

2012 Portfolio Analysis Projects

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

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QUESTION 4: WHICH TREATMENTS AND INTERVENTIONS WILL HELP?

4.S.A

Support at least three randomized controlled trials that address co-occurring medical conditions associated with ASD by 2010. *IACC Recommended Budget: \$13,400,000 over 3 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Anxiety treatment for children with autism and intellectual disability	Danial, John	University of California, Los Angeles	\$26,040	Autism Speaks
Autism Intervention Research Network on Physical Health (AIR-P network)	Perrin, James	Massachusetts General Hospital	\$2,079,996	Health Resources and Services Administration
Treatment of children with ASD and epileptiform EEG with divalproex sodium	Spence, Sarah	Boston Children's Hospital	\$68,088	Simons Foundation

4.S.B

Standardize and validate at least 20 model systems (e.g., cellular and/or animal) that replicate features of ASD and will allow identification of specific molecular targets or neural circuits amenable to existing or new interventions by 2012. *IACC Recommended Budget: \$75,000,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Effects of chronic intranasal oxytocin	Bales, Karen	University of California, Davis	\$568,507	National Institutes of Health

Synaptic pathophysiology of 16p11.2 model mice	Bear, Mark	Massachusetts Institute of Technology	\$125,000	National Institutes of Health
Development of a high-content neuronal assay to screen therapeutics for the treatment of cognitive dysfunction in autism spectrum disorders	Bear, Mark	Massachusetts Institute of Technology	\$0.00	Department of Defense
Role of cadherin-8 in the assembly of prefrontal cortical circuits	Benson, Deanna	Mount Sinai School of Medicine	\$155,940	Simons Foundation
Modeling the serotonin contribution to autism spectrum disorders	Blakely, Randy	Vanderbilt University Medical Center	\$236,532	National Institutes of Health
The genetic control of social behavior in the mouse	Blanchard, Robert	University of Hawai'i at Manoa	\$342,540	National Institutes of Health
Identifying high-impact therapeutic targets for autism spectrum disorders using rat models	Buxbaum, Joseph	Mount Sinai School of Medicine	\$137,173	Autism Speaks
Identifying therapeutic targets for autism using Shank3-deficient mice (supplement)	Buxbaum, Joseph	Mount Sinai School of Medicine	\$121,077	National Institutes of Health
Identifying therapeutic targets for autism using SHANK3-deficient mice	Buxbaum, Joseph	Mount Sinai School of Medicine	\$484,667	National Institutes of Health

The role of SHANK3 in autism spectrum disorders	Buxbaum, Joseph	Mount Sinai School of Medicine	\$0	Simons Foundation
Animal models of neuropsychiatric disorders	Crawley, Jacqueline	National Institutes of Health	\$974,415	National Institutes of Health
16p11.2 deletion mice: autism-relevant phenotypes and treatment discovery	Crawley, Jacqueline	University of California, Davis	\$200,000	Simons Foundation
Establishing next-generation tools for quantitative behavioral phenotyping	Datta, Sandeep	Harvard Medical School	\$60,000	Simons Foundation
Using induced pluripotent stem cells to identify cellular phenotypes of autism	Dolmetsch, Ricardo	Stanford University	\$792,000	National Institutes of Health
16p11.2 deletion mice: Autism-relevant phenotypes and treatment discovery	Dolmetsch, Ricardo	Stanford University	\$200,000	Simons Foundation
Serotonin, autism, and investigating cell types for CNS disorders	Dougherty, Joseph	Washington University in St. Louis	\$246,794	National Institutes of Health
Patient iPS cells with copy number variations to model neuropsychiatric disorders	Ellis, James	The Hospital for Sick Children	\$336,050	National Institutes of Health
Dissecting the circuitry basis of autistic-like behaviors in mice	Feng, Guoping	Massachusetts Institute of Technology	\$350,000	Simons Foundation

Synaptic and circuitry mechanisms of repetitive behaviors in autism	Feng, Guoping	Massachusetts Institute of Technology	\$47,041	Simons Foundation
Characterization of synaptic and neural circuitry dysfunction underlying ASD-like behaviors using a novel genetic mouse model	Fu, Zhanyan	Duke University	\$0	Brain & Behavior Research Foundation
Testing brain overgrowth and synaptic models of autism using NPCs and neurons from patient-derived iPS cells	Gage, Fred	Salk Institute for Biological Studies	\$377,663	Department of Defense - Autism Research Program
Role of Caspr2 (CNTNAP2) in brain circuits - Project 2	Geschwind, Daniel	University of California, Los Angeles	\$79,584	Simons Foundation
Genomic imbalances at the 22q11 locus and predisposition to autism	Gogos, Joseph	Columbia University	\$0	Simons Foundation
OCT blockade to restore sociability in 5-HT transporter knock-out mice	Gould, Georgianna	University of Texas Health Science Center at San Antonio	\$74,250	National Institutes of Health
Novel therapeutic targets to treat social behavior deficits in autism and related disorders	Gould, Georgianna	University of Texas Health Science Center at San Antonio	\$0	Department of Defense - Autism Research Program
Exploring the neuronal phenotype of autism spectrum disorders using induced pluripotent stem cells	Hallmayer, Joachim; Dolmetsch, Ricardo	Stanford University	\$366,529	National Institutes of Health

