

EMERGING TRENDS IN AUTISM, LEARNING DISABILITIES AND ADHD

MICROSOFT AWARDS FOURTH MAJOR GRANT TO THE HELP GROUP



Microsoft empowers young people with special needs by helping them to develop their school and workplace skills through the power of technology. Dr. Barbara Firestone, Help Group President & CEO, is pleased to announce that Microsoft has awarded a most generous YouthSpark product grant to The Help Group.



This grant is the fourth in a series, beginning in 2011, that supports The Help Group's efforts to strengthen and expand its

technological abilities in support of students with autism and other special needs.

Microsoft's most recent grant for our "Youth Achieving More Through the Power of Technology" initiative will further enhance The Help Group's ability to promote student digital literacy, learning, achievement and preparation for educational and vocational opportunities. "We are most grateful to Microsoft for recognizing the potential of our youth," commented Dr. Firestone. "Microsoft's spirit of philanthropy quite literally opens new doors of opportunity to help maximize our students' potential." (Cont'd on page 6)

CDC REPORTS UPTICK IN AUTISM PREVALENCE IN U.S.

According to a recent report from the U.S. Centers for Disease Control and Prevention, one in 59 children is diagnosed with an Autism Spectrum Disorder (ASD) by the age of eight. The new figure was derived from data based on a 2014 survey of 325,483 children across 11 states in the U.S. through the federal agency's Autism and Developmental Disabilities Monitoring Network.



This new prevalence rate of 1.7 percent is a slight uptick from 1.5 percent, or one in every 68 children, based on the CDC's 2016 report. The new estimate is a 15 percent increase from two years prior.

In the latest CDC report, ASD is about four times more likely to occur in boys than among girls. This diagnostic gender gap has decreased and autism is now estimated to affect one in every 37 boys and one in every 151 girls. While autism impacts children from all ethnic, cultural and socioeconomic backgrounds, new statistics point to a higher autism prevalence among black and Hispanic children than reported in previous years, likely due to more effective community outreach in minority communities.

Nearly a third of children identified with ASD had a co-occurring intellectual disability. The CDC found (Cont'd on page 6)

SAVE THE DATES!

THE HELP GROUP PRESENTS SUMMIT 2018

Advances and Best Practices in
Autism · Learning Disabilities · ADHD
A Cutting Edge Conference for Professionals and Parents
Friday, October 19 & Saturday, October 20
Skirball Cultural Center, Los Angeles



Registration Now Open at www.thehelpgroupsummit.org

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HelpLetter

A publication of The Help Group

Dear Friends,

Welcome to our newest edition of *HelpLetter*!

Inside you will find seven thought-provoking articles from leading experts in the fields of autism, ADHD and learning disabilities.

Please save the date for SUMMIT 2018 this coming October 19th and 20th, and take a few moments to preview the conference's exciting agenda on the next page.

In exciting news, Microsoft recently awarded The Help Group with yet another major grant. Since 2011, Microsoft has empowered our young people by helping them to develop their digital literacy skills through the power of technology.

We are delighted to share highlights of *Faces of Promise: Looking Beyond Autism* presentations at the UCLA/LACMA Conference and the Rose Gallery at Bergamot Art Center.

This past April, the CDC announced a rise in autism prevalence rates in the United States. In this edition is a brief summary of its most recent statistical findings.

As always, it's wonderful to have this opportunity to connect with our *HelpLetter* community.

Barbara Firestone, PhD
President & CEO, The Help Group

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RESEARCH AND TRAINING PARTNERSHIPS



The Alliance is an innovative partnership between The Help Group and the UCLA Semel Institute for Neuroscience and Human Behavior. It is dedicated to enhancing and expanding clinical research, education and treatment of those with autism spectrum disorder (ASD), and to contributing to the development, greater understanding and use of evidence based best practices.



The Help Group - UCLA Neuropsychology Program provides comprehensive assessment, testing and diagnosis for children with developmental challenges, as well as family conferencing and follow-up services. It also trains post-doctoral fellows from UCLA's Medical Psychology Assessment Center in pediatric neuropsychology.



The Help Group - USC Occupational Science Initiative is dedicated to developing evidence-based intervention programs for children with ASD through an interdisciplinary team of researchers, educators and clinicians.

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THE HELP GROUP PRESENTS

SUMMIT 2018

Advances and Best Practices in
Autism · Learning Disabilities · ADHD

Friday, October 19 & Saturday, October 20
Skirball Cultural Center, Los Angeles

Keynote Speakers

Susan Bookheimer, PhD - Thomas E. Brown, PhD
Jeffrey Gilger, PhD - Pat Levitt, PhD - Peter Mundy, PhD

Grace Baranek PhD,
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Topics Include

- *Focusing on Strengths in Children with Autism*
- *Learning Difficulties for Young People on the Spectrum*
 - *ADHD and Executive Functioning*
 - *Bully Proofing Strategies*
- *Sensory Over-responsivity and the Brain in Autism*
- *Building Resilience at Home and in the Classroom*
 - *Gastrointestinal Disturbances and other Co-Occurring Medical Conditions*
 - *Psychopharmacology Updates*
- *Behavioral Therapies to Ease Severe Anxiety*
- *Thought Provoking Questions About Dyslexia*
- *Learning Disabilities and Why It Goes Untreated*
- *Vocational Pathways for Young Adults on the Spectrum*
Plus many more....

For a complete conference schedule and registration, visit

www.thehelpgroupsummit.org or [CLICK HERE](#)

RE-THINKING "ASPERGER SPECTRUM" AND ADHD

Thomas E. Brown, PhD

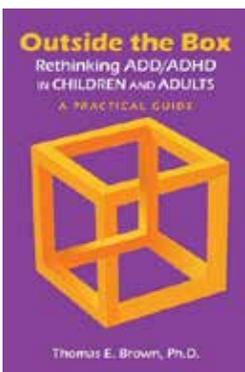


It is time to re-think our understanding of Asperger's Syndrome and ADHD. Prior to 2013 the diagnostic manual of the American Psychiatric Association did not recognize ADHD as a legitimate diagnosis for anyone diagnosed with Asperger's Syndrome or any other disorder on what is now known as the Autism Spectrum (AS). That changed after research demonstrated that many individuals with Autism or Asperger's fully meet diagnostic criteria for ADHD and that many

of those individuals benefit from the medication treatments commonly used for ADHD. DSM-5 recognized that ADHD can co-occur with autism spectrum disorders. Nevertheless, many clinicians are not yet familiar with how ADHD can be recognized and effectively treated in those with Asperger's.

Unfortunately, the 2013 edition of the DSM also removed the diagnosis of Asperger's Syndrome and subsumed it into the very broad category of Autism Spectrum Disorder, despite the fact that ICD-10, the more widely-used diagnostic system of the World Health Organization, continues to recognize Asperger's as a separate diagnosis and that the prevalence of Asperger's is almost double that of classical Autism.

It is important that Asperger's be recognized as a syndrome that has significant differences from other disorders on the AS, even though it also has some similarities. First, those with Asperger's, by definition, do not suffer from the substantial delays in language development that characterize most others on the Autism Spectrum. Second, it is typical for those with Asperger's to have at least average and, in many cases, very much above average language skills with commensurate cognitive abilities. Third, unlike most others on the AS, those with Asperger's often are not identified as impaired until they enter into their school years, sometimes not until middle school or beyond.



Most students with Asperger's can be cooperative and quite appealing to adults, but when stressed they may quickly become extremely anxious, oppositional, or seriously depressed. Many withdraw from social interactions with peers, preferring to spend time with adults or much younger children. Some immerse themselves each day in prolonged hours of solitary activities such as reading or video games any time they are not in school or other required activities. Self-imposed social isolation often escalates during adolescence.

Because their relatively strong language skills and other cognitive abilities often mask their social impairments, children with Asperger's often are not diagnosed and provided adequate support and treatment until after they encounter significant difficulties in school where their lack of intuitive

"social radar" makes it difficult for them to negotiate the complicated dynamics of interaction with their peers. Their hypersensitivity to criticism, their difficulty in modulating emotions, and their inconsistent motivation for schoolwork often puzzle and frustrate their teachers and family members. Their difficulties can elicit bullying from classmates as well as repeated confrontations from teachers and parents.

When they are recognized by parents or teachers as having difficulties, help provided for these children is often not very helpful. Many teachers, counselors, and mental health professionals have had little training in how to recognize, assess and provide treatment for those with Asperger's. Often they seek to treat the behavior problems, ADHD, anxiety or depression with the usual counseling and/or medication treatments which may work with many children of similar age, but not as well with those who suffer from Asperger's.

