

# A pilot test of red teams to foster the epistemic responsibilities of universities: an exploratory multiple case study

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Iris Lechner

[i.m.lechner@vu.nl](mailto:i.m.lechner@vu.nl)





VRIJE  
UNIVERSITEIT  
AMSTERDAM



National Technical  
University of Athens



UNIVERSITY OF  
OXFORD



UNIVERSITY OF  
CAMBRIDGE

What is a good university?



Massachusetts  
Institute of  
Technology



What is a good university?







OPINION ARTICLE

**REVISED** **Academia's Big Five: a normative taxonomy for the epistemic responsibilities of universities: peer review: 2 approved]**

**Rik Peels** <sup>1</sup>, **René van Woudenberg**<sup>1</sup>, **Jeroen de Ridder** <sup>1</sup>, **Lex Boute**

[Author details](#)



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**Abstract**

This paper proposes a normative taxonomy by which universities can express the extent to which they meet five core epistemic responsibilities. Epistemic responsibilities are responsibilities that have to do with the attainment of knowledge and understanding. The core epistemic responsibilities, which we call the Big Five, are to (1) foster research integrity, (2) teach for intellectual virtue, (3) address the big questions of life, (4) give humanistic inquiry and education a proper place, and (5) serve society. The paper characterizes the Big Five in some detail and explains why they are core epistemic responsibilities of universities. The paper concludes by describing the steps that should be taken in order to test, amend, and implement the taxonomy.

**Keywords**

Big question, epistemic responsibilities, humanities, research integrity, societal relevance, teaching, university, virtue

