

Welcome to the Life Science DMP- workshop on Zoom



Turn your video on while speaking



Use the chat function for questions



Mute yourself while not speaking



Use the 'hand up' function if you want to contribute directly



Please use the 'rename' function to indicate your department (if you want)



Data Management Plans

and a short introduction to ELIXIR & Digital Life Norway



CENTRE FOR
DIGITAL LIFE
NORWAY

Korbinian Bösl
Data management coordinator
ELIXIR Norway/Digital Life Norway
10th December 2020

Schedule

10.12.2020

0900 - 0915 Introduction

0915 - 0945 Requirements from institutions & funding bodies

0945 - 1015 Information on national and local storage infrastructures

1015 - 1030 Short break

1030 - 1230 Data preservation, archiving and sharing

Schedule

11.12.2020

0900 - 1000 Key legal requirements for research in the GDPR and Health research act

Personal Data Act

Health Research Act

1000 - 1015 Short break

1015 - 1045 Licensing of data, biological material and software

1045 - 1100 Intro Data Steward Wizard

1100 - 1300 Hands on training and assistance to generate a data



ub.uio.no

Elin
Stangeland



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Elin
Stangeland



Lars
Soligard



Gard O Sundby
Thomassen

UiO : USIT



Elin
Stangeland



Lars
Soligard



Gard O Sundby
Thomassen

UiO : USIT



Eszter
Agnes Papp





Elin
Stangeland



Lars
Soligard



Federico
Bianchini



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Gard O Sundby
Thomassen



Korbinian
Bösl

UiO : USIT



Eszter
Agnes Papp



ELIXIR Europe

'Data for Life'

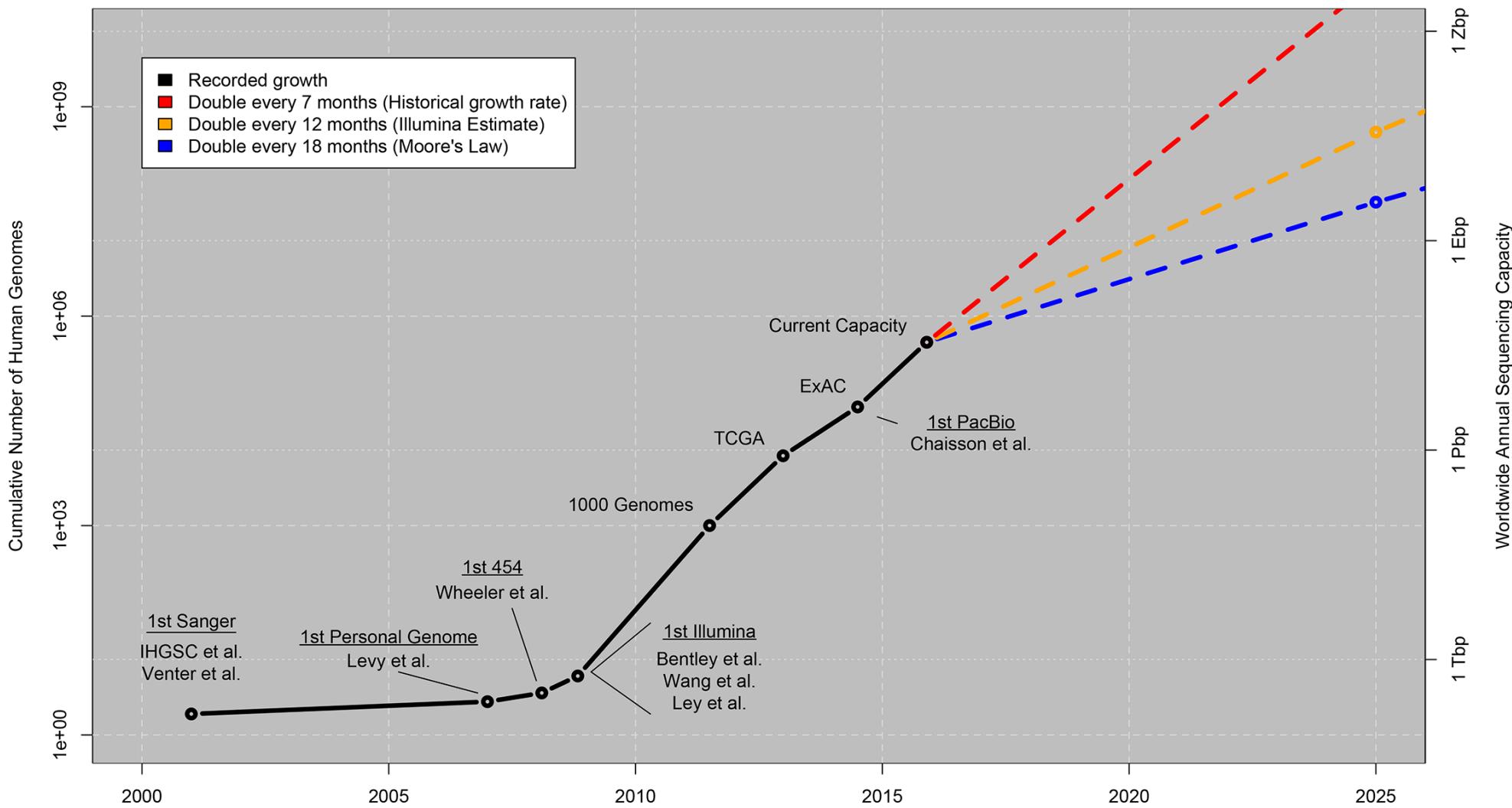
Mission:

To operate a sustainable European infrastructure for biological information, supporting life-science research and its translation to society, the bio-industries, environment and medicine



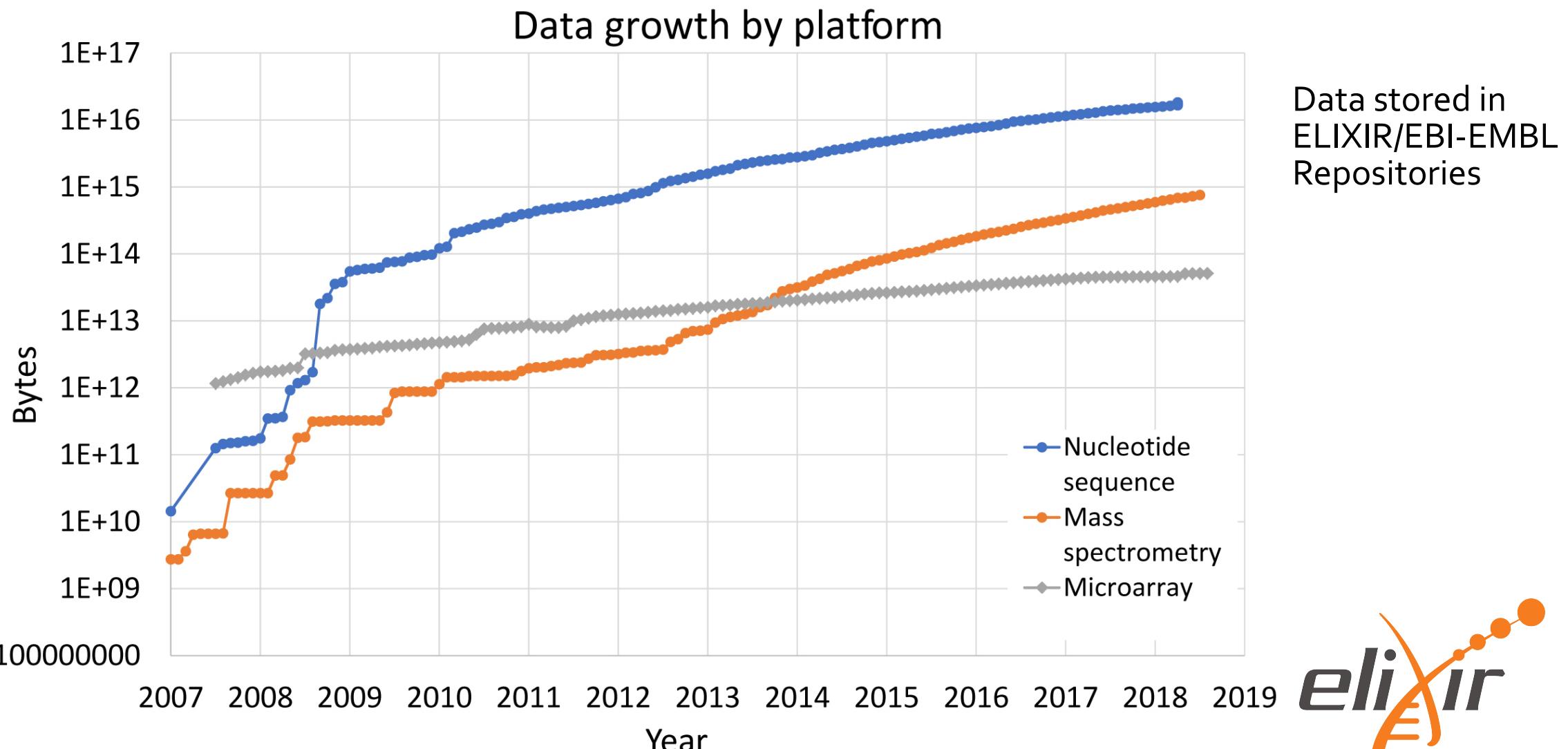
ELIXIR Europe

Growth of DNA Sequencing



From: Stephens, Z. D. et al. Big Data: Astronomical or Genomical? PLOS Biology 13, e1002195 (2015).
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ELIXIR Europe



Data stored in
ELIXIR/EBI-EMBL
Repositories



ELIXIR Members



ELIXIR Observers



Cyprus

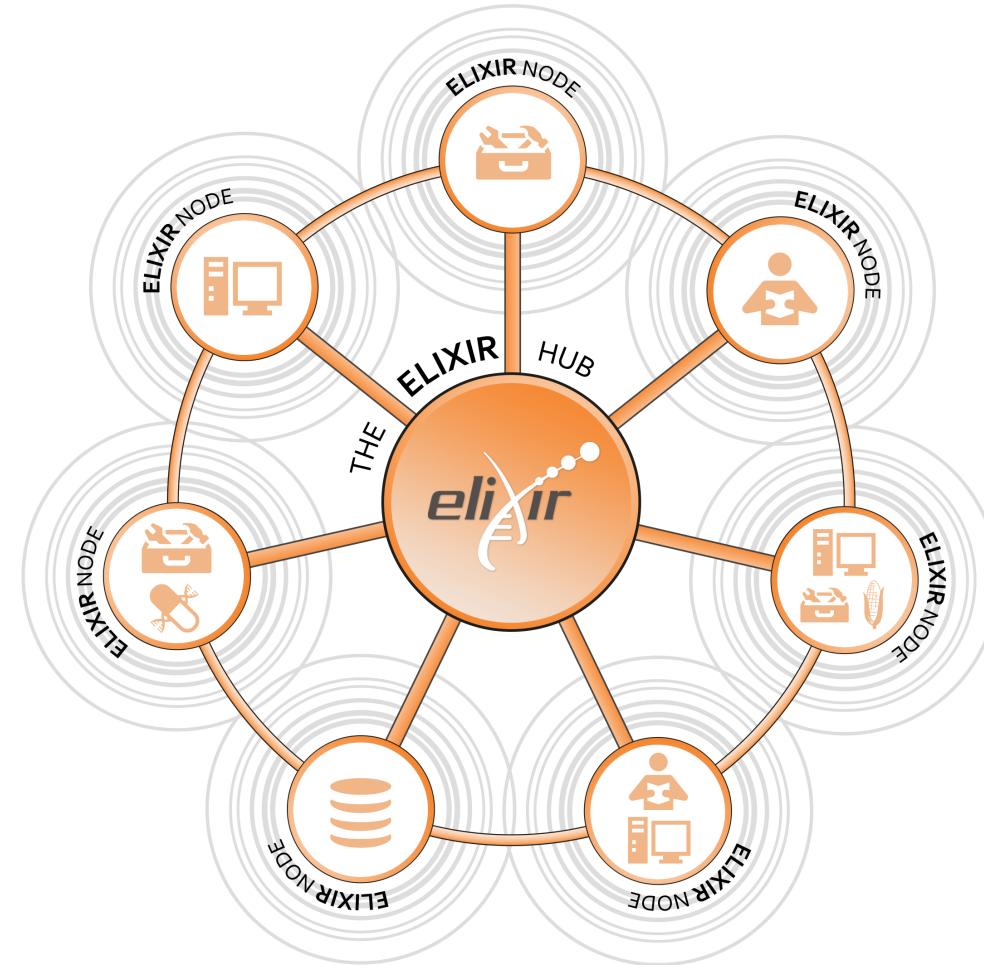


A distributed infrastructure to scale with the challenge

ELIXIR data infrastructure
for Europe's life science
research sector

ELIXIR Nodes build local
bioinformatics capacity
throughout Europe

ELIXIR Nodes build on
national strengths and
priorities



ELIXIR Services



Data deposition:
ENA, EGA, PDBe, EuropePMC, ...



