

2013 Portfolio Analysis Projects

QUESTION 4: WHICH TREATMENTS AND INTERVENTIONS WILL HELP?

2013 Projects: 268

2013 Funding: \$58,065,840

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.*

2013 Projects: 6

2013 Funding: \$1,687,680

Project Title	Principal Investigator	Institution	Funding	Funder
A Controlled Trial of Transcendental Meditation to Treat Anxiety and Stress Among Adolescents with Autism Spectrum Disorders	Black, David	Center for Autism Assessment and Treatment	\$10,400	Autism Research Institute
Anxiety treatment for children with autism and intellectual disability	Daniel, John	University of California, Los Angeles	\$27,460	Autism Speaks
Autism Intervention Research Network on Physical Health (AIR-P network)	Perrin, James	Massachusetts General Hospital	\$1,139,942	Health Resources and Services Administration
The effects of intranasal oxytocin on social cognition and neural activity	Young, Larry	Emory University	\$421,790	National Institutes of Health
Sleep education program for adolescents with autism spectrum disorders	Loring, Whitney	Vanderbilt University	\$20,000	Organization for Autism Research
Treating autism and epileptic discharges with valproic acid	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.*

2013 Projects: 86

2013 Funding: \$14,344,873

Project Title	Principal Investigator	Institution	Funding	Funder
Role of astrocytic glutamate transporter GLT1 in fragile X	Higashimori, Haruki	Tufts University	\$0	Autism Science Foundation
Using induced-pluripotent stem cells to study Phelan McDermid Syndrome	Shcheglovitov, Oleksandr	Stanford University School of Medicine	\$0	Autism Science Foundation
Identifying high-impact therapeutic targets for autism spectrum disorders using rat models	Buxbaum, Joseph	Mount Sinai School of Medicine	\$137,173	Autism Speaks
Preclinical Autism Consortium for Therapeutics	Crawley, Jacqueline	University of California, Davis	\$94,331	Autism Speaks
Preclinical Autism Consortium for Therapeutics (PACT)	Crawley, Jacqueline	University of California, Davis	\$200,894	Autism Speaks
Functional study of synaptic scaffold protein SHANK3 and autism mouse model	Jiang, Yong-hui	Duke University	\$0	Autism Speaks
Evaluating hyperserotonemia as a biomarker of sensory dysfunction in autism spectrum disorder	Muller, Christopher	Vanderbilt University	\$28,600	Autism Speaks
Integrative system biology of iPSC-induced neurons for identifying novel drug targets	Pati, Soumya	Baylor College of Medicine	\$56,900	Autism Speaks
Rat knockout models of ASD	Paylor, Rich	Baylor College of Medicine	\$0	Autism Speaks
Preclinical Autism Consortium for Therapeutics (PACT) at Baylor College of Medicine	Paylor, Rich	Baylor College of Medicine	\$98,351	Autism Speaks
Mechanism and treatment of ASD related behavior in the Cntnap2 knockout mouse model	Penagarikano, Olga	University of California, Los Angeles	\$60,000	Autism Speaks

Temporally controlled genetic rescue of Shank3 autism model	Powell, Craig	University of Texas Southwestern Medical Center	\$60,000	Autism Speaks
Preclinical Autism Consortium for Therapeutics (PACT)-Boston Children's Hospital Site	Sahin, Mustafa	Boston Children's Hospital	\$91,174	Autism Speaks
Preclinical Autism Consortium for Therapeutics (PACT)- Boston Children's Hospital	Sahin, Mustafa	Boston Children's Hospital	\$172,009	Autism Speaks
Preclinical therapeutic target validation of glutamate receptors in Shank3 models of autism	Speed, Haley	University of Texas Southwestern Medical Center	\$58,900	Autism Speaks
Effects of oxytocin receptor agonists in mouse models of autism spectrum disorder phenotypes	Teng, Brian	University of North Carolina at Chapel Hill	\$50,600	Autism Speaks
Novel approaches to enhance social cognition by stimulating central oxytocin release	Young, Larry	Emory University	\$119,499	Autism Speaks
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
Cellular and molecular pathways of cortical afferentation in autism spectrum disorders	Jabaudon, Denis	University of Geneva	\$45,000	Brain & Behavior Research Foundation
Adverse prenatal environment and altered social and anxiety-related behaviors	Reyes, Teresa	University of Pennsylvania	\$15,000	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	\$0	Department of Defense
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
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
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

