

WP1: Standardisation of animal handling

The aim here was to establish to what extent animal house regimes differed and to what degree this might impinge upon phenotype outcome, and to identify what standards could be feasibly introduced at this stage. Common maintenance and housing standards were defined including humidity, temperature, light cycle and health screens (adopting FELASA standards). Interestingly, different diets failed to show significant differences in clinical chemistry parameters¹, but nevertheless we aim in Europe to move to a standardised diet for all centres. One centre had low pH drinking water, but this also failed to impact upon clinical chemistry screens. Importantly, we also standardised the conditions for blood sampling including age, overnight fast, time of sampling and anaesthesia. Interestingly, we observed differences in several clinical chemistry parameters depending upon the method of blood collection (tail vein vs. retro-orbital bleeding, the latter banned in certain European countries) reflecting the problems and complexity of mouse phenotyping.

¹ Champy M-F, Selloum M, Piard L, Zeitler V, Caradec C, Chambon P, Auwerx J (2004) Mouse functional genomics requires standardization of mouse handling and housing conditions. *Mammalian Genome* 15: 768-783