



Introduction to the Inaugural Issue of *iCirculation*

Guo-Wei He^{1,2,3}

¹ Department of Cardiovascular Surgery & The Institute of Cardiovascular Diseases, TEDA International Cardiovascular Hospital, Tianjin University & Chinese Academy of Medical Sciences, Tianjin 300457, China; gwhezj@163.com or gwhe@tju.edu.cn; Tel.: +86-22-6520-9089; Fax: +86-22-6520-8732

² Tianjin Key Laboratory of Molecular Regulation of Cardiovascular Diseases and Translational Medicine, Tianjin 300457, China

³ Division of Cardiothoracic Surgery, Department of Surgery, Oregon Health & Science University, Portland, OR 97239, USA

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1. Welcome to the First Issue

It is my distinct pleasure and privilege to introduce the inaugural issue of *iCirculation*, a new international, peer-reviewed journal dedicated to advancing the understanding of circulatory health and disease. Our mission is to serve as a dynamic forum for groundbreaking research that spans the entire spectrum of the circulatory system—from fundamental molecular and genetic mechanisms to translational significance, laboratory and clinical diagnostics, innovative therapeutics, and population-level insights. We are committed to publishing work that not only illuminates the basic science covering physiology, pharmacology, biochemistry, molecular biology of the circulation system, pathophysiology of cardiovascular disorders but also directly informs clinical practice and improves patient outcomes.

In this first issue, we have assembled a collection of outstanding contributions that exemplify this vision. The issue features a balanced blend of incisive review articles and original research reports, tackling critical questions in coronary artery bypass grafting (CABG), heart failure, vascular inflammation, and the genetics of cardiac malformations and sudden arrest. It is our hope that these papers will stimulate discussion, spark new ideas, and set a high standard for the rigorous, impactful science we aim to publish.

2. In This Issue

We open with three insightful reviews on CABG, a cornerstone of revascularization therapy. In “What Is the Fate of Saphenous Vein Graft Vasa Vasorum after Coronary Artery Bypass Surgery: An Open-and-Shut Case?” Michael R. Dashwood elegantly explores the often-overlooked microvascular network of the vein graft—the vasa vasorum. He synthesizes evidence on how the “no touch” harvesting technique may preserve these critical vessels and support a novel “inside-out/outside-in” transport system, offering a compelling explanation for improved graft patency.

Continuing the surgical theme, Guo-Wei He addresses a long-standing technical debate in “Which Is Better? Pedicled versus Skeletonized Internal Mammary Artery Grafts in Coronary Artery Bypass Grafting: Emphasis on the Antispastic Role of Perivascular Adipose.” This review provides a masterclass in physiological surgical reasoning, demonstrating that perivascular adipose tissue (PVAT) is not inert but a bioactive organ that actively prevents graft spasm. The evidence strongly suggests that the pedicled technique, by preserving PVAT, is physiologically superior.

Turning from surgery to molecular imaging, Haoran Guo and Jianming Li present “The Latest Progress of Targeting Fibroblast Activating Protein PET/CT Molecular Imaging in Heart Failure.” This timely review highlights how fibroblast activation protein inhibitor (FAPI) positron emission tomography/computed tomography (PET/CT) is transforming our ability to visualize and quantify myocardial fibrosis at the molecular level. The authors make a compelling case for this technology as a promising tool for early diagnosis, risk stratification, and treatment monitoring in heart failure.



Our fourth review, by Seynur Sunar and colleagues delves into fundamental vascular biology. In “Lipoxygenase Pathways in the Regulation of Vascular Inflammation and Its Resolution”, the authors elegantly navigate the dual roles of lipoxygenase enzymes—orchestrating both the initiation of inflammation via leukotrienes and its active resolution via specialized pro-resolving lipid mediators (SPMs). This review offers crucial insights into how an imbalance in these pathways drives chronic vascular disease and points toward novel therapeutic strategies.

The issue also features two powerful original research articles that underscore the growing importance of genetics in cardiovascular medicine. Jiangang Wang and colleagues report on “Targeted Exome Sequencing in Pre-Hospital Sudden Cardiac Arrest Reveals a High Genetic Diagnostic Yield.” In a city-wide cohort from Hangzhou, China, they demonstrate that systematic exome sequencing identifies pathogenic or likely pathogenic variants in nearly one in five young and middle-aged individuals who suffered out-of-hospital sudden cardiac arrest. This finding has profound implications for molecular autopsy and family screening.

Finally, Zi-Fei Zheng and colleagues provide a landmark case-control study in “Genetic Variants with Cellular Dysfunction and Pathogenic Significance of *ACTC1* Gene Proximal Promoter in 634 Patients with Atrial Septal Defects and Controls.” By meticulously sequencing the *ACTC1* promoter region in over 600 subjects, they identify six patient-specific variants that impair transcriptional activity by disrupting transcription factor binding. This work uncovers a novel genetic mechanism underlying atrial septal defect, one of the most common congenital heart malformations.

3. A Call for Articles

This inaugural issue represents our first step, but the journey is just beginning. *iCirculation* is now actively seeking high-quality submissions for upcoming issues. We invite you to contribute original research, comprehensive reviews, and case studies that address the pressing challenges and emerging opportunities in circulatory science and medicine. Our scope is intentionally broad, encompassing basic, translational, clinical, and public health research. We are particularly interested in studies that bridge disciplines—from genetics and molecular biology to imaging in cardiovascular system and brain circulation, and from interventional cardiology and endovascular intervention to cardiac surgery and vascular surgery.

As a new journal, we are committed to rigorous peer review, rapid publication, and open access dissemination to ensure your work reaches the widest possible global audience. I encourage you to visit our website <https://www.sciltp.com/journals/iCirculation>, review our author guidelines, and submit your best work to *iCirculation*. Together, we can build a vibrant community and a leading platform for discoveries that will shape the future of cardiovascular health.

Thank you for your interest in our inaugural issue. I look forward to your contributions.

Conflicts of Interest

The author declares no conflict of interest.

Use of AI and AI-Assisted Technologies

No AI tools were utilized for this paper.