventually undergoes aorticopulmonary septation to form the aorta and pulmonary artery, and it is hypothesized that
February 01, 2019	<a href="#">Recent strategies on targeted delivery of thrombolytics</a>	Thrombus formed in blood vessel is a progressive process, which would lead to life-threatening thrombotic diseases such as ischemic stroke.
February 01, 2019	<a href="#">Magnesium but not nicotinamide prevents vascular calcification in experimental uraemia</a>	Background. Optimal phosphate control is an unmet need in chronic kidney disease (CKD).
February 01, 2019	<a href="#">Deficiency of IL12p40 (Interleukin 12 p40) Promotes Ang II (Angiotensin II)-Induced Abdominal Aortic Aneurysm</a>	Objective—Abdominal aortic aneurysm is caused by the accumulation of inflammatory cells in the aortic wall.
February 01, 2019	<a href="#">Effects of low-dose oxygen ions and protons on cardiac function and structure in male C57BL/6J mice</a>	Purpose: Astronauts traveling beyond low-Earth orbit will be exposed to high linear-energy transfer charged particles.
February 01, 2019	<a href="#">Functionalized polymer microbubbles as new molecular ultrasound contrast agent to target P-selectin in thrombus</a>	Thrombotic diseases rarely cause symptoms until advanced stage and sudden death.
January 22, 2019	<a href="#">Endothelial signaling by neutrophil-released oncostatin M enhances P-selectin-dependent inflammation and thrombosis</a>	In the earliest phase of inflammation, histamine and other agonists rapidly mobilize P-selectin to the apical membranes of endothelial cells, where it
January 19, 2019	<a href="#">ROBO4 variants predispose individuals to bicuspid aortic valve and thoracic aortic aneurysm</a>	Bicuspid aortic valve (BAV) is a common congenital heart defect (population incidence, 1–2%) <sup>1–3</sup> that frequently presents with ascending aortic aneurys
January 10, 2019	<a href="#">Implantation of VEGF-functionalized cell-free vascular grafts: regenerative and immunological response</a>	Recently, our group demonstrated that immobilized VEGF can capture flowing endothelial cells (ECs) from the blood in vitro and promote endothelialization and
January 01, 2019	<a href="#">Assessment of Age-related Oxygenation Changes in Calf Skeletal Muscle by Photoacoustic Imaging: A Potential Tool for Peripheral Arterial Disease</a>	Peripheral artery disease is often asymptomatic, and various imaging and nonimaging techniques have been used for assessment and monitoring treatments

January 01, 2019	<a href="#">Pigment Epithelial Derived Factor Deficiency Accelerates Atherosclerosis Development via Promoting Endothelial Fatty Acid Uptake in Mice With Hyperlipidemia</a>	Background: Endothelial cell injury, induced by dyslipidemia, is the initiation of atherosclerosis, resulting in an imbalance in endothelial fatty aci
January 01, 2019	<a href="#">Hypoxia inducible factor 1<math>\alpha</math> in vascular smooth muscle cells promotes angiotensin II-induced vascular remodeling via activation of CCL7-mediated macrophage recruitment</a>	The process of vascular remodeling is associated with increased hypoxia.
January 01, 2019	<a href="#">Bilayered Polymeric Micro- and Nanofiber Vascular Grafts as Abdominal Aorta Replacements: Long-Term in Vivo Studies in a Rat Model</a>	In vivo long-term evaluation of degradable implants offers valuable information for the further design and optimization of biomaterials.
January 01, 2019	<a href="#">Effects of Iliac Stenosis on Abdominal Aortic Aneurysm Formation in Mice and Humans</a>	Reduced lower-limb blood flow has been shown to lead to asymmetrical abdominal aortic aneurysms (AAAs) but the mechanism of action is not fully unders
January 01, 2019	<a href="#">Cell proliferation detected using [18F]FLT PET/CT as an early marker of abdominal aortic aneurysm</a>	Background: Abdominal aortic aneurysm (AAA) is a focal aortic dilatation progressing towards rupture.
January 01, 2019	<a href="#">Vimentin regulates Notch signaling strength and arterial remodeling in response to hemodynamic stress</a>	The intermediate filament (IF) cytoskeleton has been proposed to regulate morphogenic processes by integrating the cell fate signaling machinery with
January 01, 2019	<a href="#">Sex-specific differences in endoplasmic reticulum aminopeptidase 1 modulation influence blood pressure and renin-angiotensin system responses</a>	Salt sensitivity of blood pressure (SSBP) and hypertension are common, but the underlying mechanisms remain unclear.
January 01, 2019	<a href="#">In vivo engineered extracellular matrix scaffolds with instructive niches for oriented tissue regeneration</a>	Implanted scaffolds with inductive niches can facilitate the recruitment and differentiation of host cells, thereby enhancing endogenous tissue regene
January 01, 2019	<a href="#">Site-specific chelation therapy with EDTA-loaded albumin nanoparticles reverses arterial calcification in a rat model of chronic kidney disease</a>	Medial arterial calcification (MAC) is a common outcome in diabetes and chronic kidney disease (CKD).
January 01, 2019	<a href="#">Hypoxia-Induced miR-210 Is Necessary for Vascular Regeneration upon Acute Limb Ischemia</a>	Critical limb ischemia is the most serious form of peripheral artery disease, characterized by severe functional consequences, difficult clinical mana
January 01, 2019	<a href="#">Aortic pathology from protein kinase G activation is prevented by an antioxidant vitamin B12 analog</a>	People heterozygous for an activating mutation in protein kinase G1 (PRKG1, p.Arg177Gln) develop thoracic aortic aneurysms and dissections (TAAD) as y
January 01, 2019	<a href="#">Resolvin D4 attenuates the severity of pathological thrombosis in mice</a>	Deep vein thrombosis (DVT) is a common cardiovascular disease with a major effect on quality of life, and safe and effective therapeutic measures to e
January 01, 2019	<a href="#">Scutellarin Prevents Angiogenesis in Diabetic Retinopathy by Downregulating VEGF/ERK/FAK/Src Pathway Signaling</a>	Background . Diabetic retinopathy (DR) is a serious microvascular complication of diabetes.
January 01, 2019	<a href="#">Stimulation of Caveolin-1 Signaling Improves Arteriovenous Fistula Patency</a>	Objective—Arteriovenous fistulae (AVF) are the most common access created for hemodialysis; however, many AVF fail to mature and require repeated inte
January 01, 2019	<a href="#">Fetal growth outcomes following peri-implantation exposure of Long-Evans rats to noise and ozone differ by sex</a>	Background: Exposure to air pollution and high levels of noise have both been independently associated with the development of adverse pregnancy outco

January 01, 2019	<a href="#">Age-dependent characterization of the carotid and cerebral artery morphologies in a transgenic mouse model of sickle cell anemia using ultrasound and microcomputed tomography</a>	Children with sickle cell anemia have elevated stroke risks as well as other arterial complications, but morphological changes to large arteries are n
January 01, 2019	<a href="#">Aspirin pre-treatment modulates ozone-induced fetal growth restriction and alterations in uterine blood flow in rats</a>	Prenatal exposure to ozone has been linked to low birth weight in people and fetal growth restriction in rats.
January 01, 2019	<a href="#">Vascular impact of quercetin administration in association with moderate exercise training in experimental type 1 diabetes</a>	Hyperglycemia and oxidative stress have a major role in the pathogenesis of diabetic vascular complications.
January 01, 2019	<a href="#">Renal cystic disease in the Fbn1C1039G/+ Marfan mouse is associated with enhanced aortic aneurysm formation</a>	Marfan syndrome (MFS) is a connective tissue disorder caused by mutations in the fibrillin-1 gene (FBN1), resulting in aortic aneurysm formation and d
January 01, 2019	<a href="#">Fibroblast Growth Factor 21 Attenuates Vascular Calcification by Alleviating Endoplasmic Reticulum Stress Mediated Apoptosis in Rats</a>	Fibroblast growth factor 21 (FGF21), a hormone with multiple metabolic properties, has proven to be pleiotropic biological effects and may play pivota
January 01, 2019	<a href="#">The flagellin-TLR5-Nox4 axis promotes the migration of smooth muscle cells in atherosclerosis</a>	We hypothesized that NADPH oxidase 4 (Nox4) is involved in the formation of neointimal atherosclerotic plaques through the migration of smooth muscle
December 24, 2018	<a href="#">MicroRNA-217 attenuates intima-media complex thickness of ascending aorta measured by ultrasound bio-microscopy and inhibits inflammation and lipid metabolism in atherosclerotic models of ApoE-/- mice</a>	Background: Little investigation was done to test the efficiency of microRNA-217 (miR-217) on atherosclerosis in vivo.
December 18, 2018	<a href="#">The effect of the heart rate lowering drug Ivabradine on hemodynamics in atherosclerotic mice</a>	The heart rate lowering drug Ivabradine was shown to improve cardiac outcome in patients with previous heart failure.
December 16, 2018	<a href="#">Alcohol Consumption in Combination with an Atherogenic Diet Increased Indices of Atherosclerosis in Apolipoprotein E/Low Density Lipoprotein Receptor Double Knockout Mice</a>	BACKGROUND Alcohol abuse and adherence to atherogenic diet (AD; a low-carbohydrate-high-protein diet) have been positively associated with cardiovascu
December 16, 2018	<a href="#">Natural killer cells induce neutrophil extracellular trap formation in venous thrombosis</a>	Summary.
December 01, 2018	<a href="#">The GLP-1 Analogs Liraglutide and Semaglutide Reduce Atherosclerosis in ApoE-/- and LDLr-/- Mice by a Mechanism That Includes Inflammatory Pathways</a>	The glucagon-like peptide-1 receptor agonists (GLP-1RAs) liraglutide and semaglutide reduce cardiovascular risk in type 2 diabetes patients.
December 01, 2018	<a href="#">Clarifying the relative impacts of vascular and nerve injury that culminate in erectile dysfunction in a pilot study using a rat model of prostate irradiation and a thrombopoietin mimetic</a>	PURPOSE: Radiation therapy (RT) offers an important and curative approach to treating prostate cancer but is associated with a high incidence of erect
December 01, 2018	<a href="#">Rosuvastatin stabilizes atherosclerotic plaques by reducing CD40L overexpression-induced downregulation of P4Hα1 in ApoE-/- mice</a>	Background Cluster of differentiation 40 ligand (CD40L) and rosuvastatin (RSV) affect atherosclerotic plaque stability, but little is known about thei
December 01, 2018	<a href="#">Brg1 trans-activates endothelium-derived colony stimulating factor to promote calcium chloride induced abdominal aortic aneurysm in mice</a>	Endothelial cell derived secretive factors play pivotal roles maintaining the homeostasis by influencing the behaviors of other cells.
November 13, 2018	<a href="#">Noninvasive in vivo Assessment of the Re-endothelialization Process Using Ultrasound Biomicroscopy in the Rat Carotid Artery Balloon Injury Model</a>	Objectives—Ultrasound biomicroscopy (UBM), or ultra high-frequency ultrasound, is a technique used to assess the anatomy of small research animals.

