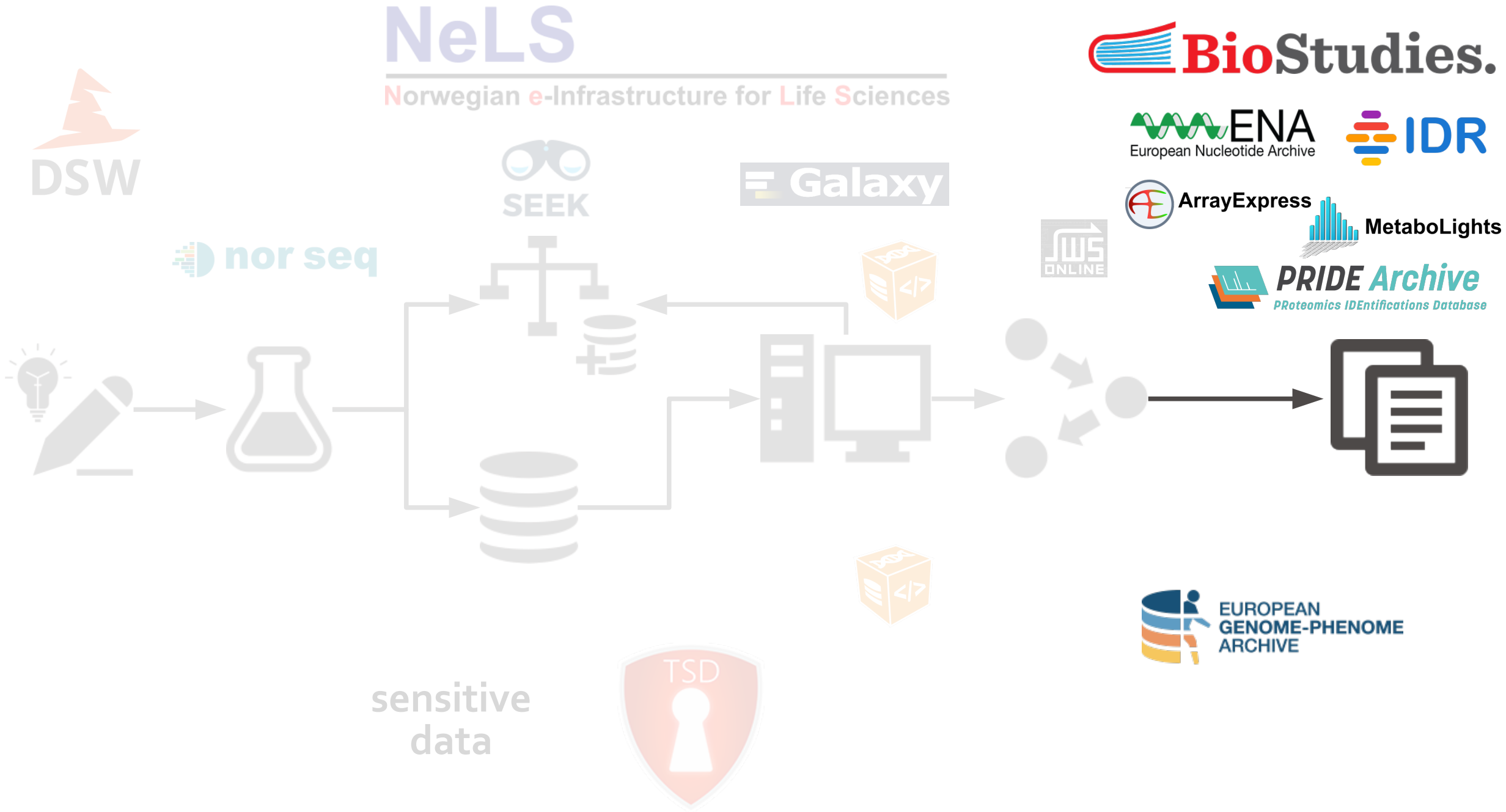
Data Deposition Repositories

Korbinian Bösl
Data manager ELIXIR Norway
21 February 2020


NeLS
Norwegian e-Infrastructure for Life Sciences
DSW
SEEK
Galaxy
nor seq
ONLINE
BioStudies.
ENA
European Nucleotide Archive
IDR
ArrayExpress
MetaboLights
PRIDE Archive
PRoteomics IDEntifications Database
EUROPEAN
GENOME-PHENOME
ARCHIVE
sensitive
data
TSD

Why should I deposit my data?

- Increased Visibility (SEO) → more citations

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Value added Databases → more citations

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- FAIRification – Funding requirements ✔✔

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- Increased Visibility (SEO) → more citations
- Value added Databases → more citations
- FAIRification – Funding requirements ✔✔
- $ Safe money on storage

Where should I deposit my data?

molecular biology 1637 databases

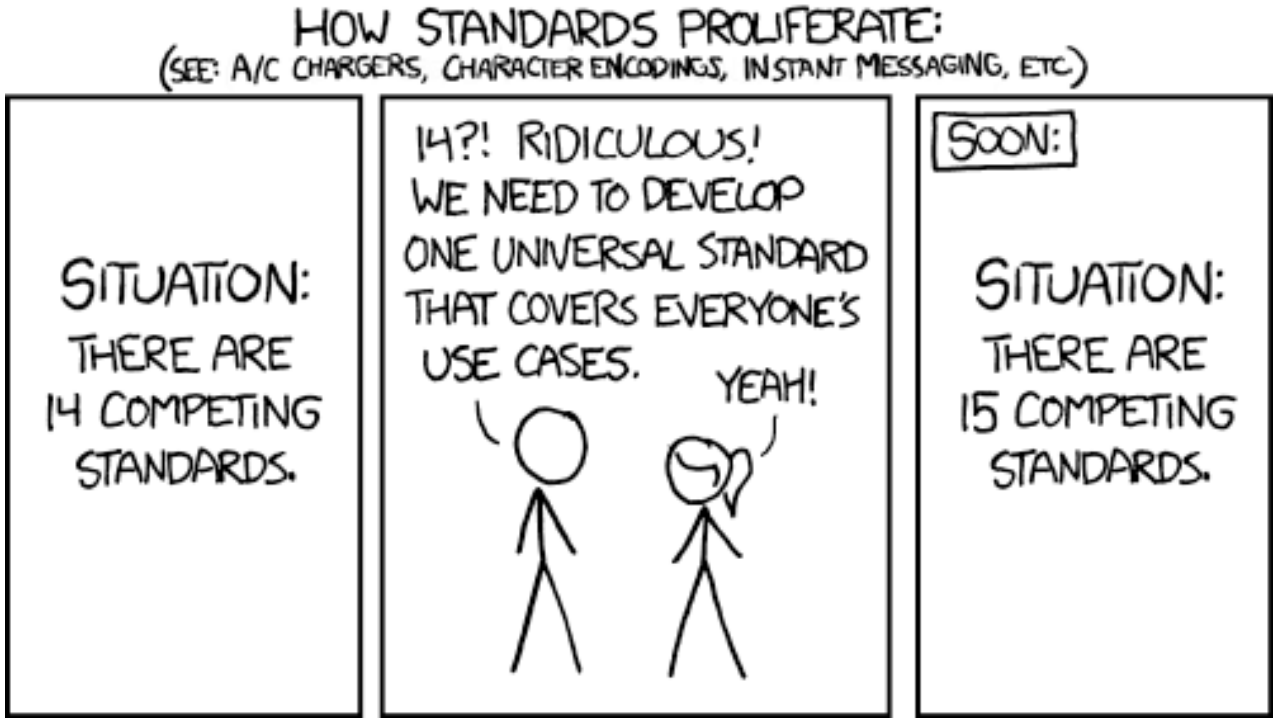
Rigden, D. J. & Fernández, X. M.
The 27th annual Nucleic Acids Research database issue and molecular biology database collection. Nucleic Acids Res 48, D1–D8 (2020).

