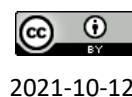




# LMU Open Science Center and German Reproducibility Network

Supporting Open Science practices  
through networks and institutions

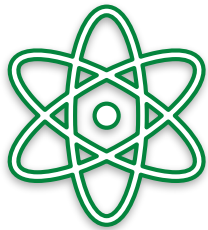
Prof. Dr. Felix Schönbrodt  
Ludwig-Maximilians-Universität  
München



2021-10-12

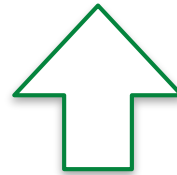


[www.nicebread.de](http://www.nicebread.de)  
[www.researchtransparency.org](http://www.researchtransparency.org)  
 @nicebread303



## **Better research**

more robust, more credible, less wrong results

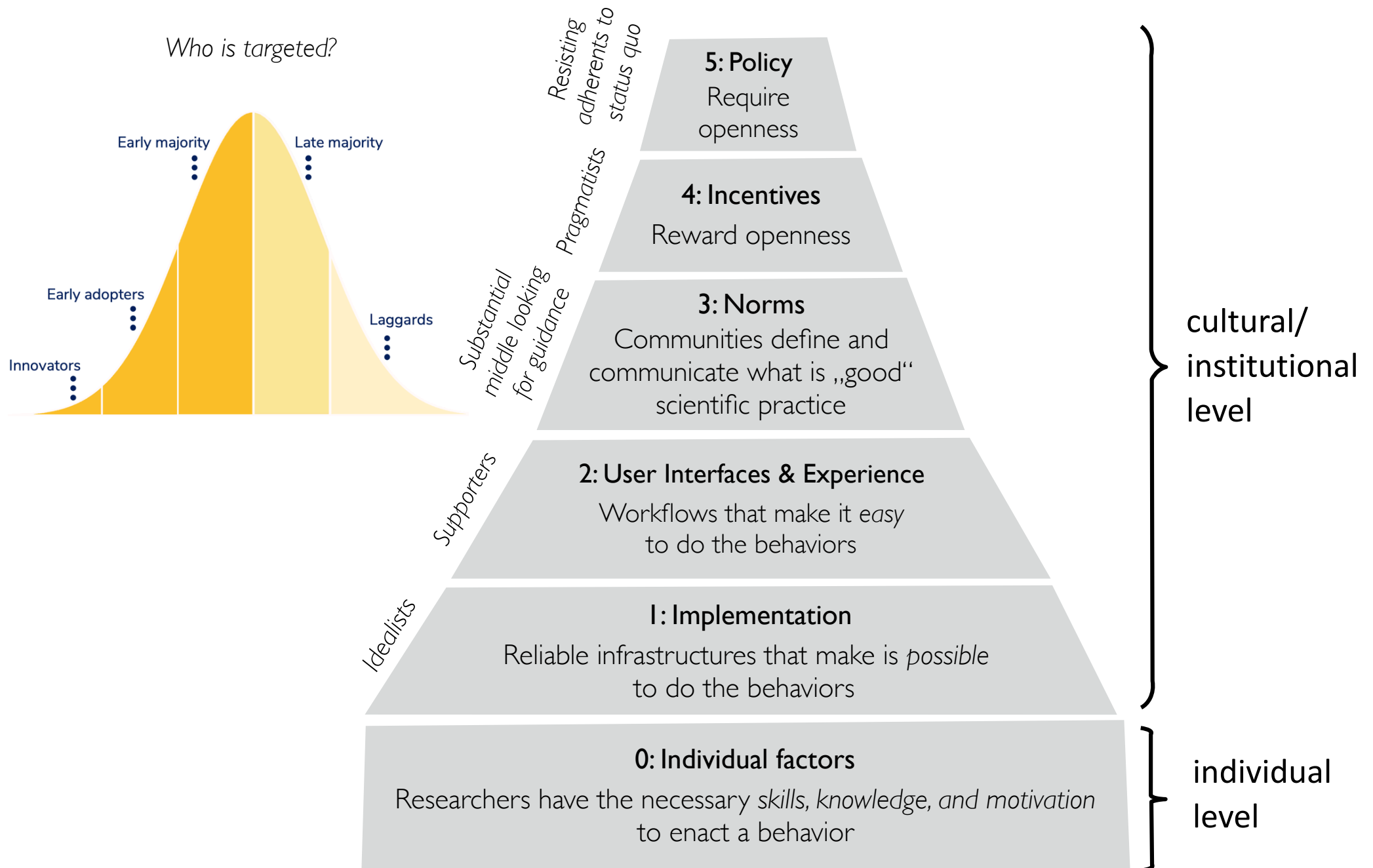


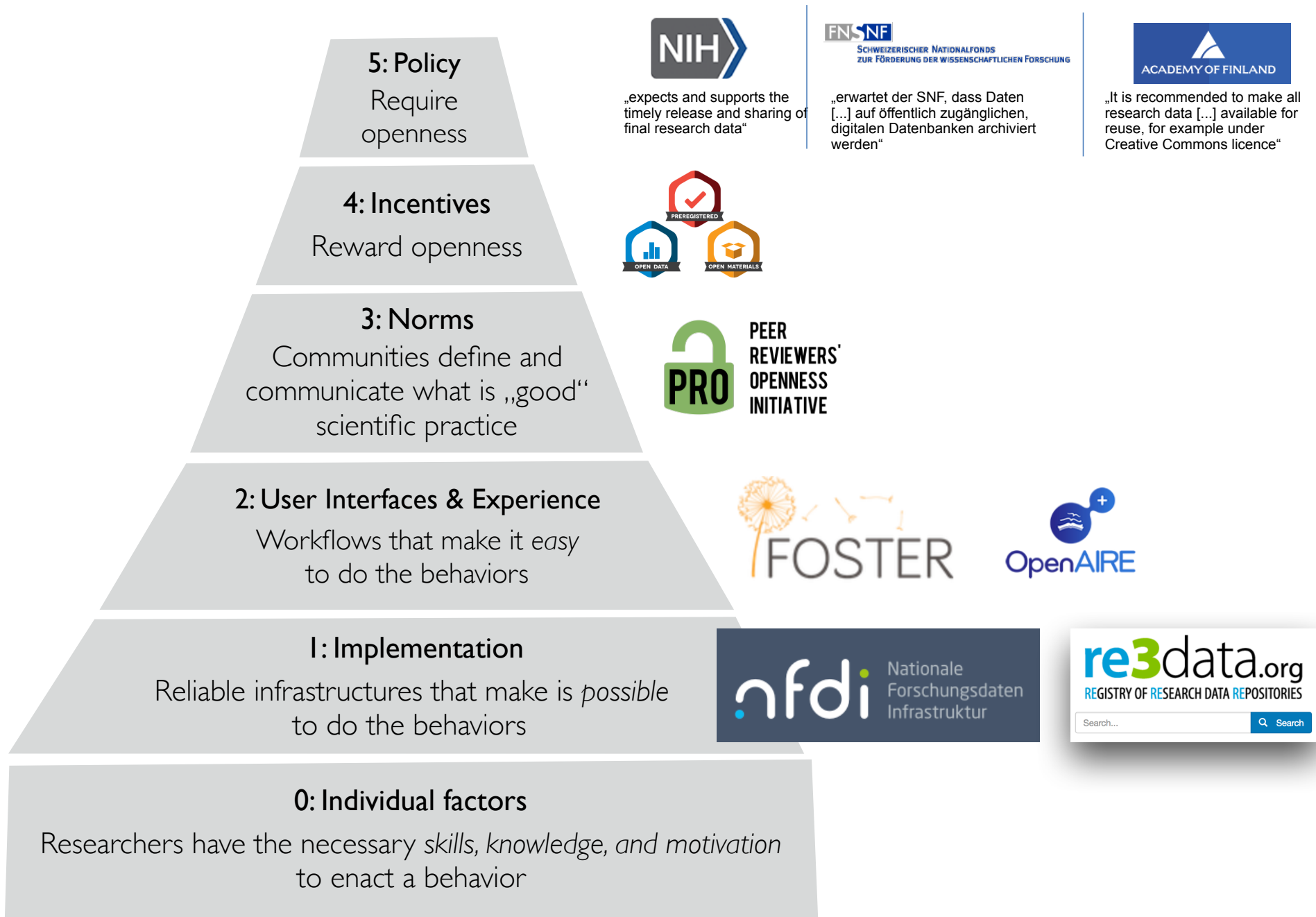
## **Better research practices**

Focus on reproducibility, research transparency, good scientific practice as necessary (though not sufficient) conditions.

