

IMPORTANT ONGOING STUDIES

Many new studies related to autism research are being performed in New York State and Central New York. Current studies are recruiting participants for studies on autism spectrum disorders (ASD) causation related to genes, gene mutations, and possible treatment options. With the increase in ASD diagnosis by the Centers for Disease Control growing to 1:110 children, and also with the lack of understanding of the origin of autism spectrum disorders, these studies serve to develop the framework for knowing possible autism risk factors, providing earlier diagnosis, and effective treatment options.

State University of New York at Upstate Medical University, Syracuse, NY

Investigation of Neuroserpin as an Autism Candidate Gene, Upstate Medical University. Principal investigator: Anthony E. Shrimpton, PhD.

Although not yet currently recruiting participants, this study will aim to explore genetic links of Neuroserpin and mutations, which are believed to play a role in the pruning of synapses in the brain during brain development. The effects of the mutations appear to play a role in the shorter connections in the brains of individuals with autism, and thus the characteristics of autism related to "underconnectivity" or delayed brain development could be better understood.

This study will be recruiting 20 participants to start, and then increase up to 100 individuals with autism spectrum disorders or first-degree relatives, also including up to 100 individuals on a matched control. The researchers will take blood samples and compare genetic makeups, surrounding the Serpini1 coding region, to the control group, among participating members, and to the Autism Genetic Resource Exchange (AGRE). AGRE is a public database of information on DNA of families of those with Autism spectrum disorders.

For trial information visit
[Link to Clinical Trial](#)

For information on AGRE visit
[Link to AGRE](#)

National Institute of Mental Health at the University of Rochester, Rochester, NY

Interventions for Communication in Autism Network (ICAN), National Institute of Mental Health.

Principal investigator: Connie Kasari, PhD.

The National Institute for Mental Health (NIMH) is conducting a study on interventions for children with autism at three US locations, including at the University of Rochester, Rochester, New York. Two treatment plans, discrete trial trainings (DTT) and Interpersonal Developmental Approach (IDA), will be studied with intent to decrease symptoms of autism and to increase communication. DTT is a training process that emphasizes structure and teaches school readiness skills, and is a recognized applied behavior analysis approach. IDA is a child directed method, where inclusion in the regular classroom or group is stressed, however the child's interests and strengths are recognized and followed. Approximately 200 preschool aged children, whom are nonverbal and have an autism diagnosis will be recruited to participate as well as their parents. Parent trainings of the goals and structure of either teaching method will be incorporated so that the parents can actively participate with the program with their children at home and during the last months of the trial.

For trial information
[Link to Clinical Trial](#)

University of Rochester, University of Pittsburgh, and Ohio State University at the University of Rochester, Rochester, NY

Atomoxetine, Placebo and Parent Management Training in Autism (Strattera), University of Rochester, University of Pittsburgh, and Ohio State University.

Principal investigators: Benjamin Handen, PhD., Michael Aman, PhD., and Tristram Smith, PhD.

Three universities are collaborating together to evaluate the effectiveness of atomoxetine, branded as Strattera, on children with autism spectrum disorders (ASDs) who display characteristics of ADHD (attention deficit hyperactivity disorder). This study will have four differing treatment methods: using the drug with parent management trainings, the drug alone, a placebo with parent trainings, or the placebo alone. Children will randomly be placed into the assorted treatment groups and data will be collected to decide the value of the different and alternative treatment methods. All families with parent trainings will also receive continuous clinical interventions.

A similar parallel trial is also being run by the National Institute of Mental Health to assess the effectiveness of atomoxetine on children with autism and ADHD characteristics.

For trial information
[Link to Clinical Trial](#)

For parallel trial information
[Link to Parallel Trial](#)

For further information, or to share items of interest for future publications, please contact:
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In the News

Vaccines and Autism: Dr. Andrew Wakefield Banned from Practicing Medicine in the United Kingdom.

