2012 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
Convergence of immune and genetic signaling pathways in autism and schizophrenia	Barrow, Stephanie	University of California, Davis	$0.00	Brain & Behavior Research Foundation
Altered placental tryptophan metabolism: A crucial molecular pathway for the fetal programming of neurodevelopmental disorders	Bonnin, Alexandre	University of Southern California	$535,699.00	Department of Defense
Brain mitochondrial abnormalities in autism	Chauhan, Abha	New York State Institute for Basic Research in Developmental Disabilities	$20,000.00	Autism Research Institute
Mechanisms of synaptic alterations in a neuroinflammation model of autism	Dunaevsky, Anna	University of Nebraska Medical Center	$579,882.00	Department of Defense - Autism Research Program

IL-1beta and IL1RAPL1: Gene-environment interactions regulating synapse density and function in ASD	Estes, Myka	University of California, Davis	$28,600.00	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
Sensitive periods in cerebellar development	Hoffman, Jessica	University of Maryland, Baltimore	$32,941.00	National Institutes of Health
Hyperthermia and the amelioration of autism symptoms	Hollander, Eric	Montefiore Medical Center	$66,153.00	Simons Foundation
Exploring metabolic dysfunction in the brains of people with autism	Hu, Valerie	George Washington University	$0.00	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
Autism spectrum disorders – inflammatory subtype: Molecular characterization	Jyonouchi, Harumi	University of Medicine & Dentistry of New Jersey	$30,000.00	Autism Research Institute
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	$0.00	Health Resources and Services Administration
Prostaglandins and cerebellum development	McCarthy, Margaret	University of Maryland, Baltimore	$371,250.00	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
GABRB3 and placental vulnerability in ASD	Palmer, Theo	Stanford University	$642,258.00	National Institutes of Health
GABA(A) and prenatal immune events leading to autism	Palmer, Theo	Stanford University	$125,000.00	Simons Foundation
A non-human primate autism model based on maternal infection	Patterson, Paul	California Institute of Technology	$0.00	Simons Foundation
The mechanism of the maternal infection risk factor for autism	Patterson, Paul	California Institute of Technology	$150,000.00	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	$0.00	Autism Speaks
To study the relationship between low GAD2 levels and anti-GAD antibodies in autistic children	Russo, A.J.	Hartwick College	$7,260.00	Autism Research Institute
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	$50,000.00	Brain and Behavior Research Foundation
Project 2: Immunological susceptibility of autism (supplement)	Van de Water, Judy	University of California, Davis	$30,784.00	National Institutes of

Health

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
Behavioral and cognitive characteristics of females and males with autism	Frazier, Thomas	Cleveland Clinic Foundation	$60,000.00	Simons Foundation
ACE Network: Multimodal developmental neurogenetics of females with ASD	Pelphrey, Kevin	Yale University	$3,118,985.00	National Institutes of Health
Why are autistic females rare and severe? An approach to autism gene identification.	Turner, Tychele	Johns Hopkins University	$28,600.00	Autism Speaks
A sex-specific dissection of autism genetics	Weiss, Lauren	University of California, San Francisco	$150,000.00	National Institutes of Health
Investigation of sex differences associated with autism candidate gene, Cyfip1	Werling, Donna	University of California, Los Angeles	$32,413.00	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
Building awareness of the value of brain tissue donation for autism research	Singer, Alison	Autism Science Foundation	$90,120.00	Simons Foundation

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
Language development in fragile X syndrome	Abbeduto, Leonard	University of California, Davis	$584,381.00	National Institutes of Health
Neurobiological mechanism of 15q11-13 duplication autism spectrum disorder	Anderson, Matthew	Beth Israel Deaconess Medical Center	$380,625.00	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	$0.00	Autism Speaks
TMLHE deficiency and a carnitine hypothesis for autism	Beaudet, Arthur	Baylor College of Medicine	$60,000.00	Autism Speaks
Role of Sema7A in functional organization of neocortex	Benson, Deanna	Mount Sinai School of Medicine	$423,750.00	National Institutes of Health
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	Bolton, Patrick	King's College London	$149,881.00	Autism Speaks
Genetic and developmental analyses of fragile X mental retardation protein	Broadie, Kendal	Vanderbilt University Medical Center	$438,391.00	National Institutes of Health
Abnormal network dynamics and "learning" in neural circuits from Fmr1-/- mice	Buonomano, Dean	University of California, Los Angeles	$192,500.00	National Institutes of Health
Functional circuit disorders of sensory cortex in ASD and RTT	Carlson, Gregory	University of Pennsylvania	$254,976.00	National Institutes of Health
Neural mechanisms underlying autism behaviors in SCN1A mutant mice	Catterall, William	University of Washington	$94,903.00	Simons Foundation
Nav1.1 channels, neural circuits, and autism	Catterall, William	University of Washington	$10,213.00	Simons Foundation

Regulation of cortical critical periods in a mouse model of autism	Contractor, Anis	Northwestern University	$60,000.00	Simons Foundation
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	$395,134.00	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
Mechanisms of motor skill learning in the fragile X mouse model	Dunaevsky, Anna	University of Nebraska Medical Center	$308,138.00	National Institutes of Health
Predicting phenotypic trajectories in Prader-Willi syndrome	Dykens, Elisabeth	Vanderbilt University Medical Center	$310,752.00	National Institutes of Health
Activity-dependent phosphorylation of MeCP2	Ebert, Daniel	Harvard Medical School	$177,055.00	National Institutes of Health
Pleiotropic roles of dyslexia genes in neurodevelopmental language impairments	Eicher, John	Yale University	$42,232.00	National Institutes of Health
Probing synaptic receptor composition in mouse models of autism	Fagiolini, Michela	Boston Children's Hospital	$124,998.00	Simons Foundation
Probing the neural basis of social behavior in mice	Feng, Guoping	Massachusetts Institute of Technology	$62,500.00	Simons Foundation
BDNF and the restoration of spine plasticity with autism spectrum disorders	Gall, Christine	University of California, Irvine	$470,063.00	National Institutes of Health
The microRNA pathway in translational regulation of neurona	Gao, Fen-Biao	University of Massachusetts	$352,647.00	National Institutes of

