HOW TO WRITE AND ILLUSTRATE A SCIENTIFIC PAPER SECOND EDITION

This Second Edition of *How to Write and Illustrate a Scientific Paper* will help both first-time writers and more experienced authors, in all biological and medical disciplines, to present their results effectively. Whilst retaining the easy-to-read and well-structured approach of the previous edition, it has been broadened to include comprehensive advice on writing compilation theses for doctoral degrees, and a detailed description of preparing case reports. Illustrations, particularly graphs, are discussed in detail, with poor examples redrawn for comparison. The reader is offered advice on how to present the paper, where and how to submit the manuscript, and finally, how to correct the proofs. Examples of both good and bad writing, selected from actual journal articles, illustrate the author's advice – which has been developed through his extensive teaching experience – in this accessible and informative guide.

BJÖRN GUSTAVII has been teaching courses in scientific writing for doctoral (Ph.D.) students in medicine for 25 years. He brings his personal experience to this book, both from writing more than 100 of his own research papers and from his work as a journal editor.

How to Write and Illustrate

Scientific Papers

Björn Gustavii

Second Edition





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Preface

Dear Novice Writer,

When I was in your shoes and preparing my first paper, I consulted a book on how to write. I found there a sentence encouraging the reader to stand in boiling water for an hour before doing the analysis:

After standing in boiling water for an hour, examine the contents of the flask.

I had a pretty good idea of what was wrong with the sentence but, at the time, I couldn't figure out how to revise it, and the author didn't tell me. Now I can. If, an hour later, you are still alive:

Place the flask in boiling water for an hour, then examine its contents.

So, in this book, every unfortunate example is followed by an improved version. Good examples are provided with appropriate bibliographic references. Bad ones, however, are presented with references expunged.

Some examples were taken from manuscripts in preparation, presented by participants in my courses on scientific writing. I have

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been holding such courses for doctoral (Ph.D.) students in medicine since 1980. Other specimens are from manuscripts submitted for publication. They were collected when I served as an editor of *Acta Obstetricia et Gynecologica Scandinavica* from 1986 to 1994. Yet others are from published material.

From class discussions I have learned what candidates want to know. Based on this information, some chapters are more detailed than others, such as the one on how to prepare graphs.

The current edition contains a new and comprehensive chapter on doctoral (Ph.D.) theses. Numerous other changes also appear in this edition, for example, instructions for making drawings and a description of preparing case reports.

Finally, don't accept all my suggestions, because there is no ultimate truth regarding how to write a paper – as I mistakenly believed when I was a bit younger.

Good luck, my friend.

Björn Gustavii

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