



# Research Data Management Survey, Concordia University

*Concordia University Library's 15th Annual Research Forum*

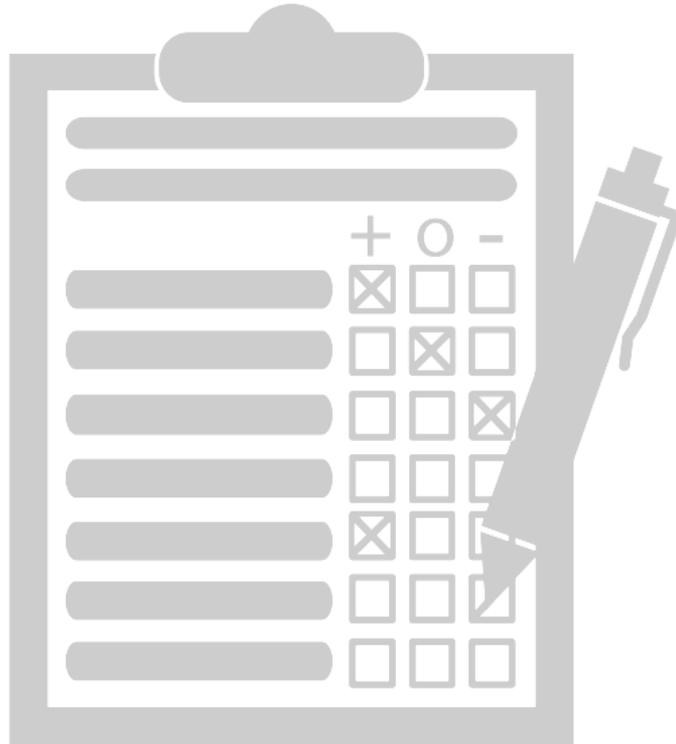
April 28, 2017

Alex Guindon & Danielle Dennie

# Overview of the project

- Study of RDM practices and needs of Concordia's researchers
- Consisted of an online survey followed by in-person interviews
- Conducted in the fall of 2015 and winter of 2016
- Follow up to a smaller scale study done in 2013
- Why this study?
  - development of RDM services
  - raise awareness of local stakeholders
  - getting ready for the upcoming Tri-Agency policies

# Survey



Annette Spithoven, the Noun Project

# Survey methodology

## Population:

all full-time faculty except for 3 social sciences departments already surveyed in 2013

## Response rate:

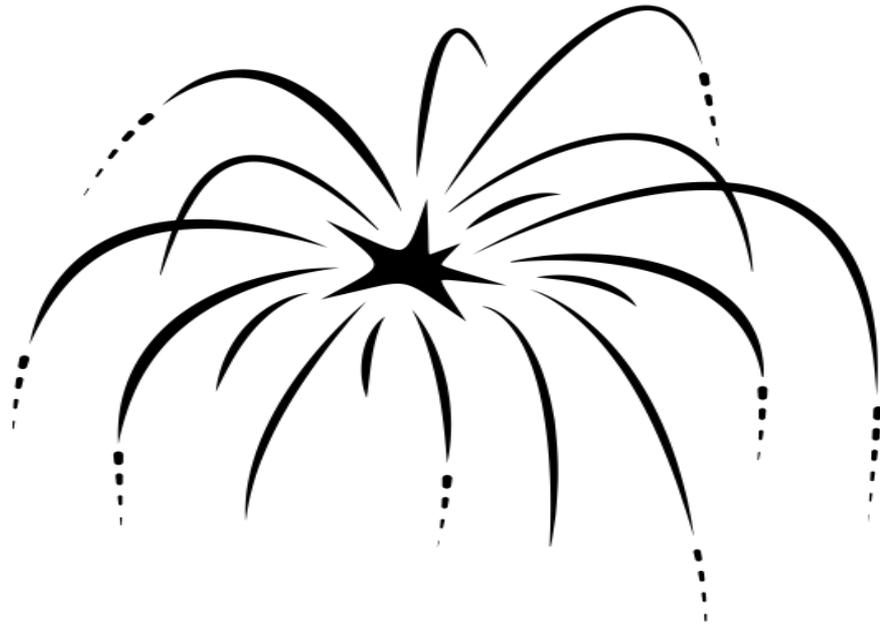
- Global rate is 19% (132 respondents out of 696 contacted)
- Response rate varies for each question

**NOTE:** Multiple answers were allowed (total > 100%)

# Survey topics

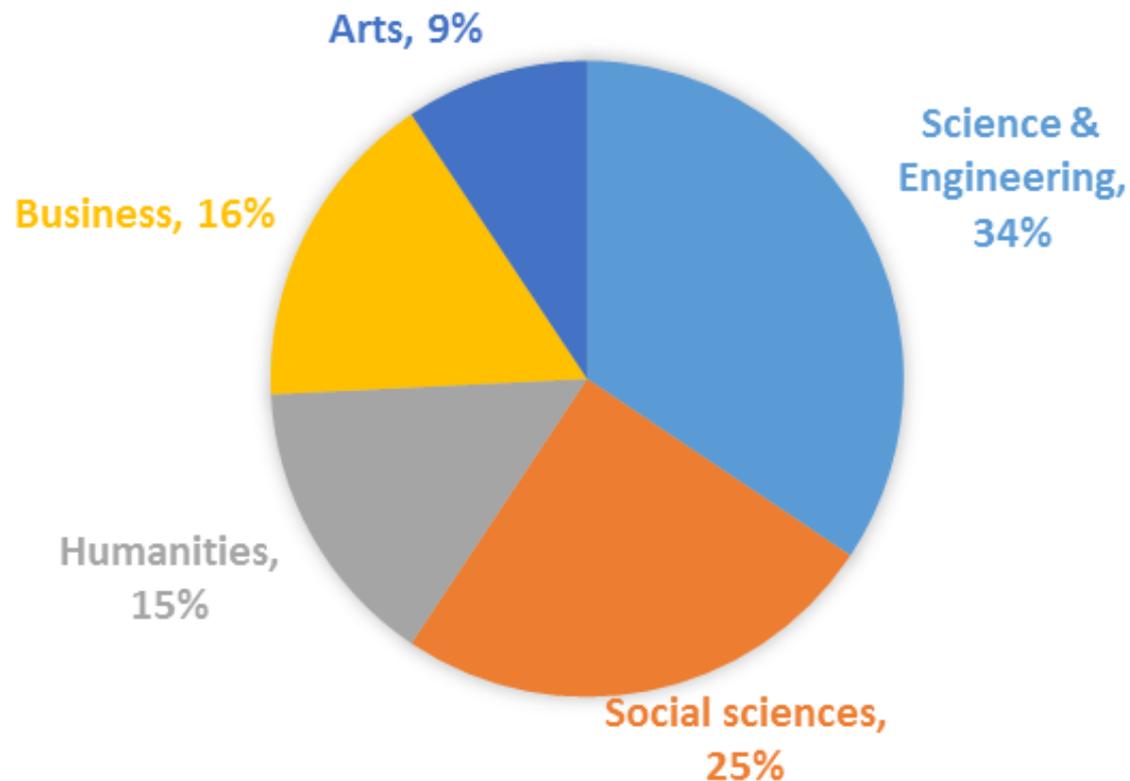
- Data collection and curation
- Data management
- Working with data: statistics, programming, & visualization
- Data workshops and assistance

