

# Welcome to the Life Science DMP- workshop on Zoom



Turn your video on while speaking (optional)



Use the 'hand up' function for questions or just unmute yourself



Mute yourself while not speaking



... or ask questions in the chat



Please use the 'rename' function to indicate your department & institution



# 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

# Schedule

**15.06.2021**

0830 - 0900 Login support

0900 - 0915 Introduction

0915 - 0930 Requirements from the RCN

0930 - 1015 Parallel session: Local recommendations & storage infrastructures Institutional DMP guidelines

1015 - 1030 Short break

1030 - 1100 Introduction DSW

1100 - 1120 Information on national storage infrastructures

1120 - 1135 Short break

1135 - 1230 Persistent identifiers, Controlled Vocabularies & Ontologies

# Schedule

**16.06.2021**

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

1000 - 1015 Short break

1015 - 1045 Relevant deposition repositories/ data archives

1100 - 1115 Licensing of data, biological material and software

1115 - 1300 Hands on training and assistance to generate a data management plan



Erik  
Hjerde



Espen  
Åberg



Eivind  
Coward



Nazeefa  
Fatima



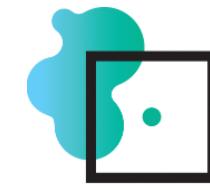
Federico  
Bianchini



Korbinian  
Bösl



Marta  
Eide



CENTRE FOR  
DIGITAL LIFE  
NORWAY



Erik  
Hjerde



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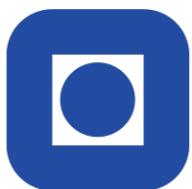
Research Data  
Support



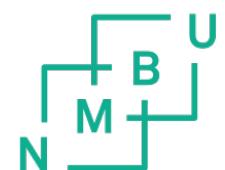
Research Data  
Competence Group



University Library  
Research Data team



RESEARCH  
DATA  
@NTNU



University Library &  
Research Support

# ELIXIR Europe

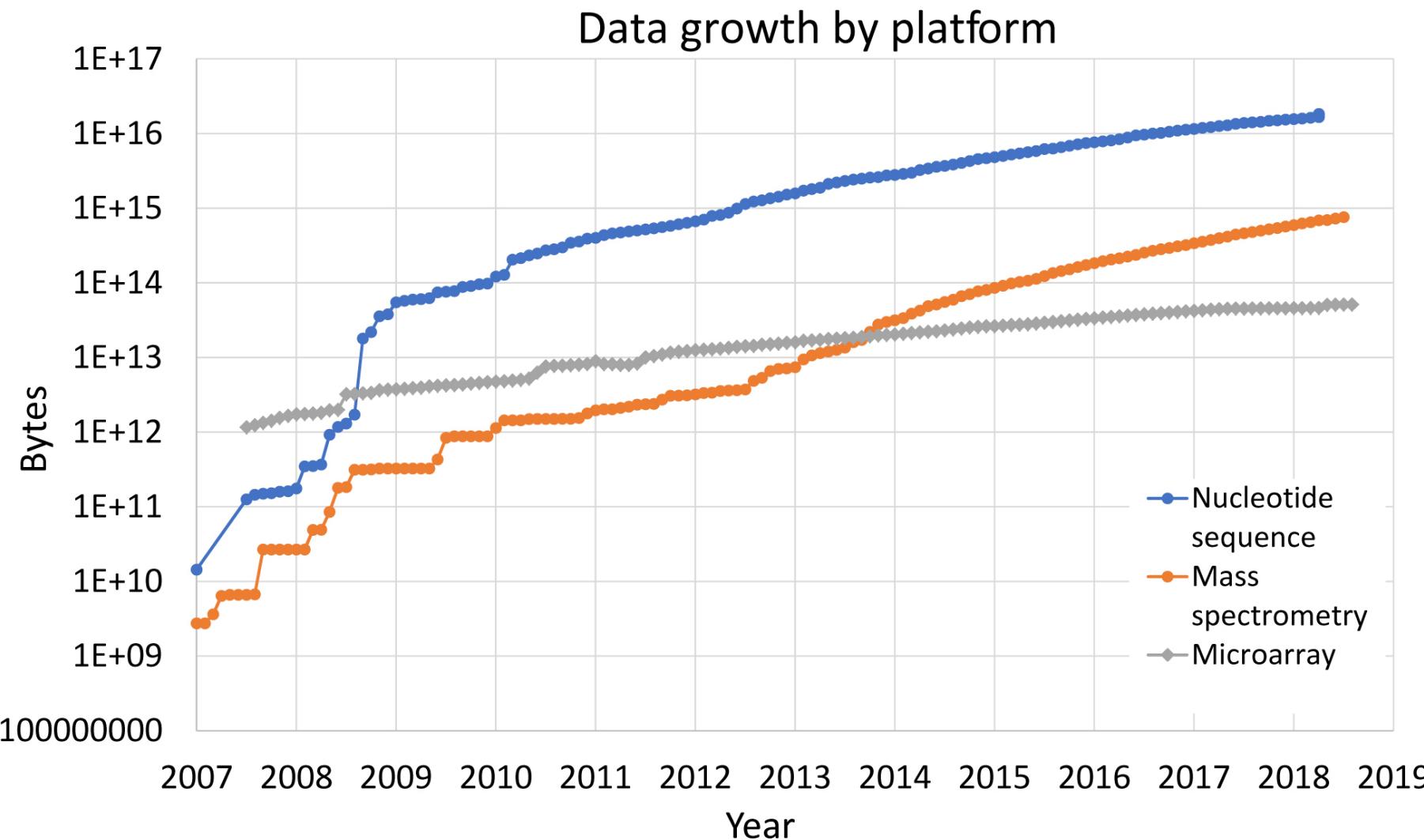
## 'Data for Life'

### 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



Data stored in  
ELIXIR/EBI-EMBL  
Repositories



## ELIXIR Members



## ELIXIR Observers



Cyprus

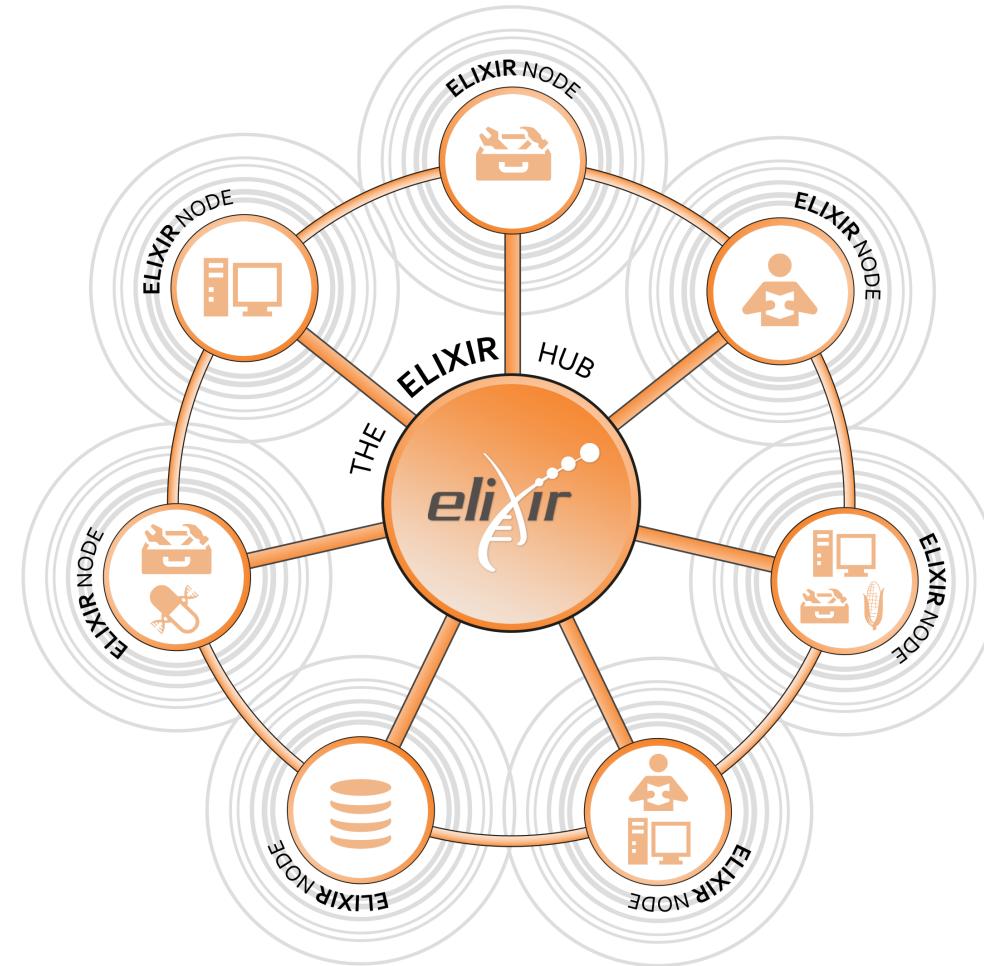


# A distributed infrastructure to scale with the challenge

**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



# ELIXIR Services



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



# ELIXIR Services



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



Data management:  
Genome annotation, RDMkit,  
Data management plans

# ELIXIR Services



Data deposition:  
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Data management:  
Genome annotation, RDMkit,  
Data management plans



