



## Charles River & The Jackson Laboratory Seminar 2018

Monday, 26 March 2018

### 10:30 – 11:30 Key Differences Among B6 Substrains and Mouse Nomenclature: The Research Impact

The C57BL/6 inbred mouse (B6) is the most commonly used research strain. This strain is the best characterized and the first to have its entire genome sequenced, and the genetic background strain of choice for most targeted mutations and transgenics. The universal acceptance and demand for B6 mice has necessitated their production from multiple sources, introducing genetic and phenotypic variability that has important consequences for accurately interpreting and repeating research. Seminar topics to include:

- A brief historical perspective on the development of B6 inbred mice and different substrains
- Recent publications highlighting significant physiological and behavioral differences among different B6 inbred mice
- The significance for control selection and experimental design
- Key tips for avoiding common B6 research mistakes

### 11:45 – 12:45 Strategies to Minimize Genetic Drift and Maximize Experimental Reproducibility in Mouse Research

Reproducibility of results is the key element for our global research community. Genetic background is subject to genetic drift that may result in phenotypic drift over time. In this seminar, you will learn about the following topics:

- The basis for genetic drift with case studies
- Recognize genetic background of your mouse strain and the necessity to use the proper nomenclature
- Selection of appropriate controls
- Strategies to reduce genetic drift and increase experimental reproducibility

### 13.30 – 16.00 Roundtable discussions (room A045)

Please contact Filip Roobaert to register for the roundtable discussions, which will give you the opportunity to discuss your individual projects with Dr. Fritsche.

**Prashant Kadam** has attended the Charles River & The Jackson Laboratory on March 26.

Ingrid Ganivet, Marketing Specialist, Charles River Europe