Resource Summary Report

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NICHD Brain and Tissue Bank for Developmental Disorders

RRID:SCR_003601 Type: Tool

Proper Citation

NICHD Brain and Tissue Bank for Developmental Disorders (RRID:SCR_003601)

Resource Information

URL: http://medschool.umaryland.edu/btbank/

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Description: The objective of this human tissue repository is to systematically collect, store, and distribute brain and other tissues for research dedicated to the improved understanding, care, and treatment of individuals with developmental disorders. Brain sections are primarily frozen in isopentane / dry ice. Tissues are stored in 10% formalin and frozen at -85 degrees C. Of special interest are individuals with Down syndrome and other chromosomal defects, mitochondrial encephalopathies, phenylketonuria and other aminoacidopathies, maternal PKU, Rett syndrome, leukodystrophies, lysosomal disorders, dyslexia, autism, and other neurodevelopmental disorders. The brain and tissue banks have extensive experience in arranging for the rapid retrieval of tissue upon the death of individuals who die while at home, in hospitals or hospice care. As a special service, the brain and tissue banks are able to assist researchers who are working with patients who intend to donate tissues at the time of their death. Immediately after retrieval of the tissue, the brain and tissue banks will forward needed tissue to the referring investigators and ensure proper storage and cataloging of any additional tissues as part of the brain and tissue banks. The recipient of tissue and the brain and tissue banks are required to sign a Tissue Transfer Agreement before any tissues are transferred.

Abbreviations: NICHD BTB

Synonyms: Eunice Kennedy Shriver NICHD BTB, NICHD Brain and Tissue Bank, NICHD Brain Tissue Bank for Developmental Disorders, NICHD BTB for Developmental Disorders

Resource Type: material resource, brain bank, tissue bank, biomaterial supply resource

Keywords: downloadable catalog, tissue, brain, body fluid, cardiovascular system, endocrine system, genital system, gastrointestinal system, hematopoietic system, integumentary, musculo-skeletal, respiratory system, spinal cord, nerve, urinary system, other, rna, frozen, fixed, developmental disorder, down syndrome, chromosomal defect, mitochondrial encephalopathy, phenylketonuria, maternal pku, rett syndrome, dyslexia, autism, neurodevelopmental disorder, aminoacidopathy, pervasive development disorder, leukodystrophy, lysosomal disorder, s syndrome

Related Condition: Developmental disorder, Down syndrome, Chromosomal defect, Mitochondrial encephalopathy, Phenylketonuria, Maternal PKU, Rett Syndrome, Dyslexia, Autism, Neurodevelopmental disorder, Aminoacidopathy, Pervasive Development Disorder, Leukodystrophy, Lysosomal disorder, S syndrome

Funding: NIH Blueprint for Neuroscience Research contract HHSN275200900011C; NICHD NO1-HD-9-0011

Availability: Public: Tissues are made available to academic researchers and commercial enterprises for basic research.

Resource Name: NICHD Brain and Tissue Bank for Developmental Disorders

Resource ID: SCR_003601

Alternate IDs: nif-0000-00217

Record Creation Time: 20220129T080219+0000

Record Last Update: 20250424T064629+0000

Ratings and Alerts

No rating or validation information has been found for NICHD Brain and Tissue Bank for Developmental Disorders.

No alerts have been found for NICHD Brain and Tissue Bank for Developmental Disorders.

Data and Source Information

Source: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We found 37 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

Billingsley KJ, et al. (2024) Long-read sequencing of hundreds of diverse brains provides insight into the impact of structural variation on gene expression and DNA methylation. bioRxiv : the preprint server for biology.

Jerez PÁ, et al. (2024) African ancestry neurodegeneration risk variant disrupts an intronic branchpoint in GBA1. medRxiv : the preprint server for health sciences.

Tan L, et al. (2023) Cerebellar Granule Cells Develop Non-neuronal 3D Genome Architecture over the Lifespan. bioRxiv : the preprint server for biology.

Murat F, et al. (2023) The molecular evolution of spermatogenesis across mammals. Nature, 613(7943), 308.

Duncan L, et al. (2023) Polygenic scores for psychiatric disorders in a diverse postmortem brain tissue cohort. Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology, 48(5), 764.

Pozzi S, et al. (2022) MCP-1/CCR2 axis inhibition sensitizes the brain microenvironment against melanoma brain metastasis progression. JCI insight, 7(17).

Johnson MA, et al. (2022) The Cure VCP Scientific Conference 2021: Molecular and clinical insights into neurodegeneration and myopathy linked to multisystem proteinopathy-1 (MSP-1). Neurobiology of disease, 169, 105722.

Pandya NJ, et al. (2021) Secreted retrovirus-like GAG-domain-containing protein PEG10 is regulated by UBE3A and is involved in Angelman syndrome pathophysiology. Cell reports. Medicine, 2(8), 100360.

Cougnoux A, et al. (2021) Reduction of glutamate neurotoxicity: A novel therapeutic approach for Niemann-Pick disease, type C1. Molecular genetics and metabolism, 134(4), 330.

Cawley NX, et al. (2020) Abnormal LAMP1 glycosylation may play a role in Niemann-Pick disease, type C pathology. PloS one, 15(1), e0227829.

Ramaswami G, et al. (2020) Integrative genomics identifies a convergent molecular subtype that links epigenomic with transcriptomic differences in autism. Nature communications, 11(1), 4873.

Kuo HY, et al. (2020) Pathological alterations in striatal compartments in the human brain of autism spectrum disorder. Molecular brain, 13(1), 83.

Li X, et al. (2019) Integrated Analysis of Brain Transcriptome Reveals Convergent Molecular Pathways in Autism Spectrum Disorder. Frontiers in psychiatry, 10, 706.

Wong CCY, et al. (2019) Genome-wide DNA methylation profiling identifies convergent

molecular signatures associated with idiopathic and syndromic autism in post-mortem human brain tissue. Human molecular genetics, 28(13), 2201.

Vasung L, et al. (2019) Structural and Diffusion MRI Analyses With Histological Observations in Patients With Lissencephaly. Frontiers in cell and developmental biology, 7, 124.

Welch JD, et al. (2019) Single-Cell Multi-omic Integration Compares and Contrasts Features of Brain Cell Identity. Cell, 177(7), 1873.

Malaby AW, et al. (2018) Structural Dynamics Control Allosteric Activation of Cytohesin Family Arf GTPase Exchange Factors. Structure (London, England : 1993), 26(1), 106.

Xu Q, et al. (2018) Autism-associated CHD8 deficiency impairs axon development and migration of cortical neurons. Molecular autism, 9, 65.

Zhu D, et al. (2018) BAI1 Suppresses Medulloblastoma Formation by Protecting p53 from Mdm2-Mediated Degradation. Cancer cell, 33(6), 1004.

Tebbenkamp ATN, et al. (2018) The 7q11.23 Protein DNAJC30 Interacts with ATP Synthase and Links Mitochondria to Brain Development. Cell, 175(4), 1088.