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



# ELIXIR Services



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



Data management:  
Genome annotation, RDMkit,  
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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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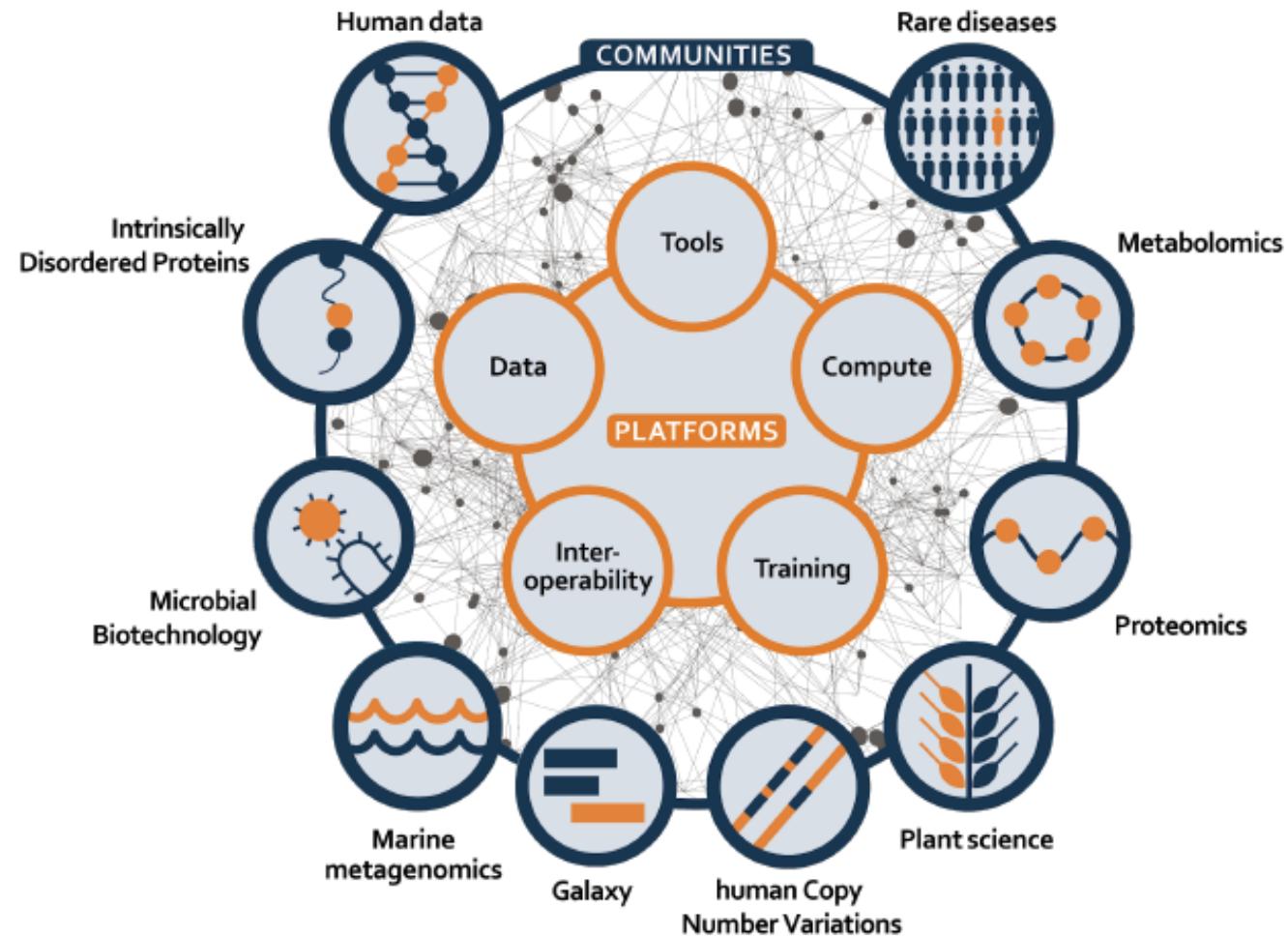


**Training:**  
TeSS, Data Carpentry, eLearning



# ELIXIR Structure

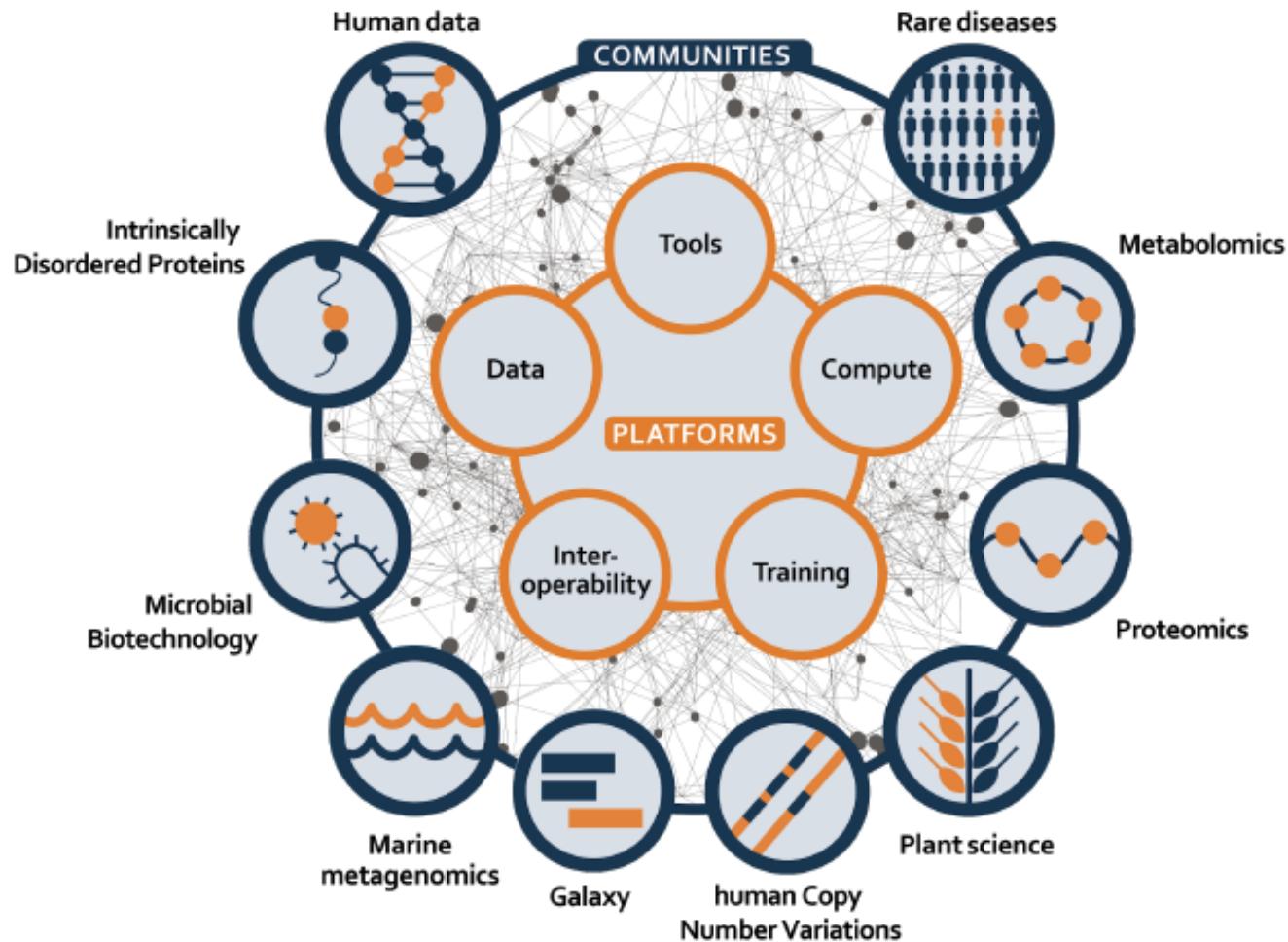
Five technical **Platforms** for  
**Compute, Data, Tools,**  
**Interoperability, and Training**