# **How to change change researcher's behavior?**

# How to change behavior: skills + cultural change







# Mission Statement

The interdisciplinary LMU Open Science Center has the mission to promote and to foster open science practices at LMU Munich and beyond.

## **1. Advanced training and consultation in Open Science:**

Modular course material, toolbox on website; talks and expert database; train-the-trainer workshops

## **2. Meta-Research:**

Interdisciplinary research about research, e.g. about publication bias, academic incentive system, questionable analytical practices, methodological solutions

## **3. Change of incentive structures:**

Impulses and recommendations, e.g. for job descriptions of professorship positions, changes in PhD agreements and examination regulations

Currently 67 members (most full professors) from 15 disciplines.

# A Strategic Community Effort to Promote Transparent Research Practices in Academia

„Network of networks“ - umbrella organization.

## Founding members



We **support researchers** in educating themselves about open science practices, and founding local open science communities.



We **connect local or topic-centered Reproducibility Initiatives** to a national network, and foster connections between them.



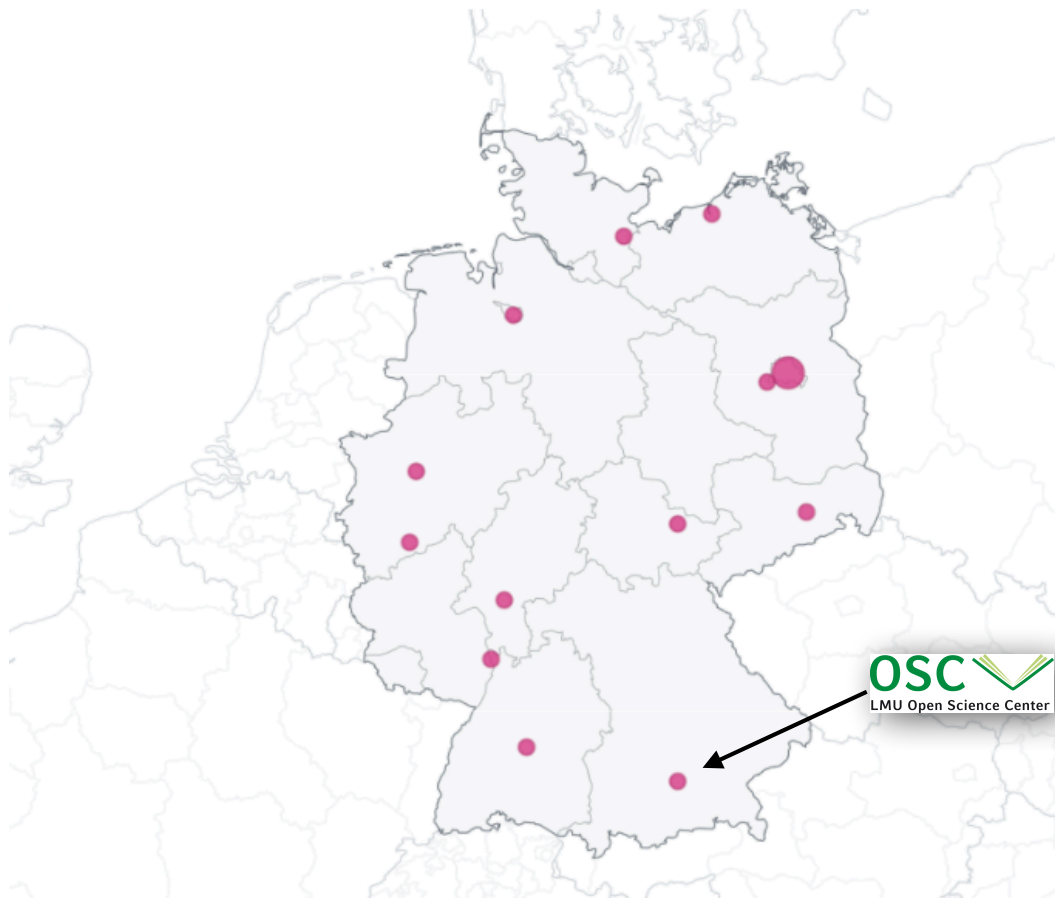
We **advise institutions** on how to embed open science practices in their work.













