

EDITORS' PAGE

JACC: Basic to Translational Science

The Apple That Falls Closely to the JACC Family Tree



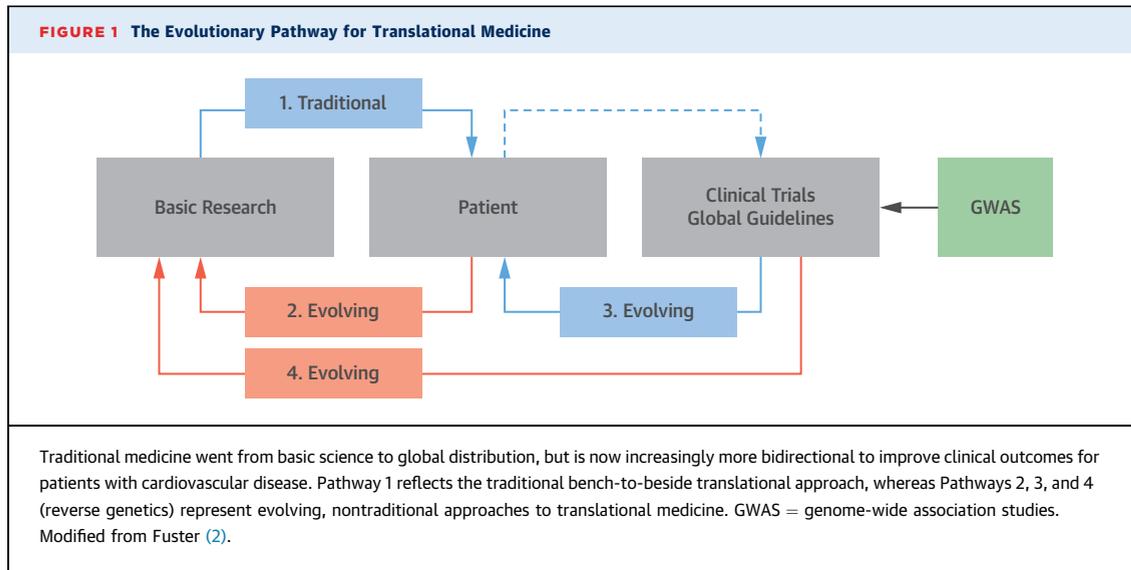
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JACC: *Basic to Translational Science*, the newest of the *Journal of the American College of Cardiology (JACC)* family of journals, is now entering its second year. Over the past 2 years, the journal has published a series of outstanding preclinical, early-phase transitional clinical studies, and novel translational methods papers. The journal also published a series of well-received State-of-the-Art reviews, as well as uniquely themed “how to” papers in the Translational Toolbox section of the journal, and a number of interesting and provocative papers on various aspects of translational medicine in the Translational Perspectives section. The open-access format has allowed *JACC: Basic to Translational Science* to increase the number of original research publications published per issue by ~15% to 20%, while still maintaining a very tight thematic focus on publishing those research studies that the Editors believe will lead to new therapies, ranging from early-phase laboratory-based research all the way up through phase I and II clinical trials. Attesting to the global nature of cardiovascular translational research, 52% of the papers published during the first 2 years were from domestic submissions, whereas 48% were from international submissions. Given that the JACC family of journals has focused traditionally on the clinical sciences and not necessarily on the basic sciences, it is reasonable to ask how the addition of *JACC: Basic to Translational Science* enriches the existing family of JACC journals.

To address the question of how *JACC: Basic to Translational Science* enriches the JACC family of journals, it bears emphasis that beginning in 2014, JACC made a strong commitment to publishing translational research studies (1). Indeed, 1 in 5 papers published in JACC are translational in nature. However, given the broad nature of the JACC readership, there were many worthwhile, albeit more specialized

papers that were of interest to the JACC readership, but that were not suitable for the parent journal. Hence, there was a need to find a home for these worthwhile papers.

A second, and perhaps more important reason for creating a journal with a translational focus, is that the field of translational medicine is evolving at a dizzying pace, and now encompasses a number of research themes that were not even imaginable 5 years ago. As noted previously, translational medicine is no longer unidirectional, with studies that start in the laboratory, proceed to the bedside to confirm the basic observations in patients, and then move from the bedside to large clinical trials that confirm efficacy in well-delineated patient populations (Figure 1) (2). Today, translational research is both bidirectional and multidimensional. Data emanating from large clinical databases and genome-wide association studies in patients have resulted in new insights into novel mechanisms of action in cardiovascular disease that, in turn, led to new therapies. One salient example is the development of proprotein convertase subtilisin kexin type 9 (PCSK9) inhibitors to reduce low-density lipoprotein cholesterol levels. The FOURIER (Further Cardiovascular Outcomes Research With PCSK9 Inhibition in Subjects With Elevated Risk) trial showed how insights gleaned from genome-wide association studies in very large patient cohorts were used to identify a novel therapeutic target (3,4) that resulted in a new therapeutic approach that saved lives when added to conventional medical therapy (5). The concept of personalized medicine, which uses information about a person's genes, proteins, and environment to inform the optimal therapeutic approach, is another example of how the bidirectional flow of information from: 1) the laboratory to the patient; and 2) from large clinical



genetic databases back to the laboratory, can better potentially inform better patient care.

Third, given the rapid development of new cardiovascular devices and drugs, the cardiovascular generalist, specialist, or investigator of the future will need to have a firm understanding of the basis for these new therapies to stay informed about new developments in the field. *JACC: Basic to Translational Science* allows the *JACC* readership to remain au courant in the evolving and expanding field of cardiovascular medicine. Borrowing from the *JACC* zeitgeist of delivering highly impactful and highly meaningful content within the context of simplicity, every original science paper in *JACC: Basic to Translational Science* is accompanied by a visual abstract that allows the reader to understand the key aspects of how the study was done, as well as understand what the major research findings of the paper were. The visual abstract allows readers, who are increasingly deluged with large amounts of information on a daily basis, to quickly understand the paper and to decide whether they should read the paper for a more complete understanding. Consistent with all of the *JACC* family of journals, every research paper concludes with a Perspectives

summary outlining the core clinical competencies and translational outlook that were produced as a result of the research.

As the newest member of the *JACC* family, *JACC: Basic to Translational Science* complements both the parent journal and the other sister journals, insofar as it creates a scientific home for translational research studies that are of interest to the *JACC* readership, but that do not necessarily fit within the clinical context of the more established *JACC* journals. Although *JACC: Basic to Translational Science* hews closely to the guiding principles of the *JACC* family of journals, it also extends their scientific breadth and reach by creating an open-access platform that is focused exclusively on accelerating the translation of new scientific discoveries into new therapies to treat the ever-growing number of patients afflicted with or at risk for developing cardiovascular disease.

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