Some who have specialized training for dealing with Autism may utilize strictly behavioral treatments that work with many others on the Spectrum, but often not as well with the complex underlying cognitive-emotional

biases typical of those with Asperger's. It is easy to overlook the unique ways those with this particular disorder perceive themselves and others in their environment, their apparent avoidance of or indifference to the emotions that pervade social interactions for most others. Often they can think and speak in ways that are extremely logical while remaining very distant from and unaware of any emotions in themselves or others.

Yet it is also important to recognize that those with Asperger's are not all alike. One might actually speak of a spectrum of Asperger's,

a spectrum which includes some who are extremely reclusive, avoiding voluntary contact with age mates while others desperately want to interact with peers and form friendships, but repeatedly encounter rejection from peers because they are clumsy in the way they come across. Some are bossy and arrogant, presenting themselves as clearly superior to others. Others are painfully shy, uncertain and self-effacing.

Some are intensely attached to one or both parents, clingy and dependent far more than others of similar age; others maintain themselves as exaggeratedly independent, quick to shake off any show of affection and seeing themselves as much more mature than their peers. Some come across as emotionally fragile, quick to cry and melt down in response to any slight or frustration; others come across as invulnerable and unaffected by any criticism or injury.

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KEYNOTE SPEAKER SUMMIT 2018

You can hear Dr. Thomas E. Brown at The Help Group Summit 2018. He will present **Understanding and Supporting Children and Teens with ADHD and Asperger Syndrome** and **How ADHD Impairs Motivation in Some Situations, But Not Others**. Dr. Brown's most recent books are *Smart but Stuck: Emotions in Teens and Adults with ADHD* (2014) and *Outside the Box: Rethinking ADD/ADHD in Children and Adults: A Practical Guide* (2017). His website is www.BrownADHDclinic.com.

ON THE ROAD TO PRECISION HEALTH: BIOMARKERS AND CLINICAL TRIALS IN AUTISM SPECTRUM DISORDER

Shafali Spurling Jeste, MD



As a child neurologist, my ultimate goal has always centered on maximizing the well-being and health of my patients. Over the last 10 years, as I have dedicated my efforts to the care of children and adults with autism and related neurodevelopmental disorders, this goal has felt, at times, elusive. We know that behavioral interventions and targeted educational programs are the mainstay of treatment

for autism, and these behavioral supports will always be required to maximize life skills, cognition, language, and social skills. But why are these behavioral interventions not accompanied by pharmacological treatments (medications) that could even further improve functioning and core features of autism? My patients come to clinic every week asking these very relevant questions: *Why are there no medications for autism? Which treatments advertised on the internet should we trust, as many of them seem to claim that provide are a "cure?"*

The urgency to answer these questions has inspired tremendous research efforts in our field, with our UCLA Center for Autism Research and Treatment (CART) playing a central role. And ultimately, I emphasize to my patients that there is hope! We do not lack promising medications nor do we doubt the potential for targeted therapies that might benefit subsets of children and adults with autism. The challenge lies in the design and implementation of clinical trials that actually test and demonstrate the effectiveness of these treatments. Numerous trials have been conducted over the years, but none have demonstrated success attenuating the core symptoms of autism. In fact, the only successful trials leading to FDA approval of medications in autism have been for Arapiprazole and Risperidone for the symptom of irritability.

The fundamental question really becomes: *Why do clinical trials of medications for autism seem to fail?* To answer to this question, we first need to understand how clinical trials work. The best trials are randomized, double blinded, and placebo controlled. Patients are randomly assigned to one of two treatment groups, one receiving the medication and the other receiving a "placebo," or sham-drug. Participants are blinded to their group membership, so they do not know if they are receiving the true medication or the placebo. At the beginning of the trial, testing is done to establish the baseline characteristics of the patients. For instance, if we are testing a drug to improve cognition, then cognitive function (IQ) will be measured. All of the patients are then treated for a fairly short period of time, usually 2-3 months, and then at the end of the treatment period they are tested again with the same assessments, which serve as endpoints or outcome measures for the trial. Success of the drug is defined

by greater improvement in outcomes in the treatment group compared to the placebo group.

So, why do our trials fail?

1. Selection of patients: Autism is very heterogeneous, with the spectrum representing a wide range of abilities and challenges, in part rooted in the range of etiologies of their autism. Yet our trials often span the whole autism spectrum or remain limited to a very specific subset of individuals, namely those with enough cognitive ability to participate in the trial (those considered "high functioning.") However, it is likely that select drugs will prove effective for subsets of individuals on the autism spectrum, and we need to find ways to better select subgroups of individuals that might best respond to certain types of treatments.

2. Outcome measure: The measures that are used in trials are often based on parent / caregiver report as well as some direct standardized assessments, such as cognitive function. Parent report measures are prone to bias and may be influenced by parent belief in the effectiveness of the drug. The scores from these direct measures are often insensitive to change in the short term. A child may actually make meaningful gains in certain areas or a drug might just start to work, but these changes will not be reflected in overall scores. We need measures that are more sensitive to subtle changes that may precede these larger scale changes in development.



3. Placebo effect: The placebo effect refers to the fact that often patients receiving the sham-drug actually make considerable gains, sometimes as robust as the treatment group. There are several reasons for the placebo effect. First, it may actually be therapeutic to be followed in a trial, especially as it raises a caregiver's awareness about their child's development and leads to closer monitoring of the child's behavior. Second, the strong belief in the promise of a drug may skew a caregiver's perception of their child's behavior, leading to biased reporting of improvement. Third, there can be a practice effect with some of the behavioral measures, with children improving when assessments are repeated.

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JESTE lab
Center for Autism Research and Treatment at UCLA

MICROSOFT AWARDS FOURTH MAJOR GRANT TO THE HELP GROUP

(Cont'd from cover)

Microsoft
YouthSpark

In 2011, The Help Group presented its *Corporate Philanthropy Award* to Microsoft at the Teddy Bear Ball, and in 2014, The Help Group presented Microsoft with its *Champion for Children Award*. Celeste Alleyne, Director, US Citizenship & Public Affairs, accepted both awards on behalf of Microsoft. "Over the past several years, I've seen first-hand how The Help Group has developed cutting edge programs that are helping young people to prepare for the jobs of tomorrow," Celeste Alleyne remarked. "Microsoft is proud to partner with The Help Group and to support an organization shaping brighter futures for so many."



Celeste Alleyne, Mary Snapp, Corporate Vice President, Microsoft Philanthropies, Dr. Barbara Firestone

Microsoft established its YouthSpark program in 2012. A global program, it's designed to help young people imagine and realize their futures by providing access to computer science opportunities, empowering them to achieve more for themselves, their families and their communities. YouthSpark is a company-wide initiative with a goal of helping over 300 million young people around the world prepare for their next steps by focusing on access to education, employment and entrepreneurship.



Students of The Help Group's STEM³ Academy

To date, Microsoft has awarded The Help Group with grants valued at \$2,400,000. The Help Group is most grateful for Microsoft's extraordinary philanthropic commitment.

CDC REPORTS UPTICK IN AUTISM PREVALENCE IN U.S.

(Cont'd from cover)



that less than half of kids with the developmental disorder were diagnosed by age 4, thereby missing the benefit of early intervention therapies and treatments. Since the last reporting, this statistic has remained the same.

"The CDC's prevalence update during National Autism Awareness Month underscores the result of years of increased awareness about autism, and continues to highlight the importance of ongoing research into risk factors for ASD," said Dr. Barbara Firestone, President & CEO of The Help Group. "The rise in autism prevalence signals the critical need for educational, therapeutic, occupational and residential services for these young people, and at The Help Group we are committed to providing these types of innovative programs and services so that each young person we serve can make gains and fully reach their potential."

[CLICK HERE FOR MORE INFORMATION](#)

GIRLS AND WOMEN WITH ADHD

Stephen P. Hinshaw, PhD



At the 2017 Help Group Summit, I presented on two topics: (1) girls and women with ADHD, including recent findings from our ongoing, long-term study at Berkeley; and (2) the stigma that still attaches, all too strongly, to ADHD in particular and mental/developmental disorders in general. In the short space available, I provide brief highlights of both talks.



First, as I've noted in past issues of this newsletter as well as in the scientific literature, girls with ADHD - particularly as they enter adulthood - continue to show clear impairments in school, in relationships, in their overall cognitive and executive functioning, and in the workplace. We began our major study of this topic over 20 years ago in the San Francisco Bay Area, by holding three consecutive summer research programs for both girls with carefully diagnosed ADHD and a matched group of typically developing girls, all of elementary-school age.