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
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
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	\$0	Department of Defense
Effects of chronic intranasal oxytocin	Bales, Karen	University of California, Davis	\$526,020	National Institutes of Health
Modeling the serotonin contribution to autism spectrum disorders	Blakely, Randy	Vanderbilt University Medical Center	\$222,643	National Institutes of Health
Identifying therapeutic targets for autism using Shank3-deficient mice	Buxbaum, Joseph	Mount Sinai School of Medicine	\$466,151	National Institutes of Health
A novel translational model of autism spectrum disorder	Chan, Anthony Wing Sang	Emory University	\$267,750	National Institutes of Health
Serotonin, autism, and investigating cell types for CNS disorders	Dougherty, Joseph	Washington University in St. Louis	\$235,867	National Institutes of Health
Exploring the neuronal phenotype of autism spectrum disorders using induced pluri	Hallmayer, Joachim	Stanford University	\$180,391	National Institutes of Health
Functional analysis of rare variants in genes associated with autism	Hoffman, Ellen	Yale University	\$146,625	National Institutes of Health
Animal model of speech sound processing in autism	Kilgard, Michael	University of Texas at Dallas	\$239,188	National Institutes of Health
Investigating the role of CNTNAP2 gene in vocal learning in mutant songbirds	Lois, Carlos	University of Massachusetts Medical School	\$197,609	National Institutes of Health
Insight into MeCP2 function raises therapeutic possibilities for Rett syndrome	Lomvardas, Stavros	University of California, San Francisco	\$277,269	National Institutes of Health
Vicarious neural activity, genetic differences and social fear learning	Panksepp, Jules	Oregon Health & Science University	\$53,942	National Institutes of Health
Training in translational social neuroscience	Parr, Lisa	Emory University	\$98,163	National Institutes of Health

Novel genetic models of autism	Powell, Craig	University of Texas Southwestern Medical Center	\$415,328	National Institutes of Health
Neuregulin function in vivo: Implications for autism and mental retardation	Powell, Craig	University of Texas Southwestern Medical Center	\$373,032	National Institutes of Health
Striatal synaptic abnormalities in models of autism	Powell, Craig	University of Texas Southwestern Medical Center	\$381,600	National Institutes of Health
Reversing BDNF impairments in Rett mice with TRPC channel activators	Pozzo-Miller, Lucas	University of Alabama at Birmingham	\$256,375	National Institutes of Health
Mechanisms of stress-enhanced aversive conditioning	Radulovic, Jelena	Northwestern University	\$366,000	National Institutes of Health
Tooth pulp as a source for neuronal precursor cells to study neurogenetic disorders	Reiter, Lawrence	University of Tennessee Health Science Center	\$217,125	National Institutes of Health
Studies of genetic and metabolic disorders, autism and premature aging	Rennert, Owen	National Institutes of Health	\$1,446,354	National Institutes of Health
Neurobiological signatures of social dysfunction and repetitive behavior	Veenstra-Vanderweele, Jeremy	Vanderbilt University Medical Center	\$374,400	National Institutes of Health
Characterization of the schizophrenia-associated 3q29 deletion in mouse	Warren, Stephen	Emory University	\$528,118	National Institutes of Health
Oxytocin receptors and social behavior	Young, Larry	Emory University	\$422,748	National Institutes of Health
Roles of oxytocin and vasopressin in brain	Young, Walter	National Institutes of Health	\$1,496,471	National Institutes of Health
Comprehensive Phenotyping of Autism Mouse Models	Abel, Edwin	The University of Pennsylvania	\$416,495	Simons Foundation
Synaptic pathophysiology of 16p11.2 model mice	Bear, Mark	Massachusetts Institute of Technology	\$250,000	Simons Foundation
Role of cadherin 8 in assembling circuits in the prefrontal cortex	Benson, Deanna	Mount Sinai School of Medicine	\$62,376	Simons Foundation
16p11.2 deletion mice: autism-relevant phenotypes and treatment discovery	Crawley, Jacqueline	University of California, Davis	\$200,000	Simons Foundation

Characterization of brain and behavior in 7q11.23 duplication syndrome-Project 1	Crawley, Jacqueline	University of California, Davis	\$90,713	Simons Foundation
Establishing next-generation tools for quantitative behavioral phenotyping	Datta, Sandeep	Harvard Medical School	\$0	Simons Foundation
Dissecting the circuits underlying autism-like behaviors in mice	Feng, Guoping	Massachusetts Institute of Technology	\$175,000	Simons Foundation
Role of Caspr2 (CNTNAP2) in brain circuits - Project 2	Geschwind, Daniel	University of California, Los Angeles	\$0	Simons Foundation
A mouse model of top-down interactions	Gilbert, Charles	The Rockefeller University	\$0	Simons Foundation
16p11.2 deletion mice: Autism-relevant phenotypes and treatment discovery	Hallmayer, Joachim	Stanford University	\$200,000	Simons Foundation
Optical imaging of circuit dynamics in autism models in virtual reality	Harvey, Christopher	Harvard Medical School	\$0	Simons Foundation
The role of glutamate receptor interacting proteins in autism	Huganir, Richard	Johns Hopkins University School of Medicine	\$249,999	Simons Foundation
Investigating the effects of chromosome 22q11.2 deletions	Karayorgou, Maria	Columbia University	\$150,000	Simons Foundation
Understanding copy number variants associated with autism	Katsanis, Nicholas	Duke University Medical Center	\$250,000	Simons Foundation
Control of synaptic protein synthesis in the pathogenesis and therapy of autism	Kelleher, Raymond	Massachusetts General Hospital	\$148,914	Simons Foundation
Functional consequences of disrupted MET signaling	Levitt, Pat	Children's Hospital Los Angeles	\$0	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
Role of Caspr2 (CNTNAP2) in brain circuits - Project 1	Marin, Oscar	King's College London	\$79,675	Simons Foundation
Perinatal choline supplementation as a treatment for autism	Mellott, Tiffany	Boston University	\$0	Simons Foundation
16p11.2: defining the gene(s) responsible	Mills, Alea	Cold Spring Harbor Laboratory	\$175,000	Simons Foundation
16p11.2: Defining the gene(s) responsible (grant 1)	Mills, Alea	Cold Spring Harbor Laboratory	\$104,190	Simons Foundation