development		Medical School		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
Multigenic basis for autism linked to 22q13 chromosomal region	Goldfarb, Mitchell	Hunter College of the City University of New York (CUNY) jointly with Research Foundation of CUNY	$125,000.00	Simons Foundation
The role of UBE3A in autism	Greenberg, Michael	Harvard Medical School	$312,501.00	Simons Foundation
Genotype-phenotype relationships in fragile X families	Hagerman, Randi	University of California, Davis	$612,413.00	National Institutes of Health
Bi-directional regulation of Ube3a stability by cyclic AMP-dependent kinase	Hahn, Klaus	University of North Carolina at Chapel Hill	$60,000.00	Autism Speaks
A longitudinal MRI study of brain development in fragile X syndrome	Hazlett, Heather	University of North Carolina at Chapel Hill	$610,416.00	National Institutes of Health
Study of fragile X mental retardation protein in synaptic function and plasticity	Huber, Kimberly	University of Texas Southwestern Medical Center	$317,077.00	National Institutes of Health
Mechanisms of mGluR5 function and dysfunction in mouse autism models	Huber, Kimberly	University of Texas Southwestern Medical Center	$406,760.00	National Institutes of Health
Coordinated control of synapse development by autism-linked genes	Huber, Kimberly	University of Texas Southwestern Medical Center	$0.00	Simons Foundation
Mechanisms of synapse elimination by autism-linked genes	Huber, Kimberly	University of Texas Southwestern Medical Center	$434,883.00	Simons Foundation
Making the connection between autism, serotonin and hedgehog signaling	Jacob, John	Medical Research Council-National Institute for Medical Research	$125,635.00	Simons Foundation
Genetically defined stem cell models of Rett and fragile X syndrome	Jaenisch, Rudolf	Whitehead Institute for Biomedical Research	$350,000.00	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	$147,806.00	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	LaSalle, Janine	University of California, Davis	$382,858.00	National Institutes of Health
Physiological studies in a human stem cell model of 15q duplication syndrome	Levine, Eric	University of Connecticut	$60,000.00	Autism Speaks
Studying Rett and Fragile X syndrome in human ES cells using TALEN technology	Li, Yun	Whitehead Institute for Biomedical Research	$0.00	Brain & Behavior Research Foundation
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	$340,520.00	National Institutes of Health
A family-genetic study of autism and fragile X syndrome	Losh, Molly	Northwestern University	$751,420.00	National Institutes of Health
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	Luo, Liqun	Stanford University	$155,380.00	Simons Foundation
Mesocorticolimbic dopamine circuitry in mouse models of autism	Malenka, Robert	Stanford University	$436,362.00	Simons Foundation
Functional and anatomical recovery of synaptic deficits in a mouse model of Angelman Syndrome	McCoy, Portia	University of North Carolina at Chapel Hill	$56,000.00	Autism Speaks
Investigating the homeostatic role of MeCP2 in mature brain	McGraw, Christopher	Baylor College of Medicine	$35,832.00	National Institutes of Health
A stem cell based platform for identification of common defects in autism spectrum disorders	Nazor, Kristopher	Scripps Research Institute	$0.00	Autism Speaks
Role of intracellular mGluR5 in fragile X syndrome and autism	O'Malley, Karen	Washington University in St. Louis	$75,000.00	Simons Foundation
L-type calcium channel regulation of neuronal differentiation	Panagiotakos, Georgia	Stanford University	$33,002.00	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	$400,000.00	Simons Foundation
Mechanism of UBE3A imprint in neurodevelopment	Powell, Weston	University of California, Davis	$34,439.00	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
The role of intracellular metabotropic glutamate receptor 5 at the synapse	Purgert, Carolyn	Washington University in St. Louis	$13,400.00	National Institutes of Health
Identification of targets for the neuronal E3 ubiquitin ligase PAM	Ramesh, Vijaya	Massachusetts General Hospital	$0.00	Simons Foundation
Pathophysiology of MeCP2 spectrum disorders	Ramocki, Melissa	Baylor College of Medicine	$179,981.00	National Institutes of Health
Underlying mechanisms in a cerebellum-dependent model of autism	Regehr, Wade	Harvard Medical School	$60,000.00	Simons Foundation
Longitudinal MRI study of brain development in fragile X	Reiss, Allan	Stanford University	$901,844.00	National Institutes of Health
Emergence and stability of autism in fragile X syndrome (supplement)	Roberts, Jane	University of South Carolina	$87,314.00	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	$149,958.00	Autism Speaks
Sex differences in early brain development; Brain development in Turner syndrome	Santelli, Rebecca	University of North Carolina at Chapel Hill	$155,873.00	National Institutes of Health
Cortactin and spine dysfunction in fragile X	Seese, Ronald	University of California, Irvine	$32,875.00	National Institutes of Health
New approaches to local translation: SpaceSTAMP of proteins synthesized in axons	Segal, Rosalind	Dana-Farber Cancer Institute	$419,095.00	National Institutes of Health
The role of genetics in communication deficits in autism spectrum disorders	Siegel, Steven	University of Pennsylvania	$60,000.00	Simons Foundation
Upper motor neuron plasticity in the MeCP2-duplication syndrome of autism	Smirnakis, Stelios	Baylor College of Medicine	$62,500.00	Simons Foundation
Dysregulation of protein synthesis in fragile X syndrome	Smith, Carolyn	National Institutes of Health	$1,117,731.00	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
Understanding the basic neurobiology of Pitt-Hopkins syndrome	Sweatt, J. David	The University of Alabama at Birmingham	$60,000.00	Simons Foundation
Investigation of protocadherin-10 in MEF2- and FMRP-mediated synapse elimination	Tsai, Nien-Pei	University of Texas Southwestern Medical Center	$53,942.00	National Institutes of Health
Probing a monogenic form of autism from molecules to behavior	Tsien, Richard	Stanford University	$0.00	Simons Foundation
Fragile X syndrome target analysis and its contribution to autism	Tuschl, Thomas	The Rockefeller University	$134,477.00	Simons Foundation
Translational regulation of adult neural stem cells	Zhao, Xinyu	University of Wisconsin - Madison	$396,944.00	National Institutes of Health
Dysregulation of mTOR signaling in fragile X syndrome (supplement)	Zukin, R. Suzanne	Albert Einstein College of Medicine of Yeshiva University	$72,034.00	National Institutes of Health
Dysregulation of mTOR signaling in fragile X syndrome	Zukin, R. Suzanne	Albert Einstein College of Medicine of Yeshiva University	$415,000.00	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	$0.00	Simons Foundation