Through a continuing series of National Institute of Mental Health grants, we have followed this sample (of 140 girls with ADHD and 90 comparison participants), for the past 16 years, through

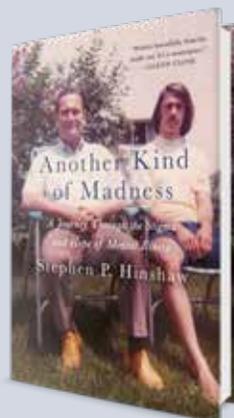
their mid-20s. Through intensive efforts to track and locate the sample every few years, we have maintained contact and assessments with 95% of them over time. Note that having such a high "retention rate" in a longitudinal study helps to assure that long-range findings are valid. The investigation is called the Berkeley Girls with ADHD Longitudinal Study—BGALS for short

The girls with ADHD, whether exclusively inattentive or both inattentive and impulsive when initially diagnosed, continued to show, on average, major academic, social, personal, and service-related problems and issues at every follow-up time point. Across the years, they also maintained medium to large deficits in so-called "executive functions" (e.g., planning, problem solving, working memory, the ability to inhibit impulses, and the like), relative to the comparison sample. Unlike most male samples, they did not show major risk for substance use problems during adolescence and early adulthood (except for heightened tobacco use). Yet the girls with ADHD—especially those with childhood impulsivity plus inattention—did show strikingly high rates of self-injury (both non-suicidal self-injury, such as cutting and other forms of self-mutilation, and actual suicide attempts) by late adolescence and beyond. The highest such rates were seen in those young women with histories of ADHD (strongly transmitted genetically) and histories of maltreatment (physical or sexual abuse, or neglect). Thus, as with other highly heritable conditions, such as bipolar disorder, the combination of genetic vulnerability and serious trauma combine to lead

to the worst outcomes. It's not biology or experience; it's both in tandem that yield the highest risk.

By our mid-20s follow-up, other patterns had become clear. Despite the presence of healthy, resilient functioning in a subset of the girls with ADHD, the overall outcomes were not auspicious. The girls with ADHD experienced high rates of intimate partner violence over time. Even more, nearly 45% of the girls with ADHD had experienced unplanned pregnancies during their lifetimes, in contrast to only 10% of the typically developing comparison group. Moreover, their academic skills (especially in math) lagged further behind at each follow-up, and problems in terms of post-secondary education and steady employment were readily apparent. For most of the negative outcomes, it was the subgroup of girls with ADHD whose symptoms persisted over time who showed the greatest young-adult problems. Yet in other cases, like unplanned pregnancy, the problematic outcomes pertained to the girls with ADHD regardless of whether their symptoms improved with time. Early detection and early intervention appear crucial.

In short, girls with ADHD do not always experience the same types of negative outcomes as do boys—indeed, they showed lower rates of delinquency and substance abuse—but risk for self-harm, for unhealthy sexual behaviors, and for long-term academic and neuropsychological problems was strong. Despite stereotypes that girls with ADHD are rare and lacking in long-range impairment, our findings tell a different story. Clinicians and researchers must come to terms with the reality of ADHD in girls and women.

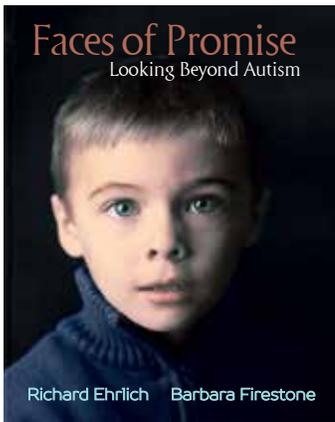


In my second talk, I began by defining stigma, the shame and disgrace placed on individuals who fall into socially rejected subgroups, whether racial, religious, physical, or behavioral in nature. Sadly, individuals with ADHD still receive stigma, partly related to the inconsistency of their behavior across situations, fueling the expectation that if only such individuals tried

harder, they wouldn't display such erratic behavior. Nearly all forms of mental disorder receive stigma as well. Yet it's not only the most severe variants (e.g., schizophrenia; bipolar disorder) that incur shame and rejection. Attention-related and learning-related problems, as well as developmental disorders, receive stigma and shame. Family members, who were believed to have caused such problems for most of the 20th century, are still particularly likely to receive blame and mistrust.

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FACES OF PROMISE PRESENTED AT THE UCLA/LACMA CONFERENCE ON ART, NEUROSCIENCE, AND PSYCHIATRY



Highly acclaimed fine art photographer and physician, Dr. Richard Ehrlich and Dr. Barbara Firestone presented their collaboration, *Faces of Promise: Looking Beyond Autism*, at the The UCLA Conference on Art, Neuroscience, Psychiatry – a joint initiative of The Semel Institute at UCLA and LACMA.

The conference, co-chaired by Dr. Andrew Leuchter, Professor in the Department of Psychiatry and Biobehavioral Science, Director of the Neuromodulation Division, and Senior Research Scientist at the Semel Institute at UCLA, and Dr. Britt Salvesen, Department Head and Curator, Wallis Annenberg Photography Department and the Department of Prints and Drawings, LACMA, took place on November 9 – 11 at the UCLA Luskin Conference Center and brought together a transdisciplinary faculty of neuroscientists, artists, academics, and psychiatrists for a dialogue exploring contemporary social issues and science/art collaboration.

Faces of Promise, a beautifully designed photo essay book, was presented during the *Art and Autism* symposium. *Faces of Promise* had its beginnings when Dr. Ehrlich approached Dr. Firestone with an idea to contribute to the acceptance of children with autism through his photography. Utilizing large-format Polaroid and digital photography he captured, in portraiture, the essence and beauty of these children.

Dr. Firestone shared, “We decided that this book should include young people across the spectrum, from preschool to young adulthood, whose families are from all walks of life and are culturally and ethnically diverse. I suggested to Rick that, in addition to his photographs, it would be meaningful to accompany the images with thoughts from the parents, and sometimes from the young people themselves.”

To conclude the presentation, video excerpts of one of the parent interviews was shown. A mother poignantly spoke about the dignity and promise of her child that reflected the message at the heart of *Faces of Promise*.

Faces of Promise was recently presented at *Classic Photographs Los Angeles* at the Rose Gallery at Bergamot Art Center. Rose Shoshana of Rose Gallery invited Dr. Firestone and Dr. Ehrlich to sign copies of the book for this wonderful exhibit.



Dr. Richard Ehrlich, Dr. Barbara Firestone and Conference Co-chairs Dr. Britt Salvesen and Dr. Andrew Leuchter



Dr. Richard Ehrlich & Dr. Barbara Firestone



Conference reception featured artwork from *Faces of Promise*.

Here are a few brief excerpts of praise for *Faces of Promise*

“By looking beyond the stereotypes often associated with the autistic spectrum, it reveals with exquisite imagery and prose, the beauty and challenge that is life itself.” Peter C. Whybrow, MD - Director, UCLA Semel Institute

“...the gorgeous photos and moving text of this masterwork epitomize the underlying humanity of these youth, and their families.” Stephen Hinshaw, PhD - Professor of Psychology, UC Berkeley; Professor of Psychiatry, UC San Francisco

“This inspiring reflection and deeply moving book is a work of art that reveals the beauty and diversity of our humanity.” Louis A. Vismara, MD – UC Davis MIND Institute Co-Founder, Autism Advocate & Parent

“My husband and I are so touched that Barbara Firestone sees in our children the very elements we hope everyone will see in them, as does Richard Ehrlich in his soulful portraits.” Hilary Kip - Parent

Available on Amazon

DEAR PARENT: WHY YOUR DYSLEXIC CHILD STRUGGLES WITH READING

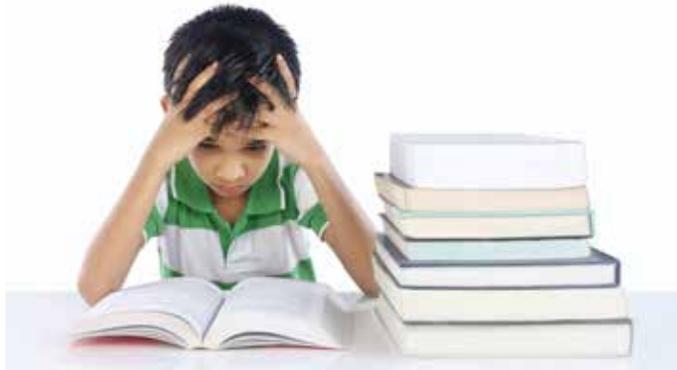
Maryanne Wolf, PhD



No one can ever prepare a parent for two things: the immeasurable love that comes with having a child; and the sorrow and confusion that comes when your child appears to learn in a different way from other children. I am an educator and neuroscientist, who studies how the brain learns to read and what happens when a young brain can't learn to read easily, as in the childhood learning challenge, developmental dyslexia.

Yet, despite this knowledge, I was unprepared to realize that my first son, Ben, was dyslexic. He was five years old when I put all the pieces together, and I wept as soundlessly and deeply as every other parent. I wept not because of his dyslexia, which I understood very well, but because I knew the long, difficult road Ben faced in an educational system ill-prepared then to meet his needs. That was the first thing I did 16 years and eight schools ago.