Role of astrocytic glutamate transporter GLT1 in fragile X	Higashimori, Haruki	Tufts University	\$40,000	Autism Science Foundation
Functional analysis of rare variants in genes associated with autism	Hoffman, Ellen	Yale University	\$146,625	National Institutes of Health
The role of glutamate receptor interacting proteins in autism	Huganir, Richard	Johns Hopkins University School of Medicine	\$312,500	Simons Foundation
Cellular and molecular pathways of cortical afferentation in autism spectrum disorders	Jabaudon, Denis	University of Geneva	\$0	Brain & Behavior Research Foundation
Preclinical testing of novel oxytocin receptor activators in models of autism phenotypes	Jarstfer, Michael	University of North Carolina at Chapel Hill	\$0	Department of Defense
Functional study of synaptic scaffold protein SHANK3 and autism mouse model	Jiang, Yong-Hui	Duke University	\$150,000.00	Autism Speaks
Examination of the mGluR-mTOR pathway for the identification of potential therapeutic targets to treat fragile X	Jongens, Thomas	University of Pennsylvania	\$0	Department of Defense - Autism Research Program
Transgenic and knockout approaches to study protocadherin function	Jontes, James	The Ohio State University	\$228,750	National Institutes of Health

<u>Investigating the effects of chromosome 22q11.2 deletions</u>	Karayiorgou, Maria	Columbia University	\$300,000	Simons Foundation
<u>Understanding copy number variants associated with autism</u>	Katsanis, Nicholas	Duke University Medical Center	\$125,000	Simons Foundation
<u>Control of synaptic protein synthesis in the pathogenesis and therapy of autism</u>	Kelleher, Raymond	Massachusetts General Hospital	\$294,937	Simons Foundation
<u>Animal model of speech sound processing in autism</u>	Kilgard, Michael	University of Texas at Dallas	\$283,249	National Institutes of Health
<u>Impact of an autism associated mutation in DACT1 on brain development and behavior</u>	Kivimae, Saul	University of California, San Francisco	\$45,000	Brain & Behavior Research Foundation
<u>Developing a new model system to study mechanisms of attention control</u>	Knudsen, Eric	Stanford University	\$0	Simons Foundation
<u>Shank3 mutant characterization in vivo</u>	Kouser, Mehreen	University of Texas Southwestern Medical Center	\$0	Autism Speaks
<u>Behavioral and physiological consequences of disrupted Met signaling</u>	Levitt, Pat	University of Southern California	\$400,000	Simons Foundation

Role of RAS/RAF/ERK pathway in pathogenesis and treatment of autism	Li, Xiaohong	New York State Institute for Basic Research in Developmental Disabilities	\$0	Simons Foundation
Investigating the role of CNTNAP2 gene in vocal learning in mutant songbirds	Lois, Carlos	University of Massachusetts Medical School	\$249,063	National Institutes of Health
Insight into MeCP2 function raises therapeutic possibilities for Rett syndrome	Lomvardas, Stavros	University of California, San Francisco	\$290,087	National Institutes of Health
Autism iPSCs for studying function and dysfunction in human neural development	Loring, Jeanne	The Scripps Research Institute	\$460,152	National Institutes of Health
Role of Caspr2 (CNTNAP2) in brain circuits - Project 1	Marin, Oscar	Universidad Miguel Hernandez	\$79,525	Simons Foundation
A probiotic therapy for autism	Mazmanian, Sarkis	California Institute of Technology	\$62,500	Simons Foundation
Perinatal choline supplementation as a treatment for autism	Mellott, Tiffany	Boston University	\$62,500	Simons Foundation
16p11.2: defining the gene(s) responsible	Mills, Alea	Cold Spring Harbor Laboratory	\$350,000	Simons Foundation
Deficits in tonic inhibition and the pathology of autism spectrum disorders	Moss, Stephen	Tufts University	\$156,250	Simons Foundation

Preclinical testing of novel oxytocin receptor activators in models of autism phenotypes	Moy, Sheryl	University of North Carolina at Chapel Hill	\$0	Department of Defense
Evaluating hyperserotonemia as a biomarker of sensory dysfunction in autism spectrum disorder	Muller, Christopher	Vanderbilt University	\$28,600	Autism Speaks
PsychoGenics Inc.	No PI listed	PsychoGenics Inc.	\$147,925	Simons Foundation
A mouse model for human chromosome 7q11.23 duplication syndrome	Osborne, Lucy	University of Toronto	\$0	Simons Foundation
Training in translational social neuroscience	Parr, Lisa	Emory University	\$98,163	National Institutes of Health
Integrative system biology of iPSC-induced neurons for identifying novel drug targets	Pati, Soumya	Baylor College of Medicine	\$55,200	Autism Speaks
Novel probiotic therapies for autism	Patterson, Paul	California Institute of Technology	\$0	Department of Defense
Rat knockout models of ASD	Paylor, Rich	Baylor College of Medicine	\$100,441	Autism Speaks
Preclinical testing of novel oxytocin receptor activators in models of autism phenotypes	Pedersen, Cort	University of North Carolina at Chapel Hill	\$0	Department of Defense

Role of Caspr2 (CNTNAP2) in brain circuits- Core	Peles, Elior	Weizmann Institute of Science	\$89,999	Simons Foundation
Mechanism and treatment of ASD related behavior in the Cntnap2 knockout mouse model	Penagarikano, Olga	University of California, Los Angeles	\$58,000	Autism Speaks
Small-molecule compounds for treating autism spectrum disorders	Philpot, Ben	The University of North Carolina at Chapel Hill	\$350,000	Simons Foundation
Role of UBE3A in neocortical plasticity and function	Philpot, Ben	University of North Carolina at Chapel Hill	\$77,686	Simons Foundation
Novel genetic models of autism (supplement)	Powell, Craig	University of Texas Southwestern Medical Center	\$99,773	National Institutes of Health
Novel genetic animal models of autism	Powell, Craig	University of Texas Southwestern Medical Center	\$337,875	National Institutes of Health
Neurexin function in vivo: Implications for autism and mental retardation	Powell, Craig	University of Texas Southwestern Medical Center	\$388,575	National Institutes of Health
Striatal synaptic abnormalities in models of autism	Powell, Craig	University of Texas Southwestern Medical Center	\$397,396	National Institutes of Health

