Synthesis: A new project for the Journal of Applied Physiology

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“The combining of often diverse conceptions into a coherent whole”

“The dialectic combination of thesis and antithesis into a higher stage of truth”

—thank you Merriam-Webster (Webster’s Ninth New Collegiate Dictionary. Springfield, MA: Merriam-Webster, 1983)

AT ITS RECENT MEETING, the Associate Editors of the Journal of Applied Physiology discussed the role of publishing scientific reviews in the journal. Policy had been that the only reviews we would publish were what we call “mini-reviews” written on focused subtopics of a Highlighted Topic. These were, of course, by invitation only. Thus larger stand-alone reviews on individual topics submitted without editorial invitation were by policy rarely entered into peer review. Unsolicited topic reviews have, however, been submitted on a fairly regular basis and some have been judged to be of considerable value.

Accordingly, we thought that readers of the journal may appreciate well written unsolicited reviews on important topics by senior investigators. To enable that, we are hereby rolling out a new journal article program that we call “Synthesis.” This three-syllable title underscores the essence of what we envision, and the details are spelled out below in the formal description that is available on the Journal of Applied Physiology website. We anticipate a publication rate of about one a month. Importantly, we do not wish to compete with Physiological Reviews and thus ask for focus and limited length (see below).

Back to the definition: perhaps the key word in both of Webster’s offerings is “combine,” to which I will add only that the combining must be balanced. We will not accept articles that are written to favor the author’s beliefs over those of others in the field. We already have platforms for such purposes—Point:Counterpoint debates and Viewpoint articles.

Here are the rules of engagement; I encourage you to consider this new opportunity and take part!

Synthesis

To allow for the publication of high quality topic reviews, an article category has been created named “Synthesis.” Authors wanting to publish a review in the Journal of Applied Physiology (JAPPL) would begin by sending the Editor a letter of intent (LOI): (a) describing the area to be covered, (b) providing a rationale for why we should consider it for JAPPL, and (c) indicating a target date for submission. An abstract-sized summary of the review plus the CV’s of all proposed authors must accompany the LOI. The criteria used to decide on whether to allow a submission will be that the article is:

* (Co)authored by a respected, leading investigator in the field. Specifically, we will not accept literature reviews conducted by trainees in the course of their thesis preparation.

* Rationalized well as to topic relevance to the journal and timeliness.

* A scholarly synthesis in the field, ideally integrating reports from different labs, bringing together data from several levels of study (ranging from modeling to whole organism and everything in between), reconciling differences where possible, explaining them when they cannot be reconciled, and ending with a statement of future research directions.

Reviews should be focused and not encyclopedic, because we do not wish to compete with Physiological Reviews. “Synthesis” articles should be no more than 10 journal pages (including figures and tables, but excluding references; no supplemental materials). One journal page of text only is approximately 1,000 words, a one-panel figure occupies approximately one-quarter of a page, and an average table occupies approximately one-third of a page. There is no limit on number of references. Unpublished data may not be included in “Synthesis” articles.

The submitted materials will be evaluated by those members of the Associate and Consulting Editor teams with knowledge about the topic. If this group recommends that submission be allowed, a decision (which will not be subject to appeal) on whether to invite submission will be made by the editor based on the sum of their opinions. An invitation to submit must not be taken as a guarantee of acceptability. Submitted articles will be subjected to peer review, and this will determine the article’s acceptability just as for original research papers.

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