The second thing was to concentrate my work on ways to help our society understand two huge things: first, the complex, unnatural miracle that takes place every time a brain learns to read; and second, the fact that many children with dyslexia have a different brain organization – one that poises them for greatness in many areas; but makes them inefficient at learning written language.

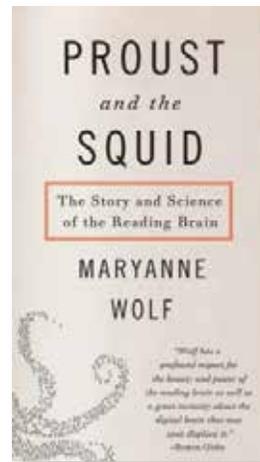


Helping every child meet his or her potential, not only children with challenges, is the underlying goal of this letter, my book, *Proust and the Squid: The Story and Science of the Reading Brain*, and the work of my entire field.

It all begins with understanding that reading does not come naturally to human beings. We humans invented literacy, which means it doesn't come for free with our genes like speech and vision. Every brain has to learn it afresh. Learning to read for the brain is a lot like an amateur ringmaster first learning how to organize a three-ring circus. He wants to begin individually and then synchronize all the performances. It only happens after all the separate acts are learned and practiced long and well. In childhood, there are three, critical "ring acts" that go into the development of reading: learning about the world of letters; learning about the individual sounds

inside of words (which linguists call phonemes); and learning a very great deal about words.

Many things help each of these three areas develop, and parents and loved ones can foster them all. The most important contribution appears deceptively simple: speaking and reading to your child from infancy onwards. Children who spend the first five years of their lives exposed to a great deal of oral language with others (and not from a television or other media) and listening to a great many books being read to them enter kindergarten with advantages that prepare them to read. In one well-known study, children in more privileged language and book-rich environments heard 32m more spoken words than children raised in disadvantaged environments. It was not economic poverty, but "linguistic poverty" that put these children at profound risk for failure before they entered the kindergarten door.



In dyslexia, the reasons for reading difficulties aren't that simple, or as easy to prevent. Somewhere between five and seven years of age, most young brains are readied to become their own ringmasters and bring all their knowledge about letters, sounds and words together to read. For children learning the alphabet, they must learn that a particular sound corresponds to a particular letter, which in English isn't always as straightforward as in other languages. Thus, programs that emphasize the principles of phoneme awareness and decoding (that is, systematic phonics programs) represent

an important foundation for all children first learning to read. There are, of course, other linguistic areas that must also be emphasized, including vocabulary knowledge, familiarity with how words work grammatically, and also knowledge about the smallest units of meaning in English, called morphemes. Ideally, our children need all of these emphases when learning to read.

In dyslexia, many children have particular difficulties distinguishing the phonemes or sounds within words. That makes it very difficult for them to learn the rules for which particular letters go with which sounds. Other children with dyslexia aren't able to acquire the speed necessary to get the different parts in the reading system together; they never learn to read fast or fluently enough to comprehend what they read.

Brain imaging studies are beginning to suggest that these difficulties may emerge in part because many children with dyslexia are endowed with a very strong right hemisphere that they use to read. In most people the left hemisphere is largely used in reading. The right hemisphere, which is involved in many spatial, artistic, and creative functions, is, however, very inefficient for reading, which would explain why it takes so long to learn to read. If this research proves correct, it also helps explain why so many great, creative figures have a history of dyslexia: artists like Picasso, Gaudi, and Rodin; writers like Yeats and Agatha Christie; and entrepreneurs like Richard Branson, Charles Schwab, and Michael Heseltine.

continued on page 17

ENDOWING SOCIALLY ASSISTIVE ROBOTS WITH THE ABILITY TO HELP YOUNG PEOPLE WITH AUTISM AND OTHER SPECIAL NEEDS

Maja J. Matarić, PhD



Socially assistive robotics (SAR) is an area of robotics that focuses on developing robots that help people through social rather than physical interaction. Autism intervention and therapy are one of the earliest challenges that SAR has been applied to. SAR has also been developed for eldercare, Alzheimer's care, stroke rehabilitation, personalized learning, and similar domains. In all cases, the socially assistive robot is a companion for the user, and depending on the context may

- Increased social integration and confidence
- Initiated physical and non-physical displays of affection
- Sustained effects after the robot is no longer present

be in a subordinate role (e.g., a pet), a peer role (a friend), or a superior role (a coach). The robot is designed and programmed to provide motivation, support, and relevant cognitive, social, and/or physical exercises and challenges toward the specific health, education, or wellness goals.

The fact that the robot is embodied, a physically co-present agent in the proximity of the user, is fundamental to its ability to be effective in achieving its goals. The growing science of embodiment has shown that people interact differently with screens and disembodied entities than we do with physically embodied social agents such as people, pets, and robots. Physical embodiment as part of interventions has been shown to improve learning, behavior change, retention, and generalization.

Socially assistive robotics was named and defined in an article David Feil-Seifer and I published in 2005. Not long thereafter, in 2009, we contributed an article to The Help Group's Helpletter titled *Can Social Robots Help Autism? Socially Assistive Robotics for ASD Intervention*. Much has happened in the nearly decade since then. Today there are over 13,000 published papers describing research into developing and testing various types of socially assistive robots for ASD intervention and therapy. Studies have engaged a variety of:

- Children with a broad range of ASD symptoms and severities.
- Robot forms, from robot balls to robot pets to humanoid robots.
- Interaction contexts scenarios, from in-lab, to in-school, to public venues, and from one-on-one to small groups to large groups.
- Study designs, from single sessions to several sessions over time.
- Research teams, from the US, Europe, and Japan, involving psychologists, therapists, ethnographers, and roboticists.

That large body of research has shown the following repeatable effects:

- Robots engage and motivate children with ASD.
- Children with ASD, and without, interact more socially with robots than with screens.

There is strong evidence of improved social and communication skills resulting from interactions with socially assistive robots, including:

- Sustained and more socially appropriate eye gaze
- Improvements in turn taking
- Increased verbalizations
- Initiating and sustaining social play
- Improved joint attention and social referencing
- Displaying empathy and perspective-taking
- Improved willingness to share

As research into SAR continues, its potential for benefiting special needs populations is growing. The next major challenge for SAR is to demonstrate effectiveness in long-term studies. Toward that end, my research team, the Interaction Lab at USC, has been part of a National Science Foundation Expedition in Computing grant that has developed SAR systems for month-long, in-home deployments. Along with our colleagues at Yale University, we have been leaving robots in homes with children with ASD for a month at a time, and observing how families interact with such robots, how they are accepted, and most importantly, how effective they are at specific ASD interventions they are implementing. The USC study is using a friendly owl-like robot named Kiwi, designed to help the child to play daily numeracy and number-learning games and to talk and share. Kiwi has a friendly voice, a screen face, and a body that stays in place (on a table top) but can squash and stretch to engage and express emotion.



While Kiwi is designed for child-robot, one-on-one interactions, siblings and family members sometimes get involved in the education games as well, presenting new opportunities for social skill training. New and unanticipated interactions present a novel challenge for Kiwi and for SAR in general; we and other researchers are exploring the latest technologies involving speech recognition and understanding and machine learning so that each robot

can be personalized to the child and family and can adapt over time as the users' needs change.

Developing in-home interventions has the potential to significantly enhance the effectiveness of various therapies. Therapists and caregivers can see their advice and strategies reinforced and amplified in schools and homes, and users and families can engage in therapeutic interactions in an accessible way. Commercially available platforms are also being developed so that the potential of socially assistive robotics can be brought out of the lab and into people's lives. I am looking forward to launching my SAR research in classrooms at The Help Group this coming fall.

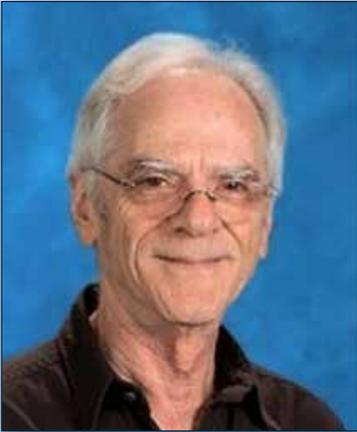
TO PARTICIPATE IN SAR RESEARCH

SAR research at USC is ongoing, in ASD and other domains. We continue to recruit families and analyze the data from the large (USC and Yale IRB-approved) ASD study. To learn more about participating in the SAR research at USC, call: (213) 740-6245; email: studyrec@usc.edu, or visit: Robotics Research at USC

Families interested in getting involved in testing and evaluation of a commercial SAR product, can connect through this online survey, goo.gl/forms/kQmWYIHsHb7vcgJj

STRENGTHS IN DIFFERENCES - STEM AND SPECIAL NEEDS

Ellis Crasnow, PhD



Young children are natural scientists, engineers, and problem-solvers, exploring the world by touching, tasting, building, dismantling, and discovering. As Director of STEM³ Academy and STEM education at The Help Group, I've seen first-hand how a STEM-based education can provide a strong foundation for students with special needs. At The Help Group, we know that students with diverse needs are every bit as capable as their neurotypical peers when given the opportunity.