ELIXIR Services



Data deposition:
ENA, EGA, PDBe, EuropePMC, ...



Data management:
Genome annotation
Data management plans

ELIXIR Services



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Added value data:
UniProt, Ensembl, OrphaNet, ...



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UniProt, Ensembl, OrphaNet, ...



Data Interoperability:
FAIRSharing, identifiers.org, OLS,
Bioschemas, ...



ELIXIR Services



Data deposition:
ENA, EGA, PDBe, EuropePMC, ...



Compute:
Secure data transfer, cloud computing, AAI



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Bioinformatics tools:
Bio.tools, Benchmarking: OpenEBench



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Industry:
Innovation and SME programme
Bespoke collaborations



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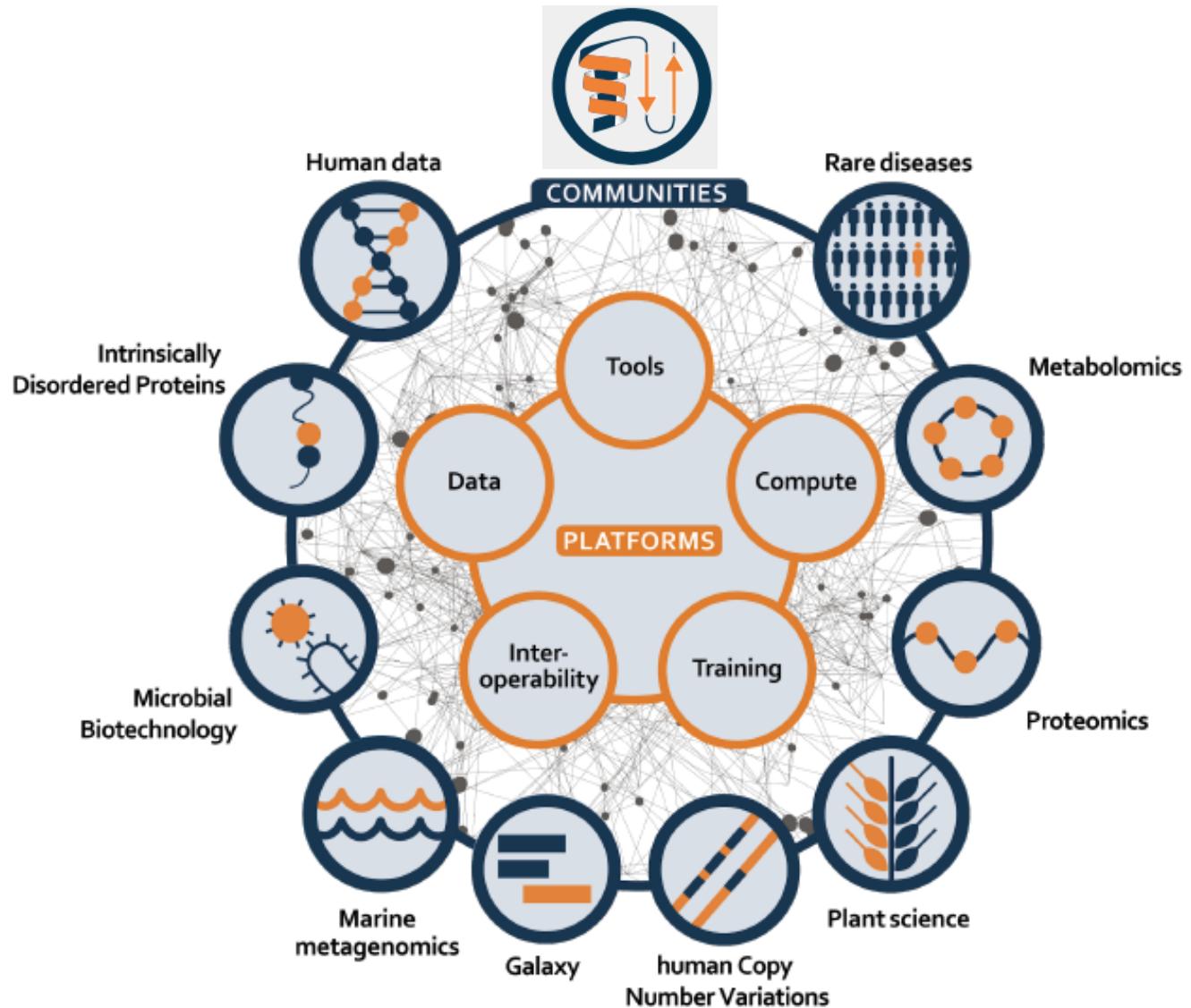


Training:
TeSS, Data Carpentry, eLearning



ELIXIR Structure

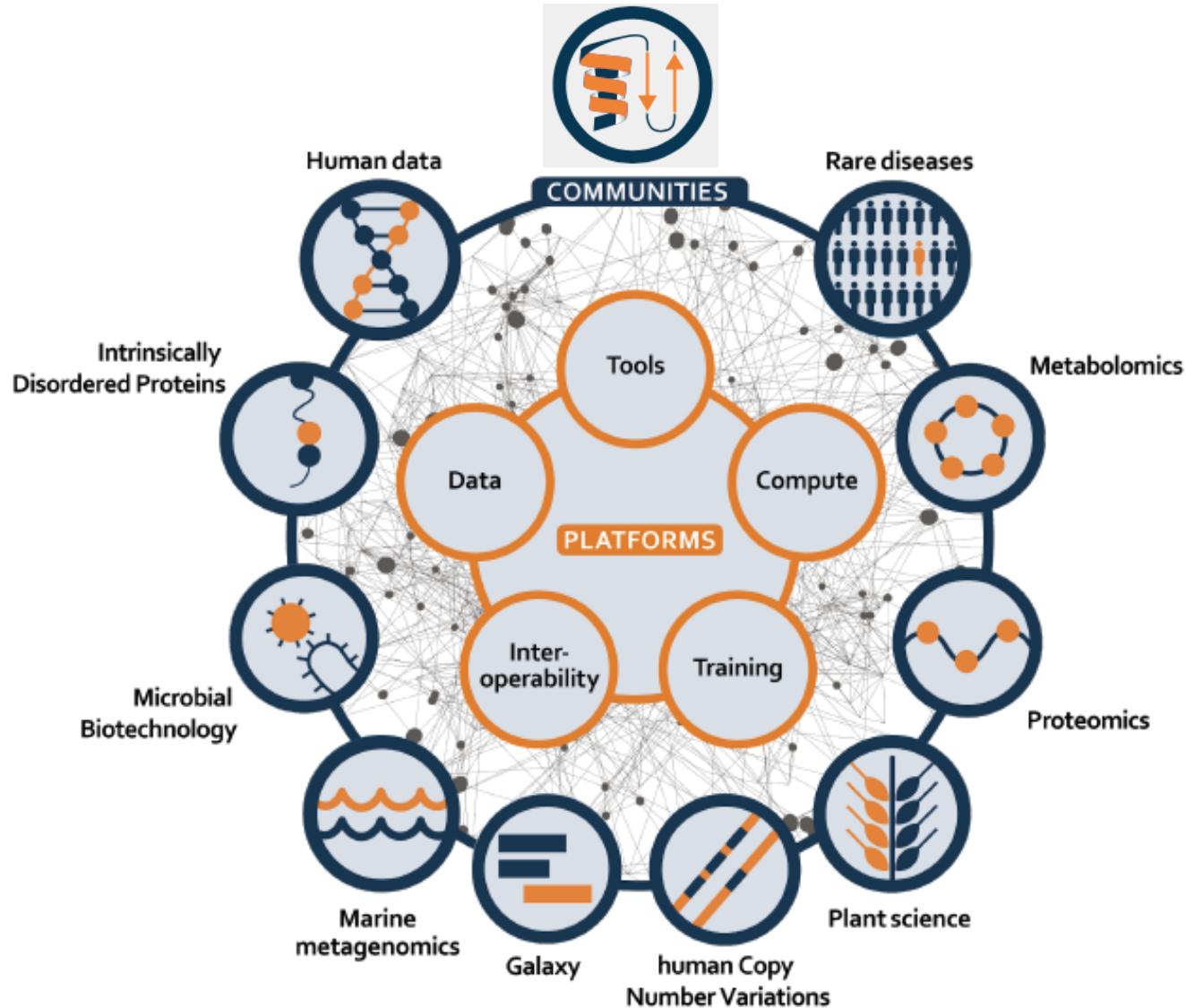
Five technical **Platforms** for
Compute, Data, Tools,
Interoperability, and Training



ELIXIR Structure

Five technical **Platforms** for
Compute, Data, Tools,
Interoperability, and Training

Complemented by
Communities for specific use
cases within e.g. **Human data,**
Metabolomics, Proteomics,
Marine Metagenomics,
Microbial Biotechnology,
Structural Bioinformatics and
others



ELIXIR Structure

The Norwegian node of ELIXIR Europe

Currently funded by:

The Research Council of Norway (until 2021)

The involved institutions; UiB, UiO, NMBU, NTNU and UiT

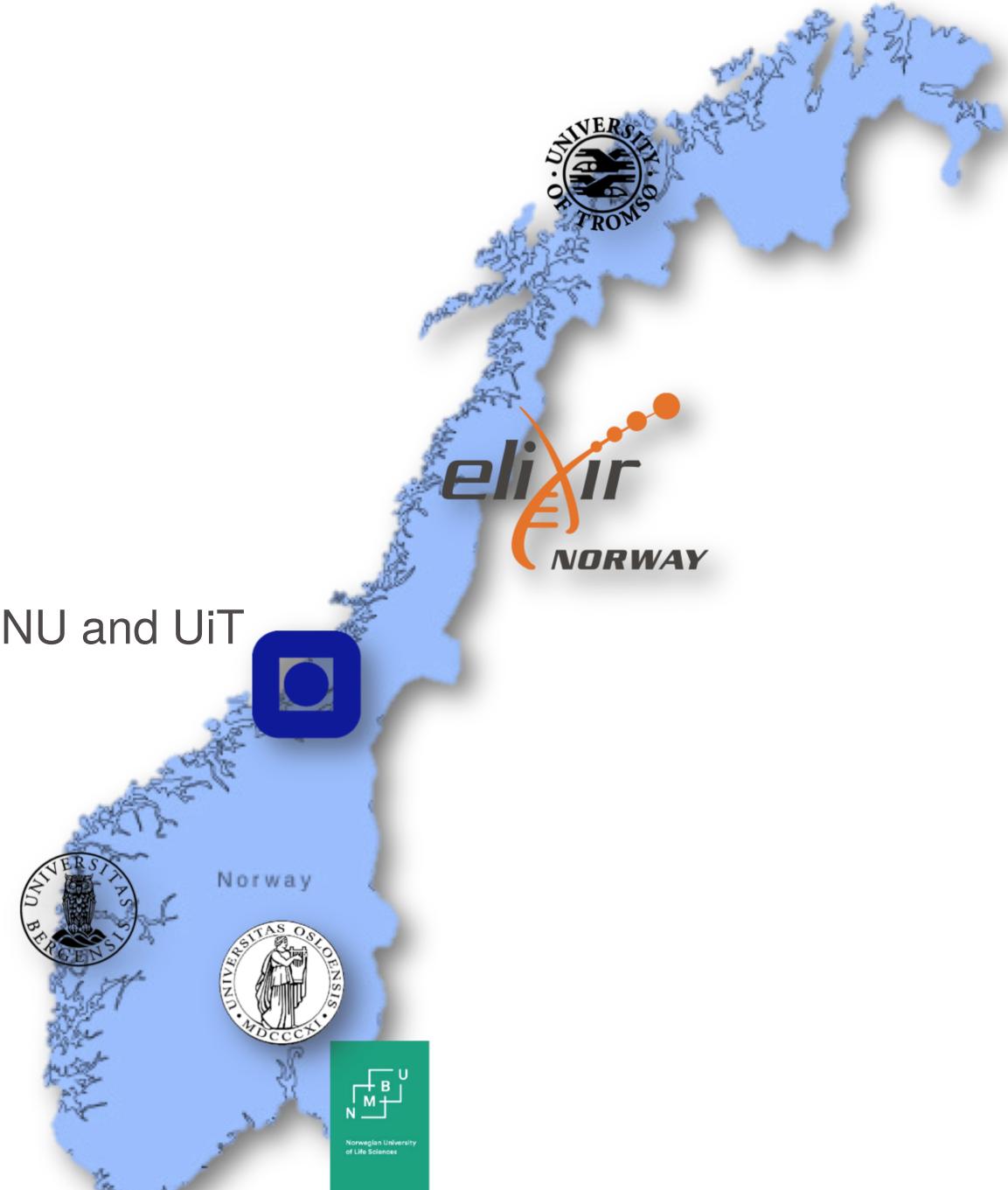
Users

Services to national users

Infrastructure, support and training

Deliverables to ELIXIR Europe

Tools and databases



Our additional user services - Norway

Support – through our HelpDesk

Training – in using our tools and workflows, and in data management

Bioinformatics infrastructure

Analysis, sharing and storage of data

contact@bioinfo.no



Support for trans-disciplinary participating projects:

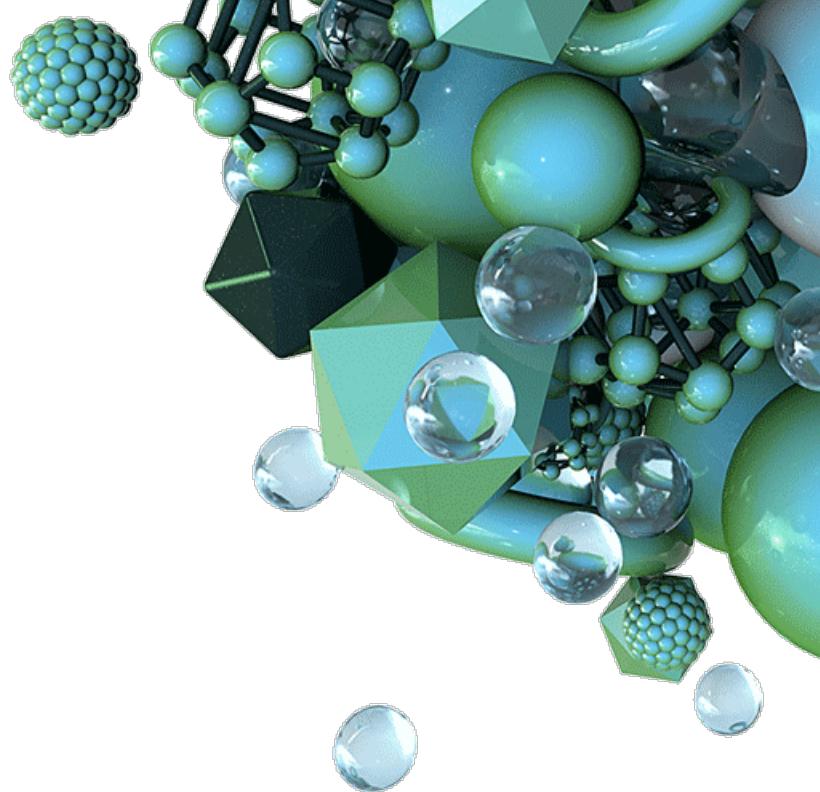
Responsible Research and Innovation

Innovation and industry involvement

Training & Research school

Competence and infrastructure – incl. Data Management

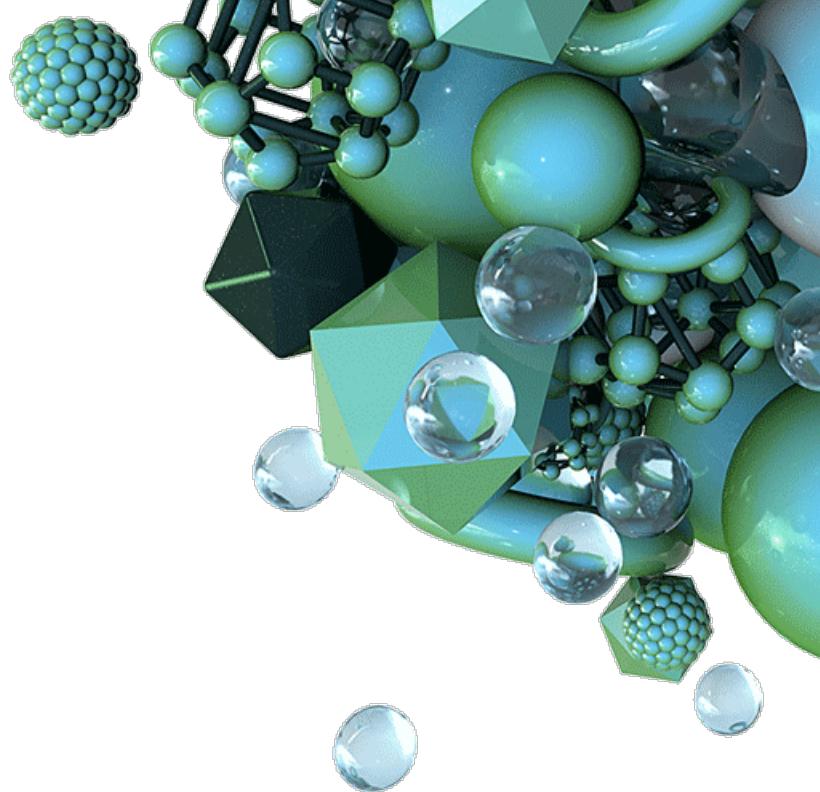
Outreach & Communication





CENTRE FOR
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NORWAY

Support for trans-disciplinary participating projects:



Responsible Research and Innovation

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Training & Research school

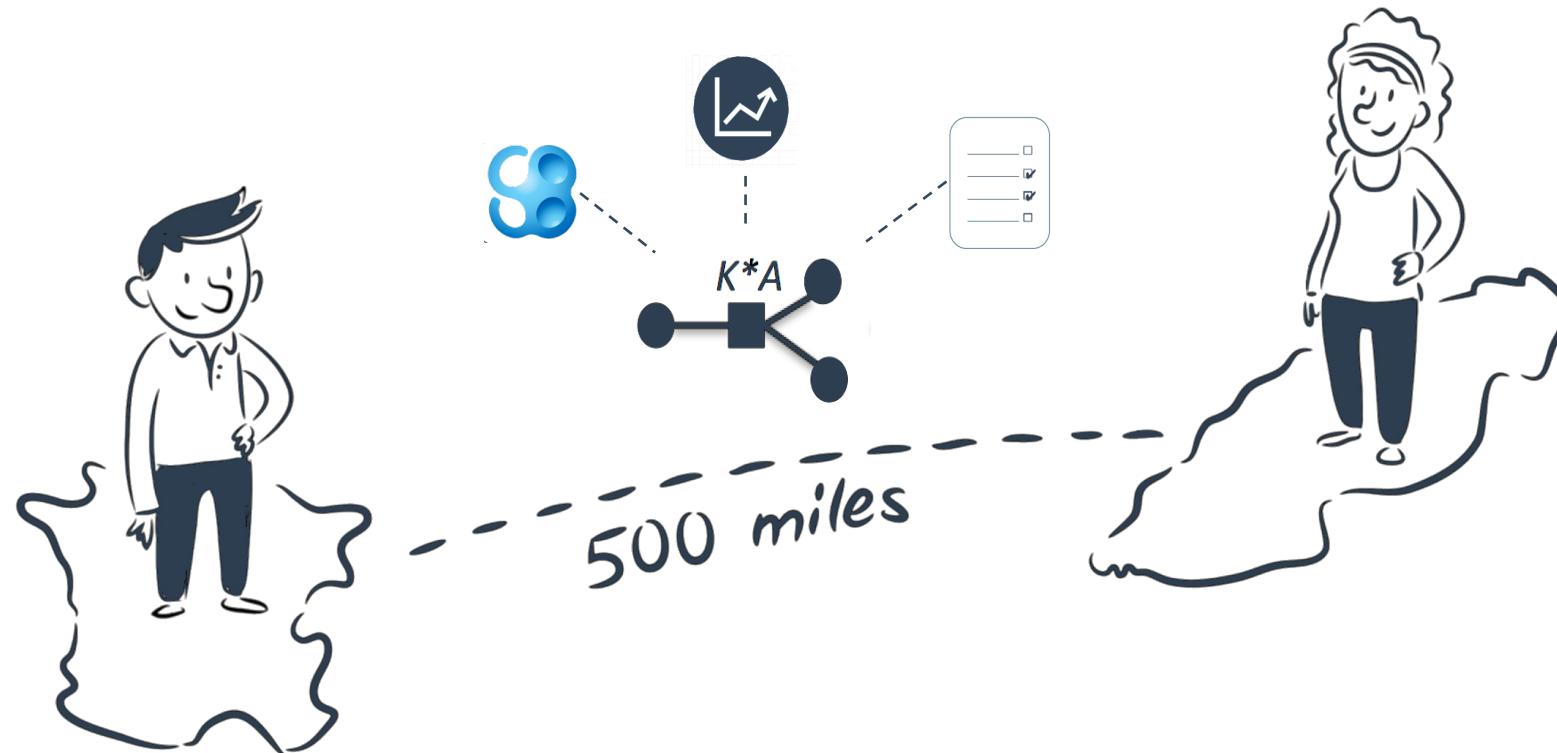
Competence and infrastructure – incl. Data Management

Outreach & Communication

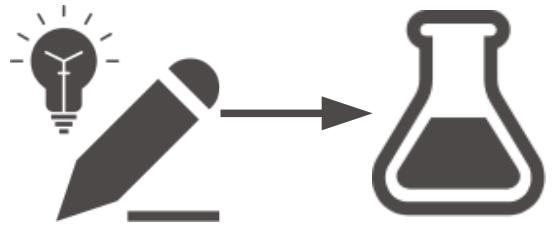
RCN: Collaborative Projects to meet Societal and Industry-related Challenges
Apply by 17th February 2021 and join DLN

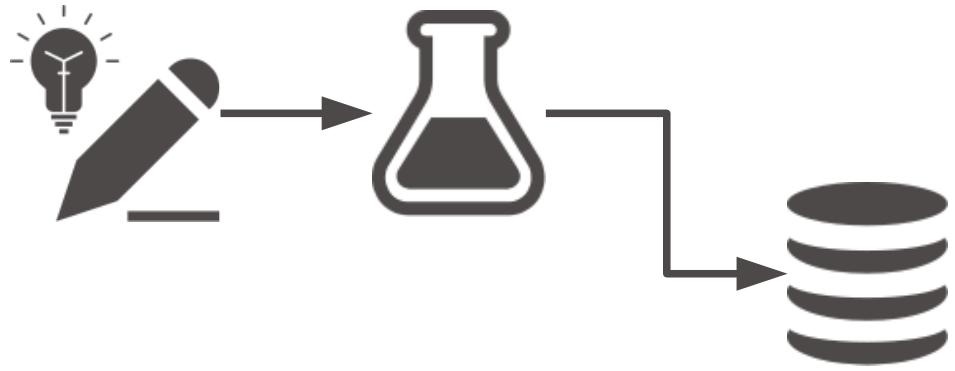
Data Management

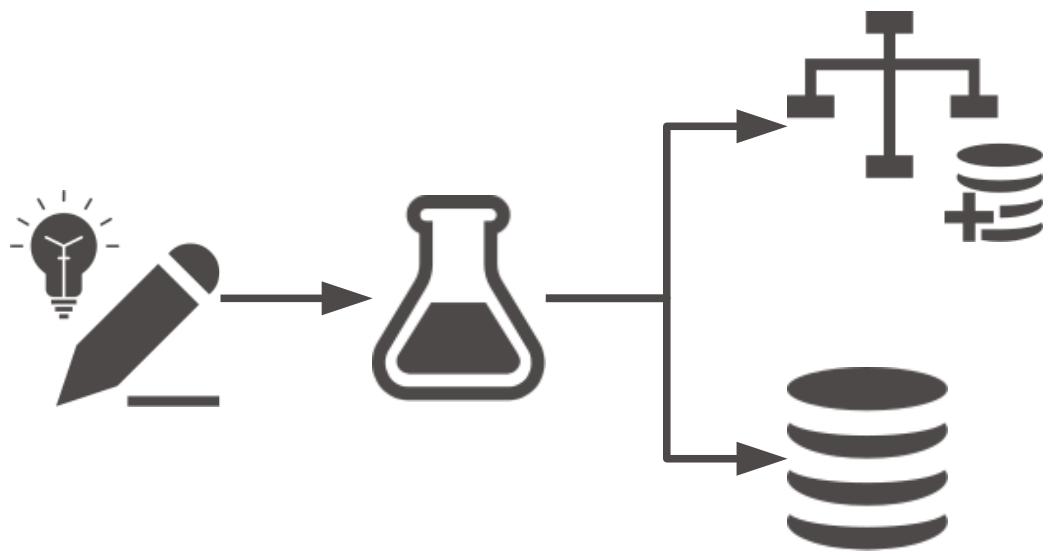
Make research data and related metadata **discoverable, accessible and understandable** today, tomorrow, and well into the future.