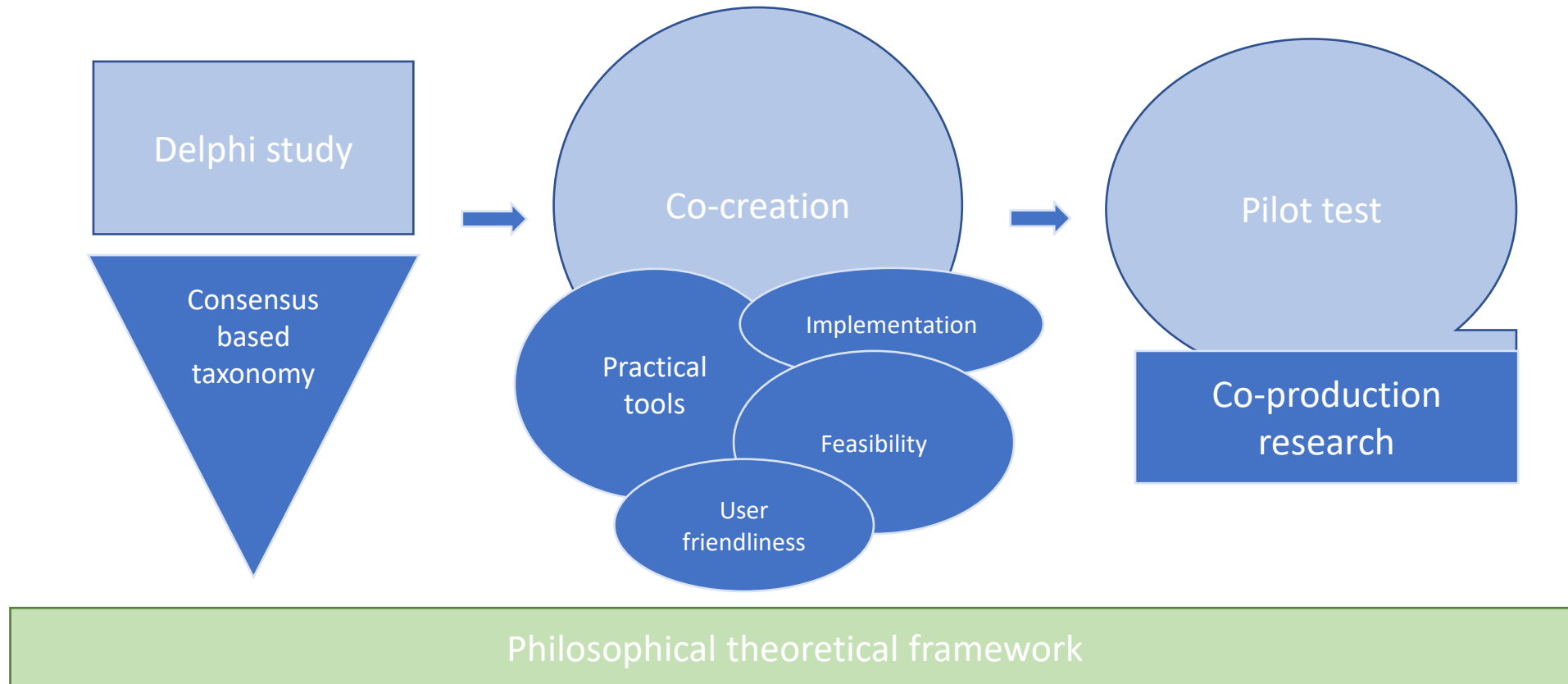
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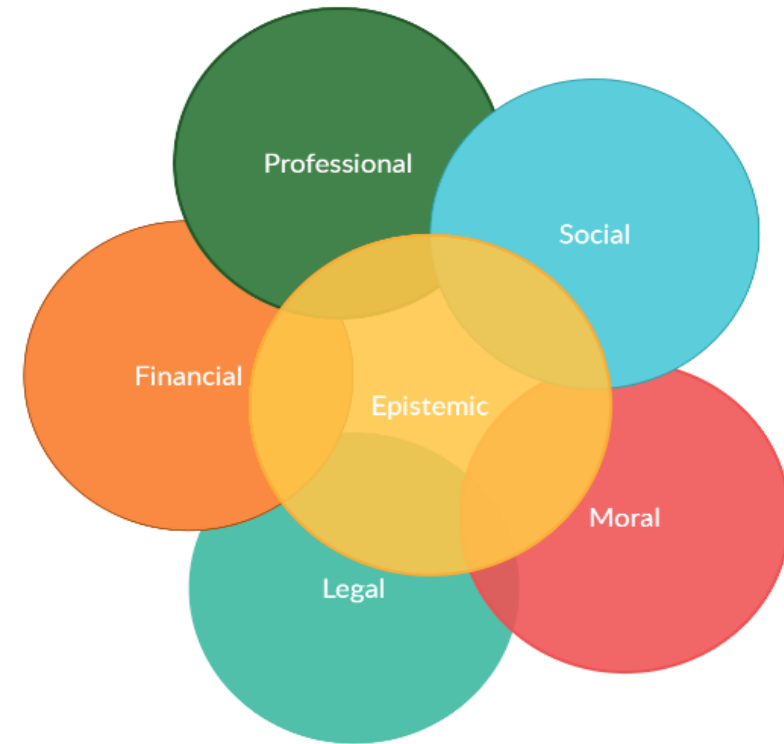
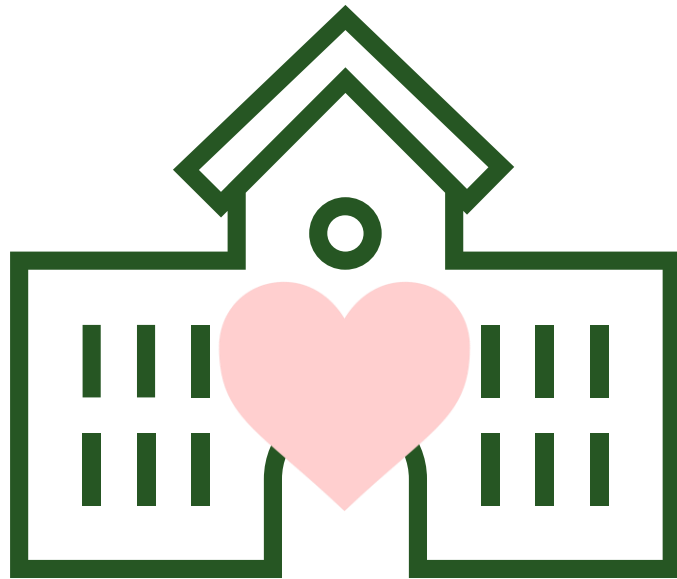
This article is included in the **Science Policy Research gateway**.

