2011 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	r Institution	Funding	Funder
Treatment of sleep problems in children with autism spectrum disorder with melatonin: A double-blind, placebo-controlled study	Hopkins, Bobbi	Baylor College of Medicine	\$0	Autism Speaks
Autism Intervention Research Network on Physical Health (AIR-P network)	Perrin, James	Massachusetts General Hospital	\$1,797,880	Health Resources and Services Administration
To study why increased copper in individuals with autism normalizes post zinc therapy in individuals with concurrent GI disease	Russo, A.J.	Health Research Institute/Pfeiffer Treatment Center	\$12,435	Autism Research Institute

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	
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The role of SHANK3 in the etiology of autism spectrum disorder	Bangash, M. Ali	Johns Hopkins University	\$0	Autism Speaks
Long-term effects of early-life antipsychotic drug treatment	Bardgett, Mark	Northern Kentucky University	\$406,200	National Institutes of Health
Neurobiology of mouse models for human chr 16p11.2 microdeletion and fragile X	Bear, Mark	Massachusetts Institute of Technology	\$249,480	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	\$31,188	Simons Foundation
The genetic control of social behavior in the mouse	Blanchard, Robert	University of Hawai'i at Manoa	\$342,540	National Institutes of Health
Neurobiology of sociability in a mouse model system relevant to autism	Brodkin, Edward	University of Pennsylvania	\$350,831	National Institutes of Health
Identifying genetic modifiers of rett syndrome in the mouse	Buchovecky, Christine	Baylor College of Medicine	\$0	Autism Science Foundation
Identifying therapeutic targets for autism using SHANK3-deficient mice	Buxbaum, Joseph	Mount Sinai School of Medicine	\$483,773	National Institutes of Health

The role of SHANK3 in autism spectrum disorders	Buxbaum, Joseph	Mount Sinai School of Medicine	\$180,000	Simons Foundation
Animal models of neuropsychiatric disorders	Crawley, Jacqueline	National Institutes of Health	\$1,776,673	National Institutes of Health
Investigation of the role of MET kinase in autism	Dawson, Ted	Johns Hopkins University School of Medicine	\$0	Simons Foundation
Using induced pluripotent stem cells to identify cellular phenotypes of autism	Dolmetsch, Ricardo	Stanford University	\$792,000	National Institutes of Health
Using iPS cells to study genetically defined forms with autism	Dolmetsch, Ricardo	Stanford University	\$100,000	Simons Foundation
16p11.2 deletion mice: Autism-relevant phenotypes and treatment discovery	Dolmetsch, Ricardo	Stanford University	\$0	Simons Foundation
Serotonin, autism, and investigating cell types for CNS disorders	Dougherty, Joseph	Washington University in St. Louis	\$249,000	National Institutes of Health
Role of UBE3A in neocortical plasticity and function	Ehlers, Michael	Duke University	\$367,500	Simons Foundation
Patient iPS cells with copy number variations to model neuropsychiatric disorders	Ellis, James	The Hospital for Sick Children	\$348,624	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	\$200,000	Simons Foundation
Functional genomic dissection of language- related disorders	Fisher, Simon	University of Oxford	\$320,076	Simons Foundation
Validating electrophysiological endophenotypes as tranlational biomarkers of autism	Gandal, Michael	University of Pennsylvania	\$28,049	National Institutes of Health
Identification of autism genes that regulate synaptic Nrx/Nlg signaling complexes	Garner, Craig	Stanford University	\$231,066	National Institutes of Health
Genomic imbalances at the 22q11 locus and predisposition to autism	Gogos, Joseph	Columbia University	\$200,000	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	\$560,625	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	\$368,475	National Institutes of Health

The role of glutamate receptor intereacting proteins in autism	Huganir, Richard	Johns Hopkins University School of Medicine	\$62,500	Simons Foundation
Cellular and molecular pathways of cortical afferentation in autism spectrum disorders	Jabaudon, Denis	University of Geneva	\$15,000	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	\$542,684	Department of Defense - Autism Research Program
Investigating the effects of chromosome 22q11.2 deletions	Karayiorgou, Maria	Columbia University	\$300,000	Simons Foundation
Control of synaptic protein synthesis in the pathogenesis and therapy of autism	Kelleher, Raymond	Massachusetts General Hospital	\$301,087	Simons Foundation
Animal model of speech sound processing in autism	Kilgard, Michael	University of Texas at Dallas	\$283,249	National Institutes of Health
Impact of an autism associated mutation in DACT1 on brain development and behavior	Kivimae, Saul	University of California, San Francisco	\$0	Brain & Behavior Research Foundation

