A LETTER FROM THE EDITOR

Dear Colleagues,

This is an exciting time for biomedical optics. We are in the midst of an extraordinary knowledge expansion in biology which, in turn, demands technologies that provide better, faster, more quantitative measurements on ever more challenging systems. In view of this, the importance of biomedical optics has never been greater. With the convergent capabilities of molecular techniques and optical technologies we are now in a position to use light for probing and manipulating biological processes with unprecedented precision and control. This, in turn, provides us with new opportunities to generate fundamental information, solve important biological problems, and develop the next generation of medical techniques. As this enterprise grows, a new formalism emerges that invokes principles of tissue optics, computational methods, and light/tissue interactions. We, as a community, are already training the next generation of biomedical optics students in these concepts. With these pieces either in place or under development, perhaps our most important future challenge is to optimize our impact on both the scientific community and on public health.

The Journal of Biomedical Optics, fueled by the youth and enthusiasm of our field, is growing rapidly. In fact, the JBO has benefited enormously from you. Fortunately, because of your support, the journal is now in a position to reciprocate and do a few important things for you.

First, I am thrilled to report that the journal is now fully indexed by the Institute for Scientific Information (http://webofscience.com). This means that, beginning with volume 4(1), your JBO articles can be found in multiple electronic databases, including Science Citation Index, Current Contents/Life Sciences, and Current Contents/Engineering, Computers & Technology. This is a huge achievement and is a direct consequence of the quality of your publications and the broad impact of our field.

Second, the journal can help identify important biological problems that should receive intense effort by our community. Topics such as the cellular and molecular origins of remitted light signals, mechanisms of light-induced gene activation, and the practical role of quantitative optical measurements in disease detection will be considered in these pages. Among the appropriate forums for these discussions will be “Letters to the Editor” and “Rapid Communications,” sections that we will introduce over the next 1–3 years. This will, hopefully, contribute to development of sound science without sacrificing the energy and idealism that has characterized biomedical optics over the years. Together, these strategies are designed to increase the general level of understanding of biological systems and help us develop better insight into the role optical technologies can play in biomedical research.

Third, and perhaps most important, is the need for JBO to be on your desks and in your laboratories with greater frequency. Our goal is to transition to a bimonthly and ultimately a monthly journal over the next 3 years. But to do this we need your help. Send in your manuscripts. Encourage your colleagues and institutions to subscribe to the JBO. Check out our new look, starting with our special millennium issue dedicated to Dr. Britton Chance (a.k.a. “BC”). The “2000 BC” issue will be the first to profile biomedical optics pioneers and centers. Future issues will contain dedicated sections highlighting biomedical optics centers and their members throughout the world.

In conclusion, I look forward to working with you to further advance and define biomedical optics. Thanks to the leadership and commitment of our founding Editor-in-Chief, Dr. Joe Lakowicz, the JBO staff, and the Editorial Board, JBO has already been established as a premier medical optics journal. One of our most important tasks for the future is to provide a framework for communicating the exceptional interdisciplinary vitality of our field to the broader community, and make JBO one of the premier journals in biomedical research.

Bruce J. Tromberg
Editor-in-Chief