



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
30th November 2020

Schedule

30.11.2020

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

1.12.2020

0900 - 1000 GDPR and other legal requirements for research on humans

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



Ingrid
Heggland



Ane Møller
Gabrielsen



Heine
Skipenes

RESEARCH DATA @NTNU



Hilde
Eikemo



Thomas
Helgesen



Kjersti Rise



Korbinian
Bösl



Anne Heidi
Skogholt



Ulrike
Schlegel



CENTRE FOR
DIGITAL LIFE
NORWAY

ELIXIR Europe

'Data for Life'

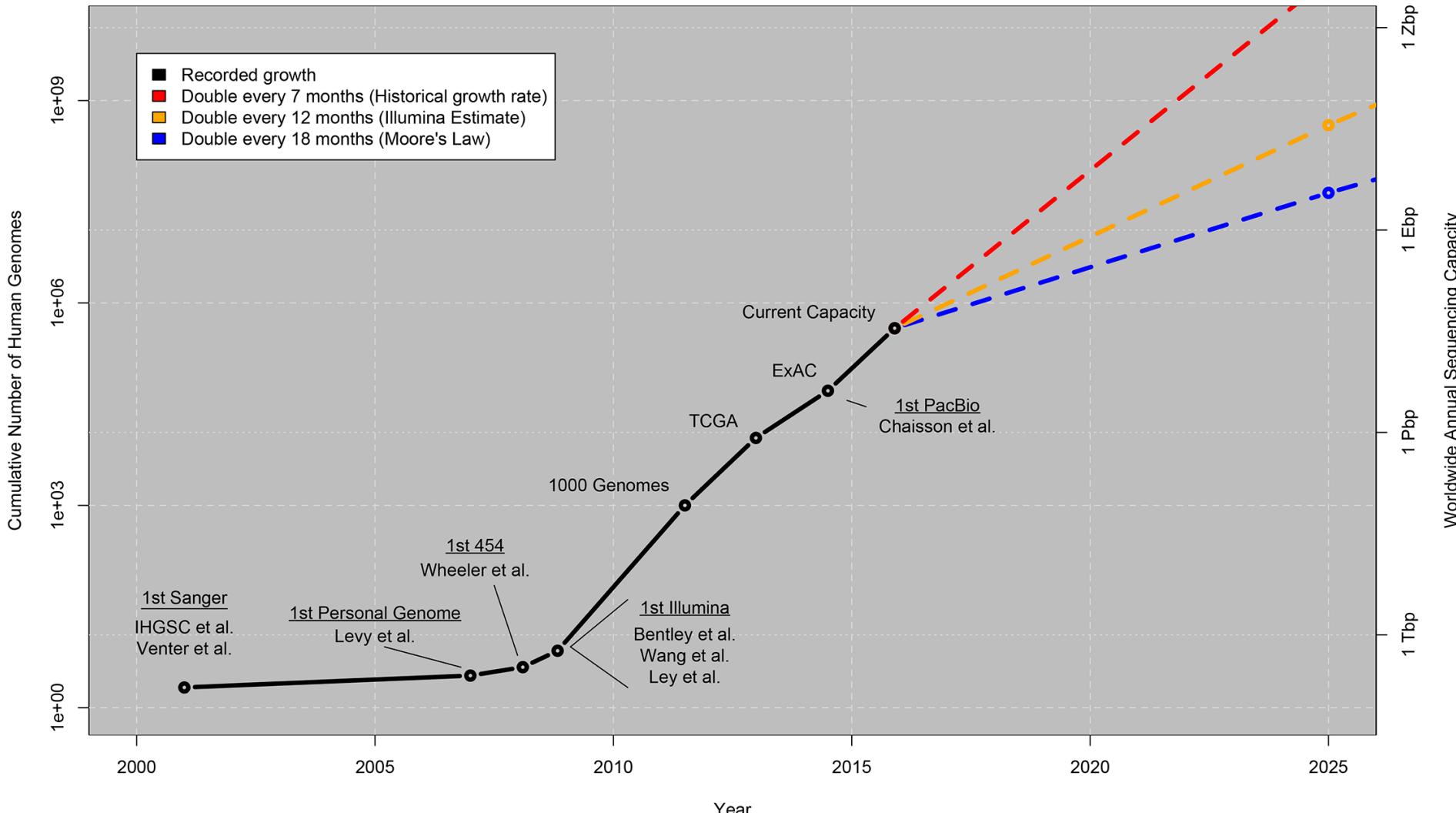
Mission:

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



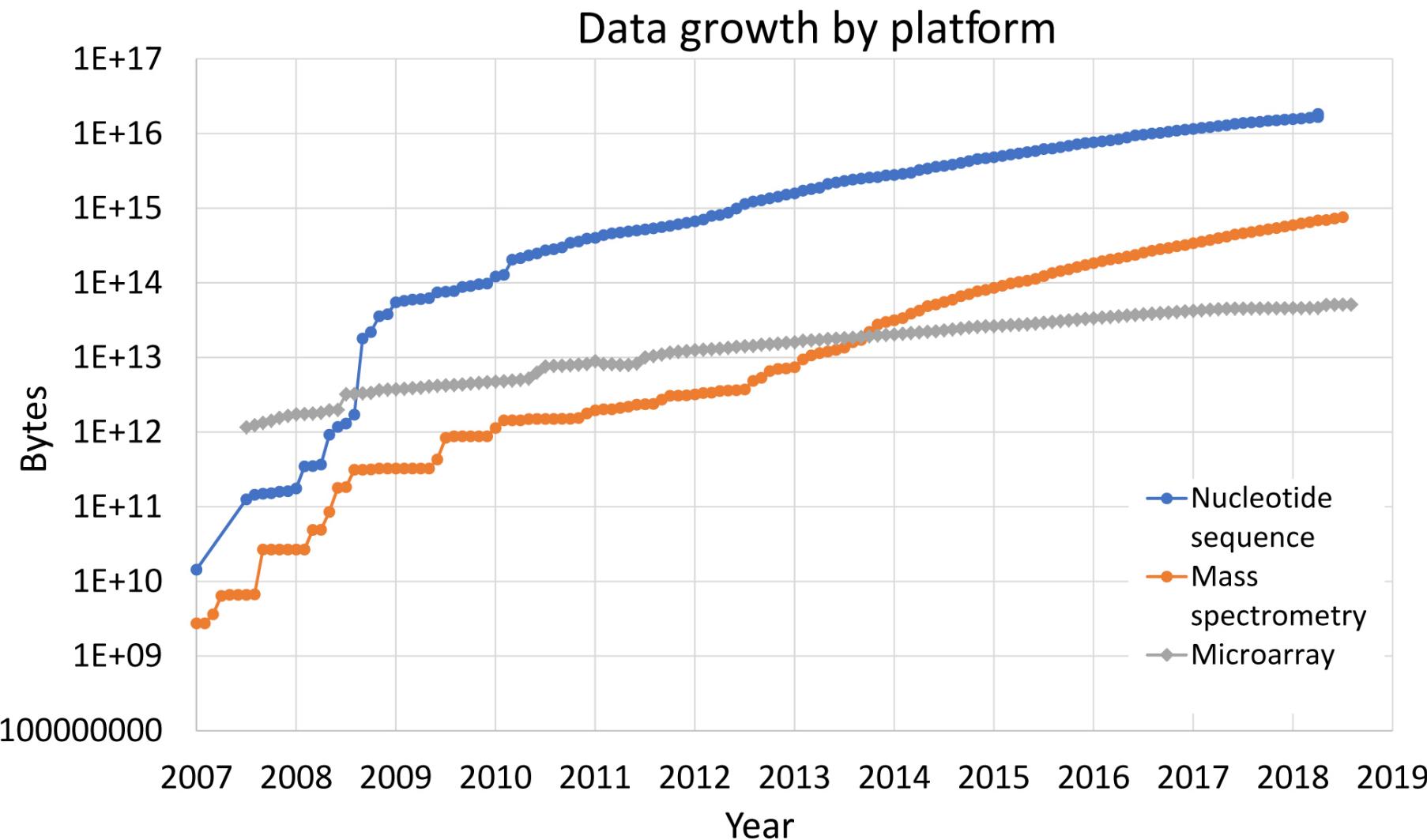
ELIXIR Europe

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

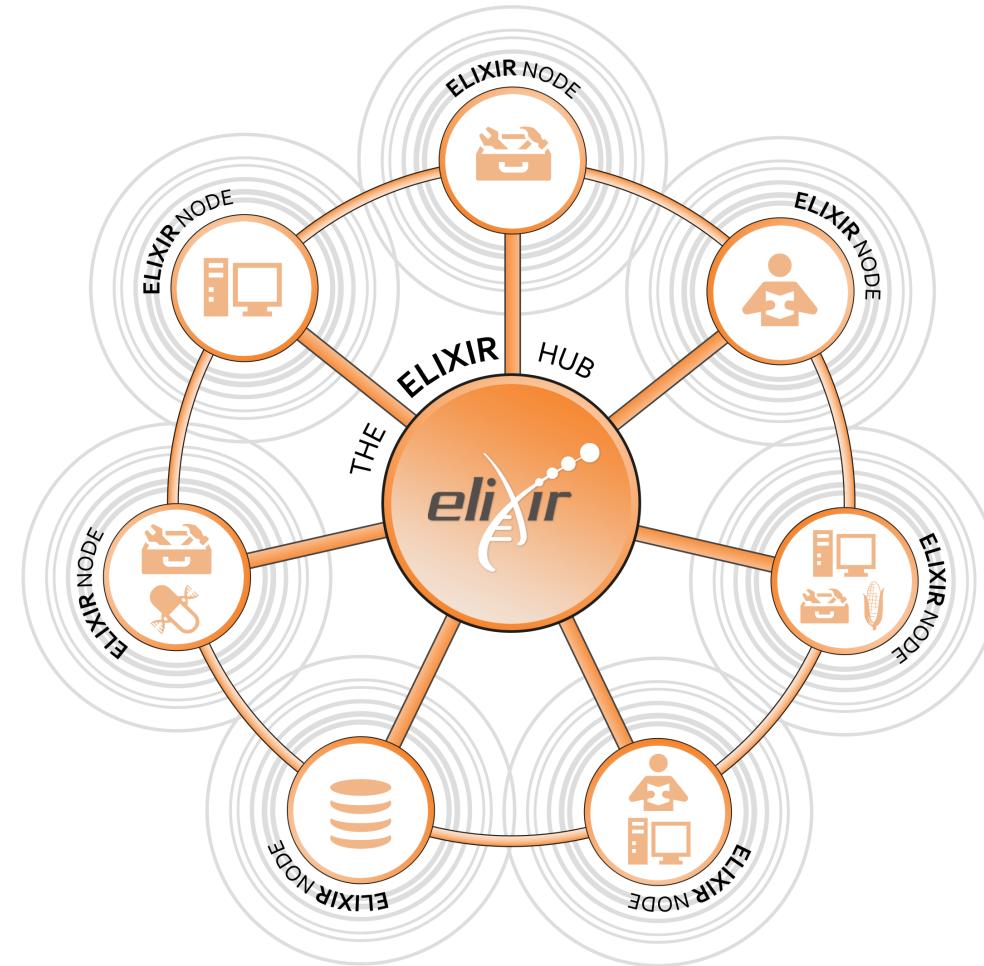


A distributed infrastructure to scale with the challenge

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, ...



Data management:
Genome annotation
Data management plans



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



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



Compute:
Secure data transfer, cloud computing, AAI



Bioinformatics tools:
Bio.tools, Benchmarking: OpenEBench



Industry:
Innovation and SME programme
Bespoke collaborations



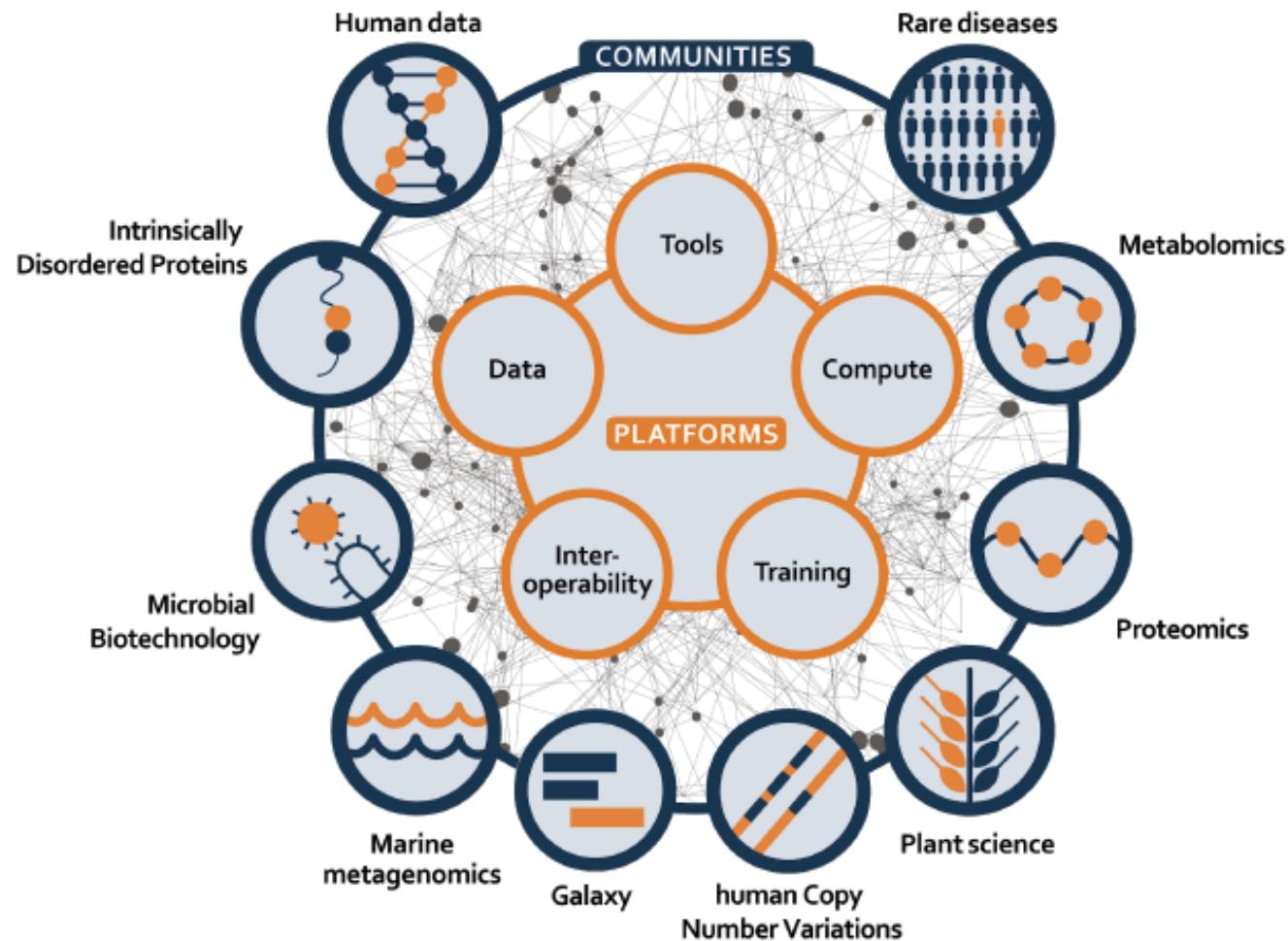
Training:
TeSS, Data Carpentry, eLearning



