

Grading report

Group evaluated: C

Evaluation by (Group, TA, or Prof.):
Prof, TA, Groups A and B

Module #: 2
Date: 5/11/25

Prof. Aleksandar Antanasijevic

Depth of understanding of the papers' content

- The paper content was understood well, given the difficulty of the paper and the complexity of this topic.
- The subject was explained in a very natural tone, accessible to audience, indicating that the group really made an effort to get to carefully read and "digest" the paper.
- The group missed a few points regarding the total number and quantitative properties of the designed nanopores, which became more obvious during the Q&A.

Level of understanding of the scientific field of the set of papers supported by additional literature search:

- Good context, deep understanding of what was done before **and after**.
- You are one of a few groups to have looked at the follow-up paper and number of citations. Trying to evaluate the impact of the paper in the field, was a very nice initiative. Great work!
- It was clear that the students were struggling to perform an in-depth critical evaluation of protein design approach which is normal given the complexity of this topic and the variety of tools available nowadays.

Quality of the presentation (slides):

- Overall, very nice slides with optimal amount of information
- Concerning the slides that have a lot of panels, consider using animations so that the data appear one at a time.
- Spend a bit more time on the bullet-points, as they are very useful for the audience to understand the main message of data-heavy slides and follow.
- Concerning the first slides, a few schematics (the one showing nanopore sequencing notably) were too small and there was a lot of blank space. Try to optimize the usage of space next time.

Quality of the presentation (oral):

- Very good, clear explanations and transitions between the topics, really highlighted the "fil rouge"
- 2 presenters were a bit shy, and the other 2 seemed very comfortable with great diction and body language. Let's see if you can help each other further grow this aspect over the next presentations.

Critical analysis, discussion and comparison of the presented set of papers:

Ecole polytechnique fédérale de Lausanne

- Good critiques of the strengths and limitations of the study, identifying several important points to emphasize. It was nice to have the strengths and limitations discussed throughout the presentation, and summarize them at the end.
- The “overall critique” part at the end was a nice summary of the discussion points throughout the paper. Try to further build on this structure next time and make the overall critique a broader discussion with less repeat of the previous arguments.
- The group checked the follow-up work and provided an analysis of citation records (very good effort). Although, through discussion we agreed that citation number over short periods of time may not be the most important factor for evaluation of this work.

Quality of the answers given in response to the audience questions:

- Additional points of criticism were raised during Q&A and the group handled the discussion relatively well.
- They were also able to reflect on questions that went beyond what they presented.
- One big point for improvement: When some questions were asked, the answers were rather qualitative, and in a few cases - completely wrong. Please try to work on this aspect, and better qualify your answers when not sure about them. It is completely understandable that you are not the experts on these topics so please do not feel pressure to provide answers to every question.

Additional optional comments:

- Maybe adding some insights on ion selectivity and how it could be improved or why it is a challenge with the beta barrel structure.
- Overall, a very strong effort with several original evaluation concepts introduced by this group. Keep up with great work!