November 06, 2018	<a href="#">Statins Reduce Thoracic Aortic Aneurysm Growth in Marfan Syndrome Mice via Inhibition of the Ras Induced ERK (Extracellular Signal Regulated Kinase) Signaling Pathway</a>	Background Statins reduce aneurysm growth in mouse models of Marfan syndrome, although the mechanism is unknown.
November 01, 2018	<a href="#">Biodegradable and elastomeric vascular grafts enable vascular remodeling</a>	Implanted grafts, including vascular substitutes, inevitably experience remodeling by host cells.
September 07, 2018	<a href="#">Combining in vivo and in vitro biomechanical data reveals key roles of perivascular tethering in central artery function</a>	Considerable insight into effectors of cardiovascular function can be gleaned from controlled studies on mice, especially given the diverse models tha
September 05, 2018	<a href="#">A preclinical ultrasound method for the assessment of vascular disease progression in murine models</a>	Introduction: The efficacy of preclinical ultrasound at providing a quantitative assessment of mouse models of vascular disease is relatively unknown.
September 01, 2018	<a href="#">Bone marrow-derived mononuclear cell seeded bioresorbable vascular graft improves acute graft patency by inhibiting thrombus formation via platelet adhesion</a>	Background: Acute thrombosis is a crucial cause of bioresorbable vascular graft (BVG) failure.
July 31, 2018	<a href="#">Fast Vessel Segmentation and Tracking in Ultra High-Frequency Ultrasound Images.</a>	Ultra High Frequency Ultrasound (UHFUS) enables the visualization of highly deformable small and medium vessels in the hand.
July 18, 2018	<a href="#">The Murine Dialysis Fistula Model Exhibits a Senescence Phenotype: Pathobiologic Mechanisms and Therapeutic Potential</a>	There is no therapy that promotes maturation and functionality of a dialysis arteriovenous fistula (AVF).
July 01, 2018	<a href="#">Inhibition of prolyl hydroxylase domain proteins selectively enhances venous thrombus neovascularisation</a>	BACKGROUND: Hypoxia within acute venous thrombi is thought to drive resolution through stabilisation of hypoxia inducible factor 1 alpha (HIF1 $\alpha$ ).
June 15, 2018	<a href="#">Angiotensin II receptor I blockade prevents stenosis of tissue engineered vascular grafts</a>	We previously developed a tissue-engineered vascular graft (TEVG)made by seeding autologous cells onto a biodegradable tubular scaffold, in anattempt
June 12, 2018	<a href="#">The endothelial tumor suppressor p53 is essential for venous thrombus formation in aged mice</a>	Venous thromboembolism (VTE) is a leading cause of morbidity and mortality in elderly people.
June 10, 2018	<a href="#">Pulmonary Arterial Hypertension and Endothelial Dysfunction Is Linked to NADPH Oxidase-Derived Superoxide Formation in Venous Thrombosis and Pulmonary Embolism in Mice</a>	Pulmonary embolism (PE) results from deep vein thrombosis (DVT) and can lead to chronic thromboembolic pulmonary hypertension (CTEPH) involving vascul
May 24, 2018	<a href="#">Perivascular Adipose Tissue-Derived PDGF-D Contributes to Aortic Aneurysm Formation during Obesity</a>	Obesity increases the risk of vascular diseases, including aortic aneurysm (AA).
May 18, 2018	<a href="#">Ginkgo biloba extracts prevent aortic rupture in angiotensin II-infused hypercholesterolemic mice</a>	Abdominal aortic aneurysms (AAAs) are a chronic vascular disease characterized by pathological luminal dilation.
April 01, 2018	<a href="#">Red blood cell antibody-induced anemia causes differential degrees of tissue hypoxia in kidney and brain</a>	Moderate anemia is associated with increased mortality and morbidity, including acute kidney injury (AKI), in surgical patients.
April 01, 2018	<a href="#">Diabetes Reduces Severity of Aortic Aneurysms Depending on the Presence of Cell Division Autoantigen 1 (CDA1)</a>	Diabetes is a negative risk factor for aortic aneurysm, but the underlying explanation for this phenomenon is unknown.
March 15, 2018	<a href="#">The large-conductance voltage- and Ca<sup>2+</sup>-activated K<sup>+</sup> channel and its <math>\gamma</math>1-subunit modulate mouse uterine artery function during pregnancy</a>	The uterine artery (UA) markedly vasodilates during pregnancy to direct blood flow to the developing fetus.

March 08, 2018	<a href="#">MicroRNA-21 Knockout Exacerbates Angiotensin II-Induced Thoracic Aortic Aneurysm and Dissection in Mice With Abnormal Transforming Growth Factor-<math>\beta</math>-SMAD3 Signaling</a>	Objective—Thoracic aortic aneurysm and dissection (TAAD) are severe vascular conditions.
March 02, 2018	<a href="#">Minoxidil improves vascular compliance, restores cerebral blood flow and alters extracellular matrix gene expression in a model of chronic vascular stiffness</a>	Increased vascular stiffness correlates with higher risk of cardiovascular complications in aging adults.
February 16, 2018	<a href="#">Effects of teriparatide on morphology of aortic calcification in aged hyperlipidemic mice</a>	Calcific aortic vasculopathy correlates with bone loss in osteoporosis in an age-independent manner.
February 12, 2018	<a href="#">In vitro photoacoustic spectroscopy of pulsatile blood flow: probing the interrelationship between red blood cell aggregation and oxygen saturation</a>	Assessments of the appropriateness and inappropriateness of behaviors may influence conflict, cohesion, and goal attainment in multinational organization
January 18, 2018	<a href="#">Pulmonary vascular dysfunction secondary to pulmonary arterial hypertension: Insights gained through retrograde perfusion</a>	Here, we tested the hypothesis that severe pulmonary arterial hypertension impairs retrograde perfusion.
January 02, 2018	<a href="#">Alternative RNA splicing in the endothelium mediated in part by Rbfox2 regulates the arterial response to low flow</a>	Low and disturbed blood flow drives the progression of arterial diseases including atherosclerosis and aneurysms.
January 01, 2018	<a href="#">A biodegradable synthetic graft for small arteries matches the performance of autologous vein in rat carotid arteries</a>	Autologous veins are the most widely used grafts for bypassing small arteries in coronary and peripheral arterial occlusive diseases.
January 01, 2018	<a href="#">Cohort-based multiscale analysis of hemodynamic-driven growth and remodeling of the embryonic pharyngeal arch arteries</a>	Growth and remodeling of the primitive pharyngeal arch artery (PAA) network into the extracardiac great vessels is poorly understood but a major source
January 01, 2018	<a href="#">Ganoderma Triterpenoids Exert Antiatherogenic Effects in Mice by Alleviating Disturbed Flow-Induced Oxidative Stress and Inflammation</a>	Ganoderma mushrooms, used in traditional Chinese medicine to promote health and longevity, have become widely accepted as herbal supplements.
January 01, 2018	<a href="#">A context-specific cardiac <math>\beta</math>-catenin and GATA4 interaction influences TCF7L2 occupancy and remodels chromatin driving disease progression in the adult heart</a>	Chromatin remodelling precedes transcriptional and structural changes in heart failure.
January 01, 2018	<a href="#">Chronic exposure to electronic cigarette (E-cig) results in impaired cardiovascular function in mice</a>	Proponents for electronic cigarettes (E-cigs) claim they are a safe alternative to smoking tobacco-based cigarettes, however little is known about the l
January 01, 2018	<a href="#">Gut-dependent microbial translocation induces inflammation and cardiovascular events after ST-elevation myocardial infarction</a>	Background: Post-infarction cardiovascular remodeling and heart failure are the leading cause of myocardial infarction (MI)-driven death during the pa
January 01, 2018	<a href="#">Upregulation of Vascular Endothelial Growth Factor in Amniotic Fluid Stem Cells Enhances Their Potential to Attenuate Lung Injury in a Preterm Rabbit Model of Bronchopulmonary Dysplasia</a>	BACKGROUND: Bronchopulmonary dysplasia (BPD) is a chronic lung disease that affects extremely preterm infants and remains - despite improvements in ne
January 01, 2018	<a href="#">Chemokine CC-motif ligand 2 participates in platelet function and arterial thrombosis by regulating PKC<math>\alpha</math>-P38MAPK-HSP27 pathway</a>	Background: Studies indicate that chemokine CC-motif ligand 2 (CCL2) is involved in inflammation and atherosclerosis.
January 01, 2018	<a href="#">The chronic complex stress combined atherogenic diet accelerates the process of atherosclerosis in mice</a>	The effects of stress on the atherosclerosis are complex.
January 01, 2018	<a href="#">CXCL8 hyper-signaling in the aortic abdominal aneurysm</a>	There are indications for elevated CXCL8 levels in abdominal aortic aneurysm disease (AAA).