Where should I deposit my data?

fairsharing.org
re3data.org

Meta data standards

Community standards vs. formal ISO standards



https://xkcd.com/927/
https://elixir-europe.org/events/elixir-guest-webinar-two-universes-one-world-community-standards-vs-formal-iso-standards-life

Where should I deposit my data?

Fits?

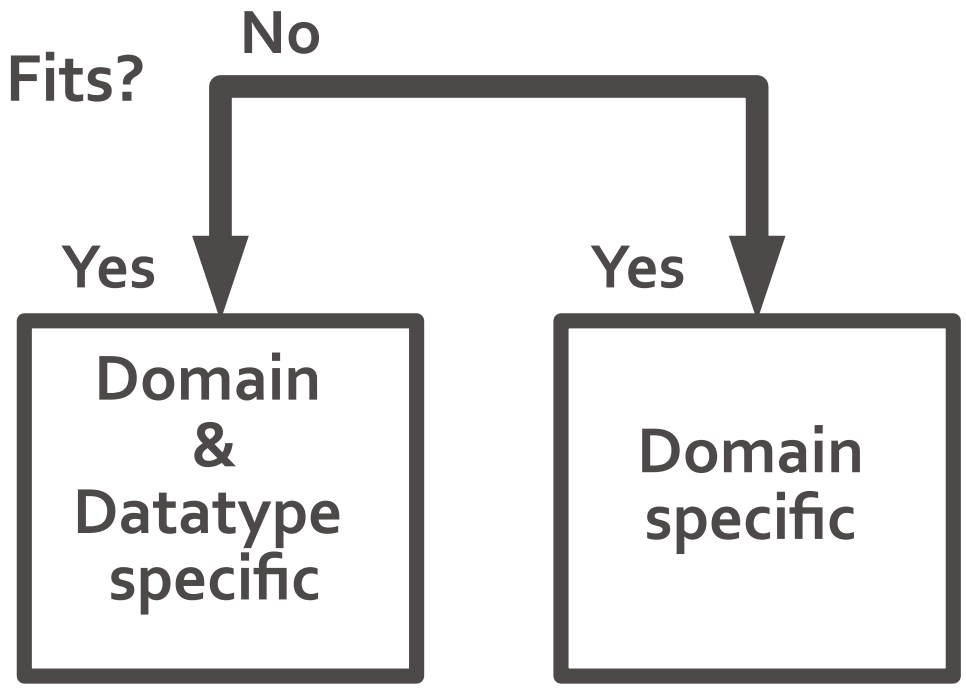
Yes

Domain
&
Datatype
specific

ENA
European Nucleotide Archive

NCBI SRA

Where should I deposit my data?



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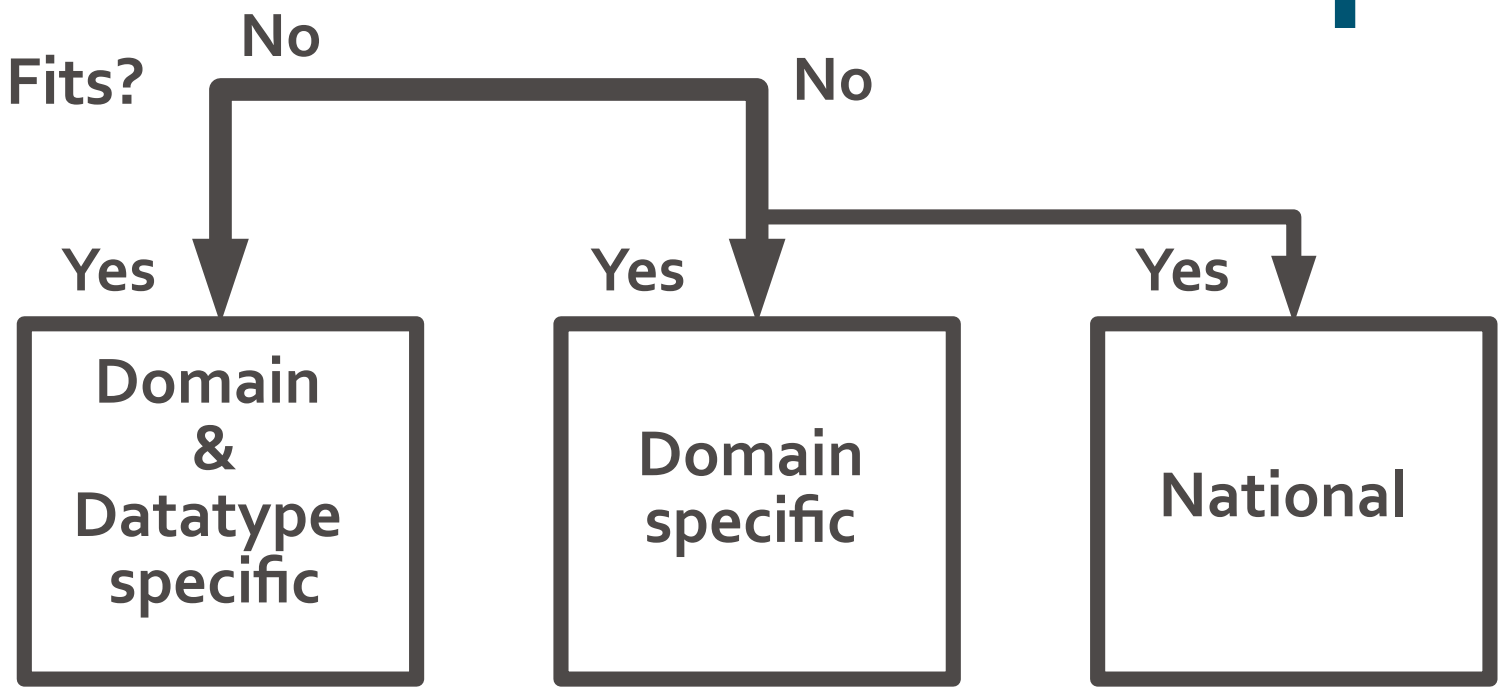

