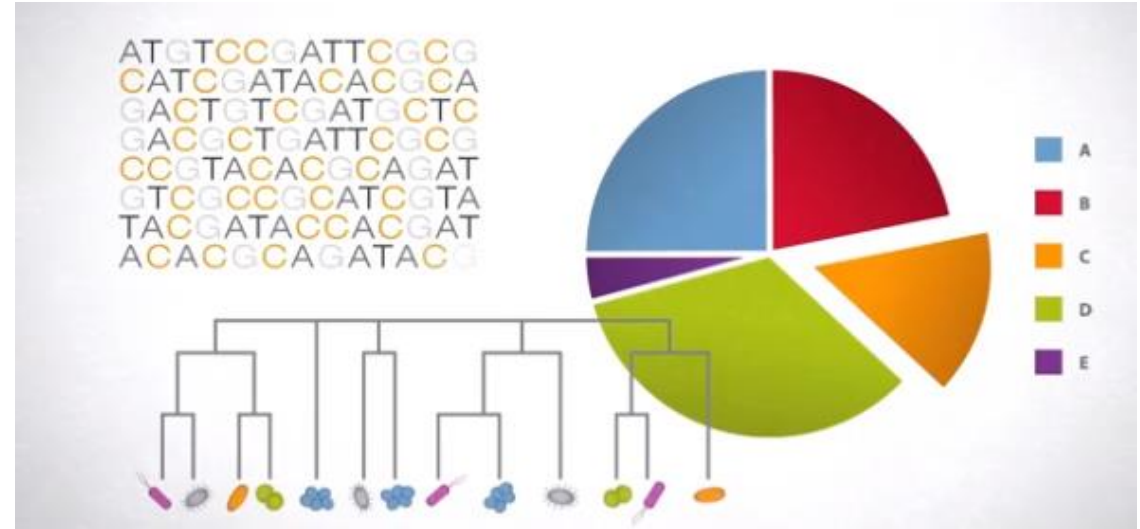
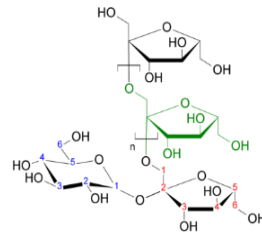


Modulatory effects of diet and infection on the porcine intestinal transcriptome



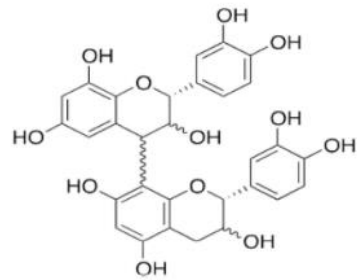
**Parasites, Immunology and Gut Health (PIGH)
 Department of Veterinary and Animal Sciences
 University of Copenhagen**

Infection, health and dietary interventions



- Gut health in growing pigs is compromised by continual exposure to gastrointestinal pathogens
- Treatment with drugs is not a sustainable option
- Nutritional Interventions may be a useful method to mitigate effects of infection

Polyphenols and intestinal health



Fiesel et al. *BMC Veterinary Research* 2014, **10**:196
<http://www.biomedcentral.com/1746-6148/10/196>



RESEARCH ARTICLE **Open Access**

Effects of dietary polyphenol-rich plant products from grape or hop on pro-inflammatory gene expression in the intestine, nutrient digestibility and faecal microbiota of weaned pigs

Anja Fiesel, Denise K Gessner, Erika Most and Klaus Eder*

The Journal of Nutrition
 Nutrient Physiology, Metabolism, and Nutrient-Nutrient Interactions

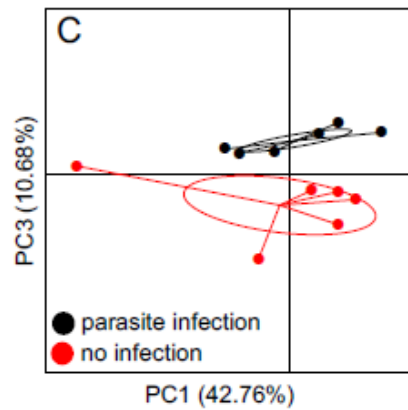
Grape Seed Proanthocyanidin Affects Lipid Metabolism via Changing Gut Microflora and Enhancing Propionate Production in Weaned Pigs

