	Year Awarded	Investigator(s)	Institution	Project	Type of Project
1	2017	Alessandra Biffi, MD	Children's Hospital - Boston	Proof of concept study of HSC gene therapy for Tay-Sachs disease	gene and cell therapy
2		Heather Gray-Edwards, PhD	Auburn	Minimally invasive delivery of AAV gene therapy in the Tay-Sachs Sheep	gene therapy
3		Tim Wood, PhD and Stephane Demotz, PhD	Greenwood Genetics & Dorphan	Development of a quantitative method for the determination of a pentasaccharide in GM1-gangliosidosis patient cells to assess the potential therapeutic efficacy of a betagalactosidase pharmacological chaperone	biomarker
4	2016	Bev Davidson, PhD	Children's Hospital of Philadelphia	Identifying Novel Therapeutics for Treating GM2 Gangliosidoses	small molecules
5		Angela Gritti, PhD	San Raffaele Scientific Institute, Italy	Novel combined gene/cell therapy strategies to provice full rescue of the Sandhoff	gene and cell therapy
6		Martin Grootveld,	De Montfort University (Leicester, UK)	Rapid Identification of New Biomarkers for the Classification of GM1 and GM2	biomarker
7		Cynthia Tifft, MD, PhD	NIH	Clinically Relevant Outcome Measures for Patients with Late Onset Tay-Sachs disease	clinical trial readines
8	2016	Doug Martin, PhD	Auburn	Lipid Biomarkers of Tay-Sachs Disease	biomarkers
9	2015	Miguel Sena-Esteves, PhD	U Massachusetts Medical Center	Pre-clinical studies of AAVrh8-Hex gene delivery in TSD	gene therapy (TSGT Consortium)
10	2015	Denis Lehotay, PhD	University of Saskatchewan	Development and Validation of an MS-MS Method for the Detection of Hexosaminidase	clinical trial readiness
11		Doug Martin, PhD	Auburn University College of Veterinary Medicine	Intravascular gene therapy for feline GM2 gangliosidosis	gene therapy (TSGT Consortium)
12		Heather Lau, MD, MS Paola Leone, PhD	New York University	Defining the Natural History of Canavan Disease through Development of an	clinical trial readiness
13		Florian Eichler, MD	Massachusetts General Hospital	Clinical Trial Readiness for Late Onset Tay- Sachs	clinical trial readines
14		Eric Sjoberg, PhD	OrPhi Therapeutics	Generation of a knock-in mutant Hexb mouse n	animal model (late onset GM2)
15	2014	David Radin, PhD	BioStrategies, LC	Lectin-assisted transnasal delivery of corrective enzyme for GM1 gangliosidosis	new therapeutic approach
16	2013	Miguel Sena-Esteves, PhD	U Massachusetts Medical Center	Selection of a new AAVrhB vector design and s	gene therapy (TSGT Consortium)
17		Alessandra d'Azzo, PhD	St. Jude Children's Research Hospital	Studies of the molecular and biochemical bases of neurodegeneration in sialidosis	basic research
18		Doug Martin, PhD	Auburn University	Breeding Flock for the Sheep Model of Tay-Sac	gene therapy (TSGT Consortium)
19		Doug Martin, PhD	Auburn University	Cat pathology studies (70% CTSF / 30% NTSAD)	gene therapy (TSGT Consortium)
20	2012		UC Davis	Vector Manufacturing (70% CTSF / 30% NTSAD)	gene therapy (TSGT Consortium)
21		Doug Martin, PhD	Auburn University	Supplemental Pre-Clinical Studies of AAV Gene Therapy in Feline Sandhoff Disease	gene therapy (TSGT Consortium)
22		Doug Martin, PhD	Auburn University	Sheep as a Model of Tay-Sachs Disease - Year 3 (70% CTSF / 30% NTSAD)	gene therapy (TSGT Consortium)
23			U of Florida	Supplemental equipment for tox studies	gene therapy (TSGT Consortium)
24	2011	Fran Platt, PhD / Allie Colaco	University of Oxford	Validation of a Potential Biomarker for the GM1 and GM2 Gangliosidoses	biomaker
25		Doug Martin, PhD	Auburn University	Sheep as a Model of Tay-Sachs Disease - Year 2	gene therapy (TSGT Consortium)
26		Florian Eichler, MD	Massachusetts General Hospital	Clinical Outcome Measures for a Gene Therapy Trial in Infantile and Juvenile GM2	natural history study (TSGT Consortium)
27		Guangping Gao, PhD	University of Massachusetts Medical	Optimization of Efficacious Gene Therapy for Canavan Disease	gene therapy
28		Yu-Tah Li, PhD	Tulane University	Studies of Taurine-Conjugated GM2 in Tay- Sachs Disease	novel marker
29	2010	Fran Platt, PhD	University of Oxford	Optimizing the Therapeutic Potential of Anti- inflammatory Therapy in Tay-Sachs and	small molecules
