The application of mixed linear models (LMM) for the estimation of functional effects on bovine stature based on SNP summary statistics from a whole-genome association study



K. Kotlarz, B. Kosinska-Selbi, Z. Cai, G. Sahana and J. Szyda

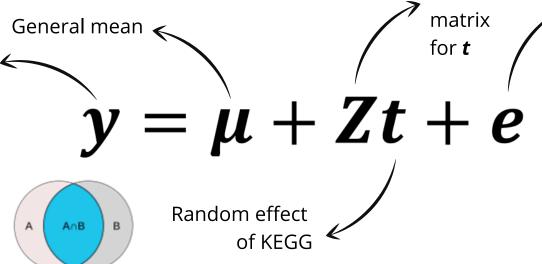
1 GWAS VS. UNITS

- 2 LMM

Incidence







Residuals

KEGG

Bile acid synthesis

Metabolism of xenobiotics

Three different bulls' breeds:

- Danish Holstein (366 877 SNPs)
- Danish Red Dairy (299 723 SNPs)
- Finnish Red Dairy (396 224 SNPs)

- The similarity between KEGGs → Jaccard Coefficients
- Henderson mixed model equations → Random effects
- Calculations → NumPy



CONTACT



Krzysztof Kotlarz

krzysztof.kotlarz@upwr.edu.pl

THETA Statistical Genetic Group

theta.edu.pl