2011 Portfolio Analysis Projects

Please note that data are not yet final; additional projects may be added.

QUESTION 2: HOW CAN I UNDERSTAND WHAT IS HAPPENING?

2.S.A

Support at least four research projects to identify mechanisms of fever, metabolic and/or immune system interactions with the central nervous system that may influence ASD during prenatal-postnatal life by 2010. *IACC Recommended Budget: $9,800,000 over 4 years.* (Fever studies to be started by 2012.)

Project Title	Principal Investigator	Institution	Funding	Funder
Systematic characterization of the immune response to gluten and casein in autism spectrum disorders	Alaedini, Armin	Weill Cornell Medical College	$0.00	Department of Defense
Autoimmunity against novel antigens in neuropsychiatric dysfunction	Balice-Gordon, Rita	University of Pennsylvania	$320,000.00	National Institutes of Health
Primate models of autism	Bauman, Melissa	University of California, Davis	$75,629.00	National Institutes of Health
CNS toxicity of ambient air pollution: Postnatal exposure to ultrafine particles	Cory-Slechta, Deborah	University of Rochester	$229,433.00	National Institutes of Health
The pathogenesis of autism: Maternal antibody exposure in the fetal brain	Diamond, Betty	The Feinstein Institute for Medical Research	$93,500.00	Autism Speaks
A role for immune molecules in cortical connectivity: Potential implications for autism	Elmer, Bradford	University of California, Davis	$0.00	Autism Speaks
Redox abnormalities as a vulnerability phenotype for autism and related alterations in CNS development	Hepel, Maria	State University of New York at Potsdam	$0.00	Department of Defense
Hyperthermia and the amelioration of autism symptoms	Hollander, Eric	Montefiore Medical Center	$0.00	Simons Foundation
How does IL-6 mediate the development of autism-related behaviors?	Hsiao, Elaine	California Institute of Technology	$28,000.00	Autism Speaks

Exploring metabolic dysfunction in the brains of people with autism	Hu, Valerie	George Washington University	$59,856.00	Simons Foundation
Redox abnormalities as a vulnerability phenotype for autism and related alterations in CNS development	James, Sandra	Arkansas Children's Hospital Research Institute	$0.00	Department of Defense
The Study of Toddlers with Autism and Regression (STAR) Protocol – Screening for treatable disorders and biomarkers of inflammation and immune activation in the plasma and CNS	Loh, Alvin	Surrey Place Centre, Toronto	$158,461.00	Health Resources and Services Administration
Prostaglandins and cerebellum development	McCarthy, Margaret	University of Maryland, Baltimore	$375,000.00	National Institutes of Health
Redox abnormalities as a vulnerability phenotype for autism and related alterations in CNS development	Noble, Mark	University of Rochester	$0.00	Department of Defense
Maternal infection and autism: Impact of placental sufficiency and maternal inflammatory responses on fetal brain development	Palmer, Theo	Stanford University	$127,500.00	Autism Speaks
GABA(A) and prenatal immune events leading to autism	Palmer, Theo	Stanford University	$62,500.00	Simons Foundation
A non-human primate autism model based on maternal immune activation	Patterson, Paul	University of California, Davis	$75,629.00	National Institutes of Health
The mechanism of the maternal infection risk factor for autism	Patterson, Paul	California Institute of Technology	$0.00	Autism Speaks
A non-human primate autism model based on maternal infection	Patterson, Paul	California Institute of Technology	$200,000.00	Simons Foundation

Influence of the maternal immune response on the development of autism	Ponzio, Nicholas	University of Medicine & Dentistry of New Jersey	$0.00	Autism Speaks
Influence of maternal cytokines during pregnancy on effector and regulatory T helper cells as etiological factors in autism	Ponzio, Nicholas	University of Medicine & Dentistry of New Jersey	$93,500.00	Autism Speaks
A primate model of gut, immune, and CNS response to childhood vaccines	Sackett, Gene	University of Washington	$156,634.00	National Institutes of Health
Mechanisms of mitochondrial dysfunction in autism	Shoffner, John	Georgia State University	$0.00	Department of Defense
Role of microglial activation in the serotonergic and neuroimmune disturbances underlying autism	Takei, Nori	Hamamatsu University School of Medicine	$0.00	Brain and Behavior Research Foundation
Investigation of IL-9, IL-33 and TSLP in serum of autistic children	Theohardies, Theoharis	Tufts University	$8,650.00	Autism Research Institute

2.S.B

Launch three studies that specifically focus on the neurodevelopment of females with ASD, spanning basic to clinical research on sex differences by 2011. *IACC Recommended Budget: $8,900,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
A sex-specific dissection of autism genetics	Weiss, Lauren	University of California, San Francisco	$150,000.00	National Institutes of Health

2.S.C

Identify ways to increase awareness among the autism spectrum community of the potential value of brain and tissue donation to further basic research by 2011. *IACC Recommended Budget: $1,400,000 over 2 years*

Project Title	Principal Investigator	Institution	Funding	Funder
Enhanced tissue procurement from autistic individuals	Zielke, H.Ronald	NICHD (National Institute of Child Health & Human Development) Brain and Tissue Bank for	$22,000.00	Autism Research Institute

		Developmental Disorders, University of Maryland		

2.S.D

Launch three studies that target improved understanding of the underlying biological pathways of genetic conditions related to autism (e.g. Fragile X, Rett syndrome, tuberous sclerosis complex) and how these conditions inform risk assessment and individualized intervention by 2012. *IACC Recommended Budget: $9,000,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Presynaptic fragile X proteins	Akins, Michael	Brown University	$90,000.00	National Institutes of Health
In-vivo imaging of neuronal structure and function in a reversible mouse model for autism.	Ash, Ryan	Baylor College of Medicine	$28,000.00	Autism Speaks
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	Bolton, Patrick	King's College London	$0.00	Autism Speaks
Functional circuit disorders of sensory cortex in ASD and RTT	Carlson, Gregory	University of Pennsylvania	$254,976.00	National Institutes of Health
Elucidation and rescue of amygdala abnormalities in the Fmr1 mutant mouse model of fragile X syndrome	Corbin, Joshua	George Washington University	$150,000.00	Autism Speaks
Synaptic phenotype, development, and plasticity in the fragile X mouse	Cox, Charles	University of Illinois at Urbana Champaign	$401,852.00	National Institutes of Health
The functional link between DISC1 and neuroligins: Two genetic factors in the etiology of autism	DiDonato, Christine	Children's Memorial Hospital, Chicago	$0.00	Department of Defense
Allelic choice in Rett syndrome	Donohoe, Mary	Winifred Masterson Burke Medical Research Institute	$390,481.00	National Institutes of Health
Activity-dependent phosphorylation of MeCP2	Ebert, Daniel	Harvard Medical School	$174,748.00	National Institutes of Health
Pleiotropic roles of dyslexia genes in neurodevelopmental language impairments	Eicher, John	Yale University	$41,800.00	National Institutes of Health

BDNF and the restoration of spine plasticity with autism spectrum disorders	Gall, Christine	University of California, Irvine	$490,756.00	National Institutes of Health
Mouse models of the neuropathology of tuberous sclerosis complex	Gambello, Michael	University of Texas Health Science Center at Houston	$253,177.00	National Institutes of Health
The microRNA pathway in translational regulation of neuronal development	Gao, Fen-Biao	University of Massachusetts Medical School	$352,647.00	National Institutes of Health
Cortical circuit changes and mechanisms in a mouse model of fragile X syndrome	Gibson, Jay	University of Texas Southwestern Medical Center	$278,656.00	National Institutes of Health
Neuronal activity-dependent regulation of MeCP2	Greenberg, Michael	Harvard Medical School	$426,857.00	National Institutes of Health
The role of UBE3A in autism	Greenberg, Michael	Harvard Medical School	$62,500.00	Simons Foundation
Genotype-phenotype relationships in fragile X families	Hagerman, Randi	University of California, Davis	$530,124.00	National Institutes of Health
Limbic system function in carriers of the fragile X premutation (supplement)	Hessl, David	University of California, Davis	$382,500.00	National Institutes of Health
Limbic system function in carriers of the fragile X premutation	Hessl, David	University of California, Davis	$677,700.00	National Institutes of Health
The role of intracellular metabotropic glutamate receptor 5 at the synapse	Hogan, Carolyn	Washington University in St. Louis	$26,338.00	National Institutes of Health
Development of novel diagnostics for fragile X syndrome	Hosono, Seiyu	JS Genetics, Inc.	$537,123.00	National Institutes of Health
Study of fragile X mental retardation protein in synaptic function and plasticity	Huber, Kimberly	University of Texas Southwestern Medical Center	$366,516.00	National Institutes of Health

