Too many journals? Towards a theory of repeated rejections and ultimate acceptance

Jan Oosterhaven

- JARK effect
  - Justify After Results are Known
- Qualquer resultado pode ser publicado
  - Vai achar referências que suportem seu desenho experimental errado.

- Muitos trabalhos de microbioma (Science, Nature, PNAS…) não são reprodutíveis.
  - Clustering method
  - Classification method
  - Assembly method

Prediabetes

Association	Organism	Result	Out of Range
Associated	*Prevotella* [57]	🟢 Normal	
	Veillonella [57]	🟢 Normal	
Inversely associated	*Akkermansia muciniphila* [58]	🟢 Normal	
	Bifidobacterium [57]	🟡 Low	⚠️ Condition more likely
	Butyricimonas [57]	🟢 Normal	
	Microbial Diversity [51]	🟢 Normal	

SmartGut™ Report

Patient **Sam Sample**
DOB **N/A**

Metabolic disorders (continued)

Type 2 Diabetes

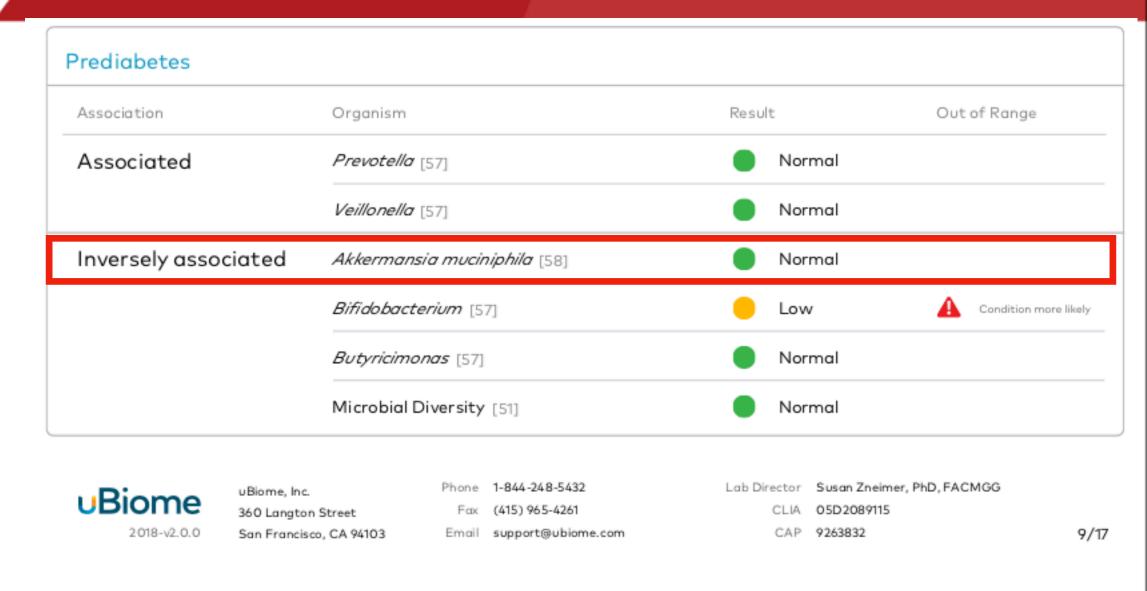| Association	Organism	Result	Out of Range
Associated	*Akkermansia muciniphila* [59]	🟢 Normal	
	Barnesiella [60]	🟢 Normal	
	Collinsella [61]	🟢 Normal	
	Prevotella [62,63]	🟢 Normal	
Inversely associated	*Lactobacillus* [64,65]	🟡 Low	⚠️ Condition more likely
	Roseburia [59,66]	🟢 Normal	

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- Muito usadas para inferir associação
- Anunciadas como causa ou consequên[...]

- Big Data trap.
  - Correlações espúrias

- Correção de testes múltiplos

_computational
BIOLOGY

PRIMER

How does multiple testing correction work?

William S Noble

When prioritizing hits from a high-throughput experiment, it is important to correct for random events that falsely appear significant. How is this done and what methods should be used?