Developing a new model system to study mechanisms of attention control	Knudsen, Eric	Stanford University	\$60,000	Simons Foundation
Shank3 mutant characterization in vivo	Kouser, Mehreen	University of Texas Southwestern Medical Center	\$28,000.00	Autism Speaks
Behavioral and physiological consequences of disrupted Met signaling	Levitt, Pat	University of Southern California	\$800,000.00	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	\$51,640	Simons Foundation
Serotonin, corpus callosum, and autism	Lin, Rick	University of Mississippi Medical Center	\$300,218	National Institutes of Health
Interaction between MEF2 and MECP2 in the pathogenesis of autism spectrum disorders - 1	Lipton, Stuart	Burnham Institute	\$0.00	Department of Defense
Using Drosophila to model the synaptic function of the autism-linked NHE9	Littleton, J. Troy	Massachusetts Institute of Technology	\$75,000	Simons Foundation
Insight into MeCP2 function raises therapeutic possibilities for Rett syndrome	Lomvardas, Stavros	University of California, San Francisco	\$291,260	National Institutes of Health

Autism iPSCs for studying function and dysfunction in human neural development	Loring, Jeanne	The Scripps Research Institute	\$481,461	National Institutes of Health
Neuropharmacology of motivation and reinforcement in mouse models of autistic spectrum disorders	Malanga, C.J.	University of North Carolina School of Medicine	\$228,965	Autism Speaks
Synaptic deficits of iPS cell-derived neurons from patients with autism	Mao, Rong	Stanford University	\$86,446	National Institutes of Health
A probiotic therapy for autism	Mazmanian, Sarkis	California Institute of Technology	\$62,500	Simons Foundation
Modeling and pharmacologic treatment of autism spectrum disorders in Drosophila	McDonald, Thomas	Albert Einstein College of Medicine of Yeshiva University	\$0	Autism Speaks
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	\$31,250	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
Interaction between MEF2 and MECP2 in the pathogenesis of autism spectrum disorders -2	Nakanishi, Nobuki	Burnham Institute	\$0.00	Department of Defense

A mouse model for human chromosome 7q11.23 duplication syndrome	Osborne, Lucy	University of Toronto	\$49,452	Simons Foundation
Systematic analysis of neural circuitry in mouse models of autism	Osten, Pavel	Cold Spring Harbor Laboratory	\$74,991	Simons Foundation
Vicarious neural activity, genetic differences and social fear learning	Panksepp, Jules	Oregon Health & Science University	\$51,326	National Institutes of Health
Novel probiotic therapies for autism	Patterson, Paul	California Institute of Technology	\$0	Department of Defense
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
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	\$0	Simons Foundation
Novel genetic animal models of autism	Powell, Craig	University of Texas Southwestern Medical Center	\$336,813	National Institutes of Health
Neuroligin function in vivo: Implications for autism and mental retardation	Powell, Craig	University of Texas Southwestern Medical Center	\$388,575	National Institutes of Health

