



Alice Kau, Ph.D. Intellectual and Developmental Disabilities Branch NICHD April 9, 2013

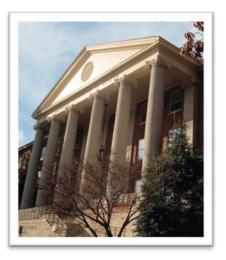




## **NIH Autism Programs: History**

- Collaborative Programs of Excellence in Autism (CPEA)
  - 1997-2007
  - Funded by NICHD & NIDCD
- Studies to Advance Autism Research and Treatment (STAART)
  - 2002-2008
  - Mandated by the Children's Health Act of 2000
  - Funded by NICHD, NIDCD, NIEHS, NIMH, NINDS
  - Coordinated by the NIH Autism Coordinating Committee



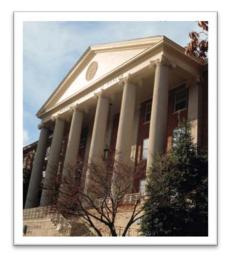




## **Autism Centers of Excellence Program**

- Consolidation of CPEA and STAART
- Funded by NICHD, NIDCD, NIEHS, NIMH, NINDS
- Funding started in FY07 for 5 years
- Renewed in FY12









# Autism Centers of Excellence Program

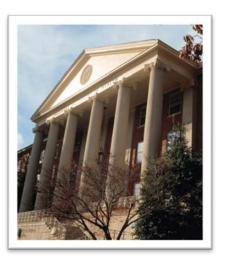
- ACE Centers
  - Integrative, multi-disciplinary, coordinated research program
  - Cohesion and synergy across subprojects and cores



A minimum of 3 but no more than 6 research projects

#### ACE Networks

- Multi-site projects for optimal design and conduct of the study
- Focusing on a specific topic of research
- Commonly used for recruitment purpose



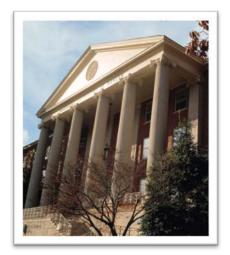




## **ACE Program: Requirements**

- Research training
- Active dissemination of research findings
- Supporting the IACC Strategic Plan
- Data sharing via National Database for Autism Research



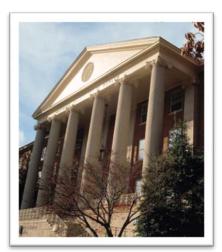




# ACE Program: Common Measures

- Medical/Family History
- Physical/Neurological examination
- Genetic Test Results
- Autism Diagnostic Interviewrevised
- Autism Diagnostic Observation Schedule
- IQ or developmental assessment measures with nonverbal and verbal components









# **ACE Program**

### FY12 Competition Funded Sites





#### **Autism Centers of Excellence Program**



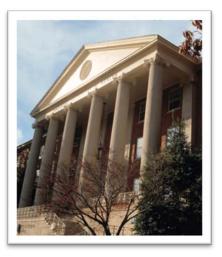
• = ACE Networks and Principal Investigators (8)



## **ACE Centers**

#### Susan Bookheimer, Ph.D. UCLA

Biomarkers of Developmental Trajectories and Treatment in ASD



#### • Ami Klin, Ph.D. Emory University, Atlanta

Mechanisms of Risks and Resilience in ASD: Ontogeny, Phylogeny and Gene Disruption