# Overview of research project

Ongoing research project



# Epistemic responsibilities of universities - or - responsibilities in the knowledge domain



# 1. Delphi study

Home » Browse » Academia's Big Five: a normative taxonomy for the epistemic responsibilities...

Check for updates

OPINION ARTICLE

**REVISED** Academia's Big Five: a normative taxonomy for the epistemic responsibilities of universities [version 2; peer review: 2 approved]

Rik Peels<sup>1</sup>, René van Woudenberg<sup>1</sup>, Jeroen de Rix

Author details



## Epistemic responsibilities

To foster research integrity

To st

**Research question**

What are epistemic responsibilities of universities, and how can we describe them?

To ad

To cu

To serve and engage with society at large

To cultivate and safeguard academic freedom

# 1. Delphi study

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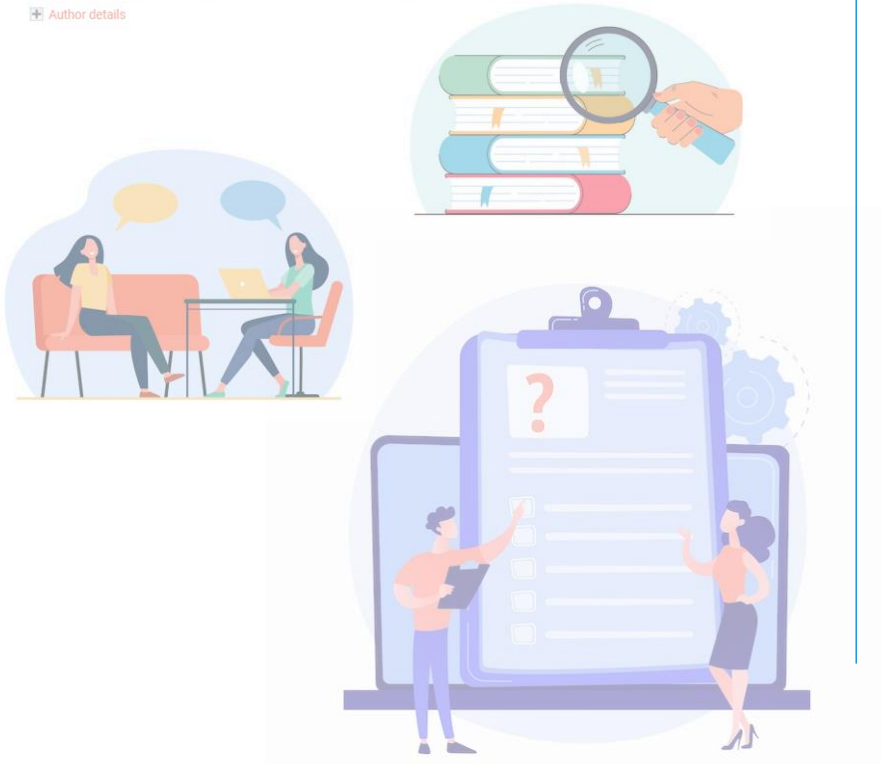
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 Author details



