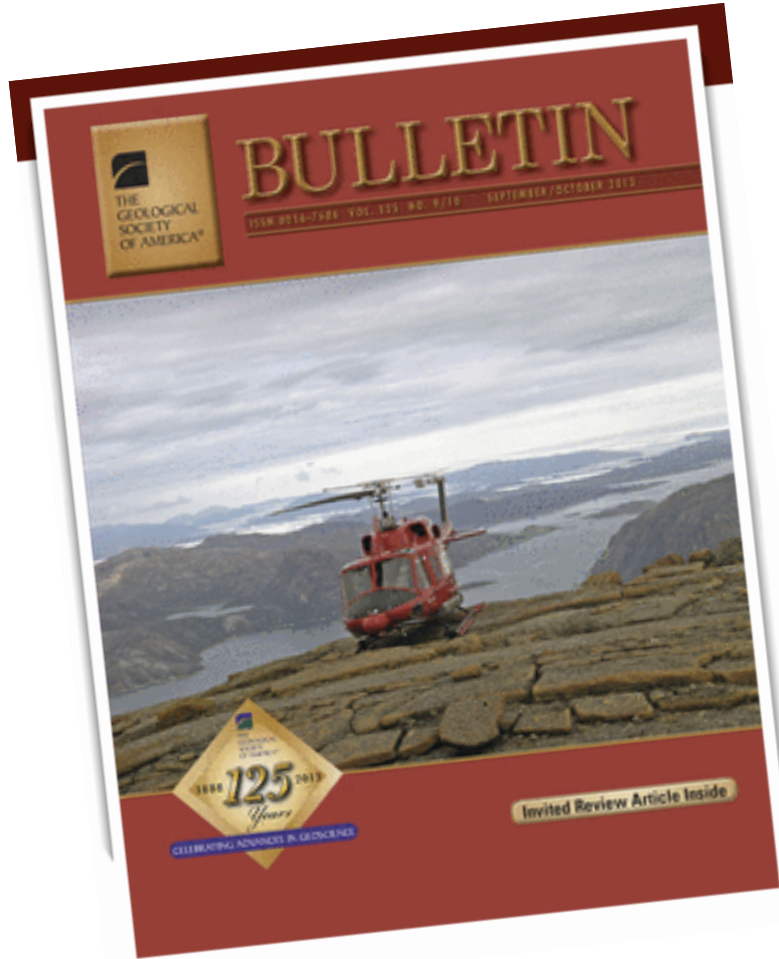


# Part I: Before you begin and as you are writing



- A few things to think about before you start
- Some best practices in constructing a manuscript

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# From the beginning

- You're finishing up your research and thrilled about your results
- You have a novel idea that apparently hasn't been discussed before
- You have an enormous pile of maps / seismic / analyses / video footage / remote imagery and synthesis

***IT'S TIME TO WRITE THAT PAPER!***

# From the beginning

- Audience!
  - choose the most appropriate journal – think about your primary idea
  - check the website for each journal
- Think about who your co-authors should be (if any)
- Refine the topic
- WRITE!

# Audience: use the journal

## Geosphere

### Readers



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**Geosphere Impact Factor  
2020: 3.298  
5-year: 3.571**

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## Overview

*Geosphere* is GSA's ambitious, online-only publication that addresses the growing need for timely publication of research results, data, software, and educational developments in ways that cannot be addressed by traditional formats. The journal's rigorously peer-reviewed, high-quality research papers target an international audience in all geoscience fields. Its innovative format encourages extensive use of color, animations, interactivity, and oversize figures (maps, cross sections, etc.), and provides easy access to resources such as GIS databases, data archives, and modeling results. *Geosphere's* broad scope and variety of contributions is a refreshing addition to traditional journals.

## Types of Articles

- **Research Papers** are fundamental and complete research contributions on scientific and educational topics.
- **Research Notes** are short research contributions that can take many forms.
- **Data Contributions** provide a forum for publishing data sets in an archive where longevity can be assured.
- **Human Dimension Contributions** offer an opportunity to publish articles addressing an array of subjects at the intersection between the human culture(s) and the geosciences, including geological education, justice, equity, diversity and inclusion in the geosciences, geoheritage, archaeological geology, geologically informed land use, and other topics pertinent to geoscientists.
- **Software Contributions** can be utilized for publishing new software, Web services, ontologies, and such that will be made freely available to the scientific and educational communities.
- **Comments and Replies** provide a forum in which published papers can be discussed.

All *Geosphere* papers are subject to [GSA's Ethical Guidelines for Publication](#).

## Audience: use the journal

- Model how you construct the manuscript on a published paper (structure, formatting, diagrams, tables, etc.)

# Audience

- keep in mind that if you are writing for a “general” journal, you must assume relatively little inferred knowledge (your reader knows much less about your topic than you do...)

