

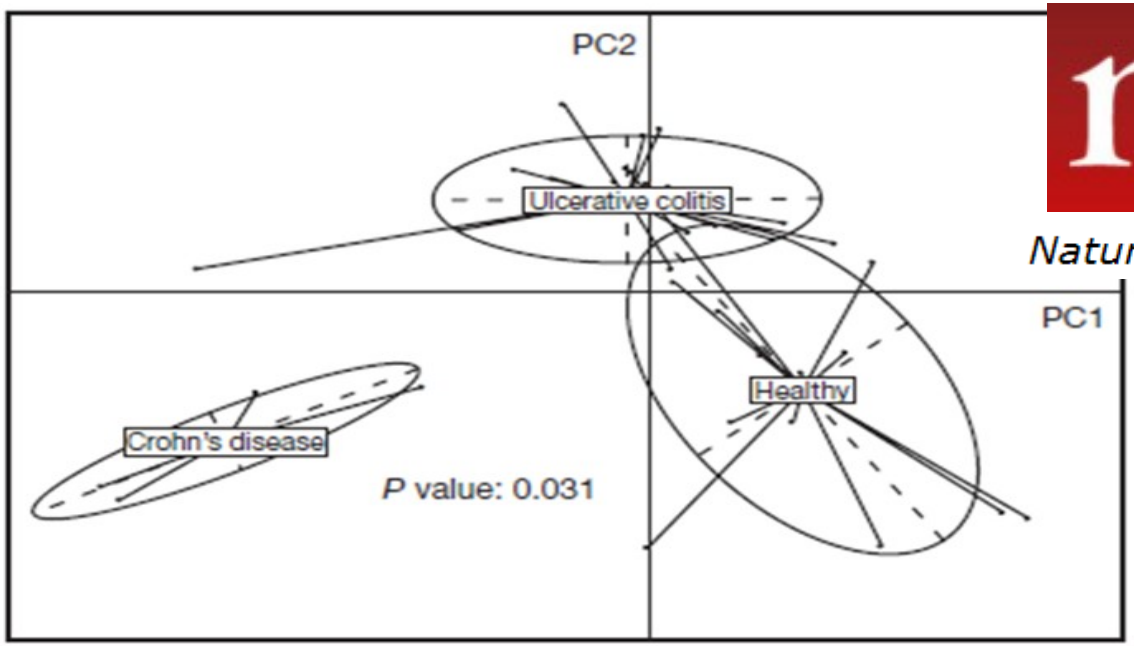
Enabling Genomic Medicine Roundtable

A Grand Challenge of Genome Sequencing: Complete Genomics of Human and Microbiome DNA: Comparing Healthy with IBD

Presented by: Larry Smarr, UCSD (Calit2)

Wednesday June 15, 2011 | San Francisco California

IBD is an Autoimmune Disease—
Correlated with SNPs and Microbiome Metagenomics



nature

Nature **464**, 59-65 (4 March 2010)

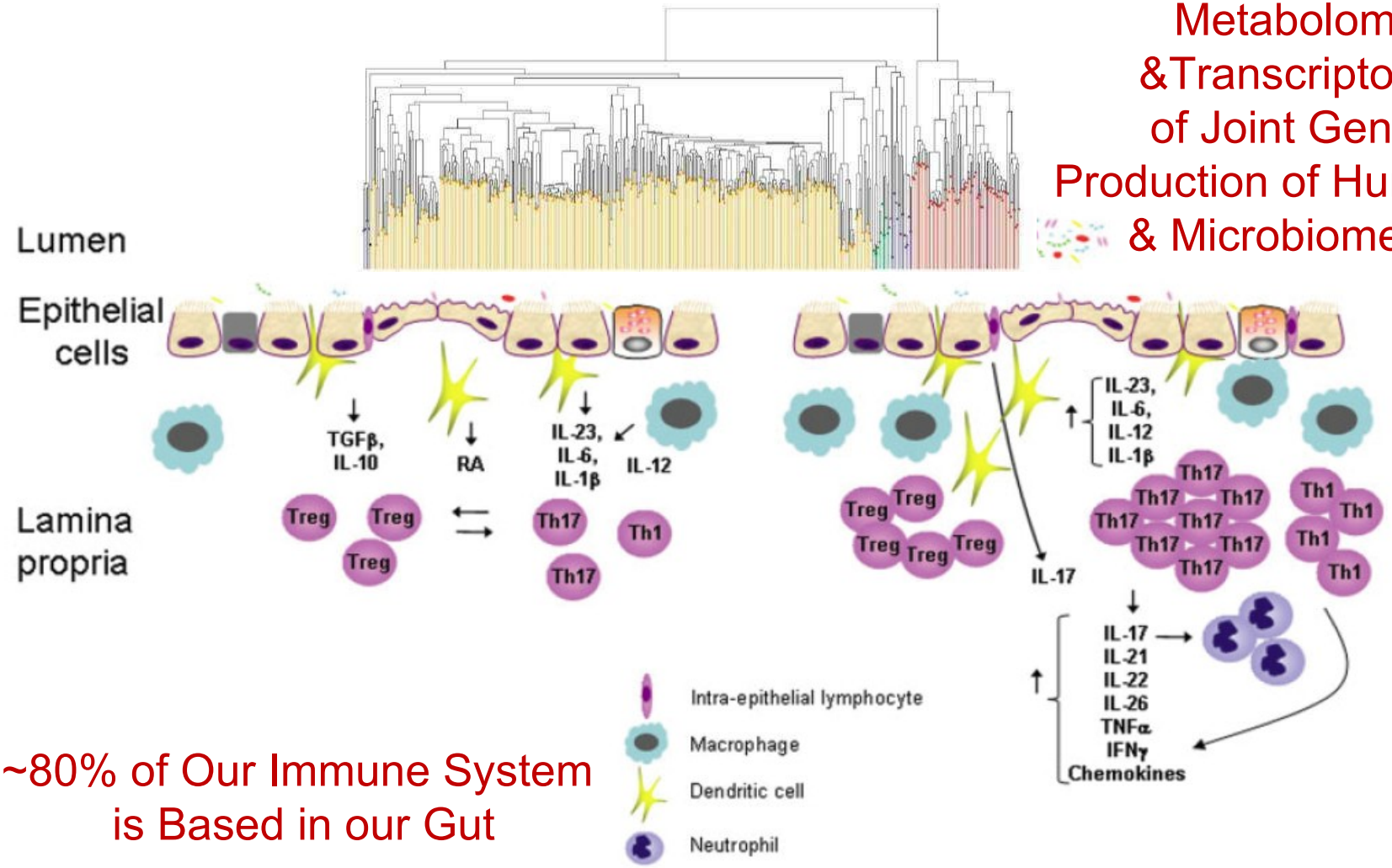
Figure 4 | Bacterial species abundance differentiates IBD patients and healthy individuals. Principal component analysis with health status as

A human gut microbial gene catalogue established by metagenomic sequencing

Junjie Qin[1]*, Ruiqiang Li[1]*, Jeroen Raes[2,3], Manimozhiyan Arumugam[2], Kristoffer Solvsten Burgdorf[4],

IBD Couples Human & Microbiome DNA and Their Products

Follow Molecular Interactions with Proteomics, Metabolomics, &Transcriptomics of Joint Genomic Production of Human DNA & Microbiome DNA



~80% of Our Immune System is Based in our Gut