# 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 2 days of service free of charge (enabled by RCN)

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

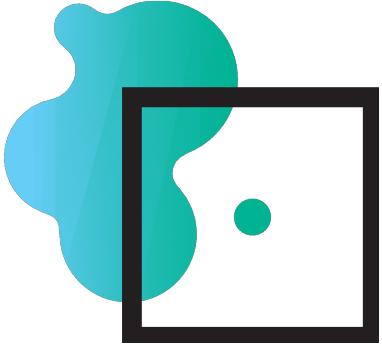
Bioinformatics infrastructure

Analysis, sharing and managing of data



[contact@bioinfo.no](mailto:contact@bioinfo.no)





# Centre for Digital Life Norway (DLN 2.0)

facilitates transdisciplinary research, innovation, and education in  
Life Science



Transdisciplinary collaborations



Education and career development



Responsible research and innovation

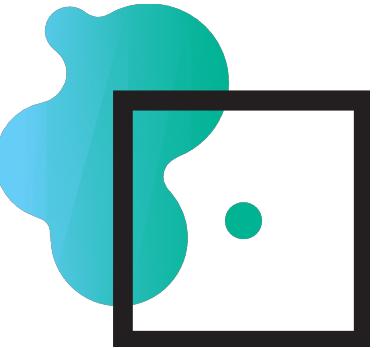


Innovation and commercialisation



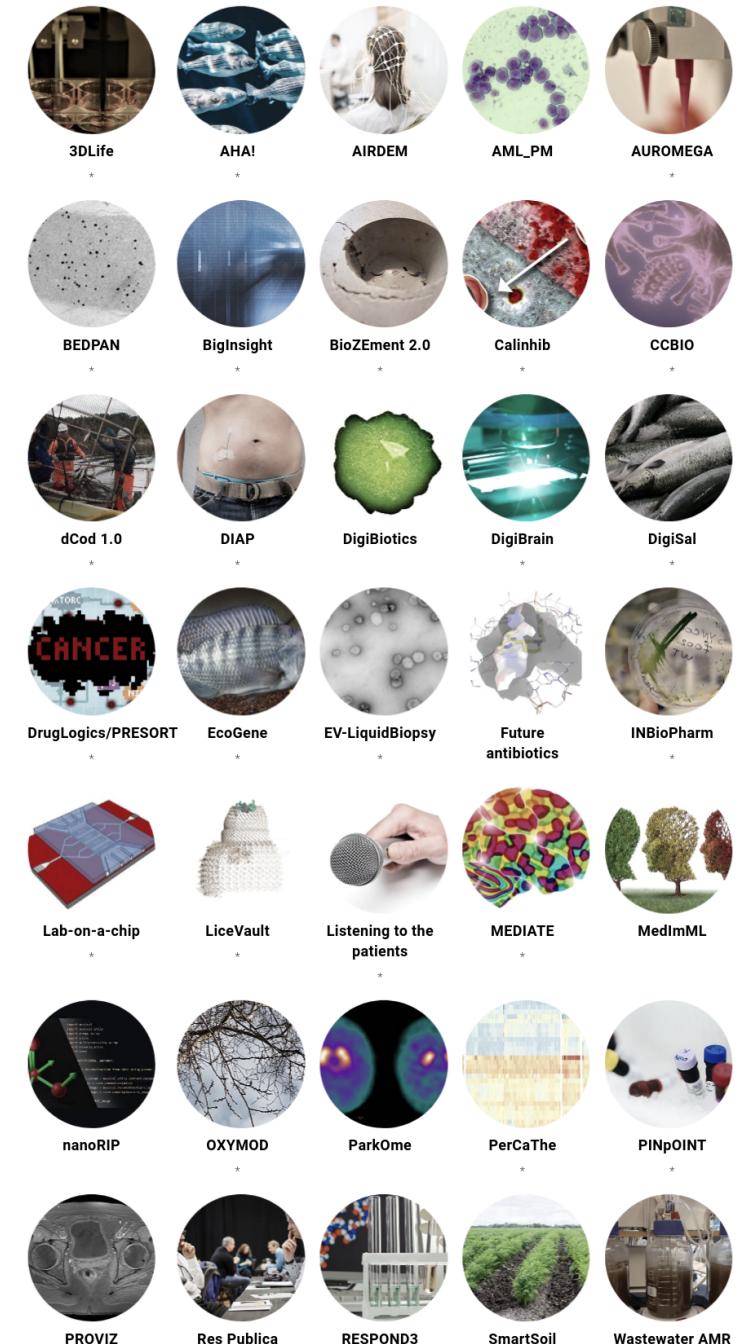
Data management

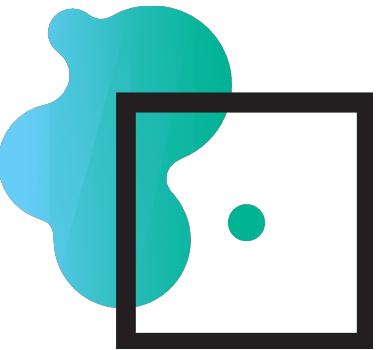
[www.digitallifenorway.org](http://www.digitallifenorway.org)



35 transdisciplinary  
biotechnology projects all over  
the country.

Biotechnology with digital  
technology: health,  
aquaculture, agriculture &  
industrial biotechnology.



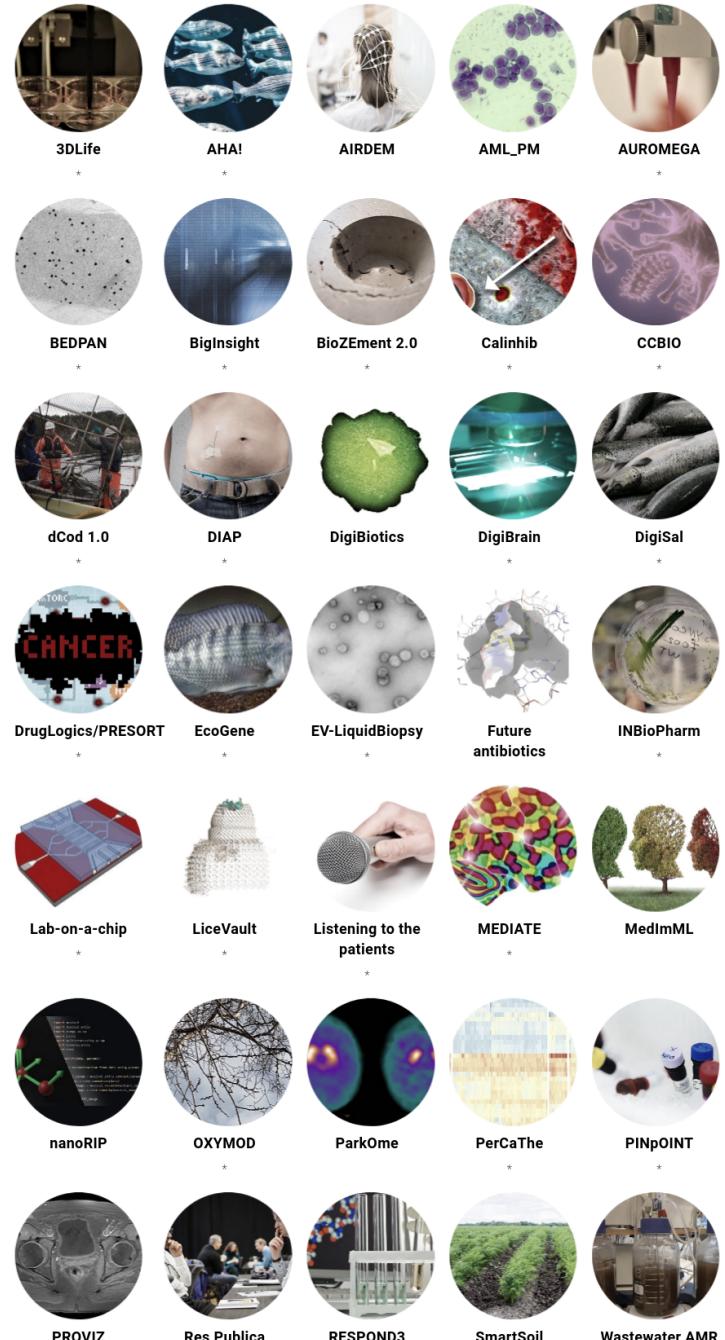


# Join us!

## upcoming partner call

Support for RCN call:  
“Enabling technologies”

**[contact@digitallifenorway.org](mailto:contact@digitallifenorway.org)**



# Data Management

Make research data and related metadata **discoverable**,  
**accessible** and **understandable** ...



