Medical Manuscript Preparation
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(some portions *almost* plagiarized from Welch, then expanded)

Getting Started
- **Develop a system**
  - **Carve out & budget time, and start early**
  - **Draft a bulleted 'block-heading' outline** (skeleton) – **DO NOT START WITH PROSE** (☺)
    - 2-3 paragraph introduction
    - Methods
    - Results/Table layout tables
    - Discussion (if have results)
      - Lay out in syllogisms, to allow logic & 'case' to be presented rationally
    - Conclusion (e.g. decide what is the main message of the manuscript/project)
  - **Focus on High-Visibility Components** (Welch)
    - Trying to HOOK the editor's (& readers)
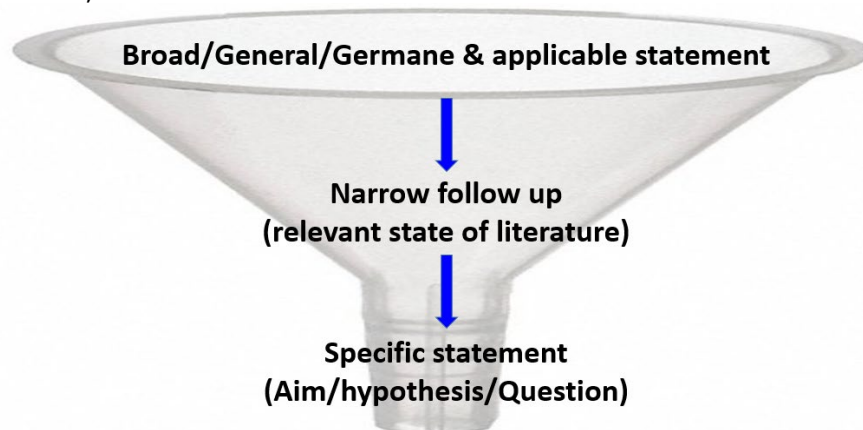   - Title → Abstract → Tables & Figures

- **Writing:**
  - **General**
    - Consider to which Journal the manuscript will be submitted.
      - Peruse said Journal to familiarize oneself with construct, etc.
    - Brevity!
    - As above, start with a bulleted outline (**no prose**) I find it far easier to assure the logical construct & flow are rational (almost like logical syllogisms)
    - **All paragraphs need a purpose**
      - Thus, as above recommend a well laid out 'syllogism' –structured, bulleted outline prior to writing formal prose.
  - **Introduction**
    - Aim: motivate **EDITORS** (& of course readers) to … read & care.
    - Create a funnel
      - Funnel;

Broad/General/Germane & applicable statement

Narrow follow up
(relevant state of literature)

Specific statement
(Aim/hypothesis/Question)

    - Limit to 2-3 paragraph introduction.
      - Background
      - Setting stage for importance of study, review or case report.

    - (Examples): Next page

(Examples): 3-Paragaph Introduction (Welch): 1) General; 2) Specific; 3) the "*So What?*"
Editor/reader –"*Why should I read this?*"

TABLE 1

Framework for a Three-Paragraph Introduction

PARAGRAPH	QUESTION	EXAMPLES OF CENTRAL IDEA		
		EXAMPLE 1	EXAMPLE 2	EXAMPLE 3
1	What is the general problem or current situation?	Otitis media is the most common reason that children receive antibiotics.	Evidence is accumulating that carotid endarterectomy reduces stroke risk in many patients with carotid stenosis.	Diabetic nephropathy is the most common cause of end-stage renal disease.
2	What is the specific problem or controversy?	Many patients receiving the diagnosis of otitis media have no microbiological evidence of infection.	Despite increasing information, decision making about carotid endarterectomy remains difficult.	Although screening for microalbuminuria is recommended for all diabetic patients, many physicians do not comply with the recommendation.
3	How will this study help?	To better delineate the vagaries of the otologic examination, we studied interobserver variability in the diagnosis of otitis media.	To help clinicians assess the relative benefits of carotid endarterectomy, we calculated the number of operations needed to prevent one major stroke or death under different conditions.	To investigate a simpler strategy for diabetic nephropathy, we used a decision model to simulate the effects of treating all patients with angiotensin-converting enzyme inhibitors.

- **Methods**
  - Clear, step-wise, description of study (complete **&** brief!)
    - Setting & Study Design
    - Sample (Population); inclusions/exclusions. (Can use flow diagrams)
    - Intervention
    - Outcomes
    - Analysis

- **Results**
  - Brief & succinct
  - Clarify primary from secondary outcomes, reporting primary outcomes first.
  - Use tables/figures to a) reduce text & emphasize points!