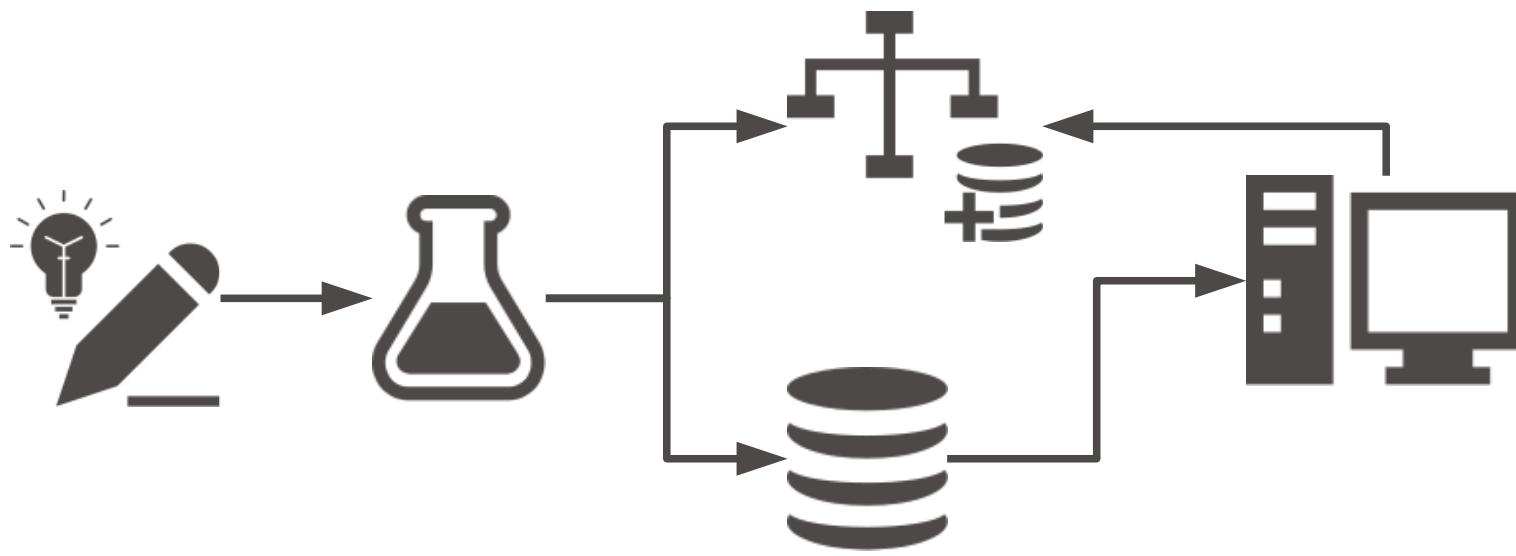


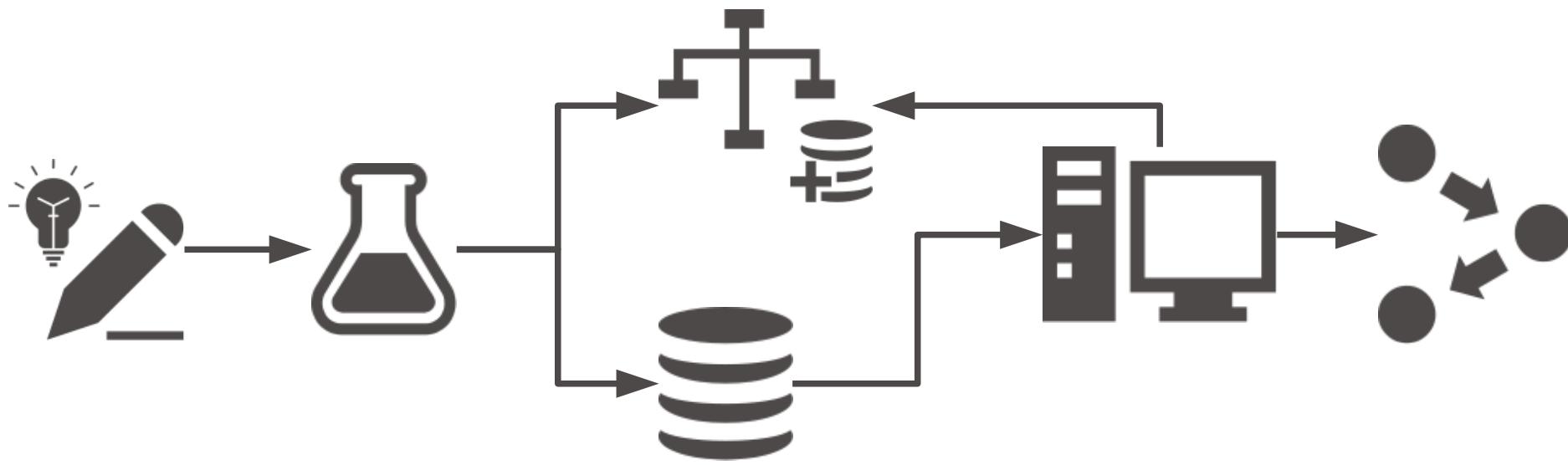


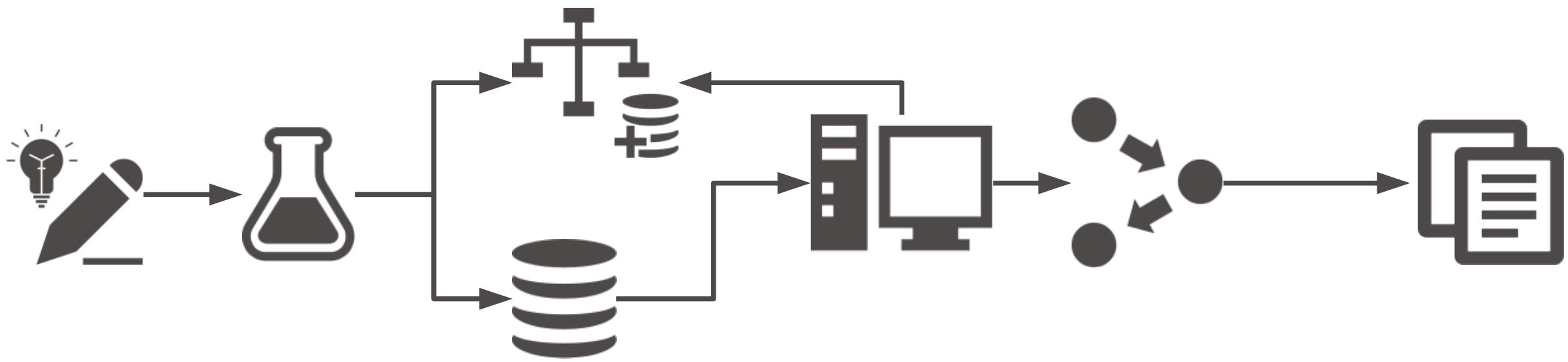


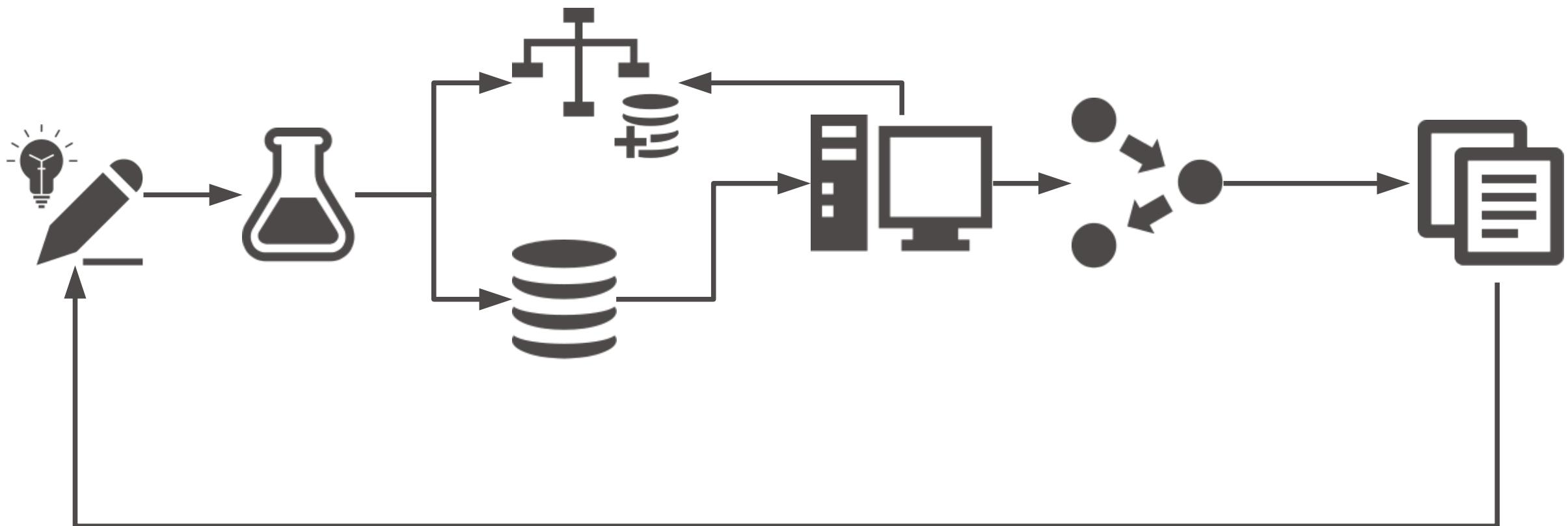


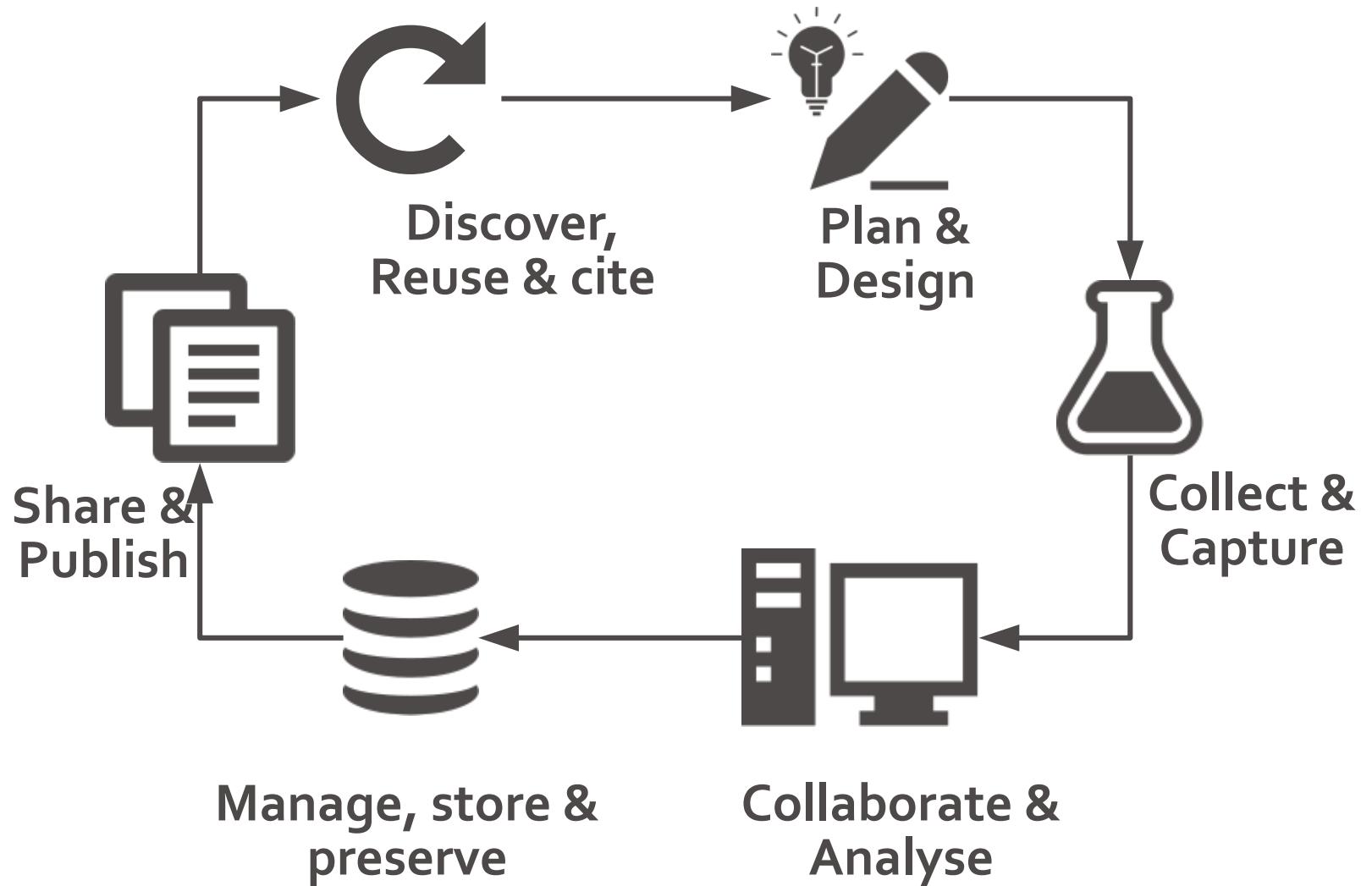


