Report from G Tornero

On the short term placement (8 weeks) of Dra. Gloria Esteso Tornero at the Department of Animal Science and Animal Health, Faculty of Life Sciences, University of Copenhagen, Denmark. Supervisor: Dr. Claus Jorgensen. (April-May 2008)

SNP ANALYSIS IN THE REGION RESPONSIBLE FOR ETEC F4ab/ac RESITANCE IN PIGS.

Enterotoxigenic *Escherichia coli* cells (ETEC) that express the F4ab or F4ac fimbrie (formely know as K88ab and K88ac) are major causes of diarrhoea and death in neonatal and young pigs *(Wilson and Francis, 1986).* In Denmark, ETEC F4 is present in around 25% of the report diarrhoea cases *(Ojeniyi et al., 1994).*

It is necessary to determinate which forms (alleles) of genetic marker are associated with the susceptible allele and which marker allele(s) is/are associated with the resistance allele.

Jorgensen et al. have established a detailed SNP map in a candidate region on pig chromosome 13. They have been screening approximately 45 KB of genomic sequences covering 22 genes flanking MUC4 in the founder animals. Sequence variation was found in these genes:

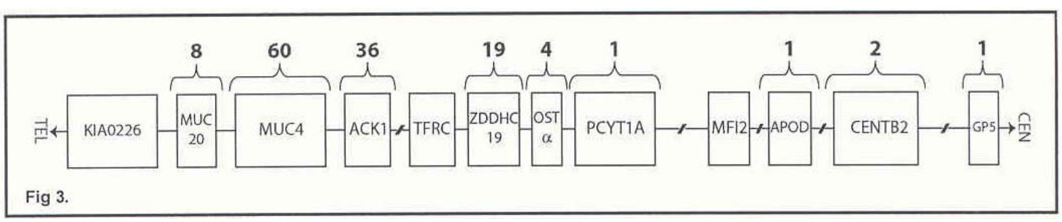

Fig 3.

The goal of my short term was to find possible SNP in the gene KIA0226 and to study the expression of this gene (PCR Real Time).

The identification the SNPs in theses region will serve as excellent markers for further fine mapping of the locus involved in ETECF4ab/ac adhesion and will lead to the identification of the causative mutation.

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