

Preparing a Manuscript for the JACMP (or any other journal, for that matter)

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Learning Objectives

After attending this presentation, the participant will:

- Be able to prepare a well-written manuscript suitable for publication in the JACMP or any other peer-reviewed journal.

Target audience

- All medical physicists who have done work worth sharing
 - Which is really most of you
- You have done the work, now how do you communicate it to others?

Before you begin to write

- Your role is to communicate knowledge and experience
- Know your audience
 - For JACMP, it is the clinical medical physicist
 - Do not pitch manuscript over your readers' heads
 - Do not talk (write) down to your reader

While you write

- Write in clear English
 - S Pinker, *The Sense of Style*
 - Strunk & White is outdated!
- Define all acronyms the first time they are being used
- Be specific with your verbiage
- Get your words right!

Get your words right!

MLB
Amphibious pitcher makes debut
 Venditte becomes first pitcher in 20 years to pitch with both arms in MLB game

By HOWARD ULMAN
 Associated Press

BOSTON — Pat Venditte took his major league debut with his right arm. And left.

The ambidextrous pitcher entered the game against the Boston Red Sox at the start of the seventh inning after being called up Friday by the Oakland Athletics.

Venditte, wearing a specially designed jersey, threw three warmup pitches with his right hand then switched to his left hand and then switched to his right hand.

He struck out Brock Holt, the Red Sox's leadoff hitter, and then struck out first baseman Ryan Braun.

The only reliable sign of its impact came when Pat Venditte from the mound, with his right arm raised, signaled the start of the game. He was replaced by Tamasz Horvath, the Oakland Athletics' starting pitcher.

The game, which was a contest between the Oakland Athletics and the Boston Red Sox, was held at Fenway Park in Boston, Friday.

In 17 outings this season, 16 in relief, Venditte was 1-0 with a 1.26 ERA. Oakland catcher Stephen Vogt faced Venditte in the minors.

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Photo: Justin Korman
 In this two image combination, Oakland Athletics relief pitcher Pat Venditte (29) delivers with his left and right hand to separate Boston Red Sox batters during the seventh inning at Fenway Park in Boston, Friday.



Where to submit

- Clinical – audience is physicists
 - JACMP
- Clinical – audience is physicists and physicians
 - Red Journal
 - Radiology
- Scientific
 - Medical Physics
 - PMB

Format of manuscript

- Abstract
- Introduction
- Methods and Materials
- Results
- Discussion
- Conclusions
- Acknowledgments
- Appendices/Supplementary Files

Order of writing manuscript

- Introduction
- Methods and Materials
- Results
- Discussion
- Conclusions
- Acknowledgments
- Appendices/Supplementary Files
- Abstract

Introduction

- **What gaps in knowledge does this work fill?**
 - Provide sufficient background so reader can appreciate the work
 - Clearly state the problem you propose to solve
 - Why is this a problem worth solving?
- **Keep Introduction focused**
 - Save discussion for Discussion section

Methods and Materials

- **Describe methodology in sufficient detail so interested reader can repeat your work or do similar work**
- **Identify equipment with generic description (with brand name in parentheses)**
- **Be sure to indicate compliance with patient issues (HIPPA, IRB, etc)**
- **Use active voice**
 - “We” is ok

Results

- **Display figures, tables, graphs**
 - Make sure everything is readable
 - Include uncertainties
- **Use text to interpret**
 - Do not rehash data
 - Point out significant findings
 - Identify trends

Discussion

- Why is this work significant?
- How has our understanding of the field been enhanced by this work?
- What issues related to this work should the reader be aware of?
- How could this work be refined?
- Where do we go from here?

Conclusions

- Base conclusions on work done
- Do not speculate – that belongs in the Discussion
- Do not suggest further work – that belongs in the Discussion

Acknowledgments

- Identify courtesy authors in Acknowledgments
- Identify funding sources

Appendices

- Information relevant to work that would distract from flow of body of manuscript
 - Derivations
 - Extensive background information

Supplementary Files

- Additional data
- Downloadable worksheets
- Video clips
- Possible with online journal

Abstract

- Write Abstract after manuscript has been completed
- Abstract allows casual reader to obtain sense of the work without going into details

What not to do in Abstract

- Too much information: Do not rehash the manuscript
 - Abstract, not Summary
- Too little information: Do not write “We will show results”
 - Instead, show results

What to do: “8-sentence rule”

- 2 sentences for Purpose
 - “The purpose of this work is to ...”
- 2 sentences for Methods and Materials
- 2 sentences for Results
- 2 sentences for Conclusions

Review and Rewrite

- Enlist colleague to read your manuscript
- Sit on manuscript for 1-2 weeks, then re-read
- If possible, have copy editor review manuscript
 - Do not rely on journal reviewer
- Be sure you have followed journal's formatting rules

Response to Reviewers

- Explicitly address each point made by reviewers
- If you disagree with reviewer, explain why you disagree
- Respond promptly to review

Final Tasks

- Respond promptly to proofreader
 - Manuscript is on schedule for publication
 - Delayed response affects production schedule
- Add manuscript reference to your CV

Take-away Message

- Preparing a manuscript for publication is a relatively straightforward procedure
- If you have done work worth sharing, consider publishing it


