March 4, 2016

Dear Editor;

We resubmit the manuscript “Compositional analysis: a valid approach to analyze microbiome high throughput sequencing data” formerly submitted as Manuscript ID cjm-2015-0821. This manuscript was invited by Dr. Chris Yost following a successful workshop on Microbiome Data analysis at last years annual meeting of the Canadian Society of Microbiology. The focus of the workshop was exploration of data and compositional data analysis. We were able to introduce the bare bones of this in the workshop, and this manuscript contains a more complete and comprehensive treatment of the issues and approach.

We have taken the reviewers’ frustrations to heart and return here a substantially updated and re-worked manuscript. The manuscript briefly reviews the need for a compositional approach, the tools available as of now: in fact Gloor has just returned from a meeting reviewing the current state of compositional data analysis in the microbiome sponsored by the Simons Foundation for data analysis in NYC. So this report is very topical.

We understand that the manuscript does not easily fit into a predefinded category, but we hope that we have added a sufficient review of the issues and tools that it could be considered as a review with worked examples. In addition, considerable attention has been paid to make the supplement as informative, useful, and transferrable as possible for people wishing to apply the methods to their own datasets.

Thank you for considering this revision.

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