January 01, 2018	<a href="#">Cell Type-Specific Contributions of the Angiotensin II Type 1a Receptor to Aorta Homeostasis and Aneurysmal Disease</a>	OBJECTIVE Two were the aims of this study: first, to translate whole-genome expression profiles into computational predictions of functional associati
January 01, 2018	<a href="#">Angiotensin II Infusion Does Not Cause Abdominal Aortic Aneurysms in Apolipoprotein E-Deficient Rats</a>	The apolipoprotein E-deficient ( apoE $-/-$ ) mouse model has advanced our understanding of cardiovascular disease mechanisms and experimental therapeut
January 01, 2018	<a href="#">Simultaneous ablation of uterine natural killer cells and uterine mast cells in mice leads to poor vascularization and abnormal doppler measurements that compromise fetal well-being</a>	Intrauterine growth restriction (IUGR) is a serious pregnancy complication with short- and long-term health consequences.
January 01, 2018	<a href="#">Role of Acid Sphingomyelinase and Ceramide in Mechano-Acoustic Enhancement of Tumor Radiation Responses</a>	Background: High-dose radiotherapy (>8-10 Gy) causes rapid endothelial cell death via acid sphingomyelinase (ASMase)-induced ceramide production, resu
January 01, 2018	<a href="#">The complement C3a-C3aR axis promotes development of thoracic aortic dissection via regulation of MMP2 expression</a>	© 2018 by The American Association of Immunologists, Inc. All rights reserved.
January 01, 2018	<a href="#">Four Surgical Modifications to the Classic Elastase Perfusion Aneurysm Model Enable Haemodynamic Alterations and Extended Elastase Perfusion</a>	OBJECTIVE/BACKGROUND: Abdominal aortic aneurysm (AAA) is an individual and socioeconomic burden in today's ageing society.
January 01, 2018	<a href="#">Improved photoacoustic-based oxygen saturation estimation with SNR-regularized local fluence correction</a>	As photoacoustic (PA) imaging makes its way into the clinic, accuracy of PA-based metrics becomes increasingly important.
January 01, 2018	<a href="#">In vivo inhibition of nuclear factor of activated T-cells leads to atherosclerotic plaque regression in IGF-II/LDLR <math>-/-</math> ApoB 100/100 mice</a>	Aims:Despite vast clinical experience linking diabetes and atherosclerosis, the molecular mechanisms leading to accelerated vascular damage are still
January 01, 2018	<a href="#">Vascular endothelial function is impaired by aerosol from a single IQOS HeatStick to the same extent as by cigarette smoke</a>	Background Heated tobacco products (also called 'heat-not-burn' products) heat tobacco at temperatures below that of combustion, causing nicotine and
January 01, 2018	<a href="#">Deep Vein Thrombosis Induced by Stasis in Mice Monitored by High Frequency Ultrasonography.</a>	Venous thrombosis is a common condition affecting 1 - 2% of the population, with an annual incidence of 1 in 500.
January 01, 2018	<a href="#">Temporal and spatial changes in wall shear stress during atherosclerotic plaque progression in mice</a>	Wall shear stress (WSS) is involved in atherosclerotic plaque initiation, yet its role in plaque progression remains unclear.
January 01, 2018	<a href="#">Copper sulfide nanoparticles as a photothermal switch for TRPV1 signaling to attenuate atherosclerosis</a>	Atherosclerosis is characterized by the accumulation of lipids within the arterial wall.
January 01, 2018	<a href="#">Restoring mitochondrial DNA copy number preserves mitochondrial function and delays vascular aging in mice</a>	Aging is the largest risk factor for cardiovascular disease, yet the molecular mechanisms underlying vascular aging remain unclear.
January 01, 2018	<a href="#">Rho Kinase Inhibitor , Fasudil , Attenuates Contrast-induced Acute Kidney Injury</a>	Abstract: In this study, we tested the hypothesis that fasudil, a Rho kinase inhibitor, would protect against contrast-induced acute kidney injury (CI
January 01, 2018	<a href="#">Rapamycin prevents thoracic aortic aneurysm and dissection in mice</a>	Objective: The purpose of this study was to investigate whether rapamycin inhibits the development of thoracic aortic aneurysm and dissection (TAAD) i

January 01, 2018	<a href="#">Vascular Remodeling Process of Heparin-Conjugated Poly(<math>\epsilon</math>-Caprolactone) Scaffold in a Rat Abdominal Aorta Replacement Model</a>	In the field of vascular graft research, poly- $\epsilon$ -caprolactone (PCL) is used owing to its good mechanical strength and biocompatibility.
January 01, 2018	<a href="#">Transcriptional regulation mediated by H2A.Z via ANP32e-dependent inhibition of protein phosphatase 2A</a>	The mechanisms that regulate H2A.Z and its requirement for transcription in differentiated mammalian cells remains ambiguous.
January 01, 2018	<a href="#">Diet-induced obesity alters the maternal metabolome and early placenta transcriptome and decreases placenta vascularity in the mouse</a>	Obesity in a mouse model leads to alterations in the maternal metabolome and early placenta transcriptome as well as changes in vascularity later in g
January 01, 2018	<a href="#">Systemic Upregulation of IL-10 (Interleukin-10) Using a Nonimmunogenic Vector Reduces Growth and Rate of Dissecting Abdominal Aortic Aneurysm</a>	Original Research Systemic Upregulation of IL-10 (Interleukin-10) Using a Nonimmunogenic Vector Reduces Growth and Rate of Dissecting Abdominal Aortic
January 01, 2018	<a href="#">Increased placental T cell trafficking results in adverse neurobehavioral outcomes in offspring exposed to sub-chronic maternal inflammation</a>	Interleukin-1 beta (IL-1 $\beta$ ) is a cytokine mediator of perinatal brain injury.
January 01, 2018	<a href="#">Notoginsenoside R1, a unique constituent of Panax notoginseng, blinds proinflammatory monocytes to protect against cardiac hypertrophy in ApoE<sup>-/-</sup> mice</a>	Notoginsenoside R1, a unique constituent from the root of Panax notoginseng, exerts anti-inflammatory, anti-oxidative and anti-apoptotic properties.
January 01, 2018	<a href="#">Lipid-Lowering Therapy With Ezetimibe Decreases Spontaneous Atherothrombotic Occlusions in a Rabbit Model of Plaque Erosion</a>	OBJECTIVE: Plaque erosion is increasing its importance as one of the mechanisms of acute coronary syndromes in this statin era.
January 01, 2018	<a href="#">Angiotensin-(1-7)-induced Mas receptor activation attenuates atherosclerosis through a nitric oxide-dependent mechanism in apolipoproteinE-KO mice</a>	© 2018 Springer-Verlag GmbH Germany, part of Springer Nature Angiotensin (Ang)-(1-7) ameliorates vascular injury by increasing nitric oxide (NO) bioav
January 01, 2018	<a href="#">Increased Calcific Aortic Valve Disease in response to a diabetogenic, procalcific diet in the LDLr<sup>-/-</sup>ApoB100/100mouse model</a>	Objective: Calcific aortic valve disease (CAVD) is a major cause of aortic stenosis (AS) and cardiac insufficiency.
January 01, 2018	<a href="#">Glucagon-like peptide-1 receptor antagonism impairs basal exercise capacity and vascular adaptation to aerobic exercise training in rats</a>	Cardiorespiratory fitness (CRF) inversely predicts cardiovascular (CV) mortality and CRF is impaired in people with type 2 diabetes (T2D).
January 01, 2018	<a href="#">Identification of type IV collagen exposure as a molecular imaging target for early detection of thoracic aortic dissection</a>	Thoracic aortic dissection (TAD) is an aggressive and life-threatening vascular disease and there is no effective means of early diagnosis of dissecti
January 01, 2018	<a href="#">Lack of T-bet reduces monocytic interleukin-12 formation and accelerates thrombus resolution in deep vein thrombosis</a>	© 2018 The Author(s). The role of leukocytes in deep vein thrombosis (DVT) resolution is incompletely understood.
January 01, 2018	<a href="#">Motion model ultrasound localization microscopy for preclinical and clinical multiparametric tumor characterization</a>	Super-resolution imaging methods promote tissue characterization beyond the spatial resolution limits of the devices and bridge the gap between histop
January 01, 2018	<a href="#">Sympathetic Neuronal Activation Triggers Myeloid Progenitor Proliferation and Differentiation</a>	There is a growing body of research on the neural control of immunity and inflammation.
January 01, 2018	<a href="#">Alterations of Ocular Hemodynamics Impair Ophthalmic Vascular and Neuroretinal Function</a>	Hypertension is associated with numerous diseases, but its direct impact on the ocular circulation and neuroretinal function remains unclear.

