Writing Successful Proposals & Abstracts

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What are proposals?

Proposals

- Conference
- Article
- Grant
- Dissertation or thesis
- Research

Overview

- Finding a place for your research
  - CFPs (call for proposals)
  - Journals
- Writing titles and abstracts
- The review process
- Additional resources

Finding a Place

- Calls for Proposals
  - Societies
  - Journals
  - Book chapters

Finding an Opportunity

- Types of opportunities
  - Conference sessions
    - Presentations, posters, panels, lightning talks
  - Publications (articles)
    - Original research, Reviews
    - Other… JoF, JoAH, BEJ

Undergraduate Research Conference

Virginia Tech's Office of Undergraduate Research is hosting the Undergraduate Research & Prospective Graduate Student Conference at the Graduate Life Center at Virginia Tech on Friday, April 18, 2014. This conference is aimed at offering undergraduates the opportunity to gain experience communicating their research or creative scholarship while engaging faculty and other students. Registration for the conference is free. Students will be notified no later than **March 28** about the status of their application and will receive more detailed information about the conference at that time. This conference is a collaborative effort made possible with support from: Student Success Center, the Fralin Life Sciences Institute, the Virginia Bioinformatics Institute, the Institute for Critical Technology and Applied Science, and the Virginia Tech Carilion Research Institute. If you have questions, please contact Jill Sible at siblej@vt.edu.

Students can submit abstracts and applications here by **March 14**.

Title & Abstract =

The most visible parts of your research to

- Reviewers
- Other researchers
- The outside world

BioMed Central says…

"During peer review, the title and abstract are used when we invite reviewers. Invited reviewers are asked to decide whether they wish to review the manuscript **on the basis of the title and abstract alone**."

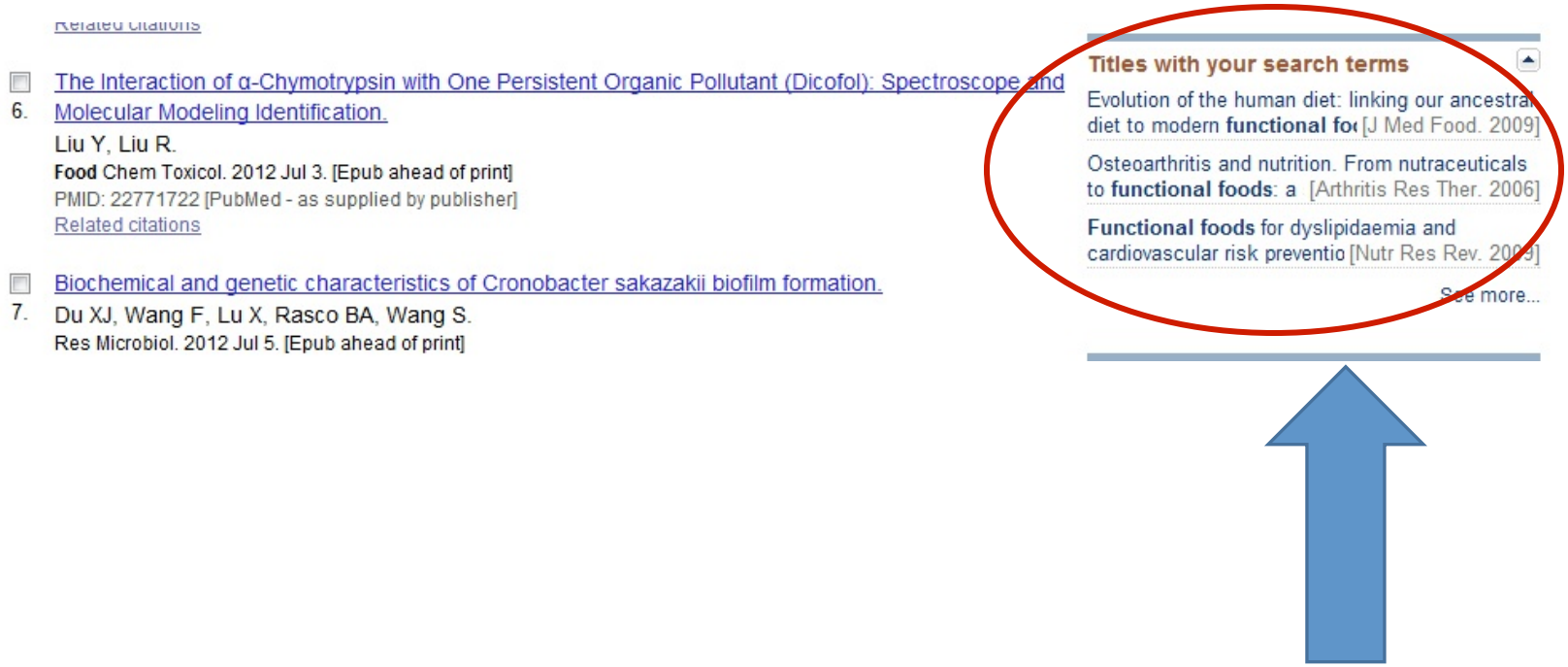
BioMed Central also says…

"More people will read the title and abstract than the whole article. In fact, **many people will only read the title and abstract**, and many will only read them once."

Access to research

For the most part, what do databases search?

Titles and abstracts



PubMed, like many databases, will return results and suggest other, relevant articles **based on an article's title and abstract**

The morale of the story?

Make the title and abstract as **concise, accurate, and readable** as possible.