<u>Temporally controlled genetic rescue of Shank3 autism model</u>	Powell, Craig	University of Texas Southwestern Medical Center	\$60,000	Autism Speaks
<u>Mechanisms of stress-enhanced aversive conditioning</u>	Radulovic, Jelena	Northwestern University	\$381,250	National Institutes of Health
<u>Cerebellar signaling in mouse models of autism</u>	Raman, Indira	Northwestern University	\$125,000	Simons Foundation
<u>Role of a novel Wnt pathway in autism spectrum disorders</u>	Reichardt, Louis	University of California, San Francisco	\$300,000	Simons Foundation
<u>Tooth pulp as a source for neuronal precursor cells to study neurogenetic disorders</u>	Reiter, Lawrence	University of Tennessee Health Science Center	\$187,344	National Institutes of Health
<u>Studies of pediatrics patients with genetic and metabolic disorders</u>	Rennert, Owen	National Institutes of Health	\$1,667,480	National Institutes of Health
<u>Adverse prenatal environment and altered social and anxiety-related behaviors</u>	Reyes, Teresa	University of Pennsylvania	\$45,000	Brain & Behavior Research Foundation
<u>The genetic and neuroanatomical origin of social behavior</u>	Samaco, Rodney	Baylor College of Medicine	\$391,250	National Institutes of Health

Dissecting the neural control of social attachment	Shah, Nirao	University of California, San Francisco	\$764,775	National Institutes of Health
Using induced-pluripotent stem cells to study Phelan McDermid Syndrome	Shcheglovitov, Oleksandr	Stanford University School of Medicine	\$40,000	Autism Science Foundation
Cell type-specific profiling for autism spectrum disorders	Sims, Peter	Columbia University	\$120,000	Simons Foundation
Using zebrafish and chemical screening to define function of autism genes	Sive, Hazel	Whitehead Institute for Biomedical Research	\$0	Simons Foundation
Effect of abnormal calcium influx on social behavior in autism	Sohal, Vikaas	University of California, San Francisco	\$156,250	Simons Foundation
Studying the neural development of patient-derived stem cells	Song, Hongjun	Johns Hopkins University School of Medicine	\$156,250	Simons Foundation
Identifying impairments in synaptic connectivity in mouse models of ASD	Speed, Haley	University of Texas Southwestern Medical Center	\$56,900	Autism Science Foundation
Neural and cognitive mechanisms of autism	Sur, Mriganka	Massachusetts Institute of Technology	\$0	Simons Foundation

Quantitative analysis of effect of autism-related genes on behavioral regulation	Tecott, Laurence	University of California, San Francisco	\$102,000	Simons Foundation
Effects of oxytocin receptor agonists in mouse models of autism spectrum disorder phenotypes	Teng, Brian	University of North Carolina at Chapel Hill	\$48,500	Autism Speaks
Integrated approach to the neurobiology of autism spectrum disorders	Vaccarino, Flora	Yale University	\$0	Simons Foundation
Cellular and genetic correlates of increased head size in autism spectrum disorder	Vaccarino, Flora	Yale University	\$393,455	National Institutes of Health
Neurobiological signatures of social dysfunction and repetitive behavior	Veenstra-Vanderweele, Jeremy	Vanderbilt University	\$395,672	Autism Speaks
Characterization of the schizophrenia-associated 3q29 deletion in mouse	Warren, Stephen	Emory University	\$404,198	National Institutes of Health
Testing brain overgrowth and synaptic models of autism using NPCs and neurons from patient-derived iPS cells	Wynshaw-Boris, Anthony	University of California, San Francisco	\$315,375	Department of Defense - Autism Research Program
Oxytocin receptors and social behavior	Young, Larry	Emory University	\$440,363	National Institutes of Health

Novel approaches to enhance social cognition by stimulating central oxytocin release	Young, Larry	Emory University	\$149,852	Autism Speaks
Roles of oxytocin and vasopressin in brain	Young, Walter	National Institutes of Health	\$1,990,068	National Institutes of Health
<u>4.S.C</u> Test safety and efficacy of at least five widely used interventions (e.g., nutrition, medications, assisted technologies, sensory integration, medical procedures) that have not been rigorously studied for use in ASD by 2012. <i>IACC Recommended Budget: \$27,800,000 over 5 years.</i>				
Project Title	Principal Investigator	Institution	Funding	Funder
Intranasal oxytocin for the treatment of children and adolescents with autism spectrum disorders (ASD)	Anagnostou, Evdokia	Holland Bloorview Kids Rehabilitation Hospital	\$0	Department of Defense
Tuning anxiety out: Exploring the potential of noise cancellation in ASD sound sensitivity	Atherton, Mark	Brunel University	\$100,000	Autism Speaks
Internet-based trial of omega-3 fatty acids for autism spectrum disorder	Bent, Stephen	University of California, San Francisco	\$62,500	Simons Foundation
Efficacy of N-acetyl cysteine in autism	Berk, Michael	Deakin University	\$146,553	Simons Foundation
Embodied rhythm interventions for children with autism spectrum disorders	Bhat, Anjana	University of Connecticut	\$60,000	Autism Speaks

Metabolic factors affecting gamma synchrony	Casanova, Manuel; Deth, Richard	University of Louisville; Northeastern University	\$25,000	Autism Research Institute
A randomized, controlled trial of intranasal oxytocin as an adjunct to behavioral therapy for autism spectrum disorder	Gabrieli, John	Massachusetts General Hospital	\$0	Department of Defense - Autism Research Program
Effects of therapeutic horseback riding on children and adolescents with autism spectrum disorders	Gabriels, Robin	University of Colorado Denver	\$298,618	National Institutes of Health
Double-blind placebo controlled trial of subcutaneous methyl B12 on behavioral and metabolic measures in children with autism	Hendren, Robert	University of California, Davis	\$0	Autism Speaks
Auditory processing training: A novel treatment for sound hypersensitivities in autism	Lewine, Jeffrey	Cognionics	\$181,154	National Institutes of Health
Training outpatient clinicians to deliver cognitive behavior therapy to children	Reaven, Judy	University of Colorado Denver	\$238,101	National Institutes of Health
Effectiveness of sensory based strategies for improving adaptive behaviors in children with autism	Schaaf, Roseann	Thomas Jefferson University	\$0	Autism Speaks
Electrophysiological and behavioral outcomes of Auditory Integration Training (AIT) in autism	Sokhadze, Estate	University of Louisville	\$10,000	Autism Research Institute
Behavioral and psycho-physiological study of attentional, perceptual, and emotional processing after treatment with ambient prism lenses and	Sokhadze, Estate	University of Louisville	\$0	Autism Research Institute

