Physiological genomics - where are we now?

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The first words of a new journal, published in 1999, promised us that we were “...in the midst of a revolution in biology and medicine: an information revolution” (1). The members of the founding editorial group of Physiological Genomics wisely predicted that the merging of the fields of physiology, genomics, and medicine would capitalize on our ability to combine and analyze large datasets and communicate their meaning effectively. From their vantage point at the entry into the 21st century, they saw that “…numerous fields, including physiology, are being redefined, new ones such as proteomics are emerging, and others (e.g., structural biology) are poised to contribute significantly to defining gene function on a large scale.” Together with the support of the American Physiological Society and an editorial board of outstanding breadth, they created a new journal that has been amazingly successful in solidifying a new field of study. As the journal completes its 11th year of publication, it seems worthwhile to see how the field and the journal have evolved together.

From its inception, prompted by the unveiling of the draft of the human genome, the field of physiological genomics has had at its core the task of assigning function to genes. With the advent of new technologies that have allowed collection of biological data at unprecedented scales, practitioners of physiological genomics have quickly realized that this task is extraordinarily complex. Interactions between genes, proteins, cells, tissues and organs and even organisms define function, and so it is very rare that we can understand physiology in the context of a single gene. As our thinking about “genes to function” has evolved, so too has our journal. Last year, we reorganized Physiological Genomics into nine separate sections to better embrace this diverse activity. Each of these sections acts as a mini-journal with a separate section editor and editorial group. With such diversity in our journal that represents a field that changes so rapidly, getting a handle on where we are is a challenge.

In 2014, four articles graced the electronic cover of Physiological Genomics. Even in these days of electronic publication, being selected by the reviewers and the editors as the “cover article” remains an honor. What better way, then, to see what the authors and the editors consider the best work, the editorial board members who contribute their best work, the editorial board members who contribute their expertise, and the APS, which continues to support this experiment.

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REFERENCES


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