



Standards in microbiomics - lessons from intestinal metagenome studies

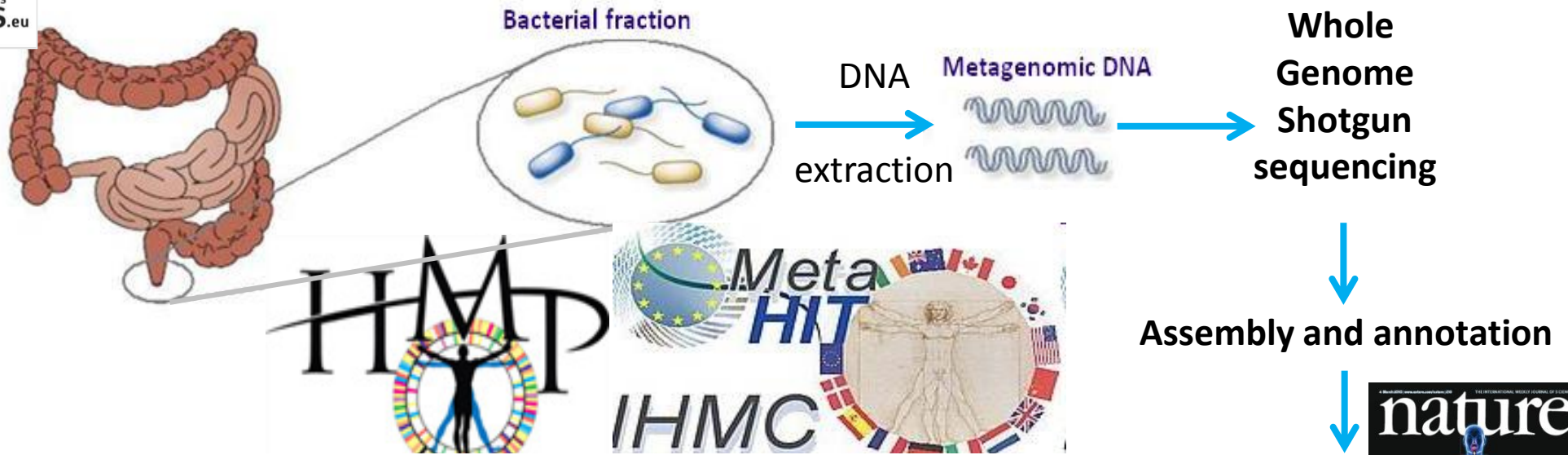
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Western





Lessons from early human intestinal tract metagenomics:

Reference gene catalogs, highlighting both core metagenome & rare genes

- 3.3 million genes Qin *Nature* 2010 to 10 million genes Li *Nature Biotech* 2014

Co-abundant gene clustering and metagenomic species Nielsen *Nature Biotech* 2014

