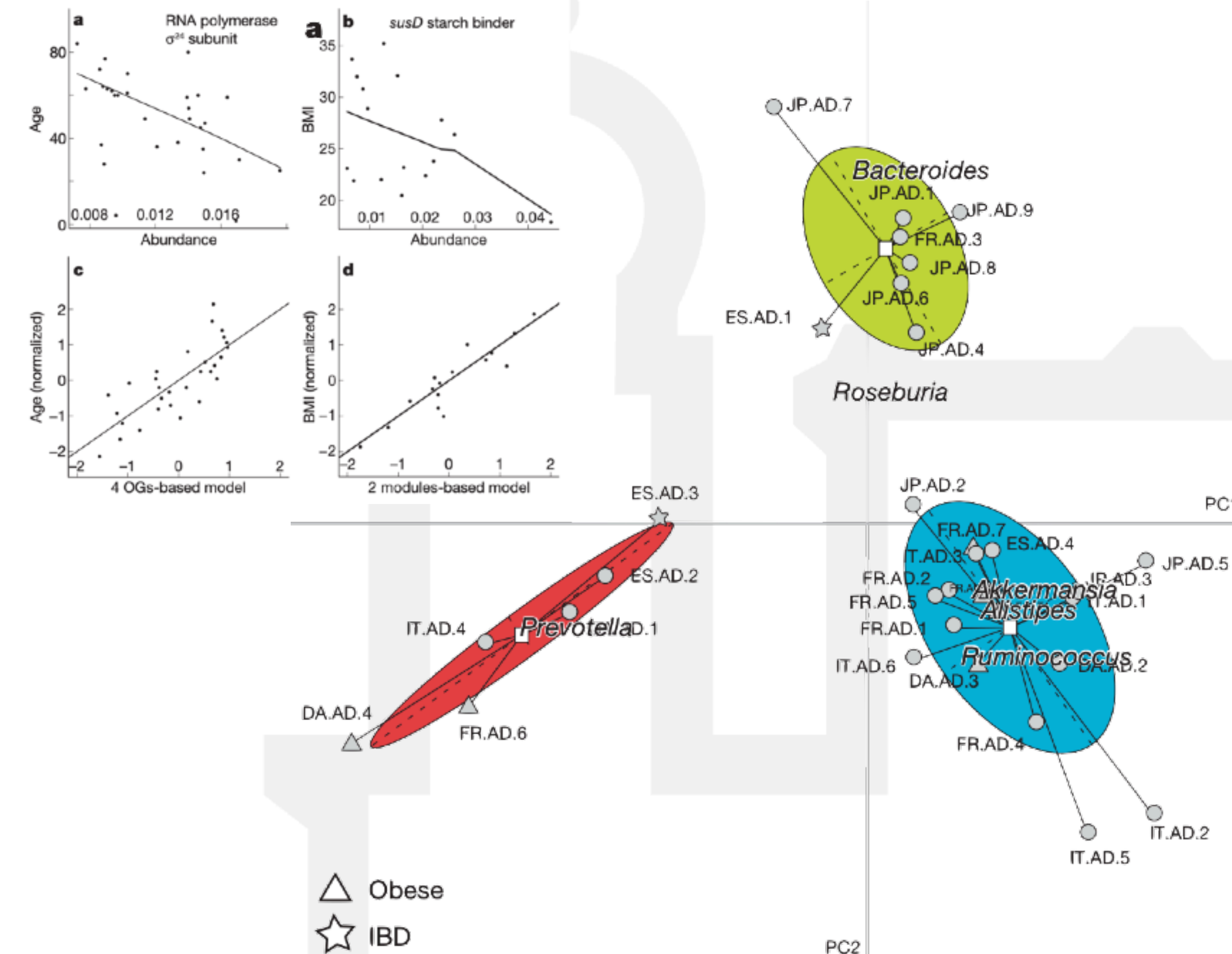


- Enterotipos
- 39 amostras
- Sequenciamento Sanger
- ~120k reads/amostra
- Pergunta:
 - Existe um padrão?
 - Por país
 - Por família
 - Por idade
 - Há associações?