30		Maria Traka, PhD	University of Chicago	Development of an in vitro approach to identify molecular pathways of Canavan disease	basic research
31		Jean-Pyo Lee, PhD / Evan Y. Snyder, MD, PhD	Tulane University	The Therapeutic Potential of Human Induced Pluripotent Stem Cells (IPSCs) in the Sandhoff	stem cell therapy
32		Gustavo Maegawa, PhD	Johns Hopkins University	Developing a High Throughput Screening Assay to Identify Potential Drugs for	small molecules
33		Doug Martin, PhD	Auburn University	Sheep as a Model of Tay-Sachs Disease - Year 1	gene therapy (TSGT Consortium)
34	2009	Alexey Pshezhetsky, PhD	Universite of Montreal	Novel therapy for Tay-Sachs disease, sialidosis and galactosialidosis using a	novel marker
35		Mark Sands, PhD	Washington University	Combination Therapy for Krabbe Disease	combination therapy
36		Joe Clarke, MD, PhD	Hospital for Sick Children	Proposed Investigator-Initiated Clinical Trial of Pyrimethamine as a Treatment for Late-Onset	phase I clinical trial

## NTSAD grants with email contact

	Year Awarded	Investigator(s)	Institution	Project	Type of Project
37		Florian Eichler, MD	Massachusetts General Hospital	A Biomarker for Disease Progression in GM2 and other Neurolipidoses	biomarker
38		Edwin Kolodny, MD	NYU	Proposed Investigator-Initiated Clinical Trial of Pyrimethamine as a Treatment for Late-Onset	phase I clinical trial
39	2008	Stephanos Kyrkanides, PhD	Stony Brook University	Retrograde transfer of therapeutic vectors enabled by the trigeminal sensory system	gene therapy
40		Angela Gritti, PhD / Alessandra Biffi, PhD	San Raffaele	Evaluation of Combined Approaches Using Hematopoietic and Neural Stem Cells for the	combination therapy (stem cells)
41	2007	Florian Eichler, MD	Massachusetts General Hospital	The Natural History of Tay-Sachs Disease	gene therapy (TSGT Consortium)
42		Miguel Sena-Esteves, PhD	Massachusetts General Hospital	AAV-mediated Gene Therapy for Tay-Sachs Disease: Vector Selection for Preclinical	gene therapy (TSGT Consortium)
43		Timothy Cox, MD M. Begoña Cachón-	University of Cambridge	Pre-Clinical/Clinical Research Program: Tay- Sachs and Related Diseases	gene therapy (TSGT Consortium)
44		Douglas Martin, PhD	Auburn University	Pre-Clinical Studies of AAV Gene Therapy in Feline GM2 Gangliosidosis	gene therapy (TSGT Consortium)
45		Thomas Seyfried, PhD	Boston College	Neurochemical and Immunological Evaluation of AAV Gene Therapy Strategies	gene therapy (TSGT Consortium)
46	2007	Susan L. Cotman, PhD	Massachusetts General Hospital	Small molecule screening to identify modifiers of lysosomal trafficking, a putative therapy for	small molecules
47		Doug Martin, PhD	Auburn University	Pre-clinical gene therapy for GM2 in a feline model	gene therapy (TSGT Consortium)
48		Miguel Sena-Esteves, PhD	Massachusetts General Hospital	AAV-mediated gene therapy for Tay-Sachs: Vector selection for pre-clinical development	gene therapy (TSGT Consortium)
49		Aryan Namoodiri, PhD	Uniformed Services University of the Heath	Preclinical Research toward Acetate Supplementation Therapy for Canavan	small molecules
50	2004	James A. Shayman, MD	University of Michigan	High throughput screening for inhibitors of ganglioside GM2 synthase	small molecules
51	2003	Jean-Pyo Lee, PhD/Evan Y. Snyder, MD, PhD	Beth Israel Deaconess Medical Center/Burnham	Therapeutic Potential of Neural Stem Cells in the Gangliosidoses (Tay-Sachs & Sandhoff	stem cell therapy
52		Cynthia Tifft, MD, PhD	Children's Research Institute of Children's	Comprehensive Biochemical Analysis of Cerebrospinal Fluid in Patients with GM2	biomarkers
53	2002	Bruce A. Bunnell, PhD	Tulane University	In utero Gene Therapy of Sandhoff Disease in a Murine Model	gene therapy
54		Stephanos Kyrkanides., PhD	University of Rochester School of Medicine &	Perinatal Gene Therapy for β-hexosaminidase disorders (Tay-Sachs and Sandhoff diseases)	gene therapy
55		Paola Leone, PhD	University of Medicine and Dentistry of New Jersey	Neuroprotective Effect of Minocycline in Sandhoff Disease	small molecules
56		Thomas N. Seyfried, PhD	Boston College	Therapeutic evaluation of NB-DGJ for ganglioside storage diseases	substrate reduction