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

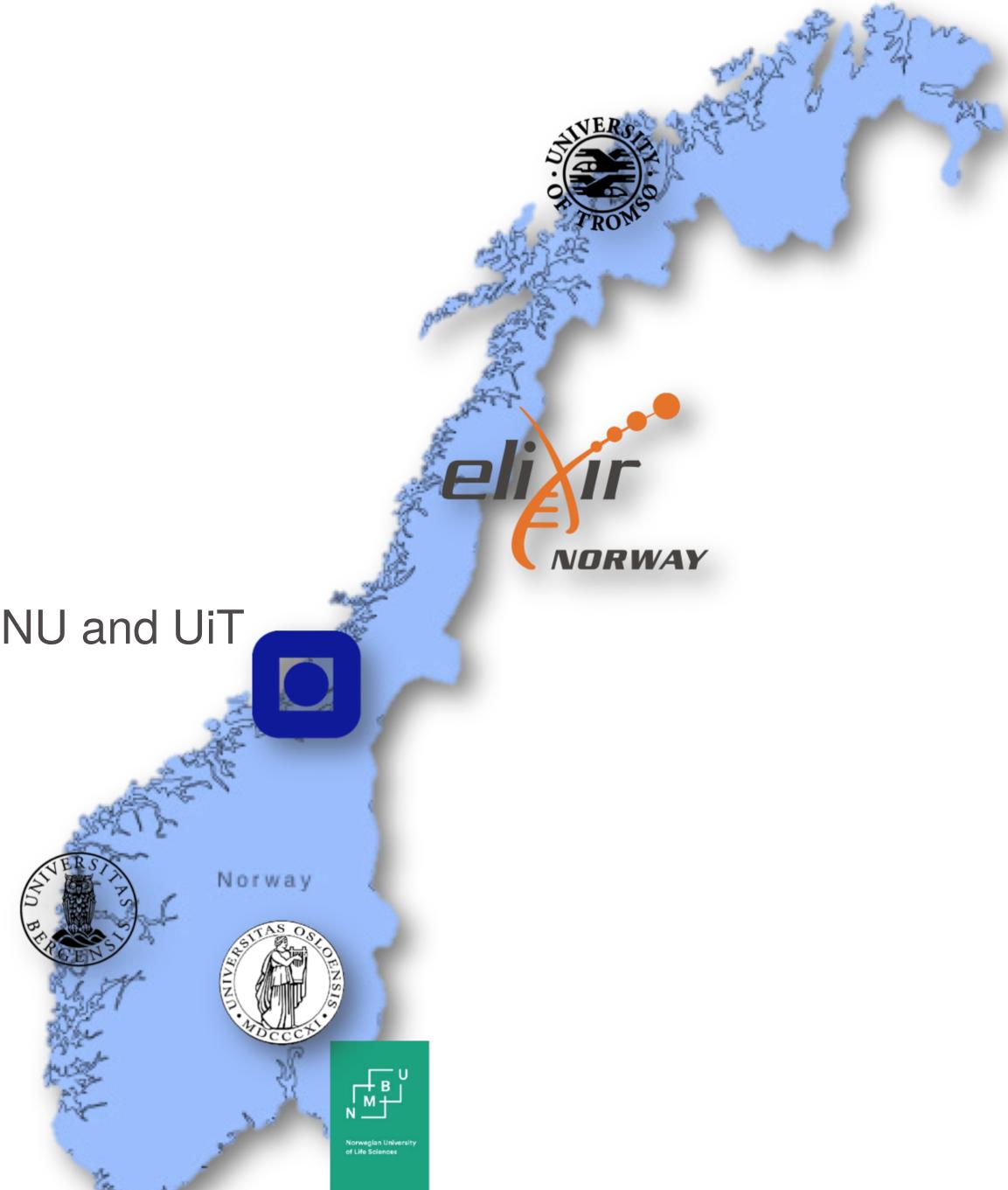
Users

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

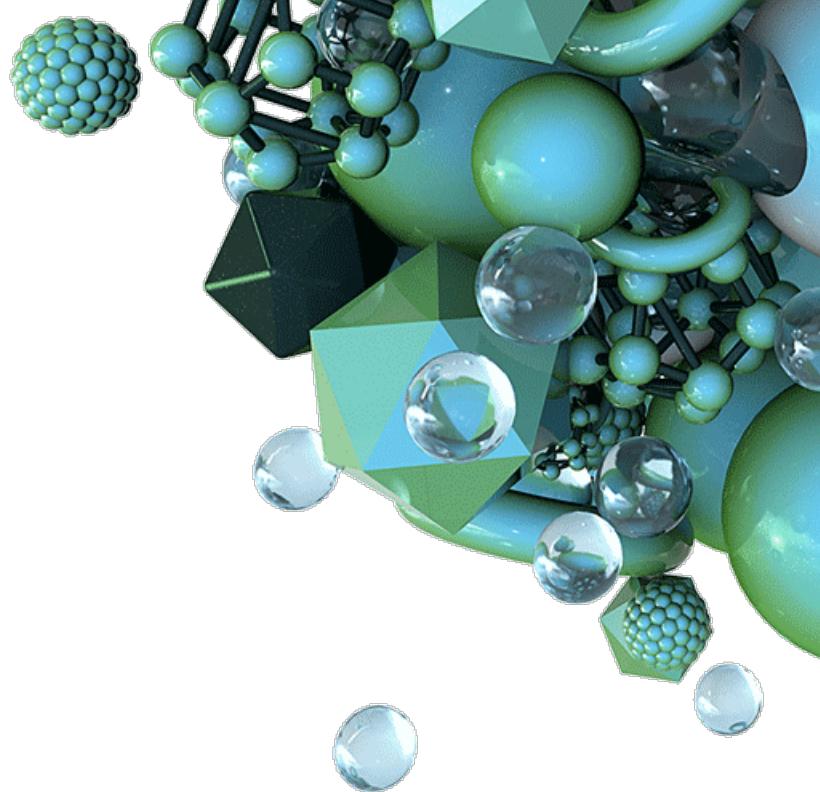
Bioinformatics infrastructure

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

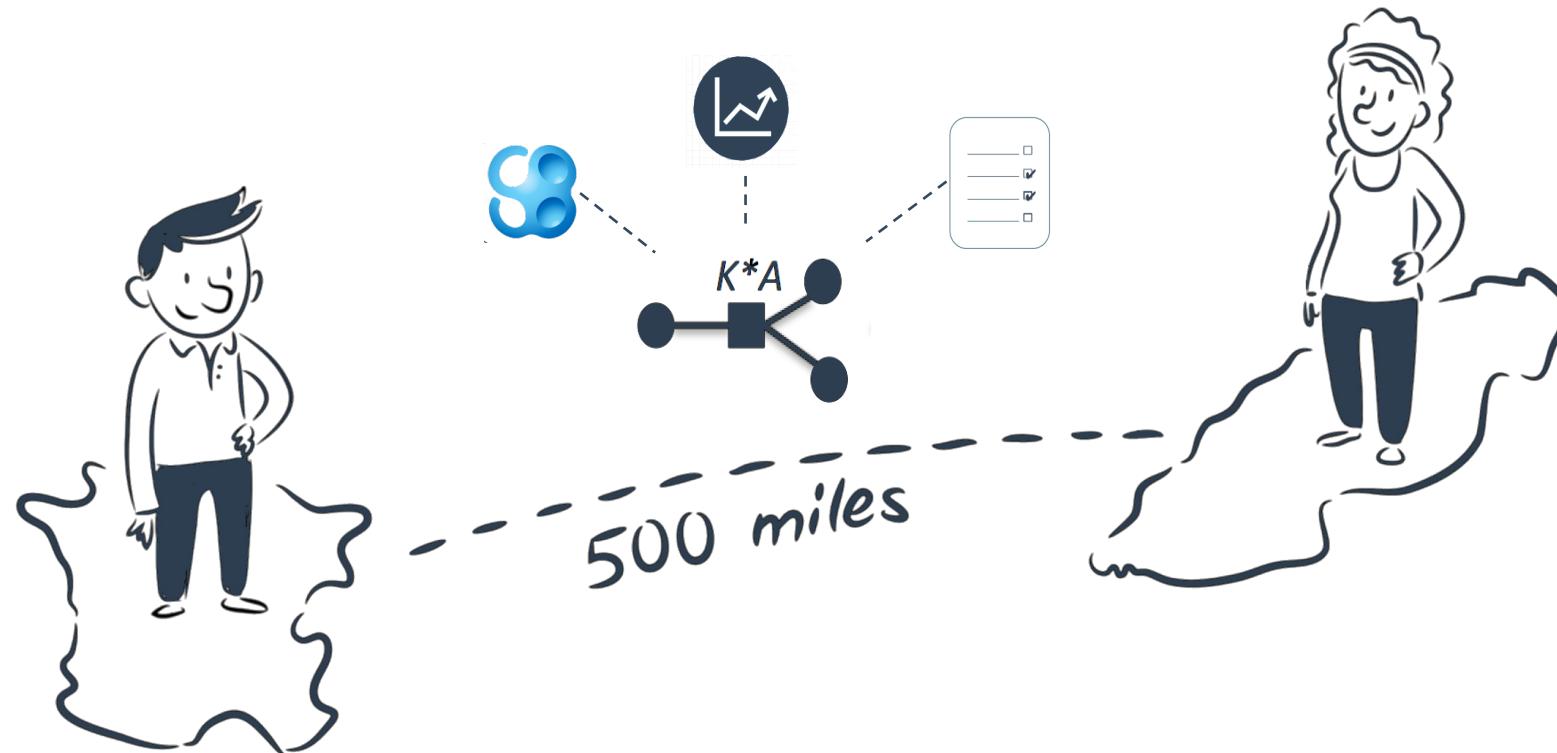
Competence and infrastructure – incl. Data Management

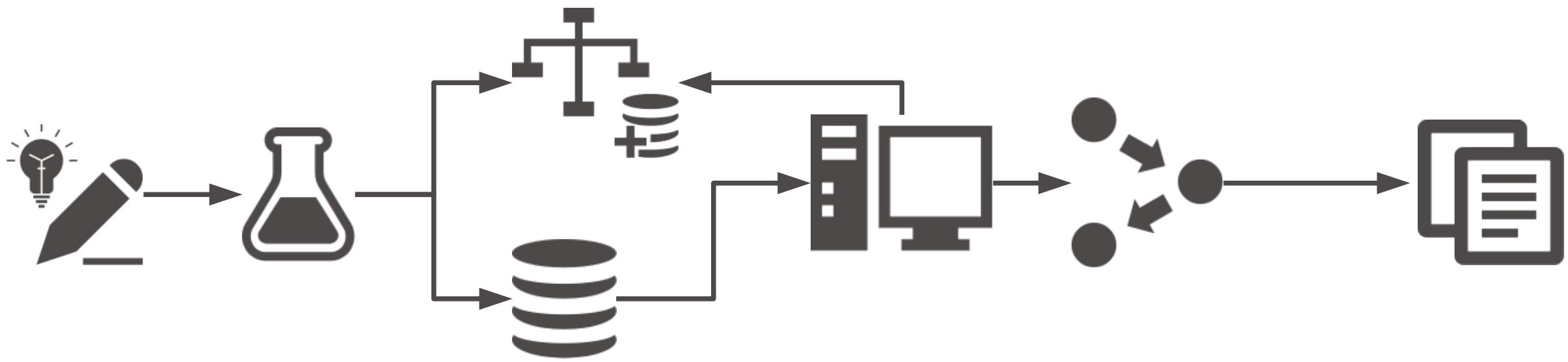
Outreach & Communication

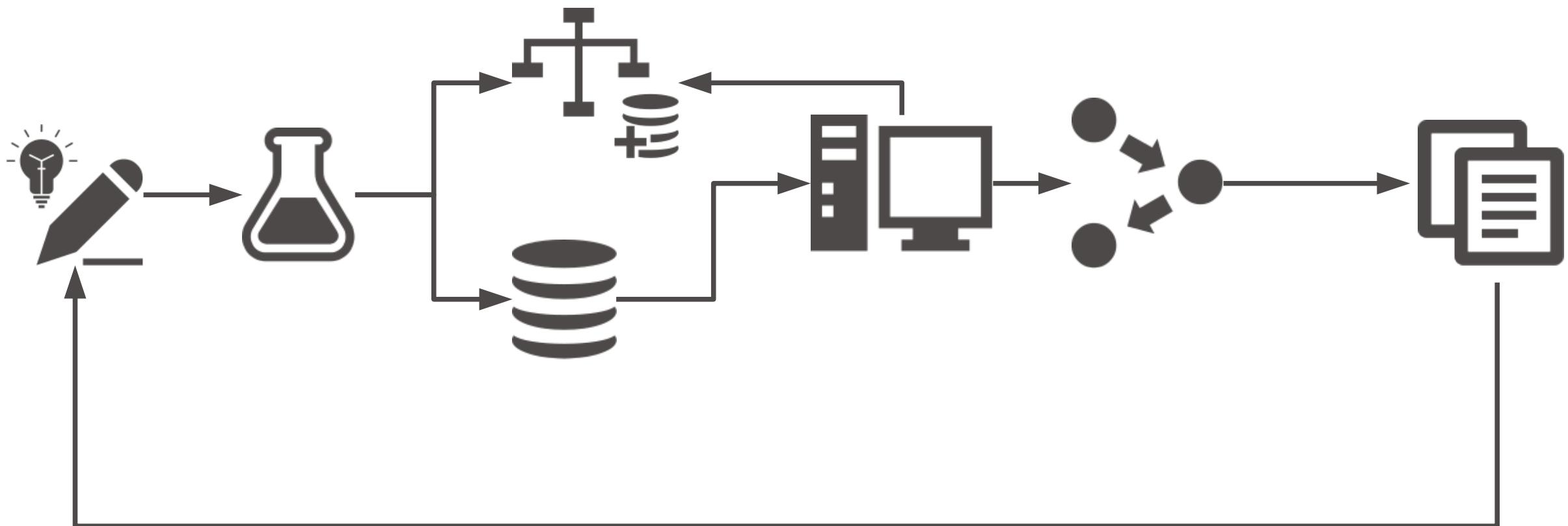
NFR: Collaborative Projects to meet Societal and Industry-related Challenges
Apply by 17th February 2021 and join DLN

