

NFDI4  
**MICROBIOTA**



FRIEDRICH-SCHILLER-  
**UNIVERSITÄT**  
**JENA**

# VirJenDB: the virus genome database based at FSU Jena

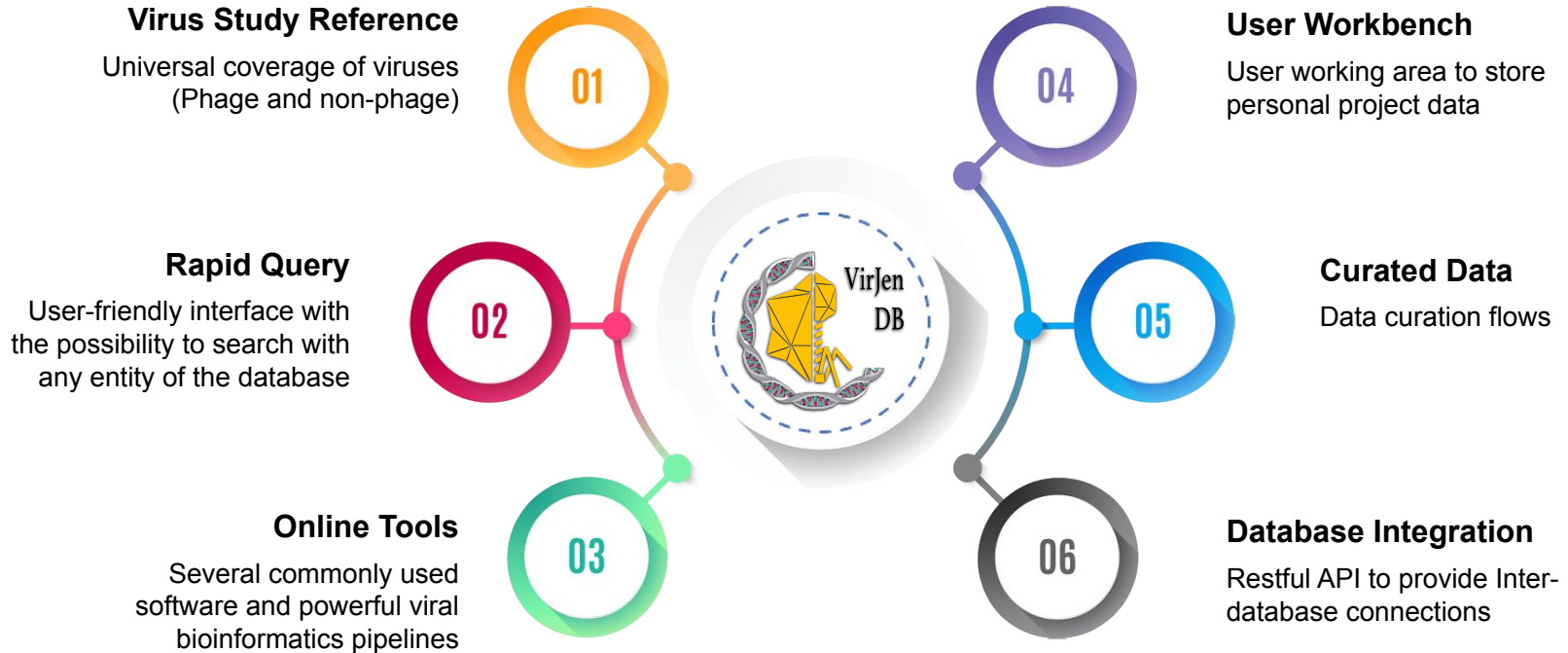
**Feb 16 - Bled, Slovenia**

NFDI4Microbiota  
RNA Bioinformatics & High Throughput Analysis  
Friedrich Schiller University

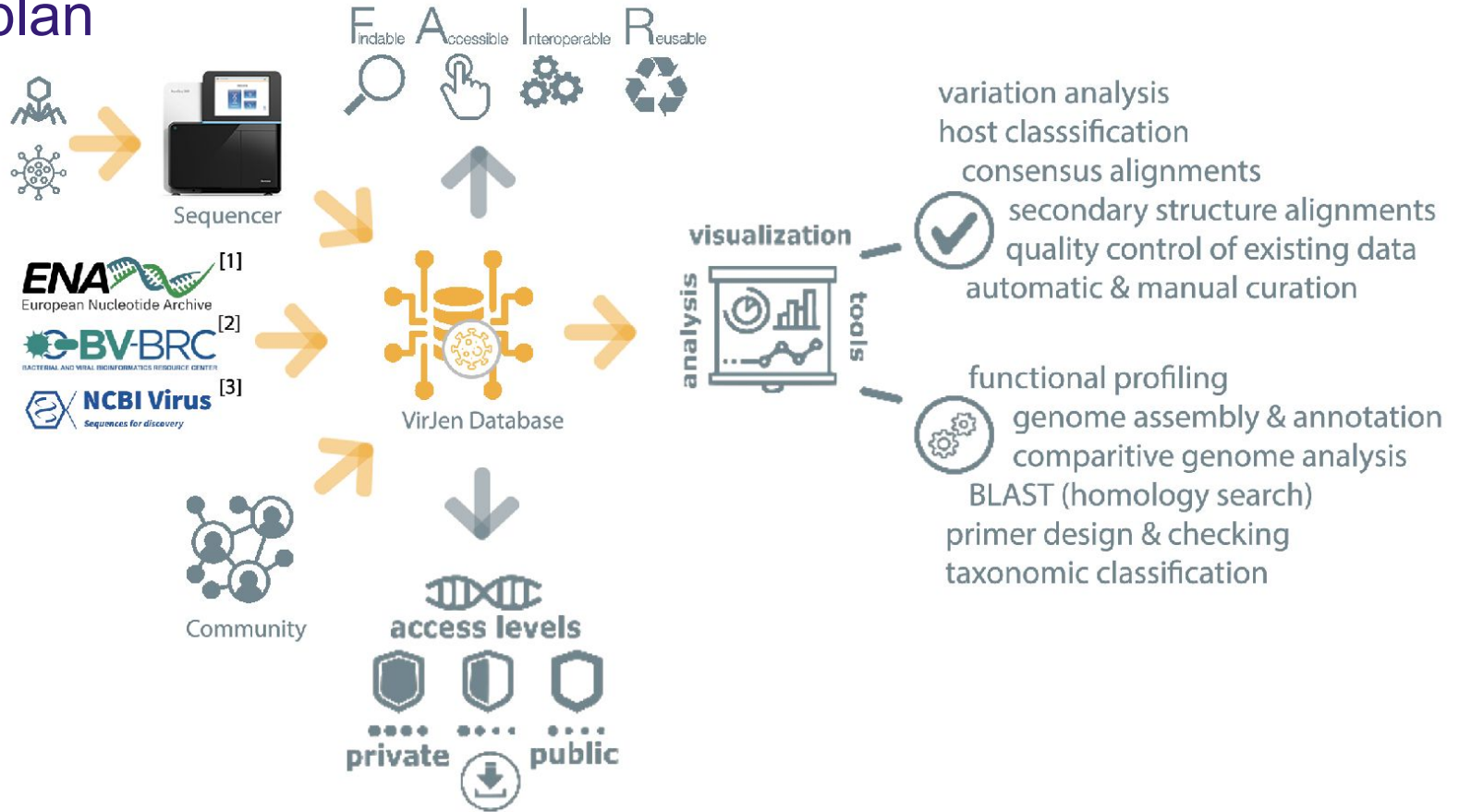
# Motivation

Database	Link	Update	# Virus Entry	Source Data
<b>BV-BRC</b>	<a href="http://bv-brc.org">bv-brc.org</a>	2023	<b>8.5 M</b>	GenBank, RefSeq,
<b>DPVweb</b>	<a href="http://www.dpvweb.net/">http://www.dpvweb.net/</a>	2013	<b>39,257</b>	EMBL, GenBank
<b>FVD</b>	<a href="http://bioinfo.ihb.ac.cn/fvd">bioinfo.ihb.ac.cn/fvd</a>	2015	<b>4,860</b>	Publications, GenBank
<b>IMG/VR v3</b>	<a href="https://img.jgi.doe.gov/vr/">https://img.jgi.doe.gov/vr/</a>	2023	<b>5.6 M</b>	IMG metagenomes, RefSeq
<b>MVIP</b>	<a href="https://mvip.whu.edu.cn">https://mvip.whu.edu.cn</a>	2021	<b>6,586</b>	Manually curated high throughput sequencing samples
<b>MVP</b>	<a href="http://mvp.medgenius.info">mvp.medgenius.info</a>	2021	<b>50,782</b>	Sequences from NCBI
<b>NCBI Virus</b>	<a href="http://ncbi.nlm.nih.gov/labs/virus/">ncbi.nlm.nih.gov/labs/virus/</a>	2023	<b>10.8 M</b>	Complete Genomes
<b>PhEVER</b>	<a href="http://pbil.univ-lyon1.fr">pbil.univ-lyon1.fr</a>	2010	<b>2,426</b>	RefSeq Viral, Ensembl, Genome Reviews
<b>phiSITE</b>	<a href="http://www.phisite.org">http://www.phisite.org</a>	2014	<b>1,229</b>	Phage genomes from publications
<b>pVOGs</b>	<a href="http://vogdb.org">vogdb.org</a>	2023	<b>9,868</b>	Genomes from RefSeq Viral
<b>RVDB</b>	<a href="http://rvdb.dbi.udel.edu">rvdb.dbi.udel.edu</a>	2022	<b>4.5 M</b>	Sequences from GenBank, RefSeq
<b>Virxicon</b>	<a href="http://virxicon.cs.put.poznan.pl">virxicon.cs.put.poznan.pl</a>	2023	<b>599,538</b>	Sequences from NCBI Viral Genomes, GenBank
<b>ViralZone</b>	<a href="http://viralzone.expasy.org">viralzone.expasy.org</a>	2023	<b>NA</b>	Curated from GenBank, ViPR, Virus variation resource, IRD, HIV sequence database, Virology.ca.
<b>GISAID</b>	<a href="http://gisaid.org">gisaid.org</a>	2023	<b>14.9 M</b>	Influenza and hCoV-19 genomes

# Objectives



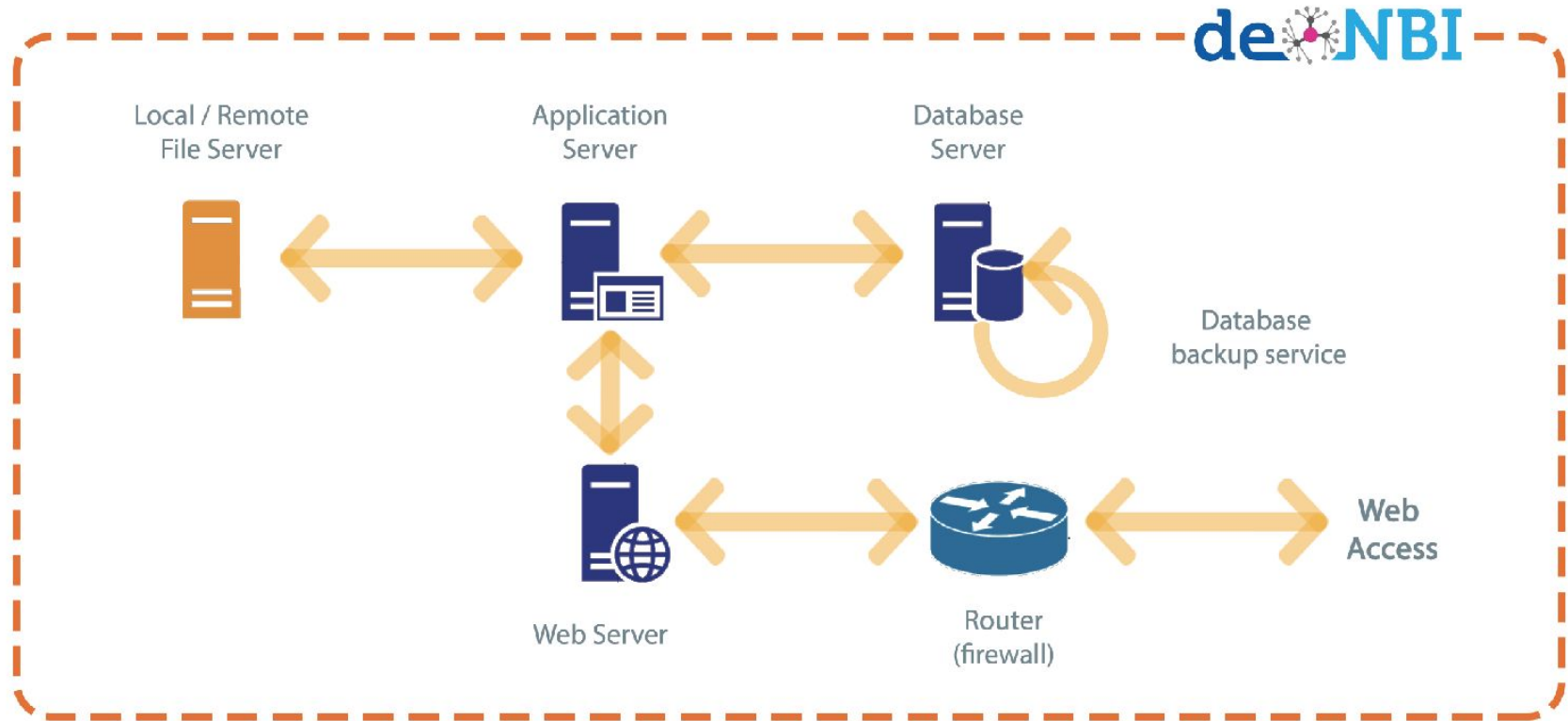
# Project plan



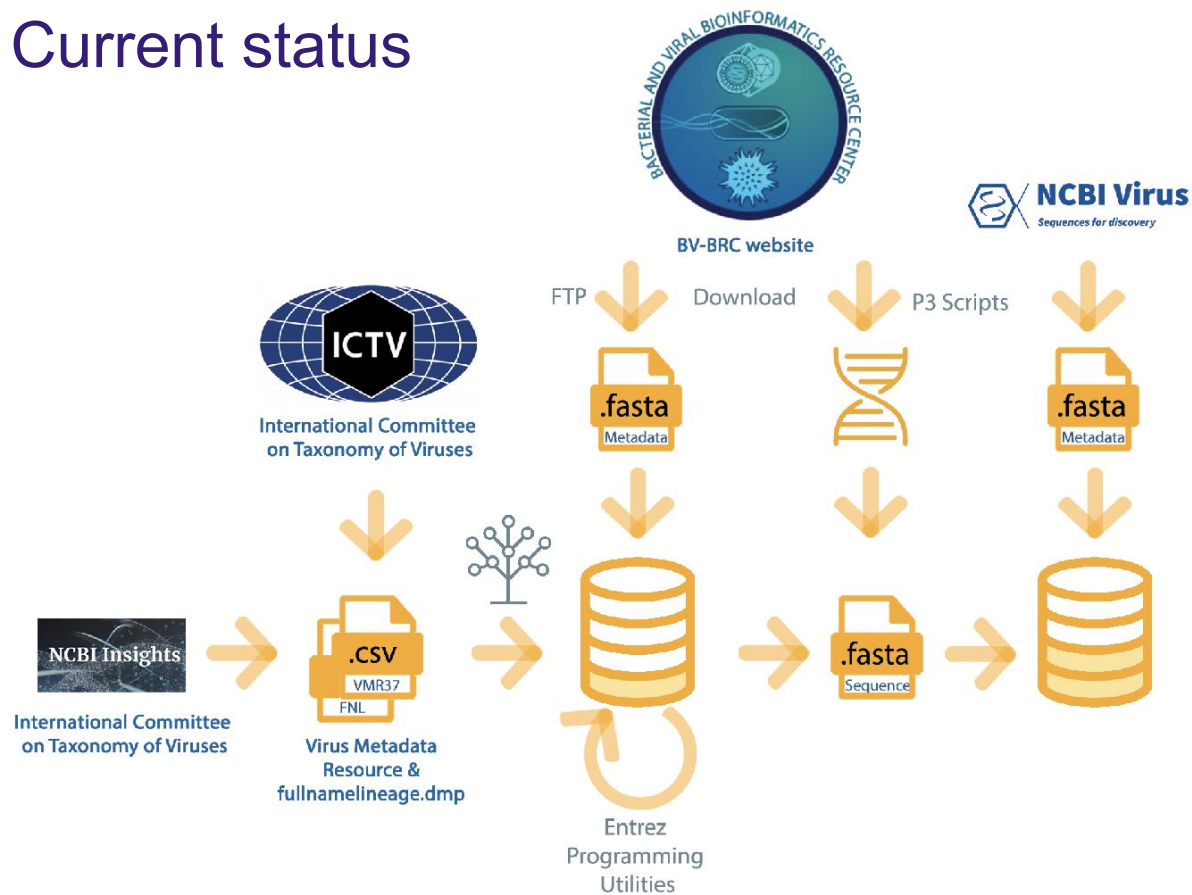
# Description of plan



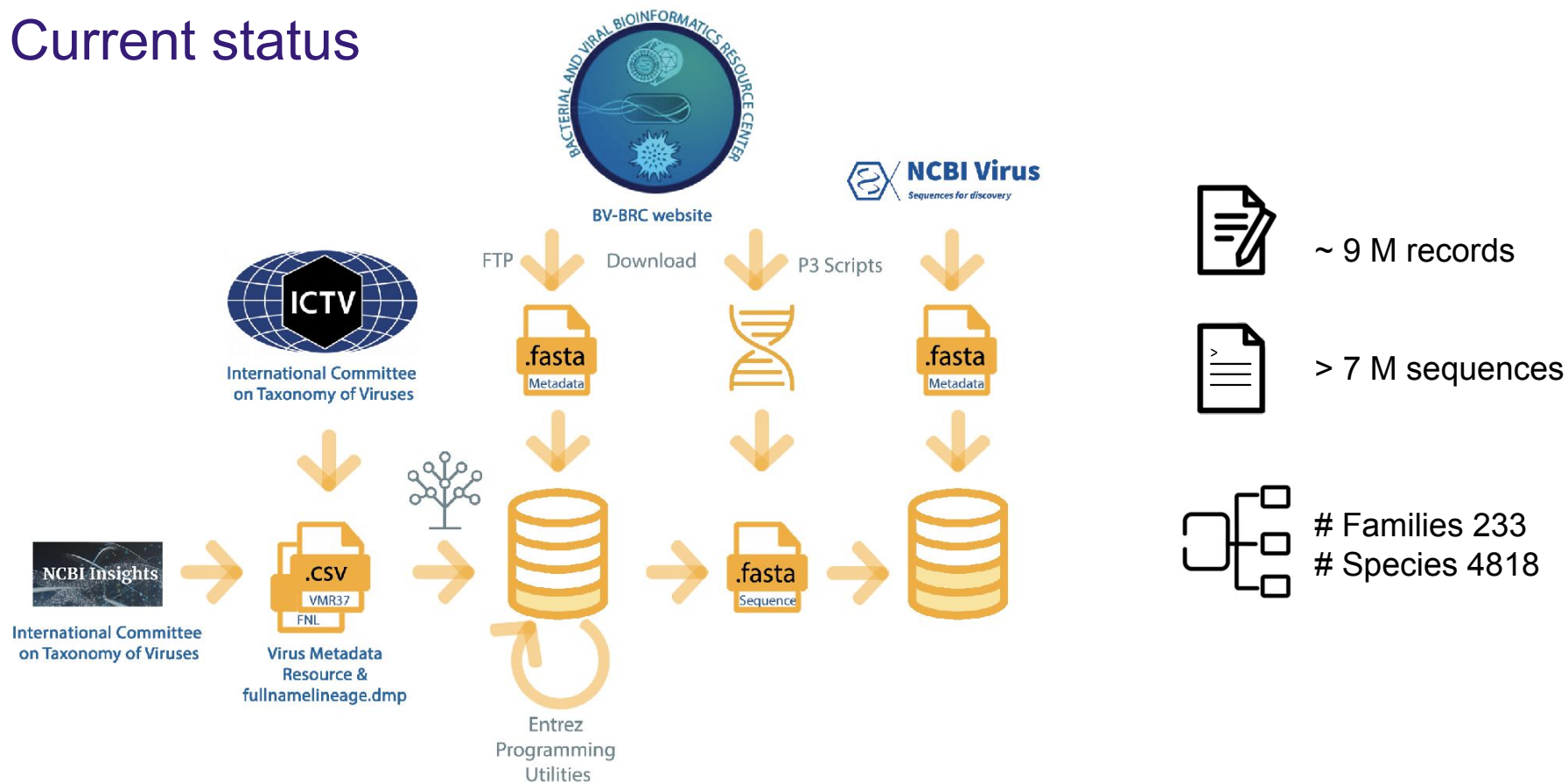
# Server-side structure



# Current status



# Current status





# Next steps

- Release the prototype
- Finalize the integration of BV-BRC and NCBI virus database into VirJenDB
- Further data curation
- FTP access for the currently available data
- Survey and feedback collection



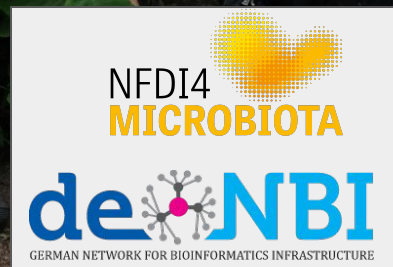
Prof. Dr. Manja Marz

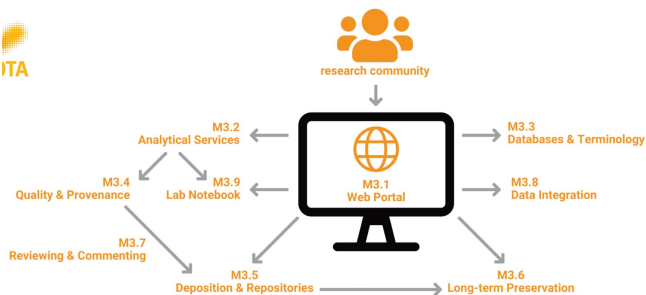


Noriko Cassman, PhD



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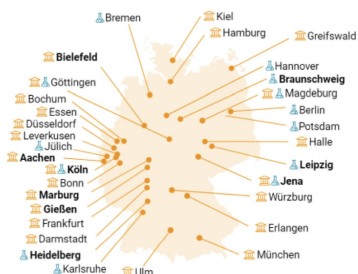
# NFDI4MICROBIOTA



**>50**  
Participants

**10**  
(Co-)Applicants

**5**  
Associations  
VAAM  
GVV  
DGHM  
DGP  
DGM



**9**  
Research Consortia  
SPP 2330  
SFB 1221  
SPP 2141  
SFB 1371  
TRR 124  
SPP 2002  
EXC 2051  
SFB 1382  
Fraunhofer CIMD

**Universities**  
**Research Institutes**

Training  
 Support

Analyses  
 Tools

Procedures  
 Workflows

Components  
 Data

Infrastructure  
 Law

- NFDI4Agri
- DataPLANT
- GHGA
- NFDI4Health
- NFDI4Immo
- NFDI4DataScience
- NFDI4RSE
- NFDI4Bioimage
- NFDI4Life Umbrella
- NFDI4BioDiversity
- PUNCH4NFDI
- NFDI4Chem
- NFDI4Cat
- NFDI4Ing
- NFDI4Earth