As I draft this editorial, it is almost a year into our stewardship as editors of the JCI. Previous Journal Editors have told me that the evaluation of manuscripts submitted across a broad range of topics and specialties was a highlight for their time as JCI Editor. I’ve found this to be no less true in my case, and I can speak confidently that the entire Editorial Board feels the same enjoyment. As I reflect upon the past year, I’m struck by feelings that range from immense privilege, to enormous responsibility, to, at times, near apoplectic bewilderment.

Let me begin with privilege. We on the Editorial Board are in a unique position to be reading and deciding whether to publish cutting-edge scientific discovery across the entire spectrum of biomedicine. It’s an amazing experience, and one that encompasses a feeling that you are at the heart of the scientific spirit. Dr. Robert J. Lefkowitz spoke about the scientific spirit during his presidential address to the American Society for Clinical Investigation in April 1988 (1). He made the point that “the true spirit of science concerns an attitude or approach to scientific investigations that inspires, pervades, and permeates the entire enterprise.” And, in his address, he went on to focus on three elements of this scientific spirit: enthusiasm, creativity, and integrity. I selected the JCI board members not only for their knowledge in a scientific area, but also for their passion for science and new discovery. In essence, these individuals truly encompassed the scientific spirit. What I did not realize at the time was how much we on the Editorial Board have benefited from the gifts that you give to us each day: the gift of sharing your most treasured discoveries and creativity.

Along with this privilege of learning about the wonderful discoveries you have made comes responsibility. Over the past year, the Editorial Board has received about 3,700 original submissions and over 800 revisions. While it is my firm belief that we do not have an obligation to publish everyone’s work, we do have a responsibility to be thoughtful, thorough, and show the utmost respect to authors who have chosen us to consider their work for publication. Given that about 70% of the submitted manuscripts are not sent out for review, it is inevitable that not all authors will be happy with our decision. The journal has a long history of publishing work that is rigorously performed and also demonstrates new insights into the mechanism of disease. This has made the JCI a highly selective venue, which means that the journal delivers many more rejections than acceptances. We undoubtedly have rejected papers that ultimately are shown to be important discoveries. The members of the Editorial Board are working scientists and clinicians, and we are well acquainted with receiving journal decisions that can generate a number of emotions: elation upon acceptance, discouragement and even outrage upon rejection. But let me assure you, the entire Editorial Board respects the passionate spirit of authors and believes in the importance of providing timely and thoughtful decisions.

Sadly, the one feeling that I did not suspect would occupy so much of my time is bewilderment. By this, I am referring to my state when we receive a manuscript with manipulated or fraudulent data. Much has been written about scientific malfeasance, both in this journal and elsewhere. However, the extent of data manipulation took me by surprise. Lefkowitz points out that “...it is integrity that provides the bricks that keep the [scientific] fire from burning out of control and focuses the resultant energy in a productive manner” (1). I assumed that as scientists, we are all on this relentless pursuit of the truth, and by our commitment to the scientific method, we will do what is right. While I believe this to be largely true, we live in a complex scientific world. Many of the papers we see are the result of collaborations between individuals from all over the world. We share reagents, techniques, experiments, and ideas among ourselves that often lead to co-authorship as recognition of contribution. How, then, does the corresponding author keep track of data integrity for that entire body of work? To be honest, I’m not sure, but I do know it must happen. We at the JCI believe it is the senior/corresponding author’s responsibility to verify the integrity of all data in a manuscript. I encourage all corresponding authors to rigorously review all the primary data, whether generated in their own lab or as part of an external collaboration. I am reminded of the weekly data meetings that I had when I was a trainee with one of my great mentors, John Ross Jr. I would perform physiological experiments recording numerous hemodynamic parameters on chart recorder paper and simultaneously electronically. At our regular data meetings, Ross would sit down with us for hours to review every hemodynamic tracing for every condition for every experiment. Not once would he look at the summary data that I had labored on for countless hours to analyze. Finally, when he did ask to see the summary data, he not infrequently would catch a calculation error. By looking at every single data point, he could integrate all the data and know whether an error was made. To this day, I practice this in my laboratory, and I encourage all authors to spend the time to rigorously review all the primary data whether generated in their lab or not.

During the past year, we have also worked hard on a number of new initiatives that I announced at the beginning of my tenure: Our video series Conversations with Giants in Medicine started in April 2012 with Harold Varmus (2) and Robert Lefkowitz, Mike Brown, and Joe Goldstein (3). We now have a collection of 11 interviews, including this month’s conversation with Paul Greengard (4). All interviews are available at http://www.jci.org/kiosk/cgm. In another video effort, Author’s Take, authors have the opportunity to briefly present the work represented in their JCI articles. These videos are available at http://www.jci.org/kiosk/authors_take. We are publishing a series called The Attending Physician that discusses current therapy, the knowledge gap, and the advance demonstrated by a research article published in the journal; articles in the new Hindsight series probe the JCI archives for landmark publications that have changed a scientific field.
In December 2012, I called for submissions in a new category, Clinical Medicine (5). In this category, and true to our heritage, the Journal of Clinical Investigation will publish early-phase (phase I/II) human research that has the potential to change the practice of medicine. We’ve already seen a number of exciting submissions, and we expect to publish our first article in this category in the coming months. Alongside this category, we’ll also be publishing Clinical Medicine Reviews, focusing on specific areas with broad relevance.

Peer review forms the backbone of editorial discrimination at the JCI. Over 4,400 reviews were submitted from the start of my tenure, and these reviews were provided by almost 2,500 unique reviewers. I would be remiss not to recognize the enormous effort contributed by this large and authoritative group of scientists.

As we on the Editorial Board get together each week to discuss your work, we share in the scientific spirit to which we all aspire. It’s like we are back in school as medical or graduate students learning about new fields and challenging problems. We share in the commitment to publish the best scientific discoveries that will have impact in the field of medicine. The deepest appreciation, however, must necessarily go to those authors who entrust their work to us and who make the JCI the standout journal that it is. I, and the rest of the board, look forward to continuing to fill the JCI with your exciting research. And, as always, I welcome your feedback (editors@the-jci.org).

Howard A. Rockman, Editor in Chief