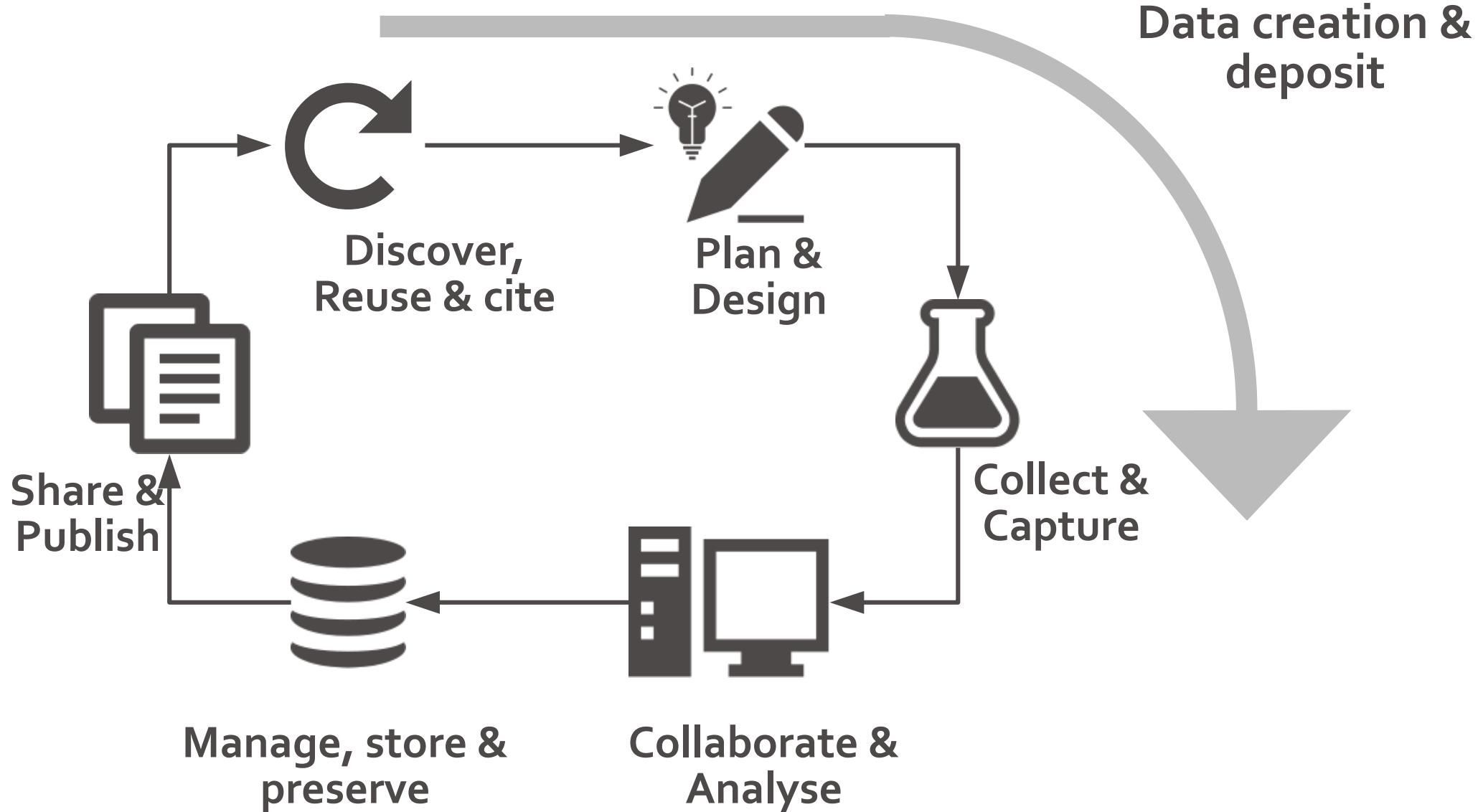


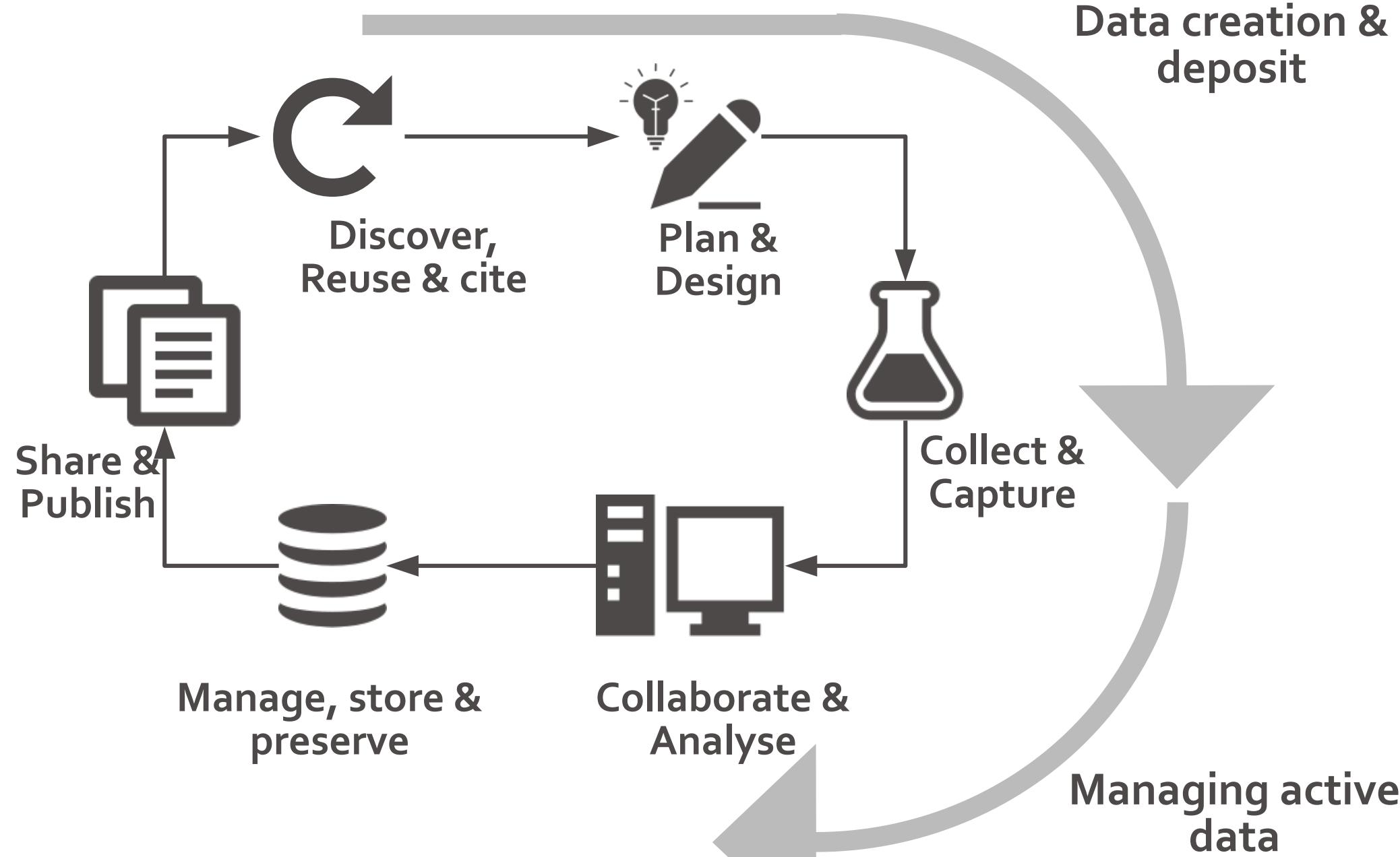


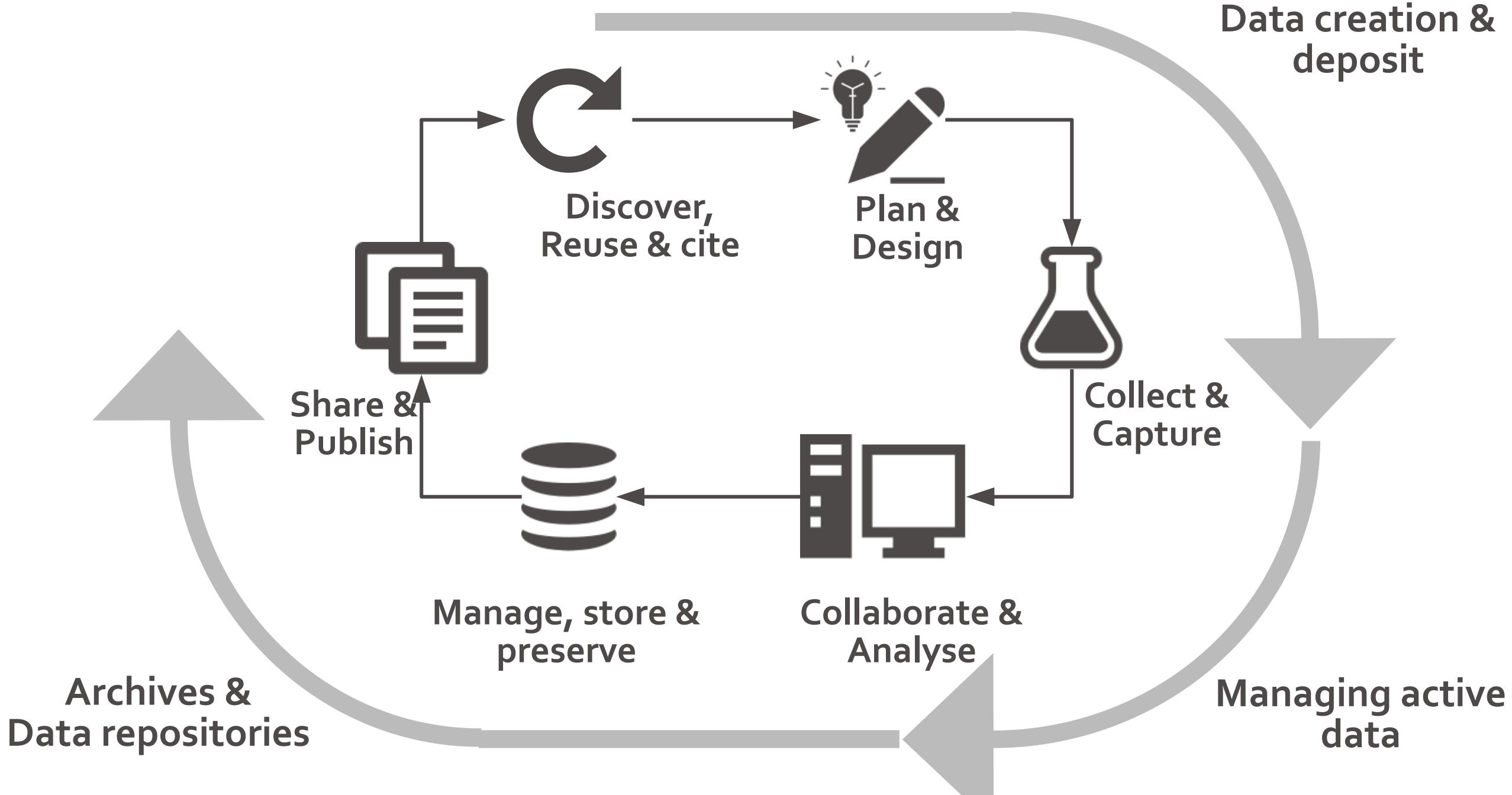


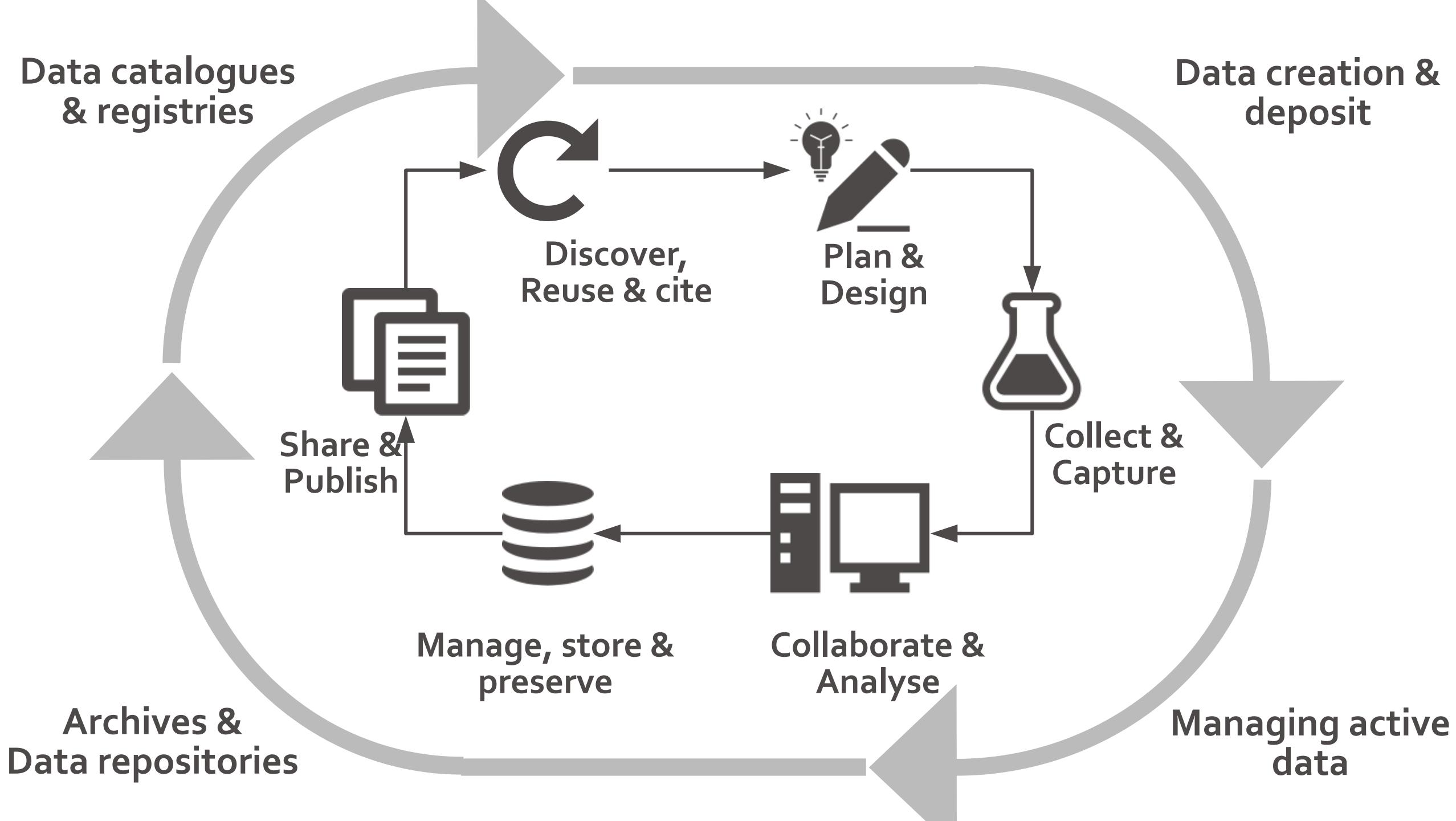


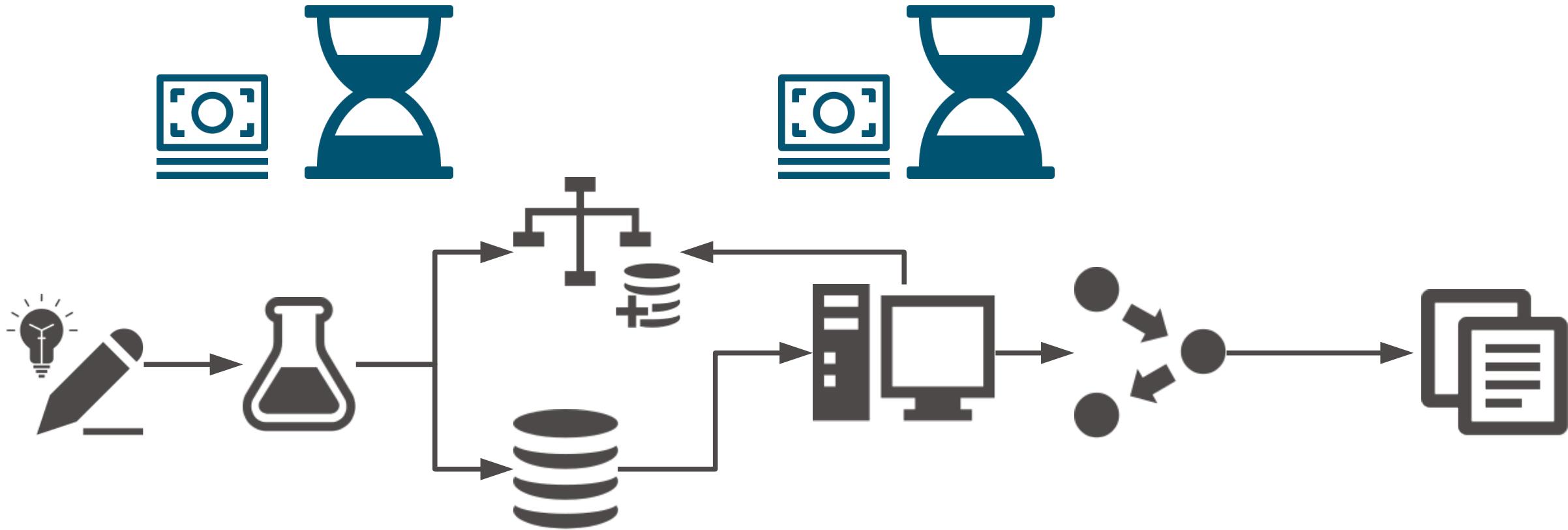