# Data Management

Make research data and related metadata **discoverable**,  
**accessible** and **understandable** ...



... today, tomorrow, and well into the  
future.

# Data Management

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... today, tomorrow, and well into the  
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... across geographical distances.

# Data Management



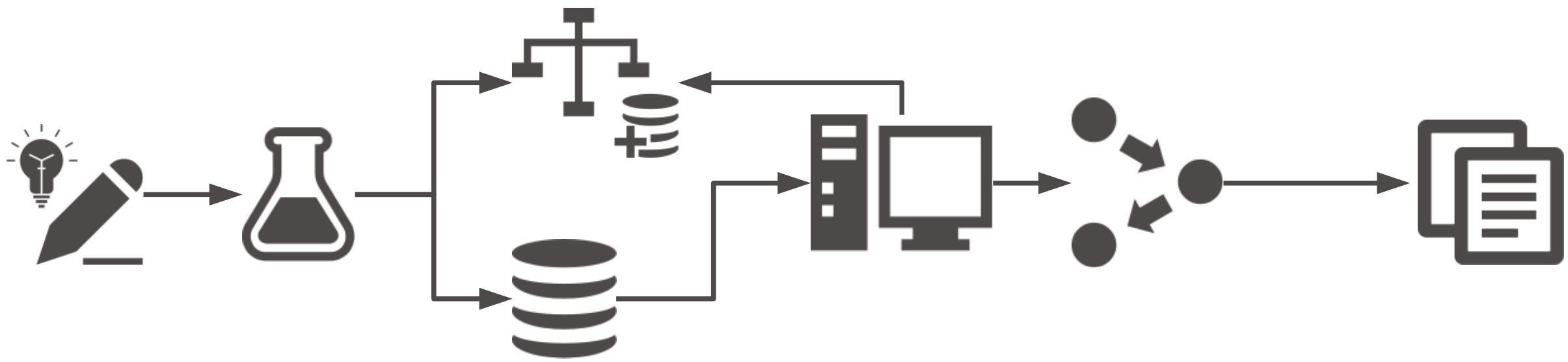
Make research data and related metadata **discoverable**,  
**accessible** and **understandable** ...

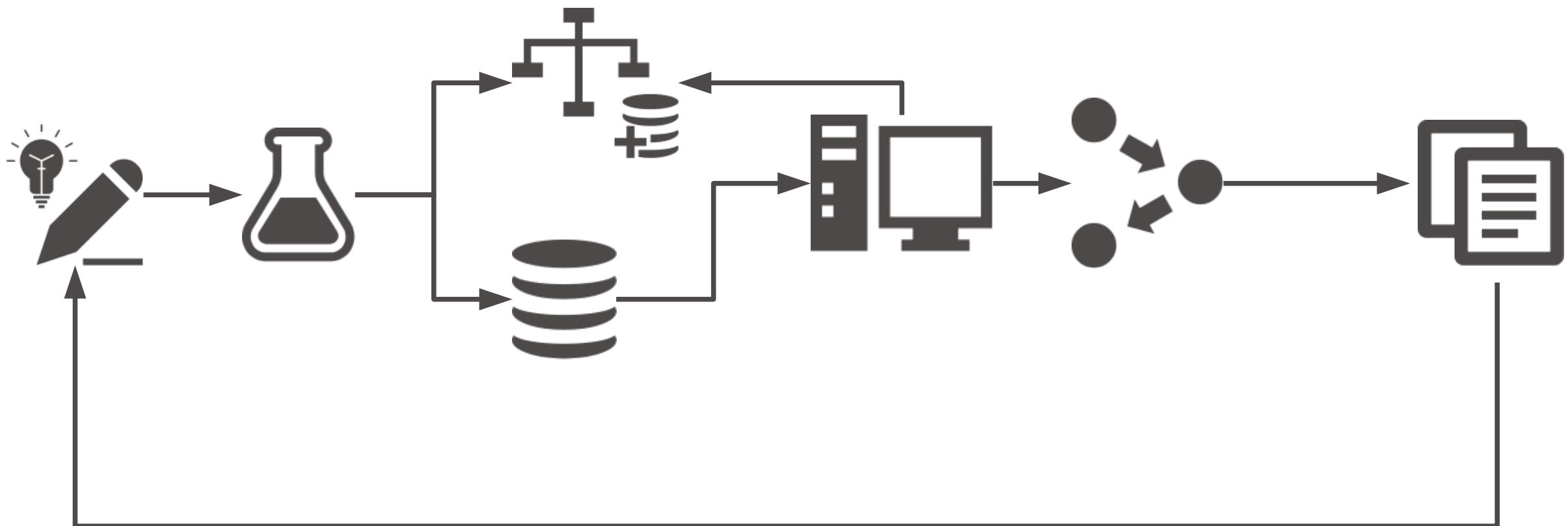
... today, tomorrow, and well into the  
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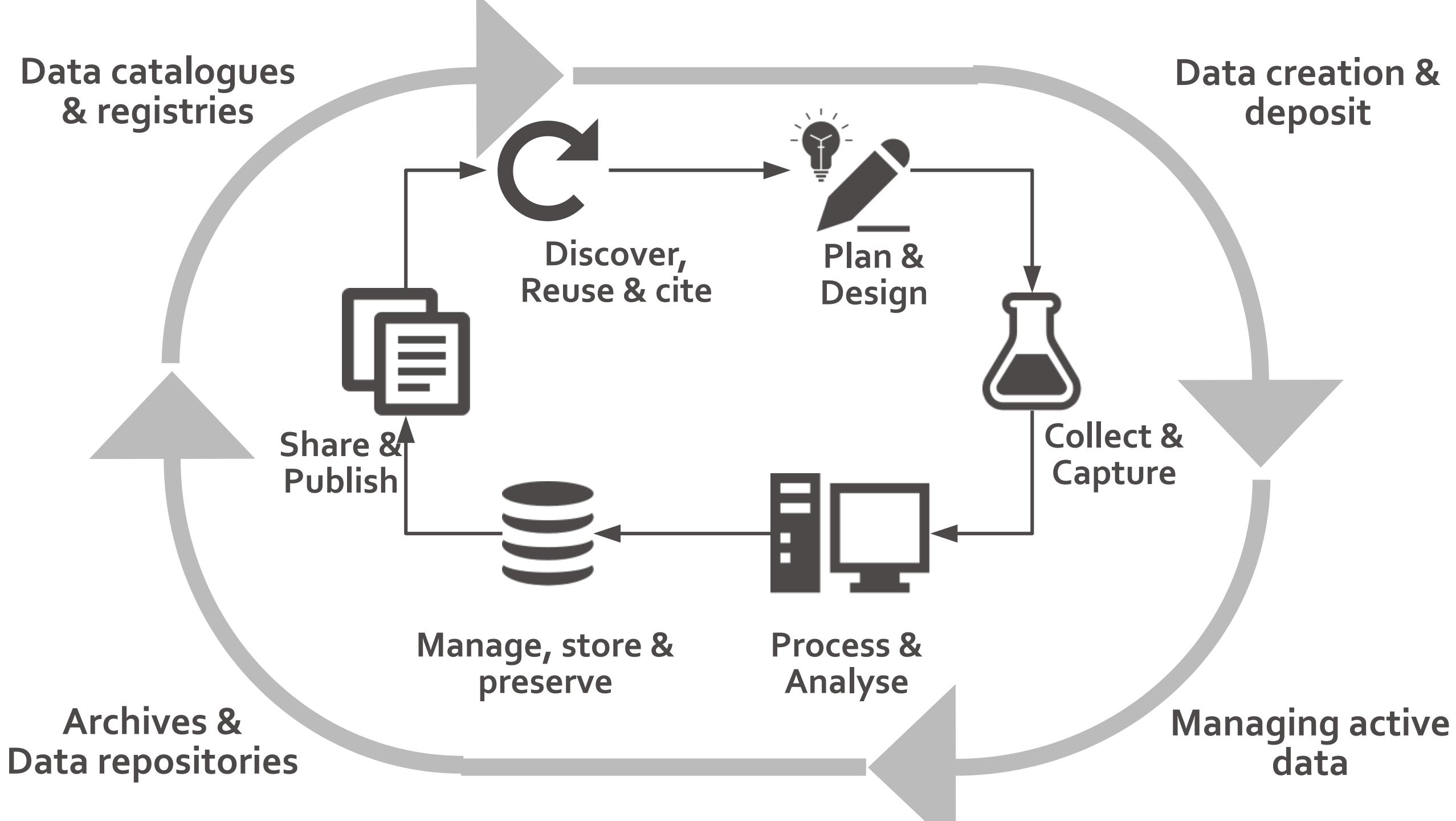
... across geographical distances.