This is why in 2015, The Help Group opened its 10th school, STEM³ Academy, the first school of its kind in the United States to offer students with social and learning differences, including autism, a rigorous curriculum in Science, Technology, Engineering and Math. STEM³ Academy has already gained international recognition and continues to expand to meet the ever growing needs of our community.

STEM³ Academy offers a strengths-based approach to teaching diverse learners who possess a passion for science and technology and who can benefit from experiential, hands-on, problem-solving. STEM³ is helping to pave the way for special needs students to lead more independent lives while at the same time, fill the growing gap for skilled STEM workers nationwide. With a 28% increase in the number of special needs students enrolled in undergraduate STEM fields, there is clearly a place for STEM³ Academy graduates in tomorrow's workforce.

STEM³ presents an entirely new model for educating special needs students from kindergarten through high school and beyond. Considerable evidence indicates that young children benefit from developing STEM-focused skills such as computer programming, building, making, and engineering solutions to real-world problem at a young age. Studies assert that students improve with more time to practice and internalize skills, so implementing a STEM-focused approach in elementary school makes perfect sense. STEM education focuses on the strengths, interests, and passions of individuals with various differences, and not on their weaknesses. A STEM-focused approach considers the whole individual as an integral being, instead of merely the areas perceived to be in need of support. It also considers the needs of the marketplace along with the abilities and skills that are continually in high demand. The goal of STEM education is to match the passions and skills of students with the demands of commerce and industry, so that after graduation there is a clearer pathway to employment.

STEM education's alternative approach to traditional education favors classes that are student-focused. Rather than have teachers lecture students, which requires them to rote-learn material and regurgitate it later, STEM³ faculty are far more interested in what the students can do, make, and perform. By implementing an alternative STEM-focused approach, classrooms become more active. Students learn to confront material and address contemporary problems while designing solutions to these problems. In doing so, students deepen their conceptual understanding of the issues involved and master the practical skills required to apply them.

A STEM-focused approach goes beyond simply incorporating science, technology, engineering and math into the curriculum. The addition of engineering and technology add distinctively new learning tracks to a more traditional curriculum. Take the field of engineering, for example. Engineers solve problems and bring a particular mindset to their process. Tasked with designing and building a bridge, an engineer wants to know the span of the bridge, how frequently it will be traveled, what kinds of loads it will bear, and how solid the ground is on which supports will rest. Once these questions are answered, the engineer might develop a prototype – a model (a physical, mathematical or computer model) to test the solution. Developing an engineering mindset turns each student into a problem-solver and a critical thinker. For each assignment, project or problem posed, a student might ask: What do I need to know, what more information do I need, how can I solve this, and what previous solutions have been offered? Answers to questions like these, and many others, turn our students at STEM³ into resourceful problem-solvers rather than repositories of information. They learn to apply what they know, and incidentally become more desirable to employers. One of the most valued characteristics that employers seek in employees is the ability to be an independent problem solver.



The other distinctive component of STEM education is technology. Because technology has drastically changed the employment landscape, it is imperative that we expose young people to the cutting-edge technology found in today's work place.

Drones, digital cameras, laptops, 3D printers, robots, CNC machines, and SOLIDWORKS are just some of the tools integral to the workplace and to student education. Robotics builds, engineering challenges, mathematics competitions, interdisciplinary projects and across-grade projects are vital components as well. This kind of technology and programming accompanied by the Innovation Lab and Maker Space are hallmarks of our STEM³ Academy campuses.

STEM students benefit from a multi-modal approach – by engaging visually, aurally and tactilely, and from a hands-on approach to their own learning. It's commonplace to find a great number of STEM³ students with exceptional scores on visual discrimination tests. Many of them possess the innate ability to detect fine differences between images – a highly marketable skill. The Israeli military has established, and since expanded, a program for individuals with autism to work in a unit dedicated to identifying troop and asset movement by detecting acute differences in satellite images. Microsoft and SAP have both established programs to employ those on the spectrum in their Autism at Work programs. Specialisterne, who established the parameters for Autism at Work, routinely train students with LEGO robotics.

This STEM-focused educational model has already achieved success in the four short years since being implemented at STEM³ Academy. Student teams were named "Rookie All Stars" at FIRST Robotics competition. STEM³ Academy's high school team took first place at Raytheon's

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UNDERSTANDING DYSLLEXIA: READING BETWEEN THE LINES

Lorie Humphrey, PhD



“Dyslexia” is an educational term that is often misunderstood. Even now this word is sometimes mistakenly defined as a tendency to read or write words/ letters backward (a common but incorrect definition that reflects earlier misconceptions about the process of reading).

As used today “dyslexia” refers to, “A reading difficulty that is unexpected [based on] a person’s age, intelligence, level of education, or profession, [and includes] ... difficulty learning to read... [and/or] trouble reading quickly and well.”

Until recently, there were also misconceptions about the brain-based processes that occur when people are reading. Although history suggests that humans have been reading in some form for many thousands of years, accurate information about the neurological process of reading is relatively new. With the development of technologies that allow scientists to “watch the brain in action” while people engage in reading tasks, however, understanding of these complex processes is finally being made available.

Background Information Related to Dyslexia

Other aspects of “dyslexia” were also not well understood until recently. For example, individuals with reading challenges often present with solid to strong abilities in other areas (such as intellectual, artistic, or interpersonal pursuits). Other observations of this group sometimes indicate skills in problem solving and strengths of imagination.

These observations suggest that reading disorders (“dyslexia”) represent specific neurological disruptions that interfere with some of the basic skills required for reading and writing. Such interference is not necessarily noteworthy in other neurological, oral language systems (i.e., talking and listening). Presumably, the latter abilities may be better preserved in general, because they were established much earlier in human history.

Skills Usually Preserved in Dyslexia

Despite difficulties with reading and writing, students with dyslexia often function well in other domains. These abilities can represent significant areas of strength, and provide compensatory skills to help the students manage academic challenges. Examples of such preserved abilities may include general intelligence, specific skills needed for daily functioning, “social intelligence,” and problem-solving abilities for non-academic pursuits.

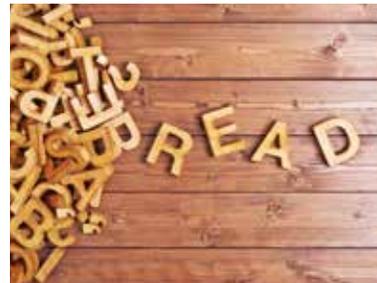
Oral Language

Learning to communicate orally (e.g., talk) is very different than learning to read. Although humans must be exposed to oral language in order to successfully develop speech, human language is very old, and is supported both physiologically and genetically. Because of the long history of human

communication, many neuro-developmental behaviors that support it are innate in babies and toddlers. Further, this development is also supported by spontaneous patterns of behavior between the parent and child.

In contrast, learning to read is not innate, and relies on both exposure and the practice of specific skills in order to develop. The abilities supporting reading must be explicitly taught in order to develop, and rely on underlying abilities that present inconsistently (such as phonological processing) thereby further increasing the risk.

Understanding the Reading Process



What are words? What are we doing when we read?

In English (as with many other languages), “spoken words” are actually series of sounds (i.e., speech sounds). When those sounds are heard in a specific order, they reference something specific (such

as the name of an object, person, or place). For example, when most English-speakers hear the sounds S-N-O they think of white, icy flakes in the middle of winter. In reality, those 3 sounds have nothing in common with the cold flakes, but because people have been taught to associate them, communication is made easier. In other words, those 3 sounds (in that order) have become an auditory symbol for something real in the environment.

In alphabetic languages like English, the speech-sounds that make up words are assigned symbols (i.e., “letters”). With practice these symbols can be visually scanned, and thus “read.” Further, when neuroimaging technology is used to observe brain activation of students when they are reading words, they appear to use the same cortical regions that are active when listening to words.

This approach to research, first developed in the mid 1990s, has allowed scientists to observe how and where the brain activates when readers engage in specific tasks. The clarity of this technology has also verified that the reason some students struggle to read efficiently, and at the expected pace, is directly related to neurological differences, and thus requires accommodation. In truth, the more that is known about reading and readers, the more evidence there is for neurological “Reading Disorders,” and the need for academic accommodations. Beyond simply offering extended time, these students require support that enables them to “access the text” with the same proficiency as their typically-reading peers.

For more information, see *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level* by Sally Shaywitz, MD First Vintage Books Edition, 2003.

