

Autism Intervention Research at MCHB

Thursday, April 08, 2010

12:30-2:00pm Eastern

Susan Hepburn, Ph.D.

David Hagner, Ph.D.

John Butterworth, Ph.D.

Connie Kasari, Ph.D.

Jim Perrin, MD, FAAP

Autism Intervention Research at MCHB

Thursday, April 08, 2010

12:30-2:00pm Eastern

Moderator:

Stella Yu, ScD, MPH
Chief, MCH Research Branch

Telehealth Delivery of a Family-Focused Intervention to Promote Coping in Youth with ASD

HRSA Award # R40MC15593-01-00 (9/1/09-8/31/11)

Susan Hepburn, Ph.D.

JFK Partners

Depts. Of Psychiatry & Pediatrics

University of Colorado School of Medicine

April 8, 2010

Goals of the TeleCopes Project



- To “translate” an evidence-based, psychosocial treatment package into a model that can be delivered to families who live far away from specialty medical centers
- To evaluate the impact of the program on child and family outcomes

The Intervention

- “Face Your Fears” Program (Reaven et al., 2009)
 - Developed by our team at JFK Partners
 - Family-focused, group treatment
 - Modified cognitive-behavioral approach
 - Empirical support for reduction of anxiety symptom severity in high-functioning children with ASD, ages 7-14

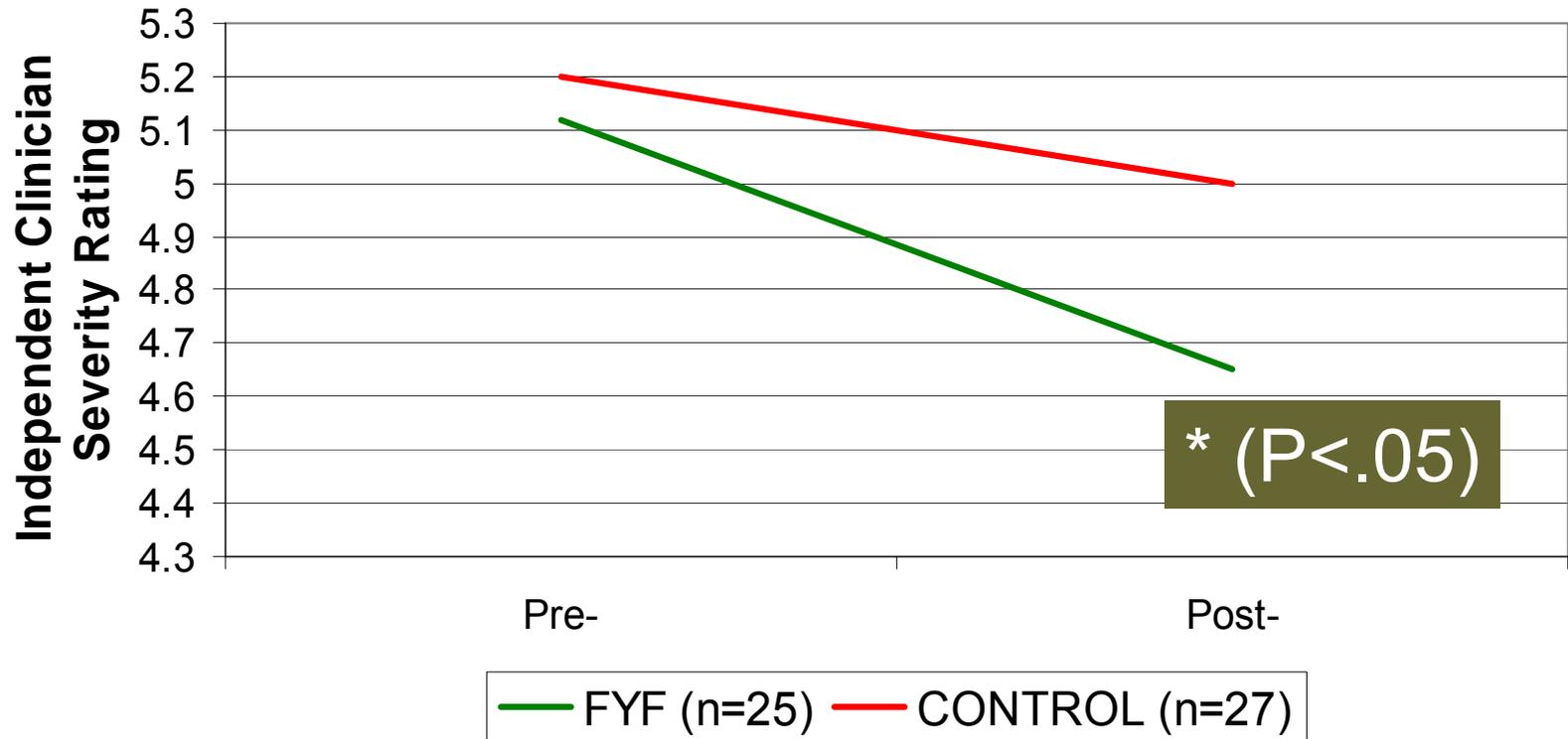
The Empirical Support

□ 2 Studies

- Wait-list control (n=33) (Reaven et al, 2009)
- RCT with Independent Clinical Evaluator (n=52) (Reaven et al, in preparation)
- 7-14 year olds, ASD, verbal & psychiatrically complex



Results from RCT (n=52)



Children in FYF Condition showed a significant decrease in anxiety symptom severity after treatment, as measured by ADIS-C ratings by an independent clinical evaluator.

Other Significant Findings

(Reaven, Blakeley-Smith, Ridge & Hepburn, in preparation)

- 78% of child participants in the FYF condition no longer met diagnostic criteria for 1 or more anxiety disorders post-treatment
- Parents report maintenance of gains across 3-month and 6-month follow-up assessments in some types of anxiety disorders

The TeleCopes Project

- Deliver modified versions of the FYF intervention through:
 - Webinars
 - Videoconferencing
 - TeleCopes Website

- And eventually....self-instructional, computer-based modules for parents and children to complete together

Phase I: Development

- “Retrofitting” the intervention for internet delivery

- Conducting Focus Groups & Outreach Workshops
 - Parents of children with ASD
 - Adults with ASD
 - Children with ASD

- Developing Technical Guidance

- Ensuring Data Security & Confidentiality

- Piloting Program Materials and Procedures

Phase II: Evaluation

- Process Measures
 - Acceptability
 - Feasibility
 - Satisfaction

- Outcome Measures
 - Child anxiety symptoms
 - Impact on family
 - Parent sense of competence

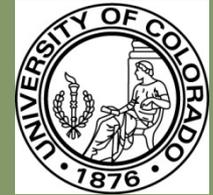
Videoconferencing: Individual Therapy



Videoconferencing: Team Meetings



TeleCopes Team

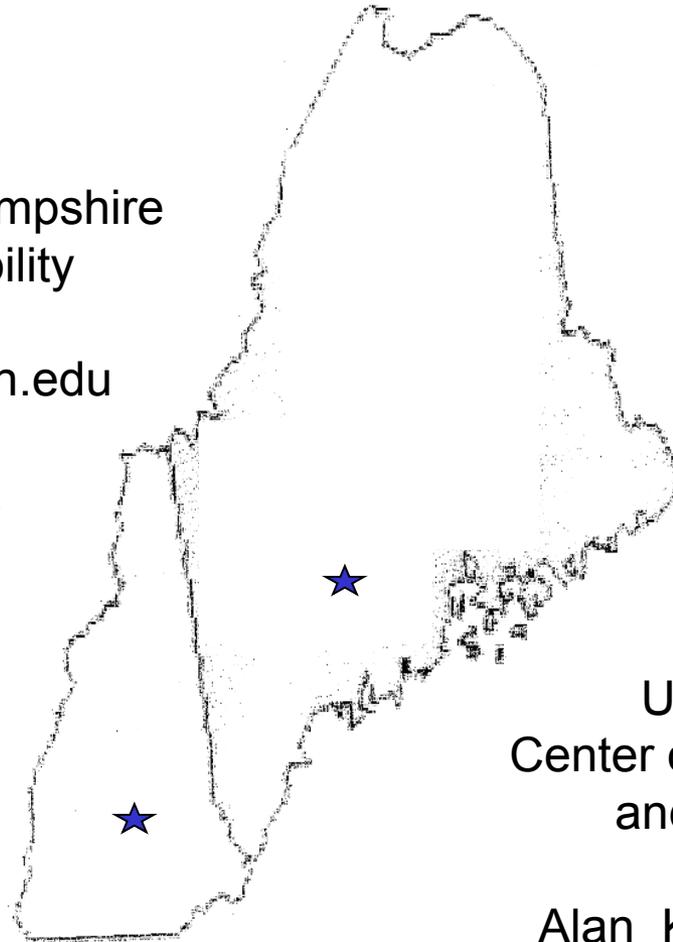


- Susan Hepburn, Ph.D. (Principal Investigator)
- Judy Reaven, Ph.D. (Clinician/Developer)
- Audrey Blakeley-Smith, Ph.D. (Clinician/Developer)
- Larry Edelman, Ph.D. (Technology Consultant)
- Mary Hetrick, B.A. (Professional Research Assistant)
- Dina Johnson, B.S. (Technology Coordinator and Graduate Student in eLearning Design and Implementation)
- Kristen Kaiser, M.S. (Parent Liaison)
- Deborah Mood, Ph.D. (LEND Psychology Post Doc)