Animal models of autism: Pathogenesis and treatment	Powell, Craig	University of Texas Southwestern Medical Center	\$0	Autism Speaks
Mechanisms of stress-enhanced aversive conditioning	Radulovic, Jelena	Northwestern University	\$381,250	National Institutes of Health
Genetic models of serotonin transporter regulation linked to mental disorders	Ramamoorthy, Sammanda	Medical University of South Carolina	\$219,038	National Institutes of Health
Role of a novel Wnt pathway in autism spectrum disorders	Reichardt, Louis	University of California, San Francisco	\$600,000	Simons Foundation
Studies of pediatrics patients with genetic and metabolic disorders	Rennert, Owen	National Institutes of Health	\$1,546,115	National Institutes of Health
A novel cell-based assay for autism research and drug discovery	Restifo, Linda	University of Arizona	\$0	Autism Speaks
Adverse prenatal environment and altered social and anxiety-related behaviors	Reyes, Teresa	University of Pennsylvania	\$0	Brain & Behavior Research Foundation
Novel strategies to manipulate Ube3a expression for the treatment of autism and Angelman syndrome	Roth, Bryan	University of North Carolina at Chapel Hill	\$0.00	Department of Defense
The genetic and neuroanatomical origin of social behavior	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	\$764,776	National Institutes of Health
Mice lacking Shank postsynaptic scaffolds as an animal model of autism	Sheng, Morgan	Massachusetts Institute of Technology	\$0	Simons Foundation
Using zebrafish and chemical screening to define function of autism genes	Sive, Hazel	Whitehead Institute for Biomedical Research	\$199,999	Simons Foundation
Characterization of autism susceptibility genes on chromosome 15q11-13	Smith, Stephen	Beth Israel Deaconess Medical Center	\$51,326	National Institutes of Health
Effect of abnormal calcium influx on social behavior in autism	Sohal, Vikaas	University of California, San Francisco	\$31,250	Simons Foundation
Studying the neural development of patient- derived stem cells	Song, Hongjun	Johns Hopkins University School of Medicine	\$31,250	Simons Foundation
Identifying impairments in synaptic connectivity in mouse models of ASD	Speed, Haley	University of Texas Southwestern Medical Center	\$0	Autism Science Foundation
Neural and cognitive mechanisms of autism	Sur, Mriganka	Massachusetts Institute of Technology	\$0	Simons Foundation
Integrated approach to the neurobiology of autism spectrum disorders	Vaccarino, Flora	Yale University	\$116,672	Simons Foundation

Cellular and genetic correlates of increased head size in autism spectrum disorder	Vaccarino, Flora	Yale University	\$405,041	National Institutes of Health
Murine genetic models of autism	Veenstra- Vanderweele, Jeremy	Vanderbilt University	\$142,791	National Institutes of Health
Neurobiological signatures of social dysfunction and repetitive behavior	Veenstra- Vanderweele, Jeremy	Vanderbilt University	\$ 389,854	Autism Speaks
Vasopressin receptors and social attachment	Young, Larry	Emory University	\$121,500.00	National Institutes of Health
Central vasopressin receptors and affiliation	Young, Larry	Emory University	\$25,000	National Institutes of Health
Central vasopressin receptors and affiliation	Young, Larry	Emory University	\$360,225	National Institutes of Health
Novel approaches to enhance social cognition by stimulating central oxytocin release	Young, Larry	Emory University	\$0.00	Autism Speaks
Regulation of gene expression in the brain	Young, Walter	National Institutes of Health	\$2,003,514	National Institutes of Health

4.S.C

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. *IACC Recommended Budget:* \$27,800,000 over 5 years.

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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	\$0.00	Department of Defense
Writing instruction for children with autism spectrum disorders: A study of self-regulation and strategy use	Asaro-Saddler, Kristie	University at Albany, State University of New York	\$9,723	Organization for Autism Research
Folate rechallenge: A pilot study	Beaudet, Arthur	Baylor College of Medicine	\$6,332	National Institutes of Health
Safety and efficacy of complementary and alternative medicine for autism spectrum disorders	Bent, Stephen	University of California, San Francisco	\$0.00	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
Investigating the efficacy of the Hane Face Window©	Bentley, Chris	Fraser Center	\$2,000	Autism Research Institute
Medical etiologies of neurodevelopmental disorders: Cerebral folate deficiency	Frye, Richard	Children's Learning Institute at the University of Texas Health Science Center at Houston	\$6,900	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	\$1,159,063	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	\$313,179	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	\$103,536	Autism Speaks
Training outpatient clinicians to deliver cognitive behavior therapy to children	Reaven, Judy	University of Colorado Denver	\$255,550	National Institutes of Health
To study the relationship between myeloperoxidase (MPO) deficiency and probiotic therapy in autistic children	Russo, A.J.	Hartwick College	\$11,890	Autism Research Institute
Effectiveness of sensory based strategies for improving adaptive behaviors in children with autism	Schaaf, Roseann	Thomas Jefferson University	\$0	Autism Speaks
Behavioral and psycho-physiological study of attentional, perceptual, and emotional processing after treatment with ambient prism lenses and visuo-motor exercises in children with autism spectrum disorder	Sokhadze, Estate	University of Louisville	\$22,000	Autism Research Institute
Multisensory integration and temporal processing in autism	Stevenson, Ryan	Vanderbilt University	\$48,398	National Institutes of Health
Double masked placebo controlled trial of cholesterol in hypocholesterolemic ASD	Tierney, Elaine	Kennedy Krieger Institute	\$253,653	Autism Speaks
Acupressure and acupuncture as an intervention with children with autism	Warren, Lana	Kennedy Krieger Institute	\$0.00	Autism Speaks

