#### Date and time

27-Apr-2022 - 29-Apr-2022

#### Location

Lund (tentative)

*Workshop on Data Visualization in R - Lund*

National course open for PhD students (prioritized), postdocs, researchers and other employees within all Swedish universities interested in learning to plot using different packages in R.

The course is organized by [NBIS](https://nbis.se/) (ELIXIR-SE).

Responsible teachers: Lokeshwaran Manoharan, Louella Vasquez, Markus Ringner

Contact information: [edu.plotting.r@nbis.se](mailto:edu.plotting.r@nbis.se)

[**Apply here**](https://forms.gle/3WDUJpCSKCD9MZ3P6)

[Course homepage](https://uppsala.instructure.com/courses/46547)

Important dates

Application open: Jan 31, 2022

Application deadline: Mar 18, 2022

Confirmation to accepted participants: Mar 25, 2022

Course fee

This online training event has no fee. However, if you accept a position at the workshop and do not participate (no-show) you will be invoiced 2000 SEK.

\**Please note that NBIS cannot invoice individuals*

Course description

This course aims to help researchers to visualize their data in different ways using R. This course will also aim to show researchers how they can make publication grade figures using R. A part of this course is also about making interactive plots that the researchers can view and share in a web-server to make interactive visualizations of the data.

Course content

In this course you will learn how to visualize your data in R.

In particular, you will learn:

· how to format the data necessary for ggplot

· how to make bar-charts, box-plots and others using ggplot

· how to make PCA plots in ggplot

· how to use R packages for heatmaps

· how to plot data on maps using R (optional)

· how to plot and handle phylogenetic trees in R (optional)

· how to make interactive plots in R using Rshiny

· how to host a Rshiny app in one of the available servers

Learning outcomes

By the end of the course the participant will be able to:

· *handle* data in R for visualizations

· *apply* the grammar efficiently in ggplot to get the desired plot

· *combine* different data and/or different plots that are of publication-grade

· *write* your own simple Rshiny app

· *deploy* Rshiny apps in public servers.

Entry requirements

Required for being able to follow the course and to complete computer exercises:

* familiarity with using R and Rstudio
* a computer with R and Rstudio
* you will be asked to install different R packages necessary for the course prior to the course.

Selection criteria

The course can accommodate 25 participants. Selection criteria include correct entry requirements, motivation to attend the course as well as gender and geographical balance. Academic affiliated registrants are prioritized prior to participants from the industry.

Please note that NBIS training events do not provide any formal university credits. The training content is estimated to correspond to a certain number of credits, however the estimated credits are just guidelines. If formal credits are crucial, the student needs to confer with the home department before submitting a course application in order to establish whether the course is valid for formal credits or not.