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	$0.00	Simons Foundation
Direct recording from autism brains	Adolphs, Ralph	California Institute of Technology	$60,074.00	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	$45,000.00	Brain and Behavior Research Foundation
Epileptiform discharges and its relation to cognition and behavior in children with autism spectrum disorders	Barnes, Gregory	Vanderbilt University	$0.00	Health Resources and Services Administration
Molecular mechanisms linking early life seizures, autism and intellectual disability	Benke, Timothy	University of Colorado Denver	$333,473.00	National Institutes of Health
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	Bornstein, Joel	University of Melbourne	$0.00	Department of Defense
Selective disruption of hippocampal dentate granule cells in autism: Impact of PTEN deletion (supplement)	Danzer, Steve	Cincinnati Children's Hospital Medical Center	$14,596.00	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	$411,292.00	National Institutes of Health
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	$0.00	Autism Speaks
Characterization of the sleep phenotype in adolescents and adults with autism spectrum disorder	Goldman, Suzanne	Vanderbilt University	$150,000.00	Autism Speaks
Neuroendocrine regulation of metabolism and neurocognition	Han, Joan	National Institutes of Health	$402,805.00	National Institutes of Health
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	Hill, Elisa	University of Melbourne	$0.00	Department of Defense
Salivary melatonin as a biomarker for response to sleep interventions in children with autism	Laudenslager, Mark	University of Colorado Denver	$0.00	Autism Speaks
Characterizing sleep disorders in autism spectrum disorder	O'Hara, Ruth	Stanford University	$225,081.00	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	$87,899.00	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	$90,480.00	Autism Speaks
Treatment of medical conditions among individuals with autism spectrum disorders	Swedo, Susan	National Institutes of Health	$339,591.00	National Institutes of Health
Sensory mechanisms and self-injury	Symons, Frank	University of Minnesota	$447,738.00	National Institutes of Health
Functional neuroimaging of attention in autism	Yerys, Benjamin	University of Pennsylvania/Children's Hospital of Philadelphia	$192,365.00	National Institutes of Health
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	Young, Heather	University of Melbourne	$0.00	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
Investigating the etiology of childhood disintegrative disorder	Pelphrey, Kevin	Yale University	$149,953.00	Simons Foundation
Neuroimmunologic investigations of autism spectrum disorders (ASD)	Swedo, Susan	National Institutes of Health	$101,877.00	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	$436,833.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Imaging Analysis Site	Buckner, Randy	Harvard University	$137,106.00	Simons Foundation
Simons Variation in Individuals Project (Simons VIP) Principal Investigator Gift	Chung, Wendy	Columbia University	$73,534.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Principal Investigator	Chung, Wendy	Columbia University	$126,453.00	Simons Foundation
Autistic traits: Life course & genetic structure	Constantino, John	Washington University	$531,127.00	National Institutes of Health
ACE Center: Neuroimaging signatures of autism: Linking brain function to genes and behavior	Dapretto, Mirella	University of California, Los Angeles	$191,823.00	National Institutes of Health
The genetic basis of mid-hindbrain malformations	Dobyns, William	Seattle Children's Hospital	$798,866.00	National Institutes of Health
Simons Variation in Individuals Project (VIP) Recruitment Coordination Site	Faucett, W.Andrew	Weis Center For Research - Geisinger Clinc	$98,087.00	Simons Foundation
Genetic investigations of motor stereotypies	Fernandez, Thomas	Yale University	$62,136.00	Simons Foundation
ACE Center: Genetics of language & social communication: Connecting genes to brain & cognition	Geschwind, Daniel	University of California, Los Angeles	$252,243.00	National Institutes of Health
Simons Variation in Individual Project (Simons VIP) Core Leader Gift	Hanson, Ellen	Children's Hospital Boston	$0.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Site	Hanson,	Children's Hospital Boston	$768,296.00	Simons Foundation
A neuroimaging study of twin pairs with autism	Hardan, Antonio	Stanford University	$625,557.00	National Institutes of Health

A collaborative translational autism research program for the military.	Herman, Gail	Nationwide Children's Hospital	$903,888.00	Department of Defense - Air Force
Autism: Neuropeptide hormones and potential pathway genes	Jacob, Suma	University of Illinois at Chicago	$185,338.00	National Institutes of Health
Genetic dissection of restricted repetitive behavior (RRB)	Kim, Soo-Jeong	Seattle Children's Hospital	$177,736.00	National Institutes of Health
Factors influencing early associative learning as a precursor to social behavior heterogeneity	Knoll, Allison	University of Southern California	$53,000.00	Autism Speaks
Simons Variation in Individuals Project (VIP) Site	Kochel, Robin	Baylor College of Medicine	$466,763.00	Simons Foundation
Comprehensive phenotypic characterization of the 17q12 deletion syndrome	Ledbetter, David	Weis Center for Research - Geisinger Clinc	$62,500.00	Simons Foundation
Identifying the gene in 17q12 responsible for neuropsychiatric phenotypes	Lese Martin, Christa	Emory University	$180,140.00	Simons Foundation
Simons Variation in Individuals Project (Simons VIP)	Lese Martin, Christa	Emory University	$706,044.00	Simons Foundation
A family-genetic study of language in autism	Losh, Molly	Northwestern University	$391,295.00	National Institutes of Health
High throughput sequencing of autism spectrum disorder (ASD) endophenotypes	Lu, James	Baylor College of Medicine	$39,432.00	National Institutes of Health
Neural correlates of restricted, repetitive behaviors in autism spectrum disorders	Manoach, Dara	Massachusetts General Hospital	$0.00	Department of Defense
Children with 7q11.23 duplication syndrome: shared characteristics with autism	Mervis, Carolyn	University of Louisville	$125,000.00	Simons Foundation
Characterization of infants and toddlers with the 16p copy-number variation	Nelson, Charles	Boston Children's Hospital	$190,766.00	Simons Foundation

Language processing in children with 22q11 deletion syndrome and autism	Ousley, Opal	Emory University	$0.00	Simons Foundation
Developmental neurogenetics in adolescents with autism	Pelphrey, Kevin	Yale University	$124,769.00	Simons Foundation
Animal model of genetics and social behavior in autism spectrum disorders	Platt, Michael	Duke University	$791,070.00	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	$0.00	Autism Speaks
Simons Variation in Individuals Project (VIP) Functional Imaging Site	Roberts,Tim	Children's Hospital of Philadelphia	$736,449.00	Simons Foundation
Simons Variation in Individuals Project (VIP) Structural Imaging and Phenotyping Site - SCAP-local	Roberts,Tim	Children's Hospital of Philadelphia	$217,322.00	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	$611,005.00	National Institutes of Health
Relating copy number variants to head and brain size in neuropsychiatric disorders	Sebat, Jonathan	University of California, San Diego	$322,286.00	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	$513,646.00	Simons Foundation
Simons Variation in Individuals Project (Simons VIP) Core Leader Gift	Sherr, Elliott	University of California, San Francisco	$1,299,083.00	Simons Foundation
Genomic and epigenomic effects of large CNV in neurons from iPSC	Urban, Alexander	Stanford University	$2,355,000.00	National Institutes of Health
Simons Variation in Individuals Project (VIP) Statistical Core Site	Vaughan, Roger	Columbia University	$136,125.00	Simons Foundation
Characterizing the genetic systems of autism through multi-disease analysis (supplement)	Wall, Dennis	Harvard Medical School	$120,328.00	National Institutes of Health
Characterizing the genetic systems of autism through multi-disease analysis	Wall, Dennis	Harvard Medical School	$524,280.00	National Institutes of Health
Social processing, language, and executive functioning in twin pairs: Electrophysiological and behavioral	Webb, Sara	University of Washington	$150,000.00	Autism Speaks

endophenotypes				
Functional imaging of flexibility in autism: Informed by SLC6A4	Yerys, Benjamin	Children's Research Institute	$132,748.00	National Institutes of Health