January 01, 2018	<a href="#">Protein-1 ) in Smooth Muscle Cells Protects Mice From Abdominal Aortic Aneurysms</a>	Abdominal aortic aneurysm (AAA) has high mortality rate when ruptured, but currently, there is no proven pharmacological therapy for AAA because of ou
January 01, 2018	<a href="#">Inhibition of endoplasmic reticulum stress by intermedin1-53 attenuates angiotensin II-induced abdominal aortic aneurysm in ApoE KO Mice</a>	Endoplasmic reticulum stress (ERS) is involved in the development of abdominal aortic aneurysm (AAA).
January 01, 2018	<a href="#">Elevated 20-HETE in metabolic syndrome regulates arterial stiffness and systolic hypertension via MMP12 activation</a>	Arterial stiffness plays a causal role in development of systolic hypertension.
December 17, 2017	<a href="#">Large is required for normal astrocyte migration and retinal vasculature development</a>	Background: Persistent fetal vasculature (PFV) is a congenital developmental anomaly of the eye that accounts for about 5% of childhood blindness.
December 04, 2017	<a href="#">The Hippo signaling pathway: a potential therapeutic target is reversed by a Chinese patent drug in rats with diabetic retinopathy</a>	Background: The Hippo signaling pathway is reported to be involved in angiogenesis, but the roles of the Hippo pathway in diabetic retinopathy have no
December 01, 2017	<a href="#">Novel application and serial evaluation of tissue-engineered portal vein grafts in a murine model</a>	Aim: Surgical management of pediatric extrahepatic portal vein obstruction requires meso-Rex bypass using autologous or synthetic grafts.
August 10, 2017	<a href="#">Sustained Placental Growth Factor-2 Treatment Does Not Aggravate Advanced Atherosclerosis in Ischemic Cardiomyopathy</a>	Angiogenic growth factor therapy for ischemic cardiovascular disease carries a risk of stimulating atherosclerotic plaque growth.
August 01, 2017	<a href="#">A Novel Murine Model of Marfan Syndrome Accelerates Aortopathy and Cardiomyopathy</a>	Background. Marfan syndrome (MFS) represents a genetic disorder with variable phenotypic expression.
June 27, 2017	<a href="#">Fibrin-Targeted and H<sub>2</sub>O<sub>2</sub>-Responsive Nanoparticles as a Theranostics for Thrombosed Vessels</a>	A thrombus (blood clot) is formed in injured vessels to maintain the integrity of vasculature.
June 13, 2017	<a href="#">Role of Bone Marrow Mononuclear Cell Seeding for Nanofiber Vascular Grafts</a>	OBJECTIVE: Electrospinning is a promising technology that provides biodegradable nanofiber scaffolds for cardiovascular tissue engineering.
June 09, 2017	<a href="#">Loss of Smooth Muscle <math>\alpha</math>-Actin Leads to NF-<math>\kappa</math>B-Dependent Increased Sensitivity to Angiotensin II in Smooth Muscle Cells and Aortic Enlargement Novelty and Significance</a>	RATIONALE Mutations in ACTA2, encoding the smooth muscle isoform of $\alpha$ -actin, cause thoracic aortic aneurysms, acute aortic dissections, and occlusive
June 01, 2017	<a href="#">Loss of MURC/Cavin-4 induces JNK and MMP-9 activity enhancement in vascular smooth muscle cells and exacerbates abdominal aortic aneurysm</a>	Abdominal aortic aneurysm (AAA) is relatively common in elderly patients with atherosclerosis.
June 01, 2017	<a href="#">Establishment and evaluation of a reversible two-kidney, one-clip renovascular hypertensive rat model</a>	The aim of the present study was to establish and evaluate a novel and reversible two-kidney, one-clip renovascular hypertensive rat model with a ti
June 01, 2017	<a href="#">Reduced arterial elasticity due to surgical skeletonization is ameliorated by abluminal PEG hydrogel</a>	Arteries for bypass grafting are harvested either with neighboring tissue attached or as skeletonized vessels that are free of surrounding tissue.
May 09, 2017	<a href="#">Effect of chronic estradiol plus progesterone treatment on experimental arterial and venous thrombosis in mouse</a>	Postmenopausal hormone replacement therapy (HRT) with estrogen plus progestogens is the first line therapy to treat menopausal symptoms.

May 02, 2017	<a href="#">Deficient Circumferential Growth Is the Primary Determinant of Aortic Obstruction Attributable to Partial Elastin Deficiency</a>	Objective—Williams syndrome is characterized by obstructive aortopathy attributable to heterozygous loss of ELN, the gene encoding elastin.
April 10, 2017	<a href="#">Cytoglobin regulates blood pressure and vascular tone through nitric oxide metabolism in the vascular wall</a>	The identity of the specific nitric oxide dioxygenase (NOD) that serves as the main in vivo regulator of O <sub>2</sub> -dependent NO degradation in smooth muscle
April 01, 2017	<a href="#">Inhibition or deletion of angiotensin II type 1 receptor suppresses elastase-induced experimental abdominal aortic aneurysms</a>	Objective: Angiotensin (Ang) II type 1 receptor (AT1) activation is essential for the development of exogenous Ang II-induced abdominal aortic aneurysms
April 01, 2017	<a href="#">Long term miR 29b suppression reduces aneurysm formation in a Marfan mouse model</a>	Aortic root aneurysm formation and subsequent dissection and/or rupture remain the leading cause of death in patients with Marfan syndrome.
April 01, 2017	<a href="#">Epoetin beta pegol ameliorates flow-mediated dilation with improving endothelial nitric oxide synthase coupling state in nonobese diabetic rats</a>	BACKGROUND/AIMS: Patients with diabetic nephropathy have a high cardiovascular mortality.
March 29, 2017	<a href="#">Development of a Glycosaminoglycan Derived, Selectin Targeting Anti-Adhesive Coating to Treat Endothelial Cell Dysfunction</a>	Endothelial cell (EC) dysfunction is associated with many disease states including deep vein thrombosis (DVT), chronic kidney disease, sepsis and diab
March 24, 2017	<a href="#">Chronic PARP-1 inhibition reduces carotid vessel remodeling and oxidative damage of the dorsal hippocampus in spontaneously hypertensive rats</a>	Vascular remodeling during chronic hypertension may impair the supply of tissues with oxygen, glucose and other compounds, potentially unleashing dele
March 09, 2017	<a href="#">A comparative study of the characterization of miR-155 in knockout mice</a>	miR-155 is one of the most important miRNAs and plays a very important role in numerous biological processes.
March 01, 2017	<a href="#">Murine ultrasound-guided transabdominal para-aortic injections of self-assembling type I collagen oligomers</a>	Abdominal aortic aneurysms (AAAs) represent a potentially life-threatening condition that predominantly affects the infrarenal aorta.
March 01, 2017	<a href="#">Endothelial Nox4-based NADPH oxidase regulates atherosclerosis via soluble epoxide hydrolase</a>	Nox4-based NADPH oxidase is a major reactive oxygen species-generating enzyme in the vasculature, but its role in atherosclerosis remains controversia
February 20, 2017	<a href="#">Dual-acting biofunctionalised scaffolds for applications in regenerative medicine</a>	Off the shelf scaffolds for replacing ultra-small diameter vascular grafts are valuable for reconstruction of diseased or damaged vessels.
February 14, 2017	<a href="#">Deletion of Hypoxia-Inducible Factor-1<math>\alpha</math> in Myeloid Lineage Exaggerates Angiotensin II-Induced Formation of Abdominal Aortic Aneurysm</a>	Hypoxia-inducible factor (HIF)-1 $\alpha$ is a transcription factor that regulates various genes responding to hypoxic conditions.
February 14, 2017	<a href="#">Ultrasound-based Pulse Wave Velocity Evaluation in Mice</a>	Arterial stiffness can be evaluated by calculating pulse wave velocity (PWV), i.e., the speed with which the pulse wave travels in a conduit vessel.
February 01, 2017	<a href="#">Dual effects of fructose on ChREBP and FoxO1/3<math>\alpha</math> are responsible for AldoB up-regulation and vascular remodelling</a>	Increased production of methylglyoxal (MG) in vascular tissues is one of the causative factors for vascular remodeling in different subtypes of metabo
February 01, 2017	<a href="#">Increased Oxidative Stress and Hypoxia Inducible Factor-1 Expression during Arteriovenous Fistula Maturation</a>	BACKGROUND: The poor clinical results that are frequently reported for arteriovenous fistulae (AVF) for hemodialysis are typically due to failure of A