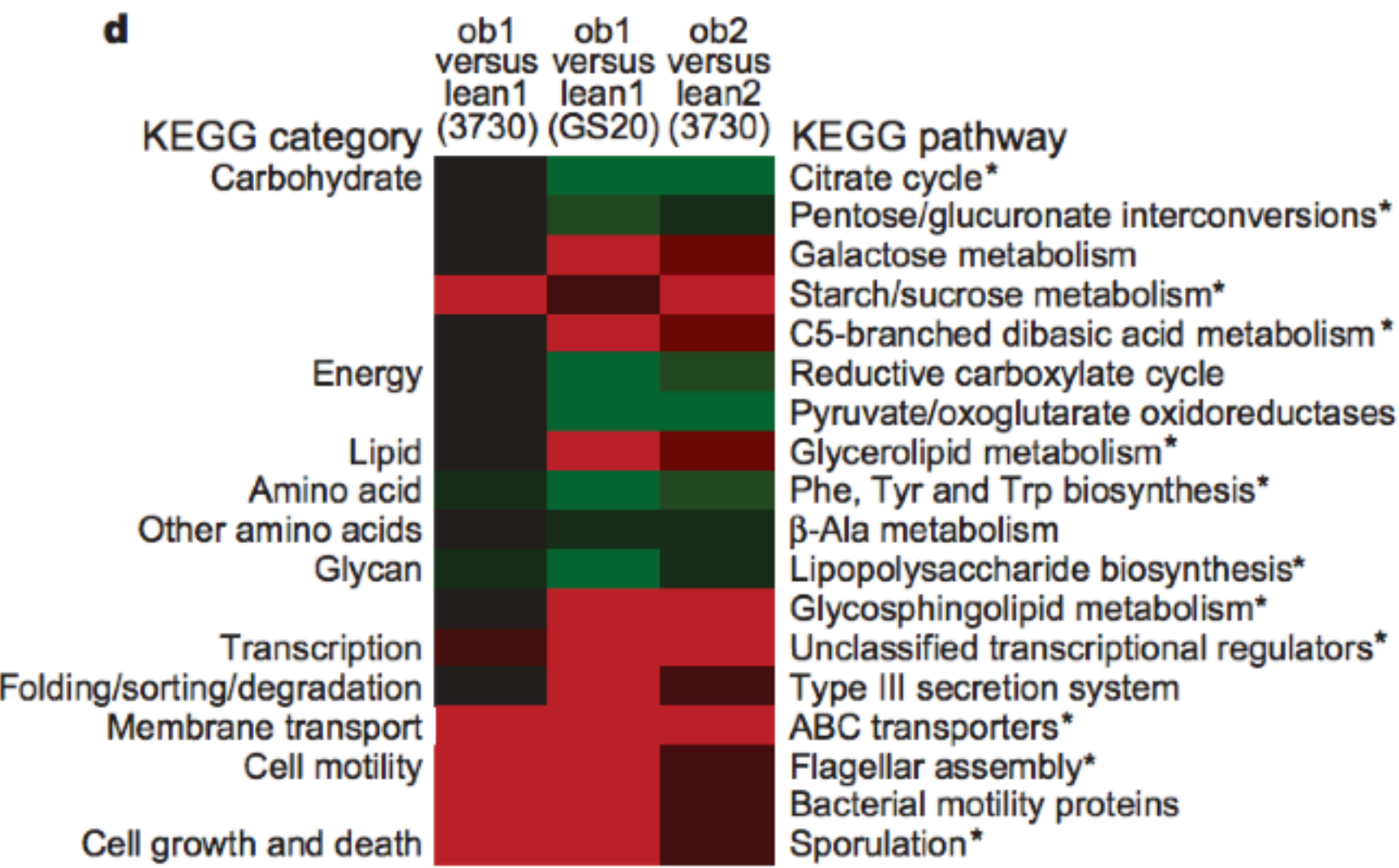
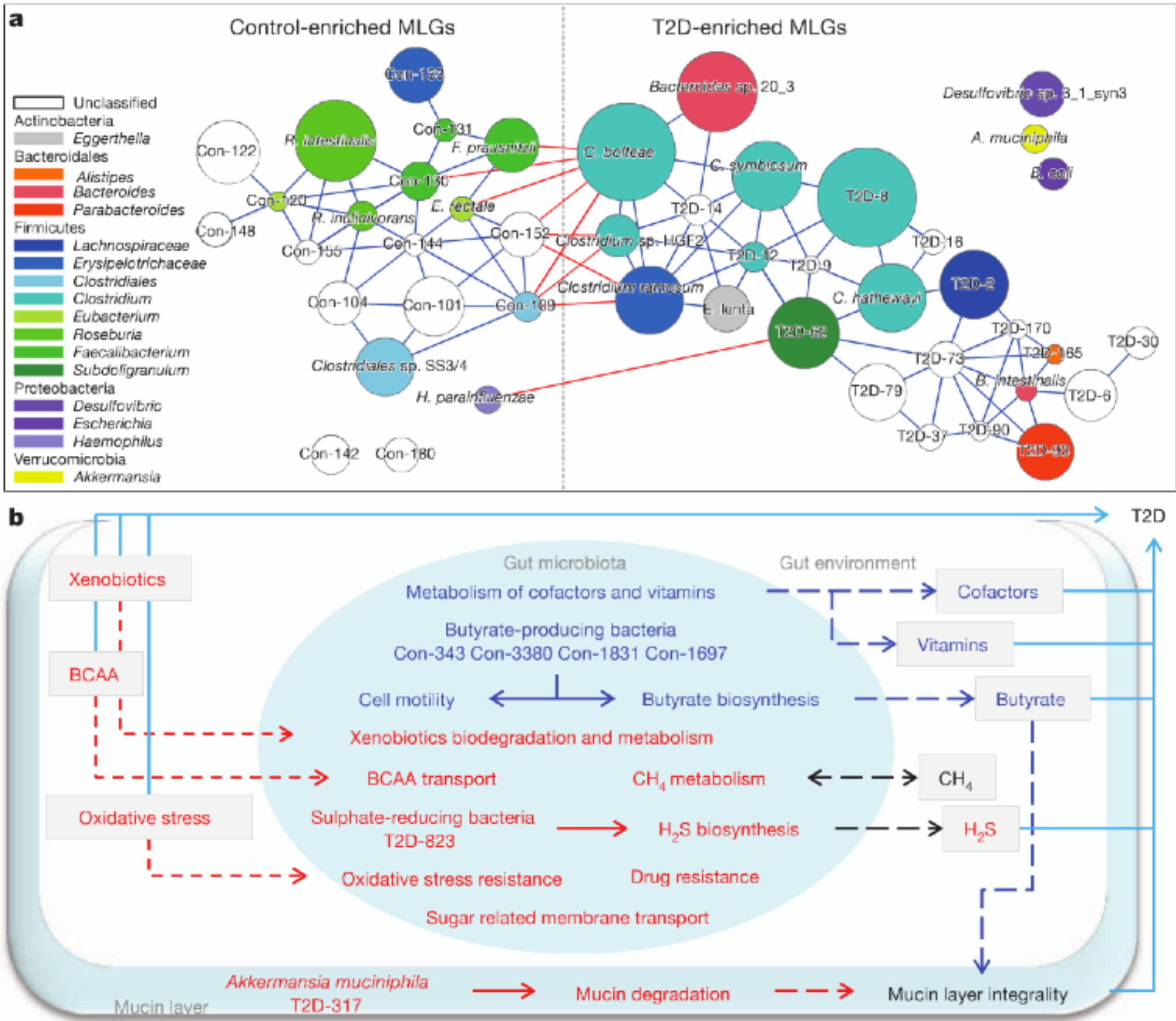
Enterotypes of the human gut microbiome

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Descrição de associações

- Obesidade:
 - Razão *Bacteroidetes/Firmicutes*
- Diabetes tipo 2:
 - Rede de interações
 - *Akkermansia muciniphila*



Gut Microbiota from Twins Discordant for Obesity Modulate Metabolism in Mice

Vanessa K. Ridaura, Jeremiah J. Faith, Federico E. Rey, Jiye Cheng, Alexis E. Duncan, Andrew L. Kau, Nicholas W. Griffin, Vincent Lombard, Bernard Henrissat, James R. Bain, Michael J. Muehlbauer, Olga Ilkayeva, Clay F. Semenkovich, Katsuhiko Funai, David K. Hayashi, Barbara J. Lyle, Margaret C. Martini, Luke K. Ursell, Jose C. Clemente, William Van Treuren, William A. Walters, Rob Knight, Christopher B. Newgard, Andrew C. Heath, Jeffrey I. Gordon*

Qin J. et al, 2012 - Nature volume 490, pages 55–60

An obesity-associated gut microbiome with increased capacity for energy harvest

Peter J. Turnbaugh¹, Ruth E. Ley¹, Michael A. Mahowald¹, Vincent Magrini², Elaine R. Mardis^{1,2} & Jeffrey I. Gordon¹