



Table of Contents

- Interview with Elizabeth Neumann [1](#)
- Science in Autism Treatment Team [1](#)
- International Update [5](#)
- Consumer Corner: Public School Administrators... [6](#)
- Champion Sponsor Program Descriptions [8](#)
- Benefactor Sponsor Program Descriptions..... [9](#)
- Letter from David..... [10](#)
- Focus on Science: Be a Savvy Consumer! [12](#)
- ASAT Advisory Board [12](#)
- Interview with Board Member Dan Mruzek..... [13](#)
- ASAT Board of Directors..... [15](#)
- Treatment Summary: Verbal Behavior [16](#)
- Clinical Corner: Safety Skills [17](#)
- From the Archives..... [19](#)
- ASAT Advertising Policy [20](#)
- ASAT Sponsorship [21](#)
- 2011 ASAT Donor Wall..... [22](#)
- ASAT Website Update..... [23](#)
- Research Review: RCT of More Than Words..... [24](#)
- Research Review: Parent-Assisted Training..... [25](#)
- Research Review: Randomized Trial of HBOT..... [26](#)
- Rock'n 4 Autism Awareness 2nd Annual Event... [27](#)
- ASAT Committee Members [28](#)
- ASAT's Facebook Update [29](#)

An Interview with Elizabeth Neumann, MA, BCaBA from Autism New Jersey, author of *Autism for Public School Administrators: What You Need to Know* by David Celiberti, ASAT President.

Elizabeth, as you know, the focus of your project is very congruent with ASAT's mission and initiatives related to promoting awareness of science-based treatment; therefore, we are very grateful for this opportunity to interview and learn more about your experiences and discoveries. Can you tell us a bit about your background and how it led you to this area?



As Professional Services Coordinator at Autism New Jersey, I have provided trainings for school districts across the state. Over the years, we've seen in action what the research suggests: That a key to effective school programs is consistent support from administrators. Simply put, their actions can make or break their programs. They are the key decision-makers on budgetary, curricular, staffing, and scheduling issues that have a direct effect on students with autism spectrum disorders(ASDs)—yet they are often under-informed about autism and evidence-based practices. Instead, they often have to sort through the varied, passionate claims of parents, teachers,

and therapists to determine which instructional strategies and supports to offer. Through no fault of their own, many administrators simply have not been prepared to meet the needs of this increasing portion of their student body. In my own personal experiences as a teacher, I was able to be a more effective teacher when I worked with administrators who understood how autism truly manifests and what best practices entail for this population.

I could not agree more! I understand that your passion for this particular layer of program implementation led to your decision to choose this as focus for your master's thesis.

Yes, when it came time to select a research topic for my master's thesis, I wanted to focus on an area that could really make a difference for students with ASDs like the ones with whom I had worked. If I were going to spend a year on this project, I wanted it to have some practical results! I brainstormed with our Executive Director, Dr. Linda Meyer, and

(Continued on page 2)

Science in Autism Treatment (SIAT) Team

Co-Editors

David Celiberti, PhD, BCBA-D
Joshua K. Pritchard, MS, BCBA

Focus On Science

Daniel W. Mruzek, PhD, BCBA-D

International Updates

Daniela Fazzio, PhD, BCBA-D

Research Synopses

Sharon Reeve, PhD, BCBA-D

Clinical Corner

Nicole Pearson, PsyD

Consumer Corner

Kate Fiske, PhD, BCBA-D

Media Watch

Barbara Jamison, BA

Treatment Summaries

Tristram Smith, PhD

Events

Denise Grosberg, MA, BCBA

Shout Outs

Kerry Ann Conde, MS, BCBA

From The Archives

Sara Jane Gershfeld, MA, BCBA

An Interview with Elizabeth Neumann continued...

Clinical Director, Dr. Suzanne Buchanan, both of whom provided incredible support throughout this whole initiative. My goal was to administer a survey to learn more about administrators' current levels of experience, knowledge, and skills so we could then work to meet their specific needs and take a top-down approach to maximizing educational services for students with ASDs.

