

Resource Summary Report

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Network Data Exchange (NDEx)

RRID:SCR_003943

Type: Tool

Proper Citation

Network Data Exchange (NDEx) (RRID:SCR_003943)

Resource Information

URL: <http://www.ndexbio.org/>

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Description: Repository where scientists and organizations can share, store, manipulate, and publish biological network data. Users can also run their own copies of NDEx Server software in cases where stored networks must be kept in highly secure environment (such as for HIPAA compliance) or where high application load is incompatible with shared public resource. Open source software system that is part of Cytoscape family. Project of Cytoscape Consortium in conjunction with Ideker lab at UCSD School of Medicine. Public forum where biologists can exchange and publish computable network models in many types and formats. NDEx is based on REST web API which can be accessed by any application, including NDEx website and NDEx Cytoscape App. NDEx networks are assigned stable, globally unique URIs and so can be referenced by publications, by other networks, and by analytic applications.

Abbreviations: NDEx

Synonyms: ndex bio, NDEx, Network Data Exchange, UCSD NDEx, ndex biology, the Network Data Exchange

Resource Type: data or information resource, database

Defining Citation: [PMID:34570431](#), [PMID:28150243](#)

Keywords: network, pathway, network model, web service, FASEB list

Funding:

Availability: Free, Freely available

Resource Name: Network Data Exchange (NDEx)

Resource ID: SCR_003943

Alternate IDs: nlx_158334

Alternate URLs: <http://ndexbio.org/>, <http://www.home.ndexbio.org/disclaimer-license/>, <http://www.ndexbio.org/#/>, <https://api.datacite.org/doi?prefix=10.18119>

Record Creation Time: 20220129T080221+0000

Record Last Update: 20250426T055654+0000

Ratings and Alerts

No rating or validation information has been found for Network Data Exchange (NDEx).

No alerts have been found for Network Data Exchange (NDEx).

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 66 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Wright SN, et al. (2025) State of the interactomes: an evaluation of molecular networks for generating biological insights. Molecular systems biology, 21(1), 1.

Martini L, et al. (2024) Detecting and dissecting signaling crosstalk via the multilayer network integration of signaling and regulatory interactions. Nucleic acids research, 52(1), e5.

Ye L, et al. (2024) AMBRA1 drives gastric cancer progression through regulation of tumor plasticity. Frontiers in immunology, 15, 1494364.

Yamagata Y, et al. (2024) Prototyping an Ontological Framework for Cellular Senescence Mechanisms: A Homeostasis Imbalance Perspective. Scientific data, 11(1), 485.

Shan L, et al. (2024) Statistical and network analyses reveal mechanisms for the enhancement of macrophage immunity by manganese in *Mycobacterium tuberculosis* infection. *Biochemistry and biophysics reports*, 37, 101602.

Yin X, et al. (2024) Global siRNA Screen Reveals Critical Human Host Factors of SARS-CoV-2 Multicycle Replication. *bioRxiv : the preprint server for biology*.

Saha P, et al. (2024) Identification of PPREs and PPRE associated genes in the human genome: insights into related kinases and disease implications. *Frontiers in immunology*, 15, 1457648.

Visonà G, et al. (2024) Network propagation for GWAS analysis: a practical guide to leveraging molecular networks for disease gene discovery. *Briefings in bioinformatics*, 25(2).

Yun HY, et al. (2024) Leucine rich repeat LGI family member 3: Integrative analyses support its prognostic association with pancreatic adenocarcinoma. *Medicine*, 103(8), e37183.

Leger BS, et al. (2024) Rare and Common Variants Associated with Alcohol Consumption Identify a Conserved Molecular Network. *bioRxiv : the preprint server for biology*.

Ticona-Pérez FV, et al. (2024) Multiple mechanisms contribute to acquired TRAIL resistance in multiple myeloma. *Cancer cell international*, 24(1), 275.

Naghdibadi M, et al. (2023) Clear Cell Renal Cell Carcinoma: A Comprehensive in Silico Study in Searching for Therapeutic Targets. *Kidney & blood pressure research*, 48(1), 135.

Silva SG, et al. (2023) Natural product biosynthetic potential reflects macroevolutionary diversification within a widely distributed bacterial taxon. *mSystems*, 8(6), e0064323.

Pillich RT, et al. (2023) NDEx IQuery: a multi-method network gene set analysis leveraging the Network Data Exchange. *Bioinformatics (Oxford, England)*, 39(3).

Wright SN, et al. (2023) Genome-wide association studies of human and rat BMI converge on synapse, epigenome, and hormone signaling networks. *Cell reports*, 42(8), 112873.

Sun H, et al. (2023) The regulation loop of MARVELD1 interacting with PARP1 in DNA damage response maintains genome stability and promotes therapy resistance of cancer cells. *Cell death and differentiation*, 30(4), 922.

Vasovi? LM, et al. (2023) Intrinsically disordered proteins and liquid-liquid phase separation in SARS-CoV-2 interactomes. *Journal of cellular biochemistry*.

Kim EY, et al. (2022) Transcriptome-wide changes in gene expression, splicing, and lncRNAs in response to a live attenuated dengue virus vaccine. *Cell reports*, 38(6), 110341.

Ochsner SA, et al. (2022) Transcriptional regulatory networks of circulating immune cells in type 1 diabetes: A community knowledgebase. *iScience*, 25(7), 104581.

Oughtred R, et al. (2021) The BioGRID database: A comprehensive biomedical resource of

curated protein, genetic, and chemical interactions. Protein science : a publication of the Protein Society, 30(1), 187.