visuo-motor exercises in children with autism spectrum disorder				
Double masked placebo controlled trial of cholesterol in hypocholesterolemic ASD	Tierney, Elaine	Kennedy Krieger Institute	\$0	Autism Speaks
Daily ratings of ASD Symptoms with digital media devices: An initial validity study	Wood, Jeffrey	University of California, Los Angeles	\$150,000	Autism Speaks
<u>4.S.D</u> Complete two multi-site randomized controlled trials of comprehensive early intervention that address core symptoms, family functioning and community involvement by 2013. <i>IACC Recommended Budget: \$16,700,000 over 5 years.</i>				
Project Title	Principal Investigator	Institution	Funding	Funder
Advancing Social-Communication and Play (ASAP): An intervention program for preschoolers with autism	Boyd, Brian; Watson, Linda	University of North Carolina at Chapel Hill	\$859,119	Department of Education
Strengthening the effects of parent-implemented early intervention to improve symptoms of ASD	Estes, Annette	University of Washington	\$250,080	Autism Speaks
5/5-Randomized trial of parent training for young children with autism	Johnson, Cynthia	University of Pittsburgh	\$236,220	National Institutes of Health
Autism Intervention Research Network on Behavioral Health (AIR-B network)	Kasari, Connie	University of California, Los Angeles	\$1,405,365	Health Resources and Services Administration

2/5-Randomized trial of parent training for young children with autism	Lecavalier, Luc	The Ohio State University	\$213,407	National Institutes of Health
Comprehensive parent-mediated intervention for children with autism in southern Taiwan	Lee, Li-Ching	Johns Hopkins University	\$100,000	Autism Speaks
2/2-Effects of parent-implemented intervention for toddlers with autism spectrum disorder	Lord, Catherine	Weill Cornell Medical College	\$284,658	National Institutes of Health
Efficacy and sustainability of the STAR program	Mandell, David	University of Pennsylvania	\$0	Department of Education
Project DATA: A multisite evaluation of a school-based model for preschoolers with autism	McBride, Bonnie; Schwartz, Ilene	University of Oklahoma Health Sciences Center; University of Washington	\$650,000	Department of Education
Evaluation of a comprehensive community-based intervention for toddlers with ASD	McBride, Bonnie; Schwartz, Ilene	University of Oklahoma Health Sciences Center; University of Washington	\$707,793	Department of Education
PASS: Parent-mediated intervention for autism spectrum disorders (ASD) in South Asia	Rahman, Atif	University of Liverpool	\$149,993	Autism Speaks
Strengthening the effects of parent-implemented early intervention to improve symptoms of ASD	Rogers, Sally	University of California, Davis	\$0.00	Autism Speaks
1/5-Randomized trial of parent training for young children with autism	Scahill, Lawrence	Yale University	\$415,097	National Institutes of Health

Joint attention mediated learning intervention for toddlers with autism spectrum disorders and their families	Schertz, Hannah; Odom, Samuel; Baggett, Kathleen	Indiana University; University of North Carolina at Chapel Hill; University of Kansas	\$879,424	Department of Education
3/5-Randomized trial of parent training for young children with autism	Smith, Tristram	University of Rochester	\$230,655	National Institutes of Health
Examining the efficacy of classroom pivotal response teaching in classroom environments	Stahmer, Aubyn	Rady Children's Hospital Health Center	\$653,534	Department of Education
LEAP–USA follow-up project	Strain, Phillip	University of Colorado Denver	\$399,864	Department of Education
4/5-Randomized trial of parent training for young children with autism	Swiezy, Naomi	Indiana University-Purdue University Indianapolis	\$235,418	National Institutes of Health
1/2-Effects of parent-implemented intervention for toddlers with autism spectrum disorder	Wetherby, Amy	Florida State University	\$427,655	National Institutes of Health
A randomized trial of the SCERTS curriculum for students with autism spectrum disorders in early elementary school classrooms	Wetherby, Amy; Morgan, Lindee	Florida State University	\$749,849	Department of Education
Comprehensive autism program using Strategies for Teaching based on Autism Research	Young, Helen; Falco, Ruth	Portland State University	\$0	Department of Education

4.S.F

Launch five randomized controlled trials of interventions including biological signatures and other measures to predict response, and monitor quality of life and functional outcomes, in each of the following groups:

- Five trials in infants and toddlers by 2013. *IACC Recommended Budget: \$30,000,000 over 5 years.*
- Three randomized controlled trials of interventions for school-aged children and/or adolescents by 2013. *IACC Recommended Budget: \$18,000,000 over 5 years.*
- Three trials for adults by 2014. *IACC Recommended Budget: \$18,000,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
2/3-Atomoxetine placebo and parent training in autism	Aman, Michael	Ohio State University	\$350,730	National Institutes of Health
Predictors of effects of propranolol on language & connectivity in autism	Beversdorf, David	University of Missouri	\$192,150	Health Resources and Services Administration
ACE Network: Early pharmacotherapy guided by biomarkers in autism	Chugani, Diane	Wayne State University	\$1,996,122	National Institutes of Health
Early pharmacotherapy guided by biomarkers in autism (supplement)	Chugani, Diane	Wayne State University	\$260,000	National Institutes of Health
Biomarkers in Autism of Aripiprazole and Risperidone Treatment (BAART)	Devane, C. Lindsay	Medical University of South Carolina	\$634,243	National Institutes of Health
The use of non-invasive brain stimulation to improve social relating in autism spectrum disorders	Enticott, Peter G.	Monash University	\$0	Brain & Behavior Research Foundation