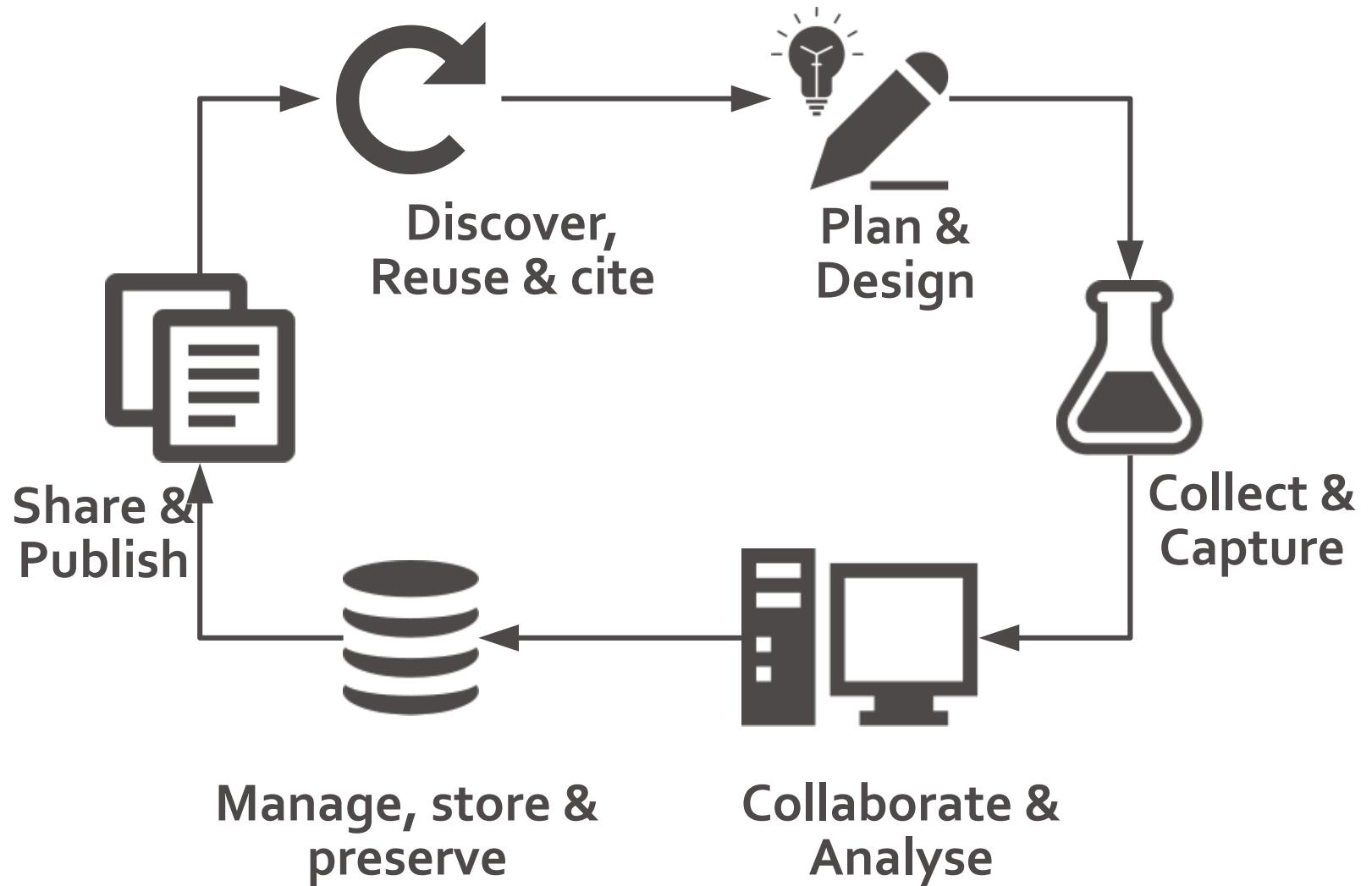
Data Management

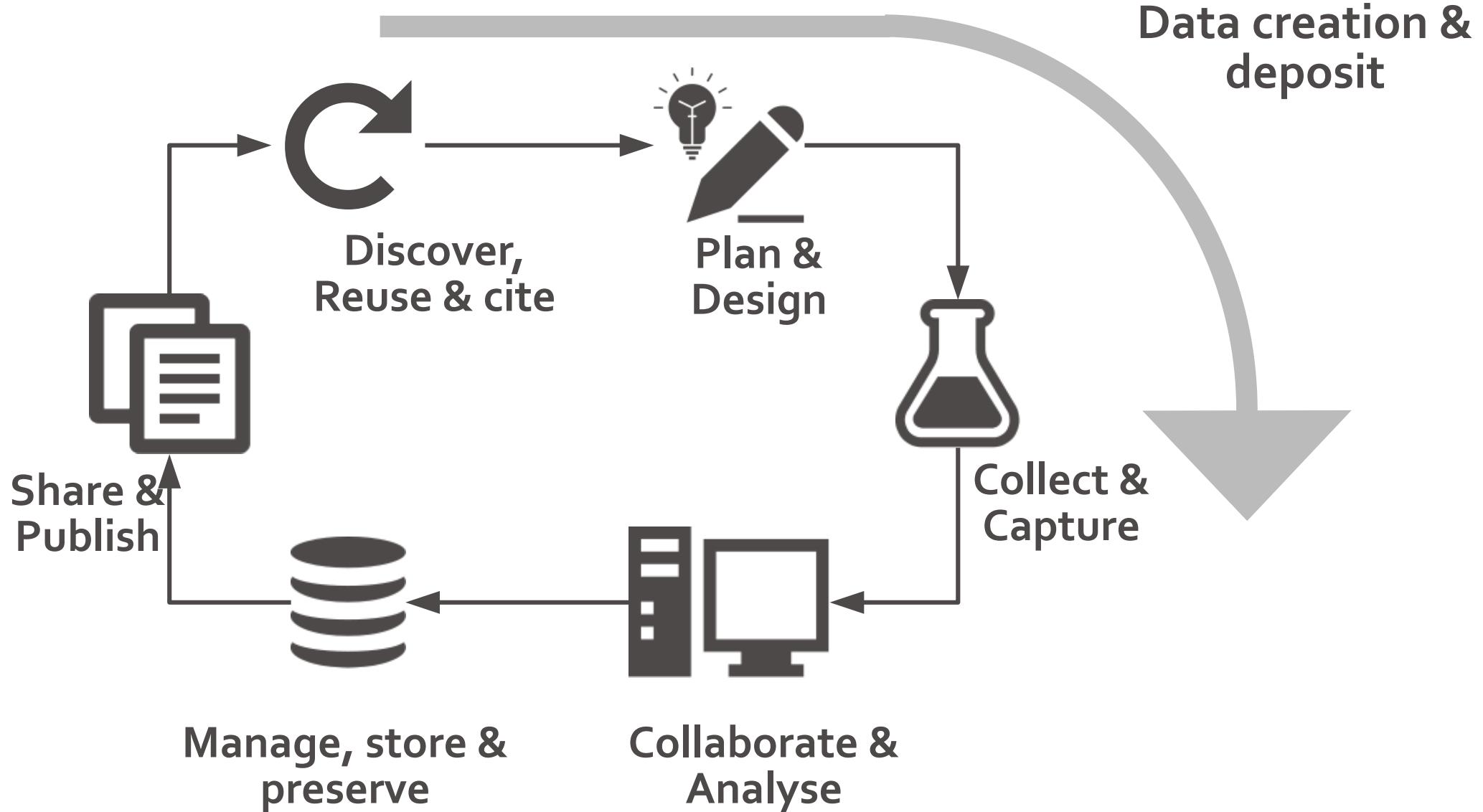
Make research data and related metadata **discoverable, accessible and understandable** today, tomorrow, and well into the future.

