



Bielefeld University Reproducible Science Tea

Kick-off Event – Welcome!

26.11.2021

# Today

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- Introduction
  - Who are we?
  - Who are you?
  - What do you think of Open Science?
- What is Open Science and how did we get here?
  - Goals of Open Science
  - Events leading to Open Science
- Where do we go from here?



# Who are we?

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- BURST organizers
  - Hannah Nilles
  - Usama EL-Awad
  - Martin Wegrzyn
  - Veit Kubik
- BURST
  - Monthly events tackling different topics of Open Science for students, researchers, and professors



- Reproducibilitea



# Who are you?

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- What's your name?
- Your position/research experience?
- When/where do you encounter Open Science? What's your experience with Open Science?
- What's your stand on Open Science?



# What have we planned?

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- 6 Meetings covering different topics regarding Open Science
  - General Overview
  - Questionable Research Practices
  - Case Study: How to Preregister
  - Analytic Flexibility
  - Reproducibility Now
  - Preregistration for Secondary Data Analysis
  - Measurement Crisis
  - Teaching and Conducting Reproducible Science
  - Agenda for Purely Confirmatory Research



# Election of topics

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- December, 10th: General Overview  
Munafò et al. (2017)
- January, 28th: TBA
- [https://bielefeldpsych.eu.qualtrics.com/jfe/form/SV\\_5ATnUYah3XGBv14](https://bielefeldpsych.eu.qualtrics.com/jfe/form/SV_5ATnUYah3XGBv14)



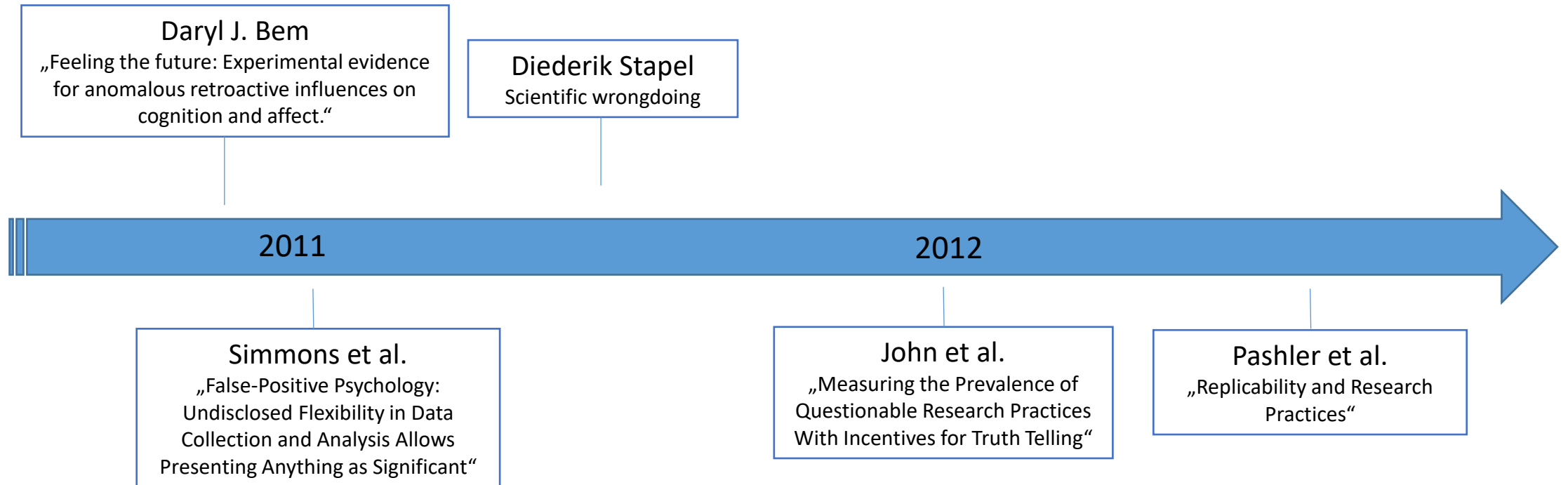
# What is Open Science and how did we get here?

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- What is Open Science?
  - A way to do research transparent, efficient, and reliable
- Goals of Open Science
  - Transparency and social trust
  - Possibility to falsify and reproduce
  - Practicability of research