ı	The effects of a reciprocal questioning				
	intervention on the reading comprehension and	Whalon, Kelly	The College of William and	\$0	Organization for
	social communication of students with autism	Whalon, Kelly	Mary	ΦΟ	Autism Research
ı	spectrum disorder				

<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. *IACC Recommended Budget:* \$16,700,000 over 5 years.

Project Title	Principal Investigator	r 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	\$768,670	Department of Education
Strengthening the effects of parent-implemented early intervention to improve symptoms of ASD	Estes, Annette	University of Washington	\$0	Autism Speaks
Comparison of high to low intensity behavioral intervention	Granpeesheh, Doreen	Center for Autism and Related Disorders (CARD)	\$121,029.00	Center for Autism and Related Disorders
5/5-Randomized trial of parent training for young children with autism	Johnson, Cynthia	University of Pittsburgh	\$236,226	National Institutes of Health
Autism Intervention Research Network on Behavioral Health (AIR-B network)	Kasari, Connie	University of California, Los Angeles	\$1,930,288	Health Resources and Services Administration
2/5-Randomized trial of parent training for young children with autism	Lecavalier, Luc	The Ohio State University	\$214,210	National Institutes of Health

2/2-Effects of parent-implemented intervention for toddlers with autism spectrum disorder Lord, Catherine University of Michigan Weill Cornell Medical College \$866,055 National Institutes of Health Efficacy and sustainability of the STAR program Mandell, David University of Pennsylvania \$383,488 Department of Education Evaluation of a comprehensive community-based Intervention for toddlers with ASD McBride, Bonnie; Schwartz, Ilene Weill Cornell Medical College \$866,055 National Institutes of Health Health Department of Education Evaluation of a comprehensive community-based Intervention for toddlers with ASD McBride, Bonnie; Schwartz, Ilene Washington ACE Network: A multi-site randomized study of intensive treatment for toddlers with autism Rogers, Sally University of California, Davis \$2,819,081 Institutes of Health National Institutes of Health National Institutes of Health Attimation of ASD National Institutes of Health Autism Speaks McBride, Bonnie; Schwartz, Ilene Vale University of California, Davis \$0.00 Autism Speaks National Institutes of Health	2/2-Effects of parent-implemented intervention for toddlers with autism spectrum disorder 2/2-Effects of parent-implemented intervention for toddlers with autism spectrum Lord, Catherine Weill Cornell Medical College \$866,055 Efficacy and sustainability of the STAR program Mandell, David University of Michigan University of Michigan	Institutes of Health National Institutes of Health Department of
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ACE Network: A multi-site randomized study of intensive treatment for toddlers with autism ACE Network: A multi-site randomized study of intensive treatment for toddlers with autism Rogers, Sally University of California, Davis \$2,819,081 National Institutes of Health Viniversity of California, Davis University of California, Davis \$438,608 National Institutes of Health Viniversity of California, Davis Mathonal Institutes of Health Viniversity of Rochester Sciences Center; University of California, Davis Viniversity of California, Davis Viniversity of California, Davis Mathonal Institutes of Health Viniversity of Rochester Sciences Center; University of California, Davis Viniversity of California, Davis Viniversity of California, Davis Viniversity of California, Davis National Institutes of Health National Institutes of Health	Linivarity of Oklahama Haalth	
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	3/5-Randomized trial of parent training for young shildren with autism Smith, Tristram University of Rochester \$239,726 I	Institutes of
<u>Leap - USA (Using Science-Based Approaches)</u> Strain, Philip University of Colorado Denver \$0.00 Department of Education	T LASO - LISA ITISINO SCIANCA-RASSO ANNINACINEST. STRAIN PHILIN THINVARSITY OF COLORAGO HANVER STEELD	•