Mechanisms of mGluR5 function and dysfunction in mouse autism models	Huber, Kimberly	University of Texas Southwestern Medical Center	$419,137.00	National Institutes of Health
Coordinated control of synapse development by autism-linked genes	Huber, Kimberly	University of Texas Southwestern Medical Center	$75,000.00	Simons Foundation
Mechanisms of synapse elimination by autism-linked genes	Huber, Kimberly	University of Texas Southwestern Medical Center	$75,000.00	Simons Foundation
Genetically defined stem cell models of Rett and fragile X syndrome	Jaenisch, Rudolf	Whitehead Institute for Biomedical Research	$112,500.00	Simons Foundation
Quantitative proteomic approach towards understanding and treating autism	Jin, Peng	Emory University	$75,000.00	Simons Foundation
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	Katz, David	Case Western Reserve University	$0.00	Autism Speaks
MicroRNAs in synaptic plasticity and behaviors relevant to autism	Kelleher, Raymond	Massachusetts General Hospital	$131,220.00	National Institutes of Health
Regulation of 22q11 genes in embryonic and adult forebrain	Lamantia, Anthony	The George Washington University	$308,631.00	National Institutes of Health
The role of MeCP2 in Rett syndrome (supplement)	LaSalle, Janine	University of California, Davis	$38,273.00	National Institutes of Health
The role of MeCP2 in Rett syndrome	LaSalle, Janine	University of California, Davis	$329,781.00	National Institutes of Health
Modulation of fxr1 splicing as a treatment strategy for autism in fragile X syndrome	Lin, Michael	Stanford University	$0.00	Department of Defense
Revealing protein synthesis defects in fragile X syndrome with new chemical tools	Lin, Michael	Stanford University	$315,341.00	National Institutes of Health
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	Luo, Liqun	Stanford University	$31,022.00	Simons Foundation
Mesocorticolimbic dopamine circuitry in mouse models of autism	Malenka, Robert	Stanford University	$87,337.00	Simons Foundation
Investigating the homeostatic role of MeCP2 in mature brain	McGraw, Christopher	Baylor College of Medicine	$35,400	National Institutes of Health
A stem cell based platform for identification of common defects in autism spectrum disorders	Nazor, Kristopher	Scripps Research Institute	$28,000.00	Autism Speaks

Role of intracellular mGluR5 in fragile X syndrome and autism	O'Malley, Karen	Washington University in St. Louis	$150,000.00	Simons Foundation
L-type calcium channel regulation of neuronal differentiation	Panagiotakos, Georgia	Stanford University	$32,129.00	National Institutes of Health
Mouse models of human autism spectrum disorders: Gene targeting in specific brain regions	Parada, Luis	University of Texas Southwestern Medical Center	$300,000.00	Simons Foundation
Mechanism of UBE3A imprint in neurodevelopment	Powell, Weston	University of California, Davis	$33,616.00	National Institutes of Health
MeCP2 modulation of BDNF signaling: Shared mechanisms of Rett and autism	Pozzo-Miller, Lucas	University of Alabama at Birmingham	$314,059.00	National Institutes of Health
Identification of targets for the neuronal E3 ubiquitin ligase PAM	Ramesh, Vijaya	Massachusetts General Hospital	$60,000.00	Simons Foundation
Pathophysiology of MeCP2 spectrum disorders	Ramocki, Melissa	Baylor College of Medicine	$170,383.00	National Institutes of Health
Underlying mechanisms in a cerebellum-dependent model of autism	Regehr, Wade	Harvard Medical School	$0.00	Simons Foundation
Augmentation of the cholinergic system in fragile X syndrome: A double-blind placebo study	Reiss, Allan	Stanford University	$237,600.00	National Institutes of Health
Proteomics in *drosophila* to identify autism candidate substrates of UBE3A (supplement)	Reiter, Lawrence	University of Tennessee Health Science Center	29,600.00	National Institutes of Health
Proteomics in drosophila to identify autism candidate substrates of UBE3A	Reiter, Lawrence	University of Tennessee Health Science Center	$313,159.00	National Institutes of Health
Emergence and stability of autism in fragile X syndrome	Roberts, Jane	University of South Carolina	$358,000.00	National Institutes of Health
Olfactory abnormalities in the modeling of Rett syndrome	Ronnett, Gabriele	Johns Hopkins University	$351,575.00	National Institutes of Health
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	Sahin, Mustafa	Children's Hospital Boston	$0.00	Autism Speaks
Sex differences in early brain development; Brain development in Turner syndrome	Santelli, Rebecca	University of North Carolina at Chapel Hill	$156,841.00	National Institutes of Health
New approaches to local translation: SpaceSTAMP of proteins synthesized in axons	Segal, Rosalind	Dana-Farber Cancer Institute	$246,254.00	National Institutes of Health
dFMRP and Caprin: Translational regulators of synaptic plasticity	Sisson, John	University of Washington	$12,768.00	National Institutes of Health

Grammatical development in boys with fragile X syndrome and autism	Sterling, Audra	University of Wisconsin - Madison	$148,500.00	National Institutes of Health
Aberrant synaptic form and function due to TSC-mTOR-related mutation in autism spectrum disorders	Sulzer, David	Columbia University	$300,000.00	Simons Foundation
Aberrant synaptic function caused by TSC mutation in autism	Sulzer, David	Columbia University	$0.00	Simons Foundation
TrkB agonist(s), a potential therapy for autism spectrum disorders	Sun, Yi	University of California, Los Angeles	$269,500.00	National Institutes of Health
Investigation of protocadherin-10 in MEF2- and FMRP-mediated synapse elimination	Tsai, Nien-Pei	University of Texas Southwestern Medical Center	$51,326.00	National Institutes of Health
Probing a monogenic form of autism from molecules to behavior	Tsien, Richard	Stanford University	$187,500.00	Simons Foundation
Regulation of synapse elimination by FMRP	Wilkerson, Julia	University of Texas Southwestern Medical Center	$54,734.00	National Institutes of Health
Dysregulation of mTOR signaling in fragile X syndrome	Zukin, R. Suzanne	Albert Einstein College of Medicine of Yeshiva University	$403,767.00	National Institutes of Health
Genetic rescue of fragile X syndrome in mice by targeted deletion of PIKE	Zukin, R. Suzanne	Albert Einstein College of Medicine of Yeshiva University	$60,000.00	National Institutes of Health

2.S.E

Launch three studies that target the underlying biological mechanisms of co-occurring conditions with autism, including seizures/epilepsy, sleep disorders, wandering/elopement behavior, and familial autoimmune disorders, by 2012. *IACC Recommended Budget: $9,000,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Single-unit recordings from the amygdala in people with autism	Adolphs, Ralph	California Institute of Technology	$54,000.00	Simons Foundation
Assessing sleep regulation, sleep-dependent memory consolidation, and sleep-dependent synaptic plasticity in mouse genetic models of schizophrenia and autism spectrum disorders	Aton, Sara J.	University of Pennsylvania	$0.00	Brain and Behavior Research Foundation
Epileptiform discharges and its relation to cognition and behavior in children with autism spectrum disorders	Barnes, Gregory	Vanderbilt University	$206,475.00	Health Resources and Services Administration