Family-Centered Transition Planning for Students with Autism Spectrum Disorders

University of New Hampshire
Institute on Disability

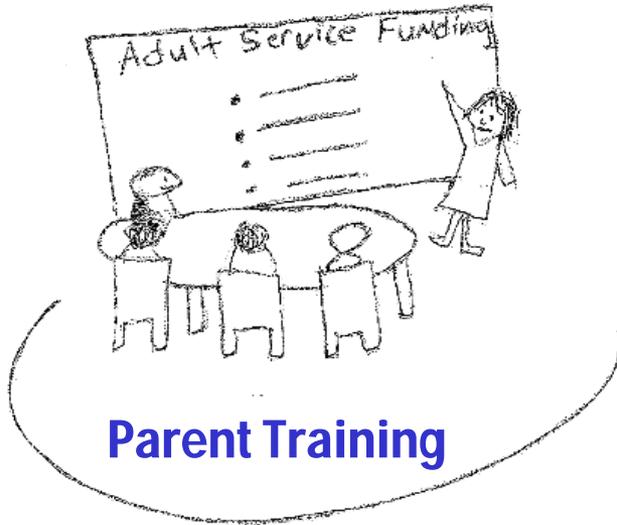
David.Hagner@unh.edu



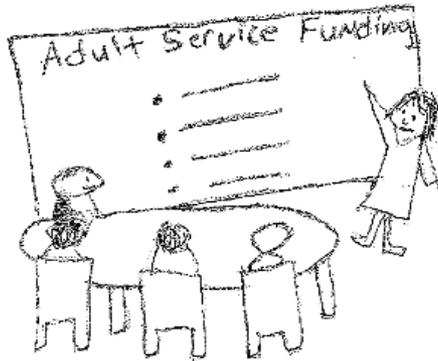
University of Maine
Center on Community Inclusion
and Disability Studies