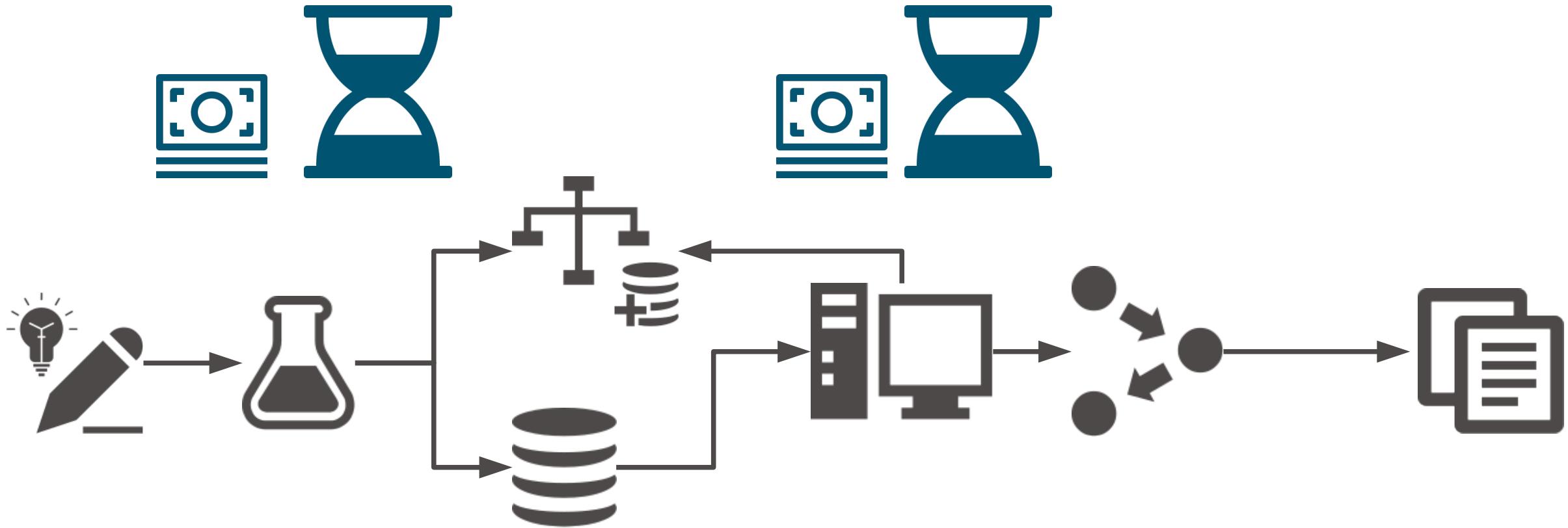
... enabling efficient collaboration;

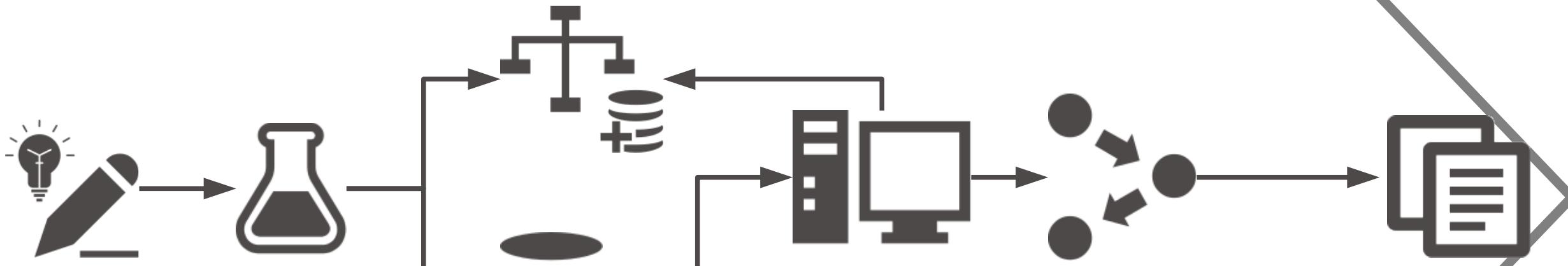
even across disciplines.

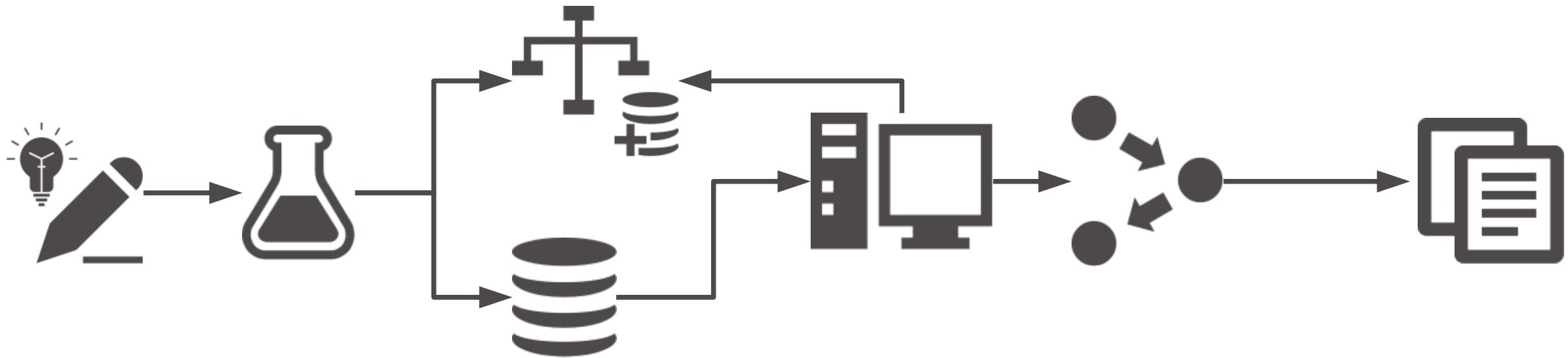










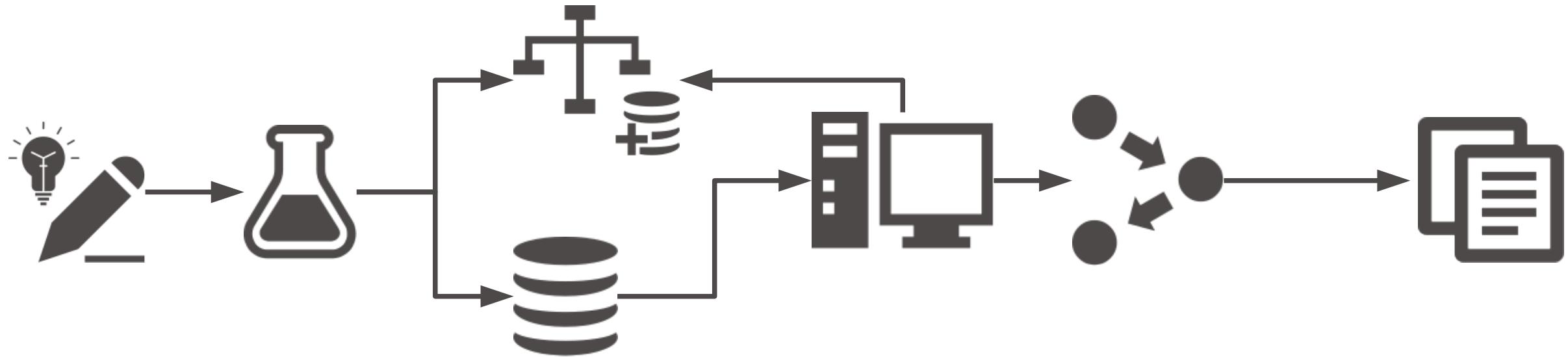




# NeLS

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Norwegian e-Infrastructure for **Life Sciences**