Molecular mechanisms linking early life seizures, autism and intellectual disability	Benke, Timothy	University of Colorado Denver	$332,369.00	National Institutes of Health
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	Bornstein, Joel	University of Melbourne	$50,434.00	Department of Defense
ACE Center: Structural and chemical brain imaging of autism	Dager, Stephen	University of Washington	$509,634.00	National Institutes of Health
Selective disruption of hippocampal dentate granule cells in autism: Impact of PTEN deletion	Danzer, Steve	Cincinnati Children's Hospital Medical Center	$367,500.00	National Institutes of Health
Gastrointestinal functions in autism	Duffey, Michael	University at Buffalo, The State University of New York	$0.00	Department of Defense
The role of mTOR inhibitors in the treatment of autistic symptoms in symptomatic infantile spasms	Galanopoulou, Aristea	Albert Einstein College of Medicine of Yeshiva University	$60,000	Autism Speaks
Characterization of the sleep phenotype in adolescents and adults with autism spectrum disorder	Goldman, Suzanne	Vanderbilt University	$0.00	Autism Speaks
Neuroendocrine regulation of metabolism and neurocognition	Han, Joan	National Institutes of Health	$434,644.00	National Institutes of Health
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	Hill, Elisa	University of Melbourne	$281,742.00	Department of Defense
Understanding the cognitive impact of early life epilepsy	Jensen, Frances	Children's Hospital Boston	$836,550.00	National Institutes of Health
Salivary melatonin as a biomarker for response to sleep interventions in children with autism	Laudenslager, Mark	University of Colorado Denver	$58,397.00	Autism Speaks
Etiology of sleep disorders in ASD: Role of inflammatory cytokines	Mong, Jessica	University of Maryland, Baltimore	$0.00	Department of Defense
Characterizing sleep disorders in autism spectrum disorder	O'Hara, Ruth	Stanford University	$112,064.50	Simons Foundation

Molecular components of A-type K+ channels	Rudy, Bernardo	New York University School of Medicine	$363,366.00	National Institutes of Health
Self-regulation and sleep in children at risk for autism spectrum disorders	Schwichtenberg, Amy	University of California, Davis	$90,000.00	National Institutes of Health
The effects of disturbed sleep on sleep-dependent memory consolidation and daily function in individuals with ASD	Stickgold, Robert	Beth Israel Deaconess Medical Center	$112,327.00	Autism Speaks
Treatment of medical conditions among individuals with autism spectrum disorders	Swedo, Susan	National Institutes of Health	$264,726.00	National Institutes of Health
Sensory mechanisms and self-injury	Symons, Frank	University of Minnesota	$392,262.00	National Institutes of Health
Functional neuroimaging of attention in autism	Yerys, Benjamin	University of Pennsylvania/Children's Hospital of Philadelphia	$234,240.00	National Institutes of Health
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	Young, Heather	University of Melbourne	$69,813.00	Department of Defense

2.S.F

Launch two studies that focus on prospective characterization of children with reported regression to investigate potential risk factors by 2012. *IACC Recommended Budget: $4,500,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Vaccination with regression study	Davis, Robert	Kaiser Permanente Georgia	$0.00	Autism Speaks
Investigating the etiology of childhood disintegrative disorder	Pelphrey, Kevin	Yale University	$74,983.00	Simons Foundation
Neuroimmunologic investigations of autism spectrum disorders (ASD)	Swedo, Susan	National Institutes of Health	$264,726.00	National Institutes of Health

2.S.G

Support five studies that associate specific genotypes with functional or structural phenotypes, including behavioral and medical phenotypes (e.g., nonverbal individuals with ASD and those with cognitive impairments) by 2015. *IACC Recommended Budget: $22,600,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Simons Variation in Individuals Project (VIP) Site	Bernier, Raphael	University of Washington	$465,813.00	Simons Foundation
The brain genomics superstruct project	Buckner, Randy	President & Fellows of Harvard College	$75,000.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Imaging Analysis Site	Buckner, Randy	Harvard University	$28,560.00	Simons Foundation
Simons Variation in Individuals Project (Simons VIP) Principal Investigator Gift	Chung, Wendy	Columbia University	$48,731.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Principal Investigator	Chung, Wendy	Columbia University	$20,272.00	Simons Foundation
Autistic traits: Life course & genetic structure	Constantino, John	Washington University	$548,446.00	National Institutes of Health
ACE Center: Genetics of serotonin in autism: Neurochemical and clinical endophenotypes	Cook, Edwin	University of Illinois at Chicago	$378,379.00	National Institutes of Health
The genetic basis of mid-hindbrain malformations	Dobyns, William	Seattle Children's Hospital	$805,771.00	National Institutes of Health
Mechanisms for 5-HTT control of PPI and perseverative behavior using mouse models	Dulawa, Stephanie	University of Chicago	$375,589.00	National Institutes of Health
Simons Variation in Individuals Project (VIP) Recruitment Coordination Site	Faucett, W.Andrew	Weis Center For Research - Geisinger Clinc	$66,702.00	Simons Foundation
ACE Center: Genetics of language & social communication: Connecting genes to brain & cognition	Geschwind, Daniel	University of California, Los Angeles	$324,642.00	National Institutes of Health

Simons Variation in Individual Project (Simons VIP) Core Leader Gift	Hanson, Ellen	Children's Hospital Boston	$8,244.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Site	Hanson, Ellen	Children's Hospital Boston	$509,875.00	Simons Foundation
A neuroimaging study of twin pairs with autism	Hardan, Antonio	Stanford University	$625,808.00	National Institutes of Health
Autism: Neuropeptide hormones and potential pathway genes	Jacob, Suma	University of Illinois at Chicago	$185,370.00	National Institutes of Health
Genetic dissection of restricted repetitive behavior (RRB)	Kim, Soo-Jeong	University of Florida	$22,813.00	National Institutes of Health
Genetic dissection of restricted repetitive behavior (RRB)	Kim, Soo-Jeong	Seattle Children's Hospital	$180,303.00	National Institutes of Health
Simons Variation in Individuals Project (VIP) Site	Kochel, Robin	Baylor College of Medicine	$406,581.00	Simons Foundation
fMRI evidence of genetic influence on rigidity in ASD	Lee, Jillian	University of Michigan	$0.00	Autism Speaks
Identifying the gene in 17q12 responsible for neuropsychiatric phenotypes	Lese Martin, Christa	Emory University	$92,640.00	Simons Foundation
Simons Variation in Individuals Project (Simons VIP)	Lese Martin, Christa	Emory University	$612,679.00	Simons Foundation
A family-genetic study of language in autism	Losh, Molly	Northwestern University	$389,948.00	National Institutes of Health
A multigenerational longitudinal study of language development: Insight from autism	Losh, Molly	Northwestern University	$0.00	National Science Foundation
A multigenerational longitudinal study of language development: Insight	Losh, Molly	University of North Carolina at Chapel	$0.00	National Science

from autism		Hill		Foundation
Neural correlates of restricted, repetitive behaviors in autism spectrum disorders	Manoach, Dara	Massachusetts General Hospital	$0.00	Department of Defense
An investigation of the overlap of autism and fragile X syndrome	Martin, Gary	University of North Carolina at Chapel Hill	$71,632.00	National Institutes of Health
Neural correlates of serotonin transporter gene polymorphisms and social impairment in ASD	Monk, Christopher	University of Michigan	$127,500.00	Autism Speaks
Language processing in children with 22q11 deletion syndrome and autism	Ousley, Opal	Emory University	$0.00	Simons Foundation
Longitudinal neurogenetics of atypical social brain development in autism	Pelphrey, Kevin	Yale University	$876,490.00	Simons Foundation
Neural circuitry of social cognition in the broad autism phenotype	Piven, Joseph	University of North Carolina at Chapel Hill	$405,855.00	National Institutes of Health
Social cognition in 22q11.2 deletion syndrom (DS) adolescents with ASD vs. without ASD: Imaging and genetic correlates	Radoeva, Petya	State University of New York Upstate Medical University	$28,000.00	Autism Speaks
Simons Variation in Individuals Project (VIP) Functional Imaging Site	Roberts,Tim	Children's Hospital of Philadelphia	$303,305.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Structural Imaging and Phenotyping Site - SCAP-local	Roberts,Tim	Children's Hospital of Philadelphia	$0.00	Simons Foundation
Neural correlates of restricted, repetitive behaviors in autism spectrum disorders	Santangelo, Susan	Massachusetts General Hospital	$0.00	Department of Defense
Genome-wide identification of variants affecting early human brain development	Santelli, Rebecca	University of North Carolina at Chapel Hill	$504,632.00	National Institutes of Health
Relating copy number variants to head and brain size in neuropsychiatric disorders	Sebat, Jonathan	University of California, San Diego	$374,659.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Functional Imaging Site	Sherr, Elliott	University of California, San Francisco	$320,196.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Core Neuroimaging Support Site	Sherr, Elliott	University of California, San Francisco	$368,786.00	Simons Foundation
Simons Variation in Individuals Project (Simons VIP) Core Leader Gift	Sherr, Elliott	University of California, San Francisco	$12,980.00	Simons Foundation
Neurogenic growth factors in autism	Vaccarino, Flora	Yale University	$0.00	Autism Speaks
Simons Variation in Individuals Project (VIP) Statistical Core Site	Vaughan, Roger	Columbia University	$131,768.00	Simons Foundation

