

# LITERATURE REVIEW STRATEGY

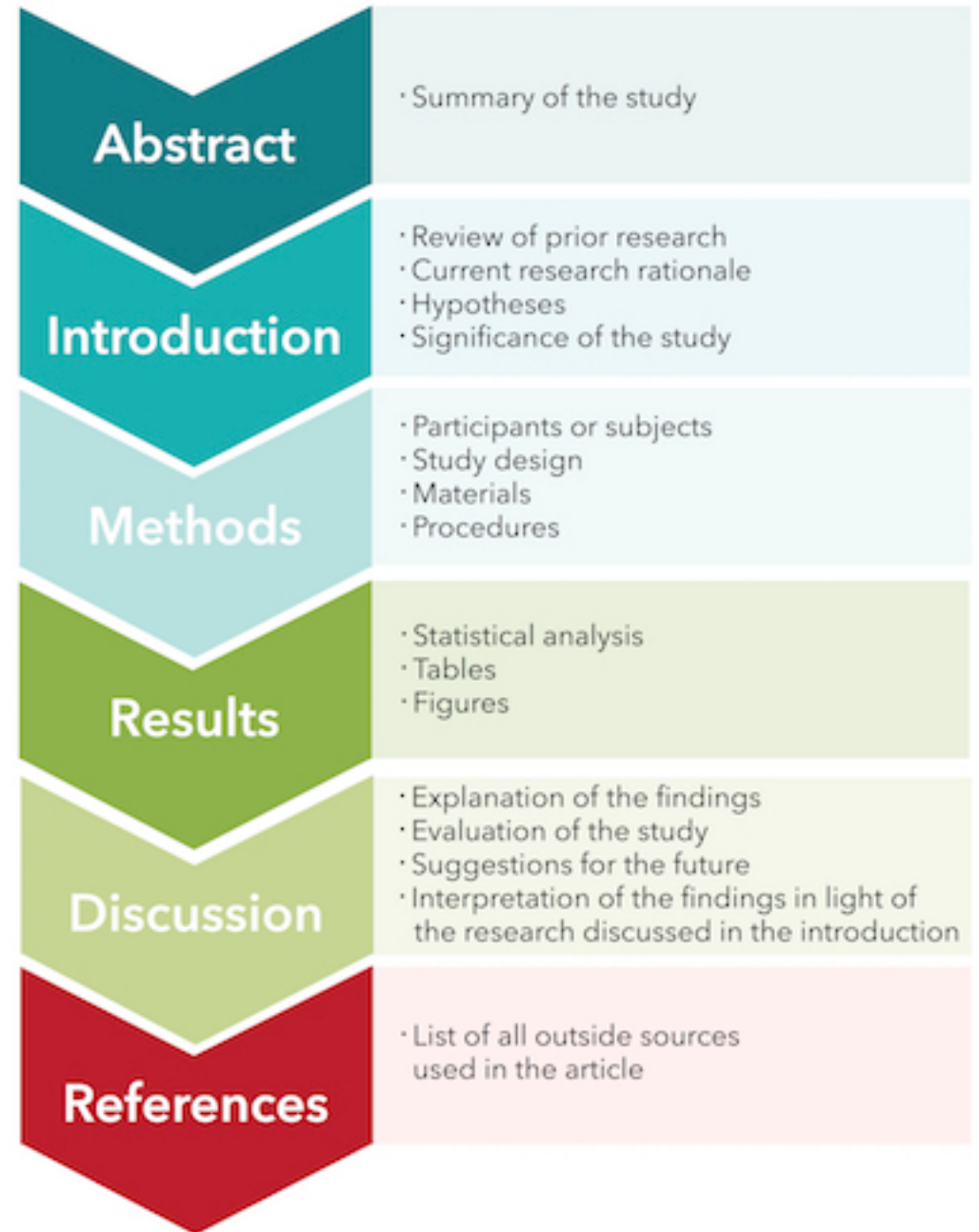


DECEMBER 5, 2020

# SCIENTIFIC ARTICLE FORMAT

## ORDER

1. Abstract
2. Introduction
3. Skim Methods/Results
4. Discussion
5. Read Methods/Results



# ABSTRACT

Abstracts contain four types of information:

- Purpose or rationale of study (why they did it)
- Methodology (how they did it)
- Results (what they found)
- Conclusion (what it means)

# INTRODUCTION

- Inform the reader what is known about the topic
  - Broad to specific
- Describe the gaps in knowledge
- Explain the focal point i.e. the question the author is asked and answered within the topic



## INTRODUCTION

*INTRODUCE RELEVANT LITERATURE  
EXPLAIN WHY YOUR STUDY IS NOVEL  
HYPOTHESIS*

# METHODS & RESULTS

## Methods:

- Explain the experiment and how it was performed
  - This is often the most difficult section to understand
  - Tip: try to draw out the experimental design

## RESULTS:

- Statements of findings with supported statistics and references to figures/tables



## **MATERIALS AND METHODS**

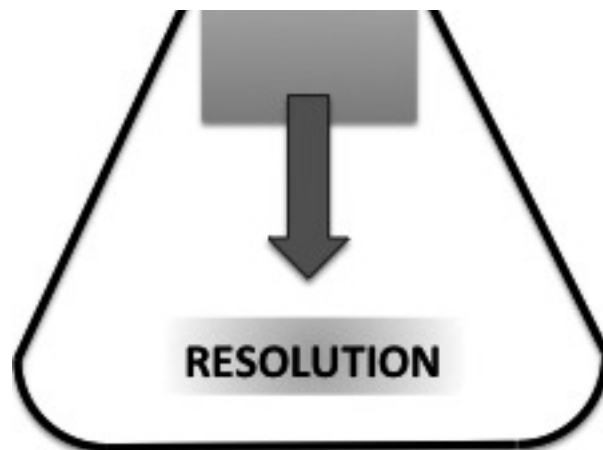
*INTRODUCE STUDY SYSTEM  
EXPLAIN METHODS SUCH THAT A READER  
COULD RECREATE YOUR STUDY*

## **RESULTS**

*OBJECTIVELY STATE FINDINGS  
FOCUS ON BIOLOGICAL RESULTS  
USING STATISTICS FOR SUPPORT*

# DISCUSSION & CONCLUSION

- Place meaning of work in broader context of topic
  - What do the author's findings mean
  - Provides a clear answer to the question proposed in the introduction



## **DISCUSSION**

*INTERPRET YOUR RESULTS  
TIE YOUR RESULTS BACK TO THE LITERATURE  
BY ANSWERING THE KNOWLEDGE GAP*

## **CONCLUSIONS AND IMPLICATIONS**

# Argonne



NATIONAL LABORATORY