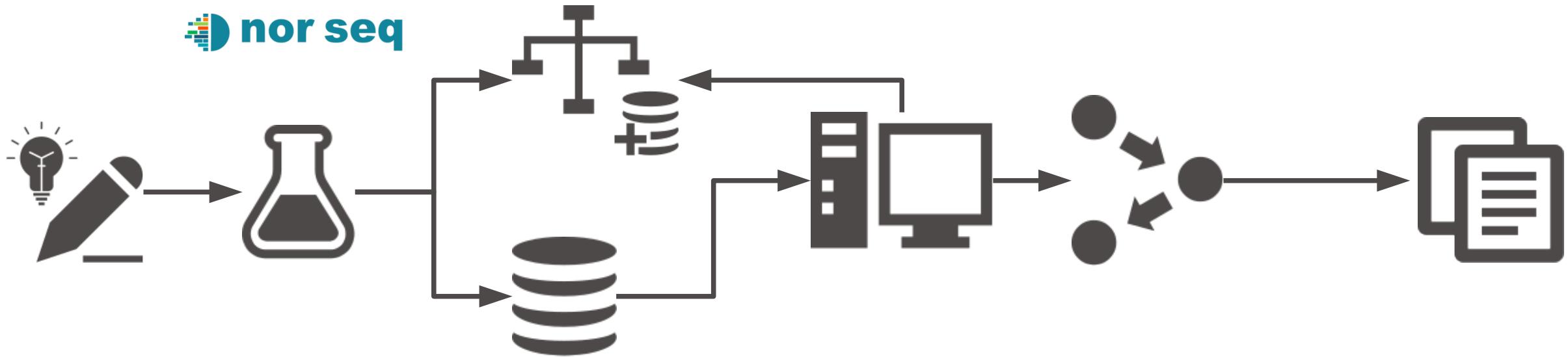




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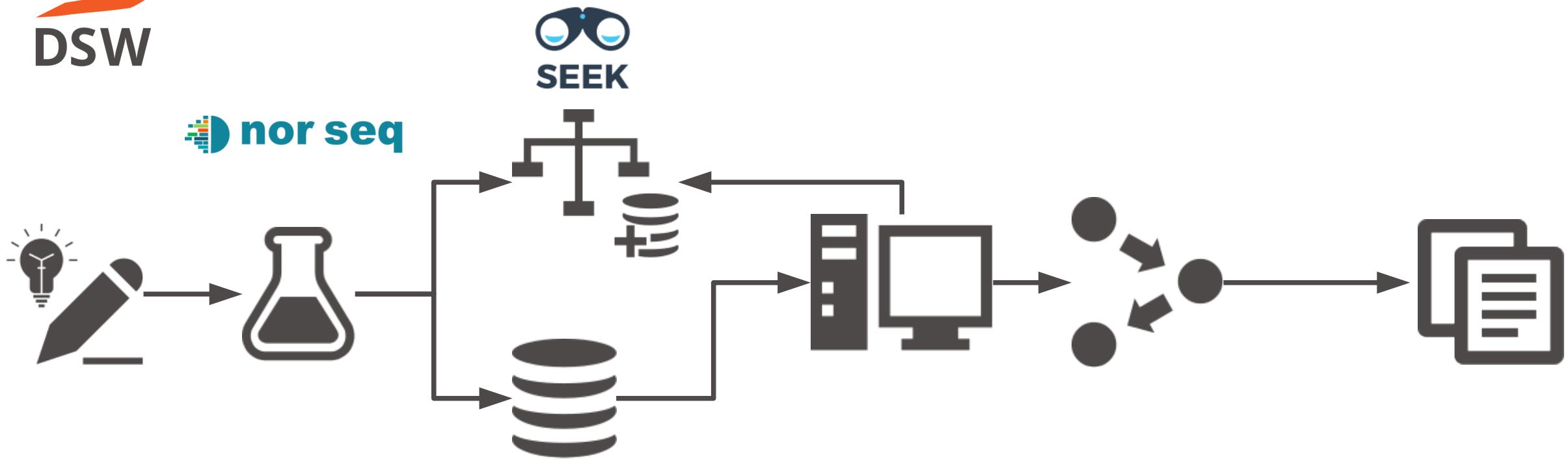




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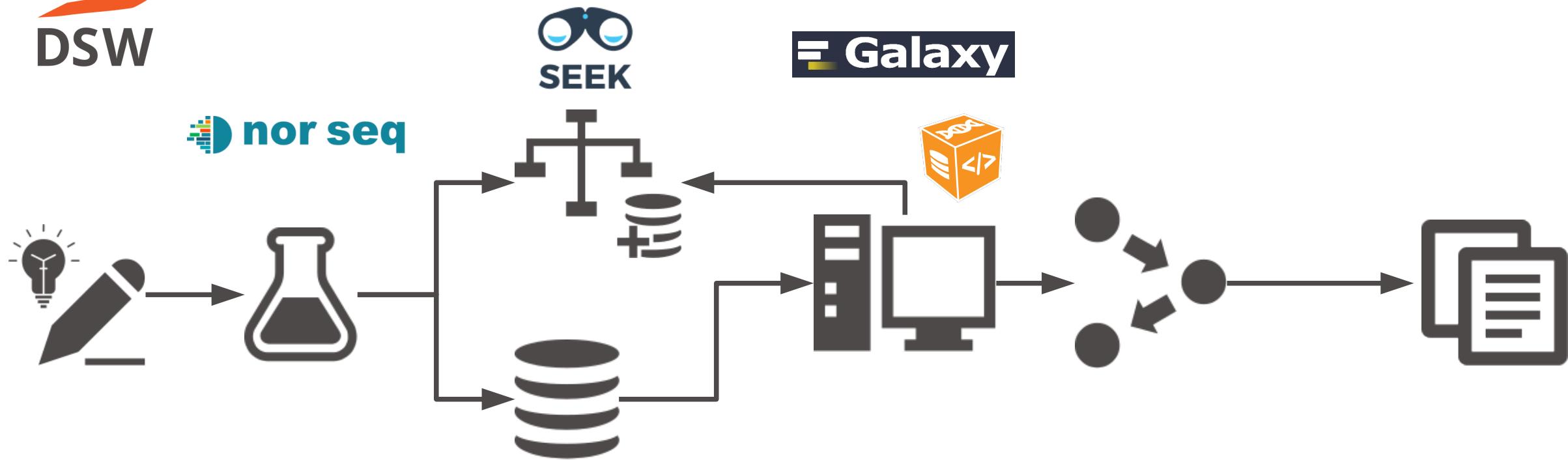




# NeLS

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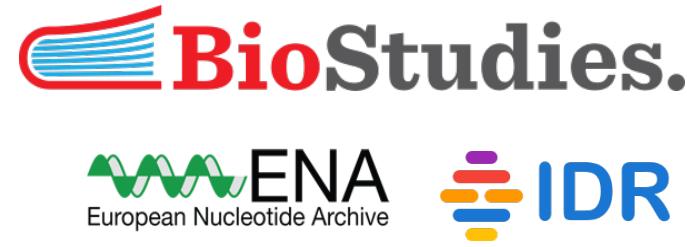
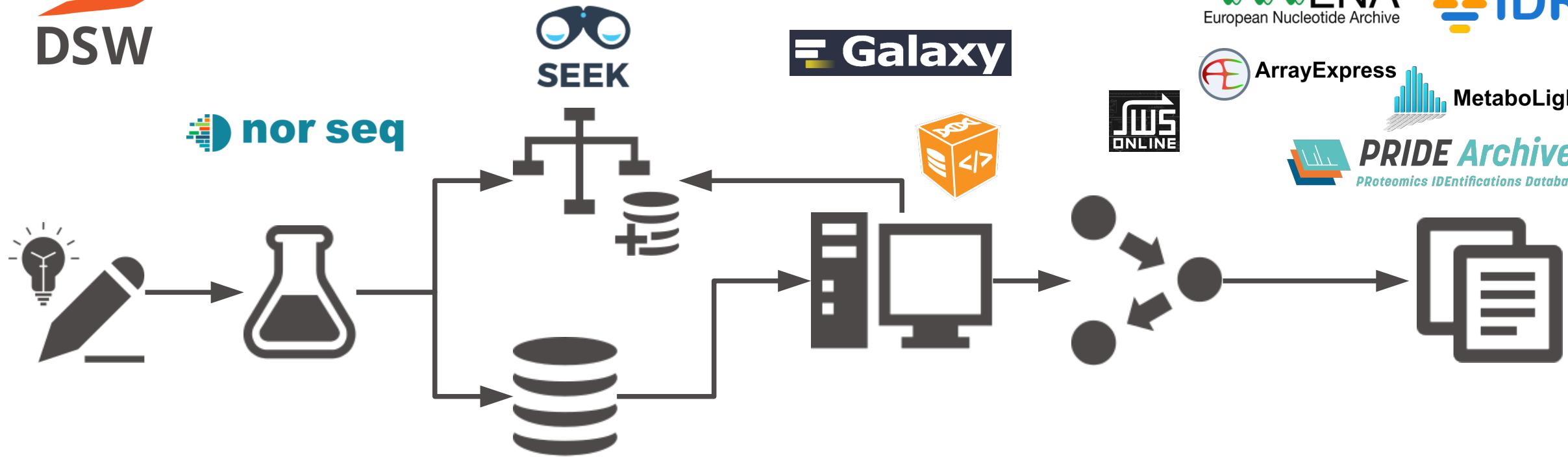
Norwegian e-Infrastructure for Life Sciences