#### • Helen Tager–Flusberg, Ph.D. Boston University

Minimally Verbal ASD: From Basic Mechanisms to Innovative Interventions



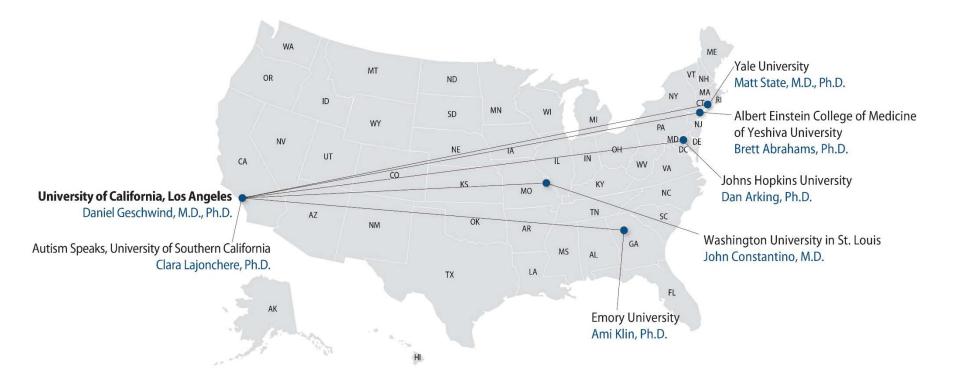


# **ACE Networks**





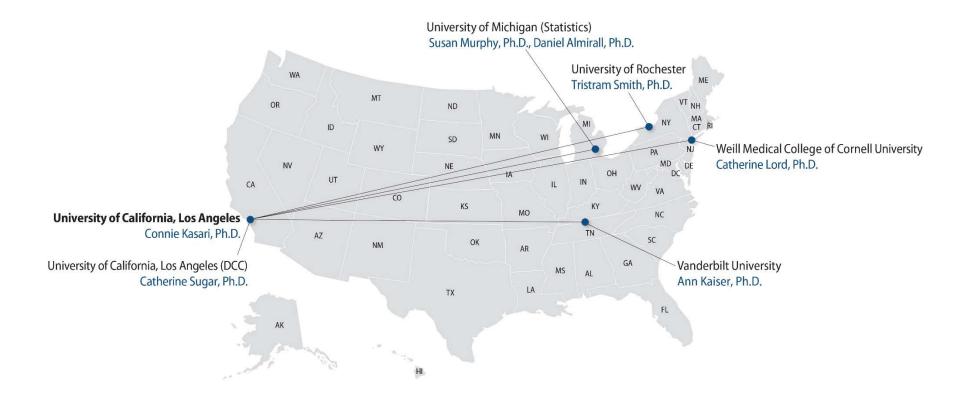
(Daniel Geschwind, M.D., Ph.D., Principal Investigator)

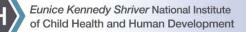




# Adaptive Interventions for Minimally Verbal Children with ASD in the Community

(Connie Kasari, Ph.D., Principal Investigator)

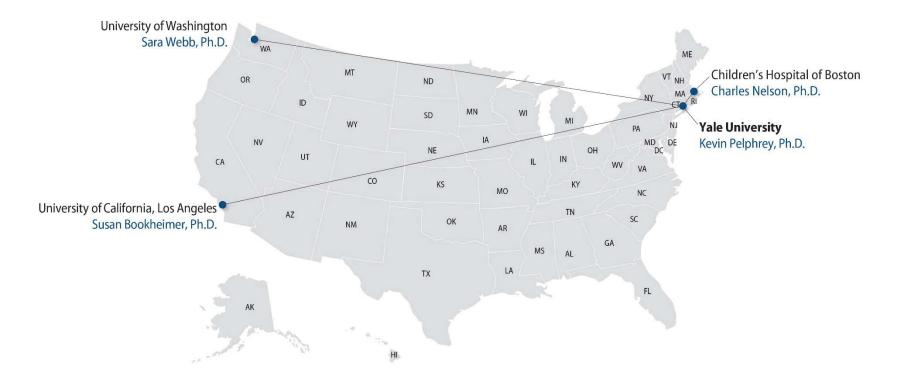


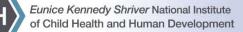




### Multimodal Developmental Neurogenetics of Females with ASD

(Kevin Pelphrey, Ph.D., Principal Investigator)

