

1 **Editorial**
2 **Guidelines in Cardiovascular Research; a First for the American Journal of**
3 **Physiology: Heart and Circulatory Physiology**

4
5 Irving H. Zucker
6 University of Nebraska Medical Center
7 Omaha, NE

8
9
10
11 Running title: Guidelines papers

12
13 Correspondence:

14 Irving H. Zucker, Ph.D.

15 Department of Cellular and Integrative Physiology

16 University of Nebraska Medical Center

17 985850 Nebraska Medical Center

18 Omaha, NE 698198

19 402 559 7161

20 Fax: 402 559 4438

21 izucker@unmc.edu

22

23

24 Certainly those of you who are avid readers of, and contributors to the *American Journal*
25 *of Physiology- Heart and Circulatory Physiology* are familiar with the types of articles
26 published in this distinguished journal. These include original research, reviews,
27 innovative methodology, rapid reports, perspectives, editorials and editorial focus
28 articles. With the publication in this issue of the paper by Hart et al. (1), the journal is
29 initiating a new kind of article that we are tentatively calling Guidelines in Cardiovascular
30 Physiology. While these articles will fall under the “review” article type they will be
31 substantially different than traditional reviews.

32 The vision for guideline articles is to focus on a particular methodology or practice and
33 to obtain a consensus opinion from individuals who work in the area to describe “best
34 practices” in each field. While these articles will incorporate some aspects of “how to”
35 discussion, they will also provide data and pertinent references to support best
36 practices. Because reproducibility of scientific experiments is a concern of the scientific
37 community, funding agencies, and scientific publishers, the journal feels obliged to
38 publish consensus statements that may help investigators sort out the “Do’s and Don’ts”
39 of a particular methodology or approach, especially for those just entering a field. I am
40 aware of the fact that there may be more than one way to achieve valid results. Indeed
41 the Guidelines in Cardiovascular Physiology review articles will try to cover multiple
42 approaches, if warranted. Our aim here is to be as helpful to cardiovascular
43 investigators as possible, and to circumvent things that are not particularly useful or
44 rigorous.

45 In the paper by Hart et al. (1), the aim is to cover techniques and validation of
46 sympathetic nerve recordings in small and large animals, as well as in humans. The
47 field of autonomic physiology is fraught with the use of surrogates for sympathetic nerve
48 activity. Furthermore, the use of anesthetized animals to quantify sympathetic nerve
49 activity may be problematic. The authors provide their consensus on the best practices
50 for obtaining high quality single and multiunit recordings. The authors also report on the
51 criteria needed to validate nerve activity and avoid the pitfalls related to reporting
52 erroneous sympathetic outflow to various target tissues.

53 As one can imagine, it takes a great deal of time and effort for nine investigators,
54 scattered around the world, to come to a consensus in the development of a paper like
55 this. It took more than a year of conference calls, assigning writing tasks, and sharing
56 figures for the authors to craft an outstanding document. The editors are extremely
57 grateful to the authors and hope our readers feel the same.

58 There are several Guidelines in Cardiovascular Physiology papers in the pipeline at
59 AJP-Heart and Circ. The editors are confident that these articles will be of value to our
60 readers. Importantly, a bonus to the guidelines papers will be the production of an
61 extended podcast author interview, offering listeners the opportunity to hear these
62 authors—leading experts from around the world—describe their key points during an
63 informal discussion with the editors. Look for this soon.

64 Finally, we value your feedback and hope that you will write to us with ideas for making
65 Guidelines in Cardiovascular Physiology reviews better. The editors are open to your
66 new suggestions for future topics. As always, we thank you for reading and supporting
67 *AJP: Heart and Circulatory Physiology* and the Guidelines articles.