## Epistemic responsibilities

**To foster research integrity**

To stimulate the development of intellectual virtues

To address the big questions of life

To cultivate the diversity of the disciplinary fields

To serve and engage with society at large

To cultivate and safeguard academic freedom

## 2. Co-design study



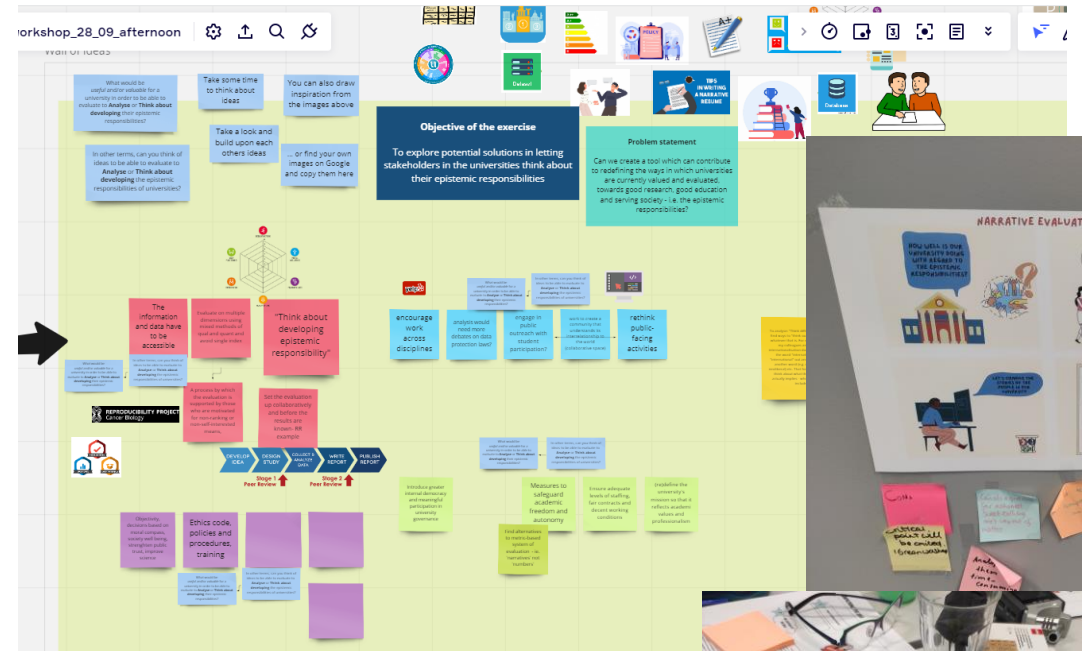
Theory → practice

### Objective study

To explore and co-create a potential *tool or instrument* which is *useful* and *valuable* for universities to think about their epistemic responsibilities

## 2. Co-design study

7 co-design workshops  
25 participants  
12 countries  
1 follow-up survey  
1 working group



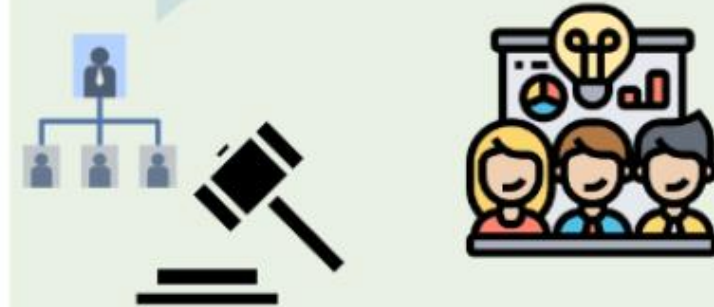
## 2. Red Teams

UNIVERSITIES HAVE THEIR OWN  
INDEPENDENT RED TEAMS...



... AND WHAT EXACTLY ARE RED TEAMS?

TO CRITICALLY REFLECT ON THE  
CURRENT STATUS OF AND PROVIDE  
SOLUTIONS TO IMPROVE AND FOSTER  
EPISTEMIC RESPONSIBILITIES



THE RED TEAM CAN COME TOGETHER...



... AND CONSULT STUDENTS,  
RESEARCHERS, EDUCATORS OR SUPPORT  
STAFF



& GIVES UNIVERSITY  
ADMINISTRATION... -->

SOME (UN)SOLICITED ADVICE



THE RED TEAM CAN  
GIVE ADVICE ON ALL  
EPISTEMIC  
RESPONSIBILITIES





## Key characteristics

- To investigate the responsibilities and values a university ought to display with regards to knowledge: good education, good research and benefitting society (*what we call: epistemic responsibilities*)
- To go to work as *ethical hackers*: finding vulnerabilities, providing constructive criticism and presenting potential solutions
- To include a diverse range of stakeholders across the university
- Each Red Team is tailored to meet the needs of a particular university

