

What is an abstract?

An abstract is a short summary of a research paper. Abstracts are meant to help your reader understand what the research paper is about and what some of the key takeaways from the paper will be. Abstracts are usually about a paragraph long but can be longer based on the type of document. For example, a Dissertation abstract will be longer than a single, short paragraph. Abstracts help your reader understand quickly what your paper is about and whether they would want to read your whole paper, making abstracts an important tool for writers wanting to share their research.¹

Abstract specifics

Because abstracts are short, it's important to be precise and detailed when writing your abstract. Most abstracts are roughly 150-250 words, but conferences, journals, and professors requesting an abstract will often set a word limit.

IMRD: Writing your abstract

Most abstracts follow an IMRD structure: introduction and importance (make a case for your new research), methods (what did you do?), results (what did you find?), and discussion (what does it mean?).

Abstracts *typically* spend:

- 25% of their space on importance of research (Introduction)
- 25% of their space on what you did (Methods)
- 35% of their space on what you found (Results)
- 15% of their space on the implications of the research (Discussion)²

Following IMRD, an abstract begins with the central problem or question you're researching or addressing and the goal of your project or research (Introduction). This includes context or background information relevant to the specific topic of your research, including what's been done in the past on your topic, setting up what makes your research novel. Then, abstracts discuss research methods used to accomplish your goal (Methods). These are your central questions or a statement of the problem addressed by your research as well as the main reasons, rationale, and goals for your research. The bulk of the abstract will then discuss the results from the research or project and what that means for the field you're in (Results). The results section is the longest and most important section of an abstract because it is where people will look to determine if your research is useful to them. Finally, an abstract will discuss the implications and significance of the research or project (Discussion). This final section of the abstract invites your audience to think about the novelty of your work in the field.³ For more on IMRD, visit our IMRD handout.

¹ *Writing an Abstract for Your Research Paper*. (n.d.). The Writing Center. <https://writing.wisc.edu/handbook/assignments/writing-an-abstract-for-your-research-paper/>

² *Writing an Abstract*. (n.d.). The Writing Center. <https://writingcenter.gmu.edu/guides/writing-an-abstract>

³ *How to Write an Abstract*. (n.d.). <https://users.ece.cmu.edu/~koopman/essays/abstract.html>

Examples
Social Sciences

| Example Text | |
|--|---------------------|
| The United Nations describes aquaculture as the fastest-growing <i>Introduction</i> method of food production, and some industry boosters have heralded the coming of a sustainable blue revolution. | <i>Introduction</i> |
| This article interprets the meteoric rise and sudden collapse of Atlantic salmon in southern Chile (1980-2010) by integrating concepts from commodity studies and comparative environmental history. | <i>Methods</i> |
| I juxtapose salmon aquaculture to twentieth-century export banana production to reveal the similar dynamics that give rise to "commodity diseases" - events caused by the entanglement of biological social, and political-economic processes that operate on local regional, and transoceanic geographical scales. Unsurprisingly, the risks and burdens associated with commodity diseases are borne disproportionately by production workers and residents in localities where commodity disease events occur | <i>Results</i> |
| Chile's blue revolution suggests that evaluating the sustainability of aquaculture in Latin America cannot be divorced from processes of accumulation. ⁴ | <i>Discussion</i> |

Sciences

| Example Text | |
|---|---------------------|
| Botulinum neurotoxins have remarkable persistence (~weeks to months in cells), outlasting the small-molecule inhibitors designed to target them. | <i>Introduction</i> |
| To address this disconnect, inhibitors bearing two pharmacophores—a zinc binding group and a Cys-reactive warhead—were designed to leverage both affinity and reactivity. | <i>Methods</i> |
| A series of first-generation bifunctional inhibitors was achieved through structure-based inhibitor design. Through X-ray crystallography, engagement of both the catalytic Zn ²⁺ and Cys165 was confirmed. A second-generation series improved on affinity by incorporating known reversible inhibitor pharmacophores; the mechanism was confirmed by exhaustive dialysis, mass spectrometry, and <i>in vitro</i> evaluation against the C165S mutant. Finally, a third-generation inhibitor was shown to have good cellular activity and low toxicity. | <i>Results</i> |
| In addition to our findings, an alternative method of modeling time-dependent inhibition that simplifies assay setup and allows | <i>Discussion</i> |

⁴ Soluri. (2011). SOMETHING FISHY: Chile's Blue Revolution, Commodity Diseases, and the Problem of Sustainability. Latin American Research Review, 46(S), 55–81. <https://doi.org/10.1353/lar.2011.0042>

comparison of inhibition models is discussed.⁵

Humanities

| Example Text | |
|---|---------------------|
| This Article reexamines Herman Melville's short story "Benito Cereno," in which the "true history" of the story's events is only revealed to the reader at the end of the story through lengthy extracts from the official deposition of Benito Cereno, captain of the slave ship San Dominick, who testifies that a slave revolt resulted in the deaths of numerous Spaniards and slaves on board. The deposition extracts through which this history is presented to the reader contain numerous defects and contradictions that have troubled critics. | <i>Introduction</i> |
| This Article reexamines the reliability of the deposition extracts through the lens of the exaggeration, distortion, and censorship that characterize the records of historical slave rebellions. | <i>Methods</i> |
| The Article argues that the parallels between the deposition extracts in "Benito Cereno " and the unique historiographical problems raised by the records of historical slave rebellions have been largely overlooked by critics and provide a basis for reexamining whether the deposition extracts in fact provide the "true history " of the story and for reevaluating suggestions of a conspiracy between the Spaniards and slaves in the story. | <i>Results</i> |
| The Article also concludes that by using a deliberately defective official document to end "Benito Cereno," Melville provides important commentary regarding the authorship and distortion of official records in slave rebellion trials and the autonomous agency on which law, narrative, and history depend. ⁶ | <i>Discussion</i> |

⁵ Lin, L., Olson, M. E., Sugane, T., Turner, L. D., Tararina, M. A., Nielsen, A. L., Kurbanov, E. K., Pellett, S., Johnson, E. A., Cohen, S. M., Allen, K. N., & Janda, K. D. (2020). Catch and Anchor Approach To Combat Both Toxicity and Longevity of Botulinum Toxin A. *Journal of Medicinal Chemistry*, 63(19), 11100–11120. <https://doi.org/10.1021/acs.jmedchem.0c01006>

⁶ Coulson, Douglas M. (2010) "Distorted Records in "Benito Cereno" and the Slave Rebellion Tradition," *Yale Journal of Law & the Humanities*: Vol. 22: Iss. 1, Article 1.