# Survey highlights

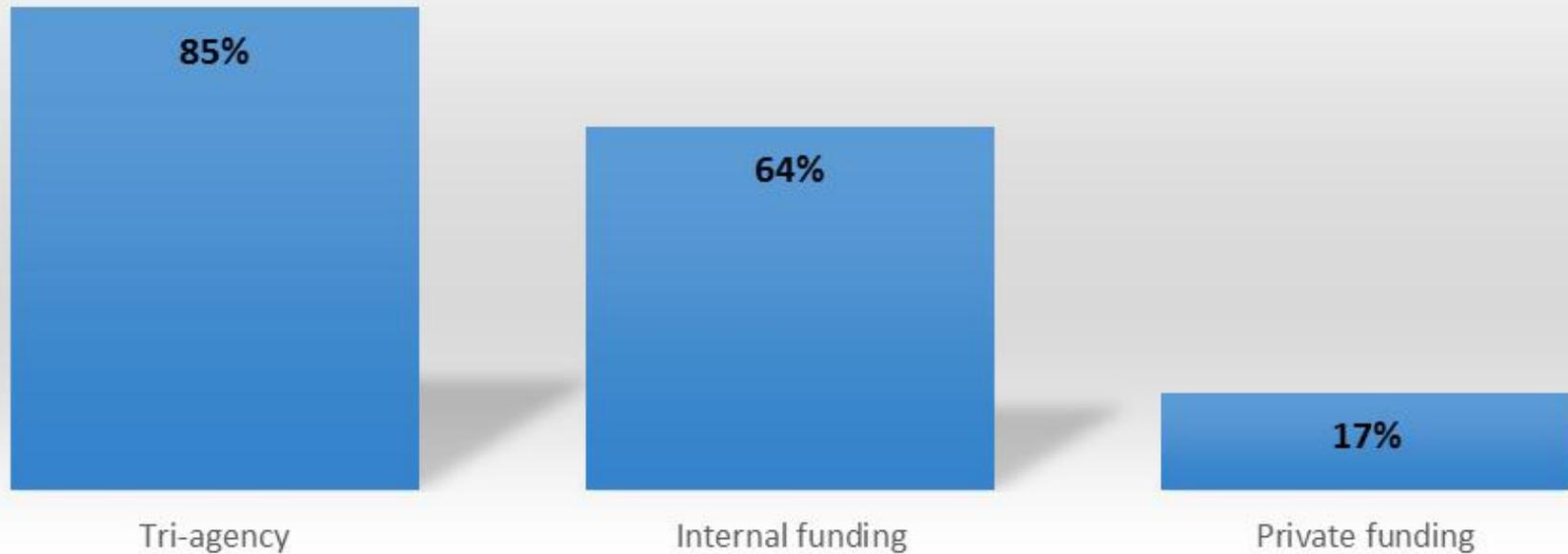


Created by Tracy Hudak  
from Noun Project

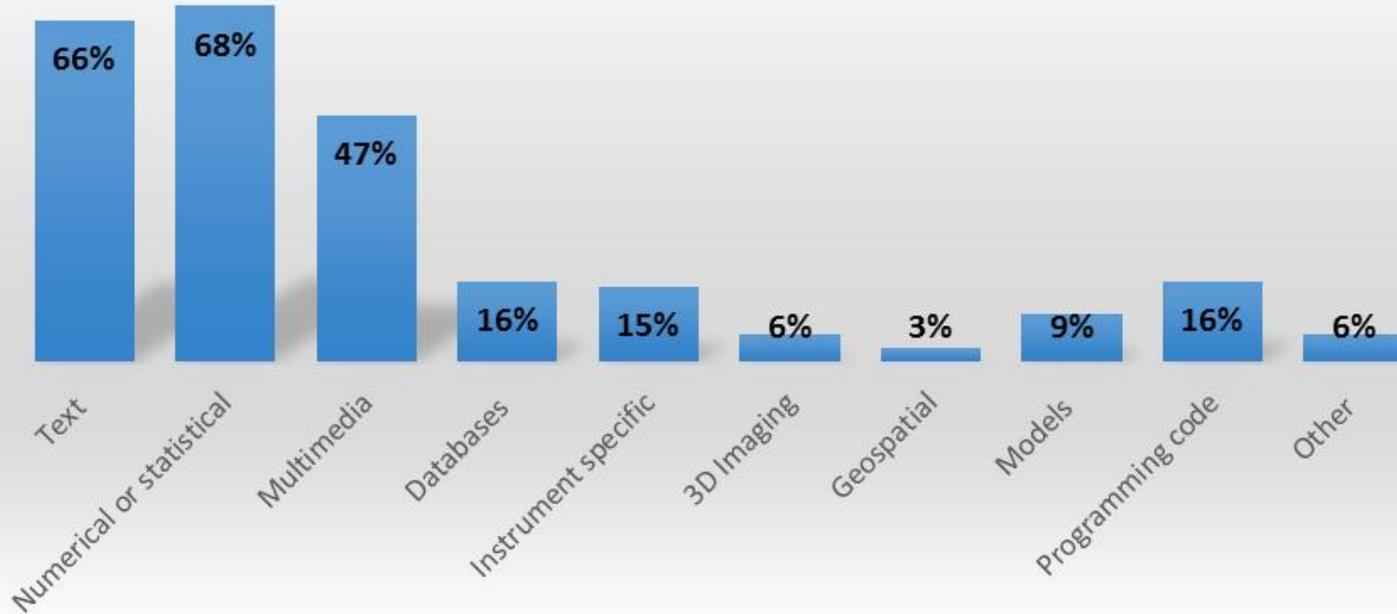
## SURVEY SAMPLE BY DISCIPLINE



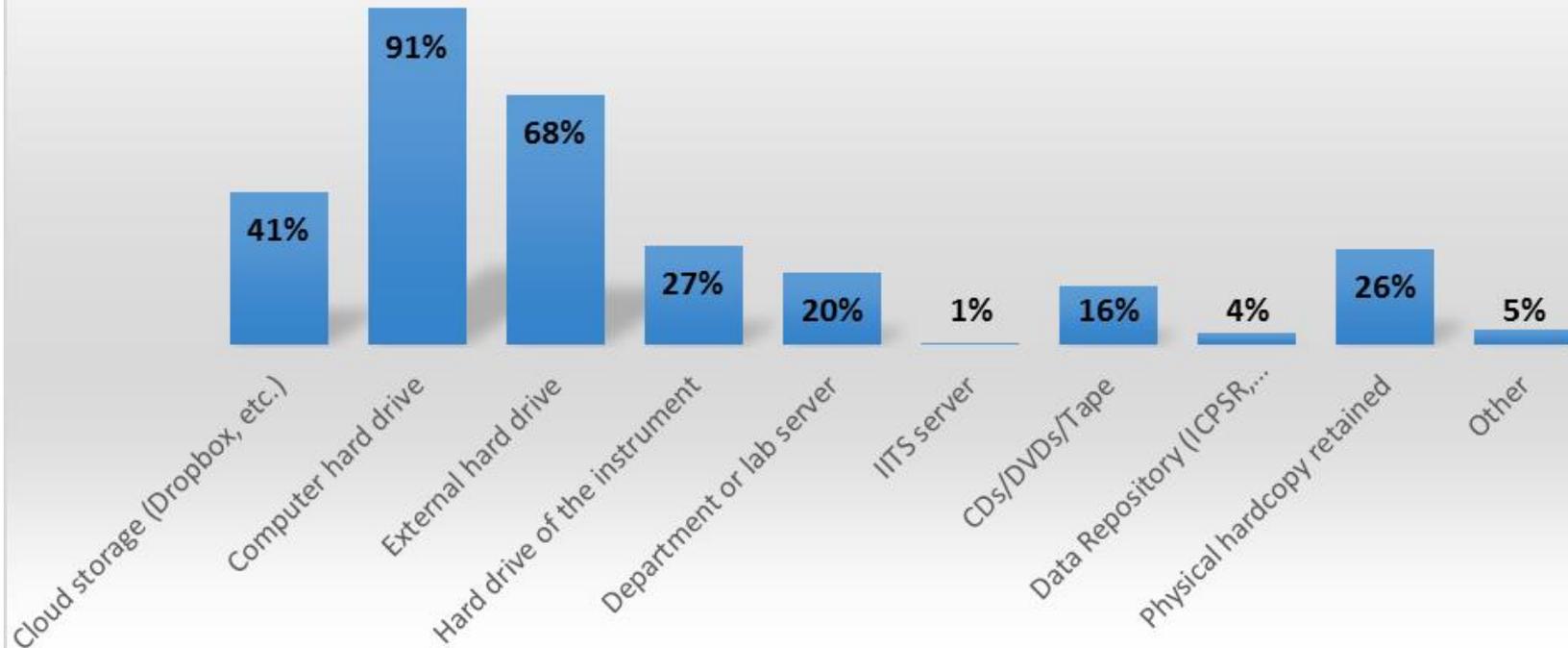
## Tri-agency, internal and private funding (% of