



FeedUtiliGene

Nutrient partitioning modules to understand feed use mechanisms in pigs

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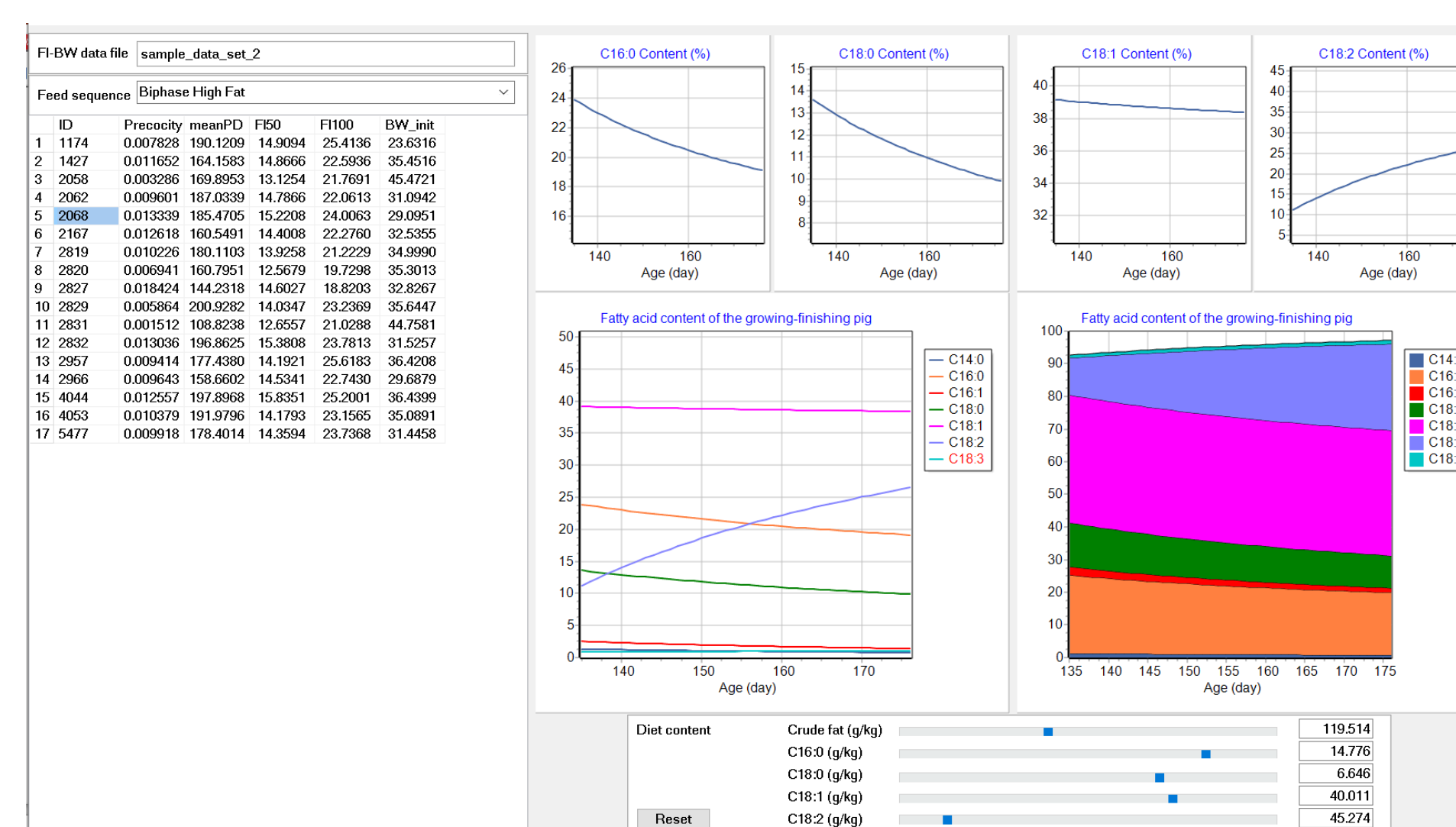
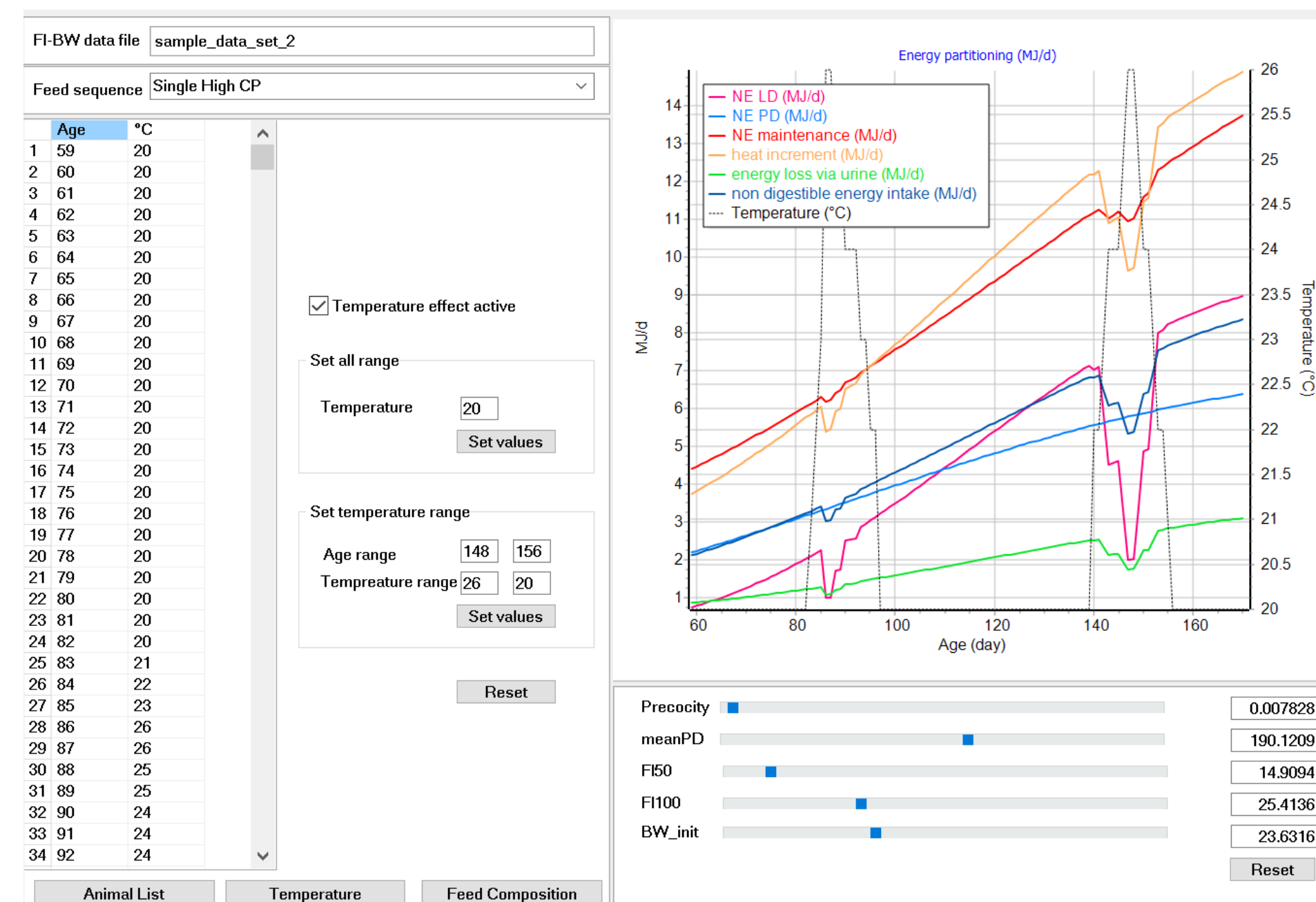
