The CARES Response: Practice-Driven Applied Research to Improve Policy and Practice for Individuals with Autism

Research Goals: Improve assessment, education, treatment and services for individuals with autism through applied research methods focused on bridging the research-to-practice gap.

Texas Children with Autism are Underserved
- CDC estimates 1 in 68 children (1 in 42 boys) have autism
- Estimated 89,500 Texas children (12,500 children ages 3-8) have autism
- Texas child population accounts for 50% of total child population increase in the US
- Texas ranks 48th overall and 48th or lower in children's health care access and affordability, prevention and treatment, and equity

Individuals with Autism
- Direct assessment of and/or treatment to ~ 130 children/year in CARES clinic
- Pilot early intervention service for TxDHHC to address needs of underserved children
- Annual summer camp for children with autism
  - serves 70+ children from low-SES families
  - $400 child care scholarships available
  - high-quality camp experiences sensitive to each child’s unique abilities
  - no child turned away based on severity of his/her disability
  - individual attention to improve social, language, communication, and motor skills
- Psychomotor intervention improved body awareness, body concepts, space concept, and overall psychomotor concepts compared to control group
- Yoga improved physical performance, emotional expression, and social interaction
- Fine and gross motor difficulties may be related to delayed sensory processing to visual, auditory, tactile, and movement stimuli

Parenting
- Intensive Parent Training funded by state Autism Grant Program
  - train 37 parents to effectively deliver evidenced-based treatments to enhance communication and social skills, and reduce aggression and self-injury ($2,852 per child)
  - measure extent to which parents learned to provide treatment and how treatment improved child functioning
  - validated methods are integrated into required graduate program training

Law-Enforcement
- Develop online training for school resource officers/law enforcement personnel to:
  - recognize communicative, physical, and behavioral characteristics of autism
  - identify strategies that lead to reasonable, acceptable outcomes of encounters with law enforcement officers
  - identify law enforcement responses that may interfere with desired outcomes

Future Research
- Debrief, pseudoscience and unproven treatment fads
- Develop and validate innovative, cost-effective ways to meet the needs of underserved children with autism
- Identify ways children with autism express happiness and how idiosyncratic indicators of happiness can be used in treatment research and practice
- Identify environmental or internal contingencies that elicit and support specific forms of play behavior to support remediation of play deficits to improve social skills and happiness
- Measure relationship of engagement in task and impact on fine and gross motor skills, cognitive development, and school readiness in children with autism

Future Needs & Collaborators
- Clinical staff to treat more children, serve more schools, and supervise training additional graduate students
- Research staff to secure and implement externally-funded projects
- Scholarships to increase enrollment in the Autism and Applied Behavior Analysis concentration of the Special Education graduate degree program
- Financial support to provide CARES services free of charge or at reduced rate to low income families
- Medical imaging and analysis, autism experts, and neuroscientists for autism research collaboration