respondents)



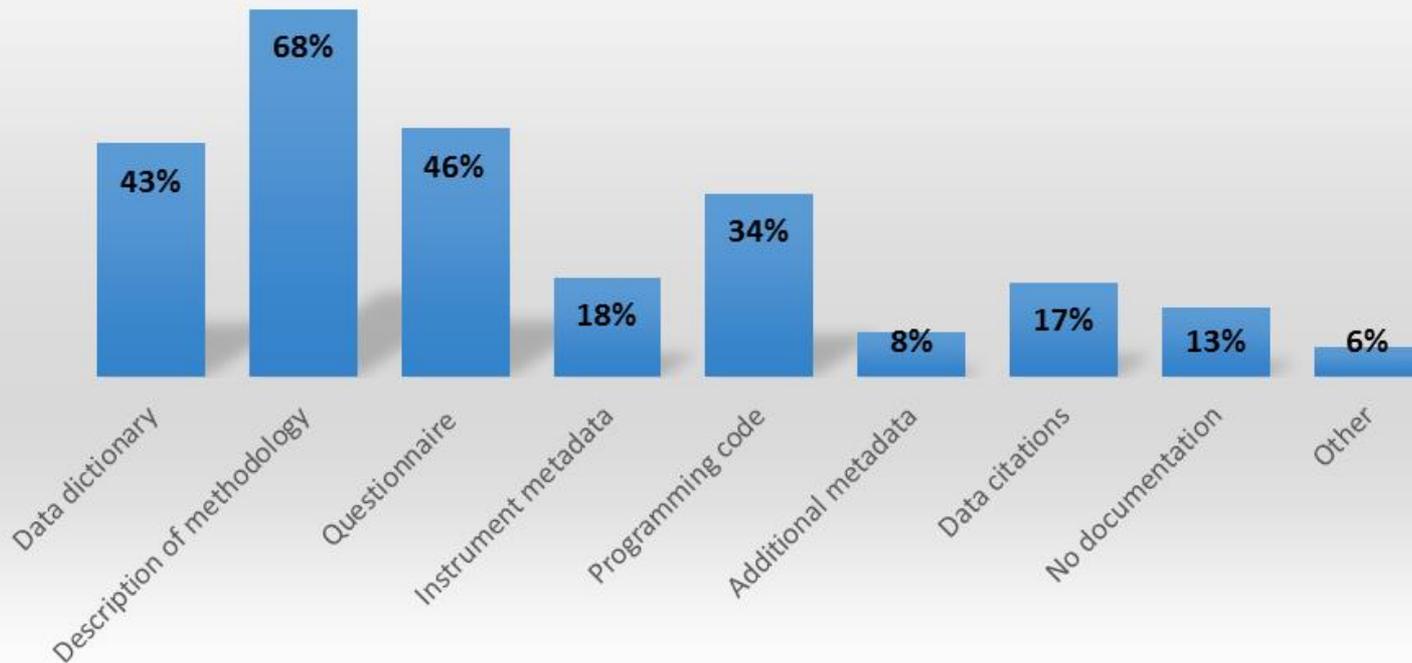
## What type of data was collected or created for this specific project?



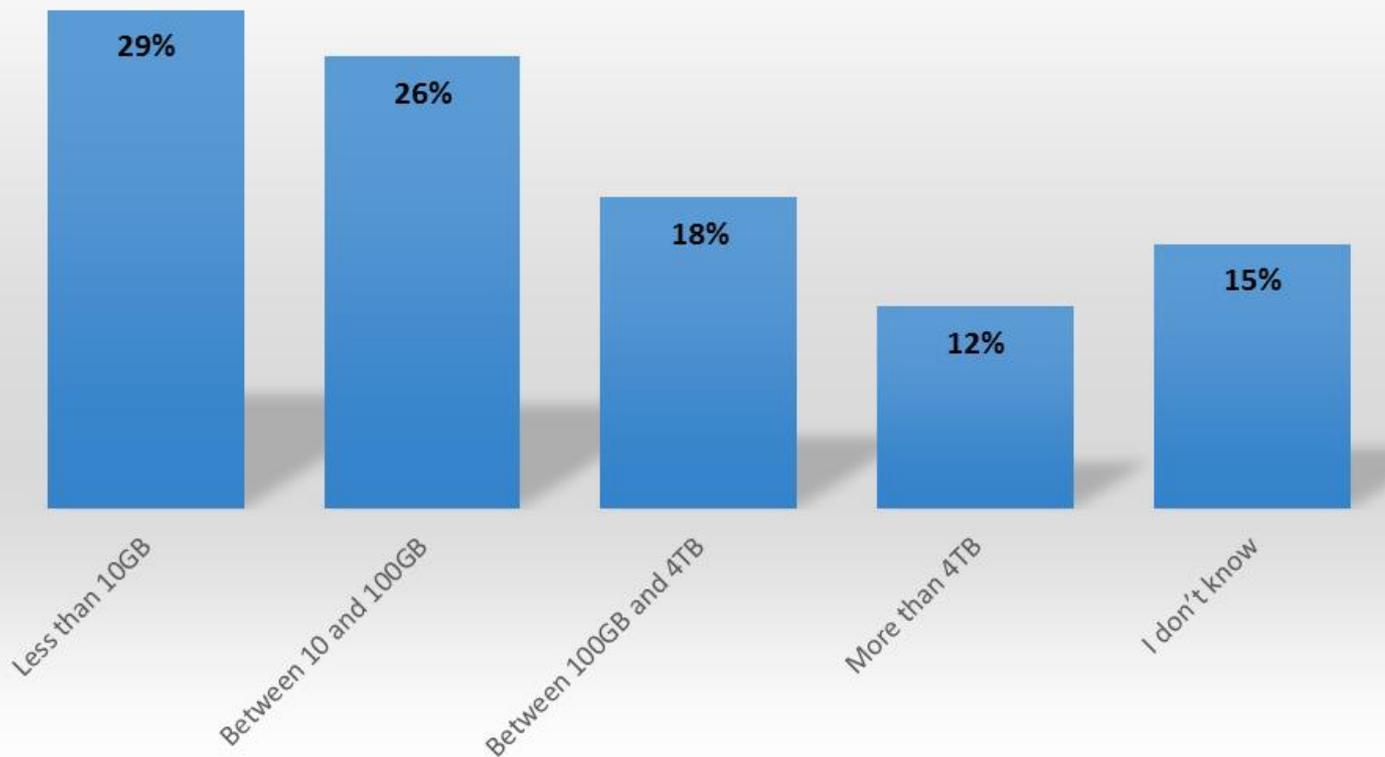
# DURING the research project and data collection, where do you store your working dataset/electronic files?