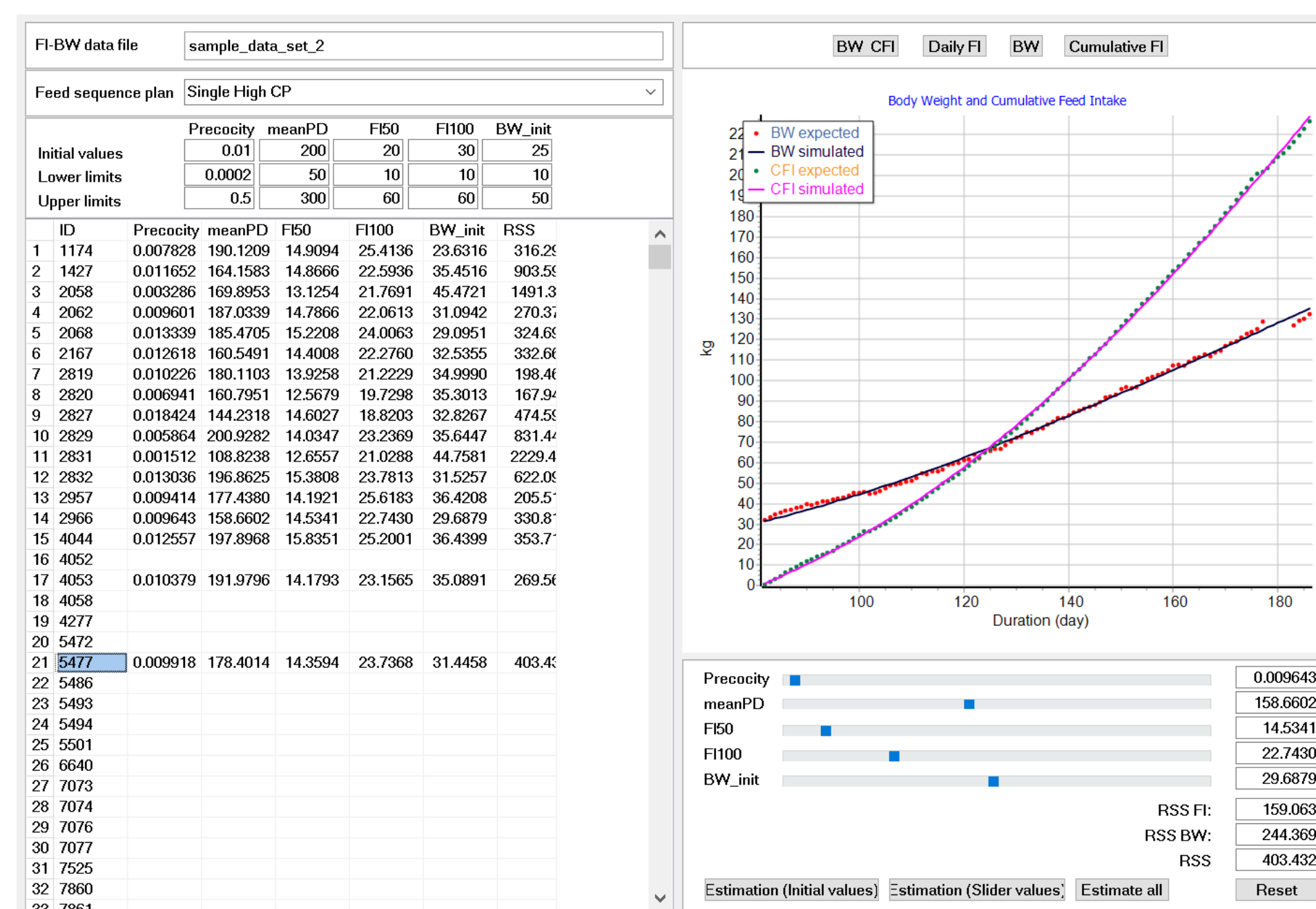
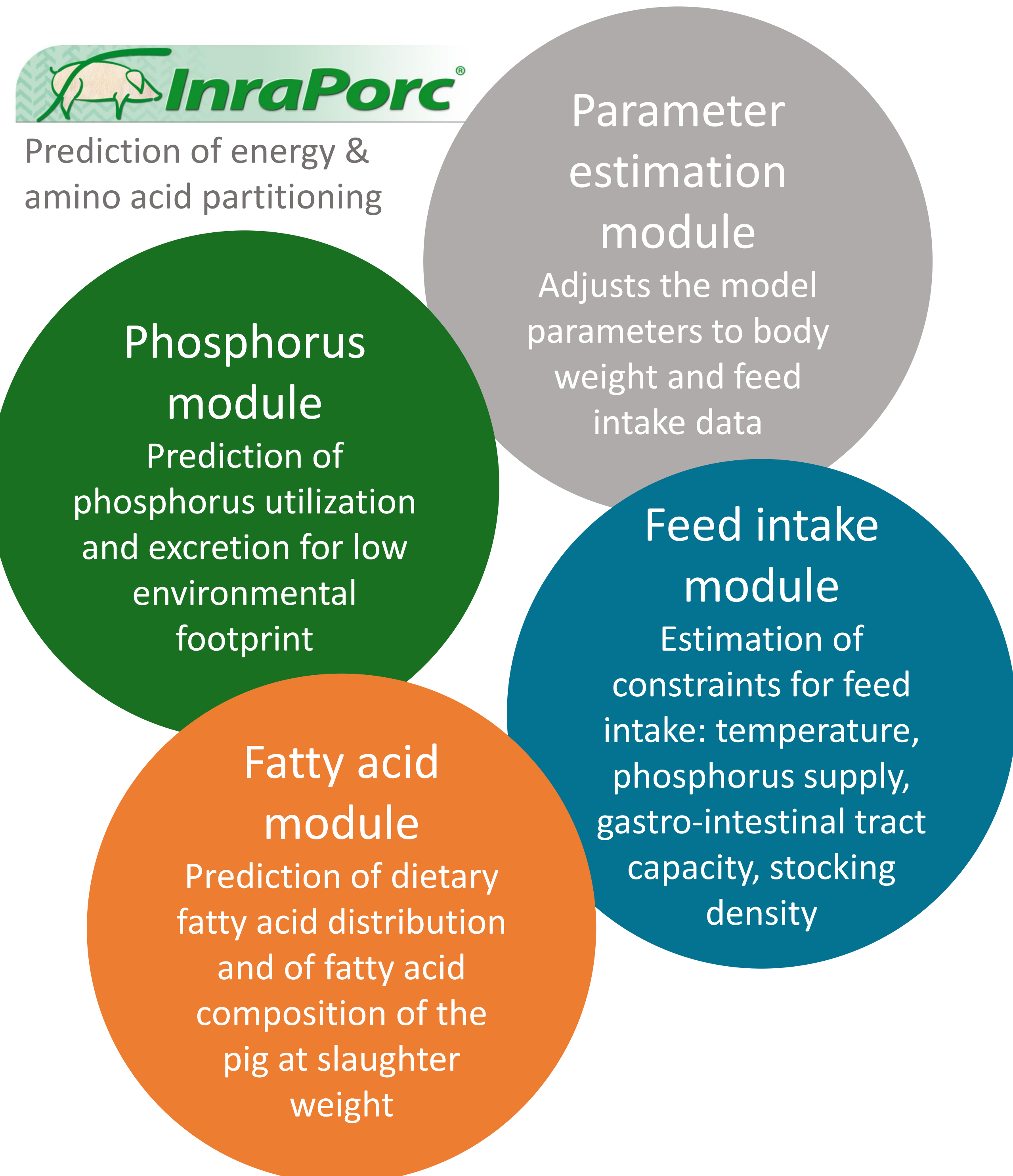
PROBLEM & OBJECTIVE

