

Reviewer Report

Title: GraphClust2: annotation and discovery of structured RNAs with scalable and accessible integrative clustering

Version: Revision 1 **Date: 10/14/2019**

Reviewer name: Ioanna Kalvari

Reviewer Comments to Author:

The authors have responded to all of the questions and provided additional information and clarifications where necessary. The authors also performed new experiments to expand and strengthen the indicated sections, resolved any technical issues and modified the text according to the suggestions. I do not have anything further to add apart from reporting some minor text errors I identified with a second read-through.

The following is a list of points I identified in the text that require editing:

1. Intro, page 2 at the end of the section where the authors list their goals "(v) allowing for efficient parallelizations over different platforms;" - I believe that sentence should be followed by a '!'.
2. Similar to 1 in Materials and methods, first paragraph after "(v) cluster collection, visualization and annotation;" ; should be replaced with .
3. These repeats 4 times in the newly added text that follows
 - a. After "specific tools; Firstly, from..."
 - b. After "smaller than the entire input data; In the second step after..."
 - c. After "maximization algorithm [28]; Thirdly after..". Perhaps a comma is also needed after "Thirdly"?
 - d. After "missed in the initial clustering; Finally, ..."
4. In the workflow output paragraph: I believe ending the sentence after "soft partitions" and starting with a new sentence as "soft partitions. In the latter case, elements can belong..." makes the text easier to read.
5. A full stop is needed after subtitle " Orthology sequence extraction from long RNA locus"
6. Page 5, end of column 1 - "To draw a conclusion, however, an extensive SHAPE data would be needed...". Would "To draw a conclusion, however, an extensive SHAPE dataset would be needed.." or "To draw a conclusion, however, extensive SHAPE data would be needed..." be more appropriate here?
7. There is a full stop at the end of title "GraphClust is Scalable." Delete if not purposefully used there
8. Page 6, column 2, right before the FTL paragraph. "And compensatory mutated paired regions; Below we describe..." Replace ; with .
9. Page 7 - The first sentence of the newly added text requires a full stop.

I would encourage the authors to do another read-through of the manuscript in case I missed something.

I am also attaching a doc file, with my full responses (blue colour) to the author comments.

Methods

Are the methods appropriate to the aims of the study, are they well described, and are necessary controls included? Choose an item.

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