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NIRD RESEARCH DATA ARCHIVE

NCBI SRA

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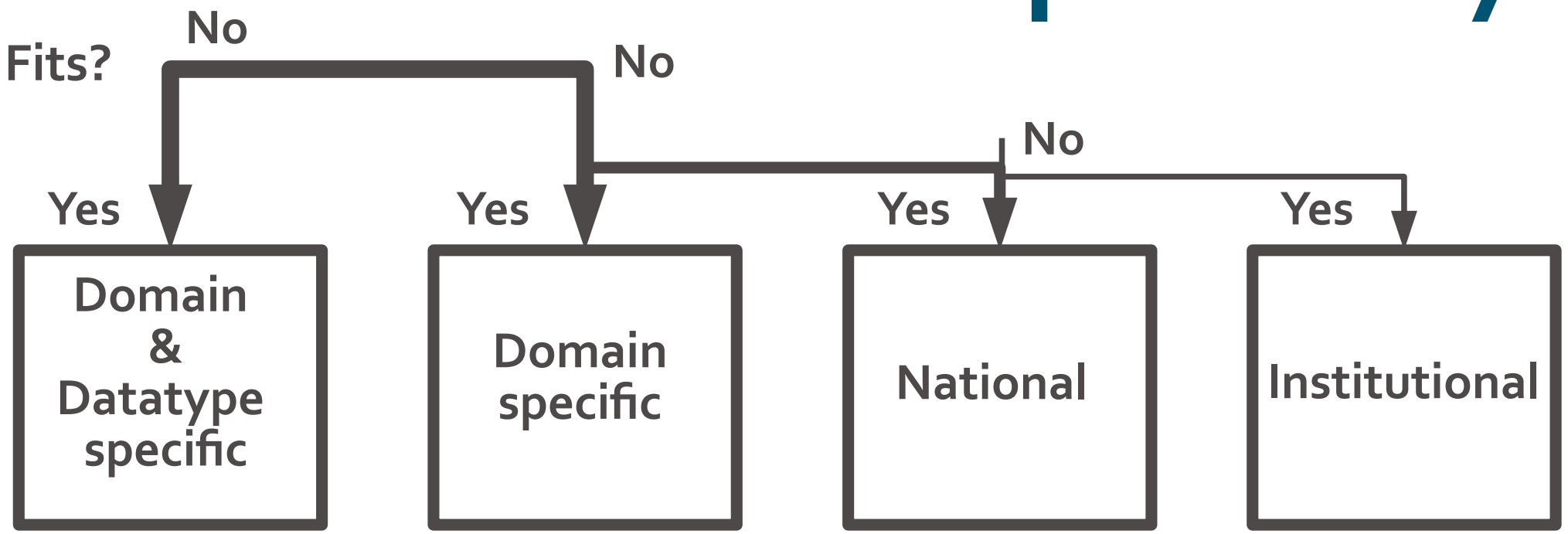

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NIRD RESEARCH DATA ARCHIVE

SRA
NCBI

DataverseNO
Dataverse Network Norway

NTNU Open Research Data
NTNU

NMBU Open Research Data
Norwegian University of Life Sciences

UiB Open Research Data

UiT Open Research Data

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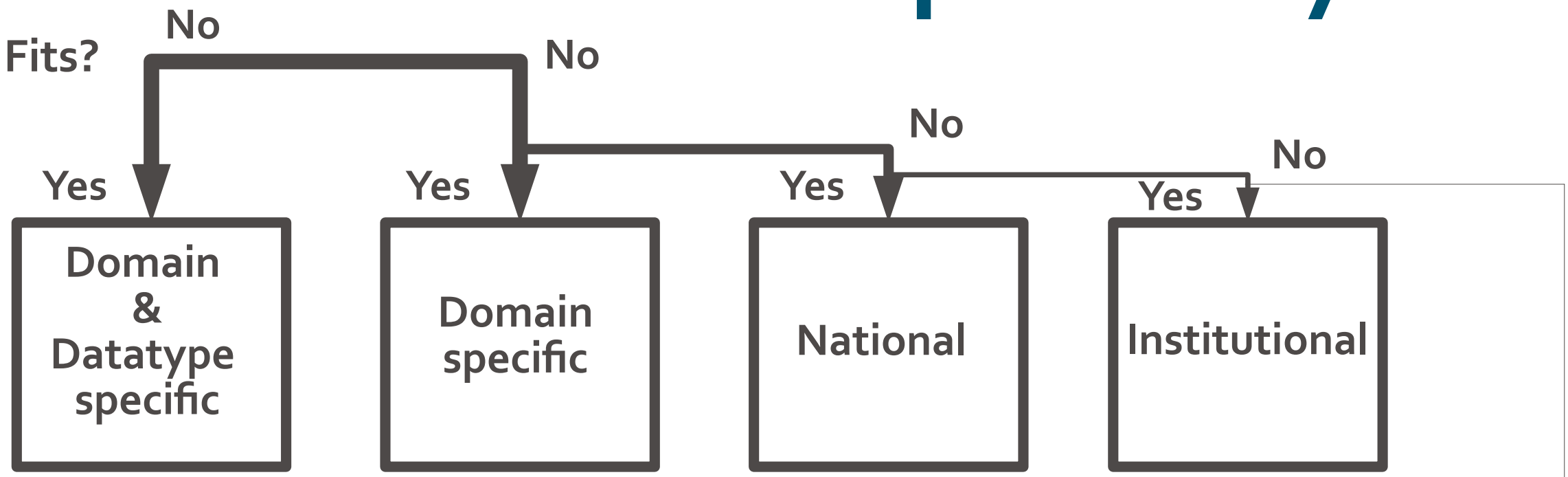

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NIRD RESEARCH DATA ARCHIVE

DataverseNO
Dataverse Network Norway

NTNU Open Research Data
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NMBU Open Research Data
Norwegian University of Life Sciences