- **Discussion** (Welch)

TABLE 2

Framework for the Discussion Section

QUESTION TO ADDRESS	CONTENT		
What's the central finding?	Restate finding. Place in the context of other work.		
Could it be wrong?	Identify and deal with threats to validity. Consider alternative explanations for your findings given the study design:		
	BEFORE/AFTER	OBSERVATIONAL	RANDOMIZED TRIAL
	Temporal trend Regression to the mean Selection bias	Loss to follow-up Low response rate Recall bias Unmeasured confounding	Inadequate blinding Ascertainment bias Loss to follow-up
What does it mean?	Put your work in perspective. Assess its generalizability, and speculate about its implications. Specify what you think should happen next.		

- Aim is to summarized, review & highlight
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- Steps (two approaches – AJH Adapted)

The Welch Way	The Auerbach Way

I. Central Findings
  a. Restate major findings
  b. Place findings in context to other literature
II. Could it be wrong (e.g. Limitations)
  a. Validate & discuss
  b. Rebut 'obvious' not-valid limitations
III. Generalizability
  a. should be stressed.
  b. Can speculate a LITTLE
IV. Future: state future qns?
V. Conclusion
  a. Summarize the Findings/Case
  b. Re-assert generalizability
  c. Take home / application points
	I. Para 1: 3-5 sentence overview of major findings
	II. Para 2: compare/contrast your study to others and describe how your paper extends previous work (OR what was the Major Ah HAH/teaching point 1)
	III. Para 3: Major teaching point (Ah – Hah moment) 2
	IV. Para 4: Major teaching point 3
	V. Para 5: Limitations
	VI. Para 6: Summary & Future

- **Case Report Notes** (*The Hunter Case Report Template*)

  - **Is this case Reportable**?
    - New syndrome?
    - Variation or new presentation of an previously described syndrome?
    - It the time ripe for a case report & case series (if only a smattering of limited CR's have been reported; If so then the case may merit more global review of the syndrome being reported)
    - Problem-solving
    - Heuristics
    - Teachable moment

  - **BEFORE YOU WRITE ANY PROSE**:
    - Ask your clinical question(s) and perform a lit search to assure the above have not already been performed.
    - Make a compulsive bulleted outline (down to the paragraph) outlining the flow of logic/construction through your paper**. I find this dramatically helps clarify the flow of the paper… before polluted by too much prose** ☺. (as per any scientific writing)

  - **Case Report "101" Outline:**
    - Introduction:
      - 3-4 sentence paragraph introducing background on issue being described (a.k.a the *funnel*)
      - Final sentence stating unique relevance of case
    - Case Description
      - Succinct & focused on relevance
    - Discussion:
      - Para 1: ~4 sentence overview of major findings
      - Para 2: compare/contrast your study to others and describe how your paper extends
      - Paragraph ~3-5: previous work OR Major Ah HAH/teaching points:
      - Para 5: Limitations
      - Para 6: Summary & Significance
      - Ref's, Figures & images

- **Getting Ready for Submission**
  - Plan on **SEVERAL revisions** prior to submissions
  - Identify a group of Internal (local) **Reviewers** (assure you have some)
    - May be co-authors
    - May be Senior (do they have time?) or Junior
    - Two flavors
      - Expert –
        - a "Hostile Friend" – *Welch*
        - aim is to assure is ready for Journal Editor Review (readability, methods, focal point, limitations, alternative interpretations, Ref's, etc)
      - General – does it make sense? Writing?
    - Getting a good review
      - Clarify intent of review
      - Get a commitment (time & intensity) from reviewer
    - 'Courtesies" Assure that;
      - The format is easy to review (double- or triple-spaced, numbered)
      - The review is not of a 'moving target' (e.g. content has not already been edited/deleted)
      - There is a conversation is had to get feedback, rather than just written
      - REJOICE in constructive feedback (it will make the manuscript better)
  - Cover letter
    - The aim of the cover is (yes to introduce your manuscript… but REALLY the aim is to

Get the editor(s) hooked…

(and if so) …

Get the reviewers hooked….

so they are drawn in to why

Their journal's readership will be hooked

- Be humble
- State why you think this particular piece is well suited and unique enough to be in their journal
- Be very clear as to its applicability to the audience.
- End humbly

References/Resources
1. Welch HG, Preparing Manuscripts for Submission to Medical Journals: The Paper Trail. Effective Clinical Practice. 1999;2:131-137.
2. Auerbach, Andrew – Personnel communication (s)