¹ *Overcoming Dyslexia*, Sally Shaywitz, Knopf, 2003, page 132.

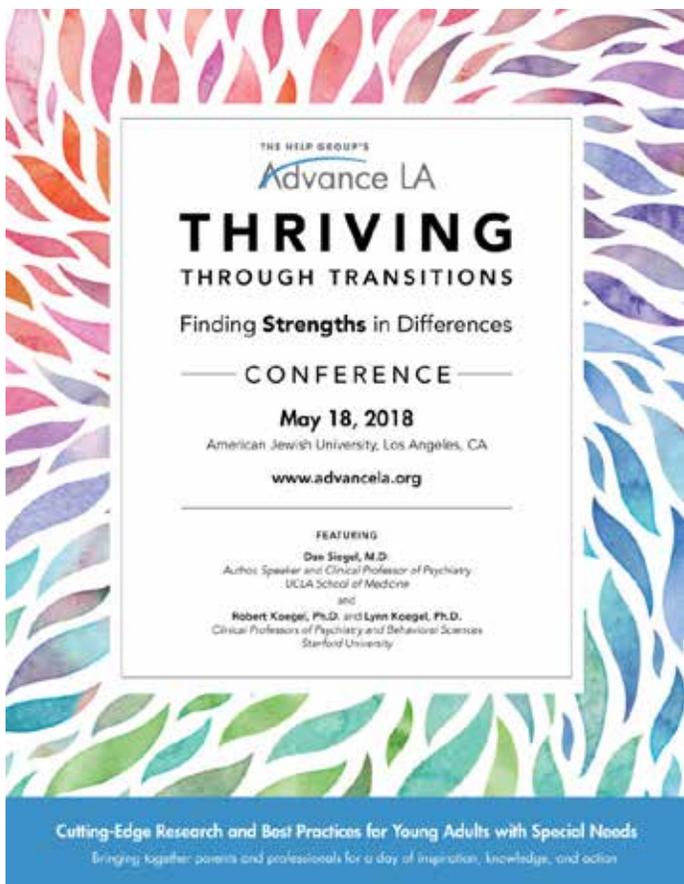
² As well as associated, later-developing skills such as written language, punctuation, spelling.

³ For example, for most individuals with dyslexia, childhood development of the primary language develops as expected during the first few years of life. In contrast, these children have difficulty

with later-developing skills of reading and writing, as well as learning a second language in the early adolescent years or later.

⁴ These findings may suggest that when accomplished readers are reading text silently, the words are being silently “heard” within the brain.

THE HELP GROUP'S ADVANCE LA'S 2018 CONFERENCE FEATURED EXPERTS WHOSE RESEARCH AND PRACTICE SUPPORT YOUNG ADULTS WITH SPECIAL NEEDS



The Help Group's 2018 Advance LA Conference, Thriving Through Transitions: Finding Strengths in Differences, took place on Friday, May 18 at the American Jewish University and featured 20 experts whose research and practice support young adults with autism, learning differences and ADHD. This year's conference theme focused on neurodiversity and the many strengths young adults can harness as they transition to adulthood. More than 300 parents, educators, clinicians, researchers, graduate and undergraduate students were in attendance.

Our Keynote Speaker, Dr. Daniel Siegel, challenged popular misconceptions about the definition of the mind and spoke about "mindsight", a term he coined which reflects our capacity to perceive the mind of the self and others. Through this powerful lens, he posits that we can understand our inner lives with more clarity, integrate the brain, and enhance our relationships with others.

In addition to Dr. Siegel, other featured speakers included Dr. Robert Koegel and Dr. Lynn Koegel, Dr. Johanna Olson-Kennedy and Aydin Olson-Kennedy, Luncheon Speaker Rabbi Naomi Levy, and returning presenters Dr. Liz Laugeson, Dr. Amy Griffiths, and Dr. Elisha Goldstein. Presentations included topics on executive functioning, social connections, decreasing barriers to education and employment, finding purpose, electronic fasting, and gender dysphoria. There was also a highly attended panel with young adults discussing their unique stories and their strengths in differences.



Keynote Speaker, Dr. Dan Siegel



Featured Speakers, Drs. Robert and Lynn Koegel



Featured Speaker, Dr. Johanna Olson-Kennedy



Dr. Susan Berman, COO (L), Dr. Jason Bolton VP of Programs (R), Present Advancing Awareness Awards to Lydia X.Z. Brown, Jessica McCabe and Tom Iland



Luncheon Speaker Rabbi Naomi Levy



This year's conference was a sold out success

SUMMIT 2017 CONVENES THOUGHT-LEADERS IN AUTISM, ADHD AND LEARNING DISABILITIES

THE HELP GROUP PRESENTS

SUMMIT 2017

A CUTTING EDGE CONFERENCE FEATURING 25 LEADING EXPERTS

On Friday, October 13th and Saturday, October 14th at the Skirball Cultural Center in Los Angeles, The Help Group's Summit convened nearly 500 guests and 25 leading experts at the forefront of their fields in autism, learning disabilities, and ADHD and presented cutting edge research and evidence-based best practices. To kick off the Summit, Dr. Barbara Firestone welcomed guests, acknowledged distinguished presenters, and recognized the conference sponsors: NBC4, LA Parent, First 5 California, and First 5 LA.

Dr. Firestone served as Summit Chair with Co-Chairs Dr. Peter Whybrow, Director of UCLA's Semel Institute, and Dr. Robert M. Bilder, Chief of Medical Psychology and Neuropsychology and Director of the Tennenbaum Center for the Biology of Creativity at UCLA's Semel Institute.

The Summit featured 21 sessions, including keynote presentations from Dr. Lonnie Zwaigenbaum on *Pushing the Boundaries of Early Diagnosis of Autism*; from Dr. Stephen Hinshaw on *The Latest ADHD Findings - Especially in Girls and Women* and insights from his latest book *Another Kind of Madness: A Journey Through the Stigma and Hope of Mental Illness* (see related article, page 7); and from Dr. Jack Fletcher on *Understanding Dyslexia and Its Implications for Identification and Treatment*. John Elder Robison gave a thought-provoking special presentation entitled *Life with Autism: A Different Perspective*, and followed his talk with a workshop entitled *The Challenge and Opportunity of Neurodiversity: A Community*

Approach. At the luncheon proceedings Dr. Firestone, joined by Co-Chair Dr. Bilder, reflected on the history of Summit. The conference is dedicated to the memory of Dr. Paul Satz, who established it 21 years ago with Dr. Firestone. Dr. Bilder remarked, "At the UCLA Semel Institute, Dr. Whybrow and myself take great pride in the Summit and in our innovative partnerships with The Help Group, and look forward to many more productive years."

Dr. Bilder also took an opportunity to announce the recent publication of *Faces of Promise: Looking Beyond Autism*, and said, "It is a remarkable collaboration between fine art photographer and physician Dr. Richard Ehrlich, who has a gift for capturing profound emotion in visual images, and Dr. Firestone, who has been a true champion of children with autism and their families."

Dr. Susan Berman, Help Group COO, presented The Help Group's *Champion For Children Award* to Raytheon in appreciation of its ongoing commitment to STEM education and diversity.

"Raytheon has provided enriching opportunities, mentorships, and advanced technology for The Help Group's STEM³ Academy – the first of its kind in the United States," Dr. Berman shared, "We are most grateful to Raytheon for providing young people with the opportunity to excel in STEM related pursuits."

Accepting on behalf of Raytheon was John H. McAlpine Jr., CCP, Senior Manager, Physical Security, HR & Security, SAS ES Security Management – Space and Airborne Systems, and Allison Chouinard, HR Generalist-Contracts and Finance Space and Airborne Systems.

Many thanks to our outstanding group of Summit presenters for sharing their important work and invaluable knowledge with us.



1. Dr. Peter Whybrow, Dr. Barbara Firestone, 2. Dr. Robert Bilder 3. Dr. Jack Fletcher 4. Dr. Lonnie Zwaigenbaum 5. Dr. Stephen Hinshaw
6. Dr. Shafali Spurling Jeste 7. Dr. Maja J. Mataric 8. John Elder Robison 9. Dr. Mirella Dapretto 10. Dr. Barbara Firestone, John H. McAlpine Jr., CCP, Dr. Susan Berman, Allison Chouinard

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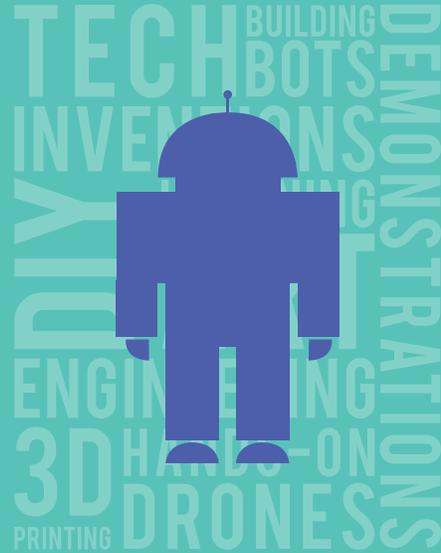
STEM³ academy's Very Special Innovation Fair

An inclusive event for children of all ages and abilities

September 23, 2018 | 10am – 2pm

6455 Coldwater Canyon Ave, Valley Glen

www.stem3academy.org/innovation-fair



THE HELP GROUP'S STEM³ ACADEMY'S ROBOTICS TEAM WINS SPOT AT *FIRST*[®] WORLD CHAMPIONSHIP COMPETITION IN HOUSTON

STEM³ academy

outside the box: students, learning, results

In April, The Help Group's STEM³ Academy's Robotics Team won a spot at the *FIRST*[®] Championship in Houston. The competition was an extraordinary opportunity for the team, and the second time they've been selected to participate in an international competition after only four years of participation in regional events.

