HOW TO WRITE AN ABSTRACT

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SOT Rules and Guidelines

https://www.toxicology.org/events/am/AM2020/abstracts-presenters.asp

- Abstract deadline: **October 18, 2019**
- 2,300 character limit
- No tables, figures, or chemical structures
- No headers
- Define your acronyms.
- Identify your compounds.
- Be sure that your work follows ethical guidelines, including IACUC/IRB approval.
- Show up at the meeting, and present your work.
Key Points

1. Know your audience(s).

2. Tell them the following about your project:
   - *Introduction/background:* Introduce the problem.
   - *Hypothesis/purpose statement:* Say how you approached the problem (conceptually).
   - *Methods:* Tell the audience what you did (nuts and bolts).
   - *Results:* Tell the audience what you found.
   - *Conclusions:* Tell the audience what it means.

3. Give your work a compelling title.

4. Be clear, concise, and honest.
Who is your audience?

- Your Science
- Scientific Program Committee(s)
- Specialty Section Program Committee(s)
- Increasing Scrutiny
- Award Review Committee(s)
- Your Peers
Example: an Abstract That Worked

- Introduction/Background
- Hypothesis
- Methods
- Results
- Conclusion
- Is it perfect? No!
Introduction/Background

■ Just a few sentences
■ Tell the audience what is known about the compound(s) and why the toxicity is important
■ End with a question or knowledge gap ★

Compound-of-Interest causes acute liver injury in the rat...

Human exposure to Compound-of-Interest has increased rapidly...

An estimated 3,000 new cases of acute Compound-of-Interest toxicity occur annually...

★ The role of Biological Process in Compound-of-Interest toxicity is unknown...
We hypothesized that activation of Imaginary Pathway was required for Compound-of-Interest-induced hepatotoxicity.

The purpose of this study was to quantify the effect of age on Compound-of-Interest-induced hepatotoxicity.

The purpose of this study was to identify the major routes of Compound-of-Interest metabolism.
Methods

- Tell the audience what you did.
- Include details about the exposure model and any unique tools or analyses.
- Don’t get too far into the weeds.

Adult male and female Sprague Dawley rats were exposed to a single dose of 3-30 μg Compound-of-Interest/kg body weight by oral gavage.

We created a novel human primary hepatocyte organoid model to test the gene expression response to Compound-of-Interest.

We tested Compound-of-Interest toxicity in wild-type and Imaginary Receptor knockout rats.
Results

- Tell the audience what you found.
- What were the key outcomes of your experiments?
- You don’t have enough space to include everything. No tangents!

Imaginary Receptor activity increased in a dose-dependent manner, beginning 1 hour after exposure to Compound-of-Interest.

The Imaginary Receptor inhibitor, Compound 2, rescued acute hepatotoxicity of Compound-of-Interest.

Compound-of-Interest enhanced expression of genes involved in Biological Process, measured by RNA-seq.

88% of Compound-of-Interest was converted to Metabolite A in the liver.
Conclusion(s)

- Bring it home.
- What is the ONE key point that the audience will learn by attending your presentation?

**Therefore**, Metabolism of Compound-of-Interest to Metabolite A contributes to Compound-of-Interest hepatotoxicity.

**We conclude that** Imaginary Receptor activation is required for Compound-of-Interest hepatotoxicity.

These results **support the hypothesis** that hydroxylation by CYP1X is a primary route of Compound-of-Interest metabolism.
Don’t jump around. Remember, structure determines function.
Be clear and concise.

- Remove extraneous words.
  - Several studies have shown...
- Resist the urge to digress.
  - Interestingly...
- Triple-check your abstract for jargon.

- Help the audience follow the story.
  - We hypothesized that...
  - To address this gap...
  - We found...
  - We conclude...

Stay focused!

- You know a lot of things. Not all of them belong in your abstract.

Be honest.

- Tell the audience what you found. Don’t overstate your findings.
Finally, give your work a compelling title.

- Your title will help you capture the interest of program committee, award committee, and conference attendees.
- Readers will scan your title for:
  - Toxicant(s)
  - Organ systems, targets, mechanisms, or disease states
  - Key conclusions
- Use an action verb.
- State a key finding in a declarative sentence.
Don’t do this:

Effect of Compound-of-Interest on Imaginary Pathway in the Liver

Do this:

Compound-of-Interest Induces Liver Toxicity through Imaginary Pathway
Good luck. Remember your goals.

Scientific Program Committee

Specialty Section Program Committee(s)

Award Review Committee(s)

Write a Compelling Abstract

Reach a bigger audience