Yi Wu,¹ Ning Ma,¹ Peixia Song,¹ Ting He,¹ Crystal Levesque,² Yueyu Bai,³ Aizhong Zhang,⁴ and Xi Ma^{1,5}

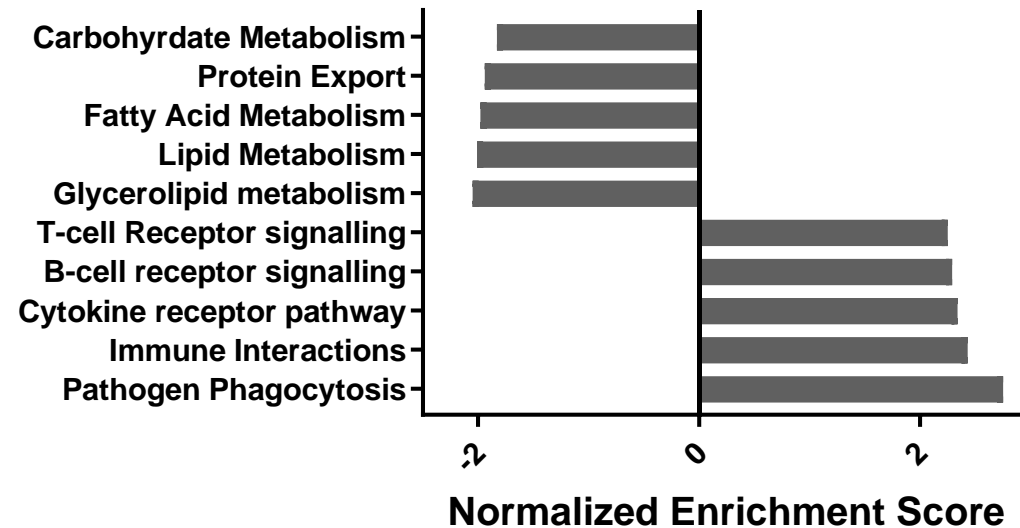
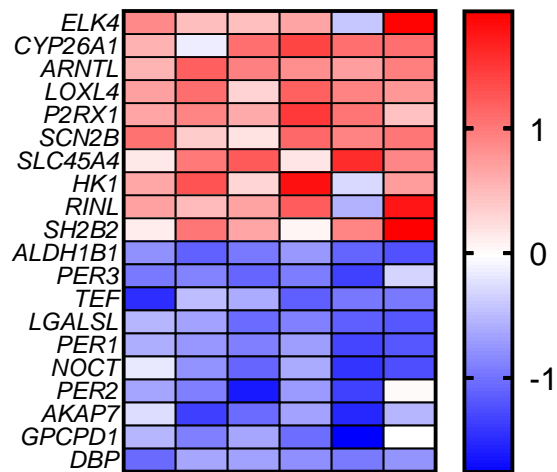
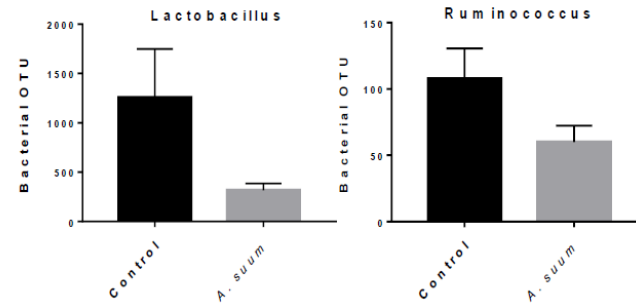


- Analysis of gut microbiota and nutrient metabolism
- Analysis of inflammatory and immune cells
- **RNAseq transcriptomic analysis**