1/3-Atomoxetine placebo and parent training in autism	Handen, Benjamin	University of Pittsburgh	\$269,976	National Institutes of Health
Behavioral and neural underpinnings of learning in autism predict response to intervention	Jones, Rebecca	Weill Cornell Medical College	\$48,000	Autism Speaks
1/3-Multisite RCT of early intervention for spoken communication in autism	Kasari, Connie	University of California, Los Angeles	\$540,947	National Institutes of Health
3/3-Multisite RCT of early Intervention for spoken communication in autism	Landa, Rebecca	Kennedy Krieger Institute	\$813,835	National Institutes of Health
Effects of self-generated experiences on social cognitive development in young children with autism	Landa, Rebecca	Kennedy Krieger Institute	\$149,967	Autism Speaks
A randomized clinical trial of cognitive enhancement therapy for adults with autism spectrum disorders	Minshew, Nancy	University of Pittsburgh	\$0	Department of Defense
Evidence-based cognitive rehabilitation to improve functional outcomes for young adults with autism spectrum disorders	Minshew, Nancy	University of Pittsburgh	\$100,000.00	Autism Speaks
Improving synchronization and functional connectivity in autism spectrum disorders through plasticity-induced rehabilitation training	Pineda, Jaime	University of California, San Diego	\$0	Department of Defense - Autism Research Program
Identifying markers for treatment response to cognitive training in autism spectrum disorders	Schweitzer, Julie	University of California, Davis	\$153,999	Department of Defense - Autism Research Program

3/3-Atomoxetine placebo and parent training in autism	Smith, Tristram	University of Rochester	\$263,639	National Institutes of Health
2/3-Multisite RCT of early intervention for spoken communication in autism	Smith, Tristram	University of Rochester	\$391,019	National Institutes of Health
The effects of behavioral intervention on neurological measures of working memory	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$40,811	Center for Autism and Related Disorders
Randomized clinical trial of mind reading and in vivo rehearsal for children with HFASDs	Thomeer, Marcus	Canisius College	\$20,000	Organization for Autism Research
2/3-Multisite RCT of early intervention for spoken communication in autism	Smith, Tristram	University of Rochester	\$392,336	National Institutes of Health
Integrated play groups: Promoting social communication and symbolic play with peers across settings in children with autism	Wolfberg, Pamela	San Francisco State University	\$0	Autism Speaks

4.S.G

Support at least five studies on interventions for nonverbal individuals with ASD by 2012. Such studies may include:

- Projects examining service-provision models that enhance access to augmentative and alternative communication (AAC) supports in both classroom and adult service-provision settings, such as residential service-provision and the impact of such access on quality of life, communication, and behavior;
- Studies of novel treatment approaches that facilitate communication skills in individuals who are nonverbal, including the components of effective AAC approaches for specific subpopulations of people with ASD; and
- Studies assessing access and use of AAC for children and adults with ASD who have limited or partially limited speech and the impact on

functional outcomes and quality of life.

IACC Recommended Budget: \$3,000,000 over 2 years.

Project Title	Principal Investigator	Institution	Funding	Funder
Transitions from augmentative or alternative communication (AAC) to speech: A pilot investigation	Brady, Nancy	University of Kansas	\$0	Autism Speaks
Making words meet: Using computerized feedback to facilitate word combinations in children with ASD	DeThorne, Laura	University of Illinois at Urbana-Champaign	\$0	Autism Speaks
Contingency analyses of observing and attending in intellectual disabilities	Dube, William	University of Massachusetts Medical School	\$276,181	National Institutes of Health
Emergent communication skills of nonverbal children with autism facilitated by relational responding	Dymond, Simon	Swansea University	\$58,094	Autism Speaks
ACE Center: Inter-regional connectivity in the speech network of minimally verbal children	Guenther, Frank	Boston University	\$365,407	National Institutes of Health

Visualizing voice	Hailpern, Joshua	University of Illinois at Urbana Champaign	\$0	Autism Speaks
ACE Network: Adaptive interventions for minimally verbal children with ASD in the community	Kasari, Connie	University of California, Los Angeles	\$2,755,427	National Institutes of Health
Developmental and augmented intervention for facilitating expressive language	Kasari, Connie; Kaiser, Ann; Landa, Rebecca; Murphy, Susan	University of California, Los Angeles; Vanderbilt University; Kennedy Krieger Institute; University of Michigan	\$0	Autism Speaks
PEAT communication scheduler for autism	Levinson, Richard	Attention Control Systems, Inc.	\$150,000	Department of Education
Optimizing initial communication for children with autism	McIlvane, William	University of Massachusetts Medical School	\$348,461	National Institutes of Health
Customized representations promote language learning for older learners with ASD	Mineo, Beth	University of Delaware	\$76,500	National Institutes of Health
Phase II. Digital Interactive Scene Program for Language in Autism (DISPL-A)	Murphy, Terence	Monarch Teaching Technology, Inc.	\$236,912	National Institutes of Health
A novel parent directed intervention to enhance language development in nonverbal children with ASD	Patterson, Stephanie	University of California, Los Angeles	\$0	Autism Speaks

