IFN646 - Portfolio item 2

Key points

- Individual assignment
- 6 marks
- Release date: 24 August 2023
- Due date: 10 September 2023

Overview

For this portfolio item, you will focus on reproducibility. You will access articles recently published in scientific journals, and we will ask you to evaluate each of them through the lens of their data and code practices.

You will submit your answers directly on Canvas, through a quiz environment. These answers will describe your findings for each article (task 1; questions 1-4 of the quiz) and provide some overall reflections (task 2; question 5 of the quiz).

1. Tasks

Overall goal

Your objective is to evaluate how reproducible published articles are, and to identify common good (or bad) practices.

Preliminary task

1. Access the articles you have been assigned. If you do not work with these specific papers, you will lose marks.
2. Read them, focusing on the analysis part. We do not need you to understand the underlying biology for each article.
3. Download their data and their code, if it is available.

Task 1 [1 mark for each paper]

In your answers, address the following questions:

- **Is the data supporting the article available?**

  - If it is, where is it hosted? Is it shared in a way that makes it easy to reuse? (think about the best practices we discussed)

  - If not, is any justification provided?

- **Is the code supporting the article available?**

  - If it is, where is it hosted? Is it archived? Is there a clear license? Is it shared in a way that makes it easy to reuse? (think about the best practices we discussed)

  - If not, is any justification provided?

  - If the authors are used tools that had already been published, is it clear which version it is, and which settings were used?

If the data or code is not available, or if it is only "available under request", you **must not** contact the authors and ask for it. This is not what the portfolio is about. Your task is to work from the information available in the articles.

Task 2 [2 marks]

Based on your analysis of each paper, draw some conclusions about current practices, journal requirements, and possible strategies to improve reproducibility.

2. Submission

You will submit your answers through the quiz environment on Canvas. Remember that you can edit your answers as many times as you want, but **you can only submit once**.

Submission will close at 11.59pm on the due date.

3. Academic honesty

This is an individual assessment, and you need to submit your own work. We reserve the right to select some submissions and ask students to explain the reasoning behind their answers.