Statistical Science
2002, Vol. 0, No. 0, 1

Editorial

It is both a pleasure and an honor to take over as Executive Editor of *Statistical Science.* This journal stands in a unique position in our profession, having a great potential to influence the direction in which our research goes. Indeed, some of the articles that have appeared in this journal have already had a part in shaping what we do today.

A number of people have asked me about the editorial policy of *Statistical Science*, specifically, what types of articles are we looking to publish? My first answer is to suggest that they read the excellent editorial by Rob Kass (*Statistical Science*, 1992, pages 1–2), which describes the types of articles that are appropriate for us, and also to look at the "Guidelines on Writing for *Statistical Science*" which appeared in 1994 (page 591). However, it seemed like a revisiting of this topic is in order, so here are some thoughts on what makes a "*Statistical Science* article."

As is stated on the cover, Statistical Science is a review journal. But a review article can take many different forms. For example, it can review a methodology, explaining both the theoretical developments and also showing how the methodology can be applied in different areas. Alternatively (turning things around), it can review an application area and show how different methodologies can apply. In either case, a good review article is not a catalog of everything that has been done, but rather a synthesis of past work. It should draw together knowledge and highlight the critical advances. It should be detailed (but not encyclopedic) in its treatment. Length is important, for you are trying to interest readers in a new area, but overly long papers will lose a reader's interest.

If an application area is being reviewed, it is a good idea to highlight the statistical issues up front, as that will help to draw in a reader. However, the review of the subject matter background should not be superficial, as a good working knowledge of the subject matter is needed in order to make a substantial statistical contribution, as is it also needed to fully understand the contributions being reviewed.

Articles can be written by statisticians or nonstatisticians, the latter group being particularly desirable if a subject matter in another discipline is being explored. In fact, I strongly encourage interdisciplinary efforts, as they not only make for interesting reading, but also typically lead to different types of statistical problems.

Many articles will also be published with discussion. My feeling has always been that a discussion should somehow enhance a reader's understanding of the article, bringing new perspectives and opinions.

A *Statistical Science* article first functions as a sieve, sifting through an area to identify and unify the key contributions. Then it becomes a cannon, shooting our field forward in a new direction.

Statistical Science also has a mission as an archive of our field—our history, our gatherings, and our people. Historical articles, biographies, Fisher and Neyman Lectures, and conversations all play an important role in this.

Realize that this is a joint effort. A submission to *Statistical Science* is different from a submission to a research journal. Producing high quality review articles requires an enormous effort, and the editorial board wants to work with authors to produce appropriate and timely articles for the journal. If you are considering a submission, a good way to start is to submit an outline to one of the Editors. We can then work with you toward the goal of producing an appropriate contribution to *Statistical Science.*

The founding of *Statistical Science* was an achievement largely due to the efforts of Ingram Olkin and Morrie DeGroot, whose careers have embodied what *Statistical Science* strives to be: excellence in methodology, applications, and in spreading the message to a wide audience. The editorial written by Morrie DeGroot as the first Executive Editor (1986, page 1) still says it best:

"A central purpose of *Statistical Science* is to convey the richness, breadth and unity of the field by presenting the full range of contemporary statistical thought at a modest technical level accessible to the wide community of practitioners, teachers, researchers and students of statistics and probability."

George Casella
February 2002