ACE Center: Testing the efficacy of a novel intervention for minimally verbal children with ASD	Schlaug, Gottfried	Boston University	\$377,590	Autism Speaks
Comparing AMMT vs. Control Therapy in facilitating speech output in nonverbal children with autism	Schlaug, Gottfried	Beth Israel Deaconess Medical Center	\$0	Autism Speaks
Do animations facilitate symbol understanding in children with autism?	Schlosser, Ralf	Northeastern University	\$197,259	Department of Education
<u>4.S.H</u> Support at least two studies that focus on research on health promotion and prevention of secondary conditions in people with ASD by 2012. Secondary conditions of interest include weight issues and obesity, injury, and co-occurring psychiatric and medical conditions. <i>IACC Recommended Budget: \$5,000,000 over 3 years.</i>				
Project Title	Principal Investigator	Institution	Funding	Funder
Growing Up Aware: A parent-based sexuality intervention for children with autism spectrum disorders	Ballan, Michelle	Columbia University	\$20,000	Organization for Autism Research
Treatment of sleep disturbances in young children with autism	Johnson, Cynthia	University of Pittsburgh	\$214,889	National Institutes of Health
Electronic location reporting for individuals with cognitive disabilities	Saripalli, Suman	Intellispeak, LLC	\$561,963	National Institutes of Health
Tailored behavioral intervention for insomnia in children with autism spectrum disorders	Souders, Margaret	University of Pennsylvania	\$159,975	Department of Defense - Autism Research

4.L.A

Complete at least three randomized controlled trials on medications targeting core symptoms in people with ASD of all ages by 2014. *IACC Recommended Budget: \$22,200,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
A multi-site double-blind placebo-controlled trial of memantine vs. placebo in children with autism	Anagnostou, Evdokia	Holland Bloorview Kids Rehabilitation Hospital	\$0	Autism Speaks
Randomized controlled trial of oxytocin treatment for social deficits in children with autism	Carson, Dean	Stanford University	\$50,600	Autism Speaks
Evaluation of a melanocortin agonist to improve social cognition in ASD.	Guastella, Adam	University of Sydney	\$74,675	Simons Foundation
Controlled trial of sertraline in young children with Fragile X Syndrome	Hagerman, Randi	University of California, Davis	\$285,970	Health Resources and Services Administration
Testing the use of helminth worm ova in treating autism spectrum disorders	Hollander, Eric	Montefiore Medical Center	\$124,802	Simons Foundation

Developing treatment, treatment validation, and treatment scope in the setting of an autism clinical trial	Johnson, William	University of Medicine & Dentistry of New Jersey - Robert Wood Johnson Medical School	\$0.00	Department of Defense
ACE Center: Understanding repetitive behavior in autism	McCracken, James	University of California, Los Angeles	\$281,072	National Institutes of Health
New experimental medicine studies: Fast-Fail Trials in autism spectrum disorders	No PI Identified	University of California, Los Angeles	\$115,889	National Institutes of Health
Developing treatment, treatment validation, and treatment scope in the setting of an autism clinical trial	Novotny, Sherie	University of Medicine & Dentistry of New Jersey - Robert Wood Johnson Medical School	\$0.00	Department of Defense
Association of cholinergic system dysfunction with autistic behavior in fragile X syndrome: Pharmacologic and imaging probes	Reiss, Allan	Stanford University	\$92,469	Autism Speaks
Randomized phase 2 trial of RAD001 (an mTOR inhibitor) in patients with tuberous sclerosis complex	Sahin, Mustafa	Childrens Hospital Boston	\$65,000.00	Autism Speaks
ACE Network: Study of Oxytocin in Autism to Improve Reciprocal Social Behaviors (SOARS-B)	Sikich, Linmarie	University of North Carolina at Chapel Hill	\$2,589,347	National Institutes of Health
Developing treatment, treatment validation, and treatment scope in the setting of an autism clinical trial	Stein, Peter	University of Medicine & Dentistry of New Jersey	\$0.00	Department of Defense
Trial of a glutamate antagonist in the treatment of OCD and autistic disorders	Swedo, Susan	National Institutes of Health	\$33,959	National Institutes of Health

4.L.B

Develop interventions for siblings of people with ASD with the goal of reducing risk recurrence by at least 30% by 2014. *IACC Recommended Budget: \$6,700,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Pivotal response treatment for infants at risk for ASD: A pilot intervention	Chawarska, Katarzyna	Yale University	\$83,000	National Institutes of Health
ACE Center: Targeting joint engagement in infants at risk for ASD: Integrating treatment with biomarkers	Kasari, Connie	University of California, Los Angeles	\$279,987	National Institutes of Health

4.L.C

Conduct at least one study to evaluate the safety and effectiveness of medications commonly used in the treatment of co-occurring conditions or specific behavioral issues in people with ASD by 2015. *IACC Recommended Budget: \$10,000,000 over 5 years.*

Project Title	Principal Investigator	Institution	Funding	Funder
Metabolic signature of antipsychotics used in the treatment of autism	Ben-Jonathan, Nira	University of Cincinnati	\$0	Department of Defense - Autism Research Program
Mirtazapine treatment of anxiety in children and adolescents with pervasive developmental disorders	McDougle, Christopher	Indiana University	\$94,242	Autism Speaks

Pharmacotherapy of pervasive developmental disorders	Stigler, Kimberly	Indiana University-Purdue University Indianapolis	\$182,830	National Institutes of Health
<u>4.L.D</u> Support at least five community-based studies that assess the effectiveness of interventions and services in broader community settings by 2015. Such studies may include comparative effectiveness research studies that assess the relative effectiveness of: • Different and/or combined medical, pharmacological, nutritional, behavioral, service-provision, and parent- or caregiver-implemented treatments; • Scalable early intervention programs for implementation in underserved, low-resource, and low-literacy populations; and • Studies of widely used community intervention models for which extensive published data are not available. Outcome measures should include assessment of potential harm as a result of autism treatments, as well as positive outcomes. <i>IACC Recommended Budget: \$37,500,000 over 5 years.</i>				
Project Title	Principal Investigator	Institution	Funding	Funder
Parent-implemented social-pragmatic communication intervention for young children with developmental disabilities	Angell, Maureen	Illinois State University	\$0	Department of Education
iSKILLS : The audio/video guidance repository for life skills	Ayres, Kevin; Rieber, Lloyd; Cihak, David	University of Georgia; University of Tennessee	\$398,120	Department of Education
Animal-assisted intervention for children with autism spectrum disorder	Beck, Alan	Purdue University	\$75,007	National Institutes of Health

