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Federal Trade Commission

Re: Comments in the Matter of Carrot Neurotechnology, Inc., File No. 1423132

Dear Commissioners,

I am writing to comment on your enforcement action in the matter of Carrot Neurotechnology, Inc. (File No. 1423132). I hold the title of Professor of Psychology at the University of Southern California. I am an expert in the human visual system. My work addresses basic and translational questions pertaining to vision loss, restoration, and rehabilitation. I have been working in this area for over 20 years. My research is primarily funded by NIH. An overview of my work, including my CV, can be found here: https://tlab.usc.edu

I have no financial interest in Carrot Neurotechnology Inc., nor have I ever involved with the company or collaborated with its founders, Adam Goldberg and Aaron Seitz.

Nevertheless, I have followed closely the scientific work of Dr. Aaron Seitz, a Professor of Psychology at UC Riverside, particularly his seminal work on perceptual learning, which continues to inform my own research.

While any claims of efficacy regarding health-related app by the marketer should be scientifically substantiated, the required level of substantiation must be assessed relative to the harm that such an app may post to the public as well as the benefits that it will bring. While I appreciate FTC's proactive approach towards consumer protection, I strongly believe that, in this particular case, the consumer's interest is unnecessarily harmed by the Commission's enforcement action for the following reasons:

1) There is a rich scientific literature, dating back decades and including work done by groups unrelated to Carrot Neurotechnology, showing feasibility of this type of perceptual training on improving vision. These peer-reviewed findings have been published in scientific journals of high standard. In other words, scientists in the field have judged that these findings are scientifically significant. The app made by Carrot Neurotechnology _is_ based on available scientific evidence. To state otherwise would be a factual error. Moreover, the level of scientific evidence in support of the claims by Carrot Neurotechnology far exceeded the level of evidence put forth by other marketers of health-related app. The double standard of enforcement is puzzling.

2) There is _no_ scientific or clinical evidence showing that the type of visual training implemented in

the app may cause any harm. It seems improbable for any customer to mistake the app as a medical treatment for any medical condition. The typical use case of the app is most certainly for vision conditions that are limiting in a mundane way but with no effective treatments – e.g. a user may be motivated by the possibility of reading a dinner menus at low light.

3) Results from the literature suggest that the effects of this type of perceptual learning tasks tend to vary across individuals, meaning that some users will see noticeable benefits while other may not. Because there is no risk associated with not having an effect, preventing or delaying the availability of the app to the general public unnecessarily deprives those for whom the training is beneficial.

4) This enforcement action will send a unmistakable message to scientists in this field of visual training to keep their work in the lab, diminishing the translational mission adapted by the scientists, their home institutions, and their federal agencies.

As a scientist with an active research program and considerable expertise in this area, I found the Commission's enforcement action, while well intended, appears ill informed. Continuing this enforcement action will be more harm than good to the consumers, by discouraging scientists to translate their research from the laboratories and depriving the consumers from receiving the benefits.

I hope that the Commission will revert its decision.

Sincerely,

Bosco S. Tjan, PhD.
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