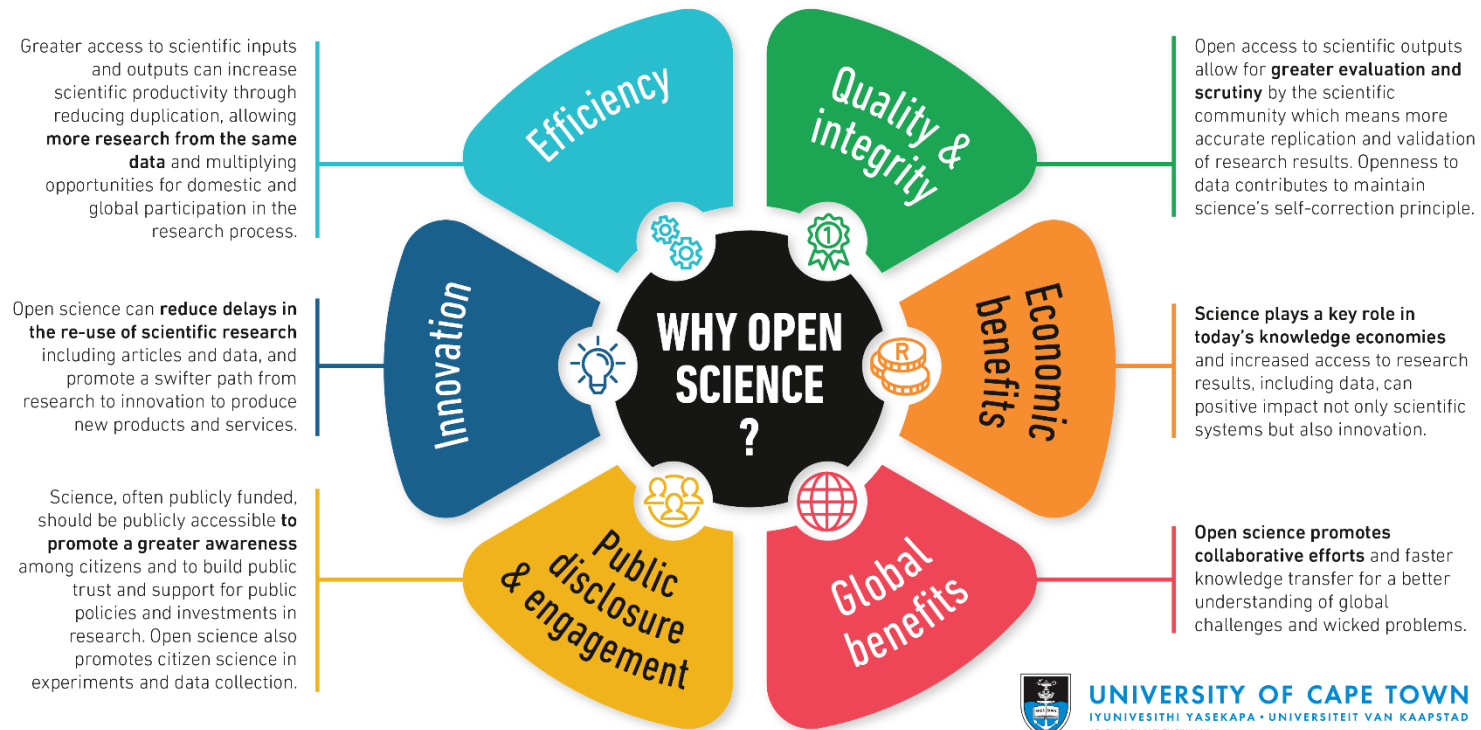
# How did we get here?

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# Why Open Science?



# Where do we go from here?

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- Munafò et al. (2017)
- Different problems
  - Small samples, small effect sizes, biases, ...
  - Conflicts of interest
  - Competitive work environment
- Different solutions
  - Methods
  - Reporting and dissemination
  - Reproducibility
  - Evaluation and incentives



# Thanks for **joyning** us today!

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- Next meeting: December, 10th.  
At 12 o'clock. Room T2-213
- Get in touch with us : [burst@uni-bielefeld.de](mailto:burst@uni-bielefeld.de)
- Find us here: <https://burst.pages.ub.uni-bielefeld.de/burst/>



# Sources

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- Images

[https://commons.wikimedia.org/wiki/File:UCT\\_RDM\\_Why-Open-Science.png](https://commons.wikimedia.org/wiki/File:UCT_RDM_Why-Open-Science.png) (last access: 11.11.2021)

- Literature

Munafo et al. 2017. A manifesto for reproducible science. *Nature Human Behaviour*, 1(1), 21.

John, L. K., Loewenstein, G., & Prelec, D. (2012). Measuring the Prevalence of Questionable Research Practices With Incentives for Truth Telling. *Psychological Science*, 23(5), 524–532.

Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-Positive Psychology. *Psychological Science*, 22(11), 1359–1366.

Silberzahn, R., et al. (2018). Many Analysts, One Data Set: Making Transparent How Variations in Analytic Choices Affect Results. *Advances in Methods and Practices in Psychological Science*, 1(3), 337–356

Reproducibility Now: Many studies don't reproduce and why: Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251)

Flake, J.K. & Fried, E.I. (2020). Measurement Schmeasurement: Questionable Measurement Practices and How to Avoid Them. *Advances in Methods and Practices in Psychological Science*, 3(4), 456-465

Chopik et al. (2018). How (and whether) to teach undergraduates about the replication crisis in psychological science. Differentiating confirmation and exploration

Wagenmakers, E.-J., Wetzels, R., Borsboom, D., J., H. L., & Kievit, R. A. (2012). An Agenda for Purely Confirmatory Research. *Perspectives on Psychological Science*, 7(6), 632–638

