

## **Challenges and innovation of organizing physiology quiz during COVID-19 pandemic: future transformation to advanced virtual-based model competition**

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Indonesian Medical Physiology Olympiad (IMPhO) is an annual physiology competition for medical students on the national level held by The Department of Physiology, Faculty of Medicine, Universitas Airlangga, Indonesia since 2017. The competition has stimulated both teachers and students to learn physiology better for several years and has become a fun learning method. However, the pandemic of COVID-19 has disrupted the whole education system where universities were closed and the classes were moved to online meetings. Due to pandemic and social restrictions, the 4th IMPhO in 2020 could not be held and was canceled. However, we received overwhelming requests and support to continue arranging the competition. Thus, in 2021 IMPhO was held again, albeit wholly transformed into an online-based competition. We needed to make several adjustments to accommodate both the written and different rounds of oral quizzes as part of the competition. Here, we will review the challenges and innovations of organizing a physiology quiz during the pandemic of COVID-19. We will also discuss the aspects that will remain effective as the advantage learning method and the alternatives to prepare a future transformation to virtual-based model competition post-COVID.

**Keywords:** Physiology quiz, Indonesian Medical Physiology Olympiad, virtual-based model competition