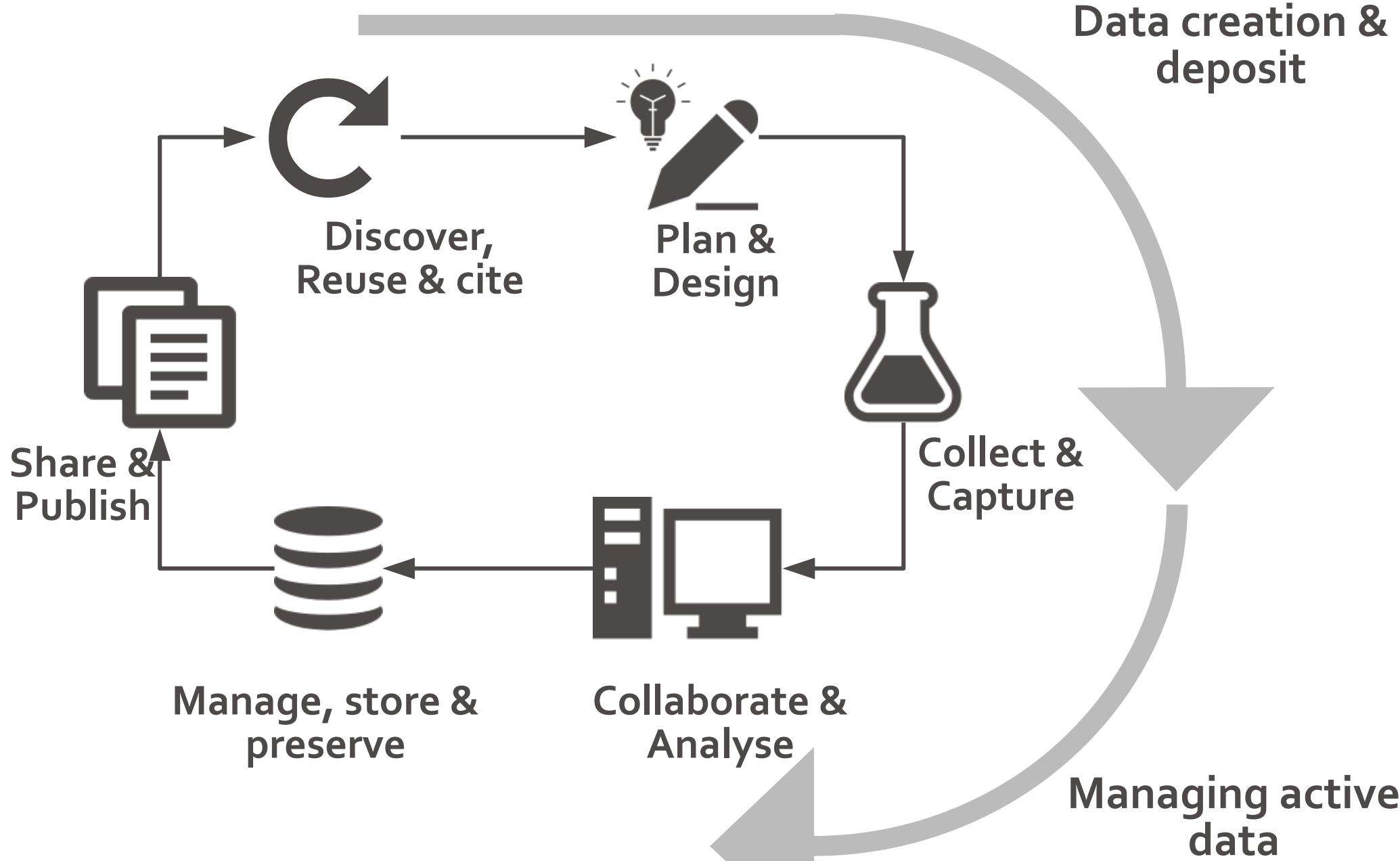


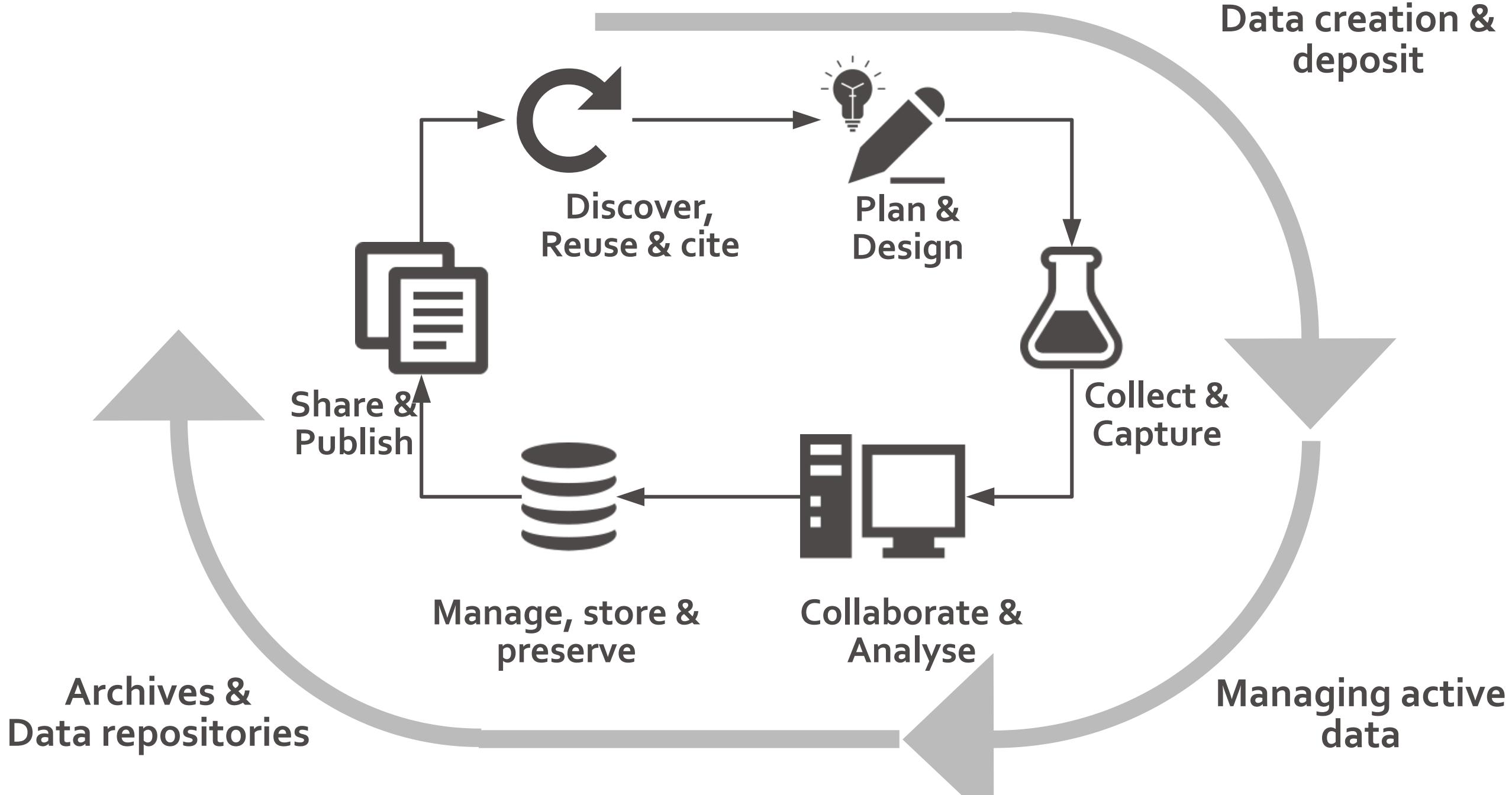


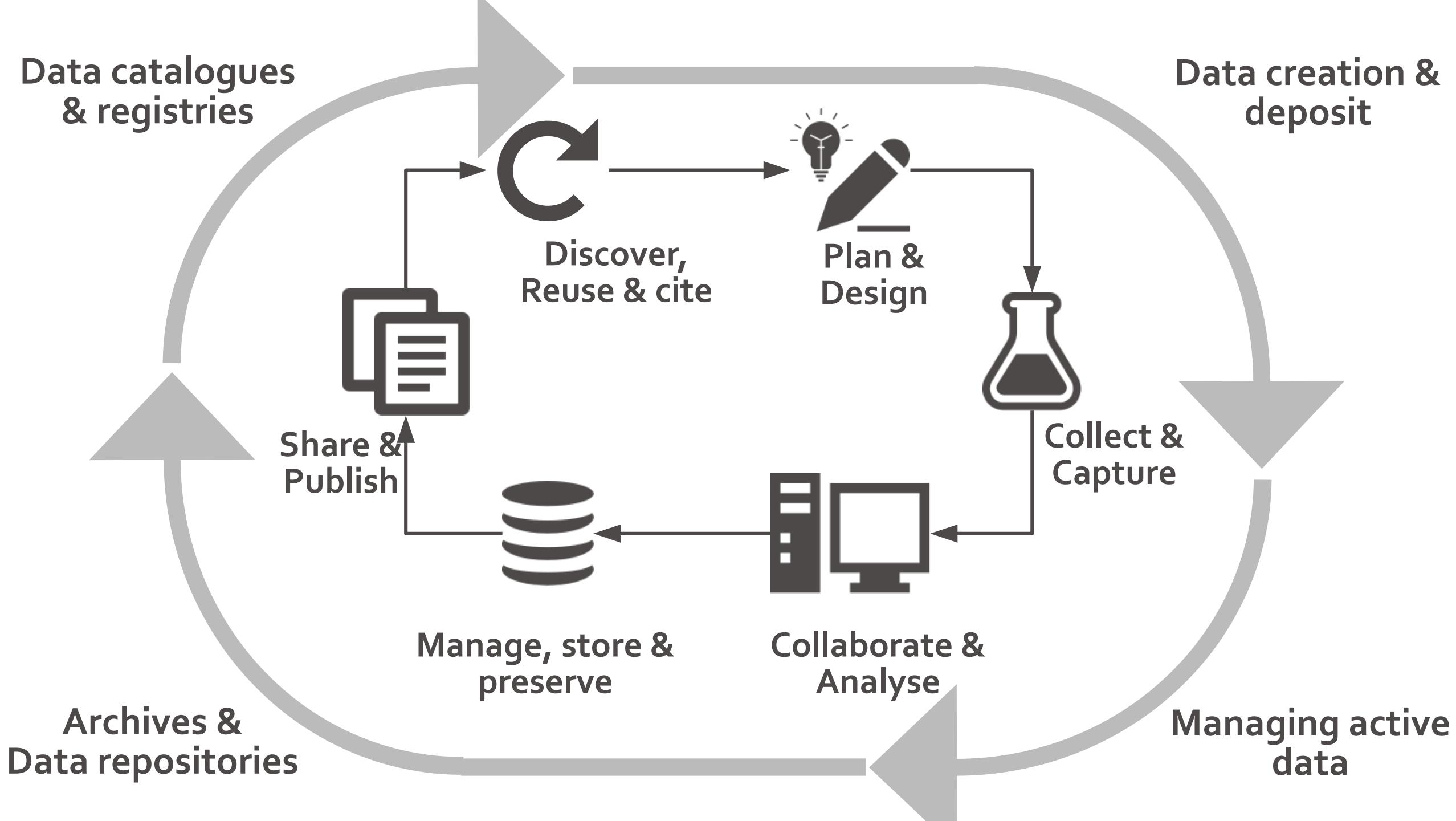


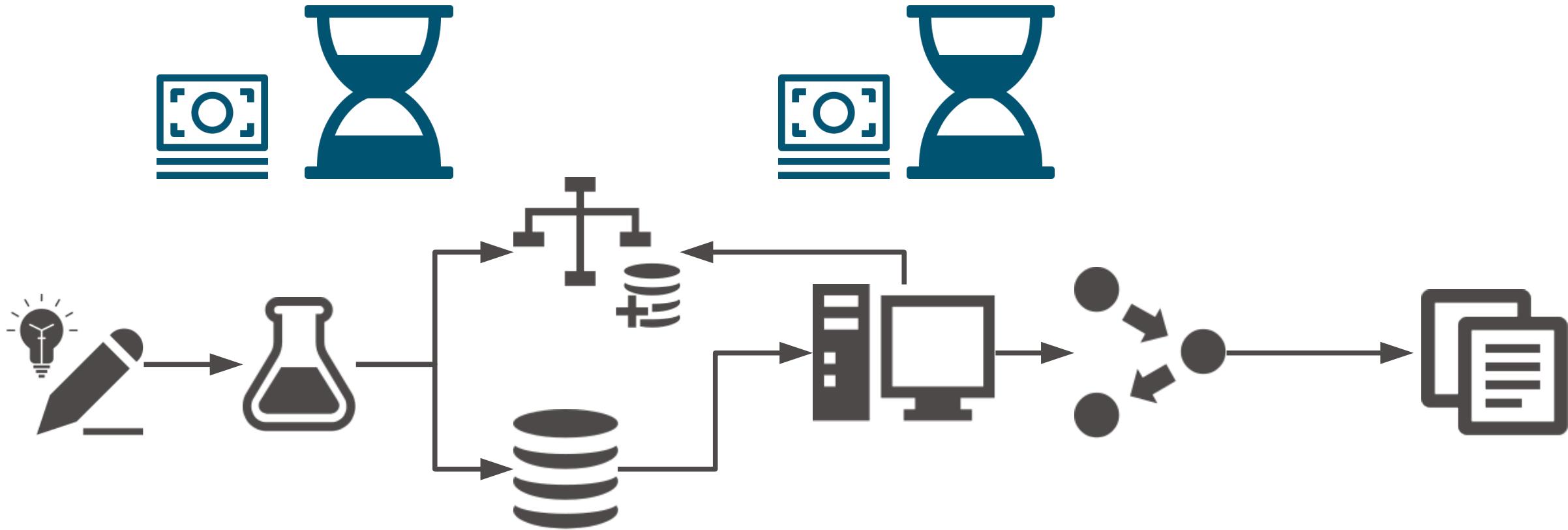


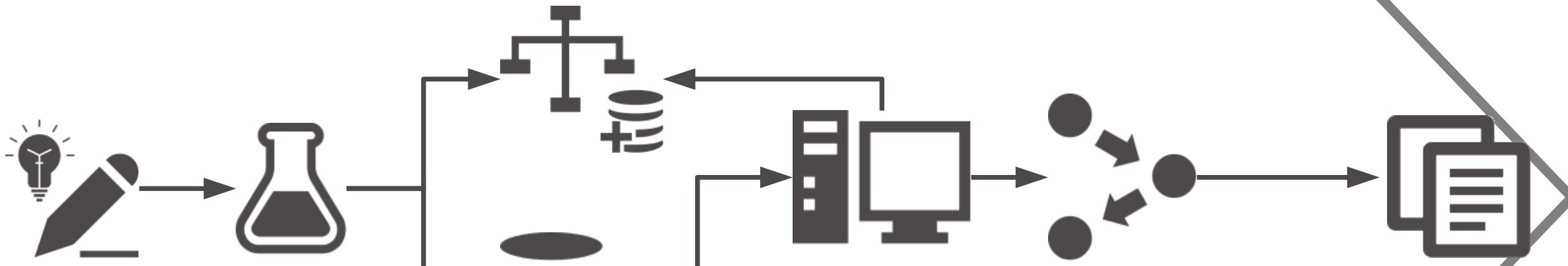


