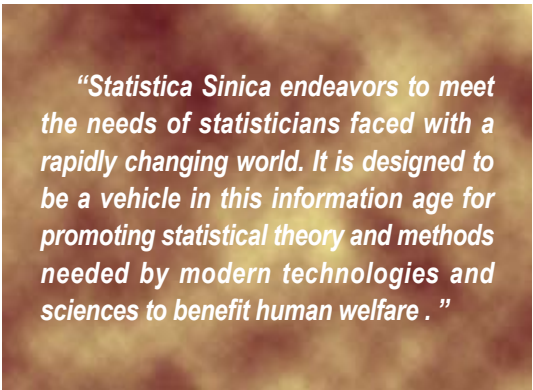


## Editorial

### After 15 Years: Better and Faster

As the new editors, we are deeply honored to be called upon to guide Statistica Sinica through its next scholarly venture. In just 15 years since the first issue appeared in January 1991, Statistica Sinica has been built into a viable choice for scholarly publication in statistics. We are indebted to the tremendous efforts of its founding editor, Professor George Tiao, and all of our predecessors. We feel privileged to be trusted to reach out to a new generation of statisticians. At the same time, we feel a weight on our shoulders. Perhaps our feelings can be best related to those of parents of a well brought up youth, who strive to do whatever they can before the end of the teenage years (or of our term), to assist the building of her/his life for many years to come.

Nature holds its own process of selection and evolution. The same applies to journals -- the survival of the fittest undoubtedly ensures a better future. Through this editorial, we introduce our plans to more efficiently handle submissions and publish the best and most engaging papers, with an understanding that a journal not only survives on, but also strives for, a reflection of the emerging interests of the authors and readers. Our planned efforts, therefore, focus on higher intellectual standards, faster publication time, and enhanced readability.



*“Statistica Sinica endeavors to meet the needs of statisticians faced with a rapidly changing world. It is designed to be a vehicle in this information age for promoting statistical theory and methods needed by modern technologies and sciences to benefit human welfare .”*

Working with our entire editorial board, we are taking a few steps, outlined below, to continue the quest for absolute excellence started by our predecessors. We will, of course, continuously refine existing strategies and adopt new ones. And in this regard, we very much appreciate input from authors and readers. To that end, we have established a “Feedback and Suggestion” forum on the journal site at <http://www3.stat.sinica.edu.tw/statistica/>.

## 1. Stimulating and Fascinating

### 1.1 Reaching higher standards.

Statistica Sinica is doing well with over 300 submissions last year. We are taking advantage of this increase to further raise its standards and to be more selective. Given the limited space, which allows for publishing about 60 papers annually, our editorial mission is simply to identify those top 20%.

What types of papers should be elected as the best among the best? Those that are adventurous and/or mature. “Adventurous” refers to those papers that can *open a field* because of their creative and insightful formulation, exploration of unexplored frontiers, and vision in pointing to new directions. Papers in this category are often necessarily “incomplete”, leaving much for others to investigate. They are also more difficult to judge, because exploring new frontiers is always more risky than following the crowd. However, Statistica Sinica is more than willing to take such a risk -- so if you believe you have a groundbreaking paper, even one already misjudged by other journals, please do send it to us. Our reviewers may or may not see the same points as you do, but we will do everything we can to minimize the review time, so in case we also misjudge, the ground breaking will not be unduly delayed.

“Mature” refers to those papers that can *close a field* because of their comprehensiveness and thoughtfulness, leaving little for others to improve upon. They do not settle for merely improving a single or a few existing results, nor on seeking mathematical generality just for the sake of being general. Rather, they present a comprehensive view on, and investigation of, what can be done with respect to a broad topic, as well as insights on what cannot be done or even should not be done.

For everything else between these two ideal types of papers, preference is given to those that are closer to either end of the spectrum. In particular, we discourage submissions that are narrowly focused, such as establishing asymptotic properties of a narrowly focused estimator or investigating simulation techniques that are applicable only to a very specific class of problems. We very much welcome submissions, but at the same time, we also want our potential authors to be well informed of our standards in order to avoid, as much as possible, disappointments to the authors and unproductive efforts by the editorial board.

### 1.2 More discussion papers.

Statistica Sinica already publishes discussion papers, but to further improve its

ability to attract the best possible papers, we plan to follow the “JRSS” format. That is, a discussion paper will be presented at a “paper reading” meeting, typically held at Academia Sinica in Taipei, and followed by pre-prepared discussions. Additional written discussions will also be solicited with a rejoinder from the author(s). At least one presenting author and two lead discussants will be reimbursed for attending the meeting (details will be given to the chosen author/discussants).

Initially, we are aiming for two discussion papers per year, with more or fewer, as dictated by the quality of submissions. Given that such discussion papers are generally regarded as “flagship” articles for a journal, they must be of a very high standard. The “field opener” and “field closer” types of papers discussed above are the most likely candidates. Well researched and written overview papers are another possibility. If you believe you have a paper that is suitable for discussion, please submit it to *Statistica Sinica* with a cover letter listing major issues that you believe would stimulate engaging and interesting discussions. Please also help us by spreading the word, especially if you learn that a truly great paper is in the making.

### **1.3 Editor’s Melange.**

To further improve readability, we plan to add a few pages of “fun reading” materials to every issue in the “Editor’s Melange” column—this editorial being its debut. The following types of items will be included:

**A. Editorials.** These can be written by us or anyone we invite, highlighting or commenting on a particular set of papers in the same issue on broadly related topics. We particularly plan to do this for the more applied and interdisciplinary oriented papers. In the forthcoming April issue, for example, there will be an editorial for the special issue on Machine Learning and Data Mining.