LEAP-USA follow-up project	Strain, Phillip	University of Colorado Denver	\$398,834	Department of Education
4/5-Randomized trial of parent training for young children with autism	Swiezy, Naomi	Indiana University-Purdue University Indianapolis	\$240,121	National Institutes of Health
1/2-Effects of parent-implemented intervention for toddlers with autism spectrum disorder	Wetherby, Amy	Florida State University	\$509,643	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	\$749,772	Department of Education
Comprehensive autism program using Strategies for Teaching based on Autism Research	Young, Helen; Falco, Ruth	Portland State University	\$499,783	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	\$356,865	National Institutes of Health

The mirror neuron system in children with autism	Bernier, Raphael	University of Washington	\$29,539	Simons Foundation
Predictors of effects of propranolol on language & connectivity in autism	Beversdorf, David	University of Missouri	\$188,378	Health Resources and Services Administration
Prelinguistic symptoms of autism spectrum disorders in infancy	Bradshaw, Jessica	University of California, Los Angeles	\$0	Autism Science Foundation
ACE Network: Early pharmacotherapy guided by biomarkers in autism	Chugani, Diane	Wayne State University	\$1,498,245	National Institutes of Health
Biomarkers in Autism of Aripiprazole and Risperidone Treatment (BAART)	Devane, C. Lindsay	Medical University of South Carolina	\$651,465	National Institutes of Health
ACE Center: Risk and protective factors in the development of associated symptoms in autism	Estes, Annette	University of Washington	\$168,117	National Institutes of Health
HCC: Collaborative research: Social-emotional technologies for autism spectrum disorders	Goodwin, Matthew	The Groden Center, Inc.	\$0	National Science Foundation
1/3-Atomoxetine placebo and parent training in autism	Handen, Benjamin	University of Pittsburgh	\$269,971	National Institutes of Health
1/3-Multisite RCT of early intervention for spoken communication in autism	Kasari, Connie	University of California, Los Angeles	\$541,313	National Institutes of Health
3/3-Multisite RCT of early intervention for spoken communication in autism (supplement)	Landa, Rebecca	Kennedy Krieger Institute	\$323,097	National Institutes of Health

3/3-Multisite RCT of early Intervention for spoken communication in autism	Landa, Rebecca	Kennedy Krieger Institute	\$516,493	National Institutes of Health
Effects of self-generated experiences on social cognitive development in young children with autism	Landa, Rebecca	Kennedy Krieger Institute	\$0	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
HCC: Collaborative research: Social-emotional technologies for autism spectrum disorders	Picard, Rosalind	Massachusetts Institute of Technology	\$0	National Science Foundation
Improving synchronization and functional connectivity in autism spectrum disorders through plasticity-induced rehabilitation training	Pineda, Jaime	University of California, San Diego	\$0.00	Department of Defense
The comparison of three behavioral therapy approaches for children with autism	Quinn, Sheila	University of Rhode Island	\$49,369	National Institutes of Health
3/3-Atomoxetine placebo and parent training in autism	Smith, Tristram	University of Rochester	\$274,428	National Institutes of Health

2/3-Multisite RCT of early intervention for spoken communication in autism	Smith, Tristram	University of Rochester	\$392,336	National Institutes of Health
Randomized clinical trial of mind reading and in vivo rehearsal for children with HFASDs	Thomeer, Marcus	Canisius College	\$10,000	Organization for Autism Research
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
Neurocognitive markers of response to treatment in autism	Young, Gregory	University of California, Davis	\$75,983	National Institutes of Health

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 Investigato	r Institution	Funding	Funder
Communication success and AAC: A model of symbol acquisition	Brady, Nancy	University of Kansas	\$332,388	National Institutes of Health
Transitions from augmentative or alternative communication (AAC) to speech: A pilot investigation	Brady, Nancy	University of Kansas	\$60,000	Autism Speaks