STEM³ Academy's Robotics Team is proud to have placed 28th out of 67 teams in their division – their best showing thus far. The STEM³ Academy Robotics Team was one of over 400 teams from around the world competing, and their standing is particularly impressive given that STEM³ Academy is a non-public school serving students with social and learning differences.

The team has excelled not only in Robotics, but in Engineering Week Challenges at Raytheon and Northrop Grumman. Last year at Raytheon, the team took first place against 25 other teams in an Arduino coding challenge competition. The previous year, they placed 3rd at a competition held at Northrop Grumman.

We are extremely proud of our team! They are already planning their next STEM endeavor – including mentoring *FIRST* LEGO League (FLL) and Junior FLL teams at STEM³ Academy's campuses in Valley Glen and Culver City.



FESTIVAL OF ARTS SPONSORED BY BEAR GIVERS FEATURES 170 YOUNG ARTISTS

On May 20, for the 9th consecutive year, The Help Group proudly presented Festival of Arts: A Celebration of Young Artists sponsored by Bear Givers – a New York based non-profit organization. The annual show featured two exhibitions by Help Group students: *Through Our Eyes*, a collection of over 170 original paintings, and *The Art of Stem*, a collection that displayed award-winning robotics.

Bear Givers is a nonprofit organization dedicated to bringing happiness to the lives of children and adults in need through a variety of programs. According to Dr. Barbara Firestone, President and CEO of The Help Group, “The Bear Givers Empowered Art Program enables children with special needs to experience the joy and pride of creating art. At The Help Group, we believe that the arts are fundamental to our students’ pathway to self-expression and self-discovery.”

The festival was held at Santa Monica Art Studios, located in a historic hangar at the Santa Monica Airport. The space provides a unique and open setting for students, their families, and friends to enjoy the artwork.



(L-R) Dr. Ellis Crasnow, Tia Bruno, Pamela Clark, Dr. Barbara Firestone, Jennifer Slade, Brad Shahine

Brad Shahine, Director of Public Affairs at The Help Group, acknowledged Joseph Sprung, Chairman and Founder of Bear Givers, and Diane Lempert, President of Bear Givers, and thanked them for their longstanding commitment to the children of The Help Group.

On behalf of The Help Group, Brad thanked all of the faculty who mentor and work with students throughout the year, including Dr. Ellis Crasnow, Crystal Roethlisberger, Jennifer Slade, Tia Bruno, and Frank Morales.

The Help Group Choir, led by Charlotte Bashner and accompanied by Tommy Reeves, shared spirited renditions of “Can’t Stop The Feeling” and “Try Everything.” The choir’s performance was met with tremendous applause by the audience. It was a magical afternoon celebrating the creative spirit of the children of The Help Group.

Our thanks and congratulations to all the young artists for yet another wonderful exhibition!

Through Our Eyes A Celebration of Young ARTISTS



Stephen P. Hinshaw, PhD ... Continued from page 7

My own personal and family experiences led me to clinical and developmental psychology. I grew up in a seemingly idyllic Midwestern college town, but without warning and without discussion, my warm philosopher father would disappear periodically for lengthy periods, as though abducted in the middle of the night. What I didn’t know—because his doctors had expressly forbidden him or my mother from ever discussing the topic—was that he was whisked off to snake-pit public mental facilities for bouts of irrational, grandiose, and psychotic behavior, misdiagnosed as schizophrenia but actually comprising bipolar episodes. Think of it: the psychiatrists of the day deemed mental illness too shameful to even mention to family members. My childhood was full of mystery and terror, lying underneath the silence and denial.

Only when I’d returned from my first spring break from college did Dad pull me aside and begin to reveal the truth. I finally had a mission—to study psychology and solve his, and maybe even the world’s, mental disorders. Yet until I opened myself up to talk with others, I was terrified that I would be next in line to enter mental facilities myself.

In my latest book, *Another Kind of Madness: A Journey through the Stigma and Hope of Mental Illness* (St. Martin’s Press, 2017), I describe, in novel-like fashion, the shame and terror of my childhood, followed by my increasing devotion to the entire topic of mental illness and developmental disorders (including ADHD) throughout my career. Indeed, the book’s title emanates from a quote from James Baldwin in *Giovanni’s Room*, in which he describes the madness of both remembering and forgetting. In my case, “another kind of madness” is the combination of stigma and shame still attached to mental and developmental disorders, preventing disclosure and robbing people of life opportunities. Along with the science I perform, removing such stigma is my biggest remaining career goal.

Summary

Investigating girls with histories of ADHD, and considering the deep roots of stigma related to nearly all forms of mental and developmental disorders, have given me deep respect for the need to disclose and discuss “difference” as a springboard for greater openness—and to ensure access to evidence-based evaluations and treatment strategies. The world can no longer remain silent about, or indifferent to, such human suffering. If we can tell our personal and family stories and demand optimal care and respect, the last frontier for human rights can be addressed.

How do we overcome these issues to promote more effective trials? We need improved, objective measures that (1) can improve our patient selection for trials, (2) demonstrate changes with treatment over a short time period and (3) are resistant to the placebo effect. Biomarkers represent such objective measures, and they are the focus of considerable research efforts in autism. A biomarker is an objective measure of a normal or abnormal biological process. We use biomarkers in medicine often, such as blood glucose for diabetes or blood pressure for hypertension. In autism, our search for biomarkers is not quite as simple as a blood test, rather we focus on measures of brain function.

Studies in autism genetics have revealed that autism results from changes in the way the brain connections and circuits are formed, or the way that neurons fire and communication with one another. We can measure these processes through several methods. In our biomarkers program at UCLA we focus on electroencephalography (EEG), which is a non-invasive, painless way to study brain function in real time. When neurons fire in the brain and communicate with one another, they generate electrical signals that can be measured at the scalp. Changes and differences in these electrical signals can reflect changes in the way the brain is wired and connections are forming. EEG is painless and tolerant of movement, and we can use it to study brain function in infants and children, including those with very limited language abilities.

At UCLA, we have developed a biomarkers research program that will help us to identify autism biomarkers for use in clinical trials. We hope that these biomarkers will help us select patients for specific types of therapies, will reflect changes in brain function that may precede behavioral change, and that may serve as more objective measures of response to treatment. We currently apply EEG methods to study infants at high risk for autism who are enrolled in an early intervention study, minimally verbal children with autism enrolled in a clinical trial that combines medications with behavioral intervention and, most recently, a national effort called the Autism Biomarkers Consortium that includes school age children with autism. In a recent study focused on one genetic syndrome associated with autism called Dup15q syndrome, we have already identified an EEG signature that relates to genetic cause, and this finding has propelled future clinical trials. We have established a multidisciplinary clinic at UCLA called the CARING Clinic (Care and Research in Neurogenetics) for children with these rare genetic conditions, with the goal of becoming a platform for clinical trials for them.

I am incredibly optimistic that our progress will be rapid and that, with effective clinical trials, I soon will be able to offer my patients more concrete medication options that can complement behavioral interventions for the symptoms associated with autism. Until then, however, I strongly urge patients to beware of centers or providers that promise "cures" or offer medications that have been "proven to work." We have a responsibility to be informed consumers by asking about the evidence behind the treatment: Were the trials performed with a rigorous study design and, if not, how do we know that the treatment works? When patients choose to try an experimental treatment, I encourage them to make sure that an outcome measure has been identified, with a plan for monitoring that outcome. Otherwise we have no way of deciding whether to continue, titrate or stop the treatment.

We are making substantial strides towards effective and informative clinical trials and pharmacological treatments for autism. My direct clinical experiences with my patients inspire me to not simply continue, but to accelerate this research, and our success depends on the advocacy and insights of our families. For information on any of our studies or clinical programs, please visit our website www.jestelab.org and www.semel.ucla.edu/autism.

