

Editorial

With this issue of the *Journal of General Physiology*, Edward N. Pugh, Jr., has agreed to assume the responsibilities as Associate Editor of the Journal after 16 years of service on the Editorial Advisory Board. This change reflects the increasing number of articles on sensory, especially visual, physiology that are published in the Journal—and our wish to promote this development further. We greatly appreciate Dr. Pugh's willingness to accept this responsibility.

Studies on sensory physiology span a wide range—from studies on chromophore turnover in visual pigments; to signaling from the initial sensory event (whether light, smell, or taste) to the plasma membrane conductance and potential changes; to action potential firing rates and other higher-order effects including psychophysical studies. Articles on sensory physiology tend to be quantitative, relying on technically sophisticated experiments in conjunction with detailed analysis of the results; qualities that long have been considered to be characteristic of articles published in the Journal. Advances in molecular biology, electrophysiology, optical microscopy, and other imaging methods, and system modeling using computational methods, provide the basis for moving the frontiers not only in the direction of increasingly sophisticated molecular mechanisms but also toward a more integrative understanding. As befits its name, articles the Journal publishes focus primarily on studies on the molecular and cellular levels. We also look forward to publishing articles that report the results of studies on the higher-order integrative problems.

Though the Journal has a distinguished history of publishing articles in sensory physiology, the recruitment of Dr. Pugh as Associate Editor to further promote the Journal's presence in sensory physiology mirrors the initiative we took in muscle and contractile systems, where Kenneth C. Holmes assumed the responsibility as Associate Editor in 2002. We publish an increasing number of articles on contractile systems, and we welcome

articles that address these problems at the single-molecule level. Indeed, the first single-molecule studies were published in the Journal almost 40 years ago (Bean, R.C., W.C. Shepherd, M. Chan, and J. Eichner. 1969. *J. Gen. Physiol.* 53:741–757), and single-channel measurements of ever-increasing power and sophistication continue to be a major presence on the Journal's pages.

Finally, I wish to comment briefly on one of the perennial complaints I hear about articles published in the Journal—that they are long and tend to have many equations. The latter feature is unavoidable; general physiology is a quantitative science, and it is often necessary to design and interpret experiments in mathematical terms. The former, however, is not entirely correct. Yes, articles published in the Journal focus on complex, mechanistic issues. Such articles often cannot be compressed into the format required by some “vanity” journals without undue loss of information, and we are pleased to provide our authors with a venue where they are able to convey the significance of their work and its mechanistic implications. Yet, brevity is a virtue, and in most cases increases the impact of an article. To emphasize this point we encourage authors to publish information that will be of interest primarily to a limited number of specialists as Supplemental Material in the Journal's online version. Recently we also instituted a new category of articles, Communications, which are limited in length to six published pages. Even before we instituted this change, however, the average length of articles published has decreased steadily—from ~15.5 pages/article in 2001 to ~13.5 pages/article in 2005.

Altogether, the Journal is doing well, and we look forward to its continued growth and expansion into new areas of general physiology.

Olaf Sparre Andersen
For the Editors
The Journal of General Physiology