Deficits in tonic inhibition and the pathology of autism spectrum disorders	Moss, Stephen	Tufts University	\$62,500	Simons Foundation
PsychoGenics Inc.	No PI listed	PsychoGenics Inc.	\$312,375	Simons Foundation
Characterization of brain and behavior in 7q11.23 duplication syndrome-Core	Osborne, Lucy	University of Toronto	\$164,853	Simons Foundation
Biomarker discovery for low sociability: A monkey model	Parker, Karen	Stanford University	\$62,500	Simons Foundation
Role of Caspr2 (CNTNAP2) in brain circuits-Core	Peles, Elior	Weizmann Institute of Science	\$89,999	Simons Foundation
Small-molecule compounds for treating autism spectrum disorders	Philpot, Ben	University of North Carolina at Chapel Hill	\$175,000	Simons Foundation
Role of UBE3A in neocortical plasticity and function	Philpot, Ben	University of North Carolina at Chapel Hill	\$77,686	Simons Foundation
Cerebellar signaling in mouse models of autism	Raman, Indira	Northwestern University	\$125,000	Simons Foundation
Cell type-specific profiling for autism spectrum disorders	Sims, Peter	Columbia University	\$0	Simons Foundation
Effect of abnormal calcium influx on social behavior in autism	Sohal, Vikaas	University of California, San Francisco	\$62,500	Simons Foundation
Studying the neural development of patient-derived stem cells	Song, Hongjun	Johns Hopkins University School of Medicine	\$62,500	Simons 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	\$0	Simons Foundation
Exploring VIPR2 microduplication linkages to autism in a mouse model	Waschek, James	University of California, Los Angeles	\$60,000	Simons Foundation
Misregulation of microtubule dynamics in Autism	Yuan, Xiaobing	Drexel University	\$60,000	Simons Foundation

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.*

2013 Projects: 22

2013 Funding: \$1,863,225

Project Title	Principal Investigator	Institution	Funding	Funder
Metabolic factors affecting gamma synchrony	Casanova, Manuel; Deth, Richard	University of Louisville; Northeastern University	\$0	Autism Research Institute
Healthy GFCF Modified Atkins Diet for Treating Seizures in Autism	Frye, Richard and James Adams	University of Arkansas & Arizona St. University	\$34,000	Autism Research Institute
Electrophysiological and behavioral outcomes of Auditory Integration Training (AIT) in autism	Sokhadze, Estate	University of Louisville	\$0	Autism Research Institute
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	\$0	Autism Research Institute
The effects of the Hane Face Window© on perceptual processing of children with autism spectrum disorders (ASD)	Yonas, Albert; Corrow, Sherryse	University of Minnesota	\$0	Autism Research Institute
Tuning anxiety out: Exploring the potential of noise cancellation in ASD sound sensitivity	Atherton, Mark	Brunel University	\$0	Autism Speaks
Embodied rhythm interventions for children with autism spectrum disorders	Bhat, Anjana	University of Connecticut	\$60,000	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
Randomized trial of a web-based system for building Individualized Education Plans.	Najdowski, Adel	Center for Autism and Related Disorders (CARD)	\$33,250	Center for Autism and Related Disorders
Using eLearning to train educational staff to implement paired-choice preference assessments	Najdowski, Adel	Center for Autism and Related Disorders (CARD)	\$66,500	Center for Autism and Related Disorders