The problem is that no one tells children or their parents, teachers, and classmates that some of the world's most creative and brilliant minds had similar difficulties learning to read. Most children with dyslexia do not easily learn to read, spell, or write, and they believe this means they must be "dumb", or "lazy" or "not working up to their potential". Not all children with dyslexia have extraordinary talents, but everyone has a unique potential that is being daily whittled away by this lack of understanding.

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Engineering week out of 25 competing schools. They have also earned awards at Odyssey of the Mind, at Northrop Grumman's Engineering week, as well as scoring high on the Biology, Computer Science A: Computer Science Principles, Calculus AB and BC, English Language and Composition, Government & Economics, Statistics U.S. History and World History AP tests that are offered. It is worth noting that STEM³ Academy students are competing exclusively against typical students. And this is just the beginning! We continue to explore opportunities such as mentorships, apprenticeships and certifications, and avenues that can lead to employment both with and without a college degree. We intend to brighten the future of those with a variety of differences to enable them to participate, succeed and thrive beside their peers.

Many have impressive talents and strengths intermingled with sometimes surprising social cluelessness and rigidity.

Despite the variety of social and emotional postures found among those with Asperger's, one common characteristic is that most have chronic and significant difficulties with the executive functions characteristic of ADHD—problems with organization, self-management in daily routines and in modulating emotions, as well as in sustaining focus and effort for any tasks which are not especially interesting to them. Often these difficulties respond well to medications used for ADHD. But dosing must be carefully fine-tuned to the individual because many have a very sensitive body chemistry which renders them vulnerable to side effects requiring adjustments. Usually medication needs to be supplemented by cognitive and emotional support with careful attention to the child's unique strengths as well as to unique difficulties. The good news is that while many with ADHD and Asperger's get increasingly isolated and bogged down as they get older, many others improve, gradually learning to use their intellect to manage skills that most others pick up intuitively.



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on Facebook...*

THE HELP GROUP



- | | | | | |
|---------------------|-------------------|--|--|----------------|
| Village Glen School | Bridgeport School | Bridgeport Vocational Education Center | Young Learners Preschool | Sunrise School |
| Summit View School | Westview | North Hills Prep | Our Newest School
STEM³ Academy | |

Founded in 1975, The Help Group is the largest, most innovative and comprehensive nonprofit of its kind in the United States serving children, adolescents and young adults with special needs related to autism spectrum disorder, learning disabilities, ADHD, developmental delays and emotional challenges.

The Help Group’s ten specialized day schools offer pre-K through high school programs for more than 1,600 students. Its broad range of mental health and therapy services and residential programs extend its reach to more than 6,000 children and their families each year. With more than 1,000 staff members, The Help Group’s state-of-the-art schools and programs are located on five campuses in the Los Angeles area.

- ASSESSMENT
- MENTAL HEALTH SERVICES
- RESIDENTIAL PROGRAMS
- 18+ PROGRAMS
- COACHING
- SOCIAL SKILLS TRAINING
- PARENT EDUCATION
- AFTER-SCHOOL ENRICHMENT
- DAY CAMPS

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ABOUT THE HELP GROUP

The Help Group is dedicated to the education, treatment and outreach of children, adolescents and young adults with autism spectrum disorder (ASD) and other special needs

SPECIALIZED DAY SCHOOLS

*Our Newest School...*STEM³ Academy provides an innovative and rigorous K-12 curriculum for students with social and learning differences, including autism, who have a passion for STEM fields and may benefit from experiential learning approaches. **

*With a 98% college acceptance rate...*Summit View School is a college-preparatory program for students with learning differences who possess average to above-average intellectual capabilities.*

Village Glen School is a college preparatory program that serves students K-12 with high-functioning autism and challenges in the areas of socialization, language development and peer relations. The Pace Program offers honors and AP classes for gifted students. The Beacon Program provides additional positive behavior support for students with behavioral challenges.*

Young Learners Preschool uses an evidence-based and interdisciplinary approach to intensive early intervention for children ages 2.9 to 5 with autism spectrum disorder.

Bridgeport School provides basic skills education, community based instruction and vocational training, for students ages 5 to 22 with mild to moderate cognitive delays and challenges with social communication and/or language development.

Bridgeport Vocational Education Center is for young adults with autism spectrum disorder and other developmental differences, ages 18 to 22, providing vocational skills training, including supported job placements.

Sunrise School is a functional life skills program serving students ages 5 to 22 with moderate to severe cognitive delays associated with autism spectrum disorder and other developmental disabilities.

The Help Group's Westview is a college preparatory program for students with mild emotional issues, ADHD and learning differences.

The Help Group's North Hills Prep offers a college preparatory curriculum while supporting students with social emotional challenges.*

*A WASC accredited school

**WASC accreditation in process

MENTAL HEALTH & CLINICAL PROGRAMS

These programs provide a continuum of comprehensive outpatient services for children and families, including assessment; individual, family and group therapy; case management; psychiatric services; parenting groups; in-home counseling; school-based mental health counseling; REACH - after-school day rehabilitation; Stepping Stones - an intensive day treatment for children ages 3 to 5 and therapeutic behavioral services. Wraparound is an innovative program designed to maintain at-risk children in their homes and avoid placement in institutions or other restrictive settings.

AUTISM SPECTRUM DISORDER PROGRAMS

The Help Group Center for Autism Spectrum Disorder features multidisciplinary assessment, consultation, intervention, family support groups, as well as seminars for parents and professionals.

Paws and Pals for Kids with Autism is a volunteer-supported pet intervention program designed to engage young people with social and communication challenges.

RECREATIONAL AND SOCIAL SKILLS DEVELOPMENT PROGRAMS

Kids Like Me provides after-school enrichment, social skills groups and day camps designed specifically for children and adolescents with ASD and other developmental challenges. Teens on the Go is a travel camp for young people with ASD. club I.a. TEEN provides a supported social network for teens with ASD.

VOCATIONAL PROGRAMS

The Community Employment Program assists adolescents and young adults with social-emotional and/or mental health challenges with the special guidance, skills and support needed to obtain and maintain successful employment.

RESIDENTIAL PROGRAMS

Project Six is a therapeutic boarding option for teens ages 13 to 17 with Asperger's Disorder, ASD, mood and anxiety disorders, and learning differences.

Project Six Adult Residential Program provides community-based group homes for adults with developmental disabilities.

18 + PROGRAMS

Advance LA provides one-on-one life skills coaching for teens and young adults with unique challenges in their transition to independence.

club I.a. facilitates activities for young adults designed to enhance social skills, meet people with similar interests and develop long-lasting friendships.

PROFESSIONAL TRAINING PROGRAMS

Doctoral Psychology Internships are full-time APA accredited internships in Health Service Psychology.

Post-Doctoral Psychology Fellowships in Pediatric Neuropsychological Assessment and in Autism Evaluation and Treatment.

Clinical Practicum Training for Psychology, Social Work, and MFT Art Therapy trainees.

UNIVERSITY PARTNERSHIPS

The Help Group – UCLA Neuropsychology Program providing neuropsychological assessments and consultations.

The Help Group – UCLA Autism Alliance dedicated to evidence-based best practices in ASD diagnosis, intervention and treatment.

The Help Group – USC Occupational Science Initiative dedicated to developing evidence-based programs for children with ASD.

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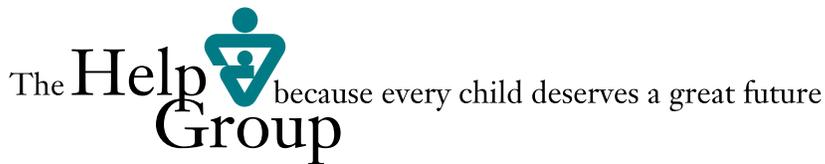
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The Help Group is widely regarded for its high standards of excellence and unique scope and breadth of services. Through its public awareness and outreach programs, university partnerships, applied research, graduate and postgraduate professional training, conferences and seminars, parent education programs, publications, and public policy efforts, The Help Group touches the lives of children with special needs and their families throughout the United States and in other parts of the world.

At the heart of its efforts is the commitment to helping young people fulfill their potential to lead positive, productive and rewarding lives.

Schools

Village Glen School · Bridgeport School · Bridgeport Vocational Education Center · Sunrise School
 Young Learners Preschool · STEM³ Academy
 Summit View School · Westview · North Hills Prep

Programs

The Help Group - UCLA Autism Alliance · The Help Group - UCLA Neuropsychology Program
 The Help Group - USC Occupational Science Initiative · Advance LA · Project Six/The Commons
 Kids Like Me Recreational Programs & Camps · club l.a./club l.a. TEEN
 Paws and Pals for Kids with Autism · The Help Group Child & Family Center
 The Help Group Center for Autism Spectrum Disorder

Campuses

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For more information on these and other events, please call 818.779.5212



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