

# Open-science practices in experimental psycholinguistics: from research plan to data processing and visualization in R

## Monday September 6

9.00 – 9.30: Welcome and presentations

9.30 – 11.00: **Timo Roettger**: *The Credibility Revolution - Reasons for and solutions to the replication crisis.*

Reading: Munafò, M., Nosek, B., Bishop, D. et al. A manifesto for reproducible science. *Nat Hum Behav* 1, 0021 (2017)

11.15 – 12.15: Student presentations (Audun Rørvik Rosslund, Magdalena Solarek-Gliniewicz)

12.15 – 13.15: Lunchbreak

13.15 – 15.00: **Nivedita Mani**: *Replicability, reproducibility and robustness: A developmental perspective*

15.15 – 16.15: Student presentations (Muna Abd EL-Raziq, Benjamin Hamish Huntington-Rainey)

## Tuesday September 7

9.00 – 11.00: **Luis Muñoz**: *Basic Structures: Planning/organizational skills:*

Useful links: <https://www.codecademy.com/learn/learn-r/modules/learn-r-introduction>

11.15 – 12.15: Student presentations (Ane Theimann, Margarita Gavrilova)

12.15 – 13.15: Lunchbreak (lunch provided)

13.15 – 15.00: **Timo Roettger**: *Preregistration - What is it and how does it work?*

Reading: Roettger, T. B. (2021). Preregistration in experimental linguistics: Applications, challenges, and limitations. *Linguistics*.

15.15 – 16.15 Student presentations (Geir Heggås Bakkevoll, Guro Stensby Sjuls)

## Wednesday September 8

9.00 – 11.00: **Luis Muñoz**: *Control Flow: Communication/clarity/Work with functions*

Useful links: <https://resbaz.github.io/2014-r-materials/lessons/30-control-flow/>

11.15 – 12.15: Student presentations (Line Sjøtun Helganger, Ellena Rose Brownlow)

12.15 – 13.15: Lunchbreak

13.15 – 15.00: **Nivedita Mani**: *Many Labs, Babies, Primates, Dogs, Birds*

Reading: Frank, M.C., Bergelson, E., Bergmann, C., Cristia, A., Floccia, C., Gervain, J., Hamlin, J.K., Hannon, E.E., Kline, M., Levelt, C., Lew-Williams, C., Nazzi, T., Panneton, R., Rabagliati, H., Soderstrom, M., Sullivan, J., Waxman, S. and Yurovsky, D. (2017), A Collaborative Approach to Infant Research: Promoting Reproducibility, Best Practices, and Theory-Building. *Infancy*, 22: 421-435. <https://doi.org/10.1111/inf.12182>

15.15 – 16.15: Socio-cognitive lab visit

19.00 - Dinner

## Thursday September 9

9.00 – 11.00: **Nivedita Mani**: *Sequential Bayesian Testing in Developmental Research*

Reading: Mani, N., Schreiner, M.S., Brase, J., Köhler, K., Strassen, K., Postin, D. and Schultze, T. (2021), Sequential Bayes Factor designs in developmental research: Studies on early word learning. *Developmental Science*, 24: e13097. <https://doi.org/10.1111/desc.13097>

11.15 – 12.15: Student presentations (Elisabet Garcia Gonzalez, Arina Shatskaya)

12.15 – 13.15: **Nivedita Mani**: *Baby steps to best practices*

13.15 – 14.15: Lunch break

14.30 – 15.45: **Luis Muñoz**: *Working with the data: Problem solving*

Useful links: <https://cran.r-project.org/web/packages/dplyr/vignettes/dplyr.html>

15.45 – 16.15: Student presentations (Marielena Soilemezidi)

## Friday September 10

9.15 – 11.15: **Luis Muñoz**: *Visualization: Self-management/independent work/Creativity*

Useful links: <https://r4ds.had.co.nz/data-visualisation.html>

11.30 – 12.00: Closing remarks, discussion & evaluation