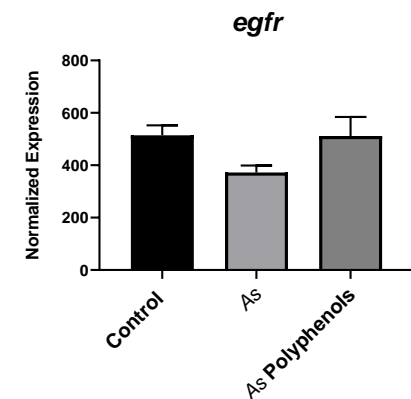
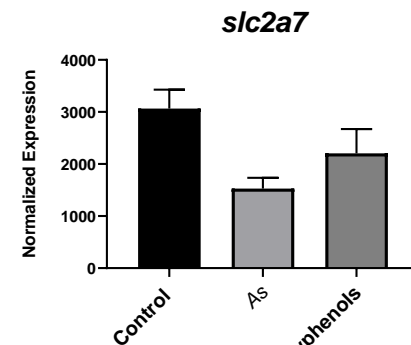
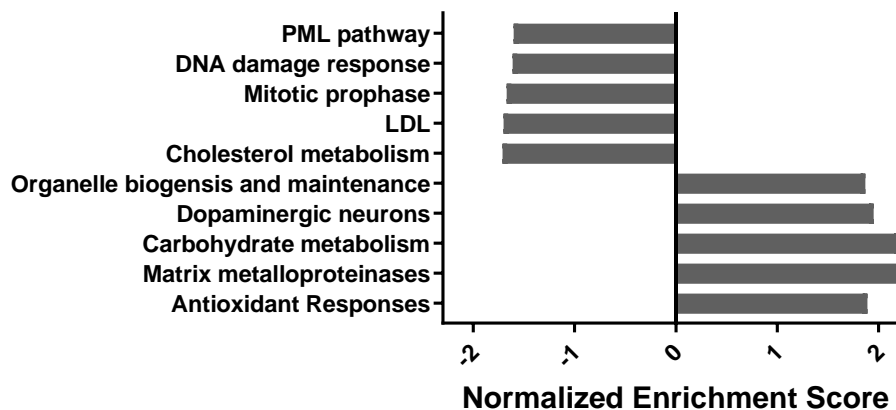
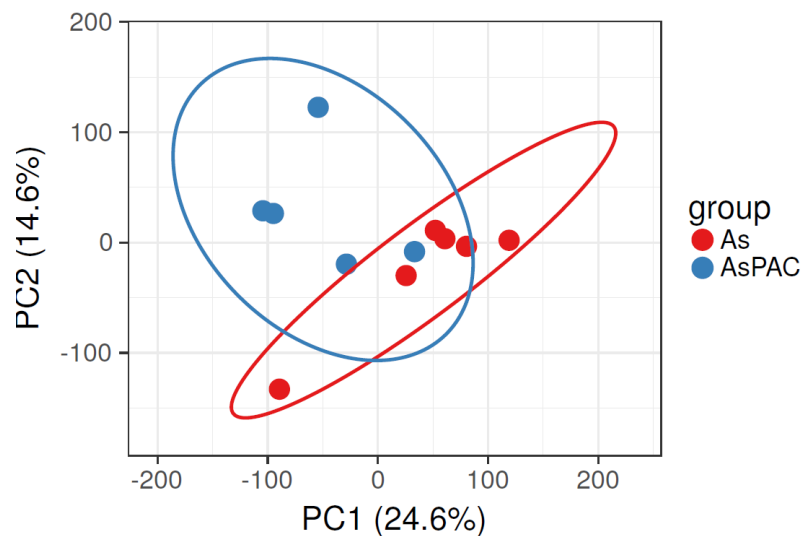
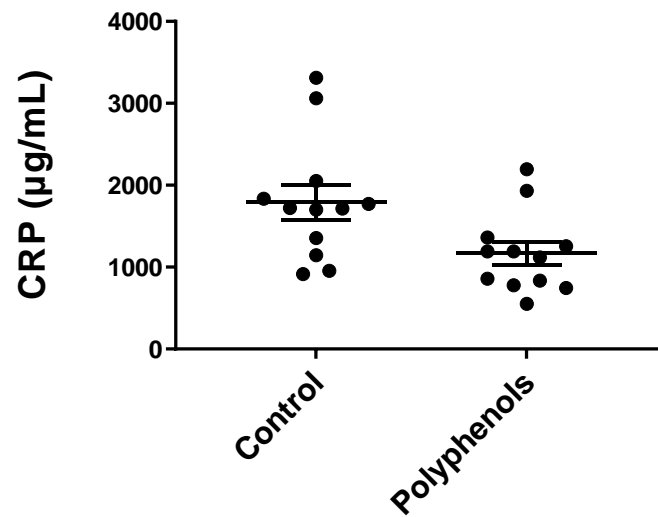
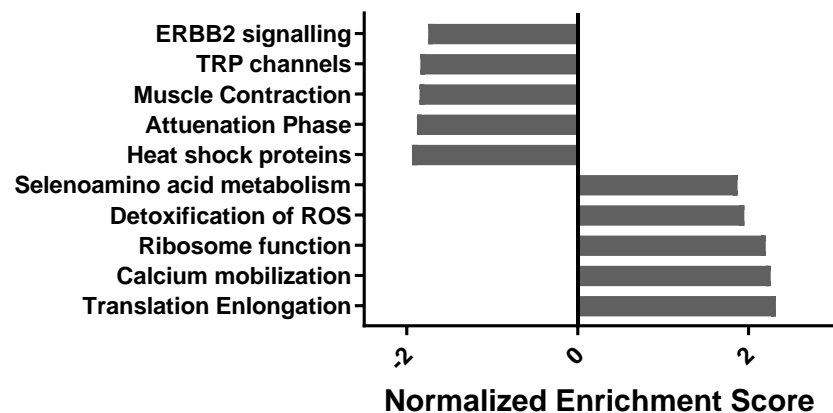
Effect of *Ascaris suum* on the intestinal response