Alan_Kurtz@umit.maine.edu

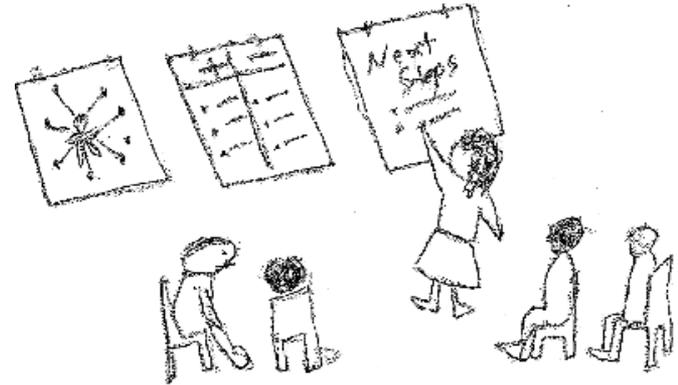
4-Component Intervention



4-Component Intervention

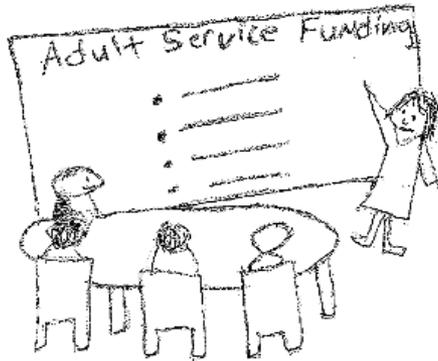


Parent Training

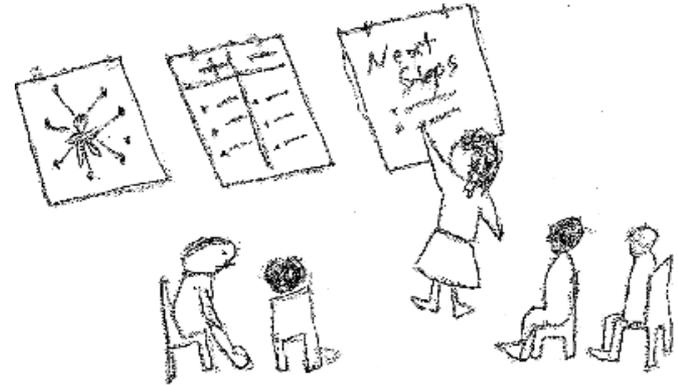


**Person-Centered
Planning**

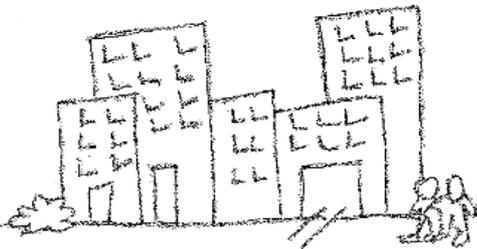
4-Component Intervention



Parent Training



**Person-Centered
Planning**

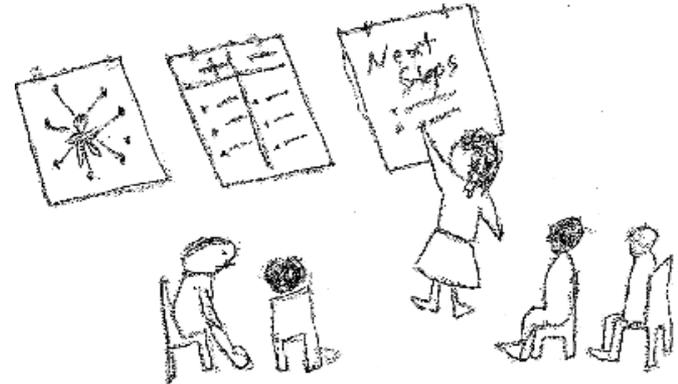


**Career Exploration /
Work Experience**

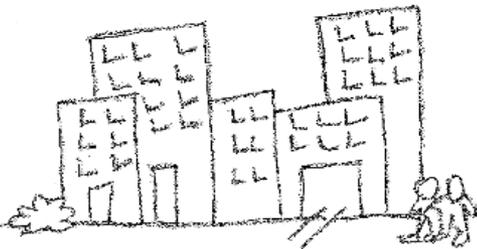
4-Component Intervention



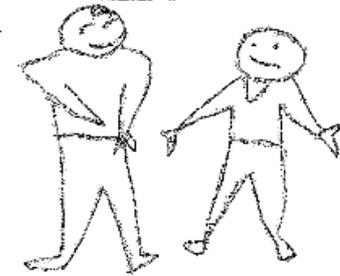
Parent Training



**Person-Centered
Planning**

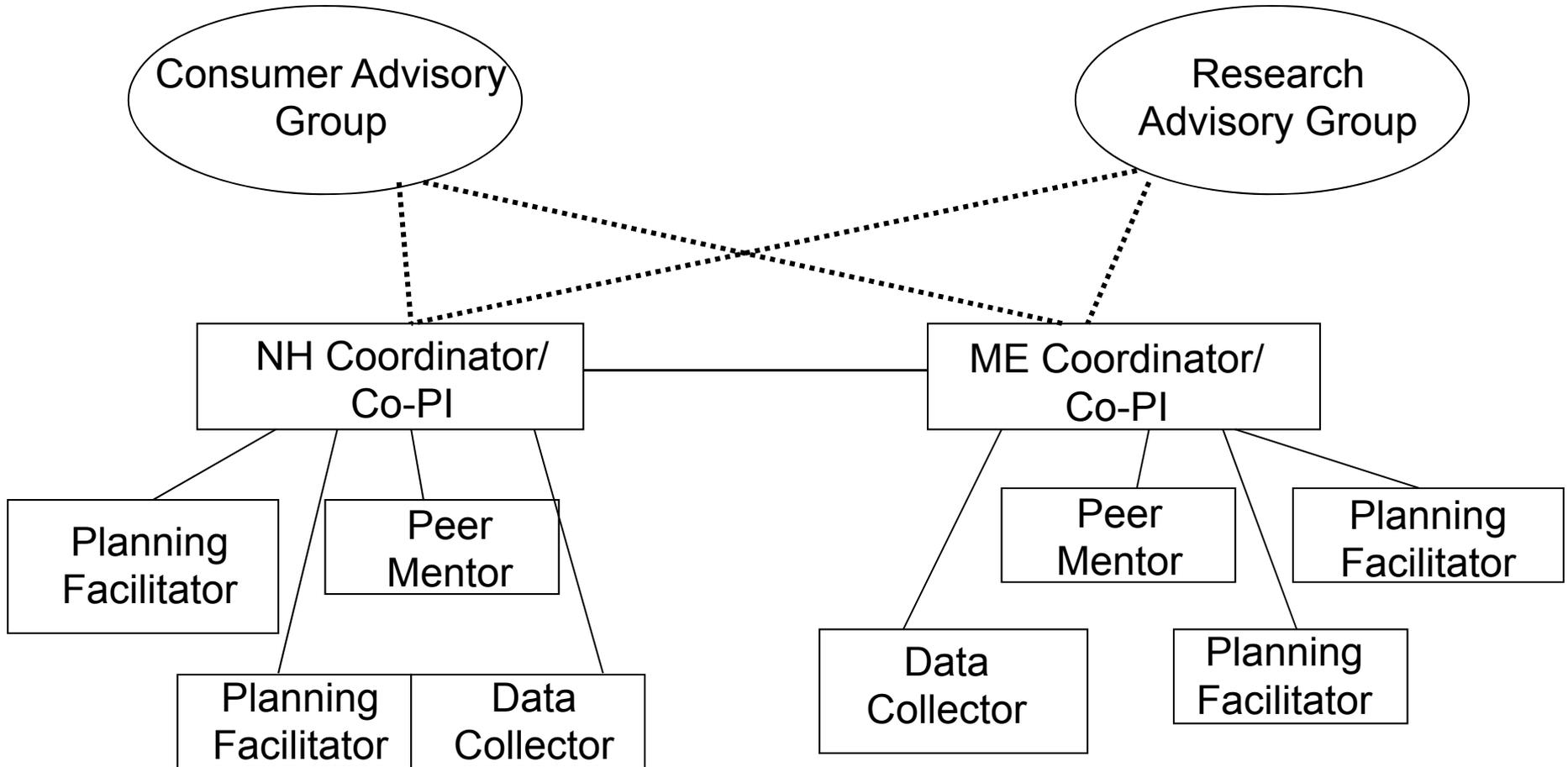


**Career Exploration /
Work Experience**



Peer Mentoring

Project Organization



Enrollment

<u>Age 16-18 (all levels of ASD)</u>	<u>NH</u>	<u>ME</u>	<u>Total</u>
Year 1 Intervention	14	11	25
Delay Control (Yr. 2)	15	9	<u>24</u>
			49

Dependent Measures

Collected at Enrollment (Nov. - Dec. 2009) and in Aug. - Sept. 2010

- Family and Student Expectations for the Future (from NLTS)
- Adaptive Behavior: ABAS II
- Self-Determination: AIR-P Inventory and ARC Inventory when possible
- Career Maturity: Vocational Decision-Making Inventory (VDMI)
- Transition IEP Quality: Statement of Transition Services Review Protocol (STSRP)

Group 2 receives intervention after 2nd data collection.

Diagnostic Check / Moderating Variable

Autism Diagnostic Observation Schedule (ADOS)
- Summer 2010

Qualitative Study

Semi-Structured Interviews with Stakeholders

- Students
- Families
- School Case Managers
- Planning Facilitators

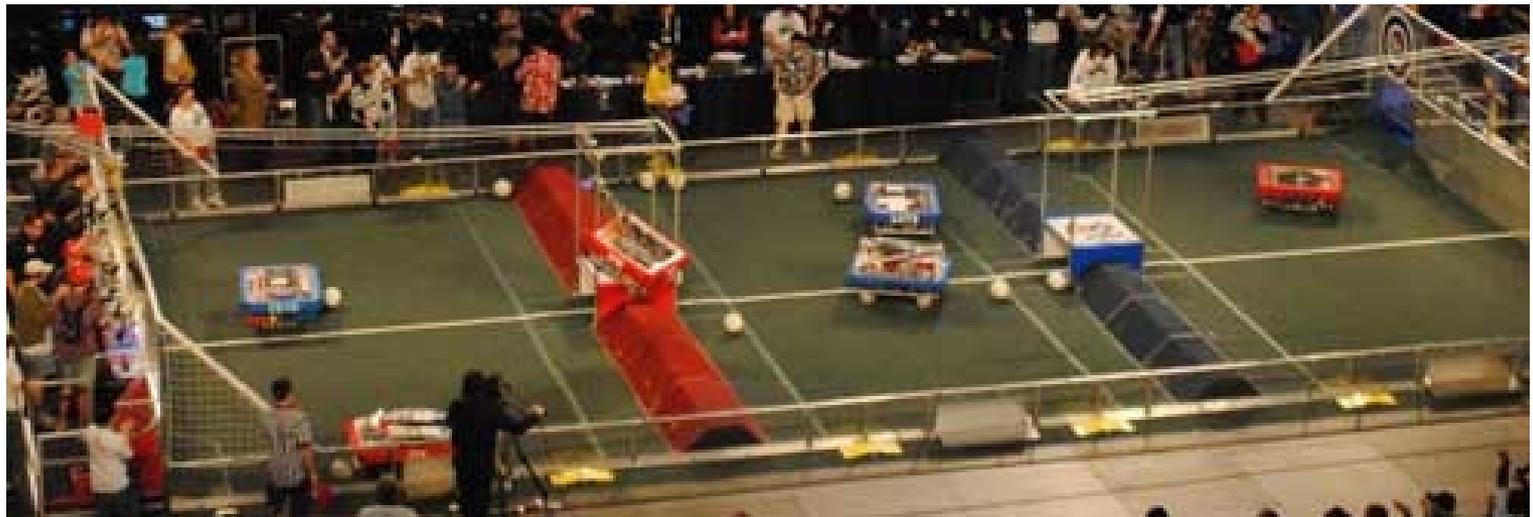
Current Status

- Recruitment, randomization and initial data collection completed
- Group 1 Parent Training completed
- Group 1 participants completed 2+ PCP Meetings

**Looking to the Future, where
“Problems Are Not Always Problems...”**

Carr, E. (2007). Social skills that are not always social and problems that are not always problems. *Research and Practice for Persons with Severe Disabilities*, 32, 110-112.

NH Robotics Competition 2010 Champions



Services and Outcomes for Transition Age Young Adults with Autism Spectrum Disorders

Secondary Analysis of the NLTS2 and RSA 911



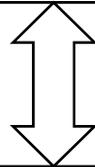
John Butterworth
Institute for
Community Inclusion

Project Goals

- **Identify personal and programmatic factors that are related to postsecondary outcomes**
- **Inform design of transition services and supports**

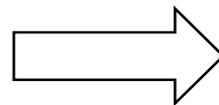
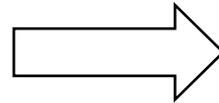
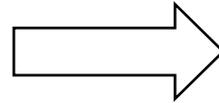
Personal & Family Characteristics

- **Demographics**
- **Health**
- **Social Supports**
- **Expectations for future**



Education & Rehabilitation

- **School supports and services**
- **Involvement in IEP/IITP**
- **Employment/career experiences**
- **VR services**
- **School inclusion**