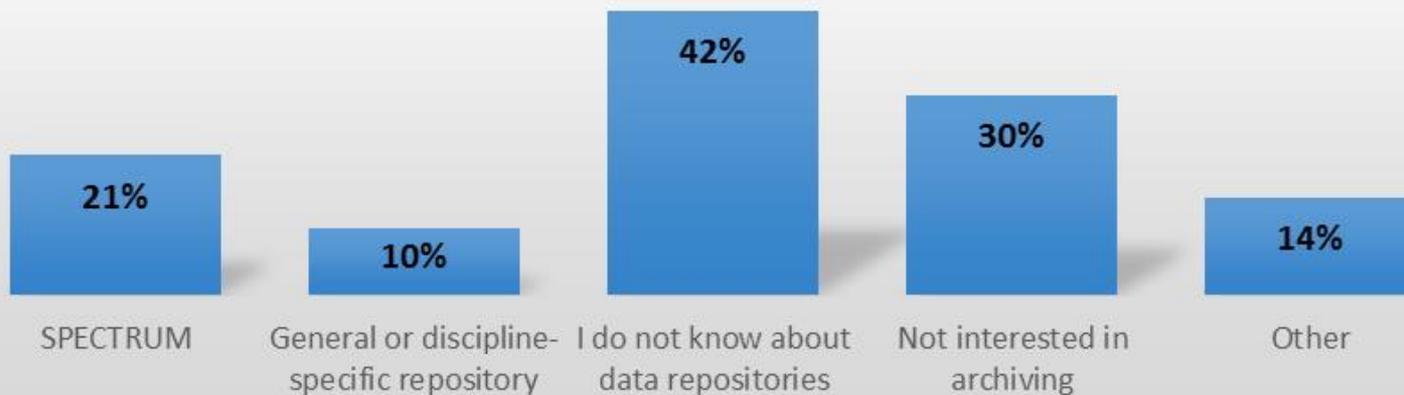
## What type of supporting documentation do you keep on your data?



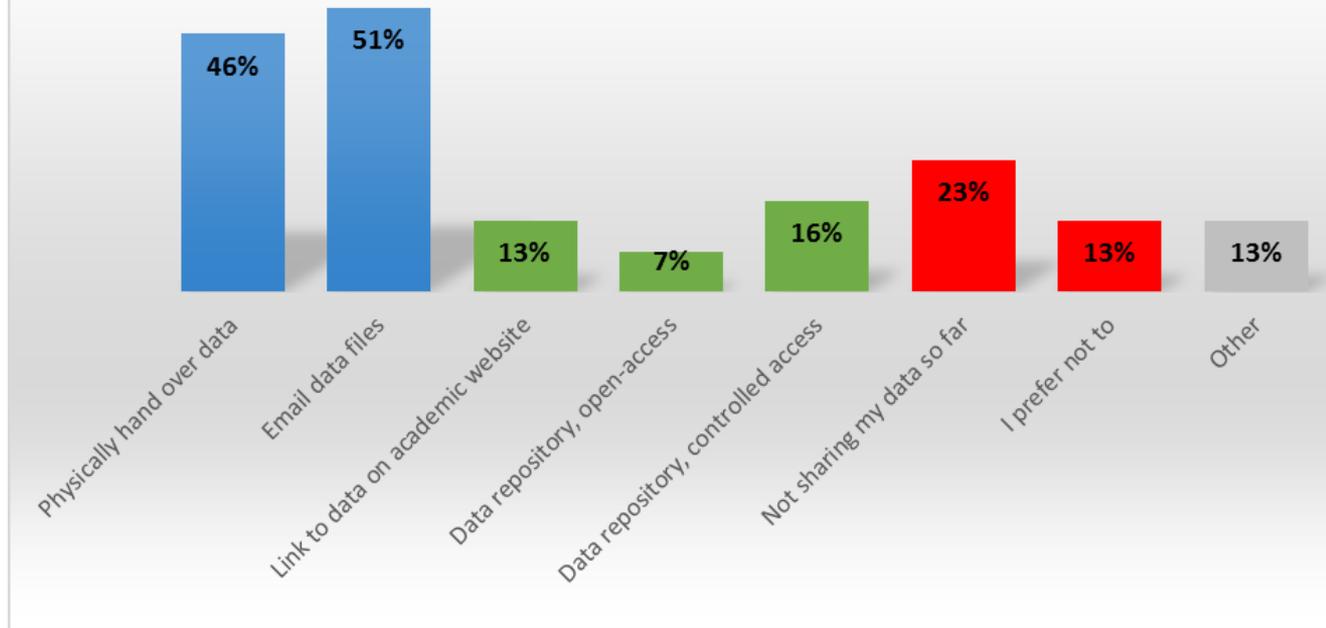
## What is the approximate total size of this dataset?



After your research project is completed in what data repository would you consider archiving this dataset?



