

How to protect your data in an open research culture

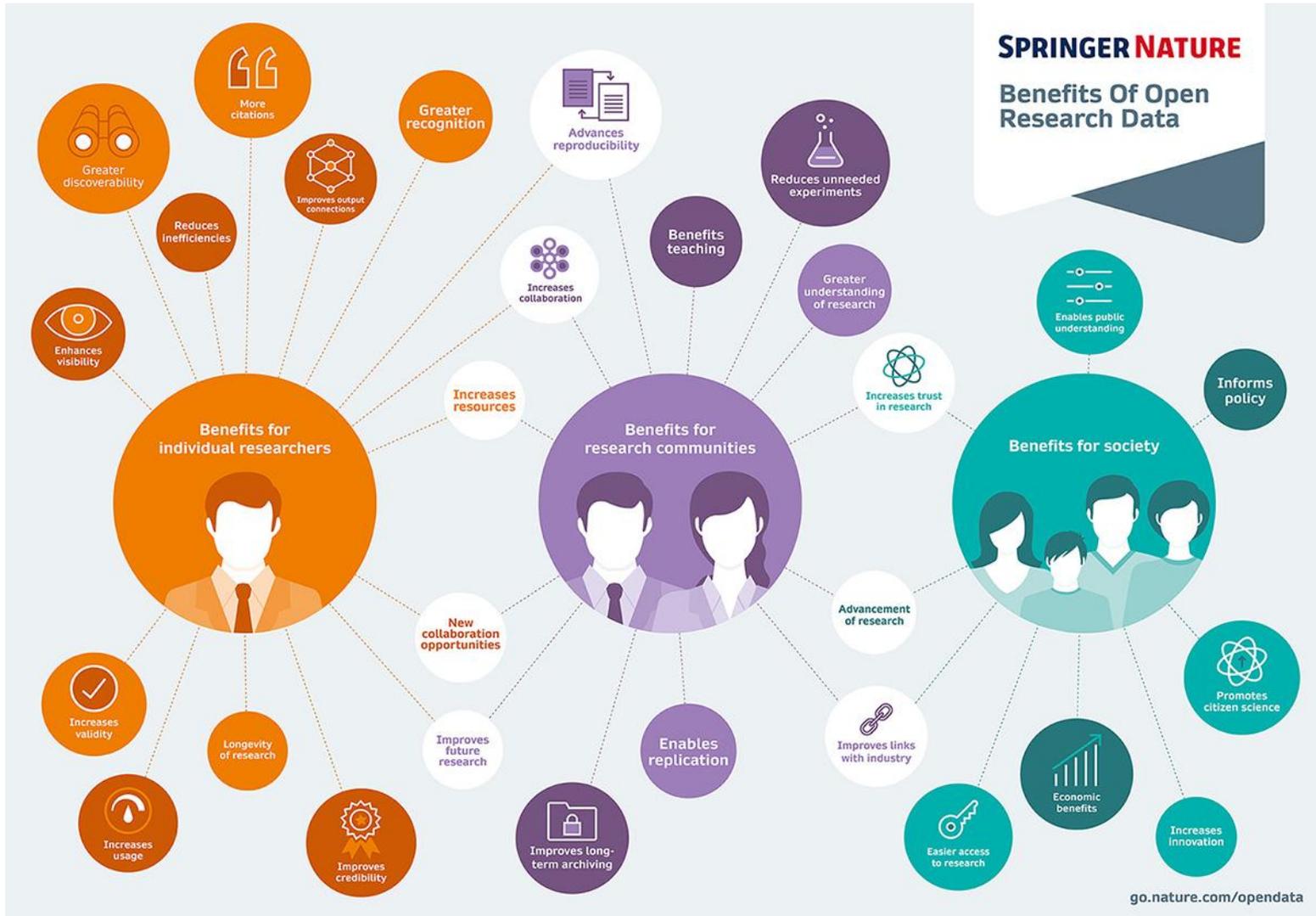
Lindsay Ramage – RIO, Leader of Research Information Management
Lyn Gibson – IS, Repository support



Intro to session

- Why make research data open?
- What is research data?
- What data should/should not be open?
- How do I make data open?
- How do I protect my data
- Open Licences

Why open research data?