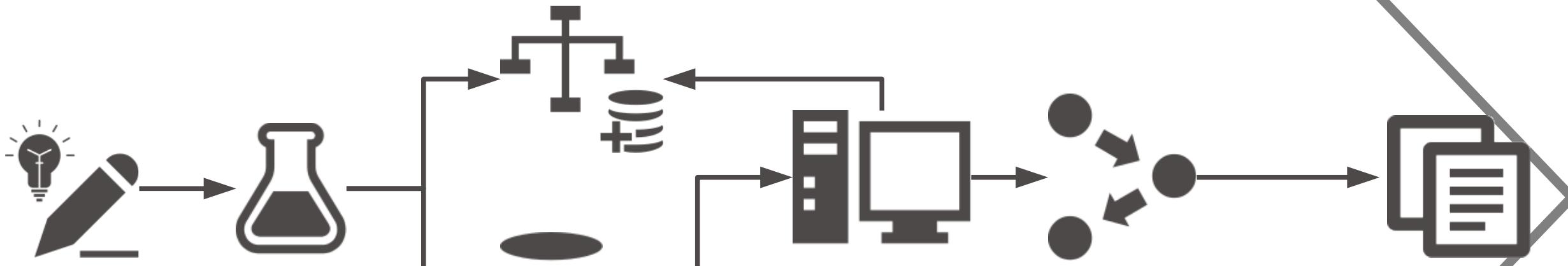


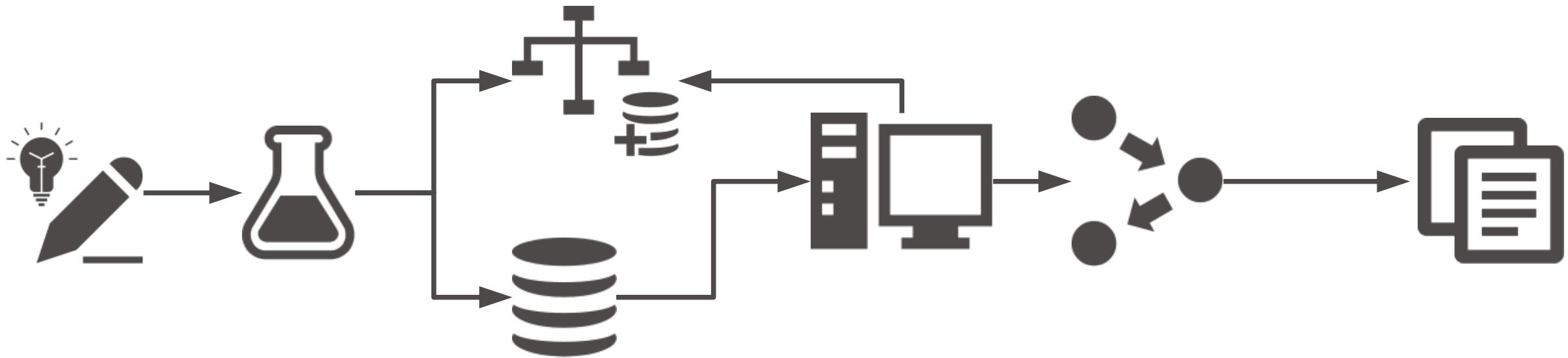








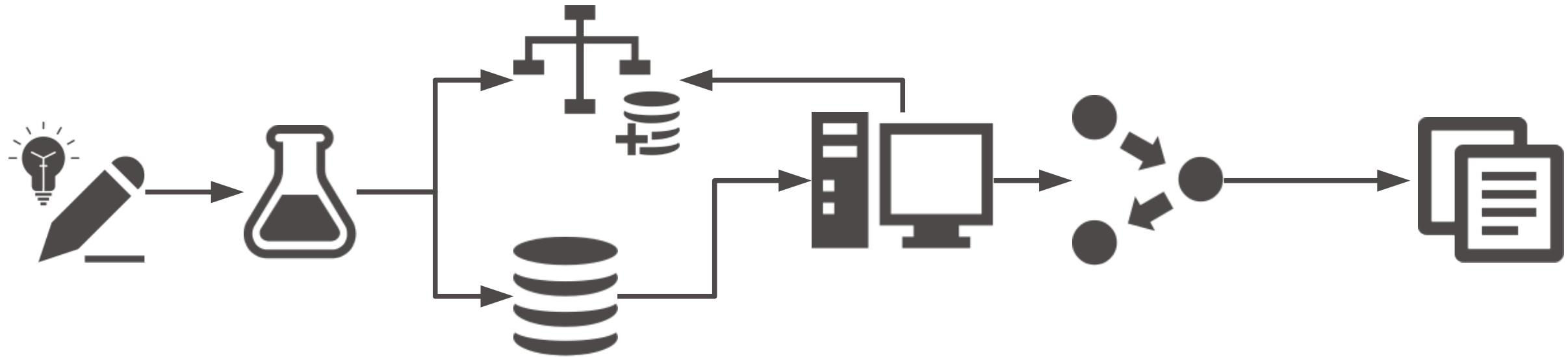






NeLS

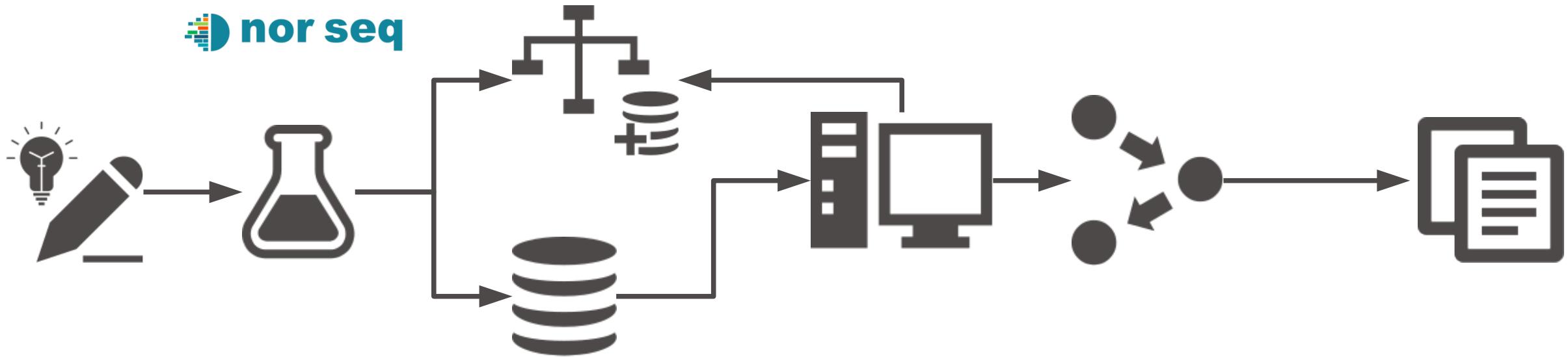
Norwegian e-Infrastructure for **Life Sciences**