Computerized system for phonemic awareness intervention	Connors, Pamela	Biospeech, Inc.	\$216,403	National Institutes of Health
Making words meet: Using computerized feedback to facilitate word combinations in children with ASD	DeThorne, Laura	University of Illinois at Urbana- Champaign	\$89,132	Autism Speaks
Contingency analyses of observing and attending in intellectual disabilities	Dube, William	University of Massachusetts Medical School	\$276,291	National Institutes of Health
Visualizing voice	Hailpern, Joshua	University of Illinois at Urbana Champaign	\$28,000.00	Autism Speaks
Technology support for interactive and collaborative visual schedules	Hayes, Gillian	University of California, Irvine	\$0.00	Autism Speaks
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	\$626,381	Autism Speaks
Optimizing initial communication for children with autism	McIlvane, William	University of Massachusetts Medical School	\$356,014	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

Murphy, Terence	Monarch Teaching Technology, Inc.	\$484,483	National Institutes of Health
Patterson, Stephanie	University of California, Los Angeles	\$28,000.00	Autism Speaks
Schlaug, Gottfried	Beth Israel Deaconess Medical Center	\$60,000	Autism Speaks
Schlosser, Ralf	Northeastern University	\$197,259	Department of Education
	Patterson, Stephanie Schlaug, Gottfried	Patterson, Stephanie University of California, Los Angeles Schlaug, Gottfried Beth Israel Deaconess Medical Center	Patterson, Stephanie University of California, Los Angeles \$28,000.00 Schlaug, Gottfried Beth Israel Deaconess Medical Center \$60,000

<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. *IACC Recommended Budget: \$5,000,000 over 3 years.*

Project Title	Principal Investigato	r Institution	Funding	Funder
Treatment of sleep disturbances in young children with autism	Johnson, Cynthia	University of Pittsburgh	\$222,265	National Institutes of Health

<u>4.L.A</u>

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	r Institution	Funding	Funder
Testing the use of helminth worm ova in treating autism spectrum disorders	Hollander, Eric	Montefiore Medical Center	\$0	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	\$257,803	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
ACE Center: The pharmacogenetics of treatment for insistence sameness in autism	Owley, Thomas	University of Illinois at Chicago	\$378,379	National Institutes of Health
Association of cholinergic system dysfunction with autistic behavior in fragile X syndrome: Pharmacologic and imaging probes	Reiss, Allan	Stanford University	\$91,292	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
Clinical Trials Network	Staff Member	Autism Speaks (AS)	\$0.00	Autism Speaks

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	\$352,969	National Institutes of Health

<u>4.L.B</u>

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 Investigato	r Institution	Funding	Funder
Preventing autism via very early detection and intervention	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$14,256.00	Center for Autism and Related Disorders
Executive functioning, theory of mind, and neurodevelopmental outcomes	Warren, Zachary	Vanderbilt University Medical Center	\$0	Simons Foundation

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 Investigato	r Institution	Funding	Funder
2/4-RUPP autism network: Guanfacine for the treatment of hyperactivity in PDD	King, Bryan	Seattle Children's Hospital	\$311,729	National Institutes of Health
3/4-RUPP autism network: Guanfacine for the treatment of hyperactivity in PDD	McCracken, James	University of California, Los Angeles	\$393,205	National Institutes of Health

1/4-RUPP autism network: Guanfacine for the treatment of hyperactivity in PDD	McDougle, Christopher	Indiana University-Purdue University Indianapolis	\$337,175	National Institutes of Health
Mirtazapine treatment of anxiety in children and adolescents with pervasive developmental disorders	McDougle, Christopher	Indiana University	\$99,993	Autism Speaks
Targeted pharmacologic interventions for autism	McDougle, Christopher	Indiana University-Purdue University Indianapolis	\$363,488	National Institutes of Health
4/4-RUPP Autism Network: Guanfacine for the treatment of hyperactivity in PDD	Scahill, Lawrence	Yale University	\$556,007	National Institutes of Health
Pharmacotherapy of pervasive developmental disorders	Stigler, Kimberly	Indiana University-Purdue University Indianapolis	\$184,540	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.

IACC Recommended Budget: \$37,500,000 over 5 years.