2.L.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
Pediatric brain imaging	Giedd, Jay	National Institutes of Health	$2,419,583.00	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	$127,479.00	Autism Speaks
Amygdala connectivity in autism spectrum disorder	Johnson, Ryan	University of California, Davis	$49,934.00	National Institutes of Health
Understanding the etiological significance of attentional disengagement in infants at-risk for ASD	Keehn, Brandon	Boston Children's Hospital	$46,000.00	Autism Speaks
Investigation of the link between early brain enlargement and abnormal functional connectivity in autism spectrum disorders	Kleinhans, Natalia	University of Washington	$0.00	Autism Speaks
Electrophysiologic biomarkers of language function in autism spectrum disorders	McEvoy, Kevin	University of California, Los Angeles	$28,600.00	Autism Speaks
20-year outcome of autism	McMahon, William	University of Utah	$149,964.00	Autism Speaks
ACE Network: A longitudinal MRI study of infants at risk for autism	Piven, Joseph	University of North Carolina at Chapel Hill	$2,619,590.00	National Institutes of Health
ACE Network: A longitudinal MRI study of infants at risk for autism (supplement)	Piven, Joseph	University of North Carolina at Chapel Hill	$565,115.00	National Institutes of Health

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	$150,000.00	Simons Foundation
Functional neuroimaging of psychopharmacologic intervention for autism	Dichter, Gabriel	University of North Carolina at Chapel Hill	$162,369.00	National Institutes of Health
ACE Center: Predicting risk and resilience in ASD through social visual engagement	Jones, Warren	Emory University	$329,264.00	National Institutes of Health
Local functional connectivity in ASD	Kenet, Tal	Massachusetts General Hospital	$50,811.00	Simons Foundation
A study of autism	Krieger, Abba	University of Pennsylvania	$162,232.00	Simons Foundation
Near-infrared spectroscopy studies of early neural signatures of autism	Pelphrey, Kevin	Yale University	$149,917.00	Autism Speaks
ACE Center: Auditory perception and perceptual organization in minimally verbal children with ASD	Shinn-Cunningham, Barbara	Boston University	$288,440.00	National Institutes of Health

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	$54,570.00	National Institutes of Health

Characterizing the regulatory pathways and regulation of AUTS2	Ahituv, Nadav	University of California, San Francisco	$57,964.00	Simons Foundation
Autism and the insula: Genomic and neural circuits	Allman, John	California Institute of Technology	$254,696.00	Simons Foundation
Transcriptional responsiveness in lymphoblastoid cell lines	Alter, Mark	University of Pennsylvania	$0.00	Simons Foundation
Role of CNTNAP2 in neuronal structural development and synaptic transmission	Anderson, Garret	Stanford University	$53,500.00	Autism Speaks
Multisensory processing in autism	Angelaki, Dora	Baylor College of Medicine	$60,000.00	Simons Foundation
The social brain in schizophrenia and autism spectrum disorders	Assaf, Michal	Hartford Hospital	$594,733.00	National Institutes of Health
ACE Center: Ontogeny and neural basis of social visual engagement in monkeys	Bachevalier, Jocelyne	Emory University	$314,068.00	National Institutes of Health
Learning and plasticity in the human brain	Baker, Christopher	National Institutes of Health	$351,533.00	National Institutes of Health
The neural bases of top-down attentional control in autism spectrum disorders	Banerjee, Snigdha	City College of New York	$27,578.00	National Institutes of Health
PI3K/mTOR signaling as a novel biomarker and therapeutic target in autism	Bassell, Gary	Emory University	$0.00	Autism Speaks
Eye movement dynamics in autism spectrum disorders	Behrmann, Marlene	Carnegie Mellon University	$0.00	Simons Foundation
Social and affective components of communication	Bellugi, Ursula	Salk Institute For Biological Studies	$317,715.00	National Institutes of Health
Early expression of autism spectrum disorder in experimental animals	Ben-Ari, Yehezkel	Neurochlore	$0.00	Simons Foundation

Taste, smell, and feeding behavior in autism: A quantitative traits study	Bennetto, Loisa	University of Rochester	$570,508.00	National Institutes of Health
Structural and functional neuroimaging of the auditory system in autism	Berman, Jeffrey	Children's Hospital of Philadelphia	$157,905.00	National Institutes of Health
Genetic studies of autism-related Drosophila neurexin and neuroligin	Bhat, Manzoor	The University of North Carolina at Chapel Hill	$489,104.00	Simons Foundation
Engrailed targets and the control of synaptic circuits in Drosophila	Blagburn, Jonathan	University of Puerto Rico Medical Sciences Campus	$352,100.00	National Institutes of Health
The genetic control of social behavior in the mouse (supplement)	Blanchard, Robert	University of Hawai'i at Manoa	$201,966.00	National Institutes of Health
Elucidation of the developmental role of Jakmip1, an autism-susceptibility gene	Bomar, Jamee	University of California, Los Angeles	$31,474.00	National Institutes of Health
Multimodal neuroimaging of motor dysfunction in autism spectrum disorders	Buard, Isabelle	University of Colorado Denver	$56,000.00	Autism Speaks
Controlling interareal gamma coherence by optogenetics, pharmacology and behavior	Buschman, Timothy	Massachusetts Institute of Technology	$84,775.00	National Institutes of Health
Neurobehavioral investigation of tactile features in autism spectrum disorders	Cascio, Carissa	Vanderbilt University	$162,666.00	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	$239,255.00	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	$250,000.00	Simons Foundation