NeLS

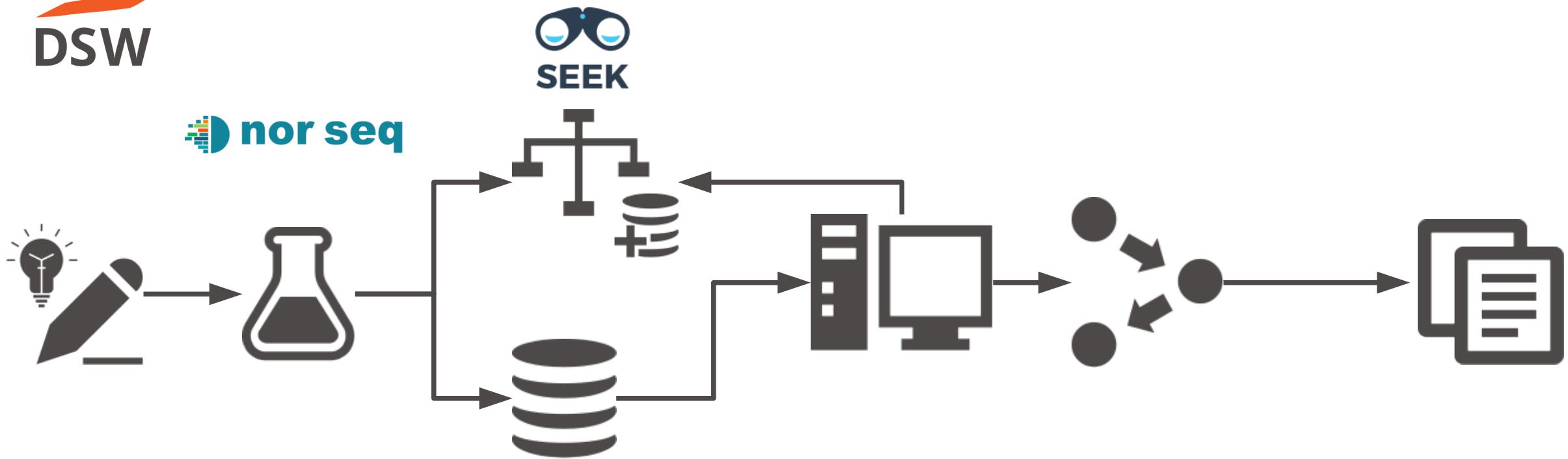
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NeLS

Norwegian e-Infrastructure for Life Sciences





NeLS

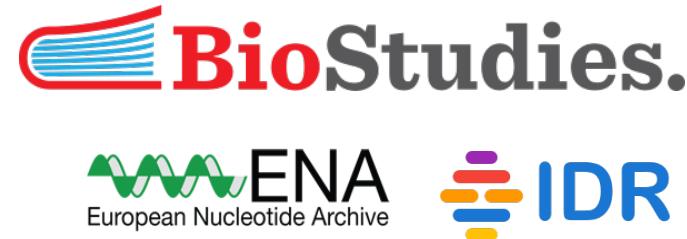
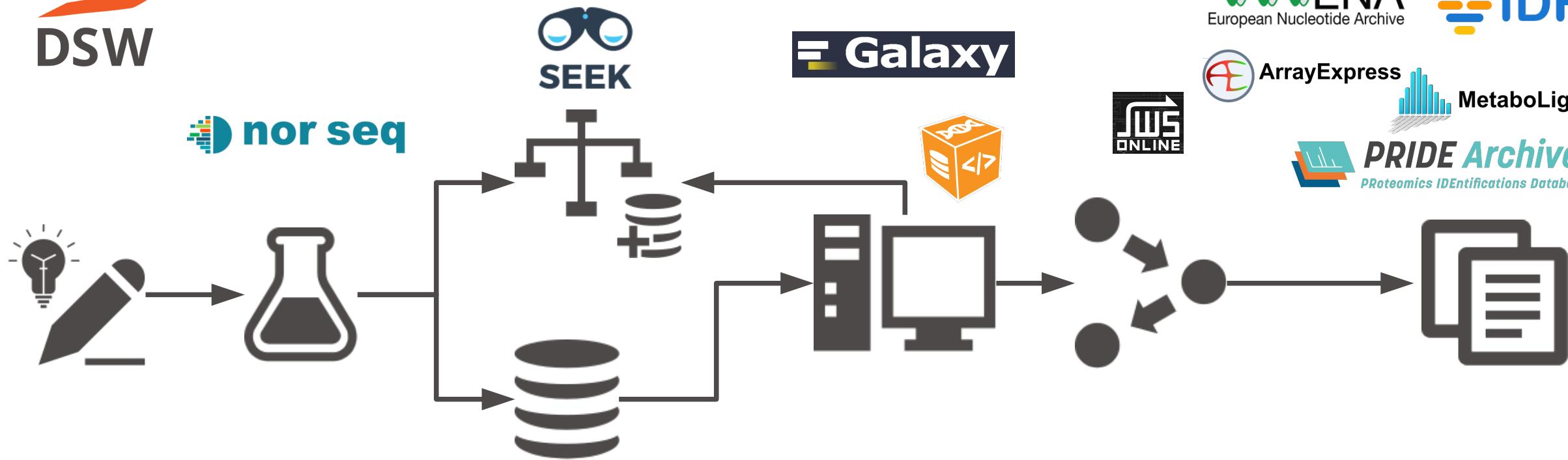
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NeLS

Norwegian e-Infrastructure for Life Sciences



ENA
European Nucleotide Archive

IDR

ArrayExpress

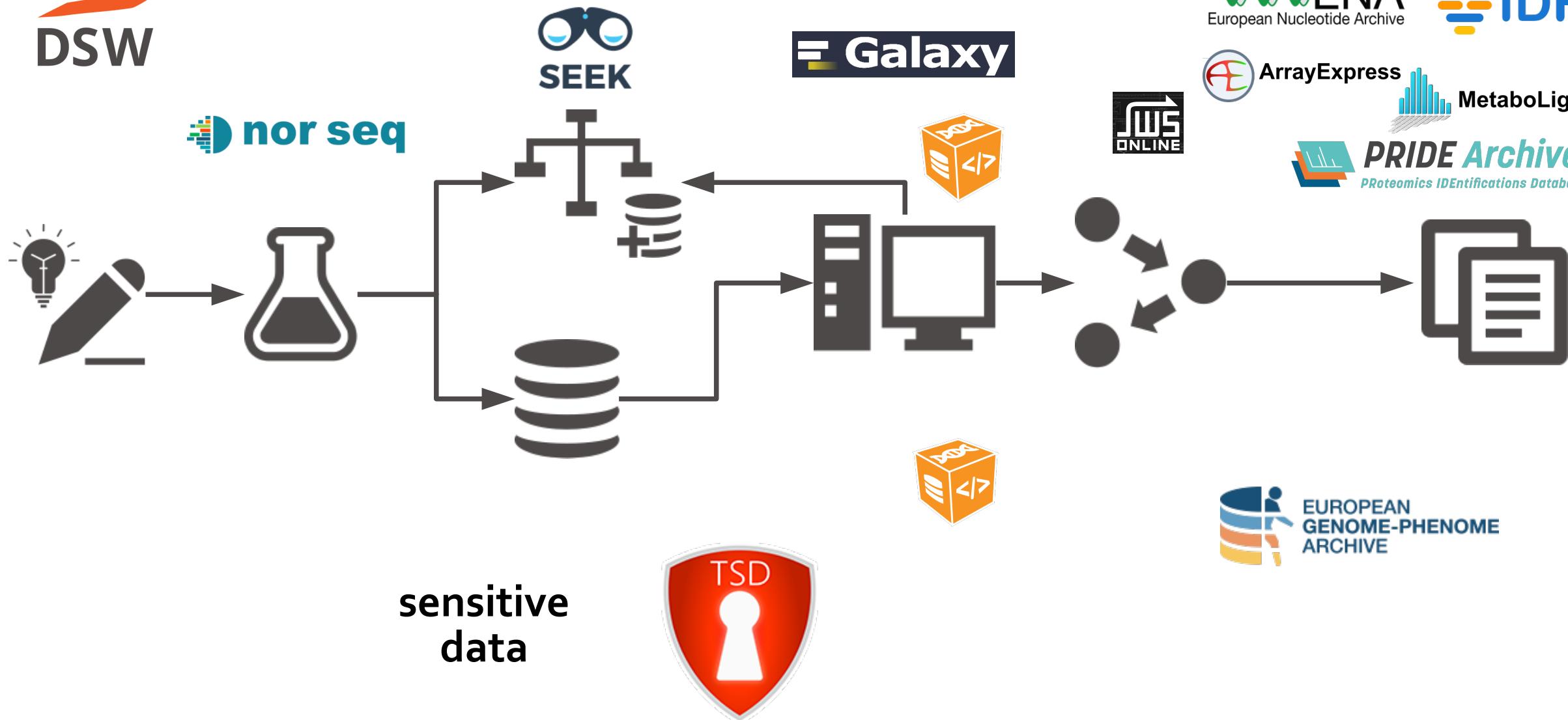
MetaboLights

PRIDE Archive
PRoteomics IDEntifications Database



NeLS

Norwegian e-Infrastructure for Life Sciences



BioStudies.

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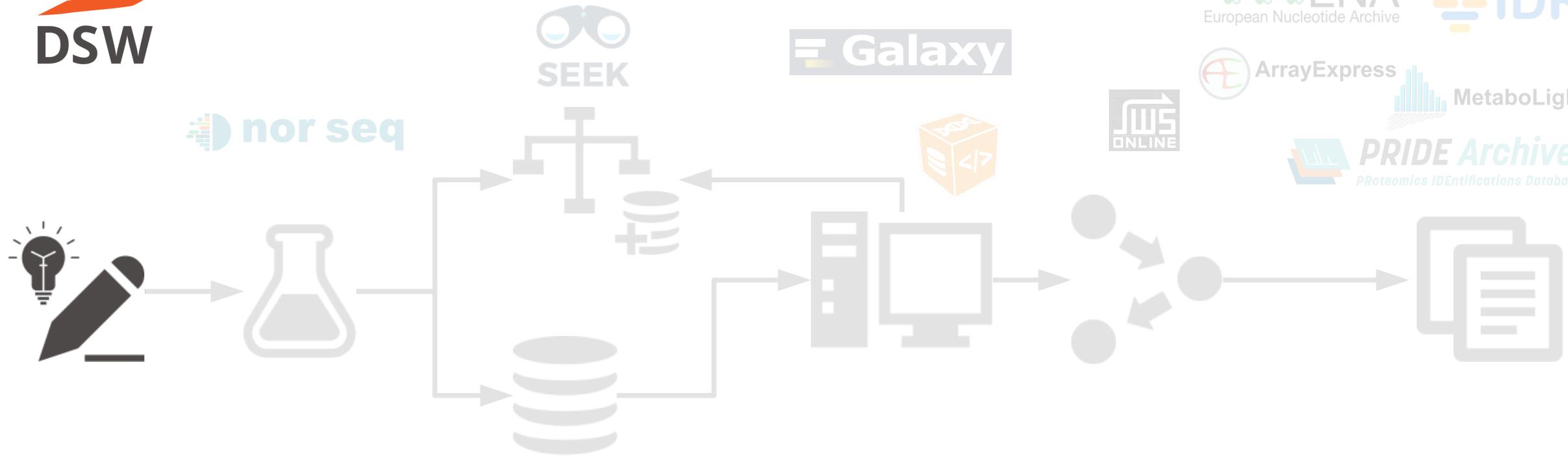
PRIDE Archive
PRoteomics IDEntifications Database

EUROPEAN GENOME-PHENOME ARCHIVE



NeLS

Norwegian e-Infrastructure for Life Sciences





Data Management Plan?





NeLS

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BioStudies.

ENA
European Nucleotide Archive

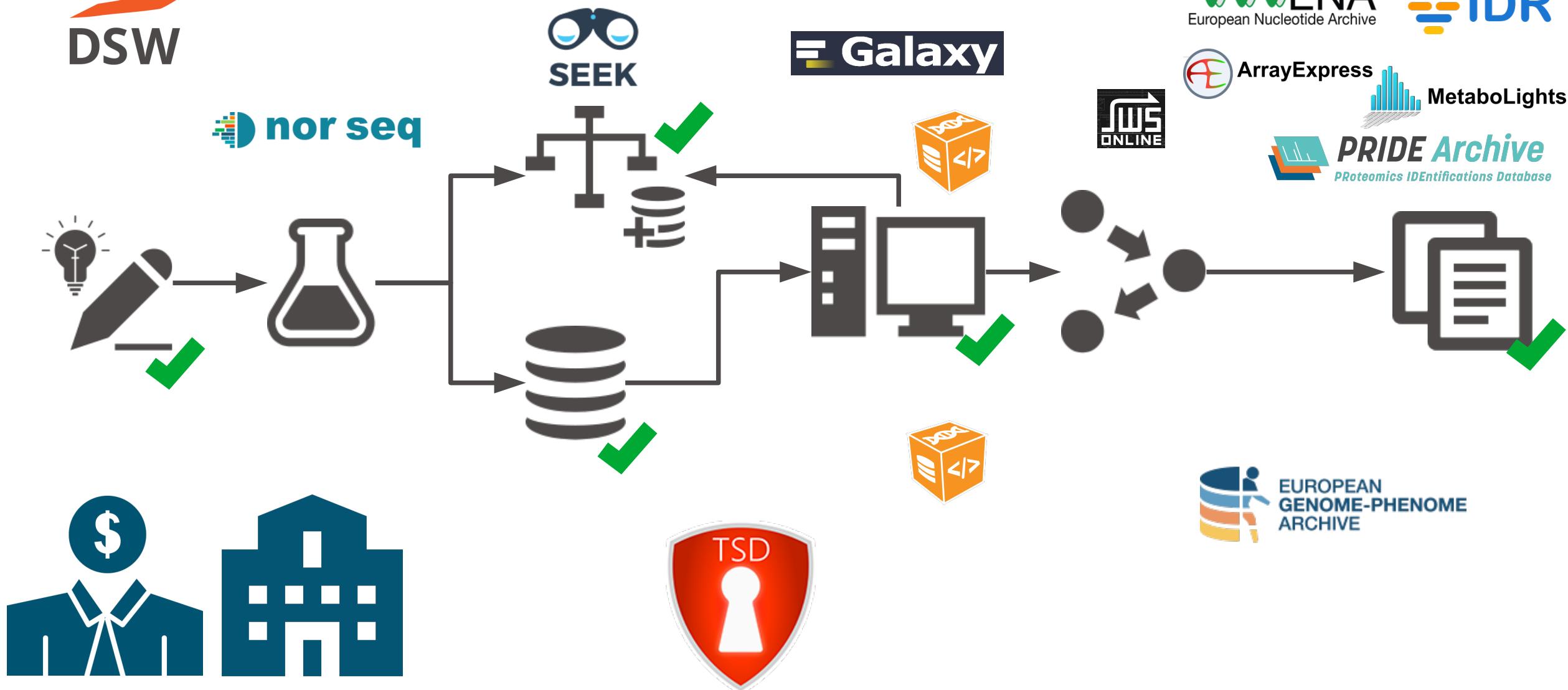
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BioStudies.