Characterizing the genetic systems of autism through multi-disease analysis	Wall, Dennis	Harvard Medical School	$560,935.00	National Institutes of Health
Social processing, language, and executive functioning in twin pairs: Electrophysiological and behavioral endophenotypes	Webb, Sara	University of Washington	$150,000.00	Autism Speaks
ACE Center: Genetic contributions to endophenotypes of autism	Wijsman, Ellen	University of Washington	$563,757.00	National Institutes of Health
Functional imaging of flexibility in autism: Informed by SLC6A4	Yerys, Benjamin	Children's Research Institute	$132,748.00	National Institutes of Health

2.I.A

Complete a large-scale, multi-disciplinary, collaborative project that longitudinally and comprehensively examines how the biological, clinical, and developmental profiles of individuals, with a special emphasis on females, youths, and adults with ASD, change over time as compared to typically developing people by 2020. *IACC Recommended Budget: $126,200,000 over 12 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Longitudinal characterization of functional connectivity in autism	Anderson, Jeffrey	University of Utah	$182,352.00	National Institutes of Health
MRI study of brain development in school age children with autism	Hazlett, Heather Cody	University of North Carolina at Chapel Hill	$126,978.00	Autism Speaks
Investigation of the link between early brain enlargement and abnormal functional connectivity in autism spectrum disorders	Kleinhans, Natalia	University of Washington	$117,156.00	Autism Speaks
Pragmatic skills of young males and females with fragile X syndrome	Martin, Gary	University of North Carolina at Chapel Hill	$396,073.00	National Institutes of Health
20-year outcome of autism	McMahon, William	University of Utah	$150,000.00	Autism Speaks
Longitudinal characterization of functional connectivity in autism	Anderson, Jeffrey	University of Utah	$182,352.00	National Institutes of Health
MRI study of brain development in school age children with autism	Hazlett, Heather Cody	University of North Carolina at Chapel Hill	$126,978.00	Autism Speaks

Investigation of the link between early brain enlargement and abnormal functional connectivity in autism spectrum disorders	Kleinhans, Natalia	University of Washington	$117,156.00	Autism Speaks
Pragmatic skills of young males and females with fragile X syndrome	Martin, Gary	University of North Carolina at Chapel Hill	$396,073.00	National Institutes of Health
20-year outcome of autism	McMahon, William	University of Utah	$150,000.00	Autism Speaks

2.L.B

Launch at least three studies which evaluate the applicability of ASD phenotype and/or biological signature findings for performing diagnosis, risk assessment, or clinical intervention by 2015. *IACC Recommended Budget: $7,200,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
The Brain Genomics Superstruct Project	Buckner, Randy	Harvard University	$0.00	Simons Foundation
Functional neuroimaging of psychopharmacologic intervention for autism	Dichter, Gabriel	University of North Carolina at Chapel Hill	$158,810.00	National Institutes of Health
A study of autism	Krieger, Abba	University of Pennsylvania	$291,461.00	Simons Foundation
Near-infrared spectroscopy studies of early neural signatures of autism	Pelphrey, Kevin	Yale University	$0.00	Autism Speaks

2.O

Not specific to any objective

Project Title	Principal Investigator	Institution	Funding	Funder
Towards an endophenotype for amygdala dysfunction	Adolphs, Ralph	California Institute of Technology	$380,304.00	National Institutes of Health
Multimodal studies of executive function deficits in autism spectrum disorders	Agam, Yigal	Massachusetts General Hospital	$51,942.00	National Institutes of Health

Autism and the insula: Genomic and neural circuits	Allman, John	California Institute of Technology	$506,341.00	Simons Foundation
Time perception and timed performance in autism	Allman, Melissa	Kennedy Krieger Institute	$89,846.00	National Institutes of Health
Transcriptional responsiveness in lymphoblastoid cell lines	Alter, Mark	University of Pennsylvania	$52,863.00	Simons Foundation
Learning and compression in human working memory	Alvarez, George	Harvard University	$84,000.00	National Institutes of Health
Anatomy of primate amygdaloid complex	Amaral, David	University of California, Davis	$75,629.00	National Institutes of Health
Cortical microcircuit dysfunction as a result of MET deficiency: A link to autism	Anderson, Charles	Northwestern University	$33,955.00	National Institutes of Health
Glutamate signaling in children with autism spectrum disorder	Ashwood, Paul	University of California, Davis	$57,840	Autism Research Institute
Learning and plasticity in the human brain	Baker, Christopher	National Institutes of Health	$286,110	National Institutes of Health
Architecture of myelinated axons linking frontal cortical areas	Barbas, Helen	Boston University	$0.00	Autism Speaks
PI3K/mTOR signaling as a novel biomarker and therapeutic target in autism	Bassell, Gary	Emory University	$100,000.00	Autism Speaks
Eye movement dynamics in autism spectrum disorders	Behrmann, Marlene	Carnegie Mellon University	$42,350.00	Simons Foundation
Social and affective components of communication	Bellugi, Ursula	Salk Institute For Biological Studies	$298,757.00	National Institutes of Health
Taste, smell, and feeding behavior in autism: A quantitative traits study	Bennetto, Loisa	University of Rochester	$0.00	Autism Speaks

Taste, smell, and feeding behavior in autism: A quantitative traits study	Bennetto, Loisa	University of Rochester	$570,508.00	National Institutes of Health
Genetic studies of autism-related Drosophila neurexin and neuroligin	Bhat, Manzoor	The University of North Carolina at Chapel Hill	$137,500.00	Simons Foundation
Elucidation of the developmental role of Jakmip1, an autism-susceptibility gene	Bomar, Jamee	University of California, Los Angeles	$31,042.00	National Institutes of Health
Controlling interareal gamma coherence by optogenetics, pharmacology and behavior	Buschman, Timothy	Massachusetts Institute of Technology	$83,521.00	National Institutes of Health
Neurobehavioral investigation of tactile features in autism spectrum disorders	Cascio, Carissa	Vanderbilt University	$159,480.00	National Institutes of Health
Development of brain connectivity in autism	Castellanos, Francisco Xavier; Lord, Catherine	New York University School of Medicine; University of Michigan	$0.00	Autism Speaks
Neocortical mechanisms of categorical speech perception	Chang, Edward	University of California, San Francisco	$240,744.00	National Institutes of Health
Characterization of the pathological and biochemical markers that correlate to the clinical features of autism	Chauhan, Abha	Research Foundation for Mental Hygiene, Inc.	$0.00	Department of Defense
Corticothalamic circuit interactions in autism	Chen, Chinfei	Boston Children's Hospital	$50,000.00	Simons Foundation
The neural correlates of transient and sustained executive control in children with autism spectrum disorder	Christ, Shawn	University of Missouri	$0.00	Autism Speaks
Abnormal connectivity in autism	Clark, Kristi A.	University of California, Los Angeles	$15,000.00	Brain and Behavior Research Foundation
Cellular characterization of Caspr2	Comoletti, Davide	University of California, San Diego	$24,666.00	National Institutes of Health
Caspr2 as an autism candidate gene: A proteomic approach to function & structure	Comoletti, Davide	University of Medicine & Dentistry of New Jersey - Robert Wood Johnson Medical	$312,000.00	National Institutes of Health