# NeLS

Norwegian e-Infrastructure for Life Sciences



ENA  
European Nucleotide Archive

IDR

ArrayExpress

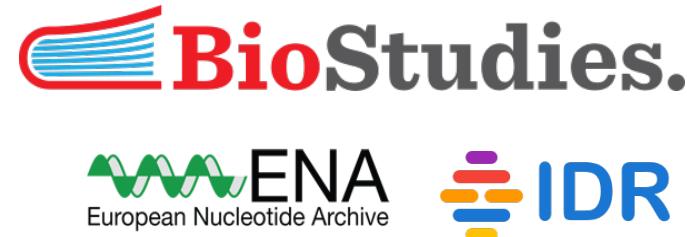
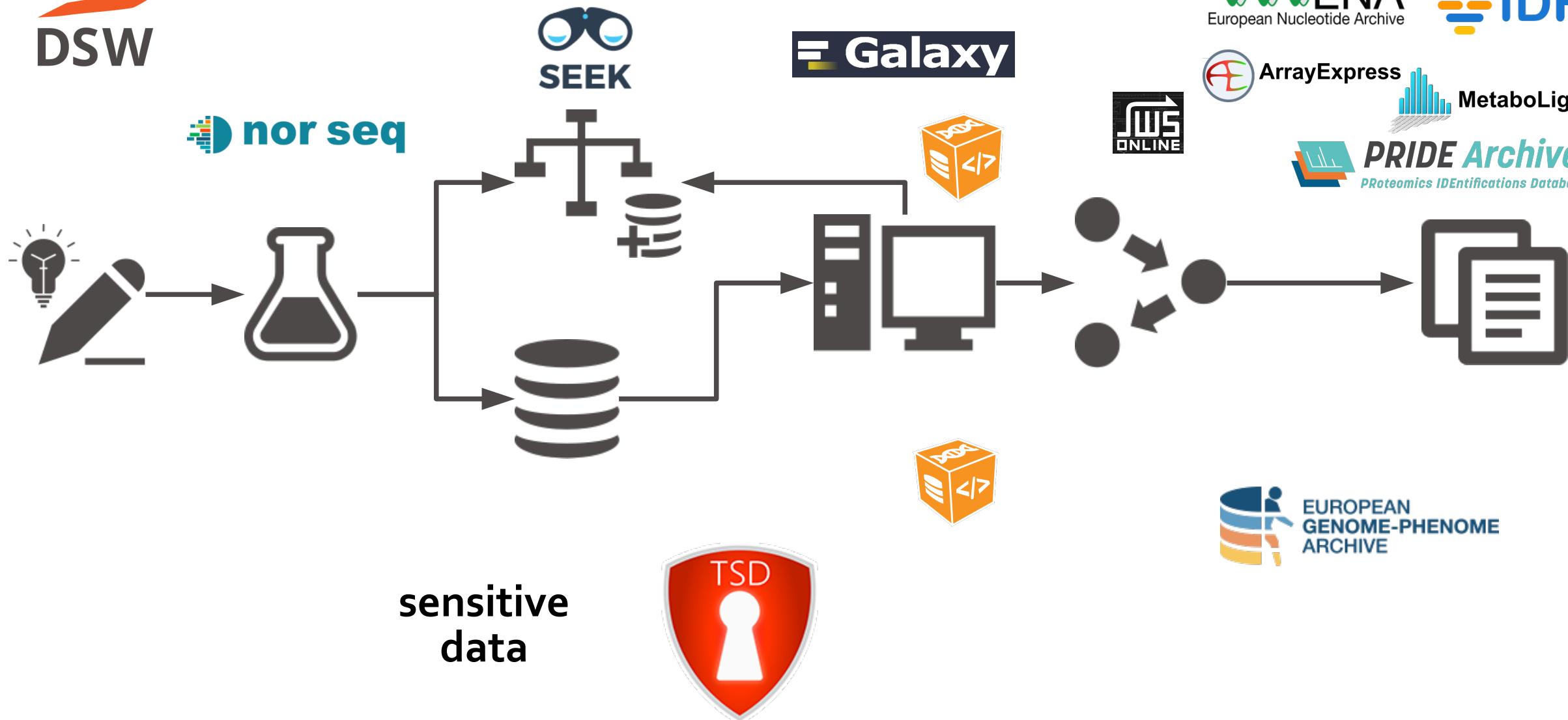
MetaboLights

PRIDE Archive  
PRoteomics IDEntifications Database



# NeLS

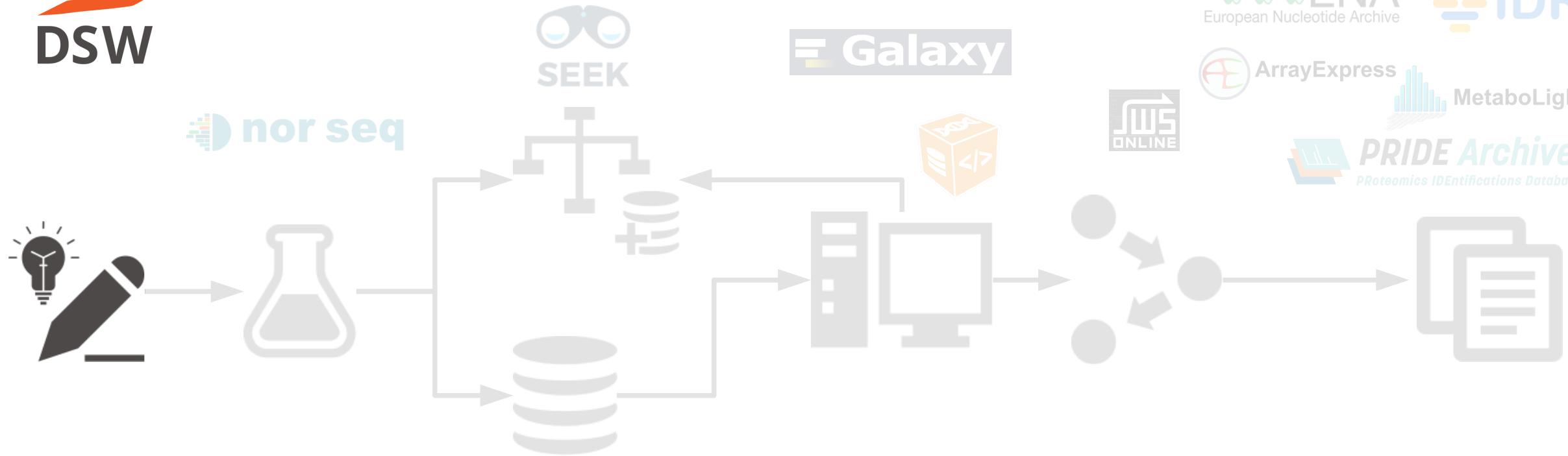
Norwegian e-Infrastructure for Life Sciences





# NeLS

Norwegian e-Infrastructure for Life Sciences



BioStudies.

ENA  
European Nucleotide Archive

IDR

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# Data Management Plan?