## How do you share your research data with others?



- Shares data manually
- Shares data through data repository or website
- Currently does not share data

# Interest in data management assistance or training at Concordia

| Workshop/Resource  | Very interested | Somewhat interested | Total interested | Not interested |
|--|-----------------|---------------------|------------------|----------------|
| Data management activities that will be required by grant funding agencies   | 43%             | 34%                 | 77%              | 15%            |
| Data management plan   | 30%             | 42%                 | 72%              | 21%            |
| Research collaboration software tools  | 29%             | 39%                 | 69%              | 25%            |
| Finding and accessing existing data sources                                  | 29%             | 34%                 | 63%              | 23%            |
| Data archiving   | 27%             | 43%                 | 69%              | 22%            |
| Data visualization   | 27%             | 44%                 | 71%              | 22%            |
| Digitization of paper records  | 27%             | 39%                 | 65%              | 26%            |
| Data sharing and access  | 23%             | 40%                 | 63%              | 30%            |
| Help in ensuring the confidentiality/anonymity of data on human participants | 21%             | 28%                 | 49%              | 29%            |
| Data management workshop   | 19%             | 49%                 | 68%              | 25%            |
| Data documentation and metadata  | 18%             | 38%                 | 56%              | 33%            |

# Interviews



Gan Khoon Lay, the Noun Project

# Interviews - Methodology

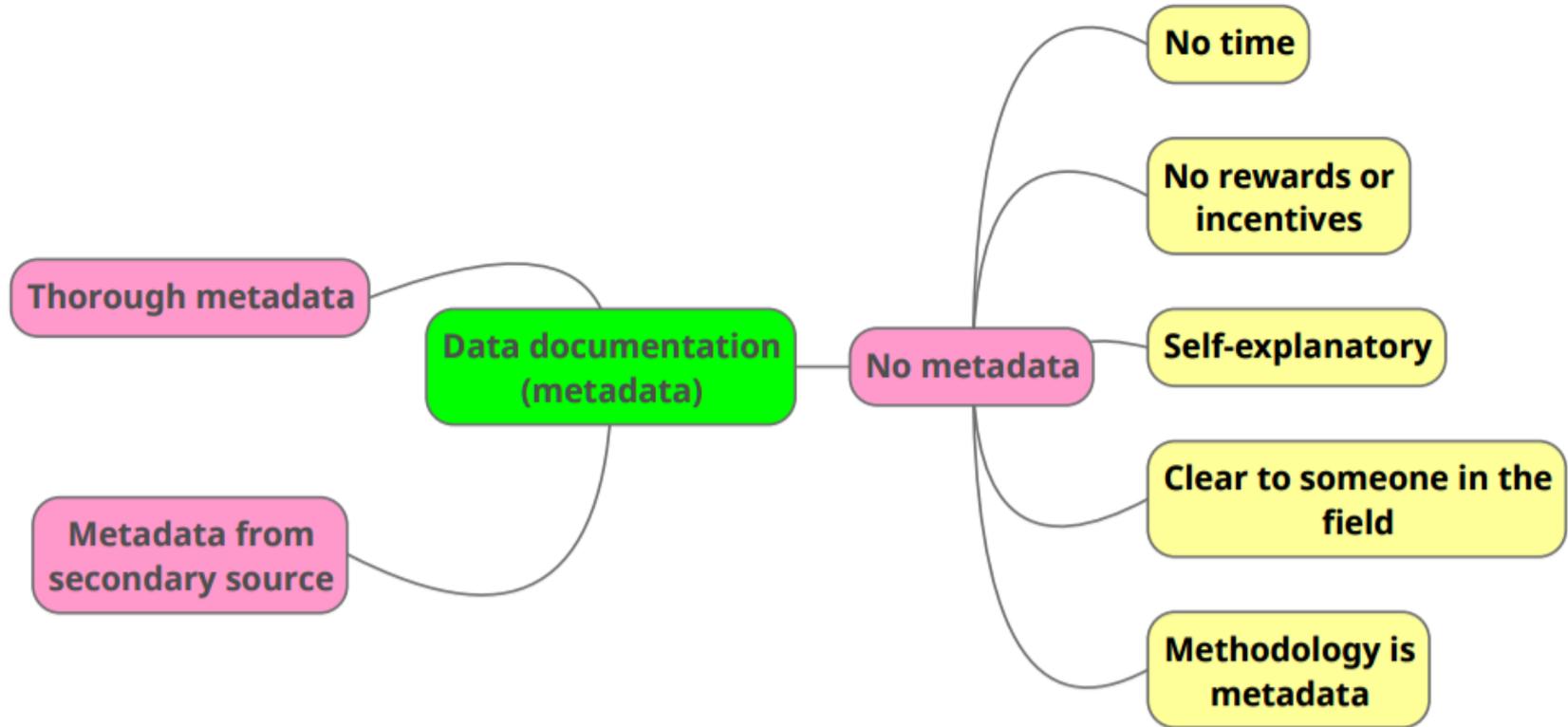
- Interview content adapted from:
  - McGowan, T. & Gibbs, T. A. (2009). ***Southampton Data Survey: Our Experiences & Lessons Learned*** [unpublished]. University of Southampton: UK.
- Descriptive and focused coding based on:
  - Saldaña, J. (2009) ***Coding Manual for qualitative researchers***. Los Angeles, CA: Sage.

# Interviews - Methodology

## Participants

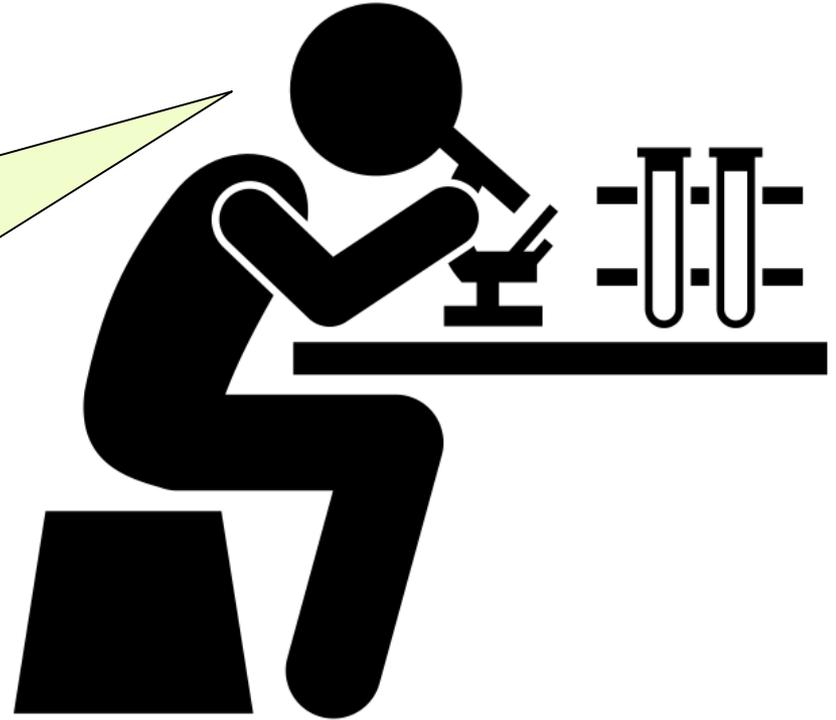
| Disciplines | Departments                                 |   |
|-------------|---|---|
| Engineering | Building, Civil & Environmental Engineering | Computer science                              |
| Science     | Physics                                     | Exercise science                              |
| Business    | Management                                  | Supply Chain & Business Technology Management |
| Humanities  | Communication studies                       | Études françaises                             |
| Fine Arts   | Studio arts                                 | Design & Computation Arts                     |