Postsecondary Outcomes

Postsecondary Education

Integrated Employment

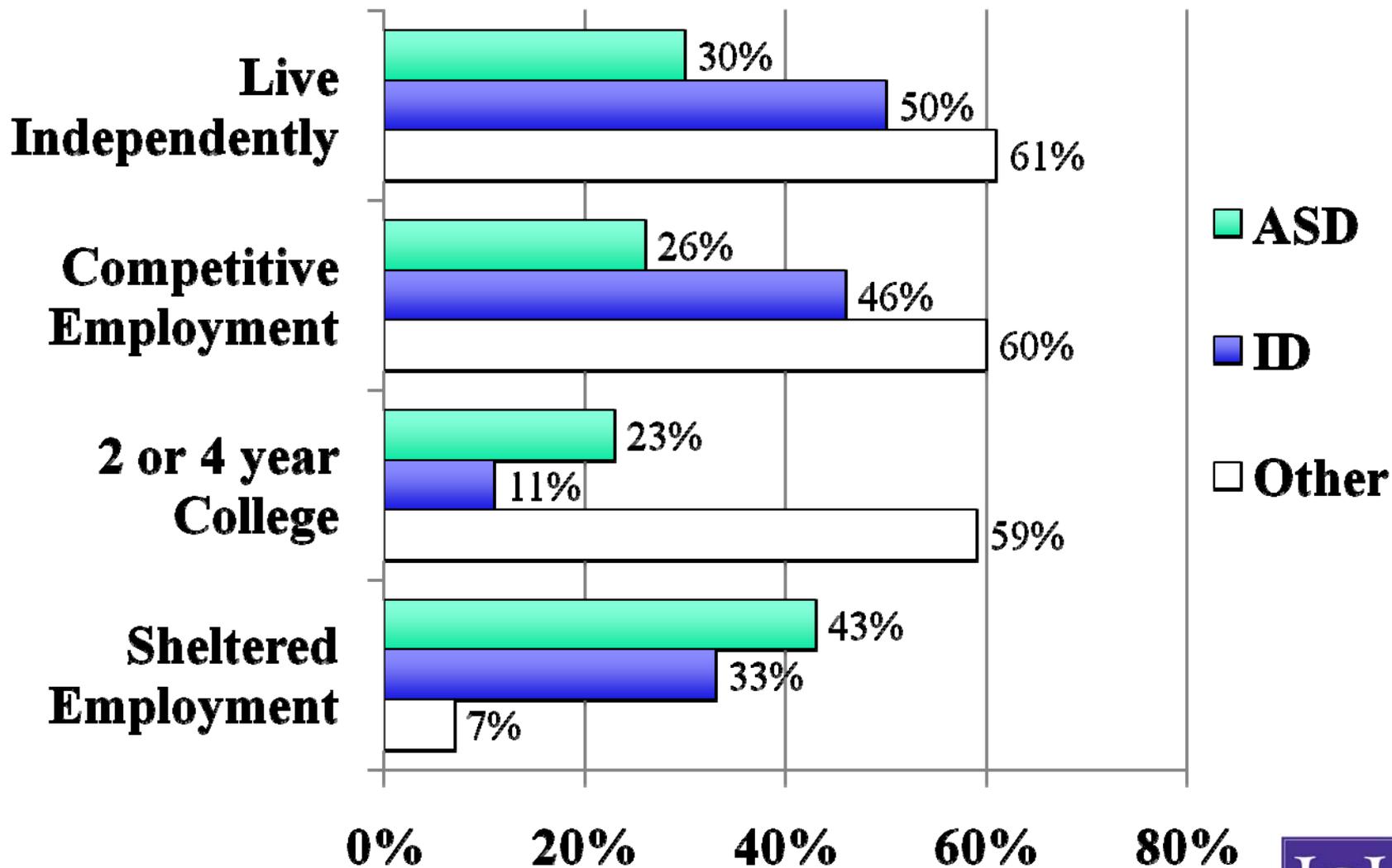
Independent Living

NLTS2

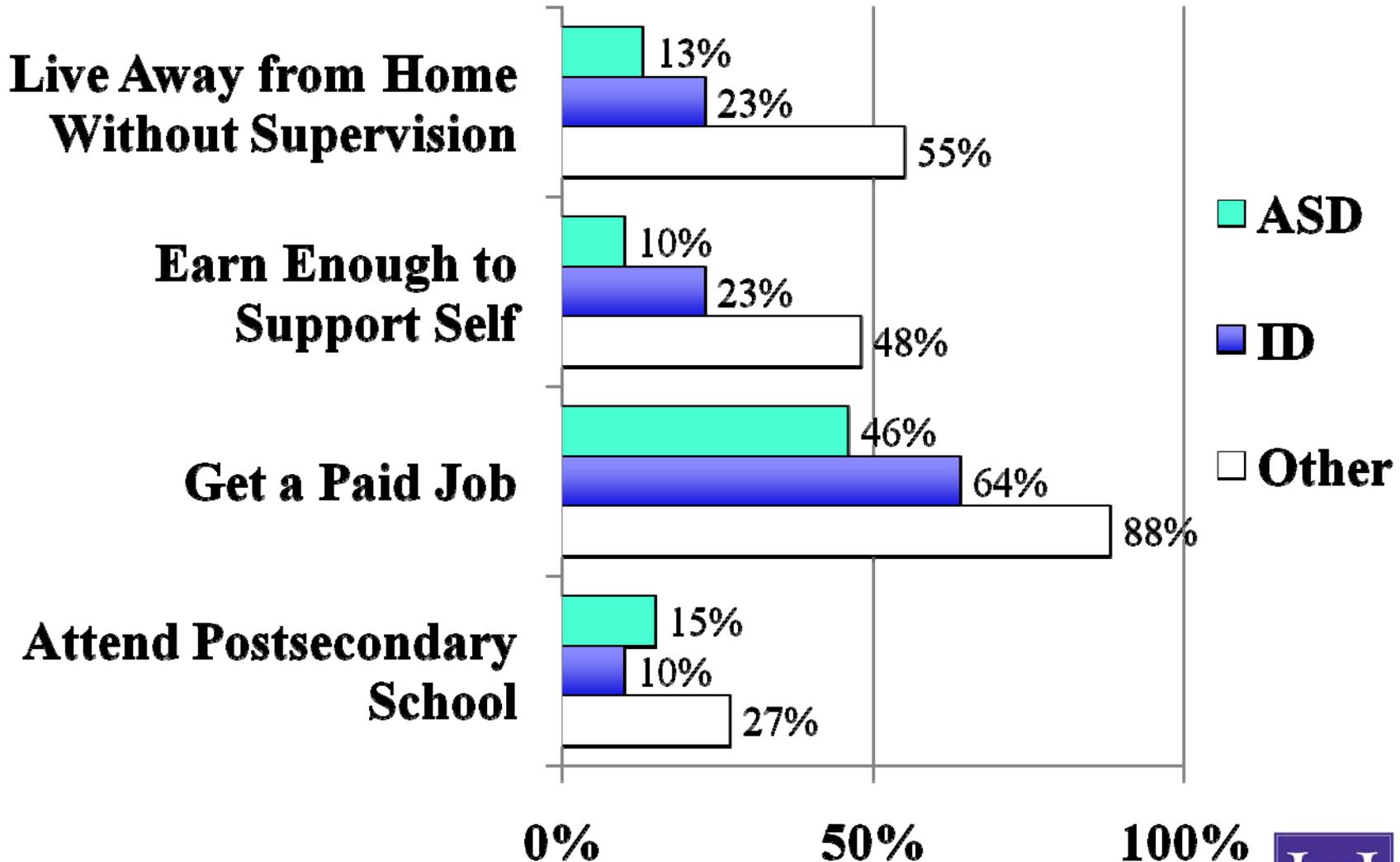
- **10 year longitudinal study**
- **Over 11,000 young adults who receive special education services**
- **501 LEAs, 38 special schools**
- **Age 13 to 16 at entry**
- **Over 10,000 variables**

	2000 2001	2001 2002	2002 2003	2003 2004	2004 2005	2005 2006	2006 2007	2007 2008	2008 2009	2009 2010
Parent Interview	Dark Blue	Light Green								
Youth Interview	Light Green	Light Green	Dark Blue	Light Green						
Direct Assessment	Light Green	Dark Blue	Light Green	Dark Blue	Light Green					
Teacher Survey	Light Green	Dark Blue	Light Green	Dark Blue	Light Green					
School Program Survey	Light Green	Dark Blue	Light Green	Dark Blue	Light Green					
School Characteristics Survey	Light Green	Dark Blue	Light Green							
Transcripts	Light Green	Dark Blue	Light Green							
Analysis	Dark Blue									