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Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity	Comoletti, Davide	University of California, San Diego	$0.00	Autism Speaks
A neural model of fronto-parietal mirror neuron system dynamics	Contreras-Vidal, Jose	University of Maryland	$183,344.00	National Institutes of Health
ACE Center: Diffusion tensor MRI + histopathology of brain microstructure + fiber pathways	Conturo, Thomas	University of Pittsburgh	$1.00	National Institutes of Health
Psychobiological investigation of the socioemotional functioning in autism	Corbett, Blythe	Vanderbilt University	$347,305.00	National Institutes of Health
fMRI studies of neural dysfunction in autistic toddlers	Courchesne, Eric	University of California, San Diego	$546,393.00	National Institutes of Health
Atypical architecture of prefrontal cortex in young children with autism	Courchesne, Eric	University of California, San Diego	$565,183.00	Simons Foundation
Neural mechanisms of imitative behavior: Implications for mental health	Cross, Kathryn	University of California, Los Angeles	$32,696.00	National Science Foundation
Behavioral and neural correlates of reward motivation in children with autism spectrum disorders	Damiano, Cara	University of North Carolina at Chapel Hill	$27,554.00	Autism Speaks
ACE Center: Mirror neuron and reward circuitry in autism	Dapretto, Mirella	University of California, Los Angeles	$302,654.00	National Institutes of Health
Neurobiological mechanisms of insistence on sameness in autism	D'Cruz, Anna-Maria	University of Illinois at Chicago	$0.00	Autism Speaks
Functional analysis of EFR3A mutations associated with autism	De Camilli, Pietro	Yale University	$31,250.00	Simons Foundation
Self-injurious behavior: An animal model of an autism endophenotype	Devine, Darragh	University of Florida	$0.00	Department of Defense
Molecular mechanisms regulating synaptic strength	DiAntonio, Aaron	Washington University	$293,266.00	National Institutes of Health
CAREER: The role of prosody in word segmentation and lexical access	Dilley, Laura	Michigan State University	$0.00	National Science Foundation
Functional properties and directed connectivity in the face-processing network	Engell, Andrew	Yale University	$53,042.00	National Institutes of Health
EEG-based assessment of functional connectivity in autism	Ewen, Joshua	Kennedy Krieger Institute	$175,176.00	Autism Speaks
Molecular controls over callosal projection neuron subtype specification and diversity	Fame, Ryan	Harvard University	$41,800.00	National Institutes of Health

GABAergic dysfunction in autism	Fatemi, Seyyed	University of Minnesota	$278,486.00	National Institutes of Health
Neural mechanisms of tactile sensation in rodent somatosensory cortex	Feldman, Daniel	University of California, Berkeley	$256,605.00	National Institutes of Health
Inhibitory mechanisms for sensory map plasticity in cerebral cortex	Feldman, Daniel	University of California, Berkeley	$320,399.00	National Institutes of Health
Enhancing neurobehavioural and clinical definitions in autism spectrum disorders	Fielding, Joanne	Monash University	$14,000.00	Brain & Behavior Research Foundation
Preference acquisition in children and adolescents with and without autism spectrum disorder	Filliter, Jillian	Dalhousie University	$28,000.00	Autism Speaks
The integration of interneurons into cortical microcircuits	Fishell, Gordon	New York University School of Medicine	$75,000.00	Simons Foundation
CAREER: Statistical models and classification of time-varying shape	Fletcher, Preston Thomas	University of Utah	$404,961.00	National Science Foundation
The role of FOX-1 in neurodevelopment and autistic spectrum disorder	Fogel, Brent	University of California, Los Angeles	$142,677.00	National Institutes of Health
Neural mechanisms underlying an extended multisensory temporal binding window in ASD	Foss-Feig, Jennifer	Vanderbilt University	$0.00	Autism Speaks
Dendritic organization within the cerebral cortex in autism	Gabbott, Paul; Rezaie, Payam	The Open University	$0.00	Autism Speaks
The role of CNTNAP2 in embryonic neural stem cell regulation	Gaiano, Nicholas	Johns Hopkins University School of Medicine	$75,000.00	Simons Foundation
Diffuse optical brain imaging	Gandjbakhche, Amir	National Institutes of Health	$182,022.00	National Science Foundation
A functional genomic analysis of the cerebral cortex	Geschwind, Daniel	University of California, Los Angeles	$85,471.00	Simons Foundation
RI: Small: Addressing visual analogy problems on the raven's intelligence test	Goel, Ashok	Georgia Tech Research Corporation	$165,546.00	National Science Foundation
Collaborative research: The path to verb learning	Golinkoff, Roberta	University of Delaware	$0.00	National Science Foundation
Role of negative regulators of FGF signaling in frontal cortex development and autism	Golonzhka, Olga	University of California, San Francisco	$0.00	Brain & Behavior Research Foundation

Monolingual and bilingual infants' sensitivity to agreement morphology in Spanish	Gouvea, Ana	Florida International University	$143,650.00	National Institutes of Health
Using fruit flies to map the network of autism-associated genes	Greenspan, Ralph	University of California, San Diego	$31,249.00	Simons Foundation
Face perception: Mapping psychological spaces to neural responses	Grill-Spector, Kalanit	Stanford University	$79,992.00	National Science Foundation
Communicative and emotional facial expression production in children with autism	Grossman, Ruth	University of Massachusetts Medical School	$171,215.00	National Institutes of Health
Identification of candidate genes at the synapse in autism spectrum disorders	Gupta, Abha	Yale University	$169,422.00	National Institutes of Health
Development of the functional neural systems for face expertise	Haist, Frank	University of California, San Diego	$505,729.00	National Institutes of Health
Cerebellar plasticity and learning in a mouse model of autism	Hansel, Christian	University of Chicago	$31,250.00	Simons Foundation
Neural systems for the extraction of socially-relevant information from faces	Haxby, James	Dartmouth College	$51,783.00	National Science Foundation
Canonical neural computation in autism spectrum disorders	Heeger, David	New York University	$200,717.00	Simons Foundation
Defining cells and circuits affected in autism spectrum disorders	Heintz, Nathaniel	The Rockefeller University	$669,298.00	Simons Foundation
Perturbed cortical patterning in autism	Hevner, Robert	Seattle Children's Hospital	$0.00	Simons Foundation
Integrative functions of the planum temporale	Hickok, Gregory	University of California, Irvine	$479,898.00	National Institutes of Health
Neural basis of cross-modal influences on perception	Hillyard, Steven	University of California, San Diego	$154,104.00	National Science Foundation
Collaborative research: The path to verb learning	Hirsh-Pasek, Kathy	Temple University	$0.00	National Science Foundation
Exploring the uncanny valley	Hodgins, Jessica	Carnegie Mellon University	$0.00	National Science Foundation
Structural brain differences between autistic and typically-developing siblings	Hoeft, Fumiko	Stanford University	$13,020.00	National Institutes of Health
Collaborative research: Learning complex auditory categories	Holt, Lori	Carnegie Mellon University	$0.00	National Science Foundation
Vasopressin receptor polymorphism and social cognition	Hopkins, William	Agnes Scott College	$373,005.00	National Institutes of Health

Proteome and interaction networks in autism	Howley, Peter	Harvard Medical School	$31,250.00	Simons Foundation
Functional role of IL-6 in fetal brain development and abnormal behavior	Hsiao, Elaine	California Institute of Technology	$41,800.00	National Institutes of Health
Collaborative research: Modeling perception and memory: Studies in priming	Huber, David	University of California, San Diego	$90,145.67	National Science Foundation
High throughput screen for small molecule probes for neural network development	Huganir, Richard	Johns Hopkins University	$405,000.00	National Institutes of Health
Neurobiological signatures of audiovisual speech perception in children in ASD	Irwin, Julia	Haskins Laboratories, Inc.	$240,420.00	National Institutes of Health
Stimulus-driven attention deficits in autism	Jiang, Yuhong	University of Minnesota	$60,000.00	Simons Foundation
Macrocephalic autism: Exploring and exploiting the role of PTEN	Johnston, Sean	University of Wisconsin - Madison	$28,000.00	Autism Speaks
A comparative developmental connectivity study of face processing	Joseph, Jane	Medical University of South Carolina	$229,574.00	National Institutes of Health
Functional neuroanatomy of developmental changes in face processing	Joseph, Jane	Medical University of South Carolina	$291,933.00	National Institutes of Health
The neural basis of weak central coherence in autism spectrum disorders	Jou, Roger J.	Yale University	$13,040.00	Brain & Behavior Research Foundation
Engrailed genes and cerebellum morphology, spatial gene expression and circuitry	Joyner, Alexandra	Memorial Sloan-Kettering Cancer Center	$470,003.00	National Institutes of Health
ACE Center: Systems connectivity + brain activation: Imaging studies of language + perception	Just, Marcel	University of Pittsburgh	$426,284.00	National Institutes of Health
Neurexin-neuroligin trans-synaptic interaction in learning and memory	Kandel, Eric	Columbia University	$200,000.00	Simons Foundation
Role of neurexin in the amygdala and associated fear memory	Kandel, Eric	Columbia University	$25,000.00	Simons Foundation