What is data?

“A reinterpretable representation of information in a formalized manner suitable for communication, interpretation, or processing.”

Digital Curation Centre



What data is generated in research at this University?

EC definition: 'Research data' refers to any information, including facts or numbers collected to be examined and considered for a basis for reasoning, discussion or calculation



In groups/pairs discuss what research data you generate based on DCC and EC definitions— 3-5 mins

Record on post-its/ flipcharts

Research data types:

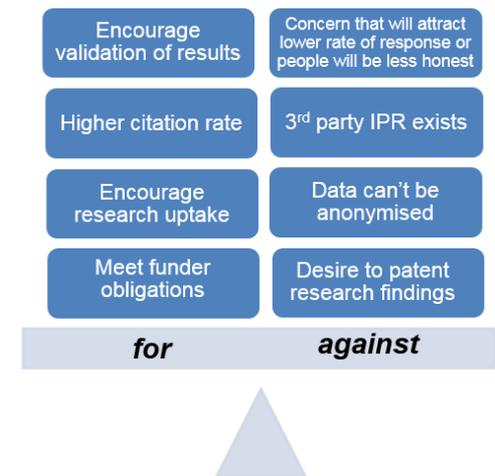
Statistics, experimental results, measurements, observations, survey results, **interview recordings**, **interview transcripts**, **images**, datasets, **databases**, **diaries**, field notes, **software**, **video**, **audio**, Text documents, secondary data (e.g. household survey data), **Simulation data & models**, biological slides, **artefacts**, specimens, biological samples, sketches, lab books, **social media data**, **methodology/protocols**

What do you need to consider before making research data open?

- Legal requirements – data protection, Intellectual Property ownership
- Funder T&Cs and policies
- University policies and requirements – data management, Open Access, IP, ethics

What is the purpose of your research:

- Do you want to publish?
- Can this be commercially exploited?



Protecting your data

- Cannot be made available – must have justification eg,
 - Ethics/consent; cant anonymise participants, danger to others
 - IP; don't own or want to protect to exploit later
- Open access
 - Unrestricted fully open – use as you want
 - Protected by open data licence – determine how used, attribution
- Commercial and legal protection
 - Commercial licence
 - Patent
 - Copyright <http://www.copyrighthub.org/copyright-resources/>

Commercial and legal protection at Napier

- 1st point of contact Business Engagement team
 - Assess if data can meet criteria for protection
 - Liaise with you and university lawyers

NHS
National Institute for
Health Research

TELL US ABOUT YOUR...
Intellectual property

THINGS TO THINK ABOUT ▾

 <p>Biological samples, cell lines or assays ▶ Research methods + tools</p>	 <p>Diagnostic tools, devices and interventions ▶ Medical Products, Interventions + Clinical Trials</p>
 <p>Assessment tools or outcome measures ▶ Research methods + tools</p>	 <p>Questionnaires, training materials and tools ▶ Intellectual property + licencing as 'copyright'</p>
 <p>Creation of data sets, databases and analysis techniques ▶ Research database + models</p>	 <p>Patents ▶ Intellectual property + licencing</p>
 <p>Web applications and software ▶ Software + Technical products</p>	 <p>Business and enterprise ▶ Spin outs</p>

For more help with your Researchfish reporting visit
www.nihr.ac.uk/researchfish

NIHR Researchfish submission opens from





Open Access Publishing

The University and research funders and REF require research publications to be open access. This can be in fully OA journals or by deposit in the repository.

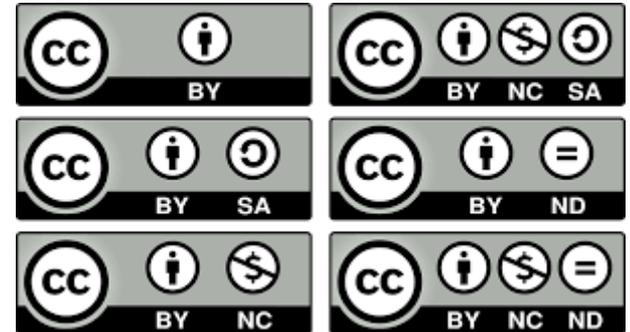
Publishers may require the research data or the publication itself to be under open licence (normally published version is copyrighted by publisher).