# Examples of red teams

## RED TEAM



Monday, May 11, 2020

## Red Team Challenge

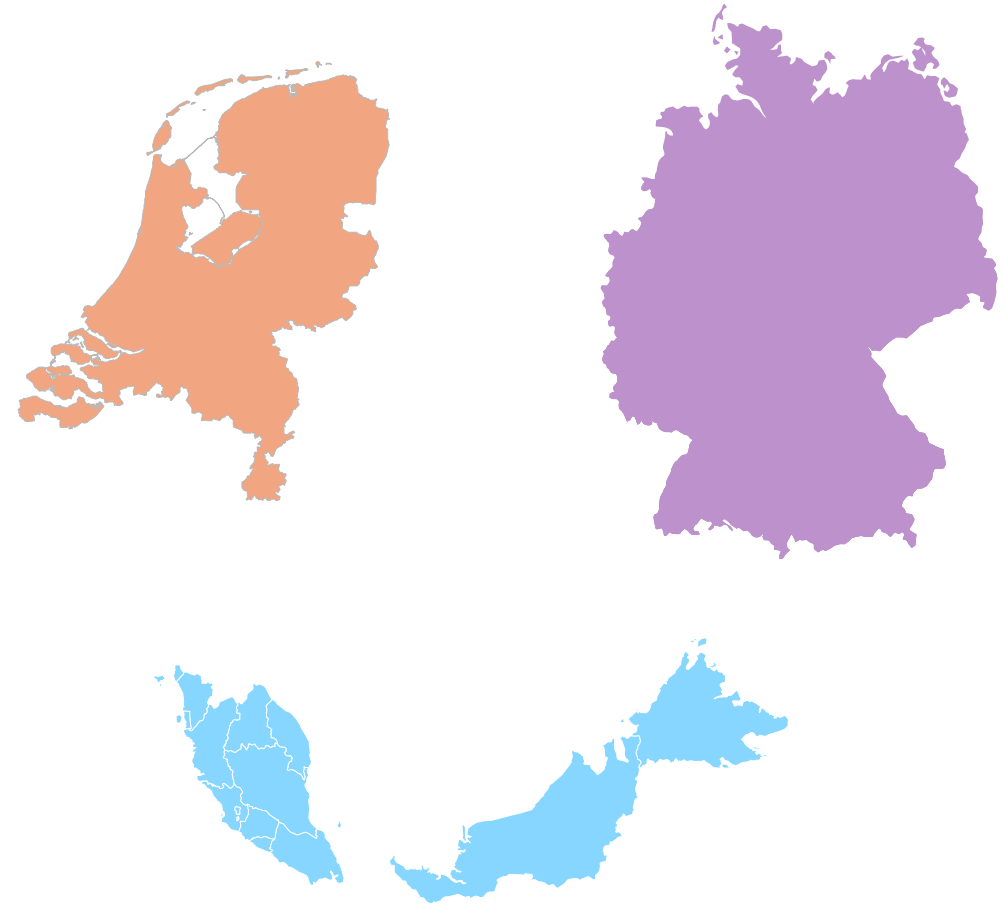
by Nicholas A. Coles, Leo Tiokhin, Ruben Arslan, Patrick Forscher, Anne Scheel, & Daniël Lakens

All else equal, scientists should trust studies and theories that have been more critically evaluated. The more that a scientific product has been exposed to processes designed to detect flaws, the more that researchers can trust the product (Lakens, 2019; Mayo, 2018). Yet, there are barriers to adopting critical approaches in science. Researchers are susceptible to biases, such as confirmation bias, the “better than average” effect, and groupthink. Researchers may gain a competitive advantage for jobs, funding, and promotions by sacrificing rigor in order to produce larger quantities of research (Heesen, 2018; Higginson & Munafò, 2016) or to win priority races (Tiokhin & Derex, 2019). And even if researchers were transparent enough to allow others to critically examine their materials, code, and ideas, there is little incentive for others—including peer reviewers—to do so. These combined factors may hinder the ability of science to detect errors and self-correct (Vazire, 2019).

Today we announce an initiative that we hope can incentivize critical feedback and error detection in science: the Red Team Challenge. Daniël Lakens and Leo Tiokhin are offering a total of \$3,000 for five individuals to provide critical feedback on the materials, code, and ideas in the forthcoming preprint titled “[Are facial feedback effects solely driven by demand characteristics? An experimental investigation](#)”. This preprint examines the role of demand characteristics in research on the controversial facial feedback hypothesis: the idea that an individual’s facial expressions can influence their emotions. This is a project that Coles and colleagues will submit for publication in parallel with the Red Team Challenge. We hope that challenge will serve as a useful case study of the role Red Teams might play in science.