While the results of Dr. Andrew Wakefield's study linking vaccines and Autism have been discredited for some time, his future as a practicing physician was unknown until recently. Based on a May 24th report by a panel from the General Medical Council (GMC), the agency who regulates physicians in the United Kingdom, Dr. Wakefield was stripped of his medical license. The council justifies the decision based on a multitude of facts including, failure to follow ethical standards of research, disregard to vulnerable patients, failure to report multiple conflicts of interests, and mismanaging of funds. The panel noted serious concerns with his pursuit of the Lancet article in the face of such dishonest behavior.

[General Medical Council's Ruling](#)

PUBLISHED RESEARCH

Journal of Autism & Developmental Disorders

(2010) Published Online Prior to Print
doi: N/A

Individualized education plans for young children with autism

Ruble, Lisa; McGrew, John; Darlymple, Nancy; Jung, Lee Ann, University of Kentucky

The authors sought to create and validate a tool for assessing the effectiveness of IEPs (Individualized Education Plans) based on the Individuals with Disabilities Education Act (IDEA). Additionally, researchers sought to understand school, teacher, and child factors that influenced the quality of the IEP. The research team created a tool to measure 8 indicators related to student IEPs. The first indicator measured the overall quality of the student's present level of performance and whether objectives could be written based on them. The remaining seven focused on quality aspects of each specific objective in the IEP. Researchers found the tool to be a reliable and face valid tool for assessing the quality of IEPs. The sample of IEPs examined was diverse across racial, socioeconomic, geographic, and school district demographic lines, contributing to the validity of the findings. The IEPs used in the study were found to be of poor quality with regard to IDEA and National Research Council. For example, while the NRC (National Research Council) suggests that the majority of children with autism receive an extended school year (ESY), most of the IEP's included in this study did not meet this expectation. Surprisingly, there was no relationship found between with the quality of IEPs, teacher experience, school setting (urban vs. rural), and child severity factors. However, there was a nearly significant negative relationship found between experience with individuals with ASD and IEP quality. This suggests that more experience is associated with poorer quality IEPs.

[Link to Journal](#)

Molecular Autism

(2010) 1:7
doi: 10.1186/2040-2392-1-7

Autism and gene research; connections made

Sousa, Ines; Clark, Taane; Holt, Richard; Paganamenta, Alistair; Mulder, Erik; Minderaa, Ruud; Baily, Anthony; Battaglia, Agatino, Klauk, Sabine; Poutska, Fritz; Monaco, Anthony, International Molecular Genetic Study of Autism Consortium

Researchers in this study examined the link between four specific genes found within the brain and nervous system and Autism spectrum disorders in families of Caucasian European descent. Both individuals with ASD and family members were part of this large-scale study, ranging into thousands of participants, from four dominant European backgrounds. Specifically four genes were targeted because expression in areas of brain and nervous system development, cellular pathways, as well as having a known connection to both schizophrenia and late onset Alzheimer's. Researchers found promising results for two of the proteins, as those results were strongly associated with risk for development of ASDs. This study also found some significant results for seven new markers on those genes, thus further research to eliminate error would be required for those findings. This study is one of the first to provide evidence for multiple gene influence on the development of ASDs in individuals with European backgrounds.

[Link to Journal](#)

BMC Pediatrics

(2010) 10:11
doi: 10.1186/1471-2431-10-11

Obesity prevalence in ASD children

Curtin, C.; Anderson, S. E.; Must, A.; & Bandini, L.

As obesity rates rise in children in the United States, the authors of this study aimed to prove if those rates would be similar between typically developing children and those with autism spectrum disorders. The study used data previously collected from the State and Local Area Integrated Telephone Survey by the National Survey of Children's Health in 2003. Phone interviews were carried out between January of 2003 and July of 2004 to assess the development and obesity rates of randomized children in the United States. A total of 102,353 children's data were used in this survey, with 454 children having a diagnosis of autism. Body Mass Index (BMI) calculations were determined for all children, and results showed obesity rates of typically developing children are at 23.6%, and those of children with autism at a higher rate of 30.4%. Indications for the obesity rates were attributed to atypical physical activity patterns, low muscle tone, poor motor skills, and food preferences or aversions.