February 01, 2017	<a href="#">In vivo photoacoustic lipid imaging in mice using the second near-infrared window</a>	Photoacoustic imaging has emerged as a promising technique to improve preclinical and clinical imaging by providing users with label-free optical cont
January 24, 2017	<a href="#">Female Mice With an XY Sex Chromosome Complement Develop Severe Angiotensin II-Induced Abdominal Aortic AneurysmsClinical Perspective</a>	Background—Abdominal aortic aneurysms (AAAs) are a deadly pathology with strong sexual dimorphism.
January 12, 2017	<a href="#">Mutations in HYAL2, Encoding Hyaluronidase 2, Cause a Syndrome of Orofacial Clefting and Cor Triatriatum Sinister in Humans and Mice</a>	Orofacial clefting is amongst the most common of birth defects, with both genetic and environmental components.
January 09, 2017	<a href="#">Nitric oxide mediates aortic disease in mice deficient in the metalloprotease Adamts1 and in a mouse model of Marfan syndrome</a>	Heritable thoracic aortic aneurysms and dissections (TAAD), including Marfan syndrome (MFS), currently lack a cure, and causative mutations have been
January 01, 2016	<a href="#">Loss of vascular smooth muscle cell autophagy exacerbates angiotensin II-associated aortic remodeling</a>	Objective: The pathophysiologic processes of abdominal aortic aneurysms (AAAs) and atherosclerosis often intersect.
January 01, 2016	<a href="#">Dietary potassium regulates vascular calcification and arterial stiffness</a>	Vascular calcification is a risk factor that predicts adverse cardiovascular complications of several diseases including atherosclerosis.
January 01, 2016	<a href="#">Characterization of age-related penile microvascular hemodynamic impairment using laser speckle contrast imaging: Possible role of increased fibrogenesis</a>	Current technology for penile hemodynamic evaluations in small animals is invasive and has limitations.
January 01, 2016	<a href="#">Molecularly Engineered Theranostic Nanoparticles for Thrombosed Vessels: H2O2-Activatable Contrast-Enhanced Photoacoustic Imaging and Antithrombotic Therapy</a>	A thrombus (blood clot), composed mainly of activated platelets and fibrin, obstructs arteries or veins, leading to various life-threatening diseases.
January 01, 2016	<a href="#">Aortic microcalcification is associated with elastin fragmentation in Marfan syndrome</a>	Marfan syndrome (MFS) is a connective tissue disorder in which aortic rupture is the major cause of death.
January 01, 2016	<a href="#">Renal Resistive Index as a Novel Indicator for Renal Complications in High-Fat Diet-Fed Mice</a>	Background/Aims: The renal resistive index (RI) is a novel candidate as a renal injury prognostic indicator, but it remains unclear how renal RI level
January 01, 2016	<a href="#">Computer-Aided Evaluation of Blood Vessel Geometry From Acoustic Images</a>	A method for computer-aided assessment of blood vessel geometries based on shape-fitting algorithms from metric vision was evaluated.
January 01, 2016	<a href="#">Moderately Elevated Homocysteine Does Not Contribute to Thoracic Aortic Aneurysm in Mice</a>	Background: Moderate hyperhomocysteinemia is an attractive target for intervention because it is present in 5-7% of the population and can be reversed
January 01, 2016	<a href="#">Fetal Alcohol Exposure Alters Blood Flow and Neurological Responses to Transient Cerebral Ischemia in Adult Mice</a>	Background: Prenatal alcohol exposure (PAE) can result in physical and neurocognitive deficits that are collectively termed “fetal alcohol spectrum di
January 01, 2016	<a href="#">Notch1 haploinsufficiency causes ascending aortic aneurysms in mice.</a>	An ascending aortic aneurysm (AscAA) is a life-threatening disease whose molecular basis is poorly understood.
January 01, 2016	<a href="#">Divergent coronary flow responses to uridine adenosine tetraphosphate in atherosclerotic ApoE knockout mice</a>	Uridine adenosine tetraphosphate (Up 4 A) exerts potent relaxation in porcine coronary arteries that is reduced following myocardial infarction, sugge

January 01, 2016	<a href="#">Intravascular application of electrocautery in a rabbit model of abdominal aortic endarterectomy</a>	Effective therapies for preventing perioperative complications such as thrombosis and inflammation after coronary endarterectomy (CE) are lacking.
January 01, 2016	<a href="#">Possible type 1 diabetes risk prediction: Using ultrasound imaging to assess pancreas inflammation in the inducible autoimmune diabetes BBDR model</a>	Background/Aims Studies of human cadaveric pancreas specimens indicate that pancreas inflammation plays an important role in type 1 diabetes pathogene
January 01, 2016	<a href="#">HPW-RX40 prevents human platelet activation by attenuating cell surface protein disulfide isomerases</a>	Protein disulfide isomerase (PDI) present at platelet surfaces has been considered to play an important role in the conformational change and activati
January 01, 2016	<a href="#">Collagen External Scaffolds Mitigate Intimal Hyperplasia and Improve Remodeling of Vein Grafts in a Rabbit Arteriovenous Graft Model</a>	Objectives .
January 01, 2016	<a href="#">Non-invasive longitudinal monitoring of angiogenesis in a murine full-thickness cutaneous wound healing model using high-resolution three-dimensional ultrasound imaging</a>	Background/Purpose: The aim of this study was to evaluate the longitudinal monitoring of angiogenesis in a murine full- thickness cutaneous wound heal
January 01, 2016	<a href="#">Trimethylamine-N-oxide induces vascular inflammation by activating the NLRP3 inflammasome through the SIRT3-SOD2-mtROS signaling pathway</a>	BACKGROUND Trimethylamine-N-oxide (TMAO) has recently been identified as a novel and independent risk factor for promoting atherosclerosis through ind
January 01, 2016	<a href="#">Angiotensin II infusion into ApoE<sup>-/-</sup> mice: a model for aortic dissection rather than abdominal aortic aneurysm?</a>	Aims Angiotensin II-infused ApoE <sup>-/-</sup> mice are a popular mouse model for preclinical aneurysm research.
January 01, 2016	<a href="#">Photoacoustic Imaging: A Novel Tool for Detecting Carotid Artery Thrombosis in Mice</a>	Thrombosis is a main cause of acute cardiovascular events, and detecting thrombi in small arteries via noninvasive im- aging remains challenging.
January 01, 2016	<a href="#">Customization of bilio-pancreatic limb length to modulate and sustain anti-diabetic effect of gastric bypass surgery</a>	Although Roux-en-Y Gastric Bypass (RYGB) remains the most effective treatment for obesity and type 2 diabetes (T2D), many patients fail to achieve rem
January 01, 2016	<a href="#">Unspliced XBP1 Confers VSMC Homeostasis and Prevents Aortic Aneurysm Formation via FoxO4 Interaction</a>	Rationale: Although not fully understood, the phenotypic transition of vascular smooth muscle cells exhibits at the early onset of the pathology of ao
January 01, 2016	<a href="#">Eph-B4 regulates adaptive venous remodeling to improve arteriovenous fistula patency</a>	Low rates of arteriovenous fistula (AVF) maturation prevent optimal fistula use for hemodialysis; however, the mechanism of venous remodeling in the f
January 01, 2016	<a href="#">Expanding Acquisition and Clutter Filter Dimensions for Improved Perfusion Sensitivity</a>	A method is explored for increasing the sensitivity of power-Doppler imaging without contrast enhancement.
January 01, 2016	<a href="#">Original Research: Feasibility and safety of two surgical techniques for the development of an animal model of jugular vein occlusion</a>	To date, no studies have explored the effect of abnormal cerebral venous circulation on brain disorders, whereas many studies have investigated neurod
January 01, 2016	<a href="#">Monitoring inflammation injuries in the progression of atherosclerosis with contrast enhanced ultrasound molecular imaging</a>	PURPOSE: The upregulation of vascular cell adhesion molecule-1 (VCAM-1) on vascular endothelium plays a great role in the progression of atherosclerosi
January 01, 2016	<a href="#">High-Fat, High-Sugar Diet-Induced Subendothelial Matrix Stiffening is Mitigated by Exercise</a>	Consumption of a high-fat, high-sugar diet and sedentary lifestyle are correlated with bulk arterial stiffening.

January 01, 2016	<a href="#">Recombinant Decorin Fusion Protein Attenuates Murine Abdominal Aortic Aneurysm Formation and Rupture</a>	Decorin (DCN) is a small-leucine rich proteoglycan that mediates collagen fibrillogenesis, organization, and tensile strength.
January 01, 2016	<a href="#">Targeting Interleukin-1<math>\beta</math> Protects from Aortic Aneurysms Induced by Disrupted Transforming Growth Factor <math>\beta</math> Signaling</a>	Aortic aneurysms are life-threatening conditions with effective treatments mainly limited to emergency surgery or trans-arterial endovascular stent gr
January 01, 2016	<a href="#">Toll-like receptor-4 signaling pathway in aorta aging and diseases: "its double nature"</a>	Recent advances in the field of innate immunity have revealed a complex role of innate immune signaling pathways in both tissue homeostasis and diseases
January 01, 2016	<a href="#">Improving in vivo outcomes of decellularized vascular grafts via incorporation of a novel extracellular matrix</a>	Each year, hundreds of thousands coronary bypass procedures are performed in the US, yet there currently exists no off-the-shelf alternative to autolo
January 01, 2016	<a href="#">Altered Penile Caveolin Expression in Diabetes: Potential Role in Erectile Dysfunction</a>	Background The pathophysiology of increased severity of erectile dysfunction in men with diabetes and their poor response to oral pharmacotherapy are
January 01, 2016	<a href="#">DBZ (Danshensu Bingpian Zhi), a novel natural compound derivative, attenuates atherosclerosis in apolipoprotein E-Deficient mice</a>	Background-DBZ (Danshensu Bingpian Zhi), a synthetic derivative of a natural compound found in traditional Chinese medicine, has been reported to supp
January 01, 2016	<a href="#">Deficiency of CCAAT/enhancer-binding protein homologous protein (CHOP) prevents diet-induced aortic valve calcification in vivo</a>	Aortic valve (AoV) calcification is common in aged populations.
January 01, 2016	<a href="#">Oral chromium picolinate impedes hyperglycemia-induced atherosclerosis and inhibits proatherogenic protein TSP-1 expression in STZ-induced type 1 diabetic ApoE -/- mice</a>	Increasing evidence suggests thrombospondin-1 (TSP-1), a potent proatherogenic matricellular protein, as a putative link between hyperglycemia and ath
January 01, 2016	<a href="#">Comparison of very-high-frequency ultrasound assessment of radial arterial wall layers after first and repeated transradial coronary procedures</a>	BACKGROUND Transradial coronary procedure (TRP) traumatizes the radial artery (RA), especially resulting in changes to arterial wall morphology.
January 01, 2016	<a href="#">5-HT causes splanchnic venodilation</a>	Serotonin [5-hydroxytryptamine (5-HT)] causes relaxation of the isolated superior mesenteric vein, a splanchnic blood vessel, through activation of th
January 01, 2016	<a href="#">Differential Effects of EGFL6 on Tumor versus Wound Angiogenesis</a>	Angiogenesis inhibitors are important for cancer therapy, but clinically approved anti-angiogenic agents have shown only modest efficacy and can compr
January 01, 2016	<a href="#">In vivo MR-angiography for the assessment of aortic aneurysms in an experimental mouse model on a clinical MRI scanner: Comparison with high-frequency ultrasound and histology</a>	Background MR-angiography currently represents one of the clinical reference-standards for the assessment of aortic-dimensions.
January 01, 2016	<a href="#">Deletion of the NR4A nuclear receptor NOR1 in hematopoietic stem cells reduces inflammation but not abdominal aortic aneurysm formation</a>	Background: The NR4A3 orphan nuclear hormone receptor, NOR1, functions as a constitutively active transcription factor to regulate inflammation, proli
January 01, 2016	<a href="#">Pentaerythritol tetranitrate (PETN) in-vivo treatment improves oxidative stress and vascular dysfunction by suppression of endothelin-1 signaling in monocrotaline-induced pulmonary hypertension</a>	Objective: Oxidative stress and endothelial dysfunction contribute to pulmonary arterial hypertension (PAH).

