



Why Biobanking? Biobanking efforts at NINDS promote the development of promising diagnostic and progression biomarkers, as well as provide well characterized cell sources to both academic and industry investigators worldwide to advance the study of neurological disorders.

NINDS BioSEND



Housed at Indiana University Genetics Biobank (IUGB), BioSEND banks, maintains, and distributes biospecimens collected through studies supported by or conducted in collaboration with NINDS, the majority of which are linked with clinical and phenotypic data.



What is currently available at BioSEND?

Parkinson's Disease	Parkinsonisms	Lewy Body Dementia	Huntington's Disease
Traumatic Brain Injury	Spinocerebellar Ataxia	Frontotemporal Dementia	Myalgic Encephalomyelitis / Chronic Fatigue Syndrome

Blood Fractions	Nucleic Acids	Human Tissue	Other Biofluids
Whole Blood	DNA	Brain	CSF
Plasma	Micro RNA	Skin	Saliva
Serum	Total RNA	Colon	Urine
Buffy Coat		Nerve	Stool
RBC Pellet		Tumor	
PBMCs		Etc.	

How can BioSEND benefit your research?

- Site requests kits
- Samples collected at study site
- Samples accessioned, processed, and stored at IU
- Inventory uploaded to searchable catalog
- Samples distributed for analysis
- Results shared with research community

Current BioSEND collaborations



THE NINDS HUMAN CELL AND DATA REPOSITORY

Providing iPSCs and Fibroblasts for the Study of Neurological Disease



Housed at Sampled in coordination with Rutgers University, The NINDS Human Cell and Data Repository (NHCDR) banks, maintains, and distributes fibroblasts and induced pluripotent stem cells (iPSCs) from NINDS mission-relevant disorders.

What is currently available at NHCDR?

Disease Collection	Fibroblasts	iPSC	Edited iPSC	Disease Collection	Fibroblasts	iPSC	Edited iPSC
Alzheimer's Disease	4	0	0	Frontotemporal Degeneration	19	68	8
Amyotrophic Lateral Sclerosis	19	51	7	Frontotemporal Degeneration, Parkinsonism	4	3	2
Amyotrophic Lateral Sclerosis, Controls	0	8	0	Huntington's Disease	19	29	3
Amyotrophic Lateral Sclerosis, Frontotemporal Degeneration	0	1	0	Lewy Body Dementia	0	26	0
Ataxia-Telangiectasia	0	4	0	Lewy Body Dementia, Parkinsonism	0	3	0
Controls	11	28	0	Mild Cognitive Impairment	0	2	0
Controls, Huntington's Disease	8	9	0	Myotonic Dystrophy	0	23	0
Controls, Parkinsonism	1	0	0	Parkinsonism	94	59	11
Dystonia	91	0	0	Spinal Muscular Atrophy	0	3	0
Dystonia, Parkinsonism	1	0	0	Spinal-Bulbar Muscular Atrophy	0	7	0

How can NHCDR benefit your research?

- Process whole blood to cryopreserved lymphocytes (CPLs)
- Process skin biopsies to fibroblast cell lines (FCLs)
- Reprogram CPLs, FCLs, and lymphoblastoid cell lines (LCLs) into iPSC
- Edit iPSC lines
- Maintain a comprehensive catalog and ordering platform

Current NHCDR collaborations



For more information on research and collaboration opportunities, contact: Rebecca Price, rebecca.price@nih.gov