

BIG BARN DISCOVERY SCHOOL

@ THE CENTER  FOR DISCOVERY



← The Big Barn Discovery School - part of the Michael Ritchie Big Barn Center for Environmental Health and Education.

ADVANCING RESEARCH IN RESPONSE TO INTERVENTION OF AUTISM AND OTHER DISABILITIES

Overview

The Big Barn Discovery School of The Center for Discovery is a unique partnership with leading research universities to improve innovation and response to intervention for those with Autism Spectrum Disorders (ASD) and other disabilities. It is specially designed to bridge the gap between diverse disciplines and systems of care by combining the applied knowledge and expertise found in school settings with the resources and expertise found in research and clinical facilities.

Using sophisticated technology such as biometric sensors, computer vision and other advanced techniques which are unobtrusively integrated into the classroom setting, data is collected and analyzed on human interactions highlighting the most effective interventions and treatments while advancing our understanding of the complexity of autism.

The Center for Discovery offers a unique and timely opportunity to advance the science of autism to improve outcomes for children and families and greatly advance the field. It addresses a major gap in current research - which is narrowly focused on genetic causation - by providing real time data and applied research findings on current interventions from multiple disciplines.

The Center currently manages extremely complex children who have autism at every level of care and stage of life. Its partnership with prominent researchers will help to improve and enhance clinical interventions to ensure the optimal level of care while advancing our understanding of the condition itself.

Autism on the Rise

Today, it is estimated that one in every 110 children is diagnosed with autism, making it more common than childhood cancer, juvenile diabetes and pediatric AIDS combined. An estimated 1.5 million individuals in the U.S. and tens of millions worldwide are affected by autism with prevalence rates growing annually. Studies suggest boys are more likely than girls to develop autism and receive the diagnosis four to five times more frequently. Current estimates in the United States alone suggest one out of 70 boys is diagnosed with autism.

The average cost per child over the course of a lifetime is estimated to be \$4.2 million, and the average cost in the U.S. for all those with Autism Spectrum Disorders is estimated to be \$35 billion per year.

Faculty & University Partners - A Public and Private Initiative

The Big Barn Discovery School is a unique collaboration and partnership of leading researchers and universities such as the MIT Media Lab, Harvard University and Georgia Institute of Technology capable of capturing vast quantities of real-time and archival data currently unavailable in traditional school and research settings. Its faculty includes:

Gregory D. Abowd, Ph.D.

Professor, School of Interactive Computing, Georgia Institute of Technology
Director of Health Systems Institute, Georgia Tech/Emory University

Matthew S. Goodwin, Ph.D.

MIT Media Lab – Director of Clinical Research
The Center for Discovery – Director of Research

Theresa Hamlin, Ed.D.

The Center for Discovery
Associate Executive Director

Martha Herbert, M.D., Ph.D.

Harvard Medical School - Assistant Professor of Neurology
Pediatric Neurologist, Massachusetts General Hospital, Boston

Brooke R. Ingersoll, Ph.D.

Department of Psychology
Michigan State University

Monica Meyer, M.D.

The Center for Discovery – Autism Medical Director
Private Practice, Developmental Behavioral Pediatrics

Stephan Rechtschaffen, M.D.

OMEGA Institute
Co-founder OMEGA Institute, Rhinebeck, NY

James M. Rehg, Ph.D.

Georgia Institute of Technology
Professor, School of Interactive Computing

Rune Simeonsson, Ph.D. MS.PH.

University of North Carolina
Professor and Department Chair of Psychology

Stephen Sprigle, Ph.D., P.T.

