

Interactive comment on “The effect of resource history on the functioning of soil microbial communities is maintained across time” by A. D. Keiser et al.

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We sincerely appreciate the overwhelmingly positive comments from the reviewer in relation to the clarity and conciseness of the manuscript as well as our experimental design. The reviewer only had three minor suggestions, which we address below.

1. This information has been added.
2. We have altered text to address this comment.
3. This is an interesting concept, which we had not previously considered. The level at which we were able to distinguish which individual microorganisms were present

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did not appear robust enough for comparisons between microbial phylogenies and function. It seems as though the methodologies for measuring genetics with bacteria and fungi would need to improve before epigenetics could be confirmed. However, we do think that there is a potential for epigenetics to drive the changes in function we observed over time. We have now noted this as a potential mechanism and cited Bossdorf et al. (2008) in the discussion.

References

Bossdorf, O., Richards, C. L., and Pigliucci, M.: Epigenetics for ecologists, *Ecol. Lett.*, 11, 106-115, 2008.

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