

Of Models and Methods

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Anniversaries provide a nice opportunity to reflect on past successes and plan for the future. During this 20th year of publication, the editors have contemplated the role of the "Statistical Methods and Models" section in *Cancer Epidemiology, Biomarkers & Prevention (CEBP)*. In particular, we questioned whether this section was still necessary because many methodological papers could be evaluated within other sections of the journal. We have concluded that keeping the section is valuable, and reemphasize here the importance of publishing methods papers in the journal.

This soul-searching was prompted by not only the milestone Anniversary, but also by the departure of Dr. Sholom Wacholder as the Senior Editor in charge of the "Statistical Methods and Models" section. Sholom has generously overseen the section for over 3 years, shepherding numerous methods papers to publication and helping editors decipher thorny methodological issues in more applied papers. We thank Sholom for his wise counsel and guidance. Now Dr. Rebbeck, the Editor-in-Chief, has invited me to assume responsibility for this section, which we have renamed "Models and Methods" to emphasize that not all methods are necessarily statistical.

From the outset in 1991, *CEBP* has aimed to publish methodological papers. The inaugural editorials noted that the journal could further the field by providing an avenue for researchers to

"...coalesce around principles and practices of effective interdisciplinary collaboration, use of rigorous methodologies for study design and evaluation, and incorporation of well-founded techniques." (1)

Moreover, that the journal provides a medium to

"...continue to develop innovative methods for combining behavioral and biological intervention and evaluation strategies." (2)

These sentiments remain 20 years later, and publishing manuscripts on novel models and methodological advances continues as an essential aim for the journal.

We welcome a wide range of methods papers that readers of *CEBP* will find interesting and worthwhile. Submitted papers should help readers understand new methods, and how they might incorporate such approaches into their own research. The most successful methods papers are those that provide a practical applied benefit and lead to a positive shift in research efforts. To this end, authors must work hard to clearly describe what is often complex material; doing so will garner thanks from editors, reviewers, and readers (3).

The specific types of papers we are interested in include—but are not limited to—those that present new quantitative methods, provide head-to-head comparisons of existing methods, and describe novel applications of methods. In particular, we welcome papers that present or evaluate: designs for genetic, molecular, and biomarker studies; analytical approaches to studying the often complex data generated by such research projects; and models to assess the impact of prevention efforts. A few examples of such work are the following: novel study designs for assaying the exposome; analytical methods for evaluating 2-stage studies of genomic sequence and GWAS data; and models to distinguish the effectiveness of different levels of prevention on the public's health. Of course, these examples are not exhaustive, and we are open to a broad range of methodological papers.

When presenting a novel method, one should compare it with conventional approaches, so readers get a sense of its strengths and weaknesses. This can be done via analytical proof, applying the methods to real data, or undertaking credible simulation studies (4). We also welcome reviews, summaries, and point-counterpoints that consider recent methodological advances. In addition, methodological contributions do not require a focus on or application to cancer as long as they are of general interest and meaningful to readers.

There are a number of reasons why authors should submit models and methods papers to *CEBP*. Your important work may reach a much broader audience than if published in a purely statistical journal, which can have a limited readership. Moreover, the *CEBP* audience is commonly focused on very specific complex and innovative research projects—that may benefit from your work—than those who only read epidemiology or genetics journals. Readers of the journal are enthusiastic about incorporating new methods that improve the effectiveness and efficiency of their research, assuming of course that the results of the analyses are easily interpretable and acceptable to the field.

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Finally, the decision to retain a stand-alone "Models and Methods" section may seem somewhat trivial because at publication the journal does not distinguish among papers submitted to different sections. By keeping this section, however, we seek to assure potential authors that the journal remains fully supportive of publishing models and methods papers. We look forward to considering future methods submissions that

are clearly written, educational, and thought-provoking for readers of *CEBP*.

Disclosure of Potential Conflicts of Interest

No potential conflicts of interest were disclosed.

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