January 01, 2016	<a href="#">Cortistatin attenuates angiotensin II-induced abdominal aortic aneurysm through inactivation of the ERK1/2 signaling pathways</a>	Abdominal aortic aneurysm (AAA) is a fatal disease that is associated with chronic inflammation in the vessel wall.
January 01, 2016	<a href="#">Obesity-induced vascular dysfunction and arterial stiffening requires endothelial cell arginase 1</a>	Aims Elevation of arginase activity has been linked to vascular dysfunction in diabetes and hypertension by a mechanism involving decreased nitric oxide
January 01, 2016	<a href="#">Effects of Rotigaptide and RIC on Ischemia Reperfusion Injury in the In Vitro Rabbit Heart</a>	Background: Remote Ischemic Preconditioning (rIPC) and the antiarrhythmic peptide analogue, Rotigaptide (ZP123), protects against myocardial ischemia-
January 01, 2016	<a href="#">Suppression of aortic expansion and contractile recovery in a rat abdominal aortic aneurysm model by biodegradable gelatin hydrogel sheet incorporating basic fibroblast growth factor</a>	Biodegradable gelatin hydrogel sheet (BGHS) incorporating basic fibroblast growth factor (bFGF) may inhibit the progression of abdominal aortic aneu
December 22, 2016	<a href="#">SRC-1 Regulates Blood Pressure and Aortic Stiffness in Female Mice</a>	Framingham Heart Study suggests that dysfunction of steroid receptor coactivator-1 may be involved in the development of hypertension.
December 12, 2016	<a href="#">The role of GRIP1 and ephrin B3 in blood pressure control and vascular smooth muscle cell contractility</a>	Several erythropoietin-producing hepatocellular receptor B family (EPHB) and their ligands, ephrinBs (EFNBs), are involved in blood pressure regulatio
December 12, 2016	<a href="#">Mouse models of deep vein thrombosis</a>	
December 01, 2016	<a href="#">Maternal vascular responses to hypoxia in a rat model of intrauterine growth restriction</a>	Maternal vascular responses to hypoxia in a rat model of intrauterine growth restriction.
December 01, 2016	<a href="#">Serelaxin improves the pathophysiology of placental ischemia in the reduced uterine perfusion pressure rat model of preeclampsia</a>	Preeclampsia is a hypertensive disorder of pregnancy with limited therapeutic options.
December 01, 2016	<a href="#">Smart Microbubble Eluting Theranostic Stent for Noninvasive Ultrasound Imaging and Prevention of Restenosis</a>	A pH-responsive microbubble-eluting theranostic stent is developed for real-time ultrasound imaging of stent implanted blood vessels and dissolution o
November 23, 2016	<a href="#">Intrauterine Growth Restriction Influences Vascular Remodeling and Stiffening in the Weanling Rat More than Sex or Diet</a>	Intrauterine growth restriction (IUGR) increases the incidence of adult cardiovascular disease (CVD).
November 11, 2016	<a href="#">Photoacoustic Imaging for the Detection of Hypoxia in the Rat Femoral Artery and Skeletal Muscle Microcirculation</a>	Photoacoustic (PA) imaging is an emerging technology that combines structural and functional imaging of tissues using laser and ultrasound energy.
November 08, 2016	<a href="#">Aortic and Cardiac Structure and Function Using High-Resolution Echocardiography and Optical Coherence Tomography in a Mouse Model of Marfan Syndrome</a>	Marfan syndrome (MFS) is an autosomal-dominant disorder of connective tissue caused by mutations in the fibrillin-1 (FBN1) gene.
November 07, 2016	<a href="#">Functional screening of mammalian mechanosensitive genes using Drosophila RNAi library– Smarcd3/Bap60 is a mechanosensitive pro-inflammatory gene</a>	Disturbed blood flow (d-flow) induces atherosclerosis by altering the expression of mechanosensitive genes in the arterial endothelium.
November 02, 2016	<a href="#">in a Rat Model</a>	Hepatic infarcts or abscesses occur after hepatic artery interruption.

October 14, 2016	<a href="#">Angiotensin receptor blockade mediated amelioration of mucopolysaccharidosis type I cardiac and craniofacial pathology</a>	Mucopolysaccharidosis type I (MPS IH) is a lysosomal storage disease (LSD) caused by inactivating mutations to the alpha-L-iduronidase (IDUA) gene.
October 14, 2016	<a href="#">Smooth muscle cell-specific Tgfr1 deficiency promotes aortic aneurysm formation by stimulating multiple signaling events</a>	Transforming growth factor (TGF)- $\beta$ signaling disorder has emerged as a common molecular signature for aortic aneurysm development.
October 05, 2016	<a href="#">Endothelial-like cells differentiated from mesenchymal stem cells attenuate neointimal hyperplasia after vascular injury</a>	The present study investigated the contribution of bone marrow-derived mesenchymal stem cells (BM-MSCs) to neointimal formation, and whether endotheli
October 05, 2016	<a href="#">Innate Effector-Memory T Cell Activation Regulates Post-Thrombotic Vein Wall Inflammation and Thrombus Resolution</a>	Rationale: Immune cells play an important role during the generation and resolution of thrombosis.
October 04, 2016	<a href="#">Asymmetric pulsation of rat carotid artery bifurcation in three-dimension observed by ultrasound imaging</a>	Abstract The arterial structure cyclically fluctuates in three-dimensions (3-D) caused by pulsatile blood flow.
October 01, 2016	<a href="#">Toll-like receptor 4 mutation suppresses hyperhomocysteinemia-induced hypertension</a>	Hyperhomocysteinemia (HHcy) has been observed to promote hypertension, but the mechanisms are unclear.
September 13, 2016	<a href="#">Hemodynamic Influence on Smooth Muscle Cell Kinetics and Phenotype During Early Vein Graft Adaptation</a>	Pathologic vascular adaptation following local injury is the primary driver for accelerated intimal hyperplasia and an occlusive phenotype.
September 13, 2016	<a href="#">Matrix metalloproteinase inhibitor, doxycycline and progression of calcific aortic valve disease in hyperlipidemic mice</a>	Calcific aortic valve disease (CAVD) is the most common cause of aortic stenosis. Currently, there is no non-invasive medical therapy for CAVD.
September 01, 2016	<a href="#">Defective Connective Tissue Remodeling in Smad3 Mice Leads to Accelerated Aneurysmal Growth through Disturbed Downstream TGF-<math>\beta</math> Signaling</a>	Aneurysm-osteoarthritis syndrome characterized by unpredictable aortic aneurysm formation, is caused by SMAD3 mutations.
September 01, 2016	<a href="#">Visualization of haemophilic arthropathy in F8 <math>-/-</math> rats by ultrasonography and micro-computed tomography</a>	A major complication of haemophilia is haemophilic arthropathy (HA), a debilitating disorder with an incompletely defined pathobiology.
September 01, 2016	<a href="#">Cardiovascular health effects of oral and pulmonary exposure to multi-walled carbon nanotubes in ApoE-deficient mice</a>	Exposure to high aspect ratio nanomaterials, such as multi-walled carbon nanotubes (MWCNTs) may be associated with increased risk of atherosclerosis,
June 01, 2016	<a href="#">Resveratrol Decreases TXNIP mRNA and Protein Nuclear Expressions With an Arterial Function Improvement in Old Mice</a>	Aging leads to a high prevalence of glucose intolerance and cardiovascular diseases, with oxidative stress playing a potential role.
February 01, 2016	<a href="#">Assessment of Venous Thrombosis in Animal Models</a>	Deep vein thrombosis and common complications, including pulmonary embolism and post-thrombotic syndrome, represent a major source of morbidity and mo
January 01, 2015	<a href="#">Partial Portal Vein Arterialization Attenuates Acute Bile Duct Injury Induced by Hepatic Dearterialization in a Rat Model</a>	Hepatic infarcts or abscesses occur after hepatic artery interruption.
January 01, 2015	<a href="#">Influence of shear stress magnitude and direction on atherosclerotic plaque composition</a>	The precise flow characteristics that promote different atherosclerotic plaque types remain unclear.

