HOW TO: REPORT

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SUMMARY OF GROUPS AND PROJECTS

- **Thermal MRI:** Charles Louis Pierre Bogdan Boissier
  Johan Bordet
- **Metabolic connectivity:** Sarah Mikami
  Sophie Mosegaard
- **MRSI and MRI for brain tumor detection → papers?**
  Naomi Andréa Solika Salomon
  Romane Michèle Paula Vorwald
- **MR Fingerprinting for low field MRI**
  Julien Strauss
  Isabel Clara Riepenhausen
- **Glutamate and GABA Quantification Across Sleep Stages**
  Angelina Matthey-Junod
  Sophia Kockisch
- **Diffusion MRI in structural connectivity → papers?**
  Ameer Elkhayat
  Hanqi Lu

STRUCTURE

- INTRODUCTION
- METHODS
- RESULTS
- DISCUSSION
- CONCLUSION
- **References!!**
- **Authors contribution:**

Cudalbu C et al, 2023; McLin VA et al, 2022

INTRODUCTION

- Theoretical details on the topic you selected – biological but focus on **MR related**
  - **Editing (**GABA, Glx**), temperature, diffusion** (connectivity)**, MRSI/MRS vs MRI** (tumor), **low field (**fingerprinting**), metabolic** (connectivity)
- Why is this topic important/needed ?
- Previous studies
- Missing points in the filed --- connect with the novelty of the studies you will be presenting
- MOTIVATION, hypothesis
- AIM
- Present the papers selected as a whole and not paper by paper – learn how to summarize/synthetise – get a common message from these papers

Cudalbu C et al, 2023; McLin VA et al, 2022

METHODS

- Sample characterisation used in the study: humans, rats, tissue, solutions, number, groups,
- **Methodology**
  - B0
  - Sequence(s) used with parameters
  - Tables (next slide)
- Processing
- Statistics, how data are presented
- Critical look to all details in the papers

Cudalbu C et al, 2023; McLin VA et al, 2022

METHODS

- BUT – you all have different topics thus not everything might apply
- What was compared

Cudalbu C et al, 2023; McLin VA et al, 2022

LIVE TABLE

Groups	Needs/doubts/inputs?
Thermal MRI	I added two new papers
Metabolic connectivity	You got a Mendeley invite
MRSI and MRI / tumor	- 1 section about MRS, 1 about MRSI, 1 about comparison and 1 about tumor (a little)
Low field MRI/Fingerprinting	https://www.ismrm.org/24/24program.htm https://ismrm2024.blazestreaming.com/sessions/ismrm-2024-p-os A Webb and D Jones
Glutamate and GABA Quantification	
Diffusion / connectivity	https://pubmed.ncbi.nlm.nih.gov/30718455/ https://pubmed.ncbi.nlm.nih.gov/40410167/ https://pubmed.ncbi.nlm.nih.gov/?term=ileana%20jelescu&sort=pubdate&page=3 Derek Jones You got two Mendely invites

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TABLE FOR METHODS (EXAMPLE)

Subjects	B0 RF coils Gradients (diffusion)	Sequence (parameters) TE, TR, bval,resolution, SE, GRE, flip angle, prep scans …	O1: Contrast T1, T2, diffusion, MRS	O2: MRS – no of metab	References

RESULTS

- Application cases
- Main findings

DISCUSSION

- Your feeling – opinion
- Improvements compared with past studies
- Novelty of these studies
- Problems / Limitations – your own interpretation/feeling – problems/limitations of the studies
- Contradictory outcomes
- Next steps

CONCLUSION

- Brief
- Main findings and main current challenges

REFERENCES

- Double check all of them!!

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THANK YOU FOR YOUR ATTENTION

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