Better understanding makes a more efficient problem solving. Nutritional models provide insight to animal x feed interaction, therefore they are useful to evaluate nutritional concepts and to develop feeding strategies. There are only a few models freely available as a hands-on-software: therefore, our aim was to develop a software tool that integrates models predicting the nutrient partitioning in growing and fattening pigs.



THE MODULES

The basis of nutrient partitioning modules of FeedUtiliGene is the InraPorc model that was extended by different additional models:



APPLICATION

- ▶ Prediction of nutrient partitioning and performance at different feeding strategies, and estimation of dynamic nutrient requirement of pigs with different growth characteristics
- ▶ Educational tool to demonstrate concepts and visualize interactions among animal, feed and environment.
- ▶ Tool for geneticists and nutritionists in R&D activity.

Feed-a-Gene Feed-a-Gene is a European H2020 project involving 23 partners which aims to adapt feeds, animals and feeding techniques to improve the efficiency and sustainability of pig, poultry and rabbit production systems. It is coordinated by INRAE (France), started in March 2015 and will last 5 years. The project aims to reduce the environmental impact of monogastric livestock production by improving and diversifying animal diets and feed technologies and by integrating new selection criteria for these animals. The Feed-a-gene project further aims to develop new management systems for precision feeding and precision farming and to evaluate the overall sustainability of the different management solutions proposed in the project.

