

Reviewer Report

Title: De novo assembly of the Indian Blue Peacock (*Pavo cristatus*) genome using Oxford Nanopore Technology and Illumina sequencing

Version: Revision 1 **Date: 10/18/2018**

Reviewer name: Matthew Greenwold

Reviewer Comments to Author:

The manuscript entitled "De novo assembly of Indian Blue Peacock (*Pavo cristatus*), from Oxford Nanopore and Illumina sequencing" details the results from sequencing and assembling the peacock genome. The manuscript is very much improved and should be ready for publication with only minor revisions.

I think this manuscript lacks one very important point. How does this hybrid assembly compare to other avian genome assemblies? For example, the turkey genome used two different genome sequencers while the original chicken genome made use of Sanger sequencing. Furthermore, many of the 48 bird genomes (Jarvis et al.; Zhang et al, 2014) only used Illumina sequencing at different sequencing depths. I think a comparison between these builds (N50, etc.) should be included in this manuscript. This will aid future researchers who are trying to decide the best sequencing strategy for their favorite bird/organism.

The abstract and introduction contain several awkward sentences that impede the reader's understanding. For example, the second to last sentence (lines 19-22) of the Abstract Background needs to be rewritten.

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