

# Reviews in Quantitative Biology

Introduction

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22 Nov 2024



# How many people...

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

# What exactly is a review?

- A scholarly article that **synthesizes** the literature on a topic.
- Comes in different flavours:
  - Provides an **overview** of the current understanding
  - Identifies **trends**, highlights significant findings
  - **Discusses** the main methodologies and approaches within the field
  - Offers a **comprehensive background** for readers who wish to get informed about the state of research on a given subject
  - Identifies **gaps** in knowledge
  - Set the context or an **agenda for further research**

# Tutorial in a nutshell

Hear a

Write a

Evaluate a



**Review**

# 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

<b>Time</b>	<b>Lecturer</b>	<b>Presentation</b>
9h	CD	Introduction
9h10	<a href="#">Prof. Sonja Lehtinen</a>	The fitness cost of antibiotic resistance from observational data
10h05	<i>break</i>	
10h20	<a href="#">Prof. Santiago Carmona</a>	What is a cell type? Conceptual and quantitative definitions of cell type in the single-cell omics era
11h15	<i>break</i>	
11h30	<a href="#">Prof. Anne-Florence Bitbol</a>	Protein Language Models
12h25	<i>Lunch break (including discussions in groups)</i>	
13h15	NG	<a href="#">How to write a review paper</a>
14h15	NG	<a href="#">Writing science in plain English</a>
15h15	CD	<a href="#">How to do a peer review and easychair tutorial</a> & <a href="#">More tips for peer reviewing</a> & <a href="#">Editing &amp; responding to reviewers</a>



# Planning

- **Today:** topic confirmed, writing teams formed (over lunch break)
- **22 Nov to 9 Dec 2024:** writing of review. Submission by 23h59 through EasyChair.
- **10-11 Dec 2024:** possibility to express peer-review preference on EasyChair
- **12-18 Dec 2024:** peer-review. Submission by 23h59 through EasyChair
- **19 Dec-9 Jan 2025:** revisions according to peer-review

# Some success stories

Review | [Open access](#) | Published: 20 November 2019

## Structural variant calling: the long and the short of it

[Medhat Mahmoud](#), [Nastassia Gobet](#), [Diana Ivette Cruz-Dávalos](#), [Ninon Mounier](#), [Christophe Dessimoz](#)

✉ & [Fritz J. Sedlazeck](#) ✉

*Genome Biology* **20**, Article number: 246 (2019) | [Cite this article](#)

**86k** Accesses | **97** Altmetric | [Metrics](#)

Cited by **602** (google scholar, Nov 24)

HGG  
Advances

REVIEW

## From pharmacogenetics to pharmaco-omics: Milestones and future directions

Chiara Auwerx,<sup>1,2,3,4,5</sup> Marie C. Sadler,<sup>2,3,4,5</sup> Alexandre Reymond,<sup>1,\*</sup> and Zoltán Kutalik<sup>2,3,4,\*</sup>

Cited by **32** (google scholar, Nov 24)

Review | [Open access](#) | Published: 14 October 2024

## When less is more: sketching with minimizers in genomics

[Malick Ndiaye](#), [Silvia Prieto-Baños](#), [Lucy M. Fitzgerald](#), [Ali Yazdizadeh Kharrazi](#), [Sergey Oreshkov](#),  
[Christophe Dessimoz](#), [Fritz J. Sedlazeck](#), [Natasha Glover](#) & [Sina Majidian](#) ✉

*Genome Biology* **25**, Article number: 270 (2024) | [Cite this article](#)

**2370** Accesses | **23** Altmetric | [Metrics](#)

Cited by **2** (google scholar, Nov 24)

# **Guest Lectures**