We **represent the open science community** toward other stakeholders in the wider scientific landscape.

## Local nodes

The GRN is primarily made up of local initiatives and stakeholders throughout Germany.

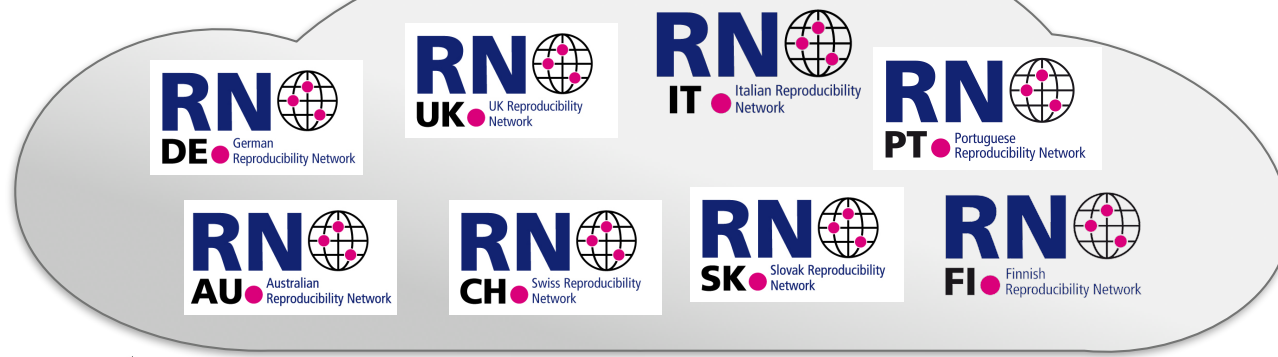


## 17 local nodes, 5 more in the pipeline

Initiative	Representative(s)
 <b>Open Reproducible Data Science and Statistics</b> University of Rostock	Anja Eggert Frank Krüger
 <b>Open Science Initiative Lübeck</b> Lübeck University	Lena Rademacher
 <b>Studentische Open Science Initiative der PsyFaKo (SOSIP)</b>	Leonardo Bergmann
 <b>Automated Screening Working Group (ScreenIT)</b>	Tracey Weissgerber
<b>Clinical Psychological Intervention</b> Freie Universität Berlin	Helen Niemeyer
 <b>Peerspectives</b> Berlin Institute of Health	Jessica L. Rohmann
<b>Pluricore</b> Berlin Institute of Health, Max Delbrück Center for Molecular Medicine	Sebastian Diecke
 <b>SPOKES</b> Berlin Institute of Health	(Mary) Constance Holman
 <b>Reproducible MODELing</b> University Potsdam and International Centre for Water Resources and Global Change	Robert Reinecke
 <b>Open Science Initiative</b> Ruhr University Bochum	Malte Elson
 <b>Reproducibility for Everyone (R4E)</b>	Susann Auer
 <b>FORRT: Framework for Open and Reproducible Research Training</b>	Flavio Azevedo



