Although Circulation Research has a long-standing, venerable reputation as a major repository of cutting-edge basic and translational research, a review of its content reveals a striking paucity of clinical research. For example, only ≈ 8% of all articles published in the period from 2009 to 2012 were focused primarily on work performed with humans or human specimens. The editors are determined to change this situation.

The general perception of the cardiovascular research community is that Circulation Research is not an appropriate venue for disseminating clinical research. Such a view seems odd, considering that the fundamental mission of the journal is to advance our understanding of human disease and that the ultimate purpose of basic research (which constitutes the bulk of the current content of the journal) is to improve our understanding and management of cardiovascular disease in humans. So, the natural question is: why? Why are human investigations generally excluded from the perceived purview of Circulation Research?

Is a bias against publishing clinical research rooted in our mission? Certainly not. As indicated, the primary mission of Circulation Research is to illuminate the mechanisms of human disease. This is clearly stated in the Instructions to Authors on our website (http://circres.ahajournals.org/site/misc/ifora.xhtml): “The journal … encourages the submission of work that uses state-of-the-art approaches to illuminate mechanisms of human disease. A special welcome is extended to translational research and to clinical research that yields fundamental insights; studies in humans or human tissues that advance our understanding of the basis of disease and the mechanism of therapies are an area of particular emphasis.” Thus, publishing clinical research is not only entirely compatible with, but also fundamentally important to, the journal’s mission.

Does our editorial policy result in a bias against publishing clinical research? Certainly not. In the statement cited, the current editors not only acknowledge their interest in clinical work but even emphasize its importance to the success of the journal. Clearly, the paucity of clinical articles cannot be ascribed to a lack of editorial interest.

Does the scarcity of clinical research reflect a lack of interest on the part of our readership? Certainly not. On the contrary, clinical articles are among the most widely read (as judged from the number of downloads) and cited. For example, in 2012, clinical investigations accounted for 2 of the 10 most read articles, although they were only 8% of all articles published that year. In the 2009 to 2012 period, the average number of downloads of clinical articles exceeded that of basic, nontranslational articles (Figure). Despite the fact that Circulation Research is commonly thought of as a basic/translational journal, the appetite of its readers for human investigations is quite robust.

In summary, the paucity of clinical articles cannot be rationalized on the basis of our mission, our editorial policy, or our readers’ interests. This leaves tradition as the most plausible explanation: that is, Circulation Research is not a frequent destination for human investigations because, traditionally, it has not been a frequent destination for human investigations and few such articles have appeared in its pages since its inception 60 years ago, leading to a perception that has discouraged submission of clinical work. Tradition alone, however, is not a sufficient or valid reason for maintaining the status quo. Just because something has been done heretofore does not mean that it should continue to be done, nor, conversely, should we refrain from doing things just because they have not been done before. Just as the world of medical research is an ever-changing enterprise, so is the platform for disseminating information. To succeed, a journal must adjust to the demands of the time. The fact that a policy was adopted during a specific phase of a journal’s history does not imply that it should continue to be adopted in perpetuity. We see no logical reasons for excluding clinical research from the journal. On the contrary, there are several cogent reasons why Circulation Research should publish more clinical work.

First, as stated twice already in this article, the overarching mission of the journal is to advance our understanding of the mechanism and treatment of cardiovascular disease in humans. This mission is clearly articulated in our website, “The journal … encourages the submission of work that uses state-of-the-art approaches to illuminate mechanisms of human disease.” It is
further reinforced in our editorial Manifesto,1 “In keeping with the increasing emphasis of the NIH, AHA, and other bodies on bridging the gap between basic research and clinical medicine, we will endeavor to publish more cutting-edge translational studies that offer mechanistic insights, i.e., work in humans or with human tissue that uses state-of-the-art approaches to illuminate basic mechanisms of disease and therapy.” It is self-evident that achieving this goal requires studying normal and abnormal cardiovascular function not only in animal models but also in humans. Indeed, it could be argued that when one is seeking to understand cardiovascular disease, human studies are just as important as, or even more important than, experimental work. As the adage goes, the best model of human disease is humans.2

Second, to unravel the mechanistic and pathophysiological basis of disease, we think that it is necessary to use the entire spectrum of model systems available, ranging from very basic settings (isolated molecules, isolated organelles, isolated cells) to intact organs, intact animals, and, of course, humans. Why should humans be excluded from the inquiry into mechanisms of disease? Why should a barrier be placed between preclinical and clinical work? Modern medical research is a continuum that begins with relatively simple experimental systems in the laboratory and extends all the way to clinical investigations; in our opinion, any boundaries, fences, or pigeonholes designed to compartmentalize this process are artificial and arbitrary.