Can you tell us more about the survey participants? What was the process like recruiting respondents for your survey?

I was thrilled with the response... 331 New Jersey public school administrators completed the anonymous electronic survey between October 1 and December 1, 2010. Approximately 14% were superintendents, 57% principals, and 29% supervisors or directors of special services. New Jersey has child study team supervisors for each county, and a few of them also participated. Respondents represented a cross-section of urban, suburban, and rural districts, and elementary, middle, and high school campuses. It was no surprise that 98% stated that their campuses currently serve students with ASDs. Although 2% were uncertain about the educational placements of these students, 80% reported having students in general education classrooms, 69% in resource rooms, 51% in learning/language disabilities classes, 50% in preschool special education, 44% in multiple disabilities settings, and 38% in autism-specific classrooms. A total of 45% of the administrators reported that they had prior teaching experience with learners with ASDs, but the amount and relevance of this experience varied greatly, 52% had no specific discussion of autism in their

undergraduate or graduate coursework; for the majority of those who did, autism was only briefly mentioned in one class. It was further revealed that 60% had participated in at least one session of professional development on supporting students with ASDs at some point during their career, but again, the qualifications of the presenter and evidence-base of the content varied widely.

Let's talk a bit about the scope of your survey questions. What types of questions were included?

All 36 questions were specific to students with ASDs and relevant staff members. I began with demographics and professional background, and proceeded to items about autism, scientifically-validated instructional strategies, and supporting staff. With each multiple choice question there was an opportunity to write in additional

ended questions.

What facts about autism did they already know? What were the most critical facts they did not yet know?

Survey data revealed that 80% of the respondents correctly identified autism as a developmental disorder, 81% recognized that "Full inclusion has been proven effective for all students with ASDs" was a false statement, 97% agreed that providing alternative communication systems will not prevent a learner with autism from attaining vocal speech, and 99% were aware that visual supports are often helpful. However, one of the open-ended questions required them to list the three core deficits in ASDs. Only 25% correctly submitted social, communication, and behavioral difficulties as the diagnostic criteria. Many had one or two of the correct responses; 70% were aware of a social

"I was thrilled with the response...331 New Jersey public school administrators completed the anonymous electronic survey between October 1 and December 1, 2010."

information. There were general questions about autism, but more specific ones as well — instead of just asking if they knew about autism, I was in essence saying, "Okay, prove it!" For example, I listed popular interventions and asked which are scientifically validated. I wanted the survey to go beyond generic statements to assess their knowledge of how to facilitate students' meaningful progress. I included these knowledge-based questions as I recognize the limitations inherent in survey research. Other questions had them rate their own effectiveness in different areas, and I concluded with a few open-

weakness, 64% recognized communicative difficulties, and 28% identified behavior problems (although only 12% specified that the behavior was restrictive or repetitive). But 18% could not answer the question at all, and another 13% just put question marks for some of the three responses. I'll share more about my impressions of the findings later, but I believe that with increased understanding of the unique features of ASDs, administrators may be better prepared to make decisions on behalf of those students.

(Continued on page 3)

An Interview with Elizabeth Neumann continued...

Yes indeed, and the converse is worrisome. Decisions and resource allocations made by administrators without an accurate and comprehensive understanding will not likely serve students with ASDs well. Despite the apparent knowledge gaps, I suspect that most respondents felt confident in their abilities to support programming for students with ASDs. What were the results of the self-evaluation questions?

Self-evaluation responses indicated that 49% rated themselves “very effective” and 49% “somewhat effective” at evaluating and contributing to programs for students with ASDs. The percentages were almost identical when asked about their proficiency in supporting staff members who worked with students with ASDs (e.g., providing professional development and resources), 86% felt confident in making logistical decisions such as class size, student-teacher ratio, and paraprofessional assignments.

40% of participants believed that there is no proven methodology for teaching students with autism. One principal wrote, “If there was proven methodology, we would all be using it.”