UiB Open Research Data

UiT Open Research Data

zenodo

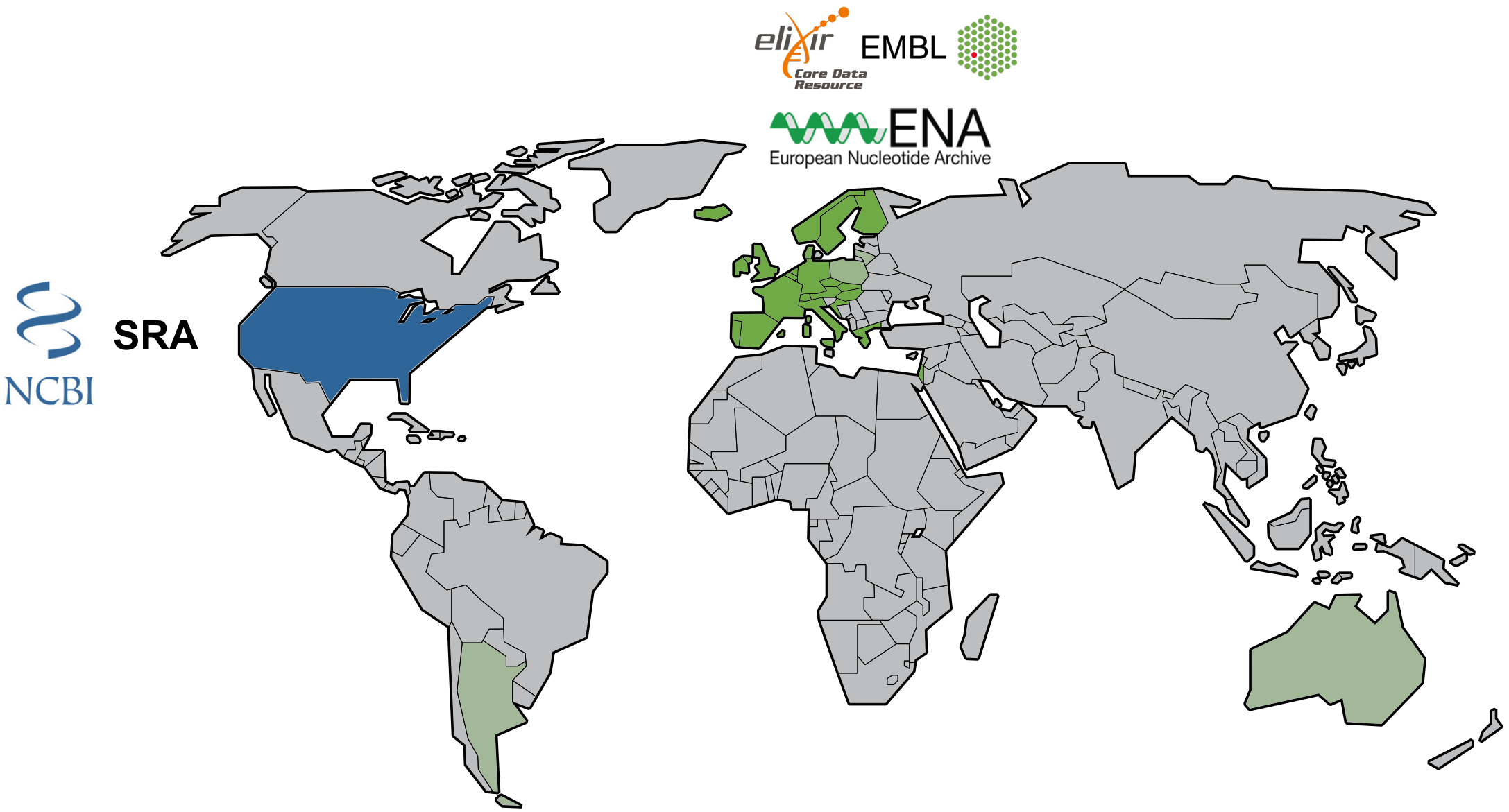
EUDAT

figshare

Multiple Repositories – similar datatypes

NCBI

SRA


elixir
Core Data Resource
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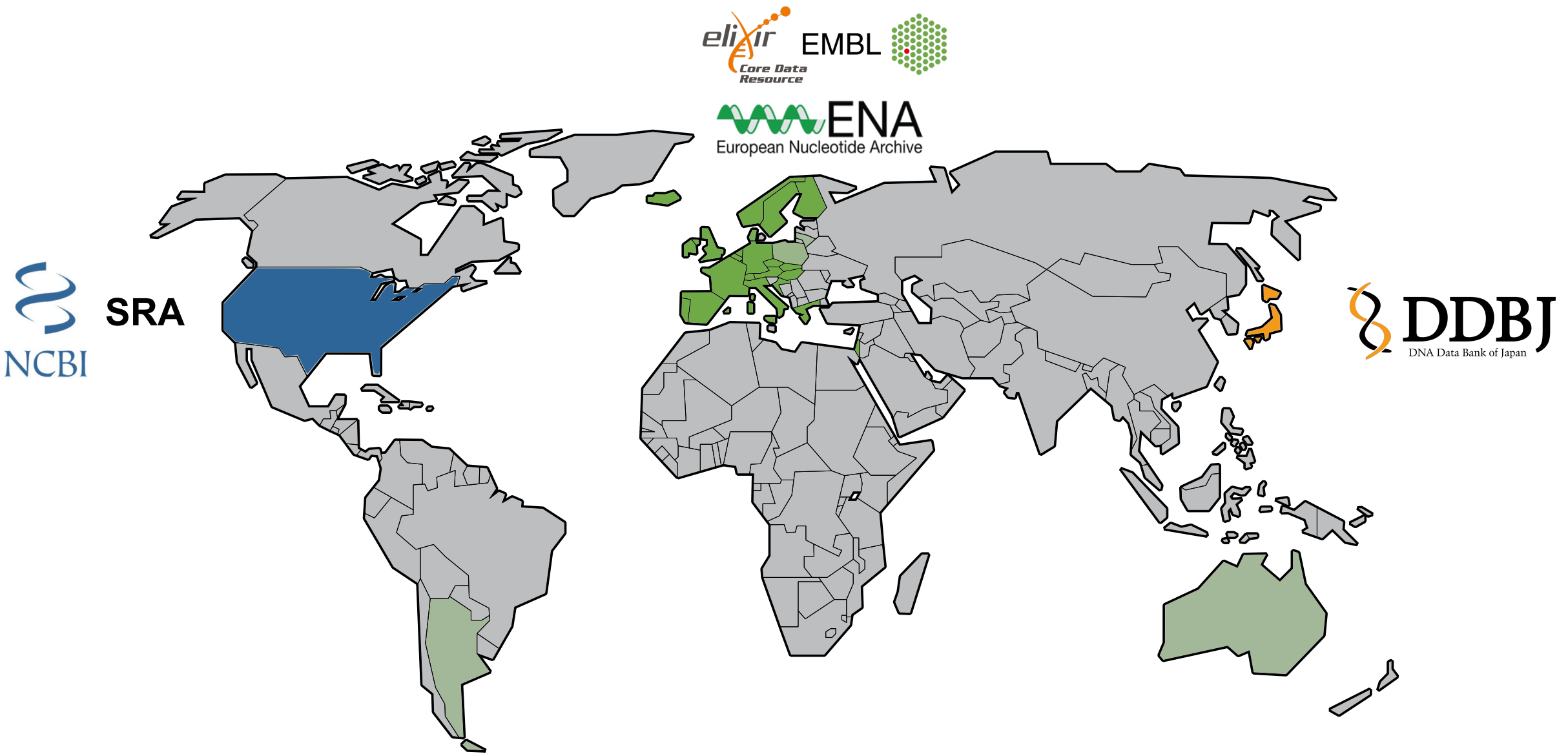