Validity of the CARD Indirect Functional Analysis.	St. Clair, Megan	Center for Autism and Related Disorders (CARD)	\$45,000	Center for Autism and Related Disorders
Comparing table based instruction with Ipad instruction in the teaching of receptive labels.	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$33,250	Center for Autism and Related Disorders
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
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
Effects of therapeutic horseback riding on children and adolescents with autism spectrum disorders	Gabriels, Robin	University of Colorado Denver	\$285,797	National Institutes of Health
Therapy management software for naturalistic model-based behavioral interventions	Jakobovits, Rex	Experiad, LLC.	\$347,991	National Institutes of Health
Training outpatient clinicians to deliver cognitive behavior therapy to children	Reaven, Judy	University of Colorado Denver	\$211,113	National Institutes of Health
Multisensory integration and temporal processing in autism	Stevenson, Ryan	Vanderbilt University	\$44,080	National Institutes of Health
Testing direct effects of soy daidzein on fragile X phenotypes	Westmark, Cara	University of Wisconsin - Madison	\$75,250	National Institutes of Health
Trial of carnitine therapy in TMLHE deficiency and non-dysmorphic autism	Beaudet, Arthur	Baylor College of Medicine	\$330,439	Simons Foundation
Internet-based trial of omega-3 fatty acids for autism spectrum disorder	Bent, Stephen	University of California, San Francisco	\$0	Simons Foundation
Efficacy of N-acetyl cysteine in autism	Berk, Michael	Deakin University	\$146,555	Simons Foundation

4.S.D

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.*

2013 Projects: 21

2013 Funding: \$10,426,942

Project Title	Principal Investigator	Institution	Funding	Funder
Strengthening the effects of parent-implemented early intervention to improve symptoms of ASD	Estes, Annette	University of Washington	\$256,981	Autism Speaks
Comprehensive parent-mediated intervention for children with autism in southern Taiwan	Lee, Li-Ching	Johns Hopkins University	\$100,000	Autism Speaks
PASS: Parent-mediated intervention for autism spectrum disorders (ASD) in South Asia	Rahman, Atif	University of Liverpool	\$149,916	Autism Speaks
Strengthening the effects of parent-implemented early intervention to improve symptoms of ASD	Rogers, Sally	University of California, Davis	\$253,534	Autism Speaks
Advancing Social-Communication and Play (ASAP): An intervention program for preschoolers with autism	Boyd, Brian; Watson, Linda	University of North Carolina at Chapel Hill	\$886,550	Department of Education
Efficacy and sustainability of the STAR program	Mandell, David	University of Pennsylvania	\$0	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	\$728,423	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
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	\$842,243	Department of Education
Examining the efficacy of classroom pivotal response teaching in classroom environments	Stahmer, Aubyn	Rady Children's Hospital Health Center	\$655,691	Department of Education

LEAP–USA follow-up project	Strain, Phillip	University of Colorado, Denver	\$1	Department of Education
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	\$0	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
Autism Intervention Research Network on Behavioral Health (AIR-B network)	Kasari, Connie	University of California, Los Angeles	\$1,608,284	Health Resources and Services Administration
5/5-Randomized trial of parent training for young children with autism	Johnson, Cynthia	University of Pittsburgh	\$226,771	National Institutes of Health
2/5-Randomized trial of parent training for young children with autism	Lecavalier, Luc	The Ohio State University	\$204,169	National Institutes of Health
ACE Network: Intervention effects of intensity and delivery style for toddlers with ASD	Rogers, Sally	University of California, Davis	\$3,118,971	National Institutes of Health
1/5-Randomized trial of parent training for young children with autism	Scahill, Lawrence	Yale University	\$242,996	National Institutes of Health
3/5-Randomized trial of parent training for young children with autism	Smith, Tristram	University of Rochester	\$65,595	National Institutes of Health
3/5-Randomized trial of parent training for young children with autism	Smith, Tristram	University of Rochester	\$215,249	National Institutes of Health
4/5-Randomized trial of parent training for young children with autism	Swiezy, Naomi	Indiana University-Purdue University Indianapolis	\$221,569	National Institutes of Health

4.S.E

Convene a workshop to advance the understanding of clinical subtypes and treatment personalization (i.e., what are the core symptoms to target for treatment studies) by 2011. *IACC Recommended Budget: \$50,000.*

(This objective was partially completed in 2011)

2013 Projects: 1

2013 Funding: \$5,000

Project Title	Principal Investigator	Institution	Funding	Funder
2013 Dup15q Alliance Scientific Meeting Support	Luschsigner, Kadi	Dup15q Alliance	\$5,000	Simons Foundation

4.S.F

Launch 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 trials in school-aged children and/or adolescents by 2013. *IACC Recommended Budget: \$18,000,000 over 5 years.*
- Three trials in adults by 2014. *IACC Recommended Budget: \$18,000,000 over 5 years.*

Total IACC Recommended Budget: \$66,000,000 over 5 years.

