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**Title of presentation:** The dynamics of organismal proteome response to drugs

## Abstract

This study analyzes how the dynamics of organismal proteome responded to the drug over 48 hours. To answer this question, the mouse proteome was studied by analyzing up to 13 major organ proteomes in 4 inbred strains for drug responses over 48 hours. To analyze the organismal proteome similarity, we used probability density function to compute the likelihood. As our statistical knowledge suggests, probability density function (PDF) is a statistical expression that defines a probability distribution (here the likelihood of two conditions) for a discrete random variable. We used this statistic to analyze our data since it provides the relationship or similarities between two different conditions. Outcomes will show how conditions differ from each other. These results could be used to reveal different drug responses.