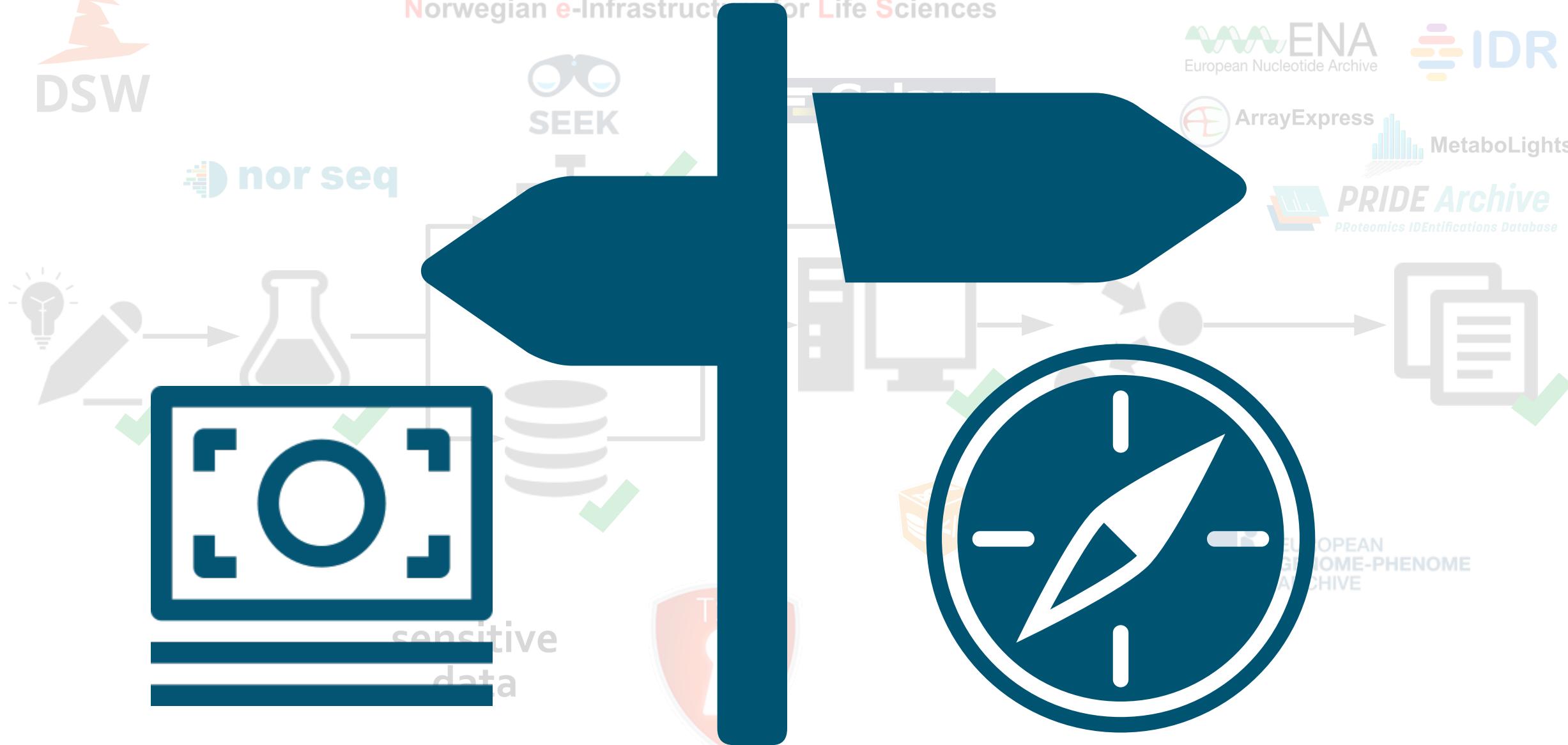
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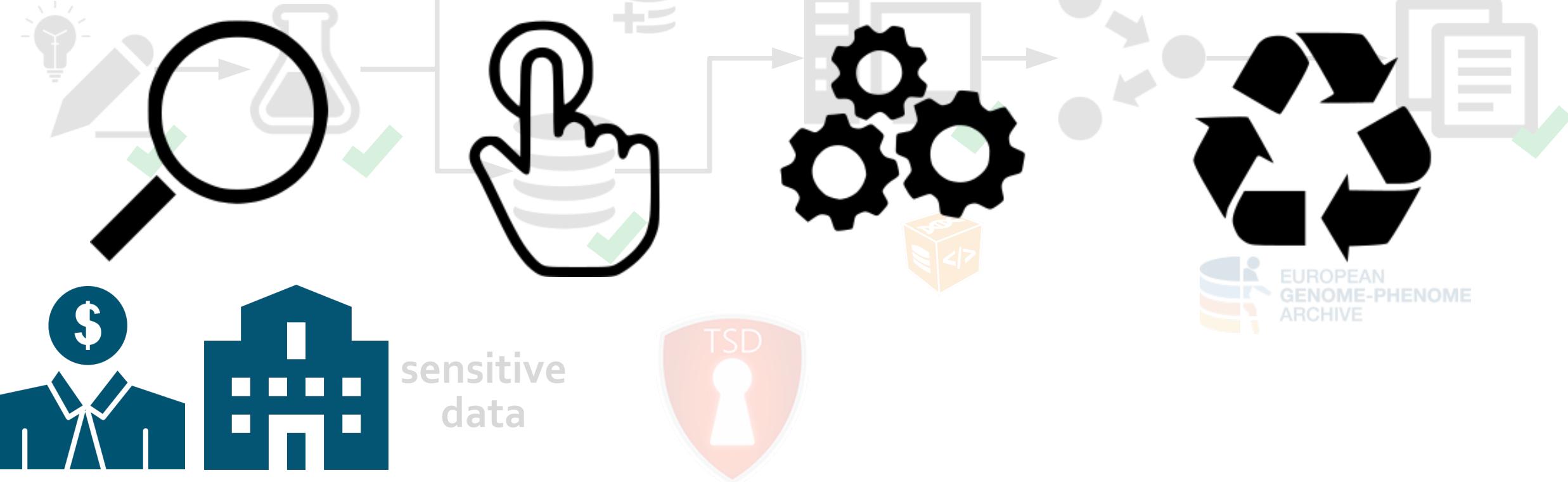
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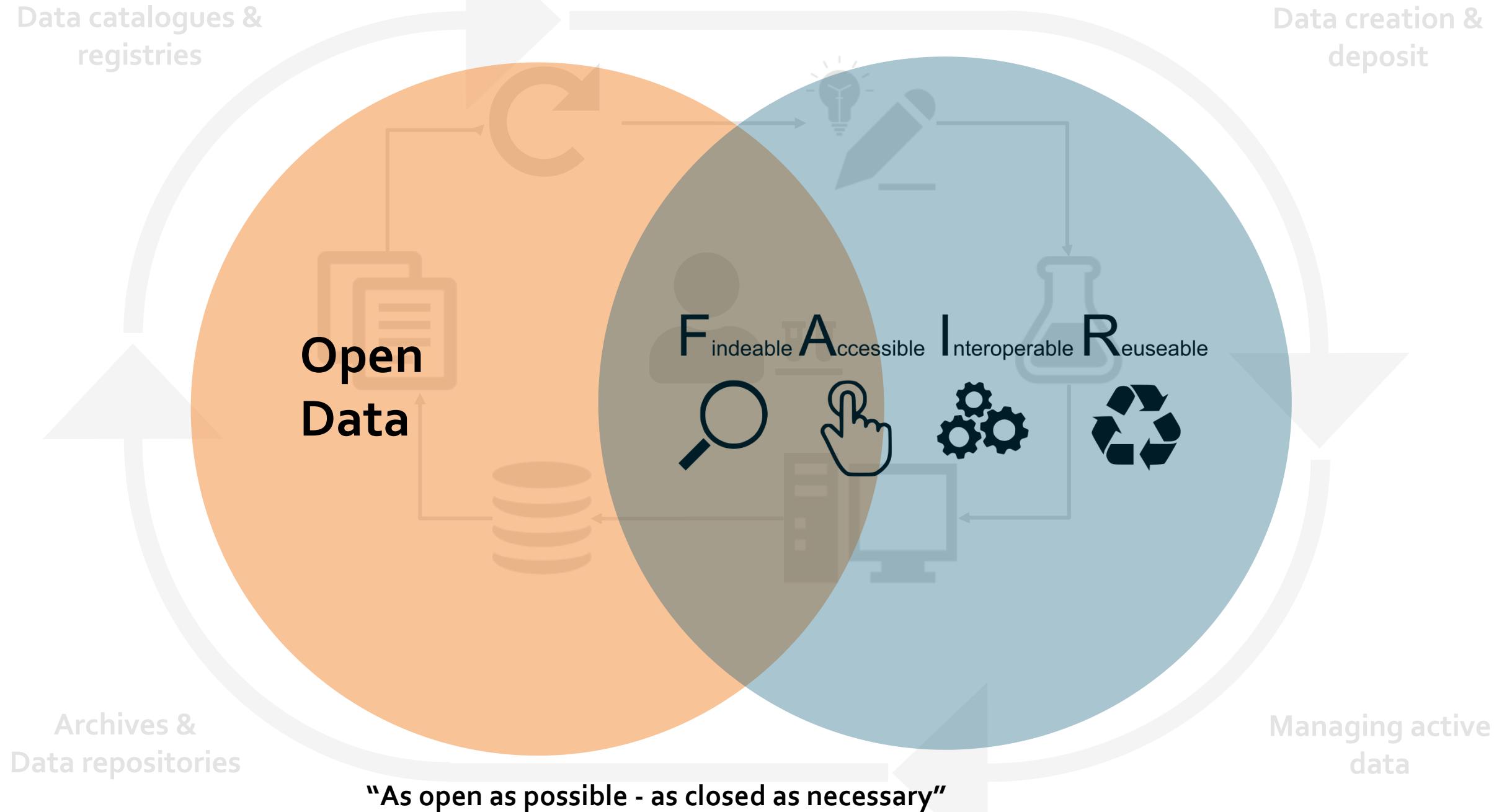
PRIDE Archive
PRoteomics IDEntifications Database





Findeable **A**ccessible **I**nteroperable **R**euseable





Amended: Addendum

OPEN

SUBJECT CATEGORIES

- » Research data
- » Publication characteristics

Received: 10 December 2015

Accepted: 12 February 2016

Published: 15 March 2016

Comment: The FAIR Guiding Principles for scientific data management and stewardship

Mark D. Wilkinson *et al.*[#]

There is an urgent need to improve the infrastructure supporting the reuse of scholarly data. A diverse set of stakeholders—representing academia, industry, funding agencies, and scholarly publishers—have come together to design and jointly endorse a concise and measureable set of principles that we refer to as the FAIR Data Principles. The intent is that these may act as a guideline for those wishing to enhance the reusability of their data holdings. Distinct from peer initiatives that focus on the human scholar, the FAIR Principles put specific emphasis on enhancing the ability of machines to automatically find and use the data, in addition to supporting its reuse by individuals. This Comment is the first formal publication of the FAIR Principles, and includes the rationale behind them, and some exemplar implementations in the community.



BioMedData



Horizon 2020
Research Infrastructure
Program



With funding from
**The Research
Council of Norway**



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