



## Certificate of competence

This is to certify that

**ILYA POPOV**

has successfully completed

“R programming, statistics and data analysis”

a 9 days course composed of the following topics:

- R basics: vectors, matrices, lists, data frames, data import, functions, apply() family, packages.
- Preprocessing in R: tidyverse, merging and reshaping data.
- Descriptive statistics and data visualization in R: ggplot2, R Markdown.
- Statistical inference: parameter estimation and null hypothesis significance testing.
- t-test, correlation, ANOVA, linear regression.
- Non-parametric statistical tests, model diagnostics, power analysis.
- General linear model, generalized linear model, mixed effects model.
- Data clustering and PCA.
- Study project: “The dependency of Drosophila melanogaster mating behaviour on female partner genotype and phenotype”.



Yury Pekov, CEO Blastim  
July 7, 2022