[Link to Journal](#)

Journal of Autism and Developmental Disorders

(2009) 40:580-589
doi: 10.1007/s10803-009-0922-1

The link: Autism, ADHD, and obsessive-compulsion

Anholt, G. E.; Cath, D. C.; van Oppen, P.; Eikelenboom, M.; Smit, J. H.; van Meegen, H.; & van Balkom, A. J. L. M.

A similarity in symptomology of autism spectrum disorders (ASD), attention-deficit/hyperactivity disorder (ADHD), and obsessive-compulsive disorders (OCD), was the foundation for the current study. Researchers examined the relationship between characteristics of ASD and ADHD in an adult population with diagnosed obsessive-compulsive disorders. Hypotheses were raised to investigate if higher rates of ASD and ADHD characteristics would be found in the OCD group versus a healthy control group, if severity of OCD characteristics could be predicted by ASD and ADHD symptoms, and if the lack of social skills in the OCD group by previous studies could be replicated. This study also aimed to show that the OCD group would have higher rates of attention to detail when tested through an autism questionnaire, the Autism-Spectrum Quotient, and that hoarding behaviors in the OCD group could be associated with the similarly like symptoms of ASD. The study concluded that individuals with OCD diagnoses frequently displayed more co-morbid characteristics of the other two disorders, ASD and ADHD, than the control group. In this study, ADHD inattention and attention switching problems were proven to be the strongest predictors for severity in OCD symptoms, whereas they concluded that these related problems might actually be the same attention based problem. In regards to hoarding, the researchers failed to conclude that autism symptoms were related to hoarding behaviors in the OCD group; rather ADHD inattentive characteristics and an older age (above 40 years) were more reliable. This study's findings suggest that all three diagnoses' characteristics are related, disorder etiologies are similar, and that characteristics overlap. Future review and treatments should include a family based approach for study of genetics and family characteristics of all disorders, drug therapies with the use of Methylphenidate for OCD and ADHD co-morbid patients, and the use of cognitive-behavioral strategies for increased attention and social skills training. Further research would also need to consider additional screening instruments or assessment methods/scales due to deficits by the patients in regards to their lack in ability to correctly self-report.

[Link to Journal](#)

Research in Autism Spectrum Disorders

(2010) 4:355-366
doi: 10.1016/j.rasd.2009.10.017

Signs of autism found in family home movies

Saint-Georges, C.; Cassel, R. S.; Cohen, D.; Chetouani, M.; Laznik, M-C.; Maestro, S.; & Muratori, F.

A recent literature review of published studies was prepared by students in various European universities to assess if home movies had any relevance in the later diagnosis of autism spectrum disorders. The researchers were looking for previously completed home movie studies to determine if characteristics displayed by the infants and toddlers could be used as indicating factors in their later diagnosis of either autism spectrum disorders (ASD) or developmental delay (DD). Children displaying certain stereotyped characteristics of ASD during toddlerhood; less response to their own name and eye contact, less positive facial expressions, and lower affect quality, were proven to be good indicators of a later diagnosis of ASD over DD. This study also verified that although many characteristics of ASD were present across age spans, for a strong correlation and diagnosis of ASD over DD, those characteristics would need to be seen during the second year.

[Link to Journal](#)

PUBLISHED RESEARCH

Journal of Autism & Developmental Disorders

(2010) 40:504-508
doi: 10.1007/s10803-009-0890-5

The impact of autism on driving motorized vehicles

Sheppard, Elizabeth; Ropar, Danielle; Underwood, Geoffrey; & van Loon, Editha

Researchers from the University of Nottingham examined the ability of high functioning individuals on the Autism spectrum to identify two types of driving hazards: social (involving a pedestrian or cyclist) or non-social (involving a motor vehicle with the driver obscured). Participants viewed video clips of hazardous driving situations and were asked to identify any potential hazards. Researchers found that Autism spectrum participants performed significantly worse than controls. The participants identified significantly less social hazards in the driving situations and responded notably slower to all hazards. Researchers suggest that special training be implemented for drivers on the Autism spectrum, focusing on hazard awareness and improving hazard detection. Additionally, the authors point out that since drivers with Autism spectrum disorders have a significantly harder time identifying social hazards, it is possible that they also have increased difficulty recognizing risky behaviors as pedestrians.