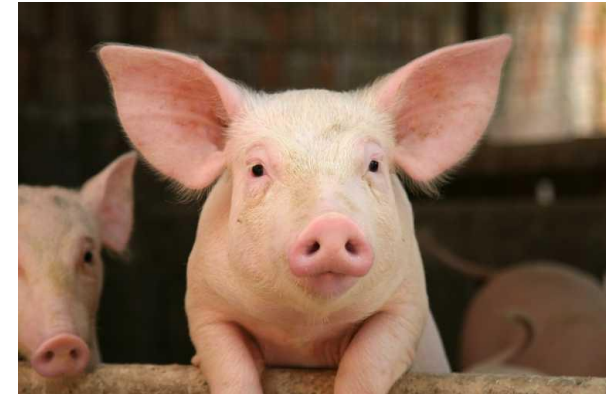
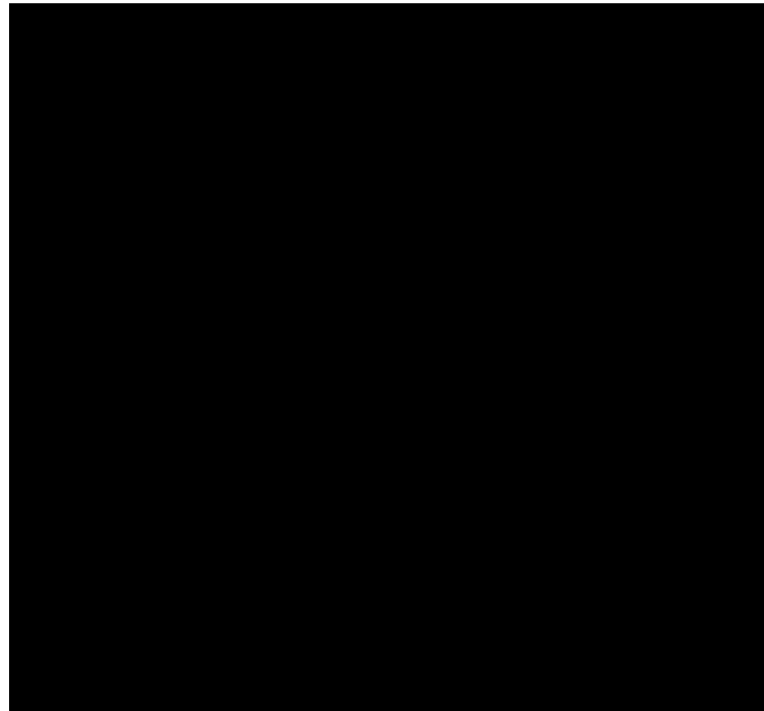
Bacterial families impacted:



Effect of Polyphenols on the intestinal response



Unlocking the black box between nutrition and coping with infection



- **Transcriptomics, microbiome analysis, metabolomics**

Thanks



ново nordisk fonden

