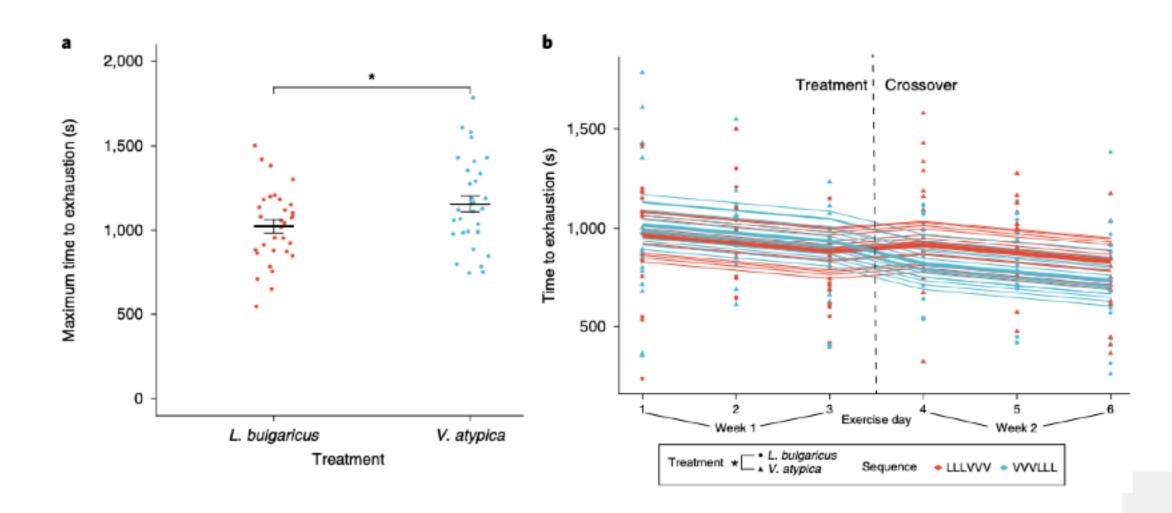
Performance de atletas

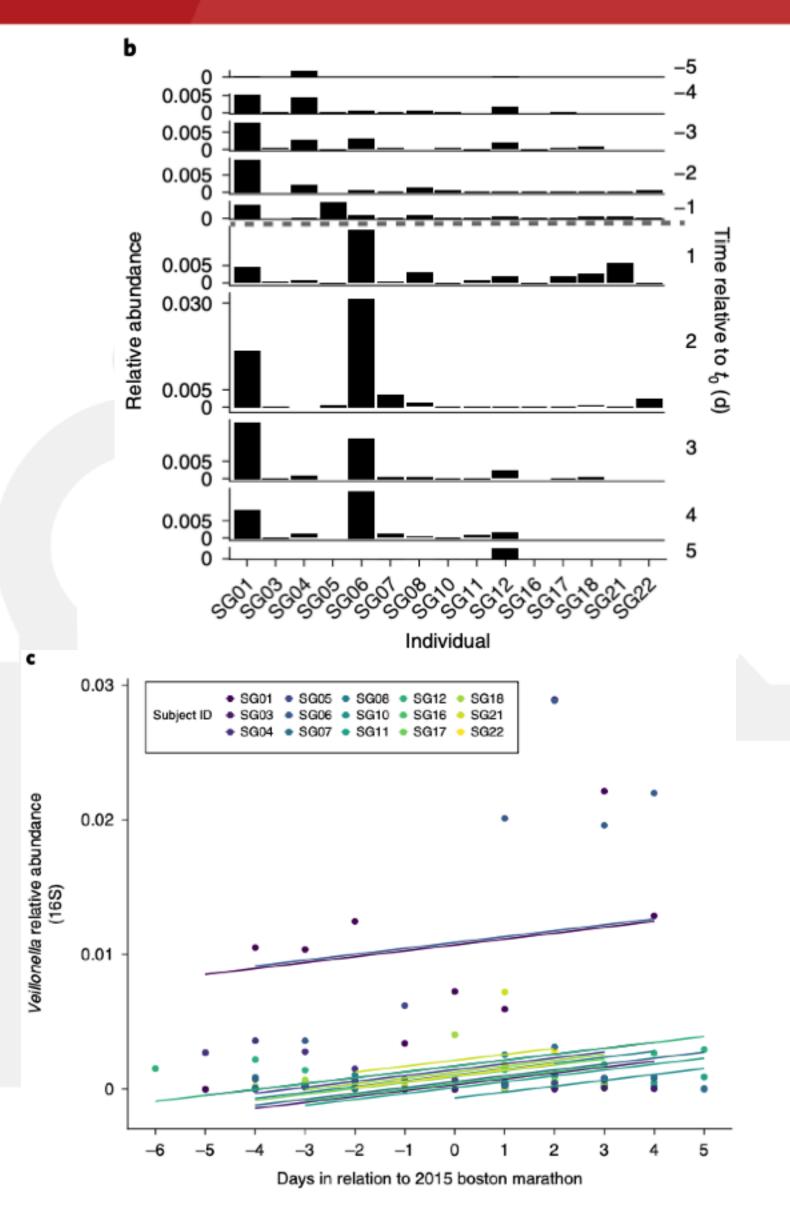


LETTERS https://doi.org/10.1038/s41591-019-0485-4

Meta-omics analysis of elite athletes identifies a performance-enhancing microbe that functions via lactate metabolism

 $Model_1 < -lme(Veillonella \sim time + sex + weight + BMI + age + race \\ + menstruation + vegetables + fruits + grains + protein + dairy + dietary_protein_supp, random = ~1 | subjectID, data = marathon 16S)$





Desafios e futuro



- Integração de dados
- Experimentos conclusivos e não especulativos
- Combinar conhecimentos específicos nos modelos