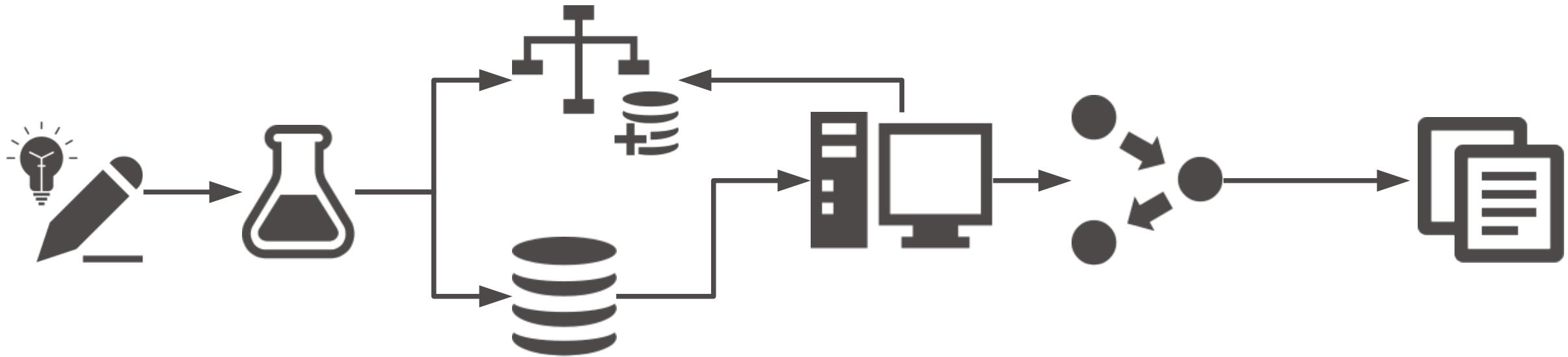








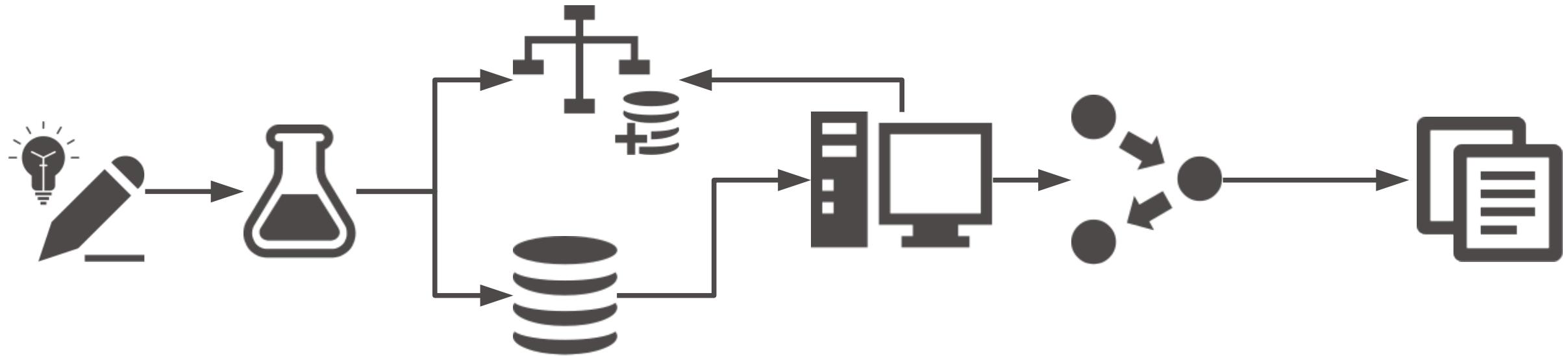






NeLS

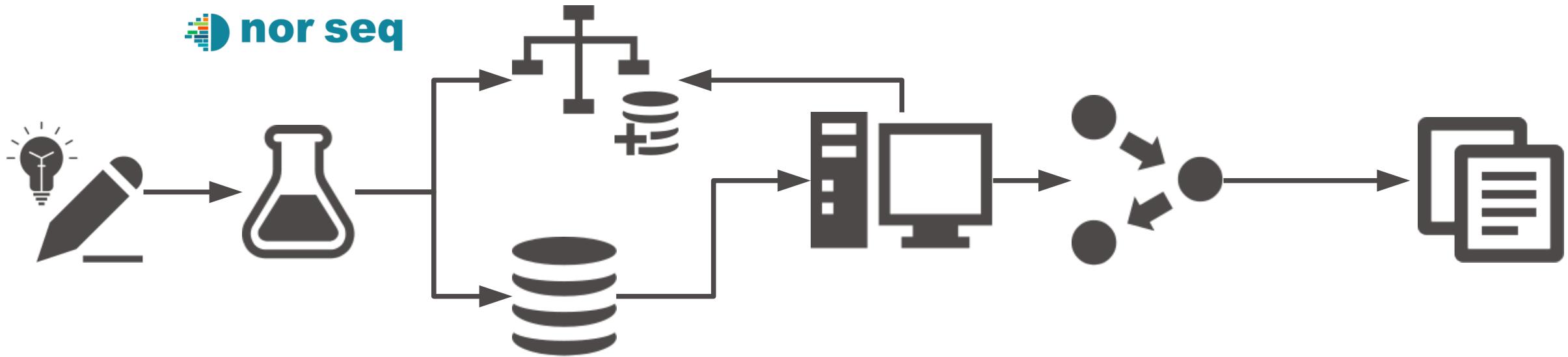
Norwegian e-Infrastructure for Life Sciences