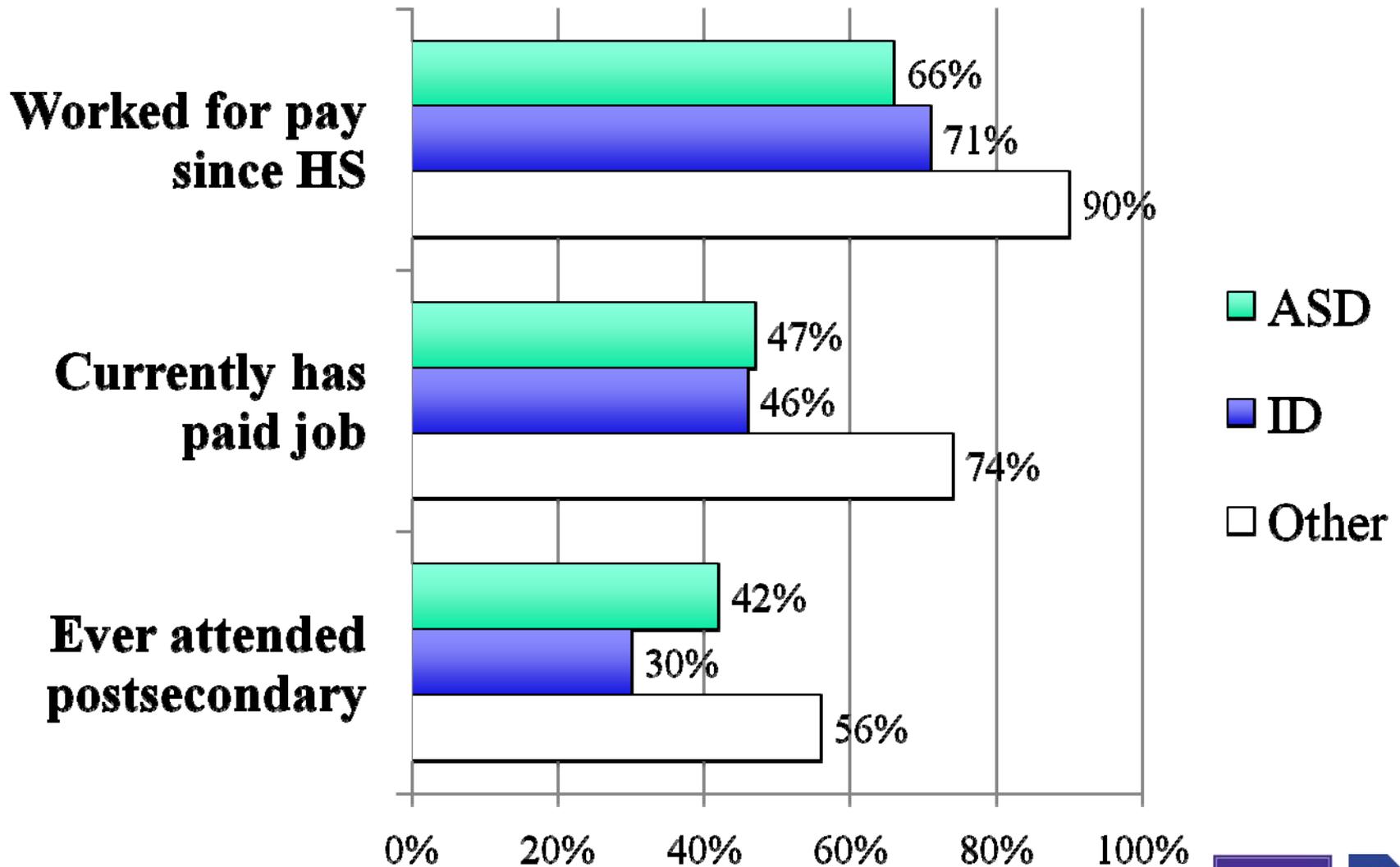
Primary Post-School Goals



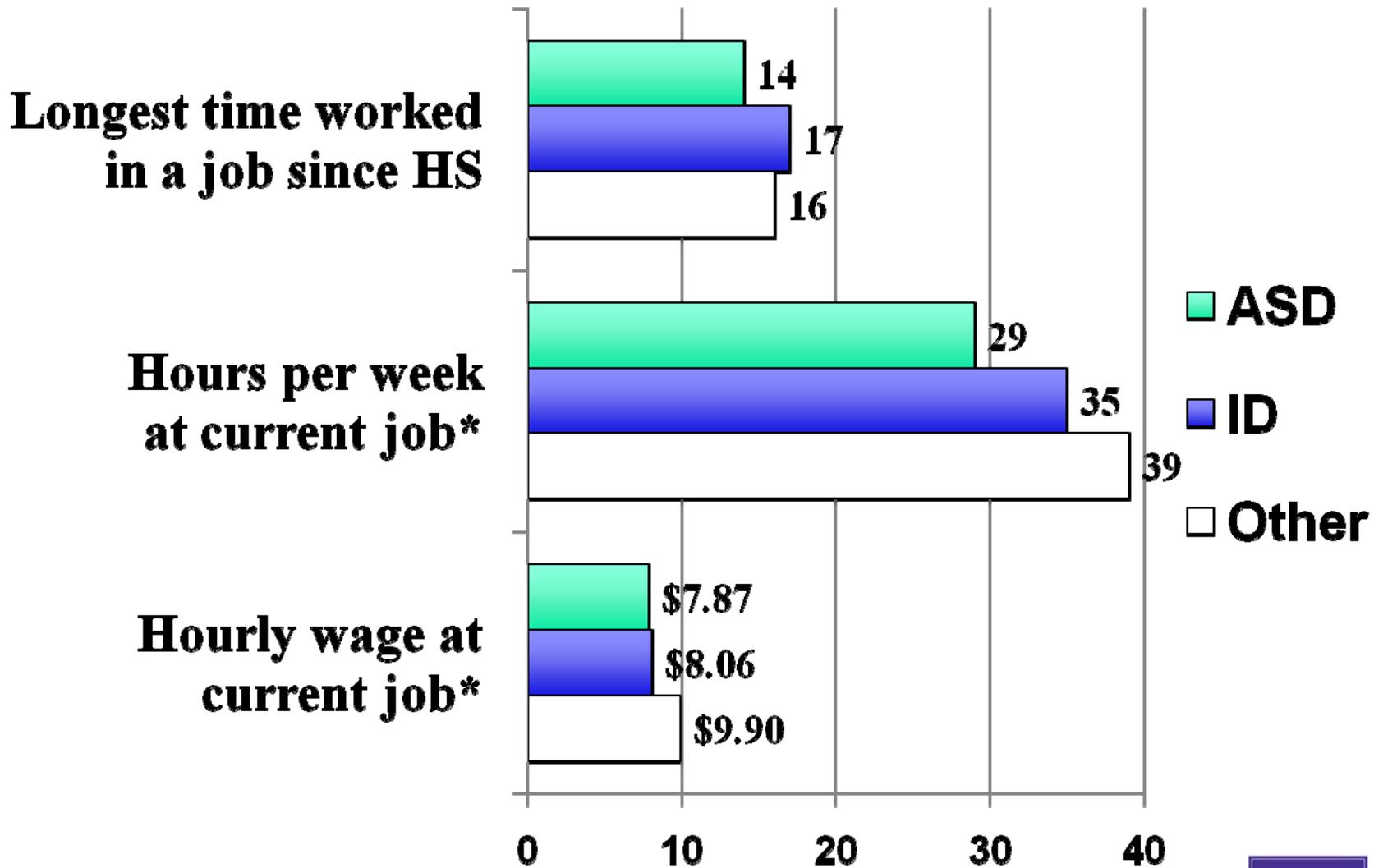
Parent Expectations



Sample Outcomes



Sample Outcomes

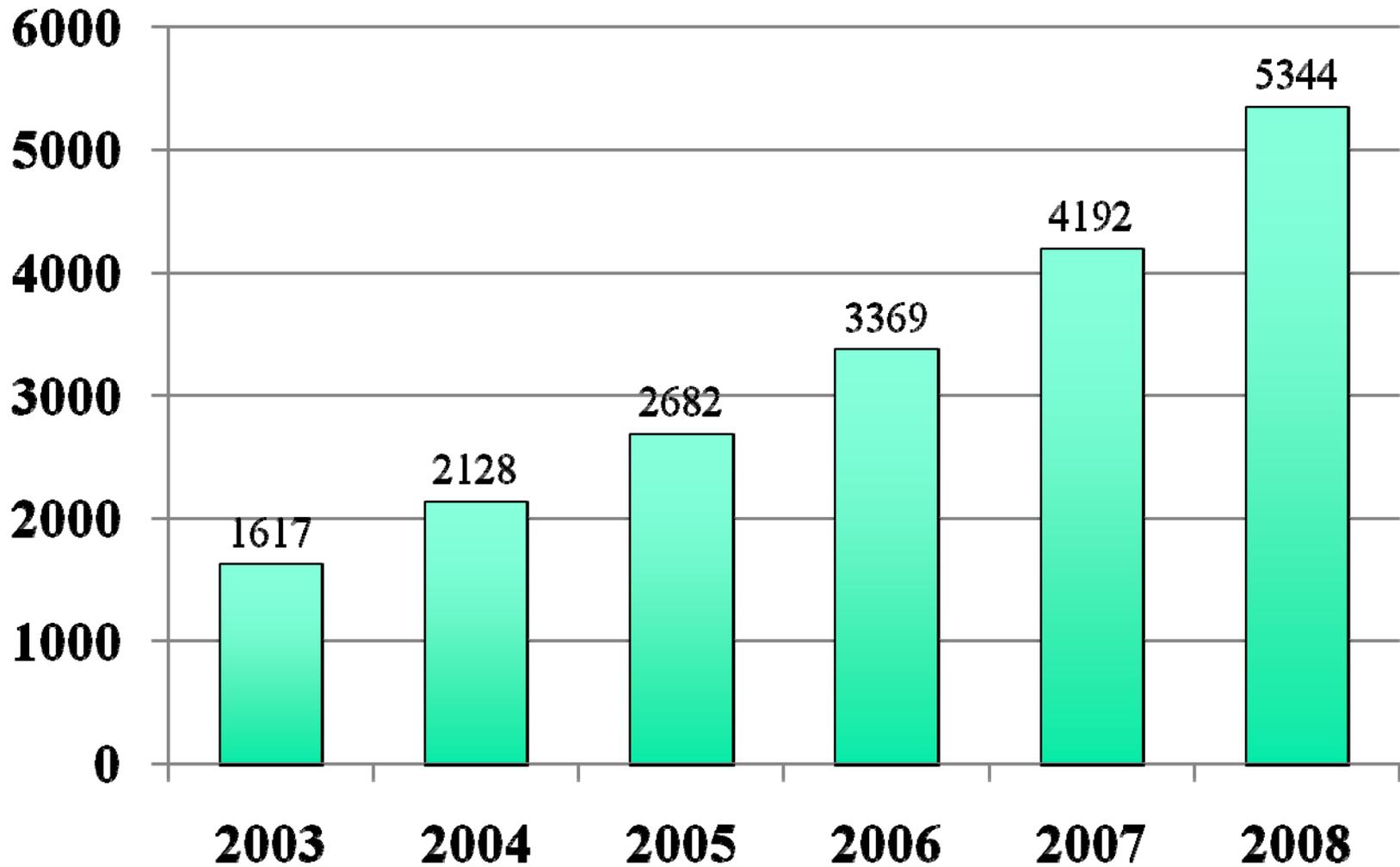


*Out of high school a year or more

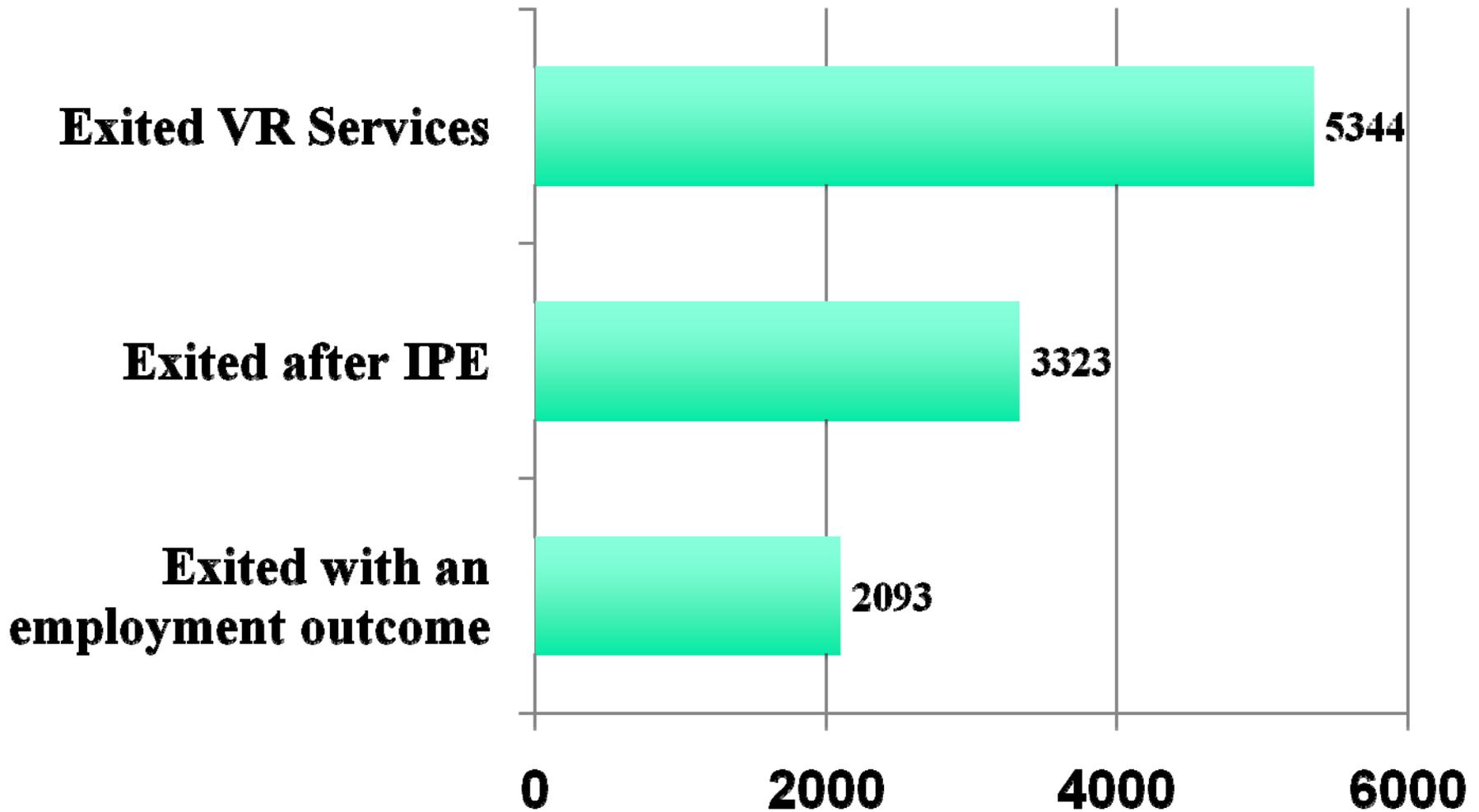
Rehabilitation Services Administration 911 Database

- **Data collected at closure from VR services**
- **600,000 closures per year**
- **Data on**
 - Individual characteristics
 - Services
 - Employment related outcomes

VR Closures – Youth with ASD



VR Closures – Youth with ASD



FY2008

Employment outcomes – FY 2008

	Youth with Autism (may also have ID)	Youth with ID	All other youth
Rehabilitation Rate*	63.0%	55.4%	55.9%
Average Earnings Per Week	\$196.30	\$195.07	\$342.91
Average Hours Worked Per Week	23.89	25.57	33.29

*Rehabilitation Rate = (# exited with employment after a signed IPE) / (# exited with employment after signed IPE + # exited *without* employment after implementing a signed IPE)

Services Received

	Autism	All Other Disabilities
College/University Services	9.6%	25.7%
Occupational/Vocational Training	9.0%	15.5%
On the job training	6.7%	3.5%
Job readiness training	22.0%	16.5%
Job search	34.2%	27.7%
Job placement	47.8%	33.5%
On the job supports	44.8%	15.2%
Rehab technology	2.1%	6.0%

John Butterworth

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www.communityinclusion.org

www.StateData.info

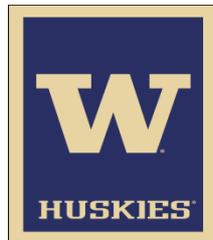


Autism Intervention Research for Behavioral Health Network

Connie Kasari, PhD



Bryan King, MD



Rebecca Landa, PhD



Cathy Lord, PhD



Amy Wetherby, PhD



AIR-B Activities

- Research Protocols
- Guideline Development
- Dissemination and Tool Development



Funded by U.S.
Dept. of Health
and Human
Services HRSA
UA3MC11055

Research Protocols



- Protocol 1
 - Joint Engagement Intervention for Parents and Young Children with Autism
- Protocol 2
 - Social Skills Interventions at School
- Protocol 3
 - Social Skills via Web Based Delivery

Common Features of Protocols

- All focused on underserved or under-represented populations
- Intervention focus on *core deficits* in autism
- Interventions carried out in natural environments
- Multi-site studies involving web-based online manuals and collaborative treatment approaches

Protocol 1: Joint Engagement Intervention

- **Problem:** *Children from low income environments have much less access to evidence based interventions*
- RCT comparing a parent education model to a parent mediated intervention
- Children between 2 and 5 years of age (n=120)
- Interventions 2x/wk for 12 weeks in the home
- Focus on joint attention/joint engagement across everyday activities
- Outcomes --social communication abilities, engagement

Protocol 1: Joint Engagement Intervention

- Changes based on pilot cases
 - Changes from 1x to 2x per week, and reduced overall enrollment
 - Challenges in recruiting and maintaining schedules in underserved populations
- Progress
 - Currently collecting data
 - Weekly phone calls, supervision, fidelity
- Data base is set up—SISTAT
 - Includes screen, randomization, measures by site

Protocol 2: Social skills at School

- **Problem:** *Children included in general education are often without services, and have need for social skills interventions*
- High functioning children with ASD who are fully included at school in elementary schools (under-represented) (n=150)
- ENGAGE group involves typical peers and involvement on the playground
- SKILLS group is standard practice

ONLINE TREATMENT MANUAL: Peer Engagement Group (PEG)

Secure online treatment manual

Accessible across sites

Regularly updated

Online manual Includes:

- Description of PEG treatment
- Video Samples
- Description of Measures
- Troubleshooting and FAQ Sections

[Home](#) [Introduction](#) [Engagement States](#) [Setting Up](#) [Session Overview](#)
[Sample Session](#) [Start Your Group](#) [Restroom](#) [Lunch](#) [Conversation](#)
[Play a Game](#) [Tell a Story](#) [Transitions](#) [Recess](#) [Problematic Behavior](#)
[Measures](#) [Conclusion](#) [References](#) [FAQ](#) [Collaborators](#)

Online Treatment Manual:

Facilitating Engagement between Children with Autism and their Peers
at School during Lunchtime



This manual outlines a peer engagement group that can be implemented at mainstream elementary schools during lunchtime to foster improved social development for both young students with autism and their peers.

Click on the links at the top of this page to read the manual and view video samples of groups in action.

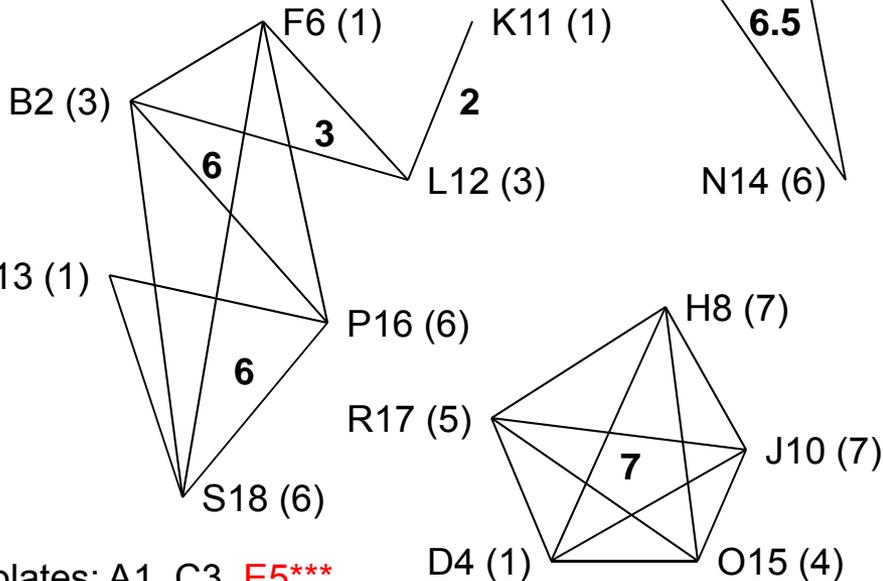
This website is for use by invited individuals within the AIR-B research network. All video, audio, text and other elements of this site are strictly confidential and may not be reproduced or distributed in any form. Site traffic is monitored to ensure confidentiality.

Social Network Centrality—Outcome Measure

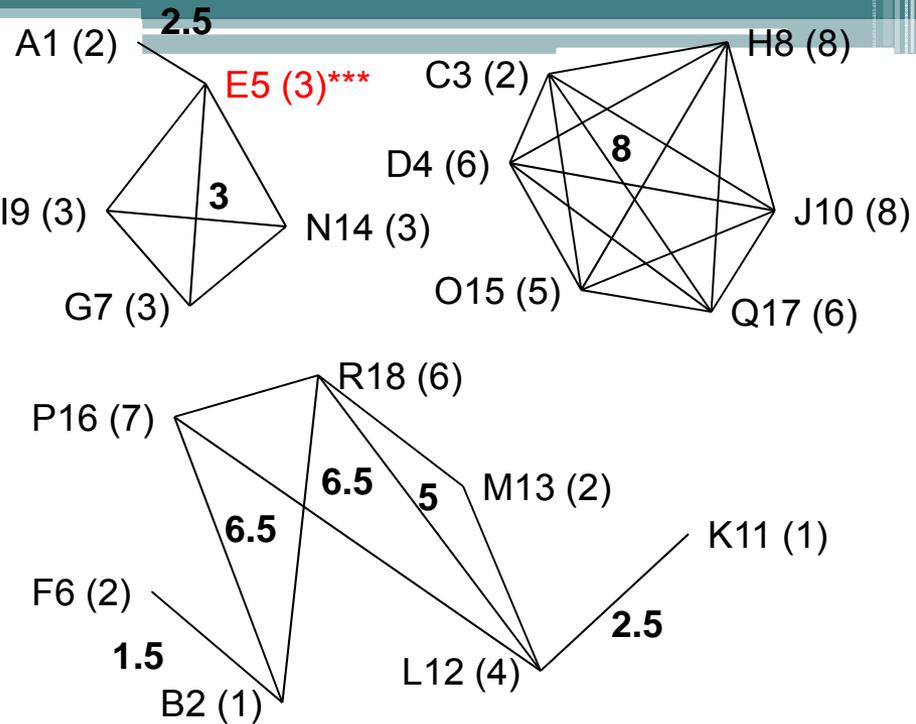
Second Grade -T2

Second Grade - T1

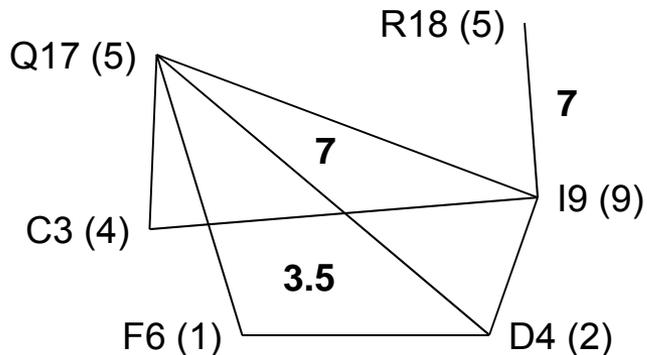
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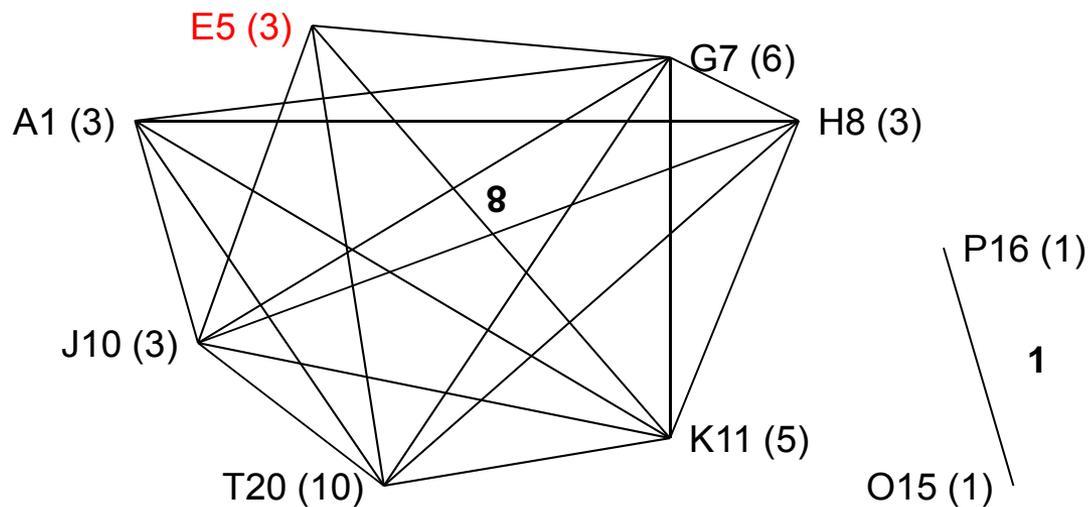
Isolates: A1, C3, E5***



Second Grade -T3



Isolates: L12, M13, N14, S19



Protocol 3: Web based social skills

- **Problem:** *Lack of available services for rural families*
- Web based social skills intervention
- Focus on rural children with limited access to evidence based interventions
 - **Data collection in rural Florida**
- Outcome measures: Parent, Teacher and Child Report

Protocol 3: Web-skills training



BrainTest

[Tests Overview](#) [Log In / Register](#) [About Us](#) [Help](#)

Social Skills for Planet Earth

Webquest for Explorers 7-12 Year Olds



- [Overview of 8 Week Lesson Plan](#)
 - [Astronaut Candidate](#)
 - [Candidate Training](#)
 - [Padawan Quest](#)
 - [Reading Quiz](#)
 - [How to Use This Curriculum](#)
 - [Assessment Measures](#)
 - [Mission Artifacts](#)
- **Lesson Plans and Mission Protocols**
 - [Session 01: Survey the aliens of Earth](#)
 - [Session 02: Outreach](#)
 - [Session 03: Calming rough encounters](#)
 - [Session 04: Interact with earth beings \(rules for engaging with alien life\)](#)
 - [Session 05: Alien Language:translation guide](#)
 - [Session 06: Locate unfriendly lifeforms](#)
 - [Session 07: Space explorer's code of behavior Part A](#)
 - [Session 08: Space explorer's code of behavior Part B](#)
 - [Session 09: Kindness: Space exploration's ultimate challenge](#)
 - [Session 10: Interesting humans in future alliances by taking turns](#)
 - [Session 11: Laugh: A great way to make friends](#)

Leverage of AIR-B Collaboration

- ARRA funds
- Protocol 4: Teen Engage vs. Skills Groups
 - High school students
 - Under-served population of children
- Lead is UW
 - UMACC
 - UCLA

Guideline Development



RAND is leading guideline development

- Literature searches complete
 - Focus on behavioral interventions
- Data abstraction and analyses in progress
- Evidence report due at year's end
- Face to face guideline development meeting June 3-4 2010

Tool Development

- Pragmatic Rating Scale
 - Ongoing training
 - Use in Protocol 2 and 4
- Playground Observation of Peer Engagement
 - Ongoing training
 - Use in Protocol 2
 - Adaptation for high school in Protocol 4

AIR-B Dissemination

Public Website (ASDweb .org)

UCLA UCLA - Autism Intervention Research Network on Behavioral Health

Participating Sites Intervention Projects Intervention Tools & Guidelines Dissemination Projects

DIRECTORY

- Home
- About Us
- Participating Sites
- Projects
- News
- Volunteer
- Links
- Members Only

Welcome to UCLA Autism Intervention Research Network on Behavioral Health

This collaborative treatment program involves 5 different sites, all of which are well positioned to carry out the proposed work plan: University of California Los Angeles (UCLA), University of Michigan, University of Washington, Florida State University and Kennedy Krieger Institute (KKI).

Recent epidemiological studies indicate that the prevalence of autism and related disorders may be as high as 1 in 150 children (Autism and Developmental Disabilities Monitoring, 2007). There is a critical need to test the effectiveness of intervention for children with autism given the heavy burden of the impairments on individuals and their families and high cost to the health care system. While researchers have made some progress in identifying effective interventions, there are several gaps in our knowledge of intervention research. These gaps include our ability to identify the active ingredients (e.g., content, dose, agent of change) of interventions given the focus on comprehensive intervention packages that are often more similar than dissimilar to each other. Another gap is our ability to individualize interventions for particular children, thus the need to identify moderators of intervention response. Important moderators may include child background characteristics, but current research is limited in both the range of child presenting characteristics, and the ethnic, racial, cultural, and economic diversity of samples. Finally, few treatments have focused on core deficits in autism, such as in the area of social-communication.

Our program will test evidence-based practices on core deficits and active ingredients of intervention. We will also validate meaningful outcome measures, develop evidence-based intervention guidelines, and disseminate information to health professionals and families using innovative approaches. For more detailed information see [About Us](#).

Copyright UCLA-Autism Intervention Research Network on Behavioral Health



Web-skills training

Online Knowledgebase

Main Page Search Input FAQ Links Supplemental info

Phenowiki: An Online Collaborative Database for Phenotype Annotation

126,97.66 talk for this ip log in / create account

page discussion edit history

Links

AUTISM SPECTRUM DISORDERS

	Autism Spectrum Disorders
	Asperger's Syndrome
	PDD-NOS
Broad overview	Autism
	Childhood Disintegrative Disorder
	Rett Syndrome
	ASD Treatments

navigation

- Main Page
- Community portal
- Current events
- Recent changes
- Random page
- Help

search

Go Search

toolbox

- What links here
- Related changes
- Special pages
- Printable version
- Permanent link

BrainTest

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 - Session 11: Laugh: A great way to make friends

Future.....

- Step up recruitment and data collection over the next year
- Test tool development along with data collection
- Complete guideline development
- Launch web-based dissemination
- Leveraging of collaborations into new projects

Collaboration

- **UCLA**
 - Connie Kasari
 - Jim McCracken
 - Fred Frankel
 - Fred Saab
 - Catherine Sugar-SISTAT
 - Jill Locke
 - Mark Kretzmann
 - Kathy Lawton
 - Sara Levitt
- **FSU**
 - Amy Wetherby
 - Renee Holland
- **HRSA**
 - Robyn Schulhof
- **KKI**
 - Rebecca Landa
 - Brian Freedman
 - Rondalyn Whitney
 - Tyson Barker
- **RAND**
 - Margaret Maglione
- **UMACC**
 - Catherine Lord
 - Constanza Columbi
- **UW**
 - Bryan King
 - Felice Orlich



Autism Intervention Research Network on Physical Conditions

WEBINAR

April 8, 2010 ✧ 12:30pm - 2:00 pm ET



James M. Perrin, MD
Director, ATN Clinical Coordinating Center
Professor of Pediatrics, Harvard Medical School
Director, MGH Center for Child and Adolescent Health Policy



MassGeneral Hospital
for Children



ATN/AIR-P Goals

- To improve quality of medical care for children and adolescents with ASD
- To develop, implement, and refine a model of coordinated care for children with ASD and their families that adheres to the philosophy of the chronic care model, and to increase the availability of sites providing this care
- To advance the evidence base and research on medical issues to provide families with better answers to the questions they raise about caring for their children
- To become the leading clinical network on medical issues related to ASD by developing and disseminating guidelines for medical care and evidence for their efficacy to medical professionals and the community





Autism Treatment Network AIR-P Research

- Funded by a grant from the Maternal and Child Health Bureau, Health Resources and Services Administration
- AIR-P goals include
 - Conducting research in physical health aspects of autism spectrum disorders (ASD)
 - Developing evidence-based guidelines for care in ASD
 - Providing community education regarding ASD
- AIR-P utilizes the infrastructure of the ATN to carry out its projects



Autism Treatment Network

- 14 sites in US and Canada
- Criteria for participation
 - Multidisciplinary team care
 - Use ATN clinical evaluation
 - Enter at least 100 subjects per year into registry
 - Participate in ATN committees (e.g., operations, clinical subspecialties)
- Key collaborators
 - Autism Speaks
 - Clinical coordinating center - MGHfC
 - EMMES Corporation
 - National Initiative for Children's Healthcare Quality







AIR-P Accomplishments Overview

- Research
- Guidelines
- Registry
- Dissemination/ Community Outreach



AIR-P Network Research

- 2 initial projects
 - *“Diet and Nutrition in Children with Autism Spectrum Disorders: An Autism Treatment Network Collaborative Study”* PI - Susan Hyman, MD
 - *“Development of a Parent-Based Sleep Education Program for Children with Autism Spectrum Disorder”* PI - Beth Malow, MD



Research funded under RFA AIR-09-01

- 4 additional studies funded
 - *“Defining the Relation of Sleep Disturbance in Autism Spectrum Disorder to Psychiatric and Behavioral Comorbidities”* PI - Suzanne Goldman, PhD
 - *“Bone Mineral Density in Children with Autism Spectrum Disorders”* PI - Ann Neumeyer, MD
 - *“Prevalence of Creatine Deficiency Syndromes and Genetic Variability in Creatine Metabolism in Children with ASD: A Pilot Study”* PI - Andreas Schulze, MD
 - *“Markers of Iron Status and Metabolism in Children with ASD”* PI - Ann Reynolds, MD



AIR-P Network RFA #ATN-AIR-10-02

“Pilot Subcontracts on Treatment Research Affecting Autism”

Release Date: January 15, 2010
Submission Deadline: March 12, 2010
Earliest Start Date: June 1, 2010

- 12 applications received - currently under review
- **LEVEL 1:** small starter pilot opportunities directed mainly to junior investigators
 - Up to \$40,000 direct costs for 1 yr
- **LEVEL 2:** larger pilot studies to gather preliminary data to support more extensive research programs
 - Up to \$150,000 direct costs (per year) for up to 2 yrs
 - Involves more than 1 ATN center





Guidelines

- Development and pilot implementation of algorithms
 - Constipation
 - Insomnia/night-wakings
 - EEG
- Others under development
 - Medication monitoring
 - Medication choice
 - MRI
 - Genetics-metabolics work-up
 - Behavioral toolkit



Constipation Algorithm

- Developed by ATN GI Committee led by George Fuchs with support of NICHQ
- Pilot implementation
 - Initial sites - Cincinnati and Colorado
 - Expanding to Rochester and Arkansas
- Toolkit
 - Using tools from AAP Autism Toolkit on GI problems
 - Developing additional, autism-focused tools



Insomnia/ night-wakings algorithm

- Developed by ATN sleep committee led by Beth Malow with support of NICHQ
- Pilot implementation
 - Initial sites - Kaiser and Missouri
 - Expanding to Baylor and OHSU
- Toolkit
 - Using behavioral pamphlet covering bedtime routine strategies and worksheet, methods for teaching routines, and the bedtime pass method



EEG algorithm

- Developed by ATN Neuro-Genetics-Metabolics Committee led by Greg Barnes and Reet Sidhu with support of NICHQ
- To be piloted at Columbia and LADDERS



ATN Registry

- Data on 1420 participants entered since December 2007 are available for analysis (as of September 8, 2009)
- 1,745 participants as of December 9, 2009
 - 2009 enrollment (as of December 9) - 1,216
 - 2008 enrollment - 529
- First round of Annual Follow-up Visits began May 2009
- February meeting to assess and revise database



Community and Family Outreach

- ATN Presentations at 4 conferences targeting communities and families
 - Thompson Center, University of Missouri, Columbia, MO
 - Kennedy Krieger Institute, Baltimore, MD
 - Northwest Autism Center, Spokane, WA
 - Xavier University, Cincinnati, OH
- ATN Presentations at 2 conferences targeting physicians
 - Medical University of South Carolina, Charleston, South Carolina
 - American Academy of Pediatrics Section on Complementary and Integrative Medicine, Washington DC



Publications

- Kogan MD, Blumberg SJ, Schieve LA, Boyle CA, Perrin JM, Ghandour RM, Singh GK, Strickland BB, Trevathan E, van Dyck PC. Prevalence of Parent-Reported Diagnosis of Autism Spectrum Disorder Among Children in the US, 2007. *Pediatrics*. 2009 Oct 124:1395-1403
- Cury D, Jones N, Klatka K, Winklosky B, Perrin J. Health Care for Children with Autism. *Current Opinion in Pediatrics*, 2009 Dec;21(6):828-832
- Cury D. Medical Treatment of Autism Spectrum Disorders. *Current Opinion in Neurology* (in press)
- Kuhlthau KA, et al. Health Related Quality of Life in Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders* (in press)



Accepted Abstracts

Pediatric Academic Societies (PAS)

- *“Use of Psychotropic Medications in Autism Spectrum Disorders”* -Daniel Coury, Patricia Manning-Courtney, Ann Reynolds, Evdokia Anagnostou, and the ATN Psychopharmacology Committee
- *“Sleep is Associated With Behavior in Children with Autism Spectrum Disorder”* - Suzanne Goldman, Beth Malow and the ATN Sleep Committee
- *“Use of Complementary and Alternative Medicine (CAM) in Children with Autism Spectrum Disorders”* -Daniel Coury and the ATN
- *“GI Symptoms in Autism Spectrum Disorders”* - Kent Williams, George Fuchs, Glenn Furuta, Margaret Marcon, Daniel Coury and the ATN GI Committee



Accepted Abstracts

IMFAR 2010

- *“Sleep is associated with behavior in children with Autism Spectrum Disorders”* - Suzanne Goldman, Beth Malow and the ATN Sleep Committee
- *“Psychotropic Medication Use in Autism Spectrum Disorders”* - Daniel Coury, Patricia Manning-Courtney, Ann Reynolds, Evdokia Anagnostou, and the ATN Psychopharmacology Committee
- *“Parent Reports of Complementary and Alternative Medicine in children with Autism Spectrum Disorders”* Daniel Coury and the ATN
- *“GI Symptoms in Autism Spectrum Disorders”* Kent Williams, George Fuchs, Glenn Furuta, Margaret Marcon, Daniel Coury and the ATN GI Committee





Accepted Abstracts

SLEEP 2010

- *“Factors Associated with Sleep Problems in Children with Autism Spectrum Disorders”* - Suzanne Goldman, Beth Malow and the ATN Sleep Committee

DIGESTIVE DISEASE WEEK (DDW)

- *“Association of Parent Reported Behavior Problems, Sleep Problems and Gastrointestinal Problems in Children with Autism Spectrum Disorders”* - Kent Williams, George Fuchs, Glenn Furuta, Margaret Marcon, Daniel Coury and the ATN GI Committee





AIR-P Summary

- Active and productive network with emphasis on quality improvement and access
- Active research program
- Active and dynamic registry
- Active outreach



Q&A Session

Please submit your questions to today's presenters!

Thank you for attending this event. Please complete the evaluation directly following the webcast.