Exercise 4

Constructing a Lay Summary (Plain Language Summary)
Korryn Bodner & Carina Rauen Firkowski

Agenda

Overview of how to write a lay summary
 15 mins

Draft a lay summary of your case study
 25 mins

With a partner, switch and critique
 25 mins

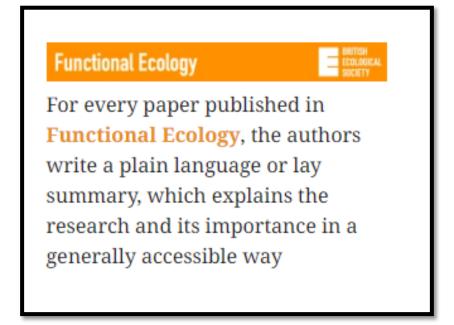
Read each other's summaries
 5 mins

Provide constructive feedback
 10 mins each

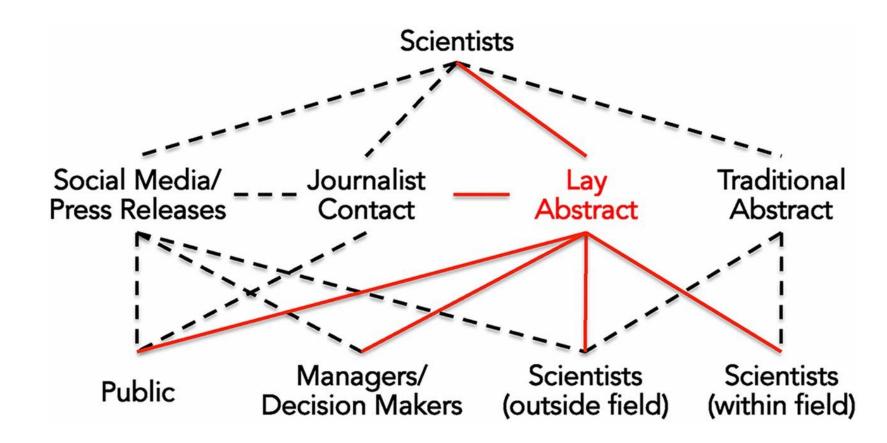
Incorporate feedback on your own
 10 mins

• Open Discussion 10 mins

Sometimes it is mandatory



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- To contextualize research and highlight its importance
- Communicate research with a broader audience



- Sometimes it is mandatory
- To contextualize research and highlight its importance
- Communicate research with a broader audience
- In general, increases research transparency

What is your experience with lay summaries?

- How many of you have written one before?
- How did you find the experience?

Even if we can't say what exactly makes a good lay summary good, we know one when we see one ...

... and we know it when we don't see one.

1

"Many trees form partnerships with soil fungi that grow on tree roots and help the tree take up nutrients. For some trees, these fungi are essential – if the right fungi aren't around, the trees can't grow. In fact, certain grassland and woodland ecosystems that would otherwise be in danger of being overgrown by forest trees are kept safe, just because they don't have the right fungi for those forest trees.

We studied a park in California where coniferous forest trees are increasingly overgrowing grassy, oak woodlands. This problem, which is called woody encroachment, is often attributed to fire suppression over the last century. And indeed, prior research shows that the oak woodlands used to catch fire frequently, which the mature oaks could tolerate but conifer seedlings couldn't. We wanted to see whether soil fungi might also play a role, since the coniferous trees in this region normally are very dependent on fungi."

2

"Naturally occurring stable isotopes, especially carbon (13C/12C, expressed as δ 13C) and nitrogen (15N/14N, expressed as δ 15N), are common tools used to understand what species are eating. Stable isotope analyses assume that "you are what you eat", meaning that the isotopic composition of an animal's tissue reflects that of its diet. However, stable isotope values of animal tissues are generally offset from diet, with this difference referred to as a trophic discrimination factor (TDF; Δ 13C and Δ 15N for carbon and nitrogen, respectively). Although researchers often apply TDF values from a similar species or use 'standard values' of approximately 1.0% for Δ 13C and 3.4% for Δ 15N, TDF values may be variable due to a variety of factors. Understanding the factors that influence TDF values can help inform researchers on the most appropriate TDF value to use."

- How did you find these two examples?
- Which one did you like better?
- What was it that made it better?

General tips for writing lay summaries

- Focus on the broader significance of your research
 - Why should the average person care about what you are doing?
- Tell a story
- Use fewer words and shorter sentences

General tips for writing lay summaries

- Write in the active voice:
 - "We found a strong relationship"
 - "The strength of the relationship was found to be strong"
- If you can add the phrase "by frisky felines" at the end and it makes sense you
 are probably using the passive voice.

General tips for writing lay summaries

- Use a lede
 - "Breast cancer is a serious disease affecting 1 in X Canadians every year"
 - "This research will change the way we think about chemotherapy for patients with breast cancer" (Krysta Coyle, Jan. 21, 2021)

Avoid when writing lay summaries

- Jargon, acronyms and overly technical language
 - What may seem like everyday language to you may be jargon for a non-specialist.
- Too many new terms or concepts
- Too much detail
 - The details may be important to you but the main meaning behind your research will get lost if too many are included in your summary
- Complicated statistics
- Making readers do calculations in their head

Language substitution examples

efficacy of X

probability

participate in

prior to

discontinue

in the event of

inform

scheduled to undergo

accordingly/consequently

utilisation

with reference to/with regard to

if this is the case

how well X works

how likely X is to happen

take part

before

stop

if

tell

due to have

SO

using

about

if so

Other general strategies

- Ask others (particularly non-specialists) for feedback on your summaries
- Use online resources and tools (e.g., readability-score.com)
- Go through the many online resources and tutorials to help with plain language summaries
- Look up writers (including non-scientific writers) that you like and think about how they construct their sentences. Why do you like their writing?
- Keep practicing ... Practice makes progress!

Individual work: draft a lay summary 25 minutes

A place to start

- Consider structuring your summary around the following questions:
 - why we did our study?
 - what did we do?
 - what did we find?
 - what does it mean?
- Focus on the content, and don't worry too much about perfecting the writing

Partner Work: Review lay summaries 25 minutes

Partnering

- Please stand up if you are in the Infectious Disease Control Case Study
- Select someone who is sitting down to be your partner. They should be in the
 - Water Quality Monitoring

or

Fisheries Management case study

Read & share constructive feedback

Read each other's summaries
 5 mins

Provide feedback
 20 mins total, 10 mins each

- What did you like about their summary?
- Did they answer their proposed questions?
- Was there a lot of jargon?
- Which sentences read well and which need more attention?
- To use these slides as a resource, find them in the Exercises folder on GitHub

Individual Work: Make summary modifications 5 mins

Large Group Discussion 10 mins

Main takeaways from this exercise?

- How did you find writing a lay summary of your case study?
- What tip did you find to be the most helpful?
- Was there anything that your partner said about your summary that surprised you?

External resources adopted for this exercise

"So you have to write a scientific lay summary" January 21, 2021. Krysta Mila Coyle. (http://www.krystacoyle.ca/uncategorized/so-you-have-to-write-a-scientific-lay-summary/)

"How 'Lay' is your Lay Summary" November 28, 2019. Medical Writing Team, TransPerfect Life Sciences Solutions. (https://www.transperfect.com/blog/how-lay-your-lay-summary)

"Writing a good lay summary" Public Engagement and Communications Resources, Radcliffe Department of Medicine (https://www.rdm.ox.ac.uk/files/intranet/writing-a-good-lay-summary-rdm.pdf)

"How to Write A Lay Summary for Your Research" April 24, 2019. Samantha Green. The Wiley Network. (https://www.wiley.com/en-us/network/publishing/research-publishing/preparing-your-article/how-to-write-a-lay-summary-for-your-research)

"E.8.6 Lay Summary Guide for Researchers: Tips on Writing a Lay Summary". Accelerating Research in Genomic Oncology. October 2021. (https://www.icgc-argo.org/page/141/e86-lay-summary-guide-for-researchers-tips-on-writing-a-lay-summary-)

Group Work

After the coffee break

Write a group lay summary

3:20 pm

- Share your lay summary with your group & write one together
- The group lay summary will serve as a basis for the presentation, which you
 can also start structuring and working on

4:00 - 5:30 pm

 Colin Daniel & Alex Filazzola (ApexRMS) will provide feedback and support on groups' lay summaries and presentation structure