Retrograde synaptic signaling by Neurexin and Neuroligin in C. elegans	Kaplan, Joshua	Massachusetts General Hospital	$250,000.00	Simons Foundation
MEG investigation of the neural substrates underlying visual perception in autism	Kenet, Tal	Massachusetts General Hospital	$128,798.00	Autism Speaks
Investigating brain connectivity in autism at the whole-brain level	Kennedy, Daniel	California Institute of Technology	$90,000.00	National Institutes of Health
Developing novel automated apparatus for studying battery of social behaviors in mutant mouse models for autism	Kimchi, Tali	Weizmann Institute of Science	$0.00	Department of Defense
Excessive cap-dependent translation as a molecular mechanism underlying ASD	Klann, Eric	New York University	$0.00	Department of Defense
Multimodal brain imaging in autism spectrum disorders	Kleinhans, Natalia	University of Washington	$167,832.00	National Institutes of Health
Role of GluK6 in cerebella circuitry development	Kubera, Cathryn	Yale University	$55,826.00	National Institutes of Health
Atypical late neurodevelopment in autism: A longitudinal MRI and DTI study (supplement)	Lainhart, Janet	University of Utah	$154,416.00	National Institutes of Health
Atypical late neurodevelopment in autism: A longitudinal MRI and DTI study	Lainhart, Janet	University of Utah	$469,620.00	National Institutes of Health
The microstructural basis of abnormal connectivity in autism	Lainhart, Janet	University of Utah	$332,991.00	National Institutes of Health
Development of face processing expertise	Lee, Kang	University of Toronto	$350,596.00	National Institutes of Health
Multiple systems in theory of mind development	Leslie, Alan	Rutgers, The State University of New Jersey - New Brunswick	$0.00	National Science Foundation
Function and structure adaptations in forebrain development	Levitt, Pat	University of Southern California	$541,770.00	National Institutes of Health
Neurodevelopmental mechanisms of social behavior	Levitt, Pat	University of Southern California	$198,063.00	National Institutes of Health

Neurobiological correlates of language dysfunction in autism spectrum disorders	Lewine, Jeffrey	The Mind Research Network	$535,464.00	National Institutes of Health
Synchronous activity in networks of electrically coupled cortical interneurons	Lewis, Timothy	University of California, Davis	$0.00	National Science Foundation
Roles of miRNAs in regulation of Foxp2 and in autism	Li, XiaoChing	Louisiana State University	$0.00	Brain & Behavior Research Foundation
Neurocognitive mechanisms underlying children's theory of mind development	Liu, David	University of California, San Diego	$74,160.00	National Institutes of Health
MTHFR functional polymorphism C677T and genomic instability in the etiology of idiopathic autism in simplex families	Liu, Xudong	Queen's University	$114,984.00	Department of Defense
Collaborative research: Learning complex auditory categories	Lotto, Andrew	University of Arizona	$0.00	National Science Foundation
Cochlear efferent feedback and hearing-in-noise perception in autism	Luebke, Anne	University of Rochester	$186,794.00	National Institutes of Health
Behavioral and neural responses to emotional faces in individuals with ASD	Luyster, Rhiannon J.	Harvard University	$14,935.00	Brain & Behavior Research Foundation
A developmental social neuroscience approach to perception-action relations	Marshall, Peter	Temple University	$0.00	National Science Foundation
The cognitive neuroscience of autism spectrum disorders	Martin, Alex	National Institutes of Health	$1,102,811.00	National Institutes of Health
Cellular density and morphology in the autistic temporal human cerebral cortex	Martinez Cerdeno, Veronica	University of California, Davis	$345,910.00	National Institutes of Health
Cognitive control of emotion in autism	Mazefsky, Carla	University of Pittsburgh	$103,256.00	National Institutes of Health

Social brain networks for the detection of agents and intentions	McCarthy, Gregory	Yale University	$413,750.00	National Institutes of Health
Ube3a requirements for structural plasticity of synapses	McCoy, Portia	Univ of North Carolina	$0.00	Autism Science Foundation
Neural underpinning of emotion perception and its disorders	Meng, Ming	Dartmouth College	$15,000.00	Brain & Behavior Research Foundation
Mathematical cognition in autism: A cognitive and systems neuroscience approach	Menon, Vinod	Stanford University	$657,886.00	National Institutes of Health
Decoding 'what' and 'who' in the auditory system of children with autism spectrum disorders	Menon, Vinod	Stanford University	$237,000.00	National Institutes of Health
Multimodal analyses of face processing in autism & down syndrome	Mitchell, Teresa	University of Massachusetts Medical School	$182,882.00	National Institutes of Health
CDI-TYPE II: From language to neural representations of meaning	Mitchell, Tom	Carnegie Mellon University	$0.00	National Science Foundation
Alterations in brain-wide neuroanatomy in autism mouse models	Mitra, Partha	Cold Spring Harbor Laboratory	$0.00	Simons Foundation
Cerebellar modulation of frontal cortical function	Mittleman, Guy	University of Memphis	$309,686.00	National Institutes of Health
Linguistic perspective-taking in adults with high-functioning autism: Investigation of the mirror neuron system	Mizuno, Akiko	Carnegie Mellon University	$0.00	Autism Speaks
Sensory processing and integration in autism	Molholm, Sophie	Albert Einstein College of Medicine of Yeshiva University	$550,283.00	National Institutes of Health
Social behavior deficits in autism: Role of amygdala	Mooney, Sandra	State University of New York Upstate Medical Center	$92,074.00	Autism Speaks
HCC:Small:Computational studies of social nonverbal communication	Morency, Louis-Philippe	University of Southern California	$0.00	National Science Foundation

Neuroimaging of social perception	Morris, James	University of Virginia	$242,812.00	National Institutes of Health
fMRI studies of cerebellar functioning in autism	Mosconi, Matthew	University of Illinois at Chicago	$0.00	Autism Speaks
Motor control and cerebellar maturation in autism	Mosconi, Matthew	University of Texas Southwestern Medical Center	$157,148.00	National Institutes of Health
Novel approaches for investigating the neurology of autism: Detailed morphometric analysis and correlation with motor impairment	Mostofsky, Stewart	Kennedy Krieger Institute	$0.00	Autism Speaks
Motor skill learning in autism	Mostofsky, Stewart	Kennedy Krieger Institute	$412,236.00	National Institutes of Health
Behavioral and functional neuroimaging investigations of visual perception and cognition in autistics	Mottron, Laurent	Université de Montréal	$0.00	Autism Speaks
Linking local activity and functional connectivity in autism	Mueller, Ralph-Axel	San Diego State University	$365,655.00	National Institutes of Health
Cell adhesion molecules in CNS development	Mueller, Ulrich	The Scripps Research Institute	$535,691.00	National Institutes of Health
How autism affects speech understanding in multitalker environments	Newman, Rochelle	University of Maryland, College Park	$143,264.00	National Institutes of Health
Experience and cognitive development in infancy	Oakes, Lisa	University of California, Davis	$100,798.00	National Science Foundation
Infants' developing representation of object function	Oakes, Lisa	University of California, Davis	$0.00	National Science Foundation
Development of ventral stream organization	O'Hearn, Kirsten	University of Pittsburgh	$137,338.00	National Institutes of Health
Deciphering the function and regulation of AUTS2	Oksenberg, Nir	University of California, San Francisco	$28,000.00	Autism Speaks
White matter glial pathology in autism	Ordway, Gregory	East Tennessee State University	$145,689.00	Department of Defense