Project Title	Principal Investigato	r Institution	Funding	Funder
Parent-implemented social-pragmatic communication intervention for young children with developmental disabilities	Angell, Maureen	Illinois State University	\$302,254	Department of Education

iSKILLS: The audio/video guidance repository for life skills	Ayres, Kevin	University of Georgia	\$389,442	Department of Education
Peer-mediated interventions for elementary school students with autism spectrum disorders	Blakeley-Smith, Audrey	University of Colorado Denver	\$10,000.00	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	\$310,894	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	\$622,904	Department of Education
Pivotal response group treatment for parents of young children with autism	Hardan, Antonio	Stanford University	\$99,883	Autism Speaks
Effectiveness of reciprocal imitation training for adolescents with low-functioning autism	Ingersoll, Brooke	Michigan State University	\$56,249	Autism Speaks
Improving social-communication, literacy, and adaptive behaviors for young children with autism spectrum disorders	Kamps, Debra	University of Kansas	\$744,999	Department of Education
ACE Center: Optimizing social and communication outcomes for toddlers with autism	Kasari, Connie	University of California, Los Angeles	\$303,029	National Institutes of Health
Deployment focused model of JASPER for preschoolers with autism spectrum disorders	Kasari, Connie	University of California, Los Angeles	\$150,000	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	University of Missouri	\$498,378	Department of Education

Parent-mediated vs. center-based intervention for toddlers with ASD: An RCT	Landa, Rebecca	Kennedy Krieger Institute	\$0	Health Resources and Services Administration
Implementing evidence-based social skills interventions in public school settings	Locke, Jill	University of Pennsylvania/Children's Hospital of Philadelphia	\$0	Autism Science Foundation
Early intervention in an underserved population	Lord, Catherine	University of Michigan	\$73,763.00	Autism Speaks
A randomized control study of relationship focused intervention with young children with ASD	Mahoney, Gerald	Case Western Reserve University	\$149,213	National Institutes of Health
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	\$149,993	Department of Education
Comparison of two comprehensive treatment models for preschool-aged children with autism spectrum disorders and their families	Odom, Samuel	University of North Carolina at Chapel Hill	\$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

Randomized controlled trial of the P.L.A.Y. Project intervention for autism	Solomon, Richard	Solomon, Richard MD, PLC	\$546,588	National Institutes of Health
The effectiveness of an evidence-based parent training intervention in a community service setting	Stadnick, Nicole	University of California, San Diego	\$28,000.00	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	\$358,118	Department of Education
iPrompt to improve teaching students with ASD	Tedesco, Robert	HandHold Adaptive, LLC	\$271,835	Department of Education
Efficacy of the home TEACCHing program for toddlers with autism	Turner-Brown, Lauren	University of North Carolina at Chapel Hill	\$299,997	Health Resources and Services Administration
Expanding the reach of toddler treatment in autism	Vismara, Laurie	University of California, Davis	\$10,000	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

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
Efficacy of a parent-mediated intervention for one-year-olds at risk for autism	Watson, Linda	University of North Carolina at Chapel Hill	\$661,373	Department of Education
Outcomes of a community center-based program for toddlers with autism spectrum disorders	Wong, Connie; Odom, Samuel	University of North Carolina at Chapel Hill	\$10,000	Organization for Autism Research
Cognitive behavioral therapy for core autism symptoms in school-age children	Wood, Jeffrey	University of California, Los Angeles	\$150,000	Autism Speaks

4. Other

Not specific to any objective

Project Title	Principal Investigato	r 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
Teaching children with ASD to tell socially appropriate "white lies"	Bergstrom, Ryan	Center for Autism and Related Disorders (CARD)	\$18,078.00	Center for Autism and Related Disorders

Robot child interactions as an intervention tool for children with autism	Bhat, Anjana	University of Connecticut	\$353,250	National Institutes of Health
Evaluating differential patterns of dishabituation in children with ASD	Bishop, Michele	Center for Autism and Related Disorders (CARD)	\$17,025.00	Center for Autism and Related Disorders
Leadership Education in Neurodevelopmental <u>Disabilities</u>	Blum, Nathan	University of Pennsylvania	\$26,000	Health Resources and Services Administration
MRI: Acquisition of instruments for interaction, learning, and perception in virtual environments	Bodenheimer, Robert	Vanderbilt University	\$0	National Science Foundation
Guiding visual attention to enhance discrimination learning	Carlin, Michael	University of Massachusetts Medical School	\$172,842	National Institutes of Health
Building a selective inhibitory control tone in autism: An rTMS study	Casanova, Manuel	University of Louisville	\$219,780	National Institutes of Health
Virtual Environment for Social Information Processing (VESIP) Phase II	Crossman, Jacob	Soar Technology, Inc.	\$335,758	Department of Education
Autism and the development of relational awareness	Diamond, Adele	University of British Columbia	\$580,924	National Institutes of Health
Delayed motor learning in autism	Dizio, Paul	Brandeis University	\$356,598	National Institutes of Health
Utility of social robots for promoting joint attention in infants and toddlers with disabilities	Dunst, Carl	Orelena Hawks Puckett Institute	\$199,910	Department of Education

