

How to Write and Publish a Scientific Paper:

—The Step-by-Step Guide—



Dr. Luz Claudio

**Write Science Now Publishing Co.
San Juan, PR
New York, NY**

Copyright © 2016 by Write Science Now Publishing Company

All rights reserved. This book or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of the publisher except for the use of brief quotations in a book review.

Printed in the United States of America

First Printing, 2014

ISBN 978-0-9960110-1-3

107 University Place
New York, NY 10003

Table of Contents

About the Author	10
Author's Preface	12
Chapter 1: Publish or Perish, so Write Your Science Research Paper Now.....	14
How do researchers become writers?	15
What is academic research, then?!.....	16
What is a peer-reviewed research paper?.....	16
The importance of peer-reviewed research publications to your academic career	17
The Top 8 Reasons to Publish Peer-Reviewed Research Papers.....	18
Points to remember from Chapter 1	19
Exercise 1: Career goals.....	20
Chapter 2: It's All About the Data.....	22
Organizing your data.....	23
Illustrating your data	23
Tables	24
Graphs and Charts.....	26
Photographs.....	29
Diagrams, Drawings and Screen Captures.....	32
Maps.....	32
Using the Figures to Guide the Writing of your Research Paper	33
Important Notice About the Responsible Conduct of Research	34
Points to remember from Chapter 2.....	36
Exercise 2: Getting to know your data.....	37
Chapter 3: Is Your Data Ready for Primetime?	39
Writing a working title.....	39
Data readiness	41
Too little data	41
Too much data.....	42
Just right? Then write!	42
Getting input from collaborators regarding data readiness.....	43
Consult advisors and coauthors	43
Present at a professional conference.....	44
Read papers that closely resemble what you are doing	44

Give a Works-In-Progress Seminar	44
Seek one-on-one consultation with an expert	45
Points to remember from Chapter 3.....	46
Exercise 3: Data readiness to-do list.....	47
Chapter 4: Publishing Preliminary Data at Professional Conferences.....	51
What are professional conferences?.....	51
Conference abstracts	52
Oral conference presentations.....	53
Poster presentations	54
How conference abstracts are published.....	56
Points to remember from Chapter 4.....	57
Exercise 4: Presenting preliminary work at professional conferences	58
Chapter 5: Types of Research Articles	59
The original research paper.....	59
Brief reports	60
Case reports and case studies	61
Commentaries	62
Review articles.....	63
Meta-analyses	64
Points to remember from Chapter 5.....	64
Exercise 5a: Getting ideas for papers.....	65
Exercise 5b: Getting even more ideas for papers.....	65
Chapter 6: Writing the Outline	68
Instructions for writing an outline for an original research paper	69
Standardized guidelines and checklists.....	75
The CONSORT statement	75
The STROBE guidelines.....	75
Organizing your materials based on your outline	76
Points to remember from Chapter 6.....	78
Exercise 6a: Template for outline	81
Exercise 6b: Template for outline.....	85
Chapter 7: Choosing a Journal.....	91
Follow the clues	91
Walk to the library	92
Let your fingers do the walking	92

The impact factor	96
Other characteristics of peer-reviewed journals	100
Points to remember from Chapter 7	101
Exercise 7a: Analyze your options for potential journals	103
Exercise 7b: Analyze your options for potential journals: Journal 1	105
Exercise 7c: Analyze your options for potential journals: Journal 2	106
Exercise 7d: Analyze your options for potential journals: Journal 3	108
Chapter 8: Ready, Set, Write!	111
The writer's mindset	112
The horror of the blank page	113
To multitask <i>or</i> to batch?	114
Play beat the clock	114
Play beat the calendar	115
Adopting a writing habit	116
Points to remember from Chapter 8	118
Exercise 8a: Where does my time go?	119
Exercise 8b: Where does my time go?	119
Chapter 9: Writing Your Paper	121
Where should I start?	122
What's next?	122
Writing in a logical order: The funnel	124
Writing the Materials and Methods section	125
Using a flow diagram to organize your Materials and Methods section	127
Writing the Introduction	129
Writing the Results section	131
Writing the Discussion	133
Writing the References	137
Reviewing the literature: General guidelines	137
Evaluating published research papers	138
Referencing: Accessing published literature	139
To cite or not to cite	139
The accidental plagiarist	140
Organize your references	141
Format your citations	142
Write the abstract	145

Points to remember from Chapter 9.....	150
Exercise 9a: The why, the how, the what and the so what?.....	151
Exercise 9b: The why, the how, the what and the so what?	152
Chapter 10: Collaborating with Other Researchers.....	153
How to write a paper with a research team.....	154
Steps to writing a first draft with a group of cowriters	154
Writing the first draft yourself	157
Determining authorship	159
Acknowledge your contributors.....	162
Points to remember from Chapter 10.....	163
Exercise 10a: Determining authorship.....	164
Exercise 10b: Determining authorship.....	165
Chapter 11: The Manuscript is Finished...Now What?.....	166
Recommending reviewers for your paper.....	167
Who's who in the journal.....	169
The peer review process.....	170
Responding to the reviewers' critiques.....	171
The publishing process	174
So, you published a research paper. Now what?!.....	175
Send out an email blast	177
Social media.....	178
Press and traditional media	179
Points to remember from Chapter 11	183
Exercise 11: Research paper writing plan.....	184
Chapter 12: Tips, Hacks and Tools.....	185
Tips for increasing writing productivity	185
Exercise 12a: My ideal research workweek.....	192
Exercise 12b: My ideal research workweek	193
Inspiration from testimonials	194
Index.....	200