[Link to Journal](#)

Research in Developmental Disabilities

(2010) 31:664-671
doi: 10.1016/j.ridd.2010.01.005

Family-indicated service needs for children with disabilities

Leung, Cynthia; Lau, Joseph; Chan, Grace; Lau, Beverly; Chui, Mandy, The Hong Kong Polytechnic University

Researchers developed and validated a measure aimed at assessing service needs of families with developmentally disabled children. Scores on the new measure correlated with parental stress levels, and were able to differentiate between clinical and non-clinical families. Authors detail the individual components of the measure, and discuss the collapsing of several variables during the validation process. Limitations include a need for increased diversity in age group: participants were exclusively primary school aged, and there exists a possibility that the needs of families may change with the age of the child. Additionally, the measure was administered only after a diagnosis had been made. Authors suggest trajectories for future validations.

[Link to Journal](#)

Research in Developmental Disabilities

(2010) 31:750-759
doi: 10.1016/j.ridd.2010.01.017

Tardive dyskinesia and long-term antipsychotic use in developmental disabilities

Fodstad, Jill; Bamburg, Jay; Matson, Johnny; Mahan, Sara; Hess, Julie; Neal, Daniene; & Holloway, Jodie, Louisiana State University

Researchers investigated side effects found in individuals on the Autism Spectrum and with other intellectual disabilities as a result of long-term use of atypical antipsychotic medications. While symptoms involving the nervous system tracts are reported to occur less often with atypical antipsychotics relative to older typical antipsychotics, the investigators discovered a profile of side effects associated with long-term use. Side effect symptoms found were consistent with tardive dyskinesia, including constant, recurring, and useless movement of the body and limbs. Researchers discussed the severity of these side effects, and urged restraint in the long-term administration of atypical antipsychotics, especially in residential treatment programs. One major limitation of the study was insufficient information concerning previous antipsychotic use from their participant pool, which may have lead to overrepresentation of the prevalence and severity of the side effects as it related to the duration of administration. Future research is needed to address this limitation. [Link to Journal](#)

Behavioral and Brain Functions

(2010) 6
doi: 10.1186/1744-9081-6-10

Maturation of social attribution skills in typically developing children

Hu, Z.; Chan, R. C. K.; & McAlonan, G. M.

The authors of this study were curious to observe and describe the developmental trajectory of social attribution skills in typically developing young children. Their findings could then be used to provide insight on the development of those skills in young children with autism spectrum disorders (ASD). Social attribution is how an individual assigns the causes or behaviors of an event to that event. Individuals with ASD typically have deficits in the related area of 'Theory of Mind', where they have difficulty with understanding and recognizing the social and emotional states of other's around them.

In this study, the researchers modified the Social Attribution Task (SAT) to a customized version for young children under the age of 13 years. The SAT uses video movements of shapes to assess if individuals can make social connections and representations between inanimate objects. In this version, they replaced the traditional shape objects with animals and cartoon representations, further encouraging the recognition of social situations and related outcomes. One hundred and fifty four children, split almost evenly for gender, were used in this study. The average age for the children was 9.88 years, and no participants had any diagnosed developmental disorders.

The results of the study indicate that social attribution skills are still developing up to age 6 years, with children displaying inconsistency up to age 8, and continuous improvement of these skills from ages 6 to 9 years. From ages 9 to 10 years, children typically start to associate personal qualities and motivations to the movements presented on screen. By 13 years of age, the children generally related the mental states of the animations to the perceived actions. [Link to Journal](#)

[Link to Journal](#)