An editorial can also be on a topic of general interest, such as a scholarly overview of several competing software packages, or an introduction to an emerging research field (e.g., sonification of data), or a call for research developments to meet societal demands (e.g., for the 2010 U.S. census). We welcome suggestions on both editorial topics and authors.

**B. (Edited) Review reports.** Occasionally, a scholarly debate between reviewers and authors may be worth publishing as a mini version of the discussion paper. The reviewer may remain anonymous or may identify her/himself in the publication. Generally, there will be no reply/rejoinder (for the authors have already been given such chances during the revisions), yet we may write a brief introduction/summary to

accompany the report(s).

**C. Letters to the Editor.** This will be similar to the column in *The American Statistician*, except that we will be more selective and only publish letters with broad perspectives, that is, those that do not focus on narrow technical aspects. If we publish a letter commenting on a particular paper in *Statistica Sinica*, again those comments having a broad implication, the author(s) of the paper will be invited to respond.

**D. Anything else you would like to read!** We would greatly appreciate your suggestions on other items for our “Editor’s Melange”. We are looking for anything that fits the scholarly nature of *Statistica Sinica*, but at the same time is suitable for “bed-time reading” – informative but light, something that will keep you entertained rather than put you to sleep!

## **2. Faster Review Cycles**

The slow review process and, more generally, publication cycle, has been a well-known “headache” for the statistical profession. Many journals have worked hard to combat the problem, and progress has been made, particularly since 2000. *Statistica Sinica*’s track record in this regard is encouraging, but there is still room for improvement. We do not have any magic tricks, but we believe the following few steps will help.

### **2.1 Adding more “younger” board members.**

As you may have noticed, the new editorial board listed in this issue almost doubles the size of the previous ones, with substantially more “younger” members in terms of their professional ages. Our rationale in making this change is partially due to the observation that a major reason for the slow review process is that Associate Editors (AEs), particularly those who are senior scholars, are often overloaded by duties within an editorial board and many outside commitments. With a larger board, each AE will have a lighter load, and hence a higher likelihood to be prompt in handling her/his assignments. We believe that efficiency can be noticeably increased by appropriately blending senior scholars’ experience and wisdom with junior scholars’ availability and energy. With a larger board, we also have a broader coverage in research expertise and interests. We plan to continuously appoint new AEs as we identify inadequate topic coverage or inefficacy in the board, for example, when an AE’s outside duties no longer permit efficient fulfillment of her/his commitments to the board.

## **2.2 More thorough and prompt screening.**

Given the approximately 20% acceptance rate, it would not be effective, for either the journal or the authors, to allow many of the submissions to go through full review. More often than not, a thorough screening is all that is needed to assess the likelihood that a submission would survive the full review process. We therefore have set up a screening committee, which includes ourselves (the Co-Editors), to screen all submissions. A submission that survives or is undecided on after this screening will be forwarded to an AE, who also has the option to reject the paper without sending it to referee, if in the AE's best judgment the submission has less than 50% chance of surviving a full review.

With these two stages of screening combined, we aim at a roughly 50%-60% rate of rejection without invoking the full review process. No one likes to be rejected. But given that ultimately about 80% of the submissions must be rejected, our goal is to make any rejection as quick and painless as possible. By using a screening process that is thorough and efficient, submissions that do not pass our screening process can be resubmitted elsewhere without unnecessary delay. To that end, our aim is to have any "screening rejection" completed within a few weeks of the submission.

## **2.3 Emergency team.**

To achieve our goal that all initial submissions should be decided upon within four months of submission, we rely on the best efforts of the board members and the referees at large. However, unforeseen circumstances do arise, which would prevent us from achieving our goal if we did not have a back-up system. To that end, we have arranged an "emergency team" inside our board, whose main responsibility is to "rescue" and thereby to ensure the 4-month deadline will be met. A team member serves either as a substitute AE or a reviewer to act very quickly on a delayed case, or sometimes as a "second opinion", to ensure both the speed and quality of our review process.

## **2.4 Any other ideas you want us to try!**

Again, we welcome your suggestions on how we can improve the review process, both in terms of duration and quality. We are trying harder, as are many other editorial boards. But we are also aware that from time to time authors will be disappointed, despite our best efforts. Slow reviews are a challenging cultural problem that has taken several (professional) generations to begin to address. It will likely take many

more generations to completely resolve, if ever. We very much want *Statistica Sinica* to take a leading role in this multi-generation effort. And to this end, we need your help. Let us know (via the on-line forum, URL given above) how we are doing, what went wrong, and what else we should do. Keep us on our toes!

### **Last But Not Least: The New Appearance**

Appearance is also important, especially for a blossoming youth. The new multi-color design reflects our hope to “turn heads”, as many youths (and adults) would desire. The outward "Yang" design on the front cover represents dissemination of wisdom, and the inward "Ying" design on the back page represents absorption of knowledge. And, of course, being raised in an “ink” culture, we could not resist the beauty of calligraphy. Great scientific writings, like good calligraphy, often consist of seemingly free strokes but with a cohesive flow, a skill that is typically attainable only after years of training and practice.

The new cover, a piece of artwork generated by computer software, also helps to symbolize what *Statistica Sinica* is striving to be -- a journal that meets the needs of statisticians faced with a rapidly changing world. Indeed, our entire editorial system has been served by computer technology; it is also our strong preference to solicit and publish papers on what statisticians should stand for in the information age in promoting statistical theory and methods needed by modern technologies and sciences to benefit human welfare.

We certainly hope that you like the new cover as much as we do, so much so that you will put a copy of *Statistica Sinica* in your living room, or study, or bedroom, or wherever you do most of your enjoyable reading. And imagine the admiring expression on your favorite guest's face, when you accidentally flip to the page where the host's name is prominently featured ....

**Xiao-Li Meng and Michelle Liou**