Sensory over responsivity & anxiety in youth with autism	Green, Shulamite	University of California, Los Angeles	\$33,337	National Institutes of Health
Identifying socially-based reinforcers for young children with ASD	Gutierrez, Anibal	University of Miami	\$20,000	Organization for Autism Research
Improving emotion recognition skills in children with ASD: A test of new intervention	Hobden, Karen	Wayne State University	\$10,000	Organization for Autism Research
Establishing conditioned reinforcers for children with ASD	Kenzer, Amy	Center for Autism and Related Disorders (CARD)	\$43,056.00	Center for Autism and Related Disorders
Virtual environment for social information processing (VESIP)	Knudsen, Keith	Soar Technology, Inc.	\$0	Department of Education
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	\$215,346	National Institutes of Health
Contingency manipulation in discrete trial interventions for children with autism	Lionello-Denolf, Karen M	University of Massachusetts Medical School	\$171,215	National Institutes of Health
Genetic components influencing the feline - human social bond	Lyons, Leslie	University of California, Davis	\$73,680	National Institutes of Health
Daily living and community skills video game for children with developmental disabilities	Maguire, Amy	Sandbox Learning Company	\$0	Department of Education

Parent-based sleep education program for children with autism spectrum disorders	Malow, Beth	Vanderbilt University	\$295,434	Health Resources and Services Administration
The Autism Curriculum Encyclopedia® (ACE®)	Mansfield, Renee	New England Center for Children, Inc.	\$0	Department of Education
HCC-Medium: Personalized socially-assistive human-robot interaction: Applications to autism spectrum disorder	Mataric, Maja	University of Southern California	\$28,756	National Science Foundation
Comparative effectiveness of therapies for children with autism spectrum disorders	McPheeters, Melissa	Agency for Healthcare Research and Quality and Vanderbilt University	\$0.00	Agency for Healthcare Research and Quality
Adapting cognitive enhancement therapy for ASD	Minshew, Nancy	University of Pittsburgh	\$198,582	National Institutes of Health
Desensitization techniques for difficult behaviors	Openden, Daniel	Southwestern Autism Research & Resource Center (SARRC)	\$50,000	Southwest Autism Research & Resource Center
An interactive social tutoring system to improve and measure social goals for students with high functioning autism spectrum disorders	Orenstein Davis, Naomi	3-C Institute for Social Development	\$0	Department of Education
Adaptive response technology for autism spectrum disorders intervention	Sarkar, Nilanjan	Vanderbilt University	\$349,876	National Institutes of Health
A novel adaptive transactional virtual reality- based assistive technology for autism intervention	Sarkar, Nilanjan	Vanderbilt University	\$116,875	National Science Foundation

ACE Center: Clinical Phenotype: Treatment Response Core	Schreibman, Laura	University of California, San Diego	\$176,168	National Institutes of Health
Phase 2: Animated Visual Support for Social Support (AViSSS); An interactive virtual experience for social skill development	Smith, Sean	University Of Kansas Center For Research, Inc.	\$248,001	Department of Education
Animated Visual Supports for Social Skills (AVISSS)	Smith, Sean	University of Kansas Medical Center Research Institute, Inc.	\$0	Department of Education
Teaching children with ASD to understand sarcasm	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$40,811	Center for Autism and Related Disorders
Teaching children with ASD to understand metaphor	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$53,863	Center for Autism and Related Disorders
A cognitive-behavioral intervention for children with autism spectrum disorders	White, Susan	Virginia Polytechnic Institute and State University	\$116,765	National Institutes of Health