Mouse gene catalog ; environment dependent Xiao *Nat Biotech* 2015

3 enterotypes / preferred ecological arrangements Arumugam *Nature* 2011

stability at SNPs level (strains) Schloissnig *Nature* 2012

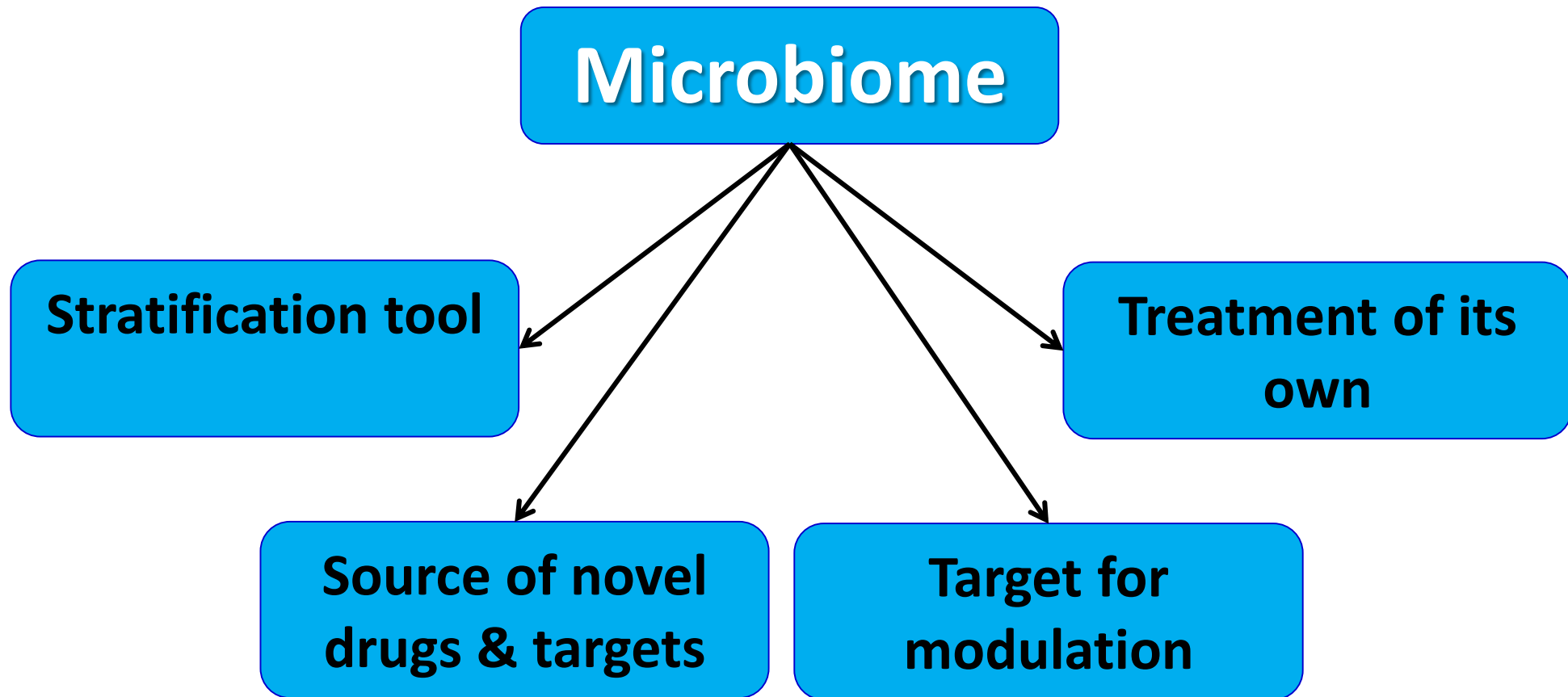
nutrition and intestinal metabolome are linked Shoaie *Cell Metabol* 2015

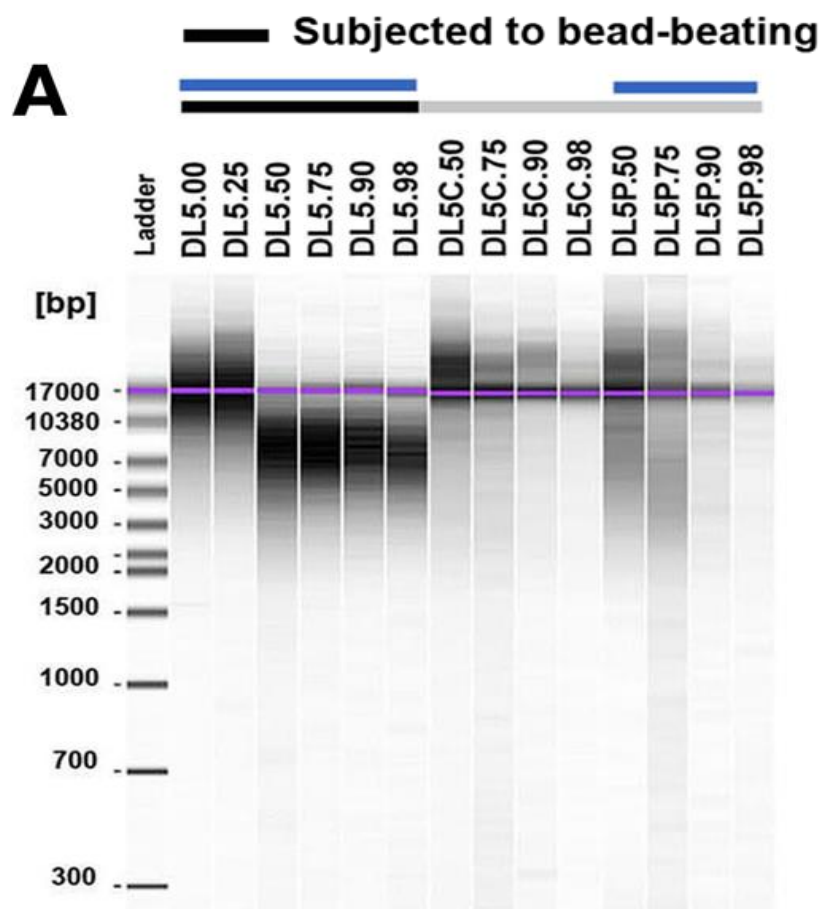
=> metagenomic disbiosis ; diagnostic signatures ; predictive models..