# NeLS

Norwegian e-Infrastructure for Life Sciences

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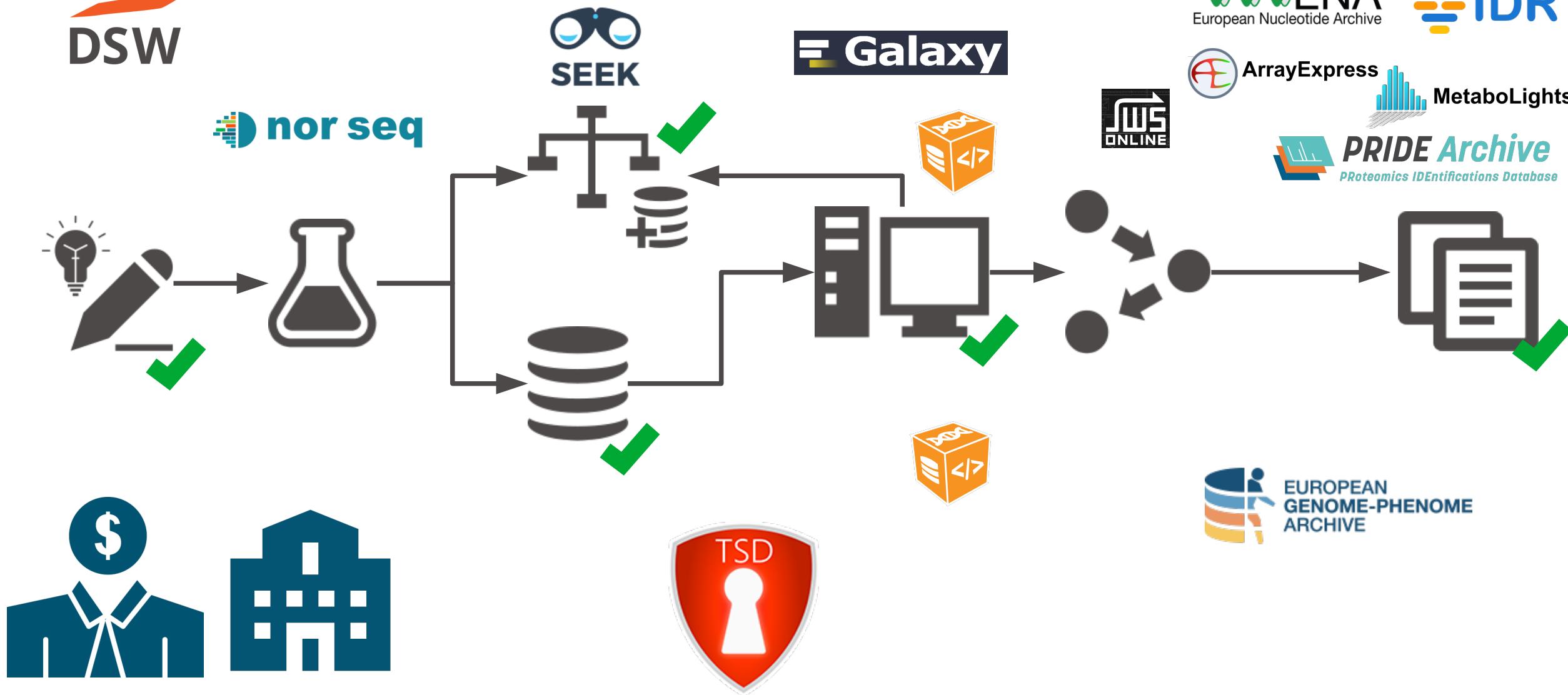
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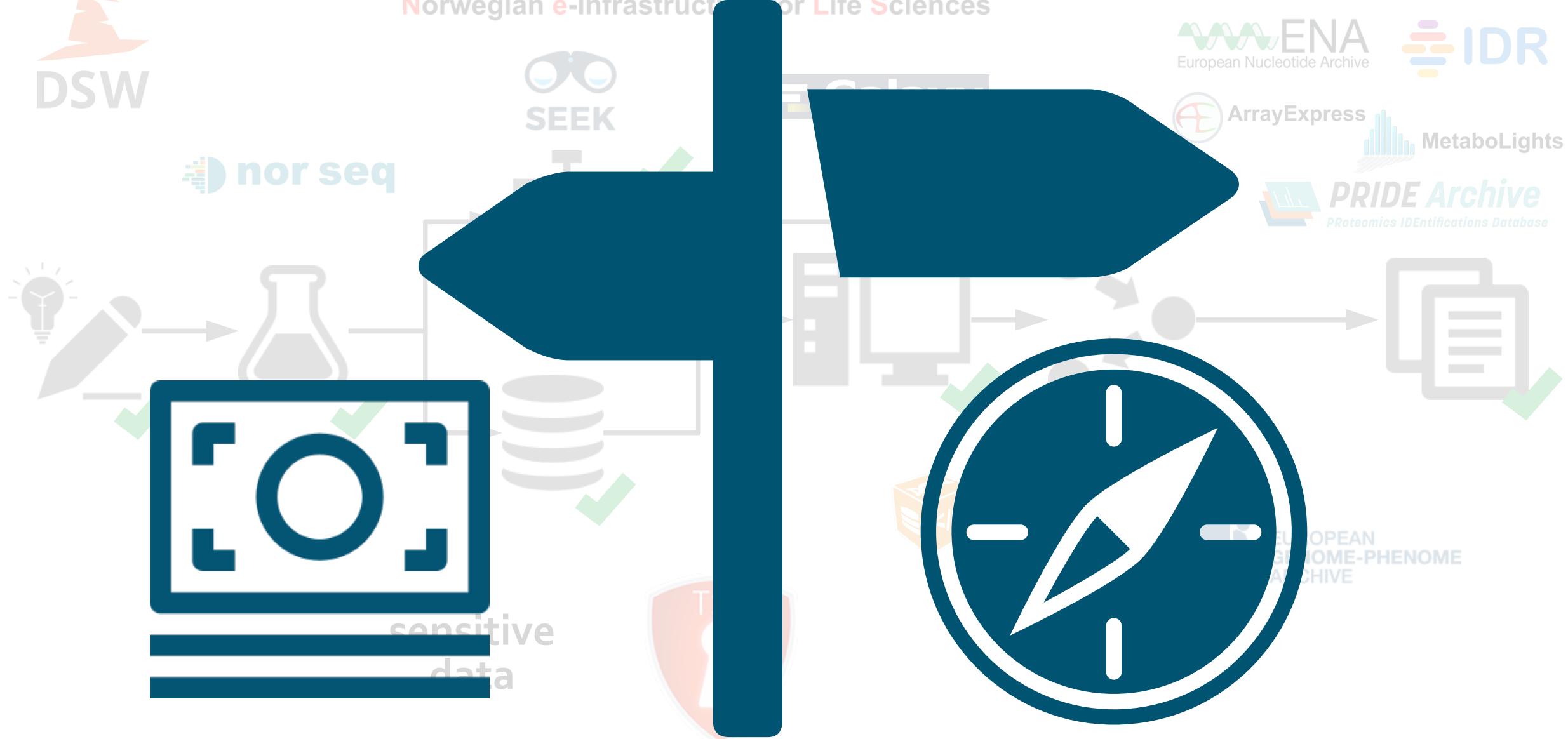
EUROPEAN GENOME-PHENOME ARCHIVE





# NeLS

Norwegian e-Infrastructure for Life Sciences



# RDMkit

Your role



- Researcher

Data steward policy

Data steward research

Data steward infrastructure

[rdmkit.elixir-europe.org](http://rdmkit.elixir-europe.org)

# RDMkit

Your domain

-

Plant sciences

Marine metagenomics

Human data

Biomolecular simulation data

Intrinsically disordered proteins

Microbial biotechnology



[rdmkit.elixir-europe.org](http://rdmkit.elixir-europe.org)

# RDMkit

Your problem

-

- Compliance monitoring

- Data analysis

- Data management plan

- Data organisation

- Data protection

- Data publication

- Data quality

- Data storage

- Data transfer

- Identifiers

- Licensing

- Metadata management

- Sensitive data



[rdmkit.elixir-europe.org](http://rdmkit.elixir-europe.org)



inbuilt curated resources:



[rdmkit.elixir-europe.org](http://rdmkit.elixir-europe.org)



inbuilt curated resources:

**Repositories &  
Metadata standards**

 FAIRsharing

The FAIRsharing logo consists of the word "FAIRsharing" in a blue and black sans-serif font. A stylized blue infinity symbol is positioned below the letter "A".

[rdmkit.elixir-europe.org](http://rdmkit.elixir-europe.org)



inbuilt curated resources:

**Repositories &  
Metadata standards**



**Software**



[rdmkit.elixir-europe.org](http://rdmkit.elixir-europe.org)

# RDMkit

inbuilt curated resources:

**Repositories &  
Metadata standards**



**Software**



**Training**



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



CENTRE FOR  
DIGITAL LIFE  
NORWAY

BioMedData



UNIVERSITY OF BERGEN



UiO : University of Oslo



UiT The Arctic University of Norway



NTNU

Norwegian University of  
Science and Technology



Norwegian University  
of Life Sciences

The Data Stewardship Wizard is provided by:





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