Teaching children with autism to identify others' knowledge	Bergstrom, Ryan	Center for Autism and Related Disorders (CARD)	\$11,660	Center for Autism and Related Disorders
Teaching children with autism to deal with jealousy constructively	Bergstrom, Ryan	Center for Autism and Related Disorders (CARD)	\$5,830	Center for Autism and Related Disorders
Peer-mediated interventions for elementary school students with autism spectrum disorders	Blakeley-Smith, Audrey; Hepburn, Susan	University of Colorado Denver	\$8,194	Organization for Autism Research
Related services intervention for expressive and receptive language skills in autism spectrum disorder and in cognitive impairment	Camarata, Steven	Vanderbilt University	\$0	Department of Education
Peer support and peer network interventions to improve peer relationships and school engagement	Carter, Erik; Asmus, Jennifer	Vanderbilt University; University of Wisconsin-Madison	\$641,771	Department of Education
Evaluation of synchronous online parent skill training	Desrochers, Marcie	The Research Foundation of the State University of New York	\$10,000	Organization for Autism Research
Efficacy of a qigong massage methodology for children with ASD aged 3-11 years	Gabrielsen, Kristen	Western Oregon University	\$242,590	Health Resources and Services Administration
Pivotal response group treatment for parents of young children with autism	Hardan, Antonio	Stanford University	\$0	Autism Speaks

Preschool reading and language interventions for children with autism	Hudson, Roxanne	University of Washington	\$299,795	National Institutes of Health
Effectiveness of reciprocal imitation training for adolescents with low-functioning autism	Ingersoll, Brooke	Michigan State University	\$0	Autism Speaks
Improving social-communication, literacy, and adaptive behaviors for young children with autism spectrum disorders	Kamps, Debra; Schwartz, Ilene	University of Kansas; University of Washington	\$745,000	Department of Education
Deployment focused model of JASPER for preschoolers with autism spectrum disorders	Kasari, Connie	University of California, Los Angeles	\$0	Autism Speaks
Developing a 3D-based virtual learning environment for use in schools to enhance the social competence of youth with autism spectrum disorder	Laffey, James; Stichter, Janine	University of Missouri	\$0	Department of Education
Development of a social and communication intervention for preschoolers with autism	Landa, Rebecca	Kennedy Krieger Institute	\$499,966	Department of Education
Using lag schedules of reinforcement to teach play skills to children with autism spectrum disorders	Lang, Russell	Texas State University	\$20,000	Organization for Autism Research
Early intervention in an underserved population	Lord, Catherine	University of Michigan	\$73,219	Autism Speaks
A computer-based social intervention for students with high functioning ASD: Using technology to improve special education	McMillan, Janey	3-C Institute for Social Development	\$899,994	Department of Education

Tactile Awareness Prompting (TAP) System	Mortimer, Bruce	Engineering Acoustics, Inc.	\$74,839	Department of Education
Virtual reality applications for the study of attention and learning in children with autism and ADHD	Mundy, Peter	University of California, Davis	\$369,546	Department of Education
Center on Secondary Education for Students with Autism Spectrum Disorders (CSESA)	Odom, Samuel	University of North Carolina at Chapel Hill	\$2,000,903	Department of Education
Comparison of two comprehensive treatment models for preschool-aged children with autism spectrum disorders and their families	Odom, Samuel; Boyd, Brian	University of North Carolina at Chapel Hill; University of Miami; University of Colorado at Denver	\$0	Department of Education
Teaching children with autism to identify social saliency: Shifting attention	Persicke, Angela	Center for Autism and Related Disorders (CARD)	\$29,150	Center for Autism and Related Disorders
Teaching children with autism to respond to subtle social cues: Desires	Persicke, Angela	Center for Autism and Related Disorders (CARD)	\$29,151	Center for Autism and Related Disorders
Increasing flexibility in children with autism	Ranick, Jennifer	Center for Autism and Related Disorders (CARD)	\$40,811	Center for Autism and Related Disorders
Teaching children with autism self-monitoring skills	Ranick, Jennifer	Center for Autism and Related Disorders (CARD)	\$40,811	Center for Autism and Related Disorders

Teaching children with autism to detect deception	Ranick, Jennifer	Center for Autism and Related Disorders (CARD)	\$24,904	Center for Autism and Related Disorders
The effectiveness of an evidence-based parent training intervention in a community service setting	Stadnick, Nicole	University of California, San Diego	\$0	Autism Speaks
Translating pivotal response training into classroom environments	Stahmer, Aubyn; Schreibman, Laura	Rady Children's Hospital Health Center	\$0	Department of Education
Developing a school-based social competence intervention (SCI)	Stichter, Janine	University of Missouri	\$0	Department of Education
Evaluating the efficacy of the school-based Social Competence Intervention for Adolescents (SCI-A) with high functioning autism	Stichter, Janine	University of Missouri	\$797,258	Department of Education
Design and evaluation of a motion-sensing computer program for teaching children with autism	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$58,301	Center for Autism and Related Disorders
iPrompt to improve teaching students with ASD	Tedesco, Robert	HandHold Adaptive, LLC	\$305,814	Department of Education