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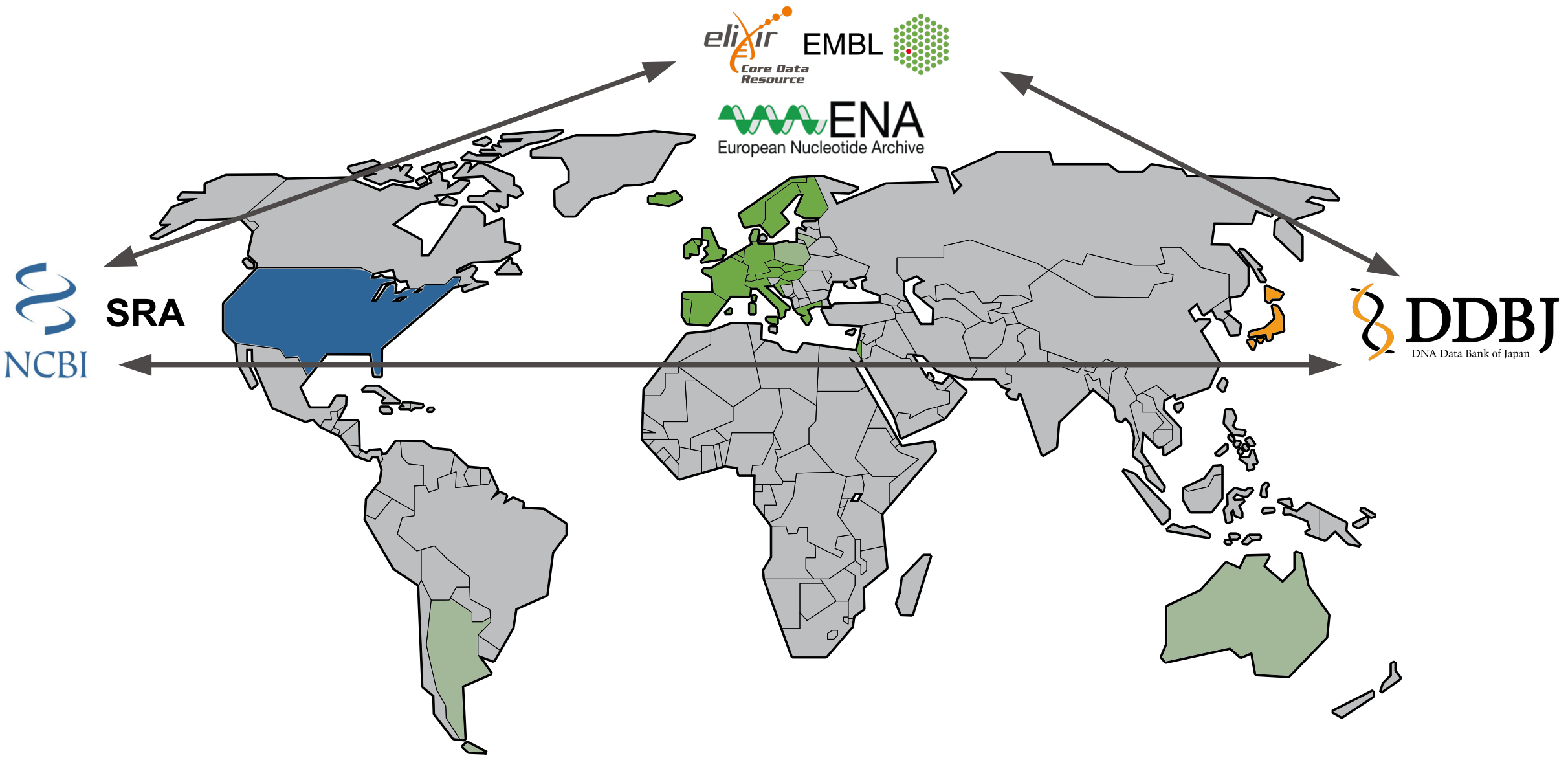
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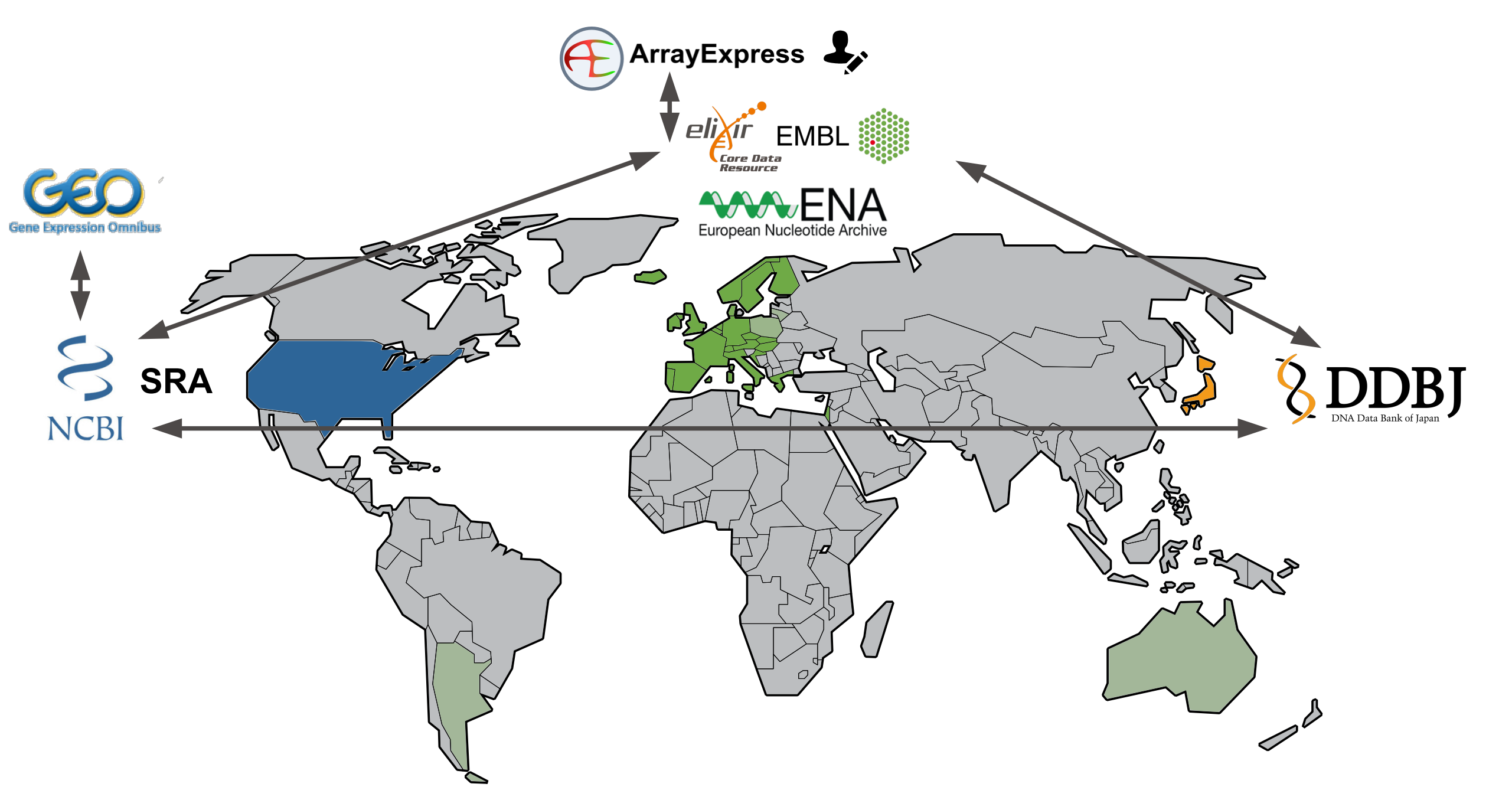
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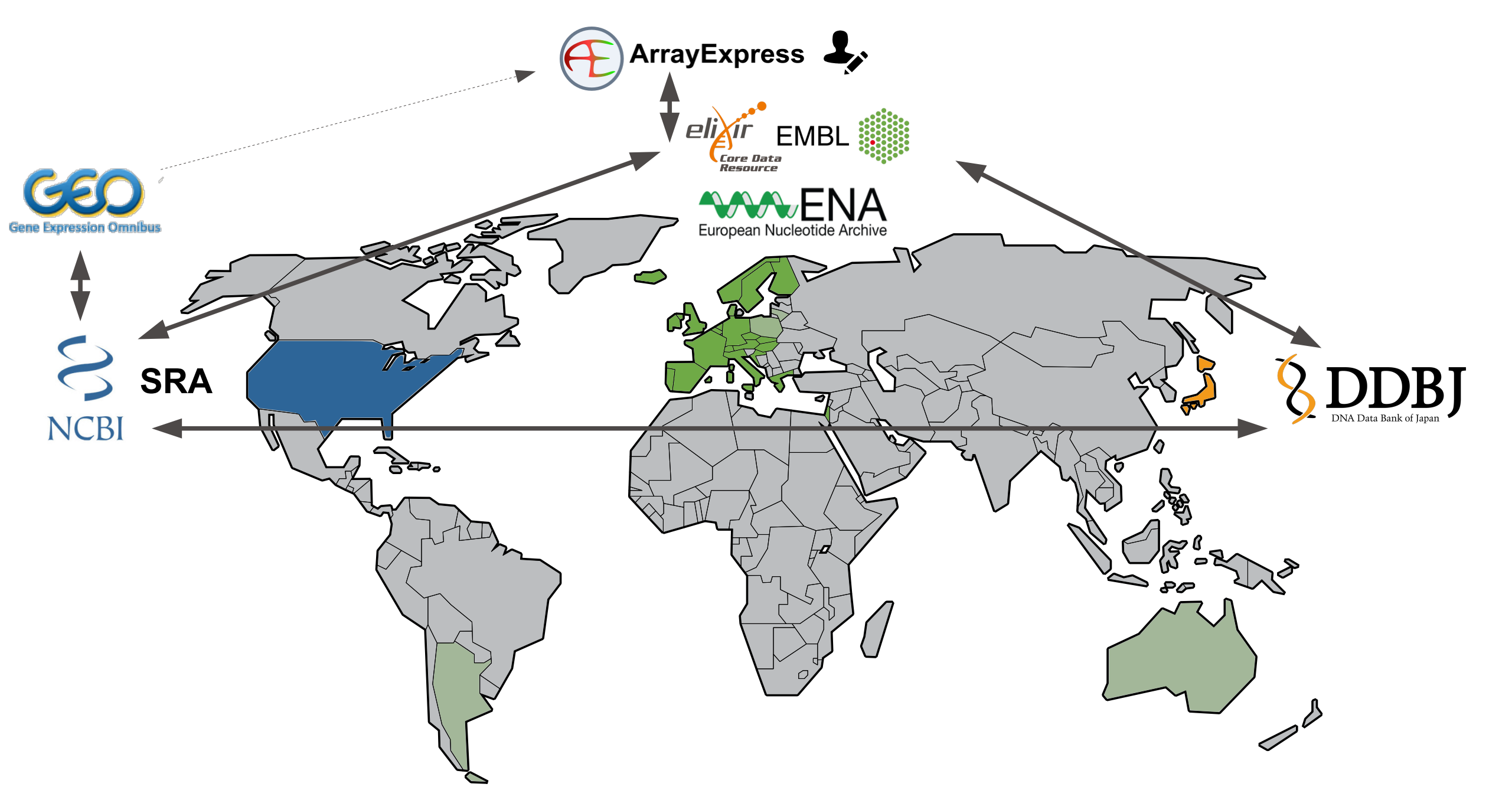
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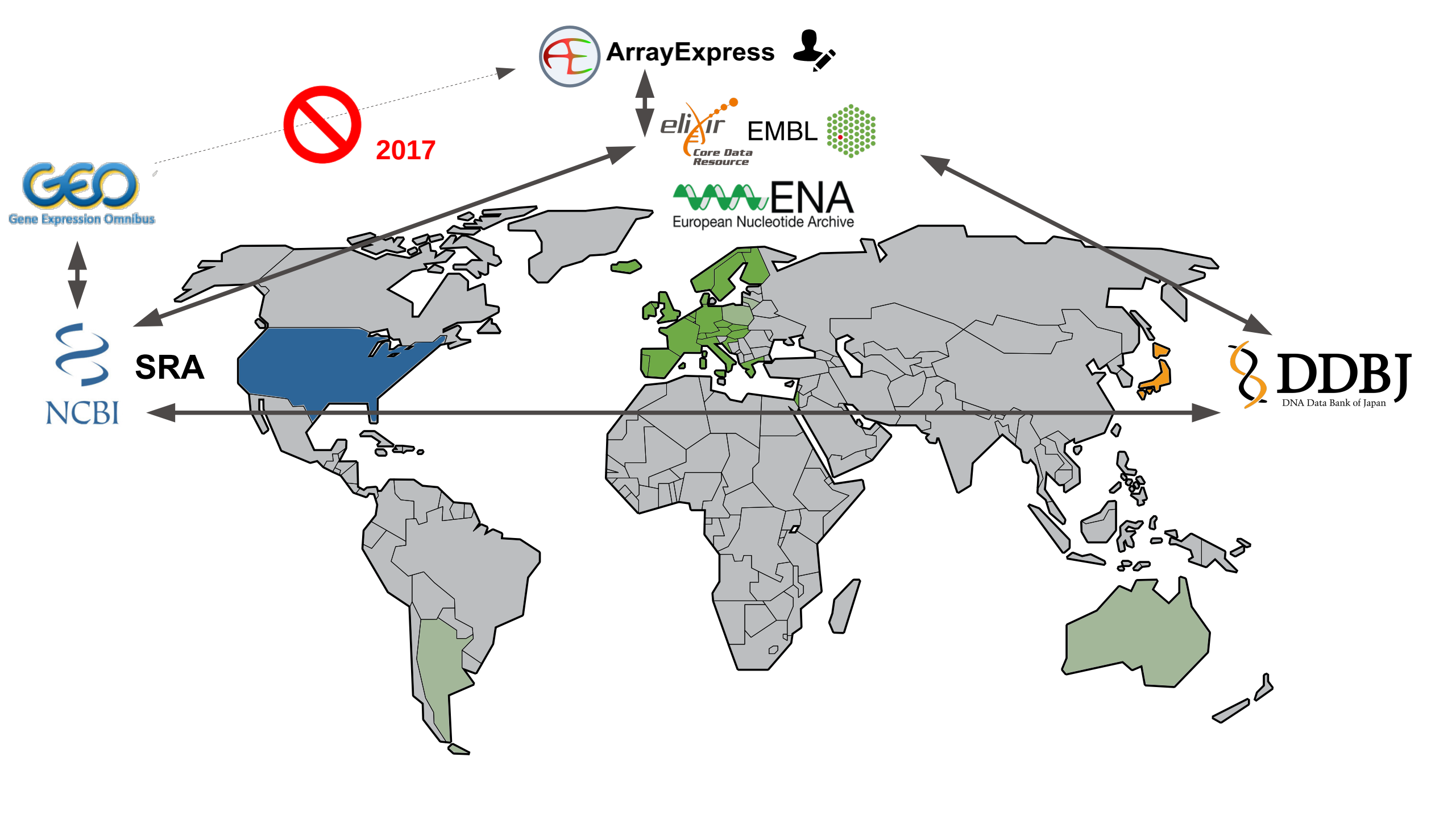
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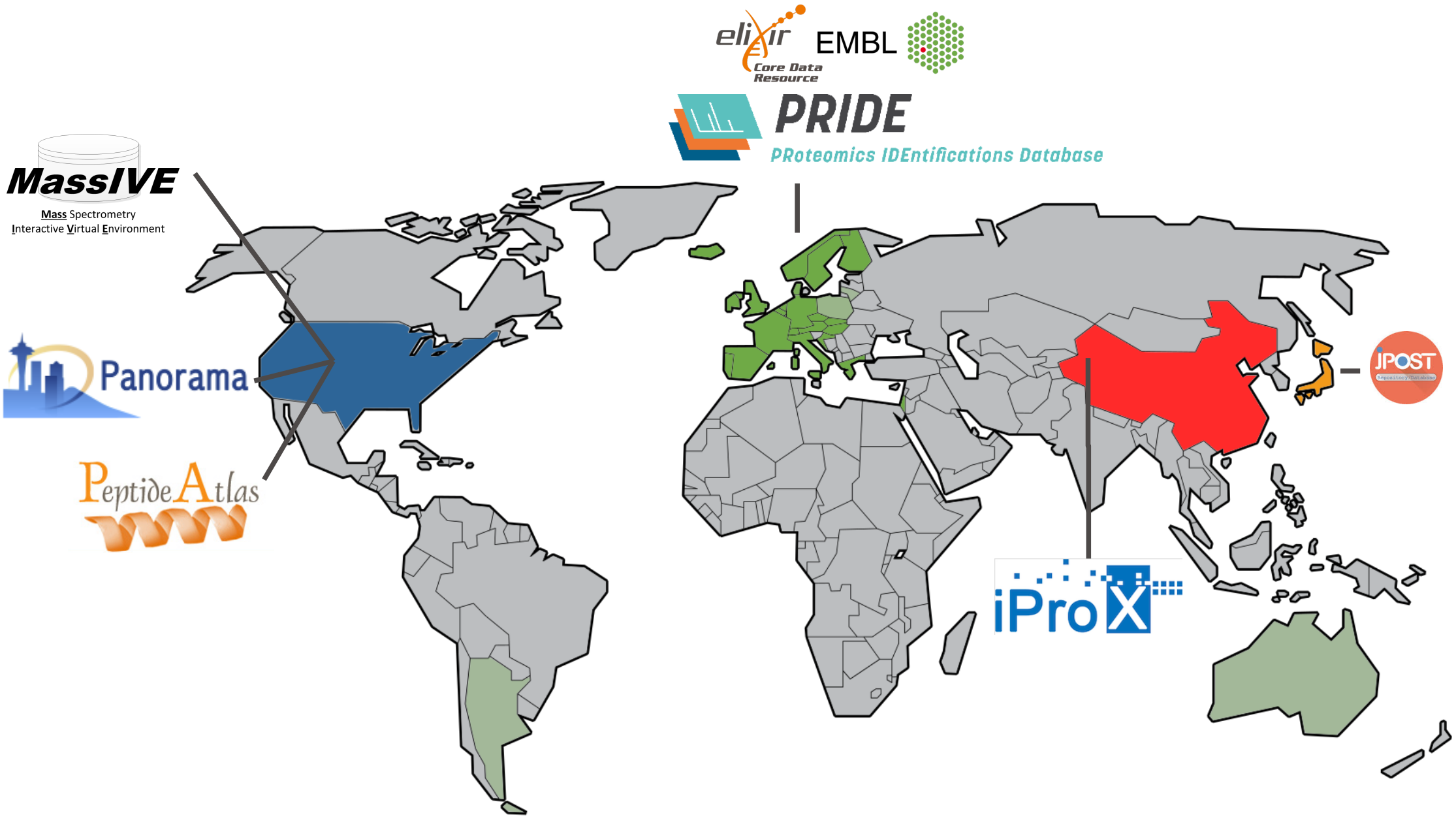
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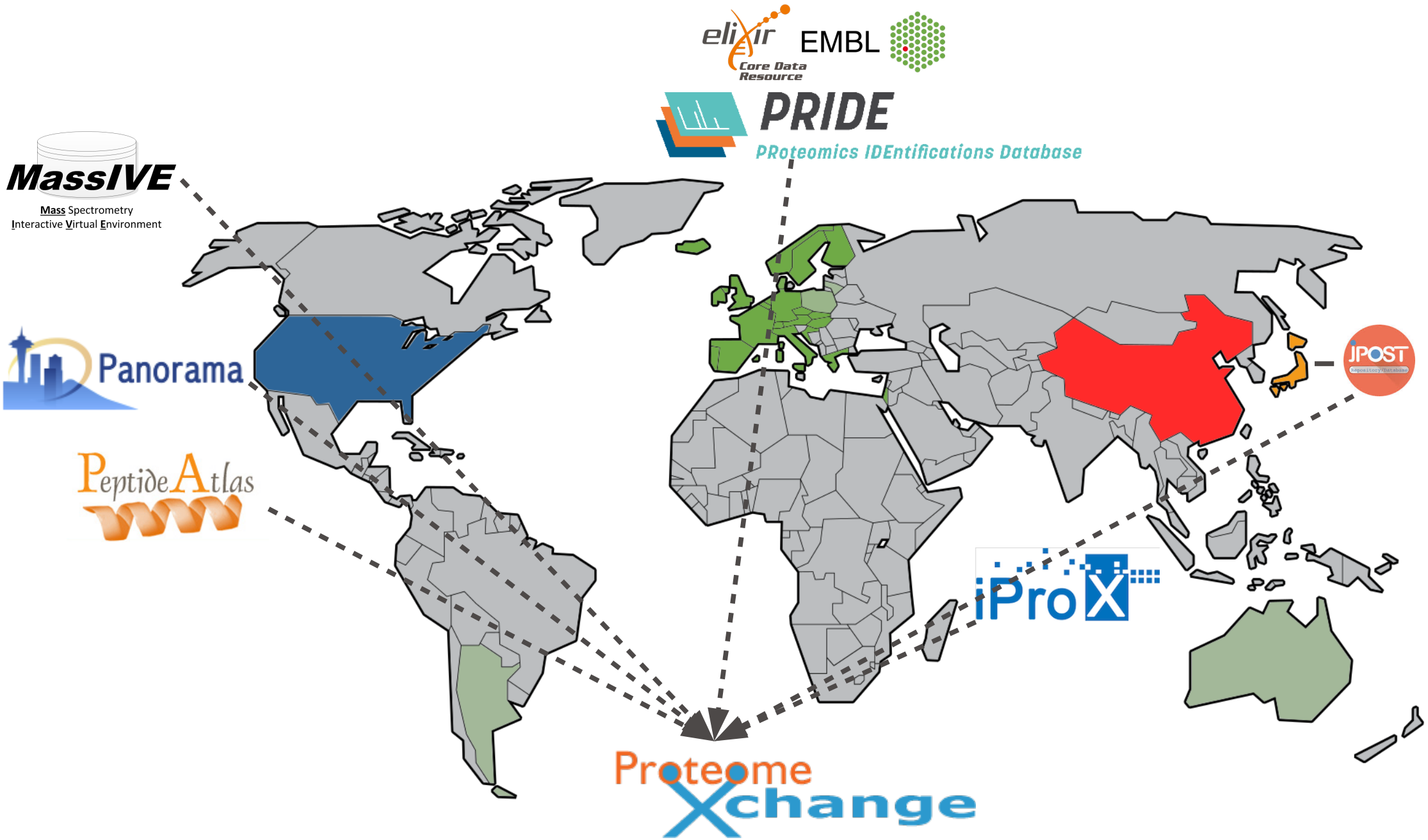
PRoteomics IDEntifications Database
MassIVE
Mass Spectrometry
Interactive Virtual Environment
Panorama
PeptideAtlas
iProX
JPOST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Where should I deposit my data?

- Free of charge

elixir-europe.org/platforms/data/core-data-resources
elixir-europe.org/platforms/data/elixir-deposition-databases

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elixir Core Data Resource

Annotare

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- Generous embargo regulation (2yrs →)

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- Guided submission process

- Generous embargo regulation (2yrs →)
- API access (upload from NeLS planned)

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PDBe
Protein Data Bank in Europe

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BioImage Archive

EMPIAR

IDR

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BioModels

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MetaboLights

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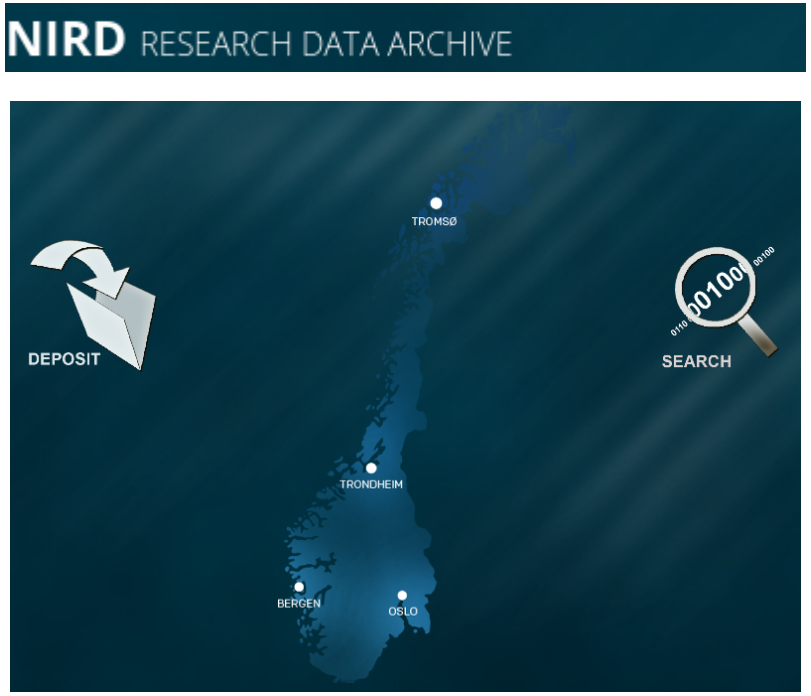
NIRD archive



National, free depositing repository

Domain agnostic

Dublin-core metadata standard

DOI accessible

Supports machine readable metadata harvesting

https://archive.norstore.no/

Generic archives

Less standard metadata → Re-usability ⇓

Domain agnostic → Finability ⇓

Guided submission process

Commercial actors: Size limitations, …

https://zenodo.org/
https://b2share.eudat.eu/
https://figshare.com/

What about sensitive data?

Central metadata accessibility

Secure storage

Implemented data access committees

Local EGA in development

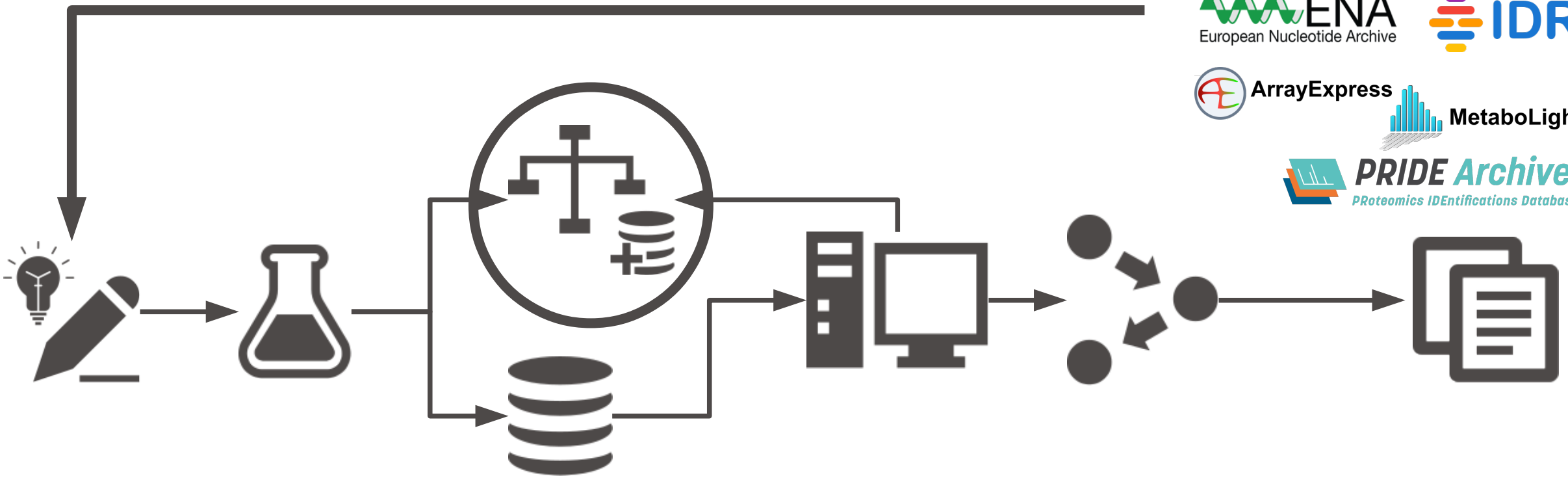
NSD archive

Domain agnostic

DOI accessible

Implemented data access committees

https://arkivering.nsd.no/



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