THE MOUSE PASSPORT

Genetic and microbiomic characterization as a tool to reduce group sizes in studies of diet induced obesity in mice

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I have no data yet

• ... So I have to make it interesting in other ways



Diet-induced obese (DIO) mouse

High calory diet



Group size as a function of standard deviation



(Variation)

Tools to increase power and reduce group sizes

- Standardization
- Standardization
- Standardization

But is there an alternative ?

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Do you want to have cancer? Ask the audience





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Characterization of the gut microbiota in leptin deficient obese mice -Correlation to inflammatory and diabetic parameters





Microbiota sequencing (MS)



The genome (The simple version)



SNPs versus STPs

STP

SNP

- **STP** Short tandem repeats
 - Multiple repeats of a double
 nucle
 - Often
 - Hy
 Hy
 Ger
 May show in dividuel variation
 - between the same

- **SNP** Single nucleotide polymorphisms
 - Single nucleo de variations in standar
 - Often inside
 enes
 - Stable over gener
 - May characterize an ino

An alternative to standardization Describe the variation the variation



Standard comparisons



Comparison with passport



Test group

Control group

The mouse passport project



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Do you want to be a millionaire? Ask the audience



Thank you for your attention