2013 Projects: 13

2013 Funding: \$2,444,294

Project Title	Principal Investigator	Institution	Funding	Funder
Gender and cognitive profile as predictors of functional outcomes in school-aged children with ASD	Moriuchi, Jennifer	Emory University Marcus Autism Center	\$0	Autism Science Foundation
Acamprosate in Youth with Autism Spectrum Disorders	Erickson, Craig	Cincinnati Childrens Hospital Medical Center	\$149,719	Autism Speaks
Behavioral and neural underpinnings of learning in autism predict response to intervention	Jones, Rebecca	Weill Cornell Medical College	\$50,000	Autism Speaks
Effects of self-generated experiences on social cognitive development in young children with autism	Landa, Rebecca	Kennedy Krieger Institute	\$149,997	Autism Speaks
Evidence-based cognitive rehabilitation to improve functional outcomes for young adults with autism spectrum disorders	Minshew, Nancy	University of Pittsburgh	\$0	Autism Speaks
The use of non-invasive brain stimulation to improve social relating in autism spectrum disorders	Enticott, Peter G.	Monash University	\$28,000	Brain & Behavior Research Foundation

The effects of behavioral intervention on neurological measures of working memory	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$55,000	Center for Autism and Related Disorders
A randomized clinical trial of cognitive enhancement therapy for adults with autism spectrum disorders	Minshew, Nancy	University of Pittsburgh	\$0	Department of Defense
Identifying markers for treatment response to cognitive training in autism spectrum disorders	Schweitzer, Julie	University of California, Davis	\$560,000	Department of Defense
1/3-Multisite RCT of early intervention for spoken communication in autism	Kasari, Connie	University of California, Los Angeles	\$515,167	National Institutes of Health
3/3-Multisite RCT of early intervention for spoken communication in autism	Landa, Rebecca	Kennedy Krieger Institute	\$442,594	National Institutes of Health
2/3-Multisite RCT of early intervention for spoken communication in autism	Smith, Tristram	University of Rochester	\$350,924	National Institutes of Health
Brain Imaging Markers of Response to Intervention in Toddlers with Autism	Wolff, Jason	University of North Carolina at Chapel Hill	\$142,893	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.

2013 Projects: 9

2013 Funding: \$3,904,625

Project Title	Principal Investigator	Institution	Funding	Funder
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Emergent communication skills of nonverbal children with autism facilitated by relational responding	Dymond, Simon	Swansea University	\$57,996	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	\$0	Department of Education
Contingency analyses of observing and attending in intellectual disabilities	Dube, William	University of Massachusetts Medical School	\$261,988	National Institutes of Health
ACE Center: Inter-regional connectivity in the speech network of minimally verbal children	Guenther, Frank	Boston University	\$376,136	National Institutes of Health
ACE Network: Adaptive interventions for minimally verbal children with ASD in the community	Kasari, Connie	University of California, Los Angeles	\$2,546,852	National Institutes of Health
Optimizing initial communication for children with autism	McIlvane, William	University of Massachusetts Medical School	\$333,168	National Institutes of Health
Peer-mediated ACC intervention for children with autism: effects on communication	Thiemann-Bourque, Kathy	University of Kansas	\$308,485	National Institutes of Health
An experimental evaluation of matrix training to teach graphic symbol combinations in severe autism	Wendt, Oliver	Purdue University	\$20,000	Organization for Autism Research

4.S.H

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.*

2013 Projects: 3
2013 Funding: \$724,478

Project Title	Principal Investigator	Institution	Funding	Funder
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Tailored behavioral intervention for insomnia in children with autism spectrum disorders	Souders, Margaret	University of Pennsylvania	\$0	Department of Defense
Electronic location reporting for individuals with cognitive disabilities	Saripalli, Suman	Intellispeak, LLC	\$704,478	National Institutes of Health
Growing Up Aware: A parent-based sexuality intervention for children with autism spectrum disorders	Ballan, Michelle	Columbia University	\$20,000	Organization for 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.*

2013 Projects: 12

2013 Funding: \$4,189,239

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	\$53,600	Autism Speaks
Association of cholinergic system dysfunction with autistic behavior in fragile X syndrome: Pharmacologic and imaging probes	Reiss, Allan	Stanford University	\$0	Autism Speaks
Randomized phase 2 trial of RAD001 (an mTOR inhibitor) in patients with tuberous sclerosis complex	Sahin, Mustafa	Boston Children's Hospital	\$0	Autism Speaks
Treatment of Overweight Induced by Antipsychotic Medication in Young People with ASD	Anagnostou, Evdokia	Holland Bloorview Rehabilitation Hospital	\$468,376	Heath Resources and Services Administration
Controlled trial of sertraline in young children with Fragile X Syndrome	Hagerman, Randi	University of California, Davis	\$285,943	Heath Resources and Services Administration