January 01, 2015	<a href="#">Ascending Aortic Aneurysm in Angiotensin II-Infused Mice: Formation, Progression, and the Role of Focal Dissections.</a>	OBJECTIVE To understand the anatomy and physiology of ascending aortic aneurysms in angiotensin II-infused ApoE(-/-) mice.
January 01, 2015	<a href="#">Accelerated Blood Clearance Phenomenon Reduces the Passive Targeting of PEGylated Nanoparticles in Peripheral Arterial Disease</a>	Peripheral arterial disease (PAD) is a leading global health concern.
January 01, 2015	<a href="#">Fetal and Neonatal Stem Cells Early Intravenous Delivery of Human Brain Stromal Cells Modulates Systemic Inflammation and Leads to Vasoprotection in Traumatic Spinal Cord Injury</a>	Spinal cord injury (SCI) is a life-threatening condition with multifaceted complications and limited treatment options.
January 01, 2015	<a href="#">Comparison of Arterial Input Function Models for Small-Animal Ultrasound Perfusion Imaging</a>	Background, Motivation and Objective Bolus & burst (B&B) is a method for quantitative ultrasound perfusion analysis combining bolus tracking and burst
January 01, 2015	<a href="#">Smooth muscle FGF/TGFbeta cross talk regulates atherosclerosis progression</a>	The conversion of vascular smooth muscle cells (SMCs) from contractile to proliferative phenotype is thought to play an important role in atherosclerosis
January 01, 2015	<a href="#">Re-assessing the enhanced permeability and retention effect in peripheral arterial disease using radiolabeled long circulating nanoparticles</a>	Abstract As peripheral arterial disease (PAD) results in muscle ischemia and neovascularization, it has been claimed that nanoparticles can passively
September 01, 2015	<a href="#">Influence of physical activity and gender on arterial function in type 2 diabetes, normal and impaired glucose tolerance</a>	To determine whether Nordic walking improves cardiovascular function in middle-aged women and men, we included 121 with normal glucose tolerance, 33 w
June 01, 2015	<a href="#">The innate immune system contributes to tissue-engineered vascular graft performance</a>	The first clinical trial of tissue-engineered vascular grafts (TEVGs) identified stenosis as the primary cause of graft failure.
April 02, 2015	<a href="#">Noninvasive Molecular Ultrasound Monitoring of Vessel Healing After Intravascular Surgical Procedures in a Preclinical Setup.</a>	OBJECTIVE: Cardiovascular interventions induce damage to the vessel wall making antithrombotic therapy inevitable until complete endothelial recovery.
April 01, 2015	<a href="#">Photoacoustic Imaging of Vascular Hemodynamics: Validation with Blood Oxygenation Level-Dependent MR Imaging</a>	Purpose To noninvasively assess vascular hemodynamics with photoacoustic imaging (PAI) and blood oxygenation level-dependent (BOLD) magnetic resonance
January 01, 2015	<a href="#">Prostaglandin E synthase is upregulated by Gas6 during cancer-induced venous thrombosis.</a>	Venous thromboembolism (VTE) is a common complication of cancer.
January 01, 2015	<a href="#">Axl modulates immune activation of smooth muscle cells in vein graft remodeling.</a>	The pathophysiological mechanisms of the immune activation of smooth muscle cells are not well understood.
January 01, 2015	<a href="#">Rip2 modifies VEGF-induced signalling and vascular permeability in myocardial ischaemia</a>	Aims In myocardial ischaemia, vascular endothelial growth factor (VEGF) induces permeability by activating a signalling pathway that includes VEGF r
January 01, 2015	<a href="#">Multimodality and Molecular Imaging of Matrix Metalloproteinase Activation in Calcific Aortic Valve Disease</a>	Calcific aortic valve disease (CAVD) is the most common cause of aortic stenosis.
November 01, 2014	<a href="#">Acute reductions in mechanical wall strain precede the formation of intimal hyperplasia in a murine model of arterial occlusive disease</a>	OBJECTIVE: Intimal hyperplasia (IH) continues to plague the durability of vascular interventions.

May 01, 2014	<a href="#">Aortic valve sclerosis in mice deficient in endothelial nitric oxide synthase</a>	Risk factors for fibrocalcific aortic valve disease (FCAVD) are associated with systemic decreases in bioavailability of endothelium-derived nitric
April 15, 2014	<a href="#">Exercise performance and peripheral vascular insufficiency improve with AMPK activation in high-fat diet-fed mice</a>	Intermittent claudication is a form of exercise intolerance characterized by muscle pain during walking in patients with peripheral artery disease (PA
January 01, 2014	<a href="#">Age-related vascular gene expression profiling in mice</a>	Increasing age involves a number of detrimental changes in the cardiovascular system and particularly on the large arteries.
January 01, 2014	<a href="#">Monitoring and staging abdominal aortic aneurysm disease with pulse wave imaging.</a>	The abdominal aortic aneurysm (AAA) is a silent and often deadly vascular disease caused by the localized weakening of the arterial wall.
November 01, 2013	<a href="#">Rhodamine-Loaded Intercellular Adhesion Molecule-1-targeted Microbubbles for Dual-Modality Imaging Under Controlled Shear Stresses</a>	BACKGROUND: The ability to image incipient atherosclerosis is based on the early events taking place at the endothelial level.
November 01, 2013	<a href="#">Development and optimization of near-IR contrast agents for immune cell tracking</a>	Gold nanorods (NRs) are attractive for in vivo imaging due to their high optical cross-sections and tunable absorbance.
July 15, 2013	<a href="#">Glucose-stimulated insulin secretion causes an insulin-dependent nitric oxide-mediated vasodilation in the blood supply of the rat sciatic nerve</a>	This study tested the hypothesis that acute hyperglycemia reduces sciatic nerve blood flow in Sprague-Dawley rats.
April 01, 2013	<a href="#">Enhanced Sonographic Imaging to Diagnose Lymph Node Metastasis: Importance of Blood Vessel Volume and Density</a>	Lymph node size is an important variable in ultrasound diagnosis of lymph node metastasis.
March 28, 2013	<a href="#">Mitochondrial activation by inhibition of PDKII suppresses HIF1a signaling and angiogenesis in cancer</a>	Most solid tumors are characterized by a metabolic shift from glucose oxidation to glycolysis, in part due to actively suppressed mitochondrial functi
January 01, 2013	<a href="#">Molecular imaging of inflammation and platelet adhesion in advanced atherosclerosis effects of antioxidant therapy with NADPH oxidase inhibition.</a>	BACKGROUND: In atherosclerosis, local generation of reactive oxygen species amplifies the inflammatory response and contributes to plaque vulnerabilit
January 01, 2013	<a href="#">High and low frequency subharmonic imaging of angiogenesis in a murine breast cancer model</a>	This project compared quantifiable measures of tumor vascularity obtained from contrast-enhanced high frequency (HF) and low frequency (LF) subharmoni
January 01, 2013	<a href="#">Injection of Vessel-Derived Stem Cells Prevents Dilated Cardiomyopathy and Promotes Angiogenesis and Endogenous Cardiac Stem Cell Proliferation in mdx/utrn<sup>-/-</sup> but Not Aged mdx Mouse Models for Duchenne Muscular Dystrophy</a>	Duchenne muscular dystrophy (DMD) is the most common form of muscular dystrophy.
December 01, 2012	<a href="#">Inhibition of Notch1 signaling reduces abdominal aortic aneurysm in mice by attenuating macrophage-mediated inflammation.</a>	OBJECTIVE: Activation of inflammatory pathways plays a critical role in the development of abdominal aortic aneurysms (AAA).
November 01, 2012	<a href="#">The Vascular Disrupting Agent STA-9584 Exhibits Potent Antitumor Activity by Selectively Targeting Microvasculature at Both the Center and Periphery of Tumors</a>	Vascular disrupting agents (VDAs) are an emerging class of therapeutics targeting the existing vascular network of solid tumors.
September 01, 2012	<a href="#">Y1R control of sciatic nerve blood flow in the Wistar Kyoto rat.</a>	We hypothesized that neuropeptide Y (NPY) exerts vasoconstrictor properties in sciatic nerve blood supply by a Y1 receptor (Y1R) mechanism.

