

## Cardiac fibrosis

For the past decade, investigation on the causes that underpin cardiac fibrosis has created its own niche in the literature. Fibrosis occurs not only in the myocardium but is important in consideration of the pathogenesis of valvular diseases and vascular dysfunction. The level of interest in cardiac fibrosis is currently very high, and the number of laboratories involved in the investigation of this disease state is burgeoning especially as it is now widely recognized that fibrosis of the heart *per se* is a common independent cause for cardiac muscle dysfunction. Nonetheless we are no nearer to finding a clinical solution for the inappropriate activation of fibroblasts or small molecule inhibitor to quell generalized cardiac dysfunction that is associated with the dysregulation and expansion of the cardiac interstitium, than we were 10 years ago. A major consideration of the complexity in seeking a universally effective anti-fibrotic agent is that the phenotype and behaviour of fibroblasts residing in different organs are themselves different from one another. Not to mention the distinct fibroblast activity and their cellular fate during various disease states in the heart. Thus the investigator would do well to consider the specific source organ (heart, lung, artery), type of disease, or even of specific structures or topographical origins of fibroblasts within a given organ e.g., cardiac valves, or atrial vs ventricular-sourced fibroblasts when investigating specific fibrotic processes. In this sense, perhaps it is an ideal point in the history of development of the main ideas surrounding the pathogenesis fibrotic processes to ask questions about the activation of quiescent fibroblasts to myofibroblasts, so as to provide clues as to the key triggers of cellular events that underpin tissue fibrosis. Further, as tissues are a complex arrangement of various cell types, researchers would be well-served to pose hypotheses that address cell-to-cell crosstalk, and matrix-to-cell signals. Recent developments in the literature reveal that progenitor cells and key players in the immune response may be at the basis of control of activation of fibroblasts, and the purpose of this book will be to highlight the latest developments in these areas, so as to develop a rational approach to quelling fibroblast activation and consequential degradation of tissue performance that is associated with generalized fibrosis. (Message from the Guest Editors)

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## Message from the Editor-in-Chief

*Reviews in Cardiovascular Medicine* was launched in 2000 by MedReviews, LLC, in New York, NY. *This journal* was conceived to fill a critical gap for clinicians who were struggling with a rapidly expanding knowledge base in cardiovascular medicine with the convergence of basic science, clinical epidemiology, and therapeutic clinical trials. The founding co-editors were David P. Faxon, MD, past president of the American Heart Association, and Norman E. Lepor, MD, who is considered a luminary in interventional cardiology. The contributing editorial board grew over time and Dr. Peter A. McCullough, MD, MPH ascended from contributing, to associate, to co-editor of *the Journal*. In 2018, *the Journal* took its next big step under the leadership of Dr. McCullough as editor-in-chief to become a truly international publication. Its offices moved to IMR Press in Hong Kong, and the editorial board was made more inclusive and representative of the world-wide contributors in academic cardiology. Additionally, *the journal* brought on expertise in translational medicine to help face the future of molecular medicine and its role in cardiovascular disease. Today *Reviews in Cardiovascular Medicine* is considered a top tier journal in cardiology with timely and comprehensive reviews covering all aspects of cardiovascular medicine including atherosclerosis, myocardial disease, arrhythmias, and valvular heart disease. The scope of papers ranges from population science, applied basic investigation, *in-vitro* diagnostics, and evidence-based strategy and therapeutic trials involving both pharmacologic intervention and interventional devices. The highly integrative style of *the Journal* anchored with evidence tables and instructive figures has garnered many citations over the years and many guidelines documents have relied upon works published in *Reviews in Cardiovascular Medicine*. Supplement and focus issues have been very popular among the readership and often are viewed as the most up-to-date compilations of new knowledge in cardiology and related specialties. The future is bright for academic cardiovascular medicine and *Reviews in Cardiovascular Medicine* is well positioned along side the clinician-investigator in the years to come as a trusted source of critical information and analysis.

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