# Interviews – Results



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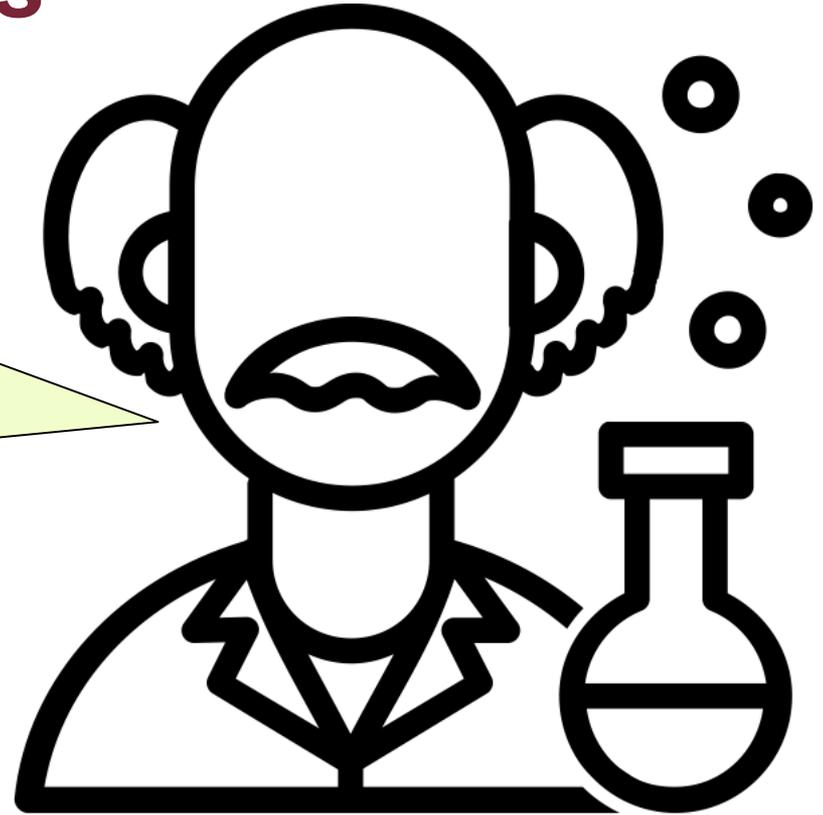
“documentation is gonna be (...) extra work for me and my team. And so, (...) I’m not really sure if you want to go that way because I prefer students to do scientific work and publish papers then, you know, be data managers.”



Gan Khoon Lay, the Noun Project

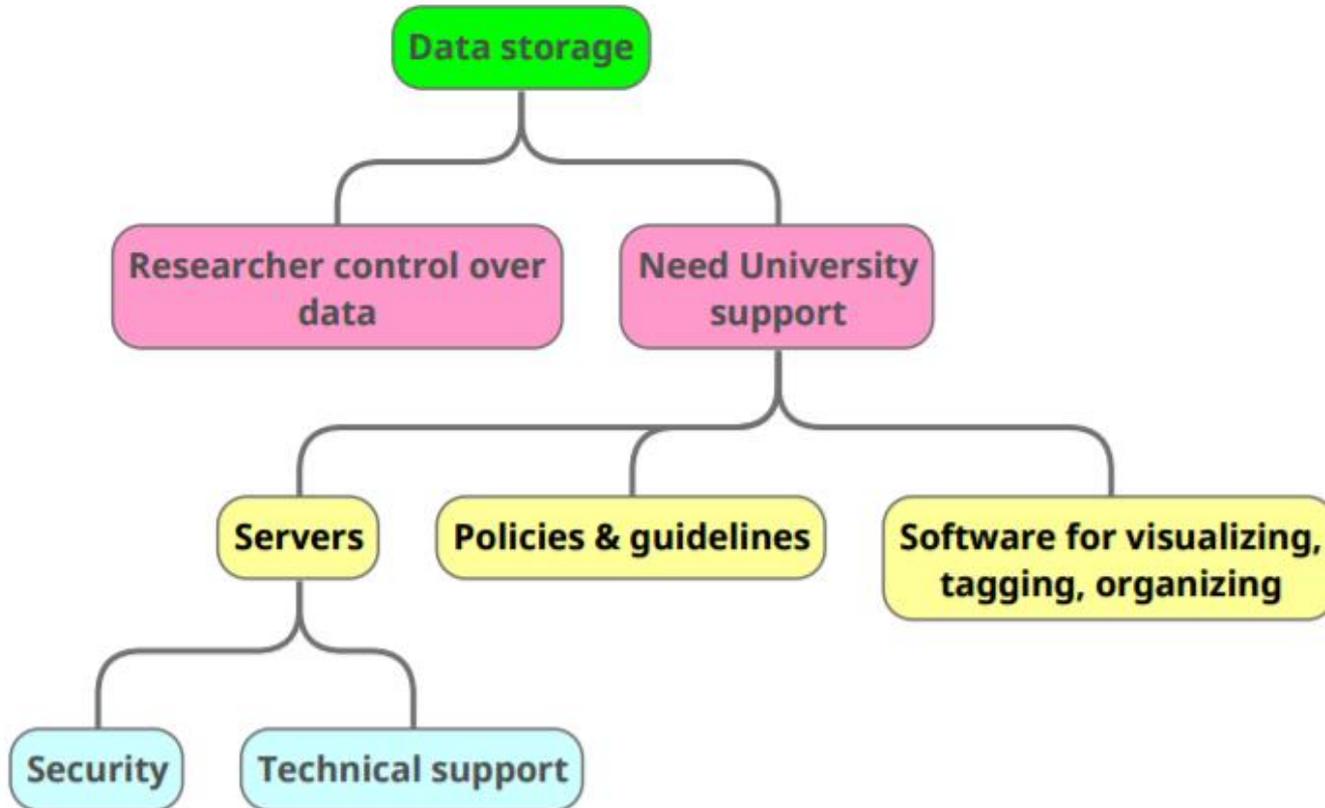
# Interviews – Results

“If there was acknowledgement of sustainability and there were rewards for that, that would be fantastic. There’s more rewards for bringing new stuff in then there is rewards for careful preservation. And that’s my observation from 25 years here.”



Chameleon Design, the Noun Project

# Interviews – Results



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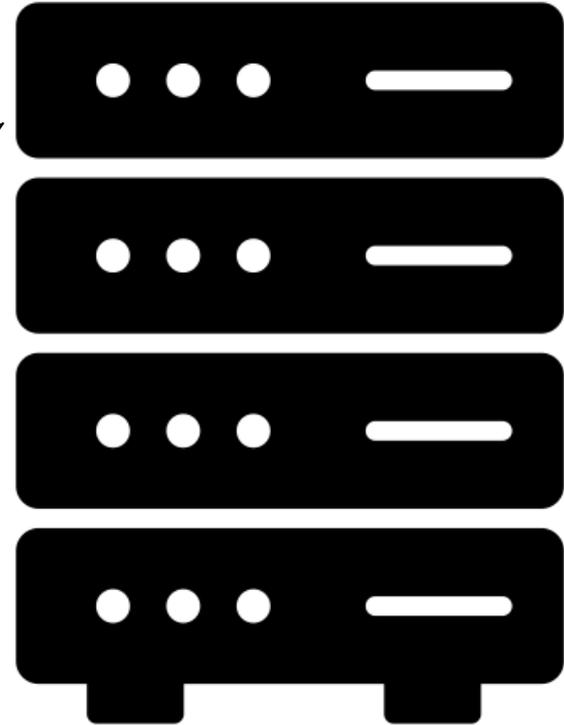
“We need an institution server (...). [W]e should have secured access with secured account for each research team, for each lab. (...) [T]here should be a flexibility [to accommodate] people with space needs. [We] need (...) a technical team supporting this server (...) someone to (...) check that there is enough available space, see if there’s problems, to fix the problem, to manage the access, the accounts, the codes, and make sure [it is] regularly backed up and whether there should be some (...) duplicate somewhere, to make sure everything’s safe.”