You need to be aware of how your data will be used/available once published.

Creative Commons Licences

Most Commonly used Creative Commons licences in Open Access Publishing

- **CC-BY 4.0** – you must cite the original
- **CC-BY-NC-ND 4.0** as above but with restrictions -
 - **NonCommercial** — You may not use the material for commercial purposes.
 - **NoDerivatives** — If you remix, transform, or build upon the material, you may not distribute the modified material





Where to find more information

- Creative Commons webpages
 - <https://wiki.creativecommons.org/images/6/6d/6licenses-flat.pdf>
- Sherpa Juliet: Funder policies about publications
 - <http://v2.sherpa.ac.uk/juliet/>
- Sherpa Romeo: Individual Journal Policies
 - <http://www.sherpa.ac.uk/romeo/index.php>
- Open Access blog: Information about open access publishing - <http://blogs.napier.ac.uk/open-access/>



Types of open data licence

- Creative commons
 - <https://creativecommons.org/share-your-work/licensing-considerations/>
- Open government licence
 - <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>
- Open source licence
 - <https://opensource.org/licenses>



- Review licence details – on handout/ poster
- Capture pros/cons for sharer and user on post-its & flip charts
- 20mins

- Collect feedback from groups and discuss

CREATIVE COMMONS LICENSES

 COPY & PUBLISH
 ATTRIBUTION REQUIRED
 COMMERCIAL USE
 MODIFY & ADAPT
 CHANGE LICENSE

License	Copy & Publish	Attribution Required	Commercial Use	Modify & Adapt	Change License
 PUBLIC DOMAIN	✓	✗	✓	✓	✓
 CC BY	✓	✓	✓	✓	✓
 CC BY-SA	✓	✓	✓	✓	✗
 CC BY-ND	✓	✓	✓	✗	✓
 CC BY-NC	✓	✓	✗	✓	✓
 CC BY-NC-SA	✓	✓	✗	✓	✗
 CC BY-NC-ND	✓	✓	✗	✗	✓

 You can redistribute (copy, publish, display, communicate, etc.)

 You have to attribute the original work

 You can use the work commercially

 You can modify and adapt the original work

 You can choose license type for your adaptations of the work.

Thoughts on Licences - 1

	ECO Creator	User
Benefits	GETTING DATA OUT INTO WORLD DELEGATE ANALYSIS TO OTHERS IF LARGE AMOUNTS OF DATA	GIVES ACCESS TO DATA NOT OTHERWISE HAVE AVOIDS DUPLICATION OF DATA - NO NEED FOR REPLICATION ESPECIALLY IN CERTAIN CIRCUMSTANCES
Negatives	GENERATE / INSPIRE OTHER RESEARCH LACK OF ATTRIBUTION	IS IT 'ROBUST' DATA? RELIABLE

	CC-BY Creator	User
Benefits	Reach wider audience Contacts. Advertising Financial incentive Re-use of data / Salami slice	Inspiration
Negatives	Use of material/ideas for better financial or commercial gain Misinterpretation of data / Wrong contact	acknowledge source
Use		

Thoughts on Licences - ?

	CC-BY-NC-ND	
	creator	user
Benefits	Reputation Protect work profits	Accessibility
negatives	Limiting the use	(cannot Resale new findings (better method)
uses.		Knowledge about what is going on

CC-BY-SA

	PRO	CONS
SHARER:	EASY TO SHARE	CAN'T EXPLOIT COMMERCIALY
	GUARANTEES A RESEARCHER GETS CREDIT	

	OGL	
	creator	user
Benefits	VISIBILITY and EXPOSURE Recognition for future work.	Easy to find
negatives	may not be entitled to profit from reuse Misinterpreted + used to push another agenda	questions about quality control
use	Not much control Over use/reuse	