The
Bernstein Network

The Bernstein Network Computational Neuro-science is a research network in the field of computational neuroscience. It unites different scientific disciplines in the endeavor to under-stand how the brain functions. The close combi-nation of neurobiological experiments with theoretical models and computer simulations allows scientists in the Bernstein Network to pursue innovative approaches. The scientists can rely on central infrastructural facilities of the network, which support the scientific dialogue.

The network is named after the German physiologist and biophysicist Julius Bernstein (1839-1917) whose „Membrane Theory" provided the first biophysical explanation for how nerve cells encode and transmit information by electrical currents.

Bernstein Network Computational Neuroscience

Be part of the
Bernstein Network!

Get in Touch

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Follow Us

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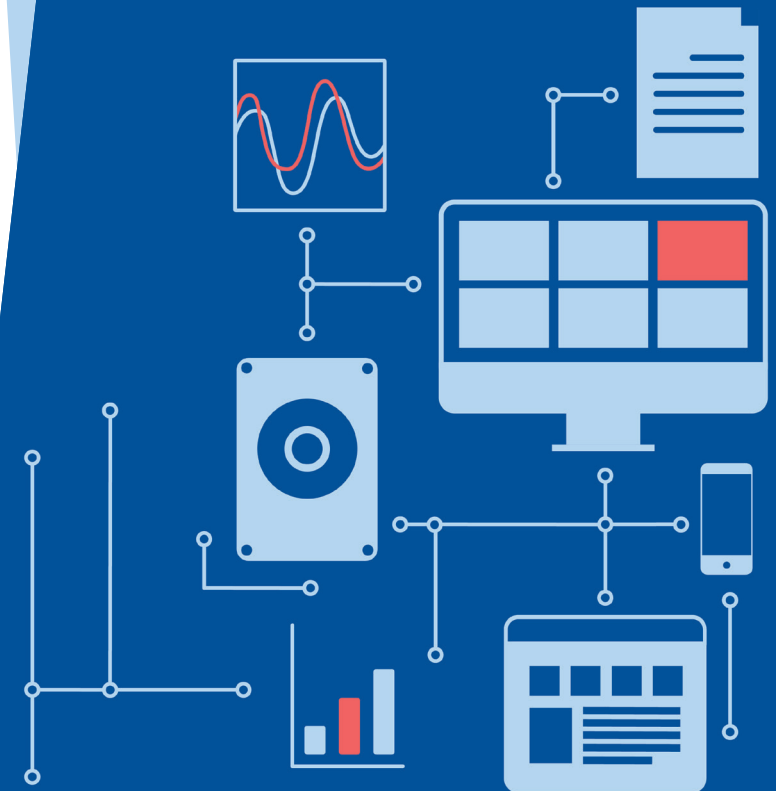Mastodon: gnode@mastodon.world

G-Node **LMU** LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN **incf**

G-Node
German Neuroinformatics Node
Bernstein Facility for Data Technology

Neuroinformatics for Efficient Research Data Management

Data Annotation

The open metadata Markup Language (odML) is a format for collecting and managing your metadata.

- Flexible: stores any metadata
- Adaptable to the specifics of an experiment
- Includes templates for convenient organization
- Machine readable: enables automated collection of metadata

www.g-node.org/odml

Data Organization

The neuroscience information exchange format (NIX) lets you organize your data and metadata together and in a versatile way.

- Stores a wide variety of data types
- Enables consistent data structure
- Integrates metadata (odML)
- Stores data, analysis results, and their relations
- Enables integration with data acquisition or analysis software
- Compatible with common platforms and tools
- Endorsed as standard by *INCF*

www.g-node.org/nix

Data Storage & Sharing

With the G-Node Data Infrastructure Services (GIN), you securely store, access, collaborate on, and publish your data.

- Provides version control: keeps track of changes as datasets evolve
- Accessible through a variety of interfaces
- Enables convenient data sharing with collaborators
- Supports data publication (DOI)
- Recommended by *PLOS*, *Nature*, and *eLife*.

www.g-node.org/gin

About G-Node

The German Neuroinformatics Node (G-Node) is one of three facilities of the Bernstein Network Computational Neuroscience. G-Node provides tools and infrastructure supporting data access, data analysis, and data exchange to foster reproducible research, collaboration, and data reuse. It links the network to the international initiatives in the context of the International Neuroinformatics Coordinating Facility (INCF).

○ BERNSTEIN CENTERS
○ Sites of Bernstein Members
Ⓑ Bernstein Coordination Site (BCOS)
Ⓖ German Neuroinformatics Node (G-Node)
Ⓢ Simulation and Data Lab Neuroscience (SDLN)

Kiel
Rostock
Lübeck
Hamburg
Oldenburg
Bremen
BERLIN
Potsdam
Osnabrück
Magdeburg
Bielefeld
Cottbus
Bochum
GÖTTINGEN
Leipzig
Jülich
Kassel
Dresden
Cologne
Marburg
Jena
Chemnitz
Bonn
Aachen
Gießen
Ilmenau
Frankfurt
Mainz
Aschaffenburg
Saarbrücken
MANNHEIM
Erlangen
HEIDELBERG
TÜBINGEN
Regensburg
Reutlingen
FREIBURG
MUNICH
Constance

Our Services

We help to fully exploit the scientific potential of research data.

We provide tools and services for comprehensive research data management from acquisition to publication.

We facilitate data sharing and data organization for efficient analysis and reuse of reseach data.