Piloting treatment with insulin-like growth Factor-1 in Phelan-McDermid syndrome	Kolevzon, Alexander	Mount Sinai School of Medicine	\$366,363	National Institutes of Health
ACE Center: Augmenting language interventions for ASD: A translational approach	McCracken, James	University of California, Los Angeles	\$269,087	National Institutes of Health
The role of vasopressin in the social deficits of autism	Parker, Karen	Stanford University	\$235,500	National Institutes of Health
ACE Network: Study of Oxytocin in Autism to Improve Reciprocal Social Behaviors (SOARS-B)	Sikich, Linmarie	University of North Carolina at Chapel Hill	\$2,435,695	National Institutes of Health
Evaluation of a melanocortin agonist to improve social cognition in autism	Guastella, Adam	University of Sydney	\$74,675	Simons Foundation
Testing the use of helminth worm ova in treating autism spectrum disorders	Hollander, Eric	Montefiore Medical Center	\$0	Simons Foundation

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.*

2013 Projects: 2

2013 Funding: \$349,595

Project Title	Principal Investigator	Institution	Funding	Funder
Pivotal response treatment for infants at risk for ASD: A pilot intervention	Chawarska, Katarzyna	Yale University	\$79,900	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	\$269,695	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.*

2013 Projects: 7

2013 Funding: \$665,668

Project Title	Principal Investigator	Institution	Funding	Funder
Human Clinical Trial of IGF-1 in Children with Idiopathic ASD	Kolevzon, Alexander	Icahn School of Medicine at Mount Sinai	\$25,000	Autism Science Foundation
Mirtazapine treatment of anxiety in children and adolescents with pervasive developmental disorders	McDougle, Christopher	Indiana University	\$99,971	Autism Speaks
Metabolic signature of antipsychotics used in the treatment of autism	Ben-Jonathan, Nira	University of Cincinnati	\$0	Department of Defense
2/4-RUPP Autism Network: Guanfacine for the treatment of hyperactivity in PDD	King, Bryan	Seattle Children's Hospital	\$171,791	National Institutes of Health
3/4-RUPP Autism Network: Guanfacine for the treatment of hyperactivity in PDD	McCracken, James	University of California, Los Angeles	\$200,372	National Institutes of Health
1/4-RUPP Autism Network: Guanfacine for the treatment of hyperactivity in PDD	McDougle, Christopher	Indiana University-Purdue University Indianapolis	\$1	National Institutes of Health
4/4-RUPP Autism Network: Guanfacine for the treatment of hyperactivity in PDD	Scahill, Lawrence	Yale University	\$168,533	National Institutes of Health

4.L.D

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.

2013 Projects: 52

2013 Funding: \$11,745,499

Project Title	Principal Investigator	Institution	Funding	Funder
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Using Growth Trajectories To Predict Distal Outcomes in Parent-Implemented Intervention for Toddlers	Guthrie, Whitney	Florida State University	\$29,500	Autism Speaks
Effectiveness of reciprocal imitation training for adolescents with low-functioning autism	Ingersoll, Brooke	Michigan State University	\$0	Autism Speaks
Deployment focused model of JASPER for preschoolers with autism spectrum disorders	Kasari, Connie	University of California, Los Angeles	\$288,364	Autism Speaks
Early intervention in an underserved population	Lord, Catherine	University of Michigan	\$85,420	Autism Speaks
Which placement for which child? Moderators of outcome in an urban early intervention system	Mandell, David	University of Pennsylvania	\$0	Autism Speaks
Parent training to reduce the elopement of children with ASD at home and in the community	McAdam, David	University of Rochester	\$0	Autism Speaks
Cognitive behavioral therapy for core autism symptoms in school-age children	Wood, Jeffrey	University of California, Los Angeles	\$150,000	Autism Speaks
Teaching children with autism to identify others' knowledge	Bergstrom, Ryan	Center for Autism and Related Disorders (CARD)	\$13,650	Center for Autism and Related Disorders
Teaching children with autism to deal with jealousy constructively	Bergstrom, Ryan	Center for Autism and Related Disorders (CARD)	\$22,750	Center for Autism and Related Disorders
Teaching children with autism to identify social saliency: Shifting attention	Persicke, Angela	Center for Autism and Related Disorders (CARD)	\$14,700	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)	\$24,500	Center for Autism and Related Disorders
Teaching children with autism self-monitoring skills	Ranick, Jennifer	Center for Autism and Related Disorders (CARD)	\$22,400	Center for Autism and Related Disorders
Teaching children with autism to detect deception	Ranick, Jennifer	Center for Autism and Related Disorders (CARD)	\$21,000	Center for Autism and Related Disorders

Increasing flexibility in children with autism	Ranick, Jennifer	Center for Autism and Related Disorders (CARD)	\$24,500	Center for Autism and Related Disorders
Design and evaluation of a motion-sensing computer program for teaching children with autism	Tarbox, Jonathan	Center for Autism and Related Disorders (CARD)	\$23,100	Center for Autism and Related Disorders
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	\$0	Department of Education
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	\$0	Department of Education
Dynamic E-Learning to Improve Postsecondary Transition Outcomes for Secondary Students with High Functioning Autism	Childress, Debra	3-C Institute for Social Development	\$150,000	Department of Education
I-CONNECT PLUS: Enhancing Community Participation for Adolescents and Adults with ASD Using Online Instruction, Coaching, and Accessible Self-Management Technologies.	Kamps, Debra	University of Kansas Center for Research, INC.	\$458,224	Department of Education
Improving social-communication, literacy, and adaptive behaviors for young children with autism spectrum disorders	Kamps, Debra; Schwartz, Ilene	University of Kansas; University of Washington	\$0	Department of Education
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	\$499,938	Department of Education
Using Peer Models in the Context of Small-Group Direct Instruction to Teach Social and Academic Skills to Children with Autism	Ledford, Jennifer	Vanderbilt University	\$0	Department of Education