Third, the cultural and societal view of basic research has changed profoundly since the journal was founded. Sixty years ago, the concept of translational research was not widely appreciated. There was a tendency to separate basic work from clinical work, which resulted in a fairly rigid distinction between basic and clinical journals. In recent times, however, these 2 realms have become increasingly integrated, as shown, for example, by the fact that many leading cardiovascular journals are publishing both basic and clinical articles and that most clinical cardiovascular training programs emphasize both basic and translational research. At the same time, the lay public has become increasingly interested in the clinical implications of basic research, as have granting agencies and philanthropic organizations. The old paradigm of basic scientists working within the confines of their laboratories, completely separated from the clinical environment, or, conversely, clinical investigators conducting clinical trials without knowledge of, or involvement with, any basic work, is fading away, increasingly replaced by efforts aimed at promoting communication, integration, and collaboration between basic and clinical scholars. Circulation Research should not continue to adhere to a mindset that is rapidly becoming vestigial. The journal should be at the forefront of modern science—a leader, not a follower.

In view of these considerations, the editors of Circulation Research have decided to place renewed emphasis on clinical articles. In follow-up to our previous statements of interest in clinical research (contained in the Instructions to Authors and in our editorial Manifesto1), we are inaugurating a new feature—the Clinical Track—which is designed for papers that describe work performed primarily in humans or with human specimens. This work can consist of first-in-human (phase I) studies, phase II clinical trials, or even phase III trials, as long as they provide insights into the mechanisms or pathophysiology of human disease. In addition, we will consider molecular epidemiological studies and manuscripts describing new evidence-based prevention strategies and risk factor management pertaining to cardiovascular disease, if they expand our understanding of the underlying pathogenesis and pathophysiology. Investigations of blood/tissue samples obtained from patients will also be included in the new track. The aim is to publish studies that help us understand how disease develops, how new therapies work, and how they alter the normal course or pathophysiology of disease, as well as studies that, by elucidating the prognosis and natural course of disease, illuminate the underlying mechanism. Thus, we are interested in a wide spectrum of clinical manuscripts. A common feature of the Clinical Track articles, however, will be their focus on advancing our understanding of the mechanism and treatment of human disease. Articles that will not be considered relevant to our mission include descriptions of new devices or new diagnostic/treatment techniques that do not advance our understanding of disease mechanisms and studies that merely compare one treatment with placebo or another treatment, without providing any pathophysiological or mechanistic insights.

Manuscripts submitted to the Clinical Track will be handled by Associate and Consulting Editors who have extensive expertise in clinical research, including (in alphabetic order) Drs Joshua Hare, David Kass, Peter Libby, Douglas Losordo, Sumanth Prabhu, Gordon Tomaselli, and James Willerson, among others. We have added to our Editorial Board Drs Lem Moyé and Michael Lauer, who will provide additional expertise in biostatistics and epidemiology, respectively, to complement the expertise of the statistical consultants who are already members of our Board (Richard Ittenbach, Hideo Kusuoka, and Jerome Trzeciakowski).

Authors who wish to submit papers to the Clinical Track should indicate this in the cover letter, so that the manuscripts will be handled in accordance with the priority assigned to Clinical Track manuscripts.

With the introduction of the Clinical Track, we have revised the nomenclature by which we categorize articles in our Table of Contents. Instead of Translational/Clinical Research, we will use the term Translational Research when the work is not conducted primarily in humans or human specimens, and the term Clinical Track when the work is conducted primarily in humans or human specimens.

We look forward eagerly to receiving papers for the newly inaugurated Clinical Track. We believe that these manuscripts will complement and augment our traditional portfolio of outstanding basic and translational articles, thereby enhancing the effectiveness of the journal in advancing our understanding of cardiovascular disease, its causes, its treatment, and its prevention.

As always, we are interested in your feedback. Please send your comments directly to Circulation Research at circulation.research@circres.com.

Disclosures

None.

References


Keywords: Editorials
Circulation Research Launches a Clinical Track for Studies in Humans
Roberto Bolli

Circ Res. 2013;113:1266-1267
doi: 10.1161/CIRCRESAHA.113.302996

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circres.ahajournals.org/content/113/12/1266