To: Elton Kok, Team Undefined Member From: Richard Chen, Team Undefined Member Date: October 4th, 2020 Subject: 'Quantitative Polymerase Chain Reaction' Definition Review

Hi Elton,

Thank you for delivering your definitions promptly, this was very informative and a good overview of 'Quantitative Polymerase Chain Reaction'. Please see the below for tips that may prove useful in the second draft.

Opening Comments

The definitions provided clearly shows mastery over the term's subject area of the natural sciences. The definitions and chosen situation are also very relevant to current world issues, and express scientific terms in plain speech, allowing for easy comprehension.

Purpose of Definitions

Overall, each definition contains enough detail that is appropriate for each definition type. Moving through the definitions leaves the reader learning a little more about qPCR.

There is one point that may improve the reader's understanding of the issue that qPCR solves:

• Expanding that the problem with viral detection is that viruses are very small, and to positively detect them a process like qPCR is needed to amplify the amount of the virus.

While this may be implicitly inferred through the context of what qPCR does, a common layperson may not know the issue that qPCR addresses, and it is not explicitly stated.

That aside, the definitions were detailed, and the choice of expansion techniques identified (history, operating principle, required conditions, and visual) were appropriate for the term. The visual chosen naturally complemented the definitions and spoke for itself.

Word Choice

- Good usage of acronyms. Acronyms were used in its fully expanded form before preceding to be used on its own. They were also fully expanded again in later cases to remind the non-technical reader.
- Reducing the usage of the word 'it' will improve the audience's clarity of what exactly is being referred to. In the parenthetical definition: 'a test method that creates copies of the viral genes to detect it'. It is not immediately clear what 'it' is referring to and whether the act of copying viral genes meant the virus was detected. Revising the sentence to clarify the relationship between copying and detection of viruses will prevent readers from being misled.

Works Cited

- References are appropriately cited in the references section
- Adding in-text citations would help users interested in learning more view the original sources, and how it relates to the definitions written.

Overall Impressions

The definitions provided a lot of insight into how scientists approach virus detection using methods like Quantitative Polymerase Chain Reaction. With the following tips, the definitions will improve upon an already polished document:

- Expanding on the issues that qPCR solves
- Reducing the usage of vague words such as 'it'