

## Scientists Need More! Good Scientific Practice.

Good scientific practice covers a wide spectrum of scientific conduct: Dealing with data (including checking, recording, ownership and storage), the publishing process and authorship, responsible supervision, academic cooperation, conflicts of interest and dealing with conflicts. Inappropriate academic behavior includes inventing or faking of data, even inappropriate deselection of data, violating intellectual property (theft of ideas or plagiarism) and sabotaging the research of others. More subtle topics are even more common in our everyday scientific work, such as skepticism, critical thinking, reproducibility, handling creativity, the danger of axiomatic assumptions and confirmation bias. Every scientist should have a professional understanding of all mentioned topics.

**OBJECTIVES** – To provide scientists with an opportunity to build their understanding, skills and confidence in good scientific practice.

## Good scientific practice

- Develop investigative strategies/procedures/processes that take account of relevant scientific and other sources of information
- Critically evaluate data, draw conclusions from it, formulate actions and recommend further investigations where appropriate
- Beware of confirmation bias in planning, pursuing and analyzing experiments
- Provide clear reports using appropriate methods of analysing, summarising and displaying information

## Feedback

- Detoxify your language by using subjective I-statements
- Be fair, balanced, timely
- Adapt to the situation
- Be constructive and give always examples

**METHODS** – A balanced and structured program of interactive lectures, challenging activities outside of the "comfort zone" and review sessions will provide a variety of first-hand learning situations allowing participants to identify and take away relevant lessons. Facilitators are habilitated scientists and successful group leaders in the natural sciences.

How do we train? Interactively! https://shorturl.de/zco3,

What do our participants say? <u>https://shorturl.de/bF3M</u>,