NeLS

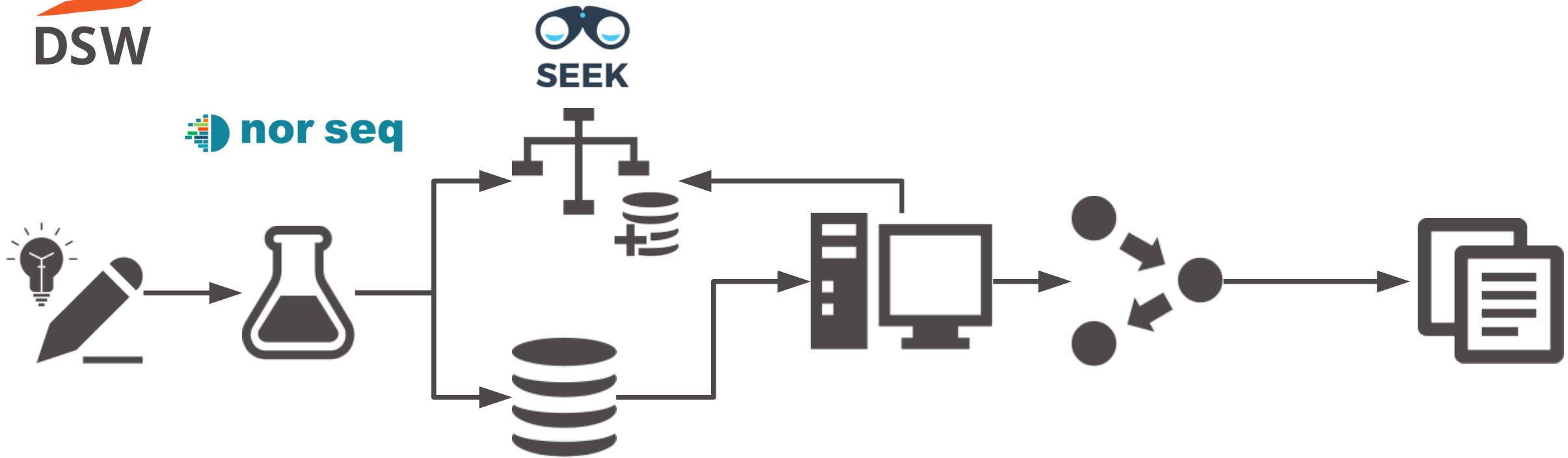
Norwegian e-Infrastructure for Life Sciences





NeLS

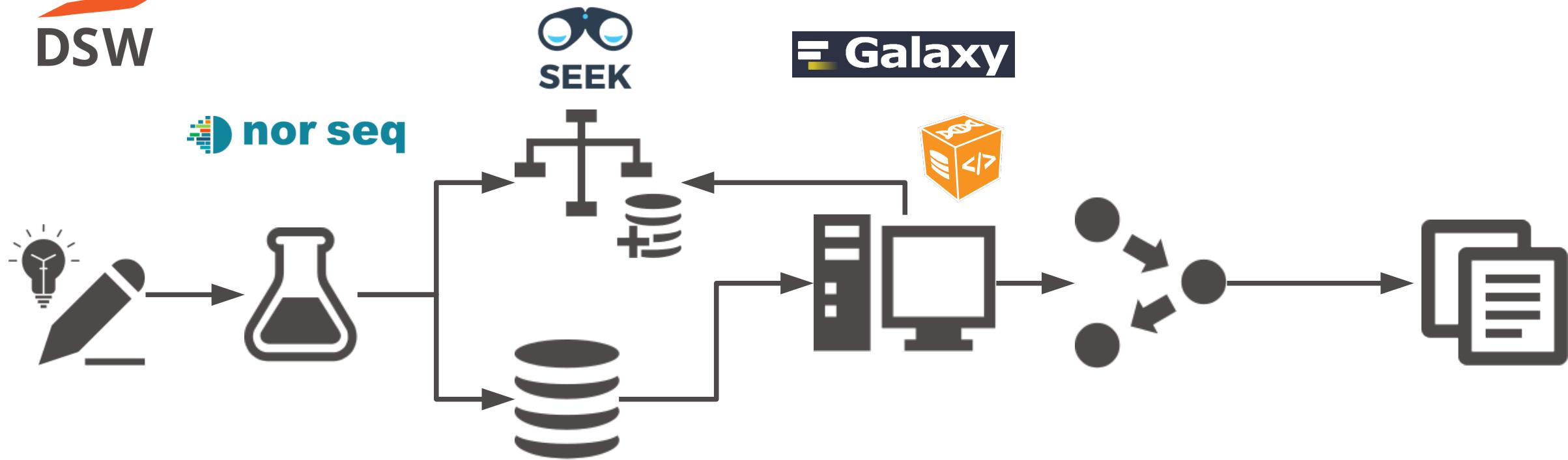
Norwegian e-Infrastructure for Life Sciences





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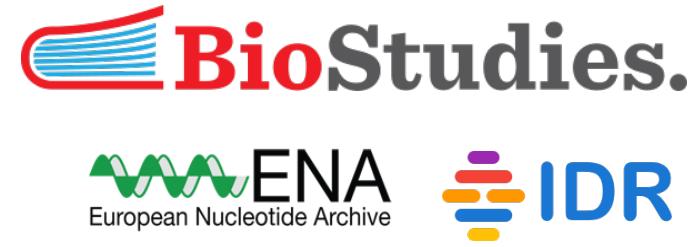
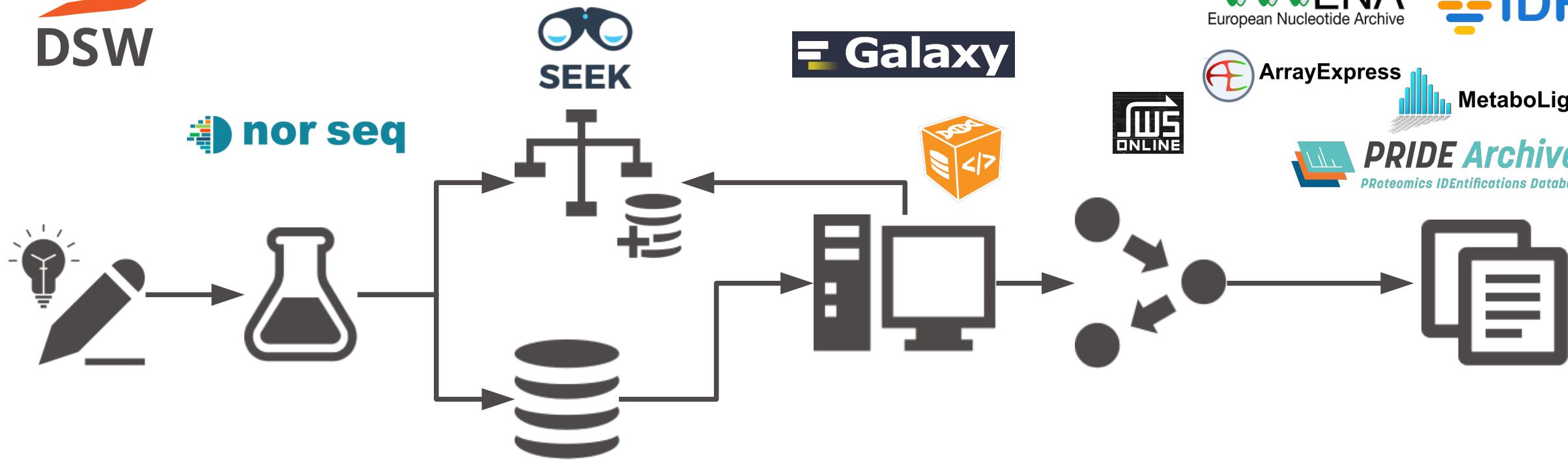
Norwegian e-Infrastructure for Life Sciences





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Norwegian e-Infrastructure for Life Sciences



