Research Data Science Summer School, Sao Paulo 2018
Responsible and Open Science Citizenship as a Data Scientist: Data Management Practices

Research activity	Tools Learnt/ To Use	Key Ethical Considerations	Key Challenges in Your Research Environment	How Can I Get Assistance?
Create	R, GitHub (versioning), DMP, FAIR data checklists, ethical approval, EOSC, FOSTER, OpenAIRE	Is my research ethical and responsible? Have I considered all types of data that I am producing? Have I thought about how to implement FAIR and openness?		
Document	GitHub DMP FAIR data checklists OMERO	Is my metadata sufficient to allow for scrutiny and re-use?		
Use	Analysis, GitHub , R, specific analysis tools, DMP, OMERO	Am I using open analysis tools? Am I complying with the ethical requirements for secondary data use?		
Store	Storage and backup options Dropbox, DMP, OMERO	Is my data properly curated and annotated for re-use? What are the implications of 3rd party, commercial storage?		
Share	Licensing – Creative Commons Re3data, DOIs, EOSC, FOSTER, OpenAIRE, DMP, OMERO	Am I using open, sustainable and responsible pathways to sharing? Could my data be misused for negative purposes? How will I control for this?		
Preserve	Archiving, DMP, OMERO	Is my data guaranteed to have long-term preservation?		

Responsible and Open Science Citizenship as a Data Scientist: Other Areas of Activity

Research activity	Tools Learnt/ To Use	Key Ethical Considerations	Key Challenges in Your Research Environment	How Can I Get Assistance?
Research misconduct	RCR guidelines Open Data guidelines Institutional policies, RDM Policy	Fabrication, falsification and plagiarism Research causing harms Lack of attribution/respect of licensing		
Conflicts of interest and commitment	RCR guidelines, DMP	Biases in research caused by undisclosed conflicts		
Collaborative research	Journal guidelines MOUs Licensing	Poor attribution of credit Scooping, theft, loss of control of data		
Authorship and publications	AuthorAid ORCID	Attribution of credit Open Access		
Peer review	Publons	Theft of ideas Uncollegial behaviour (bullying, unfair review etc)		
Mentorship and trainee relationships		Appropriation of student's research Failure in duty to teach Failure in duty to care Teaching in an appropriate fashion		