**REVIEWER COMMENTS**  
  
Reviewer #1 (Remarks to the Author):  
  
The authors have addressed my previous concerns. I have no further concerns.  
  
  
Reviewer #2 (Remarks to the Author):  
  
The author's response has dispelled my concerns, and I have no further questions.  
  
  
Reviewer #3 (Remarks to the Author):  
  
The authors have dealt satisfactorily with most of my comments, but there some outstanding points.  
  
I have added my detailed responses in red to the rebuttal letter, which is probably the clearest way to convey them because the original points were not numbered.  
  
In summary:  
  
Thanks for clarifying the permutation procedure. I don't think it is really addressing the question of whether T\_C is unusually well correlated with P\_C. However, I can see that it would be very difficult to come up with a solution, so provided the authors make very clear the limitations of their permutation procedure I guess that is OK.  
  
I still think there is a case for a training/test set analysis within the DO, in addition to the RIX, because of the challenges interpreting the replication experiments due to differences in diet, husbandry etc between the two populations. That said, it is quite impressive that the RIX replicates the DO despite all these differences and using RIX body weight as a surrogate phenotype.  
  
The MS should make it crystal clear it is using a 5% threshold for eQTLs and preferably use a more stringent threshold.  
  
I also don't think the violin plots add much - they are not the best way for showing differences between very similar distributions but this is a matter of personal preference.