

**“Researchers design, carry out, analyse and document research in a careful and well-considered manner”!** (ECoC 2017, p.5)

## Description and background

This learning unit:

*Introduces researchers to (questionable) research procedures and reliable research results*

*Builds the competency to discuss research procedures and research results*

*Challenges researchers to explain and justify complex research norms*

## Role Model

## Keywords

*Responsible Research Conduct;  
 Questionable Research Practice;  
 Misconduct.*

*This unit has been prepared for disciplinary learning groups.*

## Learning Objectives

- 1** *Accept ambiguity: be open and unprejudiced*
- 2** *Explain and justify research procedures*
- 3** *Compare and prioritise different research procedures*
- 4** *Adjust research procedures, if necessary*

## Learning Stages

- 1** *Introduce the topic*
- 2** *Motivate by introducing an interesting problem*
- 3** *Engage in role-play*
- 4** *Explain and justify research procedures*
- 5** *Evaluate different arguments, face dissent and achieve consensus*

## “Quote about Research Procedure”



## 1 Introduce the topic:

*Homework (before the unit starts) or reading session*

Read the paragraph on good research practice in “The European Code of Conduct for Research Integrity”

Discuss the meanings of any unknown words.

European Code  
of Conduct for  
Research Integrity:



## 2 Motivate by choosing an interesting challenge:

To prepare the following exercise, please choose a situation in which some of you are unsure about how to proceed.

This challenge, regarding model procedures in the natural sciences, shows some uncertainty as to how best to proceed: *A new approach on modelling particle behaviour has been introduced to a researcher at a conference; however, it conflicts with the model he currently uses. Does he have to address this in his next paper and presentation or can he just let it go, as the model he uses is already well accepted within the community?*

Likewise, the following challenge demonstrates a questionable situation with vulnerable populations: *You are running a social media experiment, and receive a request from a colleague: please let Paul attend your experiment, as he needs the money. Should you invite Paul to attend?*

In the field of research on self-driving cars, an expert questions the following: *Is it necessary to check the alarm system for distance control before every test run in the city?*

If one of these challenges is relevant to your discipline, you are welcome to use it. If not, please select an equivalent challenge from your research. Display it with one or two sentences at the chalkboard.

## 3 Engage in role-play

Go through the next steps in groups of four to six people:

flesh out your challenge with details;

imagine a conflict happens between two parties in this challenge, and perform it in a role play;

describe the conflict and write it down (each group member needs a text version).

## 4 Explain and justify research rules:

Reflect alone and answer the following questions:

*Which rules do the parties explicitly or implicitly refer to in your conflict?*

*Did the parties explain rules in the role-play?*

*If not, can you imagine which rules justify the actions of the two parties?*

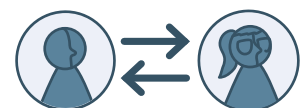
*Which rules exclude or at least hinder each other? Write the rules down.*

Pick out one rule that you agree with, and a second one that you reject.

Describe why you agree with the first, and why you disagree with the second. If possible, refer to the Code of Conduct from ECoC or a research procedure policy from your institution, country etc.

## 5 Evaluate different arguments, face dissent and achieve consensus:

Discuss your rules in the plenum. Start by arguing in favour of specific research procedures and then turn to your denials.



In the discussion you can use the terms: **Responsible Research Conduct; Questionable Research Practice; Misconduct.**

