List of attendees

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## Episode 1. Why are we here? Why should you know it?

**Exercise 1. Know each other**

Introduce yourselves telling why you have joined this course.

Then, try to find one professional/academic thing that your group has in common.   
For example:  
- we all have our last grant proposals accepted by MRC  
- we all desperate searching for an experienced lab technician

(Green Room)

* Why you here

We all

(Blue Room)

We all

(Red Room)

We all

(Yellow Room)

We all

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**Exercise 2. You and data sharing**

Thinking of how you and your group make the data or code available to others and how your group uses others data, write +1 next to the statements that matches your own experience:

- We do not really share data, we only publish the results as a part of a publication:

- We have made our data available only as Supporting Information for a paper:

- We have made our data available as both Supporting Information and as a dataset in a repository:

- We have made our data/code available without having it published in a paper:

- We share the code in github or another code repository:

- We make the code available on demand:

- We have used a dataset from a public repository:

DONE:

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**Exercise 3. Why we are not doing Open Science / Data Sharing already**

Discuss Open Science barriers, type below the reasons for not being open:

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**Exercise 4. Your presence**

Write +1 next to the statements that matches your own experience:

- I currently supervise at least 2 postdocs:

- I have promoted at least 3 PhDs:

- I revise at least 4 articles a year:

- I have been member of a grant panel:

- I have been member of a school/college/university committee:

- I have contributed to development of an institutional/community policy:

- I formed part of the selection process for fellows / lectures / readers:

- I am member of a Research Council

- ????

DONE:

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**Exercise 5. Your minions**

Write +1 if your soon-to-be leaving postdoc:

- Released software:

- Has public datasets:

- Can demonstrate outreach activities

- Is active in some scientific community group:   
 (e.g. journal club, carpentries, ReproducibiliTea)

DONE:

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**Exercise 5. Lottery winner**

Imagine a situation in which you suddenly lose a postdoc because she/he has won the National Lottery and won’t come to work (or more realistically, they were hit by a bus). Write +1 next to scenarios to which you can relate:

- everything should be recorded in their notebook, which you hope is in the office.  
But frankly, you have never checked how good their lab notes are:

- everything should be in Electronic Lab Notebook, and you can quickly check if that is the case:

- all data, excel, presentations and paper drafts are in a shared network drive:

- some data and documents may only be in the postdocs PC/laptop:

- every now and then, you check peoples data and notes, so you are fairly confident they follow good practices and you know where you can find what is needed:

- your group has “data management” policy/plan to which all members are introduced,   
so at least in principle all should be fine:

- you let it to your group to organize such trivial matters and you hope they did it well:

- your lab manager should know it all:

- there is this old postdocs who knows it:

- you are getting nervous:

DONE:

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# Episode 2. Being FAIR

**Exercise 1a. Protocol (green, blue)**

You need to do a western blot of the protein Titin, the largest protein in the body with a molecular weight of 3,800 kDa. You found an antibody sold by Sigma Aldrich that has been validated in western blots and immunofluorescence. Sigma Aldrich lists the publication by Yu et al 2019 (<https://doi.org/10.1002/acn3.50831>) which uses their antibody.

**Can you find a complete protocol for separation and transfer of this large protein?**

* Hint 1: Find the Western blot in the methods section.
* Hint 2: Follow the references

How easy was it?

**Exercise 1b. Average content (red, yellow)**

The Ikram 2014 (<https://doi.org/10.1093/jxb/err244>) paper contains data about various metabolites in different accessions (genotypes) of *Arabidopsis plant.* You would like to calculate the average nitrogen content in plants grown under normal and nitrogen limited conditions.

**Please calculate the average (across genotypes) nitrogen content for both experimental conditions.**

* Hint 1. Data are in Supplementary data (Experiment 2 - <https://tinyurl.com/hjkdzsd4>)

Hint 2. Search for nitrogen in paper text to identify the correct data column.

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**Exercise 2. FAIR and You**

The FAIR acronym is sometimes accompanied with the following labels:

* Findable - Citable
* Accessible - Trackable and countable
* Interoperable - Intelligible
* Reusable - Reproducible

Using those labels as hints discuss how FAIR principles directly benefit you as the data creators.

DONE:

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**Exercise 3. FAIR Quiz**

Which of the following statements is true/false (T or F).

* F in FAIR stands for free.
* Only figures presenting results of statistical analysis need underlying numerical data.
* Sharing numerical data as a .pdf in Zenodo is FAIR.
* Sharing numerical data as an Excel file via Github is not FAIR.
* Group website is a good place to share your data.
* Data from failed experiments are not re-usable.
* Data should always be converted to Excel or .csv files in order to be FAIR.
* A DOI of a dataset helps in getting credit.
* FAIR data are peer reviewed.
* FAIR data accompany a publication.

DONE:

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Episode 3. Tools for overlords