Efficacy of the home TEACCHing program for toddlers with autism	Turner-Brown, Lauren	University of North Carolina at Chapel Hill	\$299,995	Health Resources and Services Administration
Expanding the reach of toddler treatment in autism	Vismara, Laurie	University of California, Davis	\$0	Organization for Autism Research
Development of an intervention to enhance the social competencies of children with Asperger's/high functioning autism spectrum disorders	Volker, Martin; Lopata, Christopher; University of Rochester	University at Buffalo, The State University of New York	\$0	Department of Education
Efficacy of a parent-mediated intervention for one-year-olds at risk for autism	Watson, Linda	University of North Carolina at Chapel Hill	\$685,483	Department of Education
Social communication and symbolic play intervention for preschoolers with autism	Watson, Linda; Boyd, Brian	University of North Carolina at Chapel Hill	\$0	Department of Education
ACE Center: Changing developmental trajectories through early treatment	Wetherby, Amy	Emory University	\$390,669	National Institutes of Health
Software to enrich the noun lexicons and lexical learning of children with autism	Wilson, Mary	Laureate Learning Systems, Inc.	\$756,189	National Institutes of Health
Outcomes of a community center-based program for toddlers with autism spectrum disorders	Wong, Connie; Odom, Samuel	University of North Carolina at Chapel Hill	\$9,120	Organization for Autism Research

Cognitive behavioral therapy for core autism symptoms in school-age children	Wood, Jeffrey	University of California, Los Angeles	\$0	Autism Speaks
<u>4. Other</u> Not specific to any objective				
Project Title	Principal Investigator	Institution	Funding	Funder
Development of an executive function-based intervention for autism spectrum disorder	Anthony, Laura	Children's Research Institute	\$255,420	National Institutes of Health
A non-interactive method for teaching noun and verb meanings to young children with ASD	Arunachalam, Sudha	Boston University	\$59,986	Autism Speaks
Teaching children with ASD to tell socially appropriate "white lies"	Bergstrom, Ryan	Center for Autism and Related Disorders (CARD)	\$18,078	Center for Autism and Related Disorders
Robot child interactions as an intervention tool for children with autism	Bhat, Anjana	University of Connecticut	\$341,773	National Institutes of Health
Leadership Education in Neurodevelopmental Disabilities	Blum, Nathan	University of Pennsylvania	\$26,000	Health Resources and Services Administration
Assessing interactive avatars for use with children with autism	Carter, Elizabeth	Carnegie Mellon University	\$76,800	National Institutes of Health

<u>Building a selective inhibitory control tone in autism: An rTMS study</u>	Casanova, Manuel	University of Louisville	\$219,780	National Institutes of Health
<u>Virtual Environment for Social Information Processing (VESIP) Phase II</u>	Crossman, Jacob	Soar Technology, Inc.	\$163,841	Department of Education
<u>Guiding visual attention to enhance discrimination learning</u>	Carlin, Michael	University of Massachusetts Medical School	\$172,842	National Institutes of Health
<u>Delayed motor learning in autism</u>	Dizio, Paul	Brandeis University	\$356,598	National Institutes of Health
<u>Hybrid social communication intervention for children with ASD: Sibling mediation and video modeling</u>	Donaldson, Amy	Portland State University	\$59,998	Autism Speaks
<u>Utility of social robots for promoting joint attention in infants and toddlers with disabilities</u>	Dunst, Carl	Orelena Hawks Puckett Institute	\$0	Department of Education
<u>Exploration of resting-state network dynamics in autism spectrum disorders</u>	Eldaief, Mark Christian	Harvard University	\$0	Brain & Behavior Research Foundation
<u>Identifying socially-based reinforcers for young children with ASD</u>	Gutierrez, Anibal	University of Miami	\$10,000	Organization for Autism Research
<u>Sensory over responsivity & anxiety in youth with autism</u>	Green, Shulamite	University of California, Los Angeles	\$33,337	National Institutes of Health

Using robotics to promote social cognitive skills in the inclusive classroom	Lathan, Corinna	Anthrotronix, Inc.	\$0	Department of Education
Developing a novel treatment for restricted inflexible behavior	Lewis, Mark	University of Florida	\$178,061	National Institutes of Health
Effects of active motor & social training on developmental trajectories in infants at high risk for ASD	Libertus, Klaus	Kennedy Krieger Institute	\$40,000	Autism Science Foundation
Parent-based sleep education program for children with autism spectrum disorders	Malow, Beth	Vanderbilt University	\$0	Health Resources and Services Administration
HCC-Medium: Personalized socially-assistive human-robot interaction: Applications to autism spectrum disorder	Mataric, Maja	University of Southern California	\$19,420	National Science Foundation
Adapting cognitive enhancement therapy for ASD	Minshew, Nancy	University of Pittsburgh	\$213,586	National Institutes of Health
Desensitization techniques for difficult behaviors	Openden, Daniel	Southwestern Autism Research & Resource Center (SARRC)	\$50,000	Southwest Autism Research & Resource Center
SBIR Phase I: A consumer robot designed to help children with autism spectrum disorders practice critical social skills	Patel, Seema	Interbots LLC	\$146,639	National Science Foundation
Increasing variability of verbal initiations through the responses of conversation patterns	Petursdottir, Anna	Texas Christian University	\$20,000	Organization for Autism Research

<u>Adaptive response technology for autism spectrum disorders intervention</u>	Sarkar, Nilanjan	Vanderbilt University	\$371,470	National Institutes of Health
<u>A novel adaptive transactional virtual reality-based assistive technology for autism intervention</u>	Sarkar, Nilanjan	Vanderbilt University	\$104,814	National Science Foundation
<u>Phase 2: Animated Visual Support for Social Support (AViSSS); An interactive virtual experience for social skill development</u>	Smith, Sean	University Of Kansas Center For Research, Inc.	\$299,411	Department of Education
<u>Prosodic and pragmatic training in highly verbal children with autism</u>	Snedeker, Jesse	Harvard University	\$100,000	Simons Foundation
<u>Wireless EEG system for training attention and eye movement in ASD</u>	Townsend, Jeanne	University of California, San Diego	\$271,250	National Institutes of Health
<u>Pocket Potty Program - Toilet training for children with developmental disabilities</u>	Truong, Amy	The Sandbox Learning Company	\$74,730	Department of Education
<u>Treatment of Autism Symptoms in Children (TASC): Initial RCT with active control</u>	Wood, Jeffrey	University of California, Los Angeles	\$385,000	National Institutes of Health