# Who are your co-authors?

- Everyone who had a substantial contribution in framing the problem and its resolution.
  - all authors must contribute to writing the paper, whether literally or through ideas
  - many journals require confirmation
- When in doubt, consult your dissertation / thesis / post-doc supervisor

# What is important?

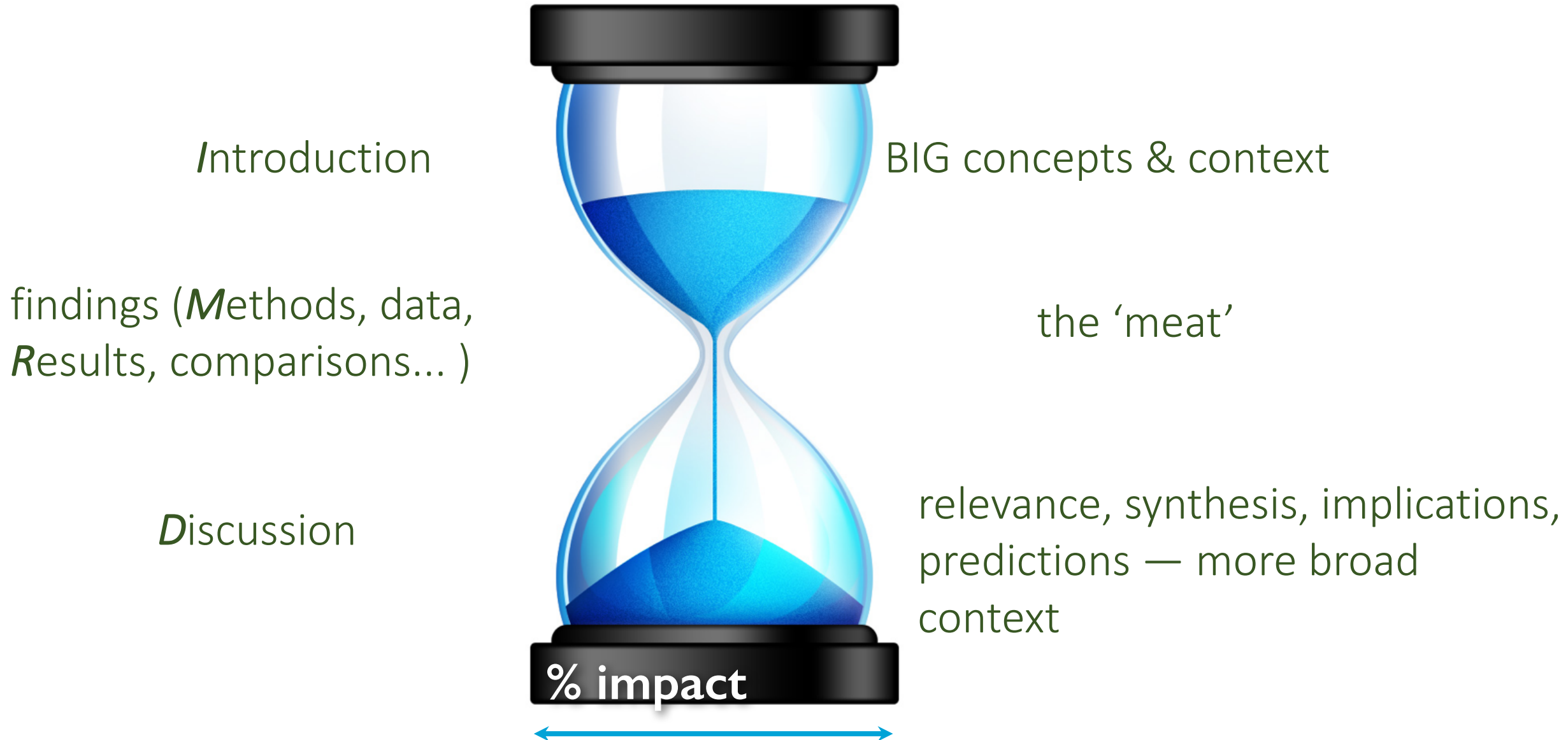
- Most ideas have value
- Frame your idea in a way that your officemate / partner / colleague can see its value: why would someone read about this?



# Write!

- Hourglass structure
- IMRAD (Introduction, Methods, Results, and Discussion)
  - what parts of the paper will deliver the greatest impact of your work?

# Hourglass structure



# Write!

- Think very seriously about writing an outline first...
- Make a list of likely figures and insert them in the outline



# Write the Introduction

- Follow the scientific method
  - what is known
  - what is not known / poorly understood / contradictory to the previous ideas: What is the problem?



# Write the Introduction

- Follow the scientific method
  - why you used the method / field site / images you did – how it/they are THE way to solve the problem
  - a bit about your conclusions
  - SET THE STAGE for the paper
- MANY people write the Introduction last

# The other parts

- Methods
  - sufficiently descriptive that they can be replicated
- Data (results):
  - all your results whether they support your ideas or not
  - no bias, no interpretation at this point

*METHODS / RESULTS*



# The other parts

- Discussion
  - your ideas and interpretations!
  - no new data in this section
  - how your data and ideas mesh with other studies
- The title (!! ) (write this last)
  - why would someone choose to read your paper?
  - be descriptive and specific

*DISCUSSION*



# Other tips for preparing the manuscript

- Write to your figures
  - “a picture paints a thousand words...” (what words are you replacing)?
  - how does a figure support the text?
  - a figure caption should concisely highlight the take-away points
- Write, put the manuscript down for three days, and rewrite



## Other tips for preparing the manuscript

- Put your co-authors to work! At minimum, make them read a draft.
- When using contributions from co-authors, don't hesitate to rewrite in your own voice

## Last but not least

- NEVER start your paper (Abstract or Introduction) with “We” or “I”. The paper is about rocks or techniques or many other things, but not about you.
- Don't write to be understood, write so that you cannot be misunderstood