ENA
European Nucleotide Archive

IDR

ArrayExpress

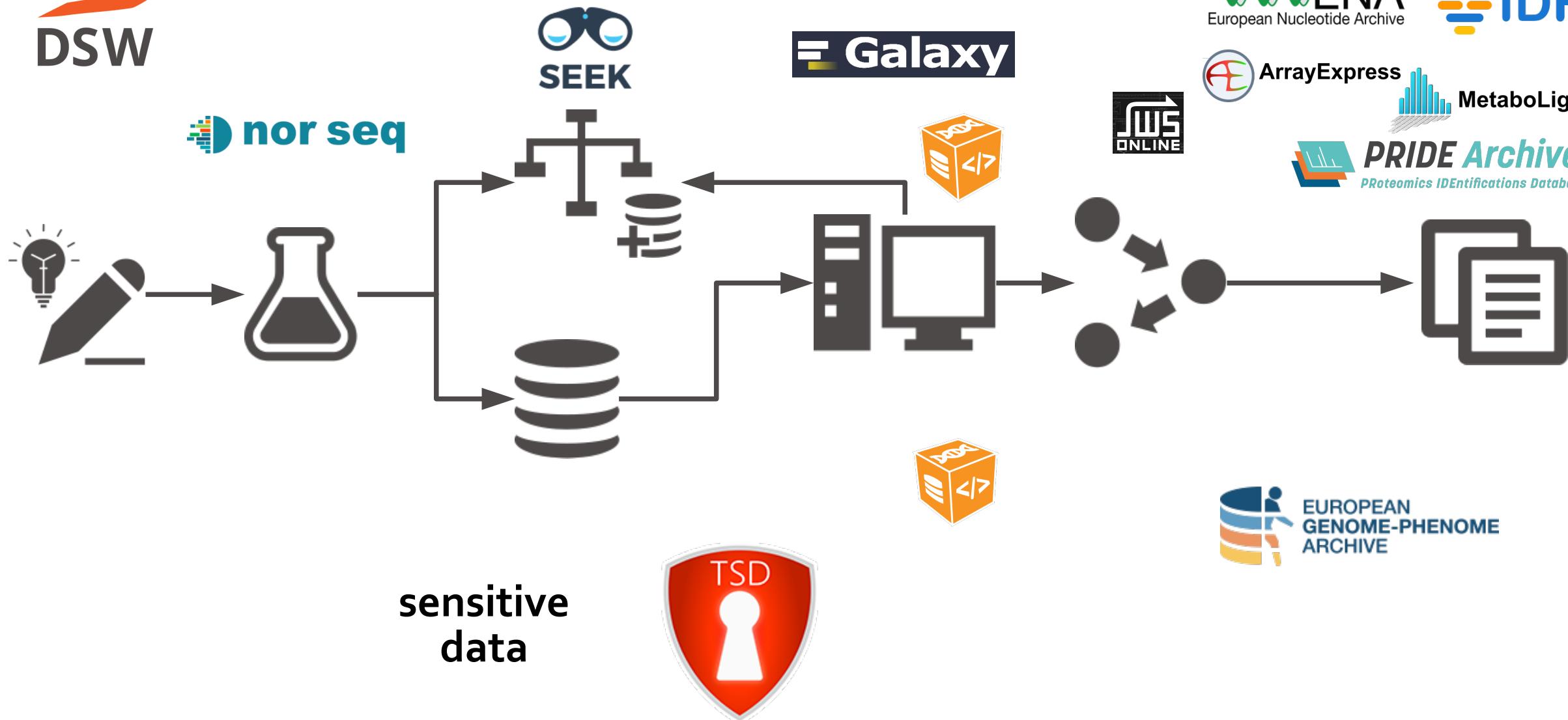
MetaboLights

PRIDE Archive
PRoteomics IDEntifications Database



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Norwegian e-Infrastructure for Life Sciences





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Data Management Plan?





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Norwegian e-Infrastructure for Life Sciences

BioStudies.

ENA
European Nucleotide Archive

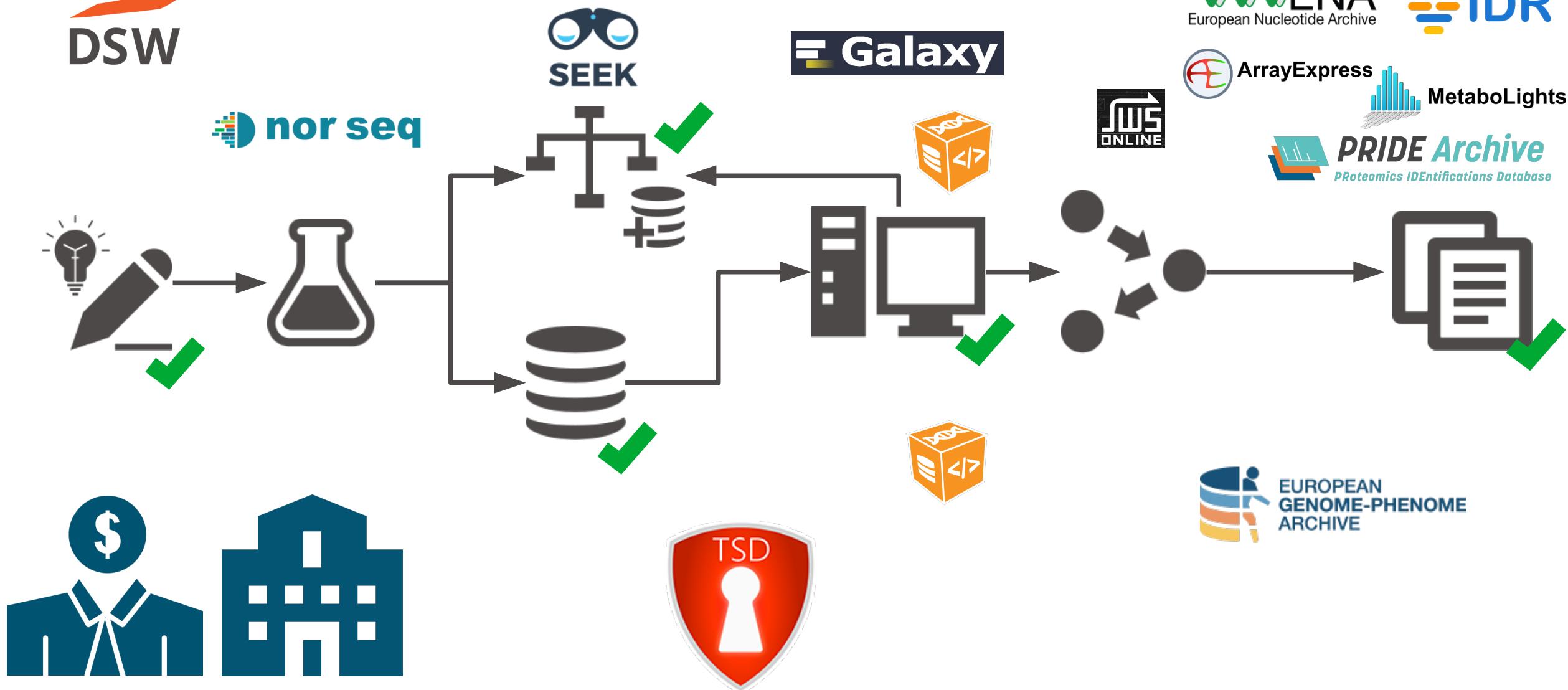
IDR

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PRIDE Archive
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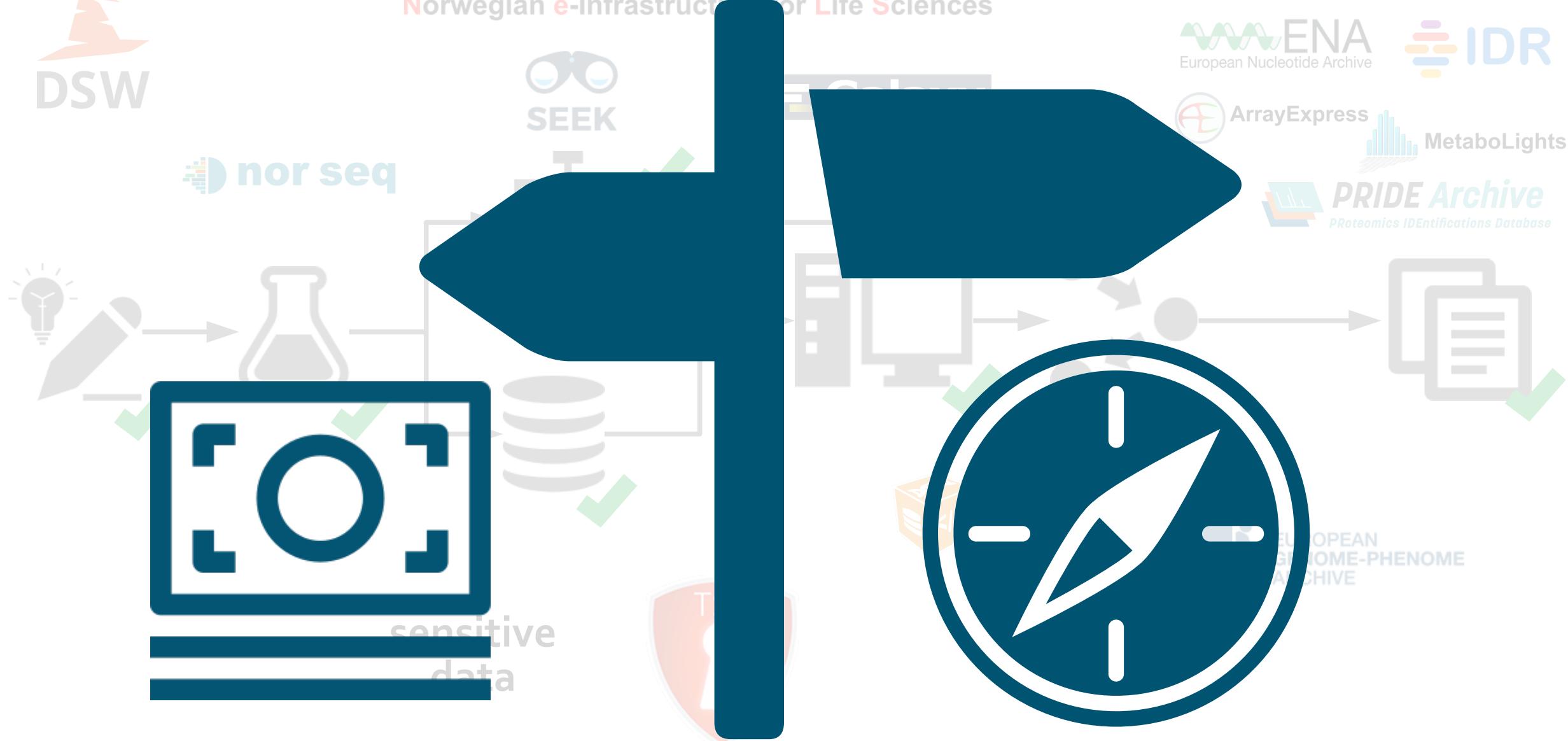
EUROPEAN GENOME-PHENOME ARCHIVE





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Norwegian e-Infrastructure for Life Sciences





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BioMedData



Horizon 2020
Research Infrastructure
Program



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



UNIVERSITY OF BERGEN



UiT The Arctic University of Norway



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Norwegian University of
Science and Technology



Norwegian University
of Life Sciences