Efficacy of a Comprehensive School-Based Intervention for Children with High-Functioning Autism Spectrum Disorders (HFASDs)	Lopata, Christopher	Canisius College	\$840,477	Department of Education
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	\$0	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	\$384,185	Department of Education
Center on Secondary Education for Students with Autism Spectrum Disorders (CSESA)	Odom, Samuel	University of North Carolina at Chapel Hill	\$2,033,801	Department of Education
Adapting an Evidence-Based Program for Infants and Toddlers at High Risk for Autism	Stahmer, Aubyn	University of California, San Diego	\$364,194	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	\$787,019	Department of Education
Developing a school-based social competence intervention (SCI)	Stichter, Janine	University of Missouri	\$0	Department of Education
Handheld Technology for Speech Development in Students with Autism spectrum Disorders	Tedesco, Robert	HandHold Adaptive, LLC	\$899,857	Department of Education
iPrompt to improve teaching students with ASD	Tedesco, Robert	HandHold Adaptive, LLC	\$0	Department of Education
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
Factors associated with positive outcomes for children and youth with autism: Secondary analysis of data from SEELS and NLTS2	Wagner, Mary; Wei, Xin; Yu, Jennifer	SRI International	\$357,724	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	\$0	Department of Education

Efficacy of a qigong massage methodology for children with ASD aged 3-11 years	Gabrielsen, Kristen	Western Oregon University	\$299,801	Heath Resources and Services Administration
Efficacy of the home TEACCHing program for toddlers with autism	Turner-Brown, Lauren	University of North Carolina at Chapel Hill	\$299,975	Heath Resources and Services Administration
Animal-assisted intervention for children with autism spectrum disorder	Beck, Alan	Purdue University	\$57,383	National Institutes of Health
Preschool reading and language interventions for children with autism	Hudson, Roxanne	University of Washington	\$279,933	National Institutes of Health
ACE Center: Changing developmental trajectories through early treatment	Wetherby, Amy	Emory University	\$642,931	National Institutes of Health
Software to enrich the noun lexicons and lexical learning of children with autism	Wilson, Mary	Laureate Learning Systems, Inc.	\$757,099	National Institutes of Health
Kit for Kids evaluation project: An initial evaluation of evidence-based peer education materials	Campbell, Jonathan	University of Kentucky	\$20,000	Organization for Autism Research
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
Improving Social-Communication and Engagement of Elementary Students with Autism Spectrum Disorders	Dykstra, Jessica	University of North Carolina at Chapel Hill	\$20,000	Organization for Autism Research
Effects of incidental teaching on expressive language of school age children with ASD who use AAC	Finke, Erinn	Pennsylvania State University	\$27,344	Organization for Autism Research
Using lag schedules of reinforcement to teach play skills to children with autism spectrum disorders	Lang, Russell	Texas State University	\$9,278	Organization for Autism Research
Effectiveness of a virtual coach application in social skills training for teens with ASD	Laugeson, Elizabeth	University of California, Los Angeles	\$30,000	Organization for Autism Research
Enhancing traditional group social skill instruction using video-based group instruction tactics	Plavnick, Joshua; Ingersoll, Brooke	Michigan State University	\$20,000	Organization for Autism Research

Expanding the reach of toddler treatment in autism	Vismara, Laurie	University of California, Davis	\$18,569	Organization for Autism Research
A Community-Based Executive Function Intervention for Low-Income Children with ADHD and ASD	Anthony, Laura Gutermuth; Kenworthy, Lauren	Children's Research Institute	\$1,757,884	Patient-Centered Outcomes Research Institute