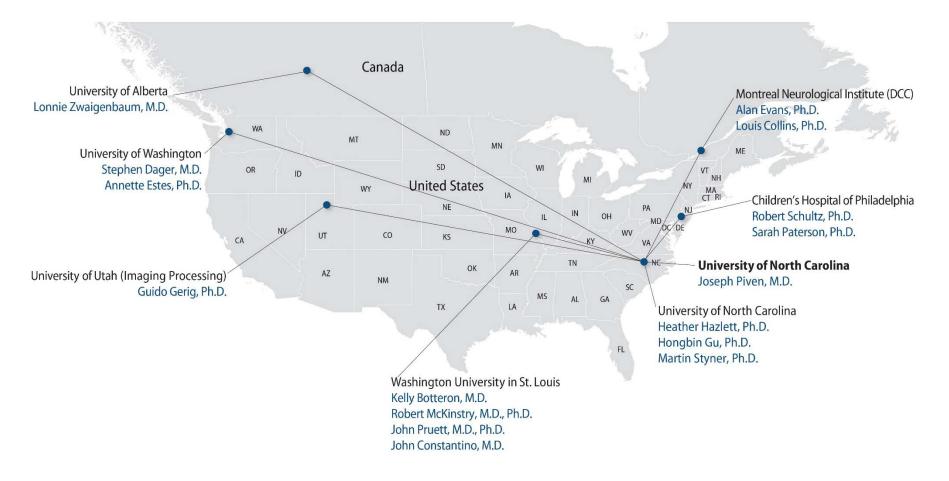


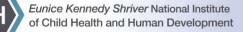




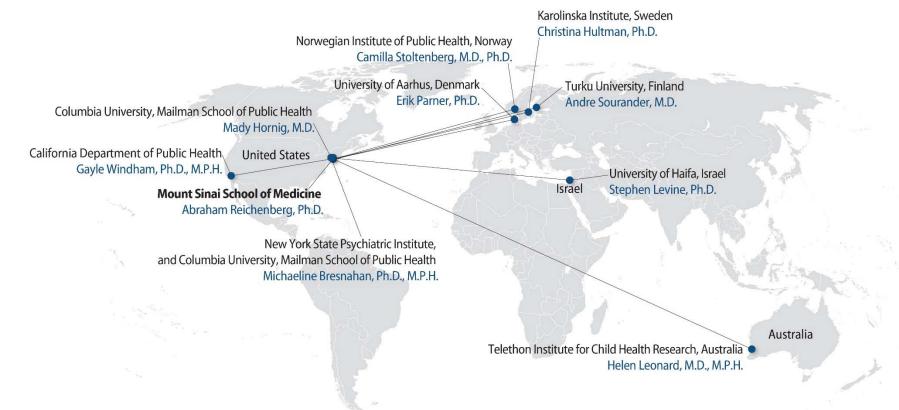
### A Longitudinal MRI Study of Infants at Risk for Autism

(Joseph Piven, M.D., Principal Investigator)





#### Multigenerational Families and Environmental Risk for Autism (MINERvA) Network (Abraham Reichenberg, Ph.D., Principal Investigator)

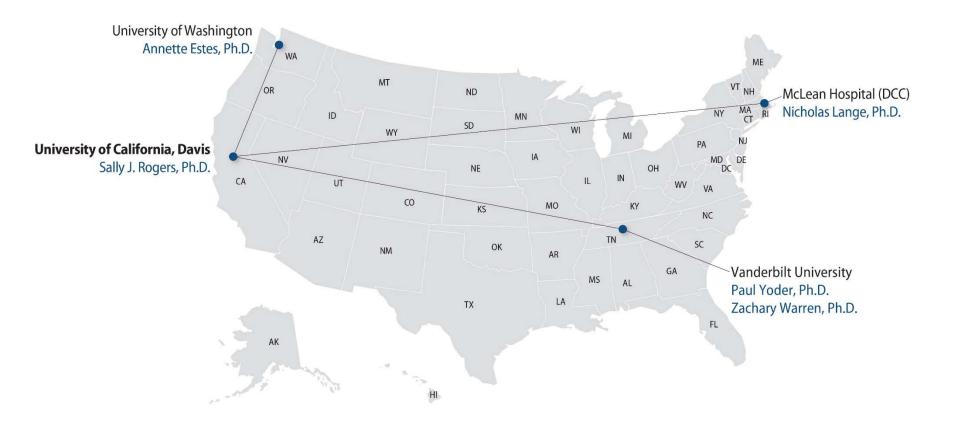






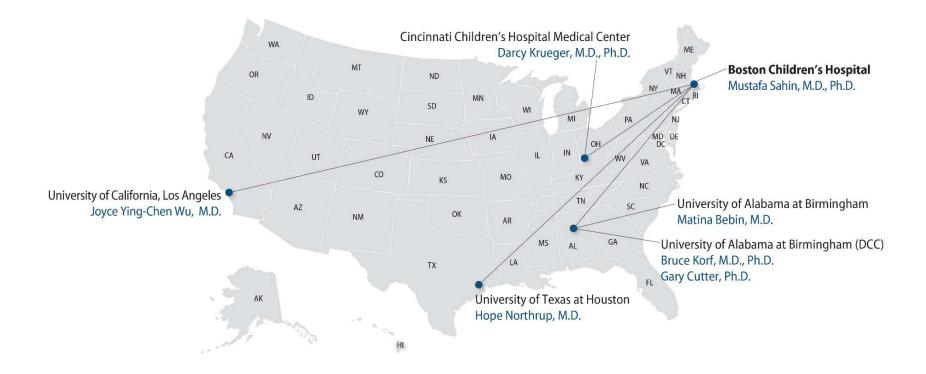
### Intervention Effects of Intensity and Delivery Style for Toddlers with ASD