Pravin Unagar, the Noun Project

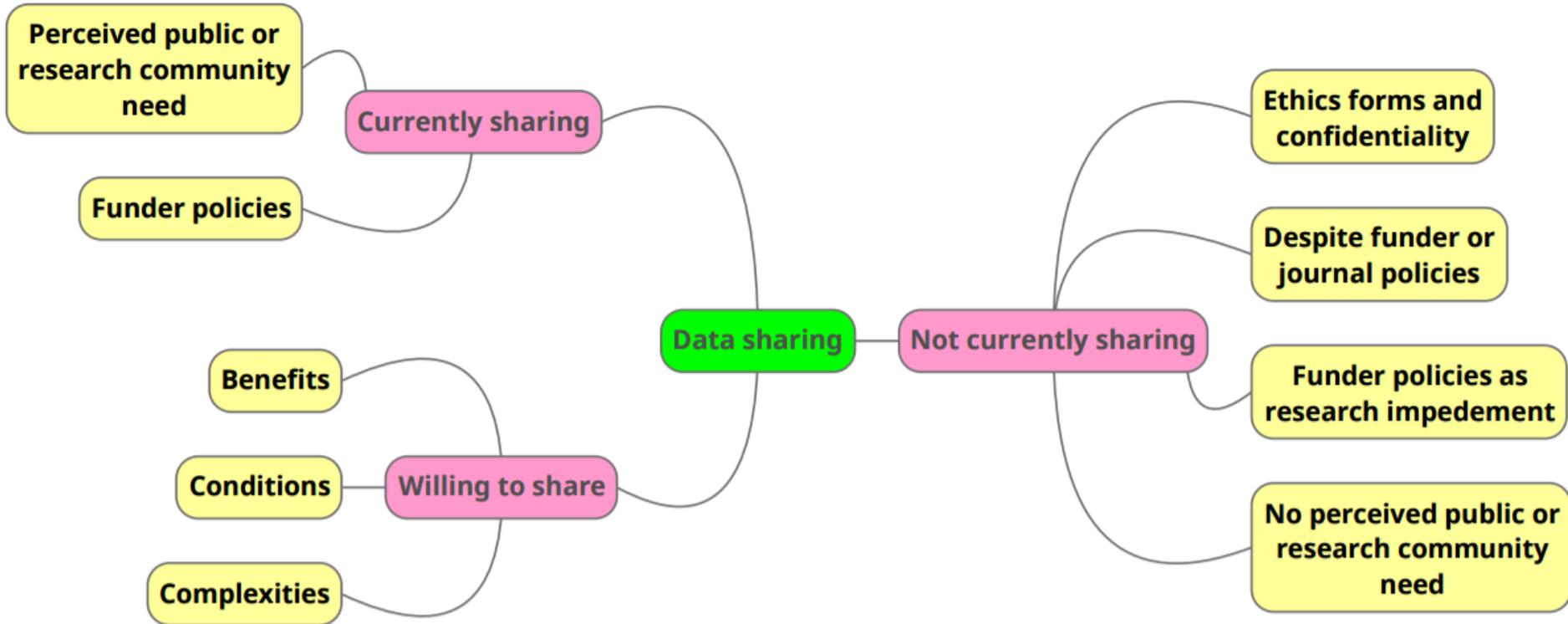
# Interviews – Results

“Ça c’est une des raisons pour lesquelles le labo avait ses propres serveurs, c’est que on s’inquiétait un peu des délais pour pouvoir régler les problèmes et (...) des délais pour régler les problèmes (...) ça entrave les recherches, ça retarde les recherches et tout, donc, on veut le contrôle, (..) sur nos archives.”