4.Other

Not specific to Question 4 objectives

2013 Projects: 34

2013 Funding: \$5,714,722

Project Title	Principal Investigator	Institution	Funding	Funder
EPC Systematic Review: Autism Spectrum Disorders - Update	Vanderbilt EP	Vanderbilt EPC	\$225,000	Agency for Healthcare Research Quality
Effects of active motor & social training on developmental trajectories in infants at high risk for ASD	Libertus, Klaus	Kennedy Krieger Institute	\$0	Autism Science Foundation
A non-interactive method for teaching noun and verb meanings to young children with ASD	Arunachalam, Sudha	Boston University	\$58,900	Autism Speaks
Hybrid social communication intervention for children with ASD: Sibling mediation and video modeling	Donaldson, Amy	Portland State University	\$59,997	Autism Speaks
Efficacy of Parent-Child Interaction Therapy with ASD	Handen, Benjamin	University of Pittsburgh	\$0	Autism Speaks
The use of eye-tracking as an outcome measure for an innovative early social intervention for ASD	Koegel, Robert	University of California, Santa Barbara	\$0	Autism Speaks
The BUFFET Program: Building Up Food Flexibility and Exposure Treatment	Kuschner, Emily	Children's Hospital of Philadelphia	\$53,104	Autism Speaks
Training Community Providers to Implement an Evidence-Based Early Intervention Program	Stahmer, Aubyn	University of California, Davis	\$149,569	Autism Speaks

Let's Face It! 2.0: Training the dynamics of facial expressions for children with ASD	Tanaka, James	University of Victoria	\$0	Autism Speaks
Psychiatric Crisis among Youth and Transition-age Adults with Autism Spectrum Disorder	Vasa, Roma	Hugo W. Moser Research at Kennedy Krieger, Inc.	\$0	Autism Speaks
CIHR Chair: Autism Spectrum Disorders Treatment and Care Research	Weiss, Jonathan	York University	\$15,000	Autism Speaks
Exploration of resting-state network dynamics in autism spectrum disorders	Eldaief, Mark Christian	Harvard University	\$30,000	Brain & Behavior Research Foundation
Whole Brain Mapping of the Effects of Intranasal Oxytocin in CNTNAP2 KO Mouse Model of Autism	Kim, Yongsoo	Cold Spring Harbor Laboratory	\$0	Brain & Behavior Research Foundation
Virtual Environment for Social Information Processing (VESIP) Phase II	Crossman, Jacob	Soar Technology, Inc..	\$0	Department of Education
Utility of social robots for promoting joint attention in infants and toddlers with disabilities	Dunst, Carl	Orelena Hawks Puckett Institute	\$0	Department of Education
Using robotics to promote social cognitive skills in the inclusive classroom	Lathan, Corinna	Anthrotronix, Inc.	\$0	Department of Education
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. - - Sped - Special Education Educ Education Administration - Sped - Special Education Educ Education Administration	\$0	Department of Education
Assessing interactive avatars for use with children with autism	Carter, Elizabeth	Carnegie Mellon University	\$72,883	National Institutes of Health
Peers, play and performance to improve social interaction in autism	Corbett, Blythe	Vanderbilt University Medical Center	\$234,000	National Institutes of Health
Atypical effects of reinforcement procedures in ASD	Mcilvane, William	University of Massachusetts Medical School	\$250,000	National Institutes of Health
Adapting cognitive enhancement therapy for ASD	Minshew, Nancy	University of Pittsburgh	\$211,536	National Institutes of Health

Fast-as -new experimental medicine studies: Fast-fail trials in autism spectrum	No PI listed	University of California, Los Angeles	\$2,312,083	National Institutes of Health
Neuroactive steroid GABAA receptor positive modulators for fragile X syndrome	Robichaud, Albert	Sage Therapeutics, Inc.	\$162,500	National Institutes of Health
Adaptive response technology for autism spectrum disorders intervention	Sarkar, Nilanjan	Vanderbilt University Medical Center	\$359,376	National Institutes of Health
Wireless EEG system for training attention and eye movement in ASD	Townsend, Jeanne	University of California, San Diego	\$214,722	National Institutes of Health
Treatment of Autism Symptoms in Children (TASC): Initial RCT with active control	Wood, Jeffrey	University of California, Los Angeles	\$369,600	National Institutes of Health
HCC-Medium: Personalized socially-assistive human-robot interaction: Applications to autism spectrum disorder	Mataric, Maja	University of Southern California	\$8,000	National Science Foundation
SBIR Phase I: A consumer robot designed to help children with autism spectrum disorders practice critical social skills	Patel, Seema	Interbots LLC	\$0	National Science Foundation
A novel adaptive transactional virtual reality-based assistive technology for autism intervention	Sarkar, Nilanjan	Vanderbilt University	\$0	National Science Foundation
Individualized Adaptive Robot-Mediated Intervention Architecture for Autism	Sarker, Nilanjan	Vanderbilt University	\$312,753	National Science Foundation
Increasing variability of verbal initiations through the responses of conversation patterns	Petursdottir, Anna	Texas Christian University	\$2,449	Organization for Autism Research
Home-based system for biobehavioral recording of individuals with autism	Goodwin, Matthew	Northeastern University	\$353,250	Simons Foundation
Prosodic and pragmatic training in highly verbal children with autism	Snedeker, Jesse	Harvard University	\$200,000	Simons Foundation
Exploring links between multisensory and cognitive function in autism	Wallace, Mark	Vanderbilt University	\$60,000	Simons Foundation