### 3. Pilot test

- Exploratory multiple case study
- 3 case sites (Yin, : the Netherlands, Germany, Malaysia)
- PRODUCES framework (Leask et al. 2019)
- Co-production approach (Hickey et al., 2018)
- September 2023 – October 2024



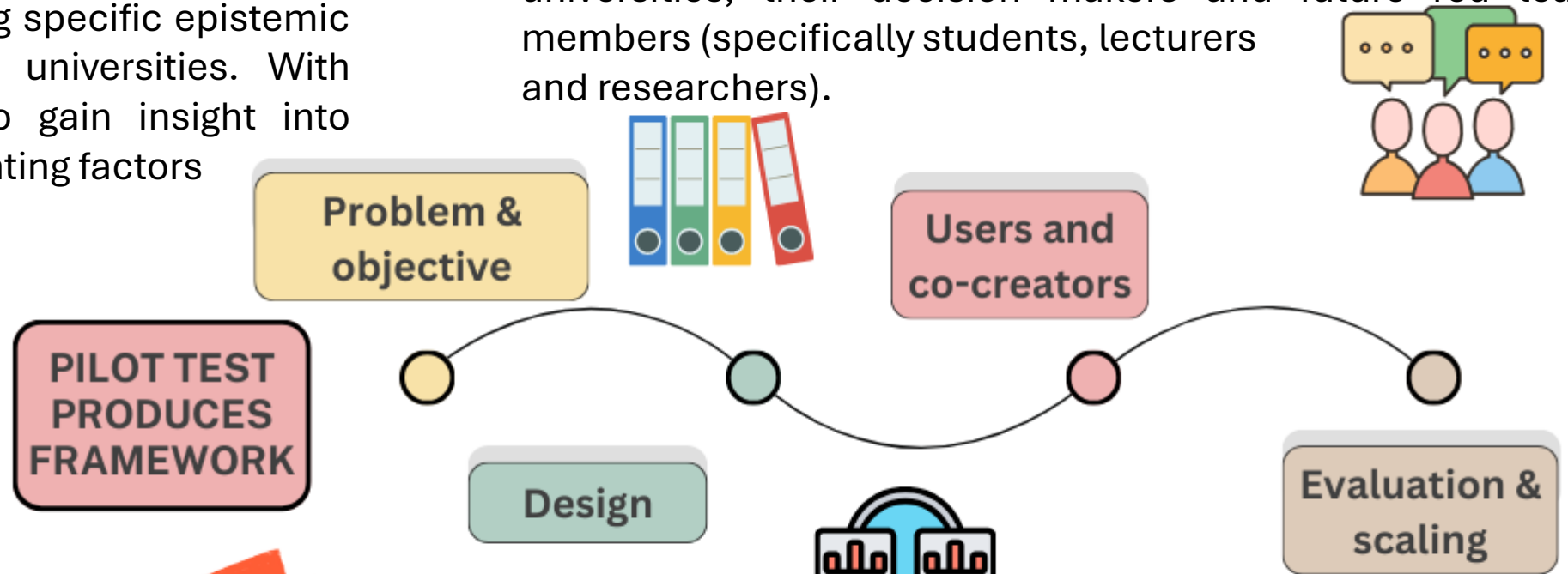
**Hickey, G.,** Brearley, S., Coldham, T., Denegri, S., Staniszewska, S., Tork, K., & Turner, K. (2018). *Guidance on co-producing a research project* (INVOLVE, NIHR). INVOLVE. [https://www.invo.org.uk/wp-content/uploads/2019/04/Copro\\_Guidance\\_Feb19.pdf](https://www.invo.org.uk/wp-content/uploads/2019/04/Copro_Guidance_Feb19.pdf)

**Leask, C. F.,** Sandlund, M., Skelton, D. A., Altenburg, T. M., Cardon, G., Chinapaw, M. J. M., De Bourdeaudhuij, I., Verloigne, M., Chastin, S. F. M., & behalf of the GrandStand, Safe Step and Teenage Girls on the Move Research Groups. (2019). Framework, principles and recommendations for utilising participatory methodologies in the co-creation and evaluation of public health interventions. *Research Involvement and Engagement*, 5(1), 2. <https://doi.org/10.1186/s40900-018-0136-9>

**Yin, R. K.** (1994). *Case Study Research: Design and Methods (Applied Social Research Methods)* (2nd ed., Vol. 5). Sage Publications.