Identification of genetic pathways that regulate neuronal circuits in C. elegans	Cherra, Salvatore	University of California, San Diego	$47,114.00	National Institutes of Health
SHB: Type II (INT): Synthesizing self-model and mirror feedback imageries with applications to behavior modeling for children with autism	Cheung, Sen-ching	University of Kentucky Research Foundation	$798,912.00	National Science Foundation
The role of the GRIP protein complex in AMPA receptor trafficking and autism spectrum disorders	Chiu, Shu-Ling	Johns Hopkins University	$0.00	Brain & Behavior Research Foundation
Abnormal connectivity in autism	Clark, Kristi A.	University of California, Los Angeles	$30,000.00	Brain & Behavior Research Foundation
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 School	$312,000.00	National Institutes of Health
A neural model of fronto-parietal mirror neuron system dynamics	Contreras-Vidal, Jose	University of Maryland	$183,960.00	National Institutes of Health
Psychobiological investigation of the socioemotional functioning in autism	Corbett, Blythe	Vanderbilt University	$347,490.00	National Institutes of Health
The role of the new mTOR complex, mTORC2, in autism spectrum disorders	Costa-Mattioli, Mauro	Baylor College of Medicine	$625,998.00	Department of Defense - Autism Research Program
Atypical architecture of prefrontal cortex in young children with autism	Courchesne, Eric	University of California, San Diego	$335,103.00	Simons Foundation
Functional analysis of patient mutations in EPHB2, an ASD candidate gene- Core	Cowan, Christopher	McLean Hospital	$62,475.00	Simons Foundation
Neural mechanisms of imitative behavior: Implications for mental health	Cross, Kathryn	University of California, Los Angeles	$33,128.00	National Institutes of Health
Behavioral and neural correlates of reward motivation in children with autism spectrum disorders	Damiano, Cara	University of North Carolina at Chapel Hill	$0.00	Autism Speaks
RNA dysregulation in autism	Darnell, Robert	The Rockefeller University	$125,000.00	Simons Foundation

Functional analysis of EFR3A mutations associated with autism	De Camilli, Pietro	Yale University	$31,250.00	Simons Foundation
CLARITY: circuit-dynamics and connectivity of autism-related behavior	Deisseroth, Karl	Stanford University	$124,320.00	Simons Foundation
Self-injurious behavior: An animal model of an autism endophenotype	Devine, Darragh	University of Florida	$0.00	Department of Defense
CAREER: The role of prosody in word segmentation and lexical access	Dilley, Laura	Michigan State University	$0.00	National Science Foundation
Mapping functional connectivity networks in autism spectrum disorder with diffuse optical tomography	Eggebrecht, Adam	Washington University in St. Louis	$55,170.00	Autism Speaks
Executive function in children with typical and atypical language abilities	Ellis-Weismer, Susan	University of Wisconsin - Madison	$564,177.00	National Institutes of Health
Magnetoencephalographic studies of lexical processing and abstraction in autism	Embick, David	University of Pennsylvania	$321,156.00	National Institutes of Health
Functional properties and directed connectivity in the face-processing network	Engell, Andrew	Yale University	$55,670.00	National Institutes of Health
EEG-based assessment of functional connectivity in autism	Ewen, Joshua	Kennedy Krieger Institute	$175,042.00	National Institutes of Health
Characterizing mechanistic heterogeneity across ADHD and autism	Fair, Damien	Oregon Health & Science University	$611,788.00	National Institutes of Health
Electrophysiological response to executive control training in autism	Faja, Susan	University of Washington	$89,670.00	National Institutes of Health
Molecular controls over callosal projection neuron subtype specification and diversity	Fame, Ryan	Harvard University	$42,232.00	National Institutes of Health
Neural mechanisms of tactile sensation in rodent somatosensory cortex	Feldman, Daniel	University of California, Berkeley	$255,940.00	National Institutes of Health
Inhibitory mechanisms for sensory map plasticity in cerebral cortex	Feldman, Daniel	University of California, Berkeley	$328,644.00	National Institutes of Health
Shank3 in synaptic function and autism	Feng, Guoping	Massachusetts Institute of Technology	$401,250.00	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	$0.00	Autism Speaks
Behavioral, fMRI, and anatomical MRI investigations of attention in autism	Fischer, Jason	Massachusetts Institute of Technology	$47,114.00	National Institutes of Health
Multimodal imaging of social brain networks in ASD	Fishman, Inna	San Diego State University	$150,036.00	National Institutes of Health
Examining connectivity patterns of brain networks participating in social cognition in ASD	Fishman, Inna	San Diego State University	$40,000.00	Autism Science Foundation
CAREER: Statistical models and classification of time-varying shape	Fletcher, Preston Thomas	University of Utah	$8,000.00	National Science Foundation
The role of FOX-1 in neurodevelopment and autistic spectrum disorder	Fogel, Brent	University of California, Los Angeles	$145,757.00	National Institutes of Health
Neural mechanisms underlying an extended multisensory temporal binding window in ASD	Foss-Feig, Jennifer	Vanderbilt University	$0.00	Autism Speaks
Brain bases of language deficits in SLI and ASD	Gabrieli, John	Massachusetts Institute of Technology	$614,180.00	National Institutes of Health
The role of CNTNAP2 in embryonic neural stem cell regulation	Gaiano, Nicholas	Johns Hopkins University School of Medicine	$0.00	Simons Foundation
Understanding the role of Epac2 in cognitive function	Gao, Ruoqi	Northwestern University	$47,232.00	National Institutes of Health
Dual modulators of GABA-A and Alpha7 nicotinic receptors for treating autism	Gee, Kelvin	University of California, Irvine	$615,849.00	Department of Defense - Autism Research Program
A functional genomic analysis of the cerebral cortex	Geschwind, Daniel	University of California, Los Angeles	$256,413.00	Simons Foundation
Probing the temporal dynamics of aberrant neural communication and its relation to social processing deficits in autism spectrum disorders	Ghuman, Avniel S.	University of Pittsburgh	$0.00	Brain & Behavior Research Foundation

RI: Small: Addressing visual analogy problems on the raven's intelligence test	Goel, Ashok	Georgia Tech Research Corporation	$284,454.00	National Science Foundation
Role of negative regulators of FGF signaling in frontal cortex development and autism	Golonzhka, Olga	University of California, San Francisco	$45,000.00	Brain & Behavior Research Foundation
Monolingual and bilingual infants' sensitivity to agreement morphology in Spanish	Gouvea, Ana	Florida International University	$144,100.00	National Institutes of Health
Using fruit flies to map the network of autism-associated genes	Greenspan, Ralph	University of California, San Diego	$156,245.00	Simons Foundation
Face perception: Mapping psychological spaces to neural responses	Grill-Spector, Kalanit	Stanford University	$0.00	National Science Foundation
Identification and analysis of ASD patients with PI3K/mTOR signalopathies	Gross, Christina	Emory University	$66,500.00	Simons Foundation
Spatial attention in autism spectrum disorders	Grubb, Michael	New York University	$28,600.00	Autism Speaks
Identification of candidate genes at the synapse in autism spectrum disorders	Gupta, Abha	Yale University	$168,839.00	National Institutes of Health
Functional analysis of patient mutations in EPHB2, an ASD candidate gene- Project 1	Gupta, Abha	Yale University	$177,512.00	Simons Foundation
The neural substrates of social interactions	Gupta, Rupa	University of Iowa	$15,865.00	National Institutes of Health
Molecular signatures of autism genes and the 16p11.2 deletion	Gusella, James	Massachusetts General Hospital	$62,500.00	Simons Foundation
Development of the functional neural systems for face expertise	Haist, Frank	University of California, San Diego	$507,685.00	National Institutes of Health
Cerebellar plasticity and learning in a mouse model of autism	Hansel, Christian	University of Chicago	$156,250.00	Simons Foundation
Canonical neural computation in autism spectrum disorders	Heeger, David	New York University	$365,741.00	Simons Foundation