August 01, 2012	<a href="#">Murine ultrasound imaging for circumferential strain analyses in the angiotensin II abdominal aortic aneurysm model</a>	OBJECTIVE: The underlying causes of abdominal aortic aneurysms (AAAs) remain obscure, although research tools such as the angiotensin II (Ang II) apol
July 06, 2012	<a href="#">Enhanced angiogenic and cardiomyocyte differentiation capacity of epigenetically reprogrammed mouse and human endothelial progenitor cells augments their efficacy for ischemic myocardial repair.</a>	RATIONALE: Although bone marrow endothelial progenitor cell (EPC)-based therapies improve the symptoms in patients with ischemic heart disease, their
June 26, 2012	<a href="#">Novel Single-Chain Antibody-Targeted Microbubbles for Molecular Ultrasound Imaging of Thrombosis: Validation of a Unique Noninvasive Method for Rapid and Sensitive Detection of Thrombi and Monitoring of Success or Failure of Thrombolysis in Mice</a>	BACKGROUND: Molecular imaging is a fast emerging technology allowing noninvasive detection of vascular pathologies.
April 03, 2012	<a href="#">Endothelial expression of hypoxia-inducible factor 1 protects the murine heart and aorta from pressure overload by suppression of TGF-<math>\beta</math> signaling.</a>	Chronic systemic hypertension causes cardiac pressure overload leading to increased myocardial O <sub>2</sub> consumption.
March 01, 2012	<a href="#">Low-dose metronomic oral dosing of a prodrug of gemcitabine (LY2334737) causes antitumor effects in the absence of inhibition of systemic vasculogenesis.</a>	Metronomic chemotherapy refers to the close, regular administration of conventional chemotherapy drugs at relatively low, minimally toxic doses, with
February 21, 2012	<a href="#">Gene Inactivation of Proprotein Convertase Subtilisin/Kexin Type 9 Reduces Atherosclerosis in Mice</a>	BACKGROUND: The proprotein convertase subtilisin/kexin type 9 (PCSK9) promotes independently of its enzymatic activity the degradation of the low-dens
February 01, 2012	<a href="#">Non- invasive in vivo analysis of a murine aortic graft using high resolution ultrasound microimaging.</a>	INTRODUCTION: As yet, murine aortic grafts have merely been monitored histopathologically.
January 01, 2011	<a href="#">Intravascular photoacoustic imaging of lipid in atherosclerotic plaques in the presence of luminal blood</a>	Intravascular photoacoustic (IVPA) imaging can characterize atherosclerotic plaque composition on the basis of the optical absorption contrast between
December 23, 2011	<a href="#">Molecular Imaging of Vasa Vasorum Neovascularization via DEspR-targeted Contrast-enhanced Ultrasound Micro-imaging in Transgenic Atherosclerosis Rat Model</a>	PURPOSE: Given that carotid vasa vasorum neovascularization is associated with increased risk for stroke and cardiac events, the present in vivo study
December 15, 2011	<a href="#">Bioengineered human vascular networks transplanted into secondary mice reconnect with the host vasculature and re-establish perfusion</a>	The ability to form anastomoses with the host circulation is essential for vascular networks incorporated within cell-seeded bioengineered tissues.
December 06, 2011	<a href="#">Imaging guided trials of the angiogenesis inhibitor sunitinib in mouse models predict efficacy in pancreatic neuroendocrine but not ductal carcinoma.</a>	Preclinical trials in mice represent a critical step in the evaluation of experimental therapeutics.
December 01, 2011	<a href="#">A critical role for macrophages in neovessel formation and the development of stenosis in tissue-engineered vascular grafts</a>	The primary graft-related complication during the first clinical trial evaluating the use of tissue-engineered vascular grafts (TEVGs) was stenosis.
November 15, 2011	<a href="#">Volumetric and Angiogenic Evaluation of Antitumor Effects with Acoustic Liposome and High-Frequency Ultrasound</a>	Acoustic liposomes (AL) have their inherent echogenicity and can add functionality in serving as drug carriers with tissue specificity.
October 11, 2011	<a href="#">Tissue-intrinsic dysfunction of circadian clock confers transplant arteriosclerosis</a>	The suprachiasmatic nucleus of the brain is the circadian center, relaying rhythmic environmental and behavioral information to peripheral tissues to

October 01, 2011	<a href="#">Regional and systemic hemodynamic responses following the creation of a murine arteriovenous fistula</a>	The study of hemodynamic alterations following the creation of an arteriovenous fistula (AVF) is relevant to vascular adaptive responses and hemodialy
September 08, 2011	<a href="#">Transcriptional profiling and network analysis of the murine angiotensin II-induced abdominal aortic aneurysm.</a>	We sought to characterize temporal gene expression changes in the murine angiotensin II (ANG II)-ApoE <sup>-/-</sup> model of abdominal aortic aneurysm (AAA).
July 01, 2011	<a href="#">Longitudinal common carotid artery wall motion is associated with plaque burden in man and mouse</a>	OBJECTIVE: Velocity vector imaging can be used to assess longitudinal common carotid artery (CCA) wall movement (tLoD) in man.
May 27, 2011	<a href="#">Calcific aortic valve stenosis: methods, models, and mechanisms.</a>	Calcific aortic valve stenosis (CAVS) is a major health problem facing aging societies.
March 01, 2011	<a href="#">HIF-1-dependent stromal adaptation to ischemia mediates in vivo tumor radiation resistance.</a>	PURPOSE: Hypoxia-inducible factor 1 (HIF-1) promotes cancer cell survival and tumor progression.
February 01, 2011	<a href="#">Influences of aortic motion and curvature on vessel expansion in murine experimental aneurysms.</a>	OBJECTIVE: To quantitatively compare aortic curvature and motion with resulting aneurysm location, direction of expansion, and pathophysiological feat
January 01, 2010	<a href="#">Micro-ultrasound for preclinical imaging</a>	Over the past decade, non-invasive preclinical imaging has emerged as an important tool to facilitate biomedical discovery.
January 01, 2010	<a href="#">Micro-Ultrasonographic Imaging of Atherosclerotic Progression</a>	We studied prospectively whether atherosclerotic progression in apolipoprotein-E knock- out mice could be noninvasively and accurately measured by use
January 01, 2010	<a href="#">In vivo bioimaging as a novel strategy to detect doxorubicin-induced damage to gonadal blood vessels.</a>	INTRODUCTION: Chemotherapy may induce deleterious effects in normal tissues, leading to organ damage.
November 15, 2010	<a href="#">A Critical Function of Th17 Proinflammatory Cells in the Development of Atherosclerotic Plaque in Mice</a>	Considerable evidence supports that the CD4(+) T cell-mediated immune response contributes to the development of atherosclerotic plaque.
June 01, 2010	<a href="#">Aortic regurgitation dramatically alters the distribution of atherosclerotic lesions and enhances atherogenesis in mice.</a>	OBJECTIVE: Hemodynamics plays a critical role in atherogenesis, but the association between flow pattern and preferential localization of lesion is no
May 01, 2010	<a href="#">Torcetrapib produces endothelial dysfunction independent of cholesteryl ester transfer protein inhibition.</a>	OBJECTIVE: Torcetrapib, a prototype cholesteryl ester transfer protein (CETP) inhibitor with potential for decreasing atherosclerotic disease, increas
January 01, 2009	<a href="#">Antiangiogenic Cancer Therapy : Monitoring with Molecular US and a Clinically Translatable Contrast Purpose : Methods : Results :</a>	Purpose: Materials and Methods: To develop and test human kinase insert domain receptor (KDR)-targeted microbubbles (MBs) (MB KDR ) for imaging KDR at
October 01, 2009	<a href="#">Partial carotid ligation is a model of acutely induced disturbed flow, leading to rapid endothelial dysfunction and atherosclerosis.</a>	Atherosclerosis is closely associated with disturbed flow characterized by low and oscillatory shear stress, but studies directly linking disturbed fl

September 01, 2008	<a href="#">Dual-targeted Contrast Agent for US Assessment of Tumor Angiogenesis in Vivo</a>	Purpose: To develop and validate a dual-targeted ultrasound imaging agent that attaches to both vascular endothelial growth factor receptor-2 (VEGFR2)
March 01, 2008	<a href="#">Micro-ultrasound imaging assessment of carotid plaque characteristics in apolipoprotein-E knockout mice.</a>	This study was aimed to test the hypothesis that noninvasive assessment of carotid plaques can be achieved by high-resolution micro-ultrasound imaging
February 01, 2008	<a href="#">In vivo measurement of flow-mediated vasodilation in living rats using high-resolution ultrasound.</a>	In humans, endothelial vasodilator function serves as a surrogate marker for cardiovascular health and is measured as changes in conduit artery diamet
January 01, 2008	<a href="#">Targeted Microbubbles for Imaging Tumor Angiogenesis: assessment of whole body biodistribution with dynamic micro-PET in mice.</a>	Purpose: Materials and Methods: Results: Conclusion: To evaluate in vivo whole-body biodistribution of micro- bubbles (MBs) targeted to tumor angiogen
January 01, 2008	<a href="#">High-Resolution Ultrasound Perfusion Imaging of Therapeutic Angiogenesis</a>	OBJECTIVES: The purpose of this study was to test the feasibility of contrast pulse sequence (CPS) ultrasound imaging for high-resolution perfusion im
December 15, 2007	<a href="#">Vitamin E analogues inhibit angiogenesis by selective induction of apoptosis in proliferating endothelial cells: the role of oxidative stress.</a>	"Mitocans" from the vitamin E group of selective anticancer drugs, alpha-tocopheryl succinate (alpha-TOS) and its ether analogue alpha-TEA, triggered
August 01, 2007	<a href="#">Detecting vascular changes in tumour xenografts using micro-ultrasound and micro-ct following treatment with VEGFR-2 blocking antibodies.</a>	Blockade of vascular endothelial growth factor (VEGF) binding to its receptors on endothelial cells has been shown preclinically to induce tumour grow
February 01, 2007	<a href="#">Non-invasive real-time imaging of atherosclerosis in mice using ultrasound biomicroscopy.</a>	There are increasing needs to develop imaging techniques to study in vivo vascular morphology and function in various mouse models of atherosclerosis.
January 01, 2007	<a href="#">Ex vivo Characterization of Atherosclerosis using Intravascular Photoacoustic Imaging.</a>	The imaging of plaque composition represents one of the important steps in the interventional management of atherosclerosis.
January 01, 2007	<a href="#">Molecular Imaging of Vascular Endothelial Growth Factor Receptor 2 Expression using targeted contrast enhanced High frequency ultrasonography</a>	The aim of our study was to investigate the use of targeted con- trast-enhanced high-frequency ultrasonography for molecular imaging of vascular endot
May 26, 2006	<a href="#">Developmental changes in hemodynamics of uterine artery, utero- and umbilicoplacental, and vitelline circulations in mouse throughout gestation</a>	In human pregnancy, abnormal placental hemodynamics likely contribute to the etiology of early-onset preeclampsia and fetal intrauterine growth restri
July 01, 2005	<a href="#">Quantitation of hemodynamic function during developmental vascular regression in the mouse eye.</a>	PURPOSE: Ultrasound biomicroscopy (UBM) utilizes frequencies higher than conventional diagnostic ultrasound and can noninvasively provide anatomic and