- in T2D Qin *Nature* 2012, in Obesity Le Chatelier *Nature* 2013, in Liver cirrhosis Qin *Nature* 2014

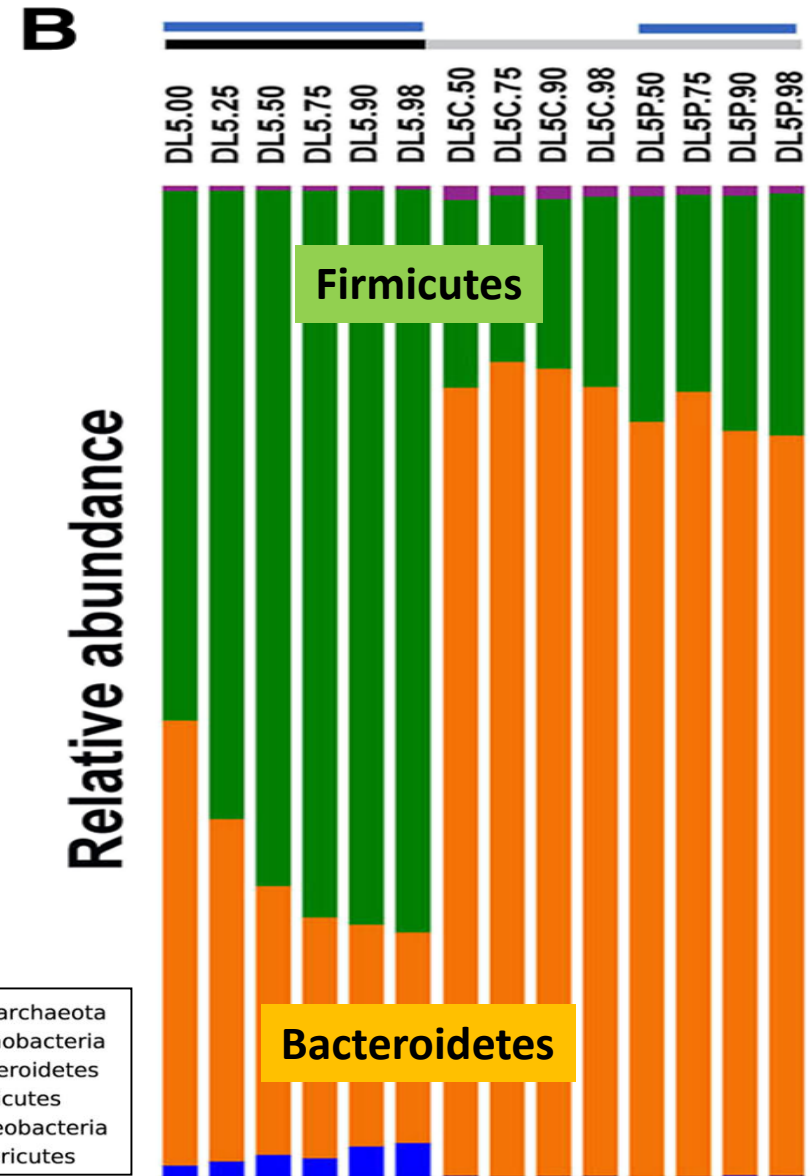
=> low gene count is a key stratifier Cotillard *Nature* 2013