As you stated earlier, self-reported ratings of effectiveness would need to be interpreted cautiously. With regard to evidence-based practices and science in autism treatment, what were your overall findings and your initial reactions?

Although a significant body of empirical evidence has established Applied Behavior Analysis (ABA) as an effective intervention, 40% of participants believed that there is no proven methodology for teaching students with autism. One principal wrote, “If there was proven methodology, we would all be using it.” When asked if public schools are required to use scientifically-validated strategies, 69% said they were not. But federal legislation such as the No Child Left Behind Act does mandate this. One director offered, “I would think that if this wasn't required we would have all kinds of treatments going on in classrooms.” Bulls-eye! With respect to the selection of instructional methodologies and supports that are scientifically-validated for students with ASDs, 41% rated themselves “very effective” and 52% “somewhat effective” and over half of those who added written comments explained that this was not their responsibility or that they rely on others for these decisions. They were then given a list of popular interventions and asked which are scientifically validated for autism; 80% recognized Applied Behavior Analysis, 53% Positive Behavior Supports, and 38% Verbal Behavior programming as correct answers (substantiated in empirical studies). However, 53% selected Sensory Integration therapy, 23% Auditory Integration Training or other listening therapies, 21% DIR®/Floortime™, and 18% Relationship Development

Intervention as scientifically validated, when to date, these interventions either lack empirical evidence of their effectiveness for learners with autism or have been proven ineffective; 16% chose “can't answer”. When asked about general practices that have evidence supporting their provision for students with ASDs, 92% chose structured environments, 91% individualized supports, 89% functional behavior assessment, 89% family involvement, 82% systematic instruction, and 73% specialized curricula. A summary of research findings from 1992-2002 found these to be core elements in the education of an individual with an ASD (as needed).

Although one cannot ignore the financial and staffing constraints districts face today, it is crucial that administrators know how to identify best practices and see that they are provided by skilled professionals. I've seen too many examples of administrators approving \$5000 for a new bubble tube for the sensory room without question, while insisting there's no money available for professional development, consultation, or community-based instruction — it's so important that they have credible information to help them manage the funds for their autism programs in ways most likely to benefit the students.

Did your survey respondents share any concerns regarding their staff?

Just as students with autism have unique needs, teachers who instruct them face unique challenges as well: 41% of survey respondents had experienced difficulty in finding trained staff to hire, but only 12% had trouble retaining staff in their positions, 62% stated that their staff members had reported feeling overwhelmed or concerned about serving these students, and another 10% were not sure. Some administrators described these roles as “demanding,” “consuming,” “exhausting,” and “emotionally draining.” The open-ended responses about professional development ranged from “We contract for BCBA services and hold training and support sessions for staff every Friday afternoon” to “Professional development for our faculty and staff is a glaring need.”

(Continued on page 4)

An Interview with Elizabeth Neumann continued...

What about working with parents of students with autism?

When asked how their relationships with these parents compare to relationships with parents of children with other special needs, 73% reported no significant difference, 16% described the relationships as more positive, and 11% as more negative. Yet almost 50% were aware of autism-related cases in their district that went to mediation or due process.

What did you learn from the open-ended responses?

You know, there were a few who came across as “We’re doing just fine” (and maybe they are!), but I was pleased to see that most seemed genuinely interested in supporting these students and staff and in learning more. Of course there is a limitation to relying too heavily on survey research in the absence of direct observation.

In many instances, several participants reported that they chose answers as required to proceed through the survey but were unsure of the accuracy of their responses. A few made blanket statements such as “We provide special education as in-class support within the general education classroom,” but others reflected more individualized needs and services. The survey item related to inclusion generated a lot of comments: 80% of the 70 write-ins stressed that inclusion was effective for some or many but not all students. Some pointed out that some students need more intensive ABA intervention or a functional life skills curriculum, or that certain prerequisite skills should be mastered before students can learn in inclusive settings. Some also qualified their responses by writing that students will only be effectively served if supports are in place or that sometimes out-of-district placements are necessary.

