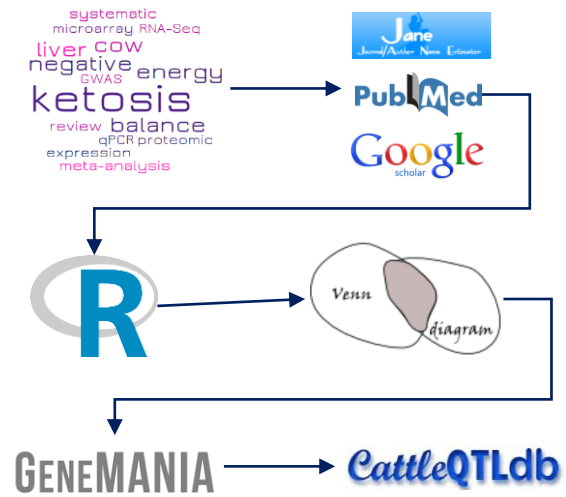
A systematic review and meta-analysis of GWAS and gene expression results of Holstein cattle under negative energy balance and ketosis

R.A.N. Soares, G. Vargas, M.M.M. Muniz, M.A.M. Soares, A. Cánovas; F. Schenkel, and E. J. Squires

INTRODUCTION

Evaluate the pattern of differential gene expression in liver of cows under **negative energy balance (NEB), subclinical, and clinical ketosis.**

METHODS



Two important genes, *PPARA* and *ACACA*, were identified as differentially expressed in the three metabolic conditions.

The genes *FN1* and *PTK2* were enriched for QTL previously associated with the trait "ketosis" on chromosome 2 and for the trait "milk iron content" on chromosome 14, respectively.

RESULTS AND DISCUSSION