Investigation of social brain circuits in mouse models of the 16p11.2 locus	Osten, Pavel	Cold Spring Harbor Laboratory	$87,500.00	Simons Foundation
Elucidating the function of class 4 semaphorins in GABAergic synapse formation	Paradis, Suzanne	Brandeis University	$337,818.00	National Institutes of Health
Behavioral and neural processing of faces and expressions in nonhuman primates	Parr, Lisa	Emory University	$435,600.00	National Institutes of Health
ACE Center: Disturbances of affective contact: Development of brain mechanisms for emotion	Pelphrey, Kevin	University of Pittsburgh	$157,294.00	National Institutes of Health
Synaptic processing in the basal ganglia	Perkel, David	University of Washington	$378,166.00	National Institutes of Health
Brain circuitry in simplex autism	Petersen, Steven	Washington University in St. Louis	$0.00	Simons Foundation
ACE Center: Imaging the autistic brain before it knows it has autism	Pierce, Karen	University of California, San Diego	$197,682.00	National Institutes of Health
Neural basis of empathy and its dysfunction in autism spectrum disorders (ASD)	Platt, Michael	Duke University	$0.00	Department of Defense
Diffusion tensor MR spectroscopic imaging in human brain	Posse, Stefan	University of New Mexico Health Sciences Center	$185,213.00	National Institutes of Health
Longitudinal neurodevelopment of auditory and language cortex in autism	Prigge, Molly	University of Utah	$27,942.00	National Institutes of Health
MET signaling in neural development and circuitry formation	Qiu, Shenfeng	University of Southern California	$83,810.00	National Institutes of Health
Neuroligin, oxidative stress and autism	Rand, James	Oklahoma Medical Research Foundation	$75,000.00	Simons Foundation
Serotonin signal transduction in two groups of autistic patients	Rasenick, Mark	University of Illinois at Chicago	$0.00	Department of Defense
CAREER: Model-based fMRI of human object recognition	Riesenhuber, Maximilian	Georgetown University	$0.00	National Science Foundation

CAREER: Integrative behavioural and neurophysiological studies of normal and autistic cognition using video game environments	Robertson, Steven	Cornell University	$0.00	National Science Foundation
Neural synchrony dysfunction of gamma oscillations in autism	Rojas, Donald	University of Colorado Denver	$265,073.00	National Institutes of Health
Frontostriatal synaptic dysfunction in a model of autism	Rothwell, Patrick	Stanford University	$48,398.00	National Institutes of Health
Regulation of activity-dependent ProSAP2 synaptic dynamics	Rowan, Magali	Stanford University	$33,879.00	National Institutes of Health
To study the relationship between decreased hepatocyte growth factor (HGF) and glutamate excitotoxicity in autistic children	Russo, A.J.	Health Research Institute/Pfeiffer Treatment Center	$7,228.00	Autism Research Institute
Perturbed activity-dependent plasticity mechanisms in autism	Sabatini, Bernardo	Harvard Medical School	$158,034.00	Simons Foundation
Multidimensional impact of pain on individuals and family functioning in ASD	Samuel, Arthur	The Research Foundation of the State University of New York	$13,000.00	Autism Research Institute
Multisensory integration in children with ASD	Saron, Clifford	University of California, Davis	$229,813.00	National Institutes of Health
Cross-modal interactions between vision and touch	Sathian, Krishnankutty	Emory University	$480,343.00	National Institutes of Health
Neural mechanisms for social cognition in autism spectrum disorders	Saxe, Rebecca	Massachusetts Institute of Technology	$112,523.00	Simons Foundation
CAREER: Typical and atypical development of brain regions for theory of mind	Saxe, Rebecca	Massachusetts Institute of Technology	$27,670.00	NSF
Collaborative research: RUI: Perceptual pick-up processes in interpersonal coordination	Schmidt, Richard	College of the Holy Cross	$0.00	National Science Foundation
Global & targeted profiling of protein, phospho and O-GlcNAc to understand synapses	Schoepfer, Alain	University of California, San Francisco	$994.00	National Institutes of Health

Typical and pathological cellular development of the human amygdala	Schumann, Cynthia	University of California, Davis	$383,750.00	National Institutes of Health
Behavioral and sensory evaluation of auditory discrimination in autism	Serna, Richard	University of Massachusetts Medical School	$178,529.00	National Institutes of Health
Glial control of neuronal receptive ending morphology	Shaham, Shai	The Rockefeller University	$418,275.00	National Institutes of Health
Are neuronal defects in the cerebral cortex linked to autism?	Shi, Song-Hai	Memorial Sloan-Kettering Cancer Center	$0.00	Autism Speaks
The effects of autism on the sign language development of deaf children	Shield, Aaron	Boston University	$47,210.00	National Institutes of Health
Autism spectrum disorders and the visual analysis of human motion	Shiffrar, Maggie	Rutgers, The State University of New Jersey	$125,000.00	Simons Foundation
Collaborative research: Modeling perception and memory: Studies in priming	Shiffrin, Richard	Indiana University	$0.00	National Science Foundation
fMRI study of reward responsiveness of children with autism spectrum disorder	Shirinyan, David	University of California, Los Angeles	$53,566.00	National Institutes of Health
Multisensory integration and temporal synchrony in autism	Smith, Elizabeth	University of Rochester	$35,100.00	National Institutes of Health
Metacognition in comparative perspective	Smith, J. David	University at Buffalo, The State University of New York	$210,896.00	National Institutes of Health
Cognitive control in autism	Solomon, Marjorie	University of California, Davis	$152,627.00	National Institutes of Health
Learning in autism spectrum disorders	Solomon, Marjorie	University of California, Davis	$0.00	Brain & Behavior Research Foundation
Computational characterization of language use in autism spectrum disorder	Sproat, Richard	Oregon Health & Science University	$759,606.00	National Institutes of Health

ACE Center: Neuroimaging studies of connectivity in ASD	Staib, Lawrence	Yale University	$324,271.00	National Institutes of Health
Phonological processing in the autism spectrum	Stewart, Mary	Heriot-Watt University	$0.00	Autism Speaks
ACE Center: Development of categorization, facial knowledge in low & high functioning autism	Strauss, Mark	University of Pittsburgh	$392,439.00	National Institutes of Health
Function of neurexins	Sudhof, Thomas	Stanford University	$466,651.00	National Institutes of Health
Function and dysfunction of neuroligins in synaptic circuits	Sudhof, Thomas	Stanford University	$450,000.00	Simons Foundation
ACE Center: Cognitive affective and neurochemical processes underlying is in autism	Sweeney, John	University of Illinois at Chicago	$378,379.00	National Institutes of Health
Using functional physiology to uncover the fundamental principles of visual cortex	Tarr, Michael	Carnegie Mellon University	$307,593.00	National Institutes of Health
Kinetics of drug macromolecule complex formation	Taylor, Palmer	University of California, San Diego	$712,920.00	National Institutes of Health
Attentional distribution and word learning in children with autism	Tenenbaum, Elena	Brown University	$0.00	Autism Science Foundation
Cognitive mechanisms of serially organized behavior	Terrace, Herbert	Columbia University	$346,928.00	National Institutes of Health
Imaging synaptic neurexin-neuroligin complexes by proximity biotinylation: Applications to the molecular pathogenesis of autism	Thyagarajan, Amar	Massachusetts Institute of Technology	$0.00	Autism Speaks
Imaging PTEN-induced changes in adult cortical structure and function in vivo	Trachtenberg, Joshua	University of California, Los Angeles	$300,339.00	National Institutes of Health
In vivo targeted gene silencing, a novel method	Truitt, William	Indiana University-Purdue University Indianapolis	$218,472.00	National Institutes of Health
Regulation of synaptogenesis by cyclin-dependent kinase 5	Tsai, Li-Huei	Massachusetts Institute of Technology	$180,264.00	Simons Foundation