For the question, “What do you feel would maximize your programs that involve students with ASDs?”, professional development was the priority for 51%; some specified that they meant not just more training, but that it should be ongoing, effective, and provided for all staff. “Consistent professional development is the most critical component for success of my students,” stated one principal. The second greatest concern (20%) was funding: 10% expressed the need for more support for teachers, including behavioral supports and time to collaborate, plan, and be mentored, 8% wanted additional parent involvement and collaboration, and 6% saw the need for increased time with consultants. When asked to share any final

thoughts, some expressed very positive statements such as “I very much enjoy working with my students with ASDs as well as the amazing teachers and paraprofessionals.” Others expressed their appreciation for the study, for reasons such as “It helped me remember some key points that I had forgotten” and “[Autism] is going to be an ever growing issue.”

What information were they interested in learning more about?

The majority reported that they were interested in learning anything that could help. From the following choices, 68% wanted information on supporting teachers, 68% effective teaching strategies, 58% recognizing interventions with research support, 57% supported inclusion, 54% assistive technology, and 53% educational needs of students with ASDs. Hopefully, getting these leaders autism-specific information and strategies will improve the overall educational experiences of students with ASDs.

As you mentioned above, this is an inherent issue with self-report data, as stated interests do not necessarily translate into behavior. How have you been able to apply these findings?

Through the partial support of an Autism Speaks Family Services Community Grant, Autism New Jersey offered ten free half-day workshops specifically tailored to this audience. Dr. Meyer and I worked with 350 administrators at these sessions (and hundreds more expressed an interest). The survey results guided us to focus on practical application of the following topics:

- ⇒ Understanding autism and students’ complex educational needs;
- ⇒ Maximizing resources by identifying evidence-based practices;
- ⇒ Supporting staff of diagnosed students in all placements across campus; and
- ⇒ Providing an extensive list of resources.

We directed them to ASAT’s website, the National Standards Project report, and NY’s Autism Program Quality Indicators among others. Our workshop evaluation forms show an average rating of 96% overall satisfaction, and quiz scores showed an

(Continued on page 5)

An Interview with Elizabeth Neumann continued...

increase from 42% on the pretest to 83% on the posttest.

We also created a publication, Autism for Public School Administrators: What You Need to Know, which was sent to all special services directors in New Jersey and all workshop registrants. Free copies are available at www.autismnj.org or 800.4.AUTISM. It has been so encouraging to see the administrators' desire to maximize their offerings to students with ASDs, their families, and the school professionals, and we hope for additional funding to continue and expand this initiative.

Elizabeth, thank you so much for sharing information about your research. As you know, we are highlighting your publication in this issue's Consumer Corner column. It takes a village to create and maintain effective and meaningful educational programs for students across the full continuum of ASDs. Supporting and engaging administrators and appreciating their influence is essential. Thanks for sharing the references below.

References

Callahan, K., Henson, R. K., & Cowan, A. K. (2007). Social validation of evidence-based practices in autism by parents, teachers, and administrators. *Journal of Autism and Developmental Disorders*, 38, 678-692.

Horrocks, J. L., White, G., & Roberts, L. (2008). Principals' attitudes regarding inclusion of children with autism in Pennsylvania public schools. *Journal of Autism and Developmental Disorders*, 38, 1462-1473.

Iovannone, R., Dunlap, G., Huber, H., & Kincaid, D. (2003). Effective educational practices for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 18, 150-165.

McKelvey, D. M. (2008). *Relationships between attitudes of school-based administrators and inclusion practices of students with autism/Asperger's syndrome*. Unpublished doctoral dissertation, University of Phoenix, Phoenix.

Smith, M. K., & Smith, K. E. (2000). "I believe in inclusion, but...": Regular education early childhood teachers' perceptions of successful inclusion. *Journal of Research in Childhood Education*, 14, 161-180.

Stanovich, P., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *Elementary School Journal*, 98 (3), 221-238.

Twohig, B. J. (2000). *Inclusive practices used by principals and their staff to facilitate the integration of students with disabilities into general education classrooms*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.

International Update by Daniela Fazzio, PhD, BