HdinHD: A Data Portal for Huntington’s Disease Research
https://www.hdinhd.org/

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Abstract
HdinHD (Huntington’s Disease in High Definition; HdinHD.org) is an open online portal for Huntington’s Disease (HD) researchers. HdinHD presents an integrated federated view of HD experimental data and highlights a federated set of visualization and analysis tools developed independently by HD scientists across the community. Researchers can interactively explore a richly-connected set of experimental data, visualize analytical results or download datasets locally to incorporate bulk data into their own databases and computational pipelines. The HdinHD team continues to monitor the literature and community omics repositories to identify emerging HD experimental data. New HD studies are curated and analyzed according to established methods and pipelines and integrated into the HdinHD environment. HdinHD endeavors to be responsive to community needs. Input is welcomed and may be submitted either through the Feedback link on the HdinHD website or by contacting CHDI directly.

Federated Set of HD Tools Authorized by the Community

- HD Explorer
  - HDinHD
  - Gena HD
  - Gena MDA SNP Viewer
  - Gena Euro SK Viewer
  - ASViewer

- HDinHD Home Page

Downloads: HDSigDB
HD in HD related Experimental Data Curated and Analyzed from Internal and External Sources. Shared HD Catalogs allow facile pivoting on Mouse Models, Treatments and Genes/Targets. HD Explorer Home Page

CoExMap Viewer is now available as a federated section within HdinHD’s Tools section [6]. CoExMap Viewer offers two major interactive components:
1. A Table Browser that allows you to sort and analyze gene signatures, cell type, and/or different markers among their enrichment in any CoExMap module as well as the converse, to sort the CoExMap modules by relevancy to any particular gene signature, cell type or different marker.
2. A UMAP (uniform manifold approximation and projection) visualization that depicts a 2-dimensional projection of co-expression modules that reflects intramodular connectivity. Users can visualize the location of their own set of genes on the UMAP, and gain insight based on functional annotation of distinct regions within the UMAP.

Striatum Disease Signatures
Mouse Allelic Series
GWAS Studies
DNA Repair & Maintenance
Causal Modeling Results
Curated HD Datasets

HD SigDB Genes

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Tools: CoExMap Viewer

Tools: HD Explorer

HdinHD is funded and developed by CHDI Foundation, Inc., a nonprofit biomedical research organization exclusively dedicated to collaboratively developing therapeutics that will substantially improve the lives of those affected by Huntington’s disease. HdinHD was launched in 2015 in partnership with the laboratory of Giovanni Coppola (UCLA). Colleagues at Rancho Biosciences contributed data curation, data analysis, data modeling and software/data engineering support, and Bridgewater Consulting contributed solution architecting and systems and software engineering support. CHDI thanks the investigators who have kindly contributed to HdinHD’s federated set of community-developed tools.

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