CAREER: Dissecting the neural mechanisms for face detection	Tsao, Doris	California Institute of Technology	$0.00	National Science Foundation
Structural and functional connectivity of large-scale brain networks in autism spectrum disorders	Uddin, Lucina	Stanford University	$168,978.00	National Institutes of Health
Role of micro-RNAs in ASD affected circuit formation and function	Ullian, Erik	University of California, San Francisco	$127,383.00	Autism Speaks
Functional anatomy of face processing in the primate brain	Ungerleider, Leslie	National Institutes of Health	$1,720,556.00	National Institutes of Health
Morphogenesis and function of the cerebral cortex	Vaccarino, Flora	Yale University	$409,613.00	National Institutes of Health
Neuroimaging of top-down control and bottom-up processes in childhood ASD	Vaidya, Chandan	Georgetown University	$386,859.00	National Institutes of Health
Neuropeptide regulation of juvenile social behaviors	Veenema, Alexa	Boston College	$14,755.00	Brain & Behavior Research Foundation
Novel computational methods for higher order diffusion MRI in autism	Verma, Ragini	University of Pennsylvania	$665,572.00	National Institutes of Health
Head-fixed recording of sensory learning in mouse autism models	Wang, Samuel	Princeton University	$60,000.00	Simons Foundation
Defining the dynamics of the default network with direct brain recordings and functional MRI	Weaver, Kurt	University of Washington	$144,317.00	National Institutes of Health
Physiology of attention and regulation in children with ASD and LD	Webb, Sara	Seattle Children's Hospital	$352,532.00	National Institutes of Health
Characterization of the pathological and biochemical markers that correlate to the clinical features of autism	Wegiel, Jerzy	Research Foundation for Mental Hygiene, Inc.	$0.00	Department of Defense
Dimensions of mind perception	Wegner, Daniel	Harvard University	$0.00	National Science Foundation

Neural basis of behavioral flexibility	Weiss, Klaudiusz	Mount Sinai School of Medicine	$360,214.00	National Institutes of Health
Neuroprotective effects of oxytocin receptor signaling in the enteric nervous system	Welch, Martha	Columbia University	$25,000.00	Autism Research Institute
Role of autism-susceptibility gene, CNTNAP2, in neural circuitry for vocal communication	White, Stephanie	University of California, Los Angeles	$0.00	Departme nt of Defense
MEG investigation of phonological processing in autism	Wilson, Lisa	University of Colorado Denver	$0.00	Autism Speaks
Characterization of the pathological and biochemical markers that correlate to the clinical features of autism	Wisniewski, Thomas	Research Foundation for Mental Hygiene, Inc.	$0.00	Departme nt of Defense
Action anticipation in infants	Woodward, Amanda	University of Chicago	$98,745.00	National Science Foundatio n
Imaging signal transduction in single dendritic spines	Yasuda, Ryohei	Duke University	$382,200.00	National Institutes of Health
Young development of a novel PET ligand for detecting oxytocin receptors in brain	Young, Larry	Emory University	$261,360.00	National Institutes of Health
Brain lipid rafts in cholesterol biosynthesis disorders	Yu, Hongwei	Medical College of Wisconsin	$60,480.00	National Institutes of Health
High-throughput DNA sequencing method for probing the connectivity of neural circuits at single-neuron resolution	Zador, Anthony	Cold Spring Harbor Laboratory	$430,650.00	National Institutes of Health
Statistical analysis of biomedical imaging data in curved space	Zhu, Hongtu	University of North Carolina at Chapel Hill	$326,619.00	National Institutes of Health
Functional analysis of neurexin IV in Drosophila	Zipursky, Larry	University of California, Los Angeles	$68,652.00	Simons Foundatio n
Towards an endophenotype for amygdala dysfunction	Adolphs, Ralph	California Institute of Technology	$380,304.00	National Institutes of Health
Multimodal studies of executive function deficits in autism spectrum disorders	Agam, Yigal	Massachusetts General Hospital	$51,942.00	National Institutes of Health

Autism and the insula: Genomic and neural circuits	Allman, John	California Institute of Technology	$506,341.00	Simons Foundation
Time perception and timed performance in autism	Allman, Melissa	Kennedy Krieger Institute	$89,846.00	National Institutes of Health
Transcriptional responsiveness in lymphoblastoid cell lines	Alter, Mark	University of Pennsylvania	$52,863.00	Simons Foundation
Learning and compression in human working memory	Alvarez, George	Harvard University	$84,000.00	National Institutes of Health
Anatomy of primate amygdaloid complex	Amaral, David	University of California, Davis	$75,629.00	National Institutes of Health
Cortical microcircuit dysfunction as a result of MET deficiency: A link to autism	Anderson, Charles	Northwestern University	$33,955.00	National Institutes of Health
Glutamate signaling in children with autism spectrum disorder	Ashwood, Paul	University of California, Davis	$57,840.00	Autism Research Institute
Learning and plasticity in the human brain	Baker, Christopher	National Institutes of Health	$286,110.00	National Institutes of Health
Architecture of myelinated axons linking frontal cortical areas	Barbas, Helen	Boston University	$0.00	Autism Speaks
PI3K/mTOR signaling as a novel biomarker and therapeutic target in autism	Bassell, Gary	Emory University	$100,000.00	Autism Speaks
Eye movement dynamics in autism spectrum disorders	Behrmann, Marlene	Carnegie Mellon University	$42,350.00	Simons Foundation
Social and affective components of communication	Bellugi, Ursula	Salk Institute For Biological Studies	$298,757.00	National Institutes of Health
Taste, smell, and feeding behavior in autism: A quantitative traits study	Bennetto, Loisa	University of Rochester	$0.00	Autism Speaks
Taste, smell, and feeding behavior in autism: A quantitative traits study	Bennetto, Loisa	University of Rochester	$570,508.00	National Institutes of Health

Genetic studies of autism-related Drosophila neurexin and neuroligin	Bhat, Manzoor	The University of North Carolina at Chapel Hill	$137,500.00	Simons Foundation
The striatal circuitry underlying autistic-like behaviors	Wells, Michael	Duke University	$31,975.00	National Institutes of Health
Role of autism-susceptibility gene, CNTNAP2, in neural circuitry for vocal communication	White, Stephanie	University of California, Los Angeles	$0.00	Department of Defense
Modulation of RhoA signaling by the mRNA binding protein hnRNPQ1	Williams, Kathryn	Emory University	$30,912.00	National Institutes of Health
Characterization of the pathological and biochemical markers that correlate to the clinical features of autism	Wisniewski, Thomas	Research Foundation for Mental Hygiene, Inc.	$0.00	Department of Defense
A preliminary investigation of the neurobehavioral basis of sensory behavior in autism	Wodka, Ericka	Kennedy Krieger Institute	$10,000.00	Organization for Autism Research
Action anticipation in infants	Woodward, Amanda	University of Chicago	$102,258.00	National Science Foundation
Dynamic regulation of Shank3 and ASD	Worley, Paul	Johns Hopkins University	$646,316.00	National Institutes of Health
Bayesian variable selection in generalized linear models with missing variables	Yang, Xiaowei	Hunter College (City University of New York)	$95,377.00	National Institutes of Health
Imaging signal transduction in single dendritic spines	Yasuda, Ryohei	Duke University	$382,200.00	National Institutes of Health
Local connectivity in altered excitation/inhibition balance states	Yizhar, Ofer	Weizmann Institute of Science	$62,500.00	Simons Foundation
Young development of a novel PET ligand for detecting oxytocin receptors in brain (supplement)	Young, Larry	Emory University	$176,000.00	National Institutes of Health
Young development of a novel PET ligand for detecting oxytocin receptors in brain	Young, Larry	Emory University	$261,360.00	National Institutes of Health
High-throughput DNA sequencing method for probing the connectivity of neural circuits at single-neuron resolution	Zador, Anthony	Cold Spring Harbor Laboratory	$430,650.00	National Institutes of Health

Novel regulatory network involving non-coding role of an ASD candidate gene PTEN	Zheng, Deyou	Albert Einstein College of Medicine of Yeshiva University	$208,750.00	National Institutes of Health
Statistical analysis of biomedical imaging data in curved space	Zhu, Hongtu	University of North Carolina at Chapel Hill	$326,619.00	National Institutes of Health
Functional analysis of neurexin IV in Drosophila	Zipursky, Larry	University of California, Los Angeles	$0.00	Simons Foundation
The role of neurexin IV in central nervous system development	Zipursky, Larry	University of California, Los Angeles	$100,466.00	Simons Foundation