Good Scientific Practice Seminar September 2024

PREPARATION (READING LIST)

Please **prepare** the following homework assignments for class. If possible, please bring a laptop or tablet to class to be able to view the documents.

For Monday, September 23

- INTRODUCTION (GENERAL ASPECTS, BYLAWS)
 - o **PDF UHH Bylaws**: Please have a look at bylaws section 3
- MISCONDUCT
 - Please take a look at <u>one of the three</u> papers below. No need to read every sentence please
 just try to get an idea about the main points.
 - A. PDF Fong & Wilhite:
 - Try to understand and explain the 3 main topics on "authorship misconduct"
 - Discuss Figures 1 and 3
 - B. **PDF Necker**:
 - Try to understand and explain Tables 1 vs. 2 as well as Figures 1, 2 and 4
 - C. **PDF Diazetal** and **PDF HuWenetal**. Think about the questions:
 - Is this OK in the scientific world?
 - Or is there cause for criticism?
 - Is this even misconduct?
- DATA HANDLING / REPRODUCIBILITY
 - Please take a look at one of these three publications on reproducibility in science. Read/skim over one of them and take some notes on interesting points for an upcoming discussion.
 - **PDF Baker**: "Is there a reproducibility crisis?"
 - → Does this apply to your field too?
 - PDF ATCC (American Type Culture Collection, non-profit): "Six factors affecting reproducibility in life science research and how to handle them"
 - → Focus on the six factors. Which ones are the most relevant in your field?
 - PDF Kuschel: "Access to Research Data"

For Tuesday, September 24

- DATA HANDLING / REPRODUCIBILITY (continued)
 - Please watch the YouTube Video and take some notes: What went wrong?
 Data Sharing and Management Snafu in 3 Short Acts | NYU Health Sciences Library
- AUTHORSHIP
 - o Please just take a quick look at the PDFs LHC and LIGO. No need to read the whole papers.
 - These are publications on huge research projects which ran over a long time. What catches your eye immediately?
 - Imagine you are a PhD student and an author on a paper like this. What would your scientific standard ask you to know about the paper? How helpful are such papers for the career?
 - o Please have a look at the Article on "Text recycling" PDF Hall
- SUPERVISION AND CONFLICTS
 - → What qualities should a good supervisor have in your opinion?