Defining cells and circuits affected in autism spectrum disorders	Heintz, Nathaniel	The Rockefeller University	$336,872.00	Simons Foundation
Homeostatic regulation of presynaptic function by dendritic mTORC1	Henry, Fredrick	University of Michigan	$32,747.00	National Institutes of Health
3 Tesla 31Phosphorus magnetic resonance spectroscopy in disorder with abnormal bioenergetics	Herbert, Martha	Treatment Research and Neuroscience Evaluation of Neurodevelopmental Disorders (TRANSCEND) Research Laboratory, Massachusetts General Hospital	$3,250.00	Autism Research Institute
Perturbed cortical patterning in autism	Hevner, Robert	Seattle Children's Hospital	$60,000.00	Simons Foundation
Integrative functions of the planum temporale (supplement)	Hickok, Gregory	University of California, Irvine	$34,768.00	National Institutes of Health
Integrative functions of the planum temporale	Hickok, Gregory	University of California, Irvine	$440,810.00	National Institutes of Health
Neural basis of cross-modal influences on perception	Hillyard, Steven	University of California, San Diego	$158,282.00	National Science Foundation
Exploring the uncanny valley	Hodgins, Jessica	Carnegie Mellon University	$0.00	National Science Foundation
Collaborative research: Learning complex auditory categories	Holt, Lori	Carnegie Mellon University	$0.00	National Science Foundation
Vasopressin receptor polymorphism and social cognition	Hopkins, William	Georgia State University	$395,156.00	National Institutes of Health
Proteome and interaction networks in autism	Howley, Peter	Harvard Medical School	$156,250.00	Simons Foundation
Functional role of IL-6 in fetal brain development and abnormal behavior	Hsiao, Elaine	California Institute of Technology	$42,232.00	National Institutes of Health

Collaborative research: Modeling perception and memory: Studies in priming	Huber, David	University of California, San Diego	$0.00	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
High metabolic demand of fast-spiking cortical interneurons underlying the etiology of autism	Inan, Melis	Weill Cornell Medical College	$54,500.00	Autism Speaks
Neurobiological signatures of audiovisual speech perception in children in ASD	Irwin, Julia	Haskins Laboratories, Inc.	$217,886.00	National Institutes of Health
Analysis of Shank3 complete and temporal and spatial specific knockout mice	Jiang, Yong-Hui	Duke University	$481,448.00	National Institutes of Health
Stimulus-driven attention deficits in autism	Jiang, Yuhong	University of Minnesota	$0.00	Simons Foundation
Macrocephalic autism: Exploring and exploiting the role of PTEN	Johnston, Sean	University of Wisconsin - Madison	$0.00	Autism Speaks
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
Using high definition fiber tracking to define developmental neurobiologic mechanisms & a neural basis for behavioral heterogeneity	Just, Marcel	Carnegie Mellon University	$25,000.00	Autism Research Institute
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	$175,000.00	Simons Foundation
Retrograde synaptic signaling by Neurexin and Neuroligin in C. elegans	Kaplan, Joshua	Massachusetts General Hospital	$250,000.00	Simons Foundation

Investigating brain connectivity in autism at the whole-brain level	Kennedy, Daniel	California Institute of Technology	$88,508.00	National Institutes of Health
Investigating brain connectivity in autism at the whole-brain level	Kennedy, Daniel	Indiana University	$249,001.00	National Institutes of Health
Investigating brain organization and activation in autism at the whole-brain level	Kennedy, Daniel P.	California Institute of Technology	$0.00	Brain & Behavior Research Foundation
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	$58,442.00	National Institutes of Health
Semaphorin4D and PlexinB1 mediate GABAergic synapse development in mammalian CNS	Kuzirian, Marissa	Brandeis University	$27,814.00	National Institutes of Health
The microstructural basis of abnormal connectivity in autism	Lainhart, Janet	University of Utah	$332,991.00	National Institutes of Health
ERK signaling in autism associated with copy number variation of 16p11.2	Landreth, Gary	Case Western Reserve University	$51,290.00	Simons Foundation
Development of face processing expertise	Lee, Kang	University of Toronto	$351,984.00	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

Genetic model to study the ASD-associated gene A2BP1 and its target PAC1	Levkowitz, Gil	Weizmann Institute of Science	$62,500.00	Simons Foundation
Neurobiological correlates of language dysfunction in autism spectrum disorders	Lewine, Jeffrey	The Mind Research Network	$535,052.00	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	$45,000.00	Brain & Behavior Research Foundation
MTHFR functional polymorphism C677T and genomic instability in the etiology of idiopathic autism in simplex families	Liu, Xudong	Queen's University	$0.00	Department of Defense
Role of major vault protein in autism	Lombroso, Paul	Yale University	$59,972.00	Simons Foundation
Pragmatics and semantics in autism spectrum disorder	Lopez, Karece	City University of New York Graduate School and University Center	$29,155.00	National Institutes of Health
Collaborative research: Learning complex auditory categories	Lotto, Andrew	University of Arizona	$0.00	National Science Foundation
The impact of Pten signaling on neuronal form and function	Luikart, Bryan	Dartmouth College	$346,014.00	National Institutes of Health
Social interaction and reward in autism: Possible role for ventral tegmental area	Luscher, Christian	University of Geneva	$62,496.00	Simons Foundation
Behavioral and neural responses to emotional faces in individuals with ASD	Luyster, Rhiannon J.	Harvard University	$14,935.00	Brain & Behavior Research Foundation

