Suggested timeline

Statistical models in R

version March 21, 2019

- 5 min: Intro to workshop and data; Setup
- 15 min: Experimental design
- 10 min: ANOVA
- 10 min: Fruit fly data
- 15 min: 1-way ANOVA with 2 groups
- 10 min: Exercise
- 15 min: > 2 groups ANOVA
- 20 min: 2-way ANOVA +/- interaction
- 10 min: Exercise
- **End day 1 for 3 x 2-hour workshop**
- 5 min: gapminder data
- 10 min: Linear models
- 10 min: Exercise (best fit)
- 10 min: Simple linear regression
- 10 min: Residuals
- 10 min: Exercise
- **End day 1 for 2 x 3-hour workshop**
- 10 min: Cautions!
- 15 min: Multiple linear regression
- 10 min: Exercise (transformation)
- 15 min: log and polynomial transformations
- 10 min: Exercise (as homework if needed)
- **End day 2 for 3 x 2-hour workshop**
- 10 min: Interactions and ANCOVA
- 20 min: Linear mixed effects model
- 10 min: Exercise
- 10 min: General linear model (GLM)
- 15 min: Binomial GLM (homework exercise)
- 10 min: Poisson GLM
- 10 min: Exercise
- 15 min: Negative binomial
- 10 min: Exercise

- **End of workshop**