Microbiome – source of innovation for health

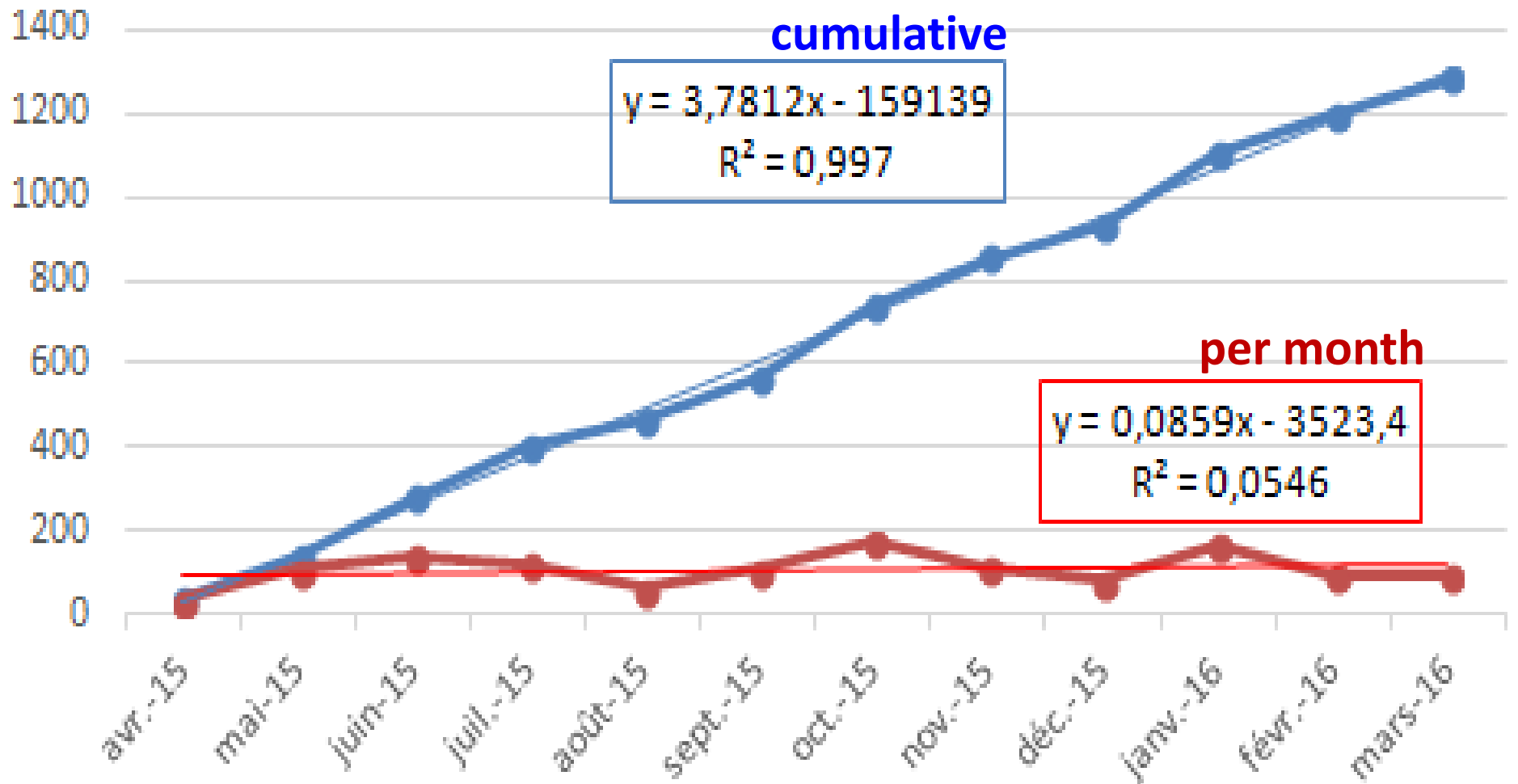




Bead-beating strongly impacts
recovery of Firmicutes



International Human Microbiome Standards SOPs downloads



IHMS Partners



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GIVING LIFE TO POSSIBLE
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