Our research **PROBLEM** is to identify the lessons learned from pilot testing a red team in different universities, with the aim of fostering specific epistemic responsibilities of universities. With the **OBJECTIVE** to gain insight into barriers and facilitating factors

At each case site we collaborate with **CO-RESEARCHERS**. The envisioned **END-USERS** of the 'red teams' are universities, their decision makers and future red team members (specifically students, lecturers and researchers).



The **RESEARCH DESIGN** is a co-production approach, and we formulate the aims together with the co-researchers, decide on the type of research to be conducted (e.g. focus groups, observations, interviews), and how to tailor red teams to the institutional context.

We will **EVALUATE** the experiences, lessons learned, scaling up, expectations met (or failed), etc. For **SCALING** we aim to use the experiences and results of the pilot test to revise the 'red team policy', disseminate findings and incentivize uptake for new Red Teams

## Research question & objective



What lessons can we learn from pilot testing a red team in different universities with the aim of fostering specific epistemic responsibilities of universities?



What are barriers and success factors towards setting up a red team at each case site?

## Co-production approach

- 1) Sharing power
- 2) Including all perspectives and skills
- 3) Respecting and valuing the knowledge of all those working together on the research,
- 4) Reciprocity (all involved stakeholders benefitting from collaborating)
- 5) Building and maintaining relationships



## Approach to a red team

- University wide RT
- Mandate from president required to make impact
- Recruitment of red team
- Democratic decision making on a specific topic

## Status?

- Mandate rejected on a specific topic (initially put forward by research team), but red team could go forward to be recruited
- First red team meeting took place. The ten red team members have diverse backgrounds
- Discussion of 'ground rules', moving towards choosing a topic



## Approach to a red team

- A red team for research integrity: 'research integrity office' (RIO) at one faculty
- Change of name required to fit institutional needs
- Focus group study with students, researchers and lecturers to investigate governance structure and needs for an RIO
- The outcomes of the focus groups will be used to set up an RIO

## Status?

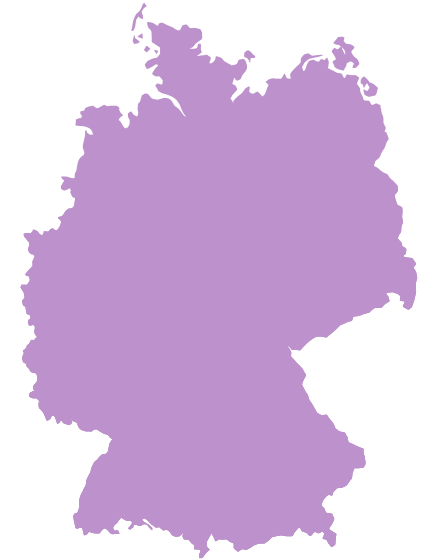
- Top management of university interested in exploring setting up an RIO
- Outcomes of focus groups are currently being analyzed

## Approach to a red team

- Red team at one department
- Proposal of a red team in department meeting, commitment of professors in the department required for recruitment and commitment to change

## Status?

- After initial interest during a department wide meeting, the professors did not commit to partaking in a red team
- As an alternative, an event was organized to bring attention to the 'epistemic responsibilities of universities' (based on recommendations from our previous study)
- Follow up interviews with professors will be planned to evaluate the 'red team' process



## Questions to discuss

- 1) Is the taken approach a question of weighing one principle (democratic research) against another principle (research integrity)? Or could both approaches be combined, and if so, how?
- 2) What lessons can you share from working in international collaborations as a PhD candidate. What are your experiences in working in international collaborations? What can you expect from collaborators? And how do you deal with cultural, hierarchical or institutional differences?
- 3) We are collecting a lot of data in the process of the case study, including, but not limited to, field notes, conversations, interviews, focus groups, workshops etc. Given the abundance of data, what are your suggestions on how to best present this in an article?
- 4) ??

Questions?



Thank you for listening!

[i.m.lechner@vu.nl](mailto:i.m.lechner@vu.nl)