Qeios

Peer Review

Review of: "Cholinergic Signaling Differentially Regulates Song Premotor Circuits to Stabilise Songs in Songbirds"

Jaromir Myslivecek[1]

1. Charles University Prague, Czech Republic

The authors of this manuscript have studied cholinergic signaling in specific brain areas in zebra finches. The study is well-designed and provides a sufficient picture of these circuits. However, the reading of the manuscript is difficult and does not comply with scientific standards.

The main problem with the article is the overuse of abbreviations that complicates reading. All abbreviations should be explained in their first use. Mainly, avoid abbreviations in the abstract. This decreases the attractiveness of the study.

Specific points:

The last sentence in the abstract is too general; please be more concrete.

Please adapt highlights that are well-written to the abstract.

Please be more specific concerning the sex differences in the abstract. Also, the fact that females do not sing while males do should be mentioned here.

Figure 1: Again, please do not use abbreviations; it is hard to understand the meaning. The meaning of mEPSCs is explained at the end of the manuscript; it should be explained here.

Similarly, the description of acoustic phenomenon values (pitch, FM, goodness) should be given.

The drug DMPP is dimethylphenylpiperazinium; it should be mentioned.

PBS as a control should be moved to the left after Pre (Figures 5 and 6).

Discussion: the differences between carvachol and oxotremorine M should be discussed, as both are non-specific agonists.

Key resource table:

What is MCE?

Sound Analysis Pro 2011: there should be a citation of the original paper: Tchernichovski et al. Animal Behav 59, 1167-1176, 2000.

Please be more specific about what a reputable supplier is.

doi.org/10.32388/WVQP9P

Declarations

Potential competing interests: No potential competing interests to declare.