Form + Function

In addition to being concise, accurate, readable, and eye-catching--

Titles and abstracts also need to be developed specifically in order to help **reviewers** understand your work and **researchers** find your work

Titles

- May be the only piece of information a database provides about an article
- Should be **accurate, informative, and complete**
- **5 Tips**

Title Tip 1: Specific terms

Use specific rather than general terms

Example: use the specific drug name instead of the class of drug

Prevention of infusion reactions to infliximab in pediatric patients with oral acetylsalicylic acid.

Title Tip 2:
Word order & combinations

Use simple word order and common word combinations

Example: "juvenile delinquency" rather than "delinquency among juveniles"

Female juvenile delinquency, motherhood, and the intergenerational transmission of aggression and antisocial behavior

Title Tip 3: Avoid abbreviations, acronyms, and initials

Abbreviations, acronyms, and initials may different meanings for different fields or disciplines

Example: Ca (calcium) could be mistaken for CA (cancer)

Calcium, obesity, and the elderly

Title Tip 4: Scientific names

Use full scientific names

Example: Escherichia coli, rather than E. coli

Elongation factor G is a critical target during oxidative damage to the translation system of Escherichia coli

Title Tip 5: Chemical names

Refer to chemicals by their common (generic) names rather than their formulas

Example: Sodium hydroxide, rather than NaOH

Effects of sodium hydroxide exposure on esophageal epithelial cells in an in vitro ovine model: implications for esophagus tissue engineering

Pop Quiz!

Screening for superoxide reactivity in Li-O2 batteries: effect on Li2O2/LiOH crystallization

How Can We Better Classify NSAID Hypersensitivity Reactions? - Validation from a Large Database

MORE on titles: the colon

Over 20 research articles have been written about academics using colons in titles!

Hartley, J. (2007). Planning that title: Practices and preferences for titles with colons in academic articles. *Library & Information Science Research*, *29*(4): 553-568.

Hartley, 2007

Table 1. Recent estimates of the percentages of colonic titles found in articles in different disciplines

Source	Discipline	Estimated percentages of colonic titles
Lewison and Hartley (2005)	Engineering	09
Busch-Lauer (2000)	Veterinary science	10
Lewison and Hartley (2005)	Biology	11
Lewison and Hartley (2005)	Physics	12
Anthony (2001)	Computer science	13
Lewison and Hartley (2005)	Earth and space	15
Lewison and Hartley (2005)	Biomedical research	17
Busch-Lauer (2000)	Forestry	20
Lewison and Hartley (2005)	Chemistry	25
Lewison and Hartley (2005)	Clinical medicine	27
Haggan (2004)	Linguistics	30
Fontanet et al. (1997)	Business studies	33
Hartley (2005)	Psychology	45
Busch-Lauer (2000)	Education	50
Hartley (2005)	History	50
Haggan (2004)	Literature	61
Busch-Lauer (2000)	Music	66

Types of colon use

- problem:solution
- general:specific
- topic:method
- major:minor

Hartley, J. (2007). Colonic titles! *The Write Stuff, 16*(4): 147-149.

MORE on titles: Cute

A very modal model of a modern, major, general type system

(Proceedings of the 34th Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages)

Your Turn

- In groups of 5, write a title for the abstract that I will be handing out
- When you're finished, bring me the title on a piece of paper
- The entire group will vote on the best title

Abstracts

- Should **outline the most important aspects of the research**
- Should **provide a limited amount of detail** on the background, methodology, and results
- **5 Tips**

Abstracts: several purposes

- Help authors summarize their work
- Help reviewers assess the contents of the article or other type of research
- Help other researchers discover the research in databases

Abstract Tip 1: Length

Most abstracts are between 100 and 300 words long (give or take). Normally, abstract length will be defined in proposal or author instructions.

Abstract Tip 2: Synonyms

Include synonyms for words and concepts that appear in the title

Example: If the word "stillbirths" is in the title, mention "perinatal deaths" in the abstract

Abstract Tip 3: Consistency

Mention only the points actually covered in the research

Organize your abstract with the most important information first, and try to avoid referencing other works

Abstract Tip 4: Simplicity

As with titles, minimize the use of abbreviations and use common word order/combinations

Abstract Tip 5: Structure

- **Background/problem statement**: What is my research about?
- **Aim/purpose**: Why am I studying this?
- **Method/approach**: What techniques/ methods were used?
- **Results**: What did I find?
- **Conclusions**: What are the implications and impact of the research?

Your Turn, Part I

- Organize back into your groups of 5
- Everyone will read the same abstract
- In your groups, identify the different parts of the abstract
- We'll come back together to discuss

Your Turn, Part II

- Organize back into your groups of 5
- Each group will receive a different (short) article
- Members of the group will read the article, and then collaboratively develop an abstract
- We'll come back together and share the abstracts that you've written

Remember:
Ask these questions

- What is this paper about?
- What is the purpose of this research?
- What techniques, methods, or designs were used?
- What were the results?
- What is the bottom line or impact of this research?

Review Process

- Check your abstract for clarity/ conciseness. Ask friends to read it over
- Reviewers will check for content and fit

Questions & Discussion

Resources

- OWL at Purdue: https://owl.english.purdue.edu/owl/resource/752/01/
- VT Writing Center: http://www.lib.vt.edu/about/writing/
- CommLab: http://www.commlab.vt.edu/

Thanks!

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Also, check out:
http://www.biomedcentral.com/ifora/abstracts