# International Level



# National Level



Academic society

# Local Level



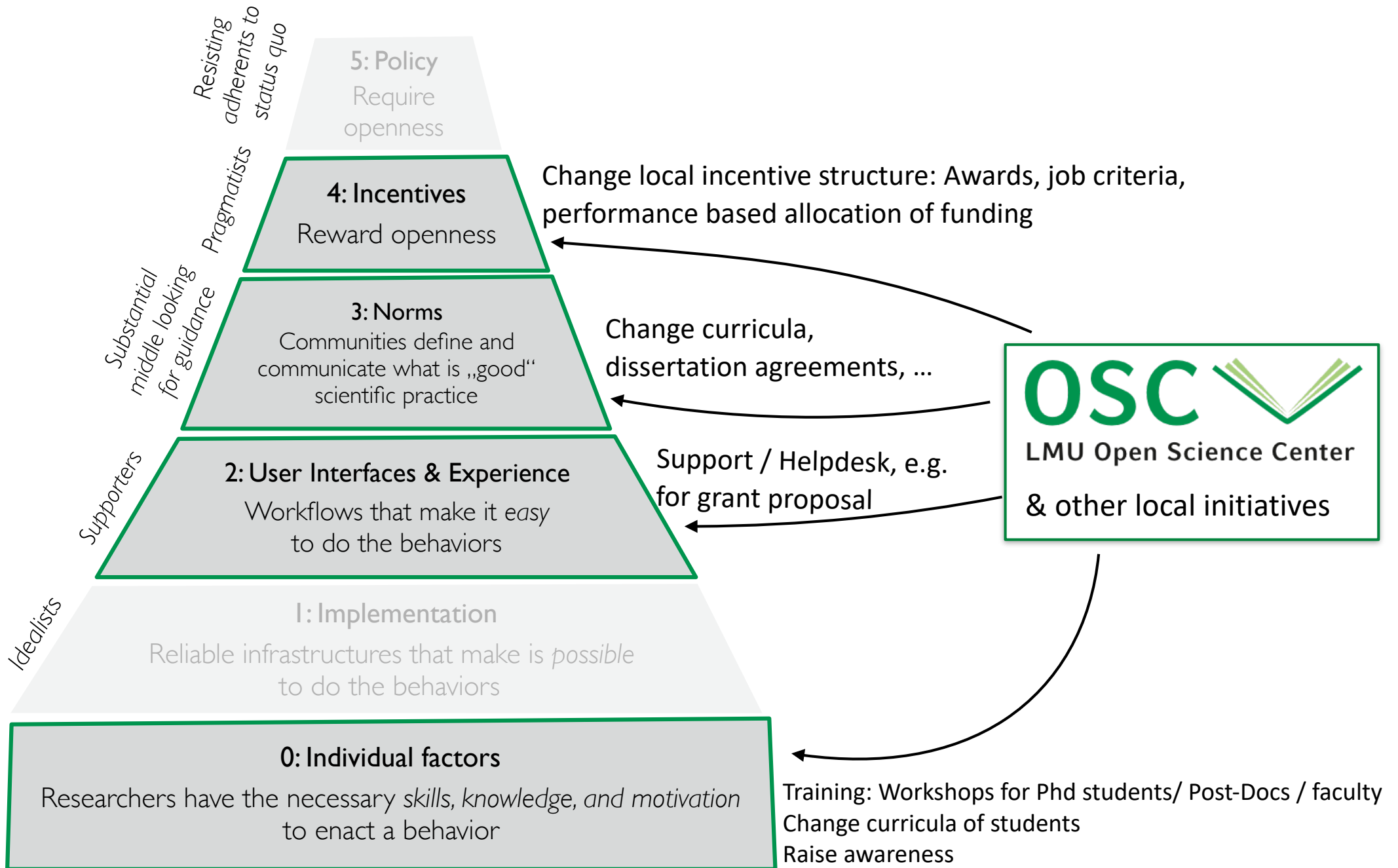
**OSC**  
LMU Open Science Center

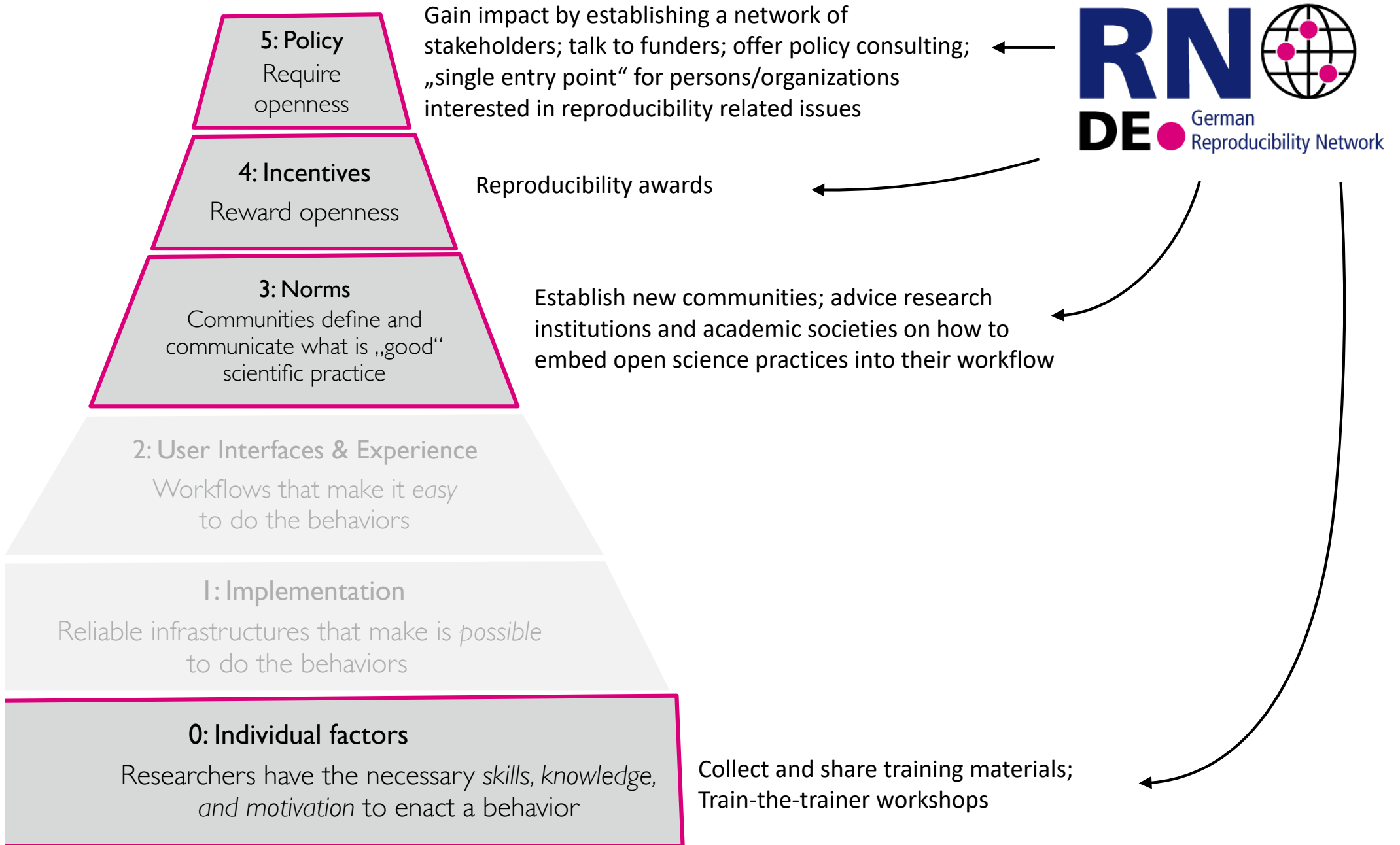
**BIH QUEST**  
Transforming Biomedical Research

Mannheim University  
Open Science Office

**NOSI**  
Netzwerk der  
Open Science Initiativen

<https://osf.io/tbkzh/>





# Experiences: Chances

- Lot of latent potential in different scientific communities
  - OSC as a catalyst
  - „Exothermic reaction“: Add a little starting energy to release a lot of more energy
- Connecting previously disparate resources
  - Library, computing center, unit for research funding: Joint workshops, for example on Open Access, RDM, or funding
  - Interdisciplinary meta-scientific activity (e.g., [DFG SPP META-REP](#))
- Strong interest from researchers: Workshops are always fully booked
- Students are „born reproducible“

# Experiences: Challenges

- „Glass ceiling“ beyond the early adopters
- Sesame street effect
- Large differences between fields; how to connect to humanities
- „We are already excellent!“
  - Having a dedicated center for good research practices does not imply that a university has catch-up demand for doing good research. In contrary, it shows
- Passive understanding of good scientific practice
  - Good scientific practice often is negatively defined: Do *not* plagiarize!
  - Our point of view: **Good science is *more* than the absence of fraud.**
- Chronically overworked & publication pressured
  - Nobody has time to learn new things and to change the research routine.