(Sally J. Rogers, Ph.D., Principal Investigator)



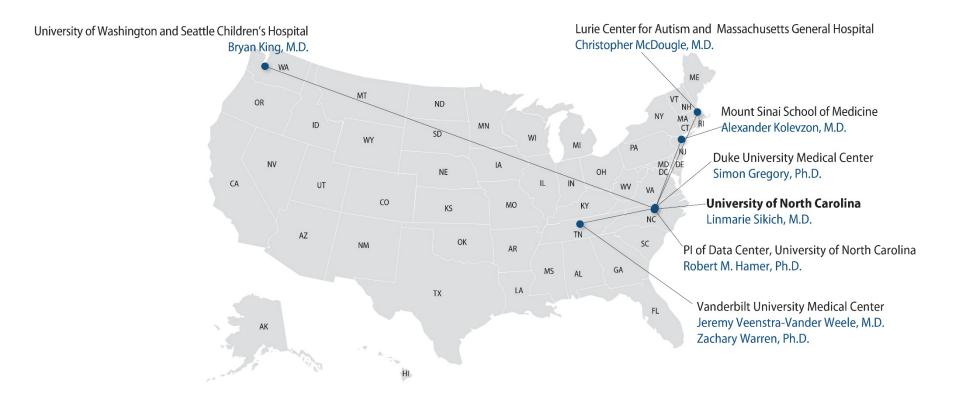


#### Early Biomarkers of Autism Spectrum Disorders in Infants with Tuberous Sclerosis (Mustafa Sahin, M.D., Ph.D., Principal Investigator)





### Study of Oxytocin in Autism to Improve Reciprocal Social Behaviors (SOARS-B) (Linmarie Sikich, M.D., Principal Investigator)







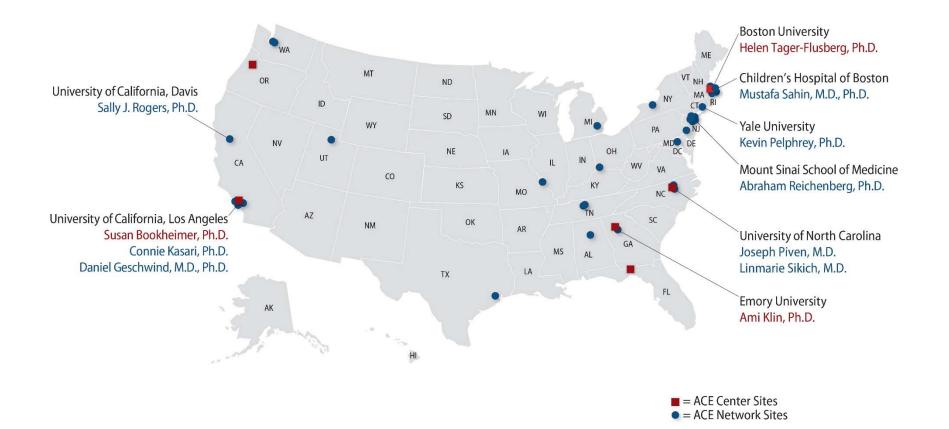
# **ACE Centers and Networks**

### Nationwide distribution of sites





### **ACE Sites Nationwide**



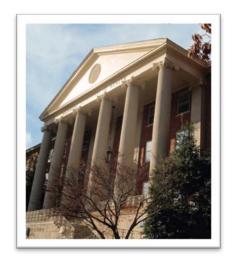




# **ACE Program Team**

- Frank Avenilla, Ph.D.
- Judith Cooper, Ph.D.
- Lisa Gilotty, Ph.D.
- Deborah Hirtz, M.D.
- Alice Kau, Ph.D.
- Cindy Lawler, Ph.D.
- Laura Mamounas, Ph.D.
- Melissa Parisi, M.D., Ph.D.
- Ann Wagner, Ph.D.









# The End