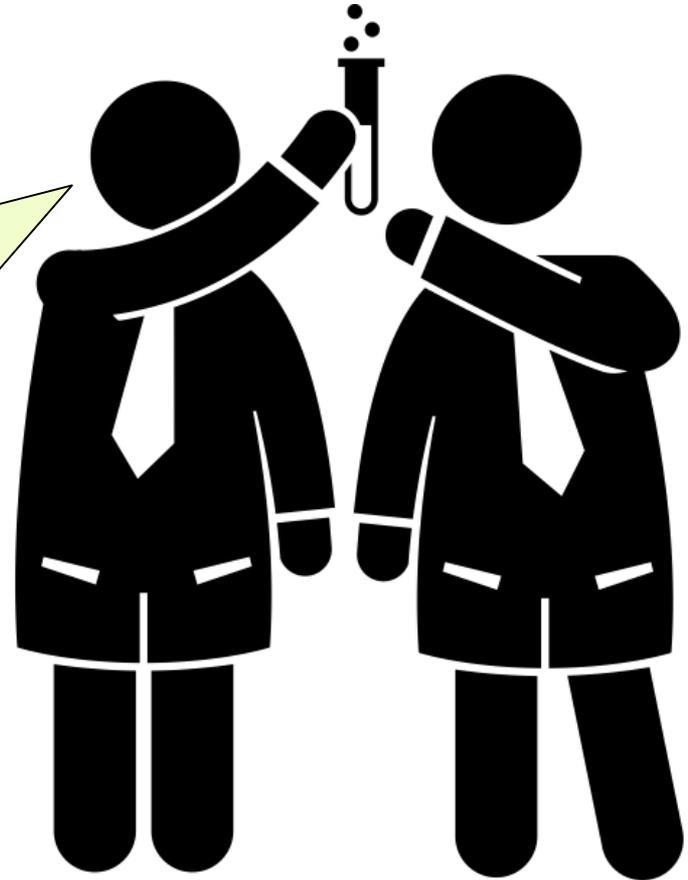
IconDots, the Noun Project

# Interviews – Results



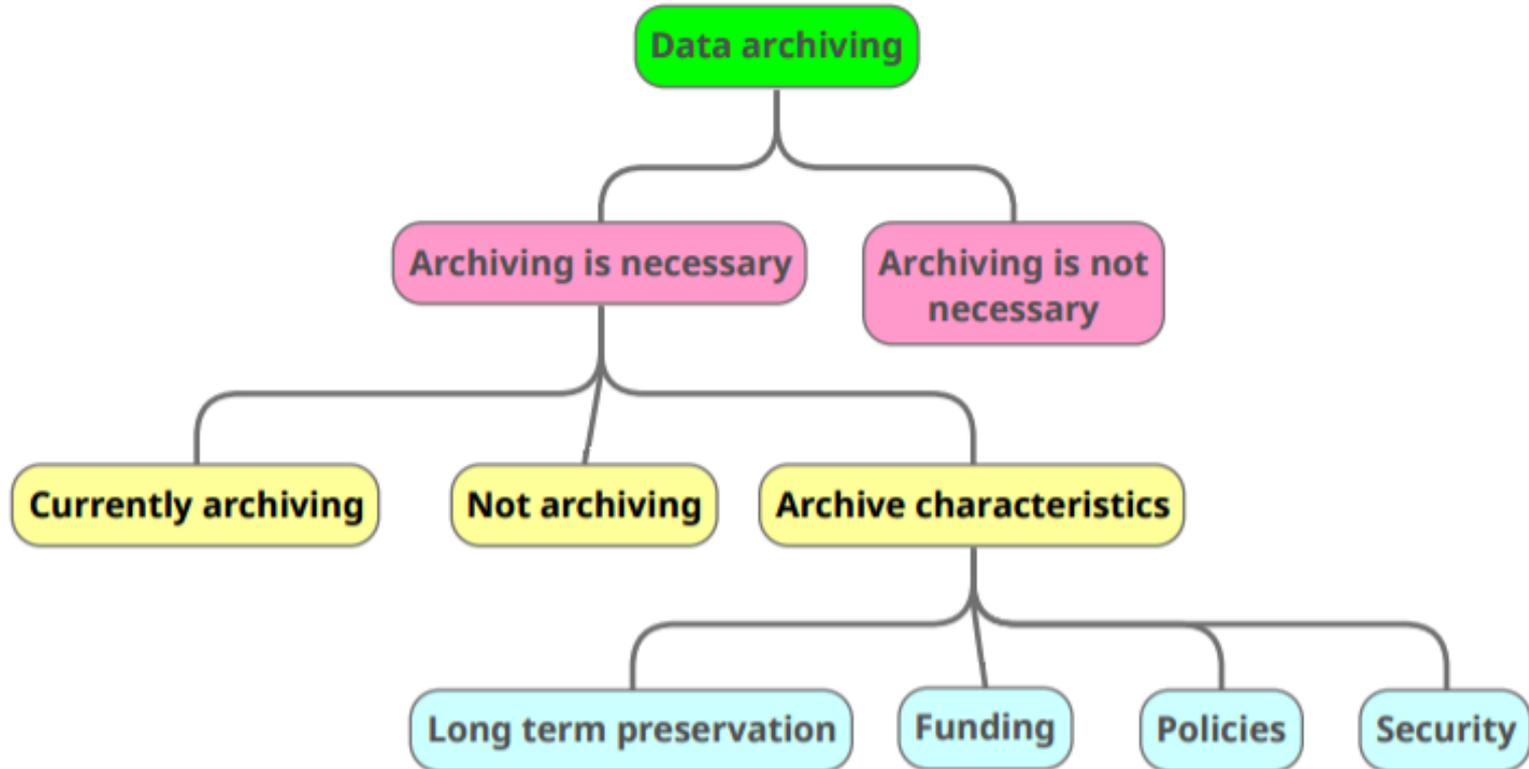
# Interviews – Results

“get[ting] citations (...) is (...) how my university recognizes the value of what I’ve done. (...) I realize that if your article is valuable, people might cite it, but a lot of the time, the most valuable thing about an article is the data that was collected.”



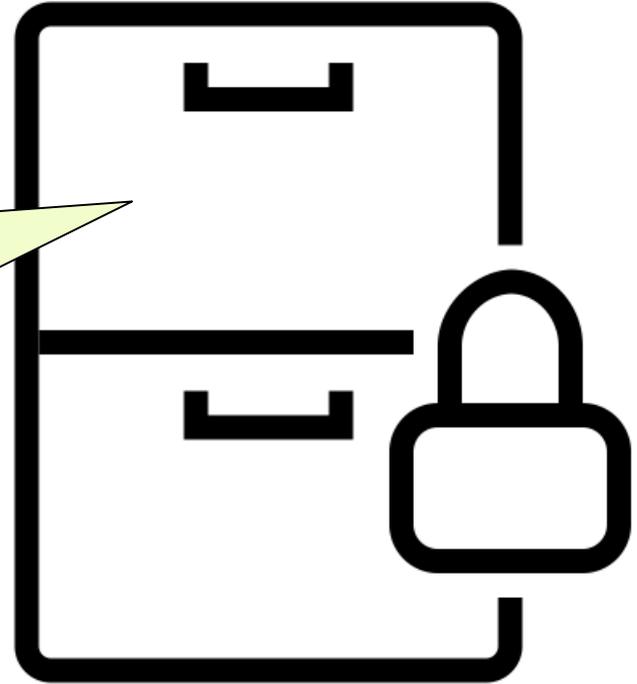
Gan Khoon Lay, the Noun Project

# Interviews – Results



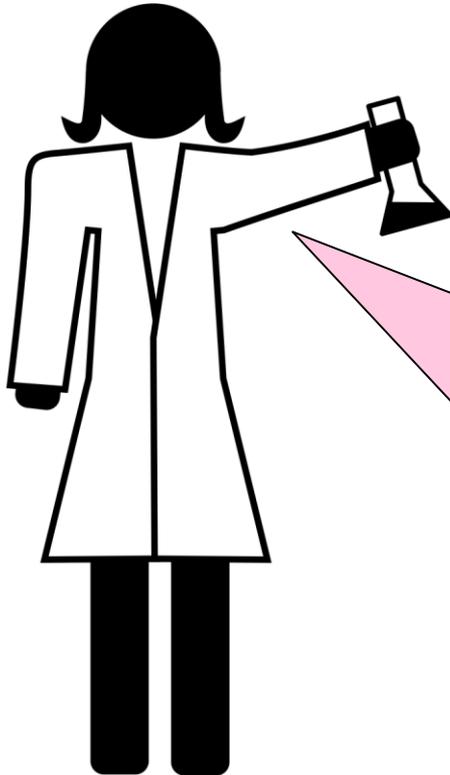
# Interviews – Results

“ “[T]he funding doesn’t work that way. [They] pay you to do the project, and once the project’s over, [y]ou [get] zero support. And if the data is still there when someone starts up the machine the next time, good, (...).”



BraveBros, the Noun Project

# Interviews – Results



Noun Project

## Data workshops

“[A]s a researcher that really cares about data, I just feel like all of this is absolutely key, but I don’t know when I’d have the time to do it. That’s why I think this needs to be a boot camp, or it needs to be a one week course. I think that if it was presented (...) in the kind of right way, even giving people a certificate at the end of it so that they can say they have (...) completed a course in data management would be really good for somebody’s CV even, making it so that [there is] official acknowledgement of certain kind of skill acquisition.”

# Conclusions

- Comparison with results from the common Canadian RDM survey shows that our results are consistent with those from other universities
- Researchers are aware of the benefits of RDM
- There is also some willingness to adopt good RDM practices and to share their data, but also some serious hurdles:
  - the lack of academic incentive for managing and sharing data;
  - the scarcity of necessary resources –both human and technological— necessary to curate their datasets;
  - the difficulty of dealing with confidentiality and ethics issues;
  - the desire, for some researchers, to keep a level of control on who will be using their data and for what purposes

# Conclusions (continued)

Upcoming data management requirement from the Tri-Agency should be a turning point

- **more than 75%** of respondents that mention are interested in attending workshops on data activities funded by funding agencies.
- Incentives and resources should be made available by: funding agencies, universities and academic libraries



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