Regulation of spine morphogenesis by NrCAM	Maness Tidwell, Patricia	University of North Carolina at Chapel Hill	$185,000.00	National Institutes of Health
Investigation of a possible role of the protocahderin gene cluster in autism	Maniatis, Tom	Columbia University	$150,000.00	Simons Foundation
The cognitive neuroscience of autism spectrum disorders	Martin, Alex	National Institutes of Health	$1,074,095.00	National Institutes of Health
Cellular density and morphology in the autistic temporal human cerebral cortex	Martinez Cerdeno, Veronica	University of California, Davis	$363,672.00	National Institutes of Health
Cognitive control of emotion in autism	Mazefsky, Carla	University of Pittsburgh	$102,638.00	National Institutes of Health
Social brain networks for the detection of agents and intentions	McCarthy, Gregory	Yale University	$414,688.00	National Institutes of Health
Neural underpinning of emotion perception and its disorders	Meng, Ming	Dartmouth College	$30,000.00	Brain & Behavior Research Foundation
Mathematical cognition in autism: A cognitive and systems neuroscience approach	Menon, Vinod	Stanford University	$652,461.00	National Institutes of Health
Decoding 'what' and 'who' in the auditory system of children with autism spectrum disorders	Menon, Vinod	Stanford University	$197,500.00	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	$300,000.00	Simons Foundation
Cerebellar modulation of frontal cortical function	Mittleman, Guy	University of Memphis	$302,306.00	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	$548,158.00	National Institutes of Health
Social behavior deficits in autism: Role of amygdala	Mooney, Sandra	State University of New York Upstate Medical Center	$0.00	Autism Speaks
HCC:Small:Computational studies of social nonverbal communication	Morency, Louis-Philippe	University of Southern California	$0.00	National Science Foundation
Endosomal NHE6 in long-range connectivity and autism	Morrow, Eric	Brown University	$62,500.00	Simons Foundation
Motor control and cerebellar maturation in autism	Mosconi, Matthew	University of Texas Southwestern Medical Center	$157,148.00	National Institutes of Health
Motor skill learning in autism	Mostofsky, Stewart	Kennedy Krieger Institute	$395,908.00	National Institutes of Health
Linking local activity and functional connectivity in autism (supplement)	Mueller, Ralph-Axel	San Diego State University	$92,508.00	National Institutes of Health
Linking local activity and functional connectivity in autism	Mueller, Ralph-Axel	San Diego State University	$370,304.00	National Institutes of Health
Cell adhesion molecules in CNS development	Mueller, Ulrich	The Scripps Research Institute	$534,562.00	National Institutes of Health
Networked cortical responses to movement associated with ASD	Murias, Michael	University of Washington	$449,700.00	National Institutes of Health
Thalamocortical connectivity in children and adolescents with ASD-A combined fcMRI and DTI approach	Nair, Aarti	San Diego State University	$28,600.00	Autism Speaks
Brain electrophysiology of interactive social stimuli	Naples, Adam	Yale University	$52,984.00	Autism Speaks
Understanding the brain basis of impaired imitation learning in autism	Nebel, Mary Beth	Kennedy Krieger Institute	$55,200.00	Autism Speaks

How autism affects speech understanding in multitalker environments	Newman, Rochelle	University of Maryland, College Park	$0.00	National Institutes of Health
Experience and cognitive development in infancy	Oakes, Lisa	University of California, Davis	$102,038.00	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	$0.00	Autism Speaks
White matter glial pathology in autism	Ordway, Gregory	East Tennessee State University	$0.00	Department of Defense
Investigation of social brain circuits in mouse models of the 16p11.2 locus	Osten, Pavel	Cold Spring Harbor Laboratory	$175,000.00	Simons Foundation
Cell adhesion molecules in autism: A whole-brain study of genetic mouse models	Osten, Pavel	Cold Spring Harbor Laboratory	$485,438.00	National Institutes of Health
Investigation of social brain circuits and fever-evoked response in 16p11.2 mice	Osten, Pavel	Cold Spring Harbor Laboratory	$60,000.00	Simons Foundation
Extended tracking of single synaptic proteins with upconverting nanoparticles	Ostrowski, Alexis	University of California; Lawrence Berkeley National Laboratory	$10,819.00	National Institutes of Health
Elucidating the function of class 4 semaphorins in GABAergic synapse formation (supplement)	Paradis, Suzanne	Brandeis University	$23,015.00	National Institutes of Health
Elucidating the function of class 4 semaphorins in GABAergic synapse formation	Paradis, Suzanne	Brandeis University	$336,922.00	National Institutes of Health
Effect of paternal age on mutational burden and behavior in mice	Pardo-Manuel De Villena, Fernando	University of North Carolina at Chapel Hill	$222,000.00	National Institutes of Health

Transcriptional regulators in normal human brain development and autism	Parikshak, Neelroop	University of California, Los Angeles	$30,002.00	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
Synaptic processing in the basal ganglia	Perkel, David	University of Washington	$377,815.00	National Institutes of Health
Neuronal basis of vicarious reinforcement dysfunction in autism spectrum disorder	Platt, Michael	Duke University	$310,081.00	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	$203,715.00	National Institutes of Health
GABAergic dysfunction in autism	Puts, Nicolaas	Johns Hopkins University	$48,000.00	Autism Speaks
MET signaling in neural development and circuitry formation	Qiu, Shenfeng	University of Arizona	$249,000.00	National Institutes of Health
Neuroligin, oxidative stress and autism	Rand, James	Oklahoma Medical Research Foundation	$150,000.00	Simons Foundation
Serotonin signal transduction in two groups of autistic patients	Rasenick, Mark	University of Illinois at Chicago	$0.00	Department of Defense
Evaluating the time-dependent unfolding of social interactions in autism	Richardson, Michael	University of Cincinnati	$252,622.00	National Institutes of Health
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 (supplement)	Rojas, Donald	University of Colorado Denver	$100,386.00	National Institutes of Health
Neural synchrony dysfunction of gamma oscillations in autism	Rojas, Donald	University of Colorado Denver	$265,073.00	National Institutes of Health

Auditory and integrative functions of the prefrontal cortex	Romanski, Lizabeth	University of Rochester	$387,285.00	National Institutes of Health
A novel transplantation assay to study human PTEN ASD alleles in GABAergic interneurons	Rubenstein, John	University of California, San Francisco	$60,000.00	Autism Speaks
Development of a connectomic functional brain imaging endophenotype of autism	Rubinov, Mikail	University of Cambridge	$0.00	Brain & Behavior Research Foundation
Molecular mechanisms of the synaptic organizer alpha-neurexin	Rudenko, Gabrielle	University of Michigan	$383,267.00	National Institutes of Health
Impact of SynGAP1 mutations on synapse maturation and cognitive development	Rumbaugh, Gavin	The Scripps Research Institute - Florida	$789,981.00	National Institutes of Health
Urokinase-type plasminogen activator plasma concentration and its relationship to hepatocyte growth factor (HGF) and GABA levels in autistic children	Russo, A.J.	Hartwick College	$8,505.00	Autism Research Institute
Cortical dynamics in autism	Said, Chris	New York University	$52,190.00	National Institutes of Health
Multisensory integration in children with ASD	Saron, Clifford	University of California, Davis	$192,136.00	National Institutes of Health
Impairments of theory of mind disrupt patterns of brain activity	Saxe, Rebecca	Massachusetts Institute of Technology	$321,000.00	Simons Foundation
CAREER: Typical and atypical development of brain regions for theory of mind	Saxe, Rebecca	Massachusetts Institute of Technology	$86,848.00	National Institutes of Health
Collaborative research: RUI: Perceptual pick-up processes in interpersonal coordination	Schmidt, Richard	College of the Holy Cross	$0.00	National Science Foundation
Testing the hyperspecificity hypothesis: A neural theory of autism	Schultz, Robert	Children's Hospital of Philadelphia	$247,018.00	National Institutes of Health
Typical and pathological cellular development of the human amygdala	Schumann, Cynthia	University of California, Davis	$385,000.00	National Institutes of Health

Glial control of neuronal receptive ending morphology	Shaham, Shai	The Rockefeller University	$418,275.00	National Institutes of Health
Molecular dissection of calmodulin domain functions	Shea, Madeline	University of Iowa	$321,473.00	National Institutes of Health
The effects of autism on the sign language development of deaf children (supplement)	Shield, Aaron	Boston University	$1,188.00	National Institutes of Health
The effects of autism on the sign language development of deaf children	Shield, Aaron	Boston University	$59,419.00	National Institutes of Health
Autism spectrum disorders and the visual analysis of human motion	Shiffrar, Maggie	Rutgers, The State University of New Jersey	$0.00	Simons Foundation
Metacognition in comparative perspective	Smith, J. David	University at Buffalo, The State University of New York	$210,561.00	National Institutes of Health
The neural substrates of higher-level learning in autism	Solomon, Marjorie	University of California, Davis	$192,500.00	National Institutes of Health
Learning in autism spectrum disorders	Solomon, Marjorie	University of California, Davis	$28,902.00	Brain & Behavior Research Foundation
Brain-behavior interactions and visuospatial expertise in autism: a window into the neural basis of autistic cognition	Soulieres, Isabelle	Hospital Riviere-des-Praires, University of Montreal, Canada	$0.00	Brain & Behavior Research Foundation
Computational characterization of language use in autism spectrum disorder	Sproat, Richard	Oregon Health & Science University	$738,723.00	National Institutes of Health
ACE Center: Neuroimaging studies of connectivity in ASD	Staib, Lawrence	Yale University	$315,268.00	National Institutes of Health
The computational basis of theory of mind in the human brain	Stanley, Damian	California Institute of Technology	$103,965.00	National Institutes of Health
Stimulus preceding negativity and social stimuli in autism spectrum disorder	Stavropoulos, Katherine	University of California, San Diego	$28,600.00	Autism Speaks

Role of neuronal migration genes in synaptogenesis and plasticity	Sudarov, Anamaria	Weill Cornell Medical College	$52,190.00	National Institutes of Health
Function of neurexins	Sudhof, Thomas	Stanford University	$473,710.00	National Institutes of Health
Function and dysfunction of neuroligins in synaptic circuits	Sudhof, Thomas	Stanford University	$750,000.00	Simons Foundation
Modeling 5-HT-absorbing neurons in neuropathology of autism	Sze, Ji	Albert Einstein College of Medicine of Yeshiva University	$250,500.00	National Institutes of Health
Subependymal zone function in autism spectrum disorders	Szele, Francis	University of Oxford	$59,560.00	Simons Foundation
Kinetics of drug macromolecule complex formation	Taylor, Palmer	University of California, San Diego	$712,921.00	National Institutes of Health
Attentional distribution and word learning in children with autism	Tenenbaum, Elena	Women & Infants Hospital	$50,600.00	Autism Speaks
Influence of attention and arousal on sensory abnormalities in ASD	Townsend, Jeanne	University of California, San Diego	$232,500.00	National Institutes of Health
Imaging PTEN-induced changes in adult cortical structure and function in vivo	Trachtenberg, Joshua	University of California, Los Angeles	$300,156.00	National Institutes of Health
In vivo targeted gene silencing, a novel method	Truitt, William	Indiana University-Purdue University Indianapolis	$192,500.00	National Institutes of Health
Regulation of synaptogenesis by cyclin-dependent kinase 5	Tsai, Li-Huei	Massachusetts Institute of Technology	$0.00	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
Presynaptic regulation of quantal size by the cation/H+ exchangers NHE6 & NHE9	Ullman, Julie	University of California, Berkeley	$33,932.00	National Institutes of Health

Functional anatomy of face processing in the primate brain	Ungerleider, Leslie	National Institutes of Health	$1,660,304.00	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 (supplement)	Vaidya, Chandan	Georgetown University	$111,600.00	National Institutes of Health
Neuroimaging of top-down control and bottom-up processes in childhood ASD	Vaidya, Chandan	Georgetown University	$387,066.00	National Institutes of Health
Neuropeptide regulation of juvenile social behaviors	Veenema, Alexa	Boston College	$29,550.00	Brain & Behavior Research Foundation
Statistical word learning and non-social visual attention in children with autism	Venker, Courtney	University of Wisconsin - Madison	$33,148.00	National Institutes of Health
Novel computational methods for higher order diffusion MRI in autism	Verma, Ragini	University of Pennsylvania	$725,545.00	National Institutes of Health
Head-fixed recording of sensory learning in mouse autism models	Wang, Samuel	Princeton University	$0.00	Simons Foundation
Defining the dynamics of the default network with direct brain recordings and functional MRI	Weaver, Kurt	University of Washington	$146,025.00	National Institutes of Health
Physiology of attention and regulation in children with ASD and LD	Webb, Sara	Seattle Children's Hospital	$341,013.00	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
BRIGE: Emotion mapping of children through human-robot interaction and affective computing	Welch, Karla	University of Louisville Research Foundation Inc	$174,583.00	National Science Foundation

Neuroprotective effects of oxytocin receptor signaling in the enteric nervous system	Welch, Martha	Columbia University	$25,000.00	Autism Research Institute
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	Departme nt 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	Departme nt of Defense
A preliminary investigation of the neurobehavioral basis of sensory behavior in autism	Wodka, Ericka	Kennedy Krieger Institute	$10,000.00	Organizati on for Autism Research
Action anticipation in infants	Woodward, Amanda	University of Chicago	$102,258.00	National Science Foundatio n
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 Foundatio n
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