Georgia Institute of Technology
Director of Center for Assistive Technology and Environmental Access

Expected Outcomes

The Big Barn Discovery School is expected to:

- Improve methods of assessment, education and treatment of ASD
- Implement improved and novel research methodologies for documenting the efficacy of interventions
- Improve outcome measures, which translate into improving the lives of individuals and their families struggling with autism
- Improve teacher and clinical training and education
- Collect a large corpus of multimodal data that can be explored by researchers and experts from around the world to better understand and effectively address the challenge of autism in our society

The Michael Ritchie Big Barn Center for Environmental Health and Education

The Big Barn Discovery School is housed within the Michael Ritchie Big Barn Center which is devoted to exploring the interconnections between the environment, nutrition, education and human health. Located at The Center's 300 acre Stonewall Preserve Farm, the Big Barn is a model for universal design and sustainable living, with Platinum level Leadership in Energy and Environmental Design (LEED) certification by the U.S. Green Building Council (the highest level attainable).

Serving as the nexus for some The Center for Discovery's most innovative initiatives, the Big Barn houses and brings together the following programs and capabilities:

- The Big Barn Discovery School to provide improved interventions for individuals with Autism Spectrum Disorders and other disabilities
- The DaVinci Project in bio-dynamic farming and food production
- The Community Building Project to develop new, sustainable models for caring for individuals with a range of physical and intellectual disabilities throughout the lifespan as well as related efforts to contribute to the revitalization of the historic town of Hurleyville

The Michael Ritchie Big Barn was made possible in part by a generous gift from Michael and Nelly Arougheti, and is named in memory of renowned film director Michael Ritchie.

About The Center for Discovery

The Center for Discovery, Inc. is a not-for-profit, nationally known provider of educational, health and residential services for children and adults with significant disabilities, including a growing number of individuals with Autism Spectrum Disorders. The Center offers individuals with complex disabilities and medical frailties – and their families – innovative educational, clinical, social and creative arts experiences designed to enrich their lives through personal accomplishment.

Public/Private partnerships are at the heart of The Center for Discovery's growth and continue to enrich the quality of its offerings. While the care and treatment of residents at the Center is reimbursed by New York State, remarkably generous and ongoing support from private sector donors shapes every aspect of the community and its programs.

Private donors support everything from staff and family conferences, opportunities for staff to pursue continuing and higher education such as the Walter J. Scherr Staff Scholarships, while the Milligan Hill Equestrian Center, The Gerald and Janet Carrus Institute and the recently completed Michael Ritchie Big Barn Center for Environmental Health and Education are examples of major undertakings supported entirely by private individuals.

Contact Us

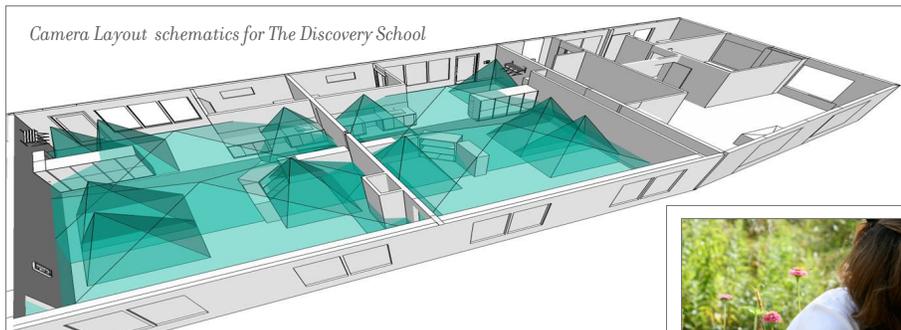
The Center is located on a multi-campus setting in the Catskill Mountains of Sullivan County, just 90 minutes northwest of New York City. Distinguished by a philosophy that celebrates each individual's abilities rather than his or her disabilities, the agency cares for an ethnically and demographically diverse population.

For additional information, contact:

The Center for Discovery

P.O. Box 840, Harris, New York 12742 | www.thecenterfordiscovery.org | P. 845.707.8506

The Discovery School is designed to scientifically understand responses to interventions for children diagnosed with autism spectrum disorders.



Camera Layout schematics for The Discovery School

Using human interactions to discover the most effective interventions, while advancing our understanding of the field of autism and care of people with disabilities.

