# Writing the Abstract and Acknowledgments

- 1. Writing an effective abstract
  - Functions of an abstract
  - Parts of an abstract

2. How should I write my acknowledgments?

#### Functions of an Abstract

An abstract is a complete story in 250 words!



#### **contains:**

- Brief orientation to topic
- Your specific goal
- Strategy and methods used
- Central results & big conclusions

#### Functions of an Abstract

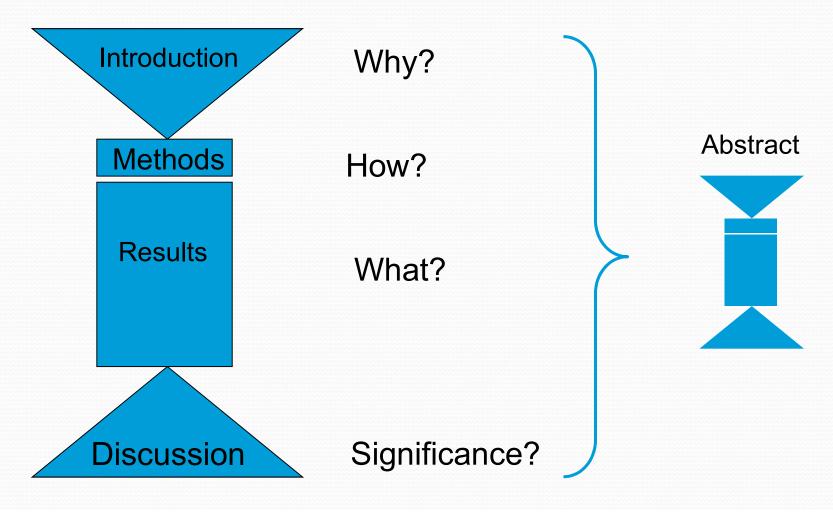
- 1. Summarizes the major points
- 2. The abstract
  - Is used as indexing tool
  - Is available in electronic databases
  - May be the ONLY part of your paper someone reads
- 3. Attracts the reader to READ the rest of the article You want them to read the full article
  - → MAKE THE ABSTRACT CLEAR!

## The abstract is an argument

- > It is not an introduction
- > It is not a list
- > It is not an unsolved mystery

### Parts of Abstract

#### **Abstract = mini article!**



### **Abstract Content**

#### May contain the same information as:

- The first paragraph of the introduction
- The last paragraph of the introduction
- Your first paragraph of the discussion
- NEVER include information that is not presented elsewhere in article

> DO NOT include a reference citation in abstract

#### Orient Reader in the First Sentence

The first sentence can be very general:

FOR EXAMPLE "In recent years, yellow fever has spread throughout tropical regions of Africa."

## State topic and purpose

"In this study, the prevalence of deaths caused by TB was determined in HIV patients with and without ART treatment."

"In order to characterize genetic variations, 83 strains of Mycobacterium tuberculosis from South Africa were analyzed by restriction fragment polymorphism (RFLP)."

## Specify your methods-- briefly!

#### Name the technique:

- Too general: "Biochemical studies showed that..."

- Better: "In vitro translation studies revealed that..."

#### Specify your methods-- briefly!

Can often describe methods in introductory phrase

"Using RT-PCR, 384 samples were analyzed for the presence of poliovirus RNA."

"Using restriction fragment length polymorphism (RFLP) analysis, we characterized genetic variation among *Mycobacterium tuberculosis* strains."

# Summarize Results & Conclusions

- >Summarize the central results
  - The most significant points only
  - Remove needless information



- ➤ Identify the major conclusions
  - Only space for your major conclusions

## When stating the results, be definitive

The total number of measles cases decreased in Uganda after the introduction of the WHO campaign in 2012

The death rate in patients with TB/HIV is still high despite concurrent treatment with anti TB and ART

We have developed a rapid and sensitive one-step PCR assay for detecting dengue virus in serum samples

#### BUT when interpreting results...

use appropriate qualifiers:

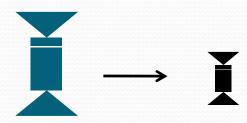
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"This indicates..." "suggests" "may", "might", "could"
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## Make EVERY word count!

- > Often the abstract is ≤ 250 words
- > Look at every word: do you need it?
- > Save words by eliminating passive voice
- > Read it out loud

#### Outline

1. Parts of an abstract:



- 2. How should I write my acknowledgments?
  - A. Who to include
  - B. Who to omit
  - C. How to acknowledge people
  - D. How to acknowledge funding agencies

# Who should you acknowledge?



When in doubt:

It's better to include more people than to omit someone!

## Include:

- Anyone who gave you technical help
- Anyone who gave you valuable input on your study design or interpretations of your results
- 3. Your human subjects
- 4. Anyone who gave you materials or supplies
- 5. Specify your funding sources
  - Granting agency (include grant number)
  - Fellowship funding
  - Institutional funding

# Do not acknowledge

Co-authors

# Examples: People

- ➤ "We thank Prof. Josaphat from Makerere University for technical assistance on the Census survey."
- > "We thank Dr. W. Alemu for valuable discussions and critical reading of the manuscript."
- ➤ "We thank Dr. Simpson for providing the TB isolates from Springfield."
- > "We thank Marge Simpson for her support."

## Examples: People

- "We also thank Dr. Asuman Lukwago, Secretary of the Ministry of Health for the Publication of the Hospital Census Survey."
- ➤ "Thanks to Dr. PR Beatty for his kind gift of anti-Dengue NS-1 antibody."
- ➤ "Thanks to Steve Opendoor for sharing results prepublication."

# **Examples: Funding**

"Financial support for this work was provided in part by the African Development Bank, the Fogarty International Center, and the National Institutes of Health (grant D43 TW00905)."

"This study was also supported in part by the World Health Organization and Centers for Disease Control and Prevention Post-Doctoral Fellowship awarded to B. Simpson."