Reviews in Quantitative Biology

Introduction

Time Topic

- 11:00-11:20 Introduction
- 11:20-11:45 How to write a review
- 11:45-12:00 Break
- 12:00-12:45 Guest presentation
- 12:45-13:00 Q&A

How many people...

- Know what is a review?
- Have read a review?
- Have written a review?
- Have published a review?

Course in a nutshell

Hear a Write a Evaluate a

Why review the literature?

- Discover and learn new topics
- Identify relevant research questions
- Build upon existing work

Why write a review?

- Introduce proposals, research plans, theses, papers...
- Improve your writing skills
- Improve your science communication skills
- Think/understand through writing

Why peer review?

- •Be a good citizen
- Stay at the forefront of research
- Sharpen your critical thinking skills
- Impress the editor

Learning outcomes

- Recognize current QB topics
- Identify relevant papers
- Organize and summarize relevant work in a clear, coherent, concise, and correct review
- Provide critical and constructive peer reviews
- Improve your work from peer reviews

Organization

- •Main tutorial (11am 1pm)
 - 1 hr on specifics of the writing and reviewing process
 - 1 hr review on a special topic by an invited speaker
 - Presence mandatory!

Assignments

Write 1 review and do 2 peer reviews

	1st Friday	2nd Friday	3rd Friday	4th Friday	5th Friday	6th Friday	7th Friday	8th Friday
	Nov.04	Nov.11	Nov.18	Nov.25	Dec.02	Dec.09	Dec.16	Dec.24
	Topic presented in class (Daron)		Your paper due	Get peer review for your paper	Revision for your paper due			
Group 1				Your peer review due		Your peer review due		
Group 2		Topic presented in class (van Leeuwen)		Your paper due	Get peer review for your paper	Revision for your paper due		
					Your peer review due		Your peer review due	
			Topic presented in class (Majidian)		Your paper due	Get peer review for your paper	Revision for your paper due	
Group 3				Your peer review due				
Group 4				Topic presented in class (Soyk)		Your paper due	Get peer review for your paper	Revision for you paper due
				Your peer review due	Your peer review due			
	Topic decided by you		Your paper due	Get peer review for your paper	Revision for your paper due			
ndependent				Your peer review due		Your peer review due		

RQB 2022 Friday Schedule

Location: see table below (or Whttps://unil.zoom.us/my/natashaglover)

Week	Date	Location	11:00-12.00	12:00-13:00		
1st	04 Nov	Génopode C	Introduction & How to write a review	Dr. Josquin Daron (Université de Montpellier): Transposable elements and population genetics in mosquitos		
2nd	11 Nov	Génopode A	Writing science in plain English	Prof. Jolanda van Leeuwen (CIG): Conservation of genetic interaction properties		
3rd	18 Nov	Cubotron III	Editing & Peer review	Dr. Sina Majidian (DBC): Applications of k-mer analysis in quantitative biology		
4th	25 Nov	Génopode A	How to get published	Prof. Sebastian Soyk (CIG): Dissecting quantitative variation by genome editing		

Participants not assigned to one topic plan to write their own review.

Writing and Independent review

- You must get your advisor to agree to review your paper
- Paper is due 2 weeks from today!

Co-authoring reviews

- Reviews are written in groups
- Include a statement of author contribution at the end, e.g.:

JS wrote most of the introduction and section on PPI network and produced Table 1. CD wrote most of the section on regulatory network and produced the figures.

Manuscript

- Quality matters more than quantity, but ~2000 words is a typical length.
- Write with Google Docs + Paperpile (*recommended*)
- Initially submit as a PDF only with a References section and any images and tables.
- Submit revised version as a PDF with a cover letter addressing the referees' criticisms.

Course homepage

- <u>https://lab.dessimoz.org/teaching/rqb/</u>
 - Course details
 - Schedule
 - Slides
- Article management webpage (EasyChair): <u>https://easychair.org/my/conference?conf=rqb22</u>

Authorship according to Genome Biology

To qualify as an author one should:

1) Have made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;

2) Have been involved in drafting the manuscript or revising it critically for important intellectual content; and

3) Have given final approval of the version to be published.

4) Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship.

Share credit with lecturer

- Reviews written in this course heavily draw from the presentation.
- Thus, the speaker is typically listed as last author on your submission.
- Note that if this was a *real* submission, the other two requirements would also need to be fulfilled.

My expectations

- Demanding tutorial
- Presence and participation on Fridays
- Strong commitment to both review and peer-review
- Intellectual honesty: no plagiarism nor fabrication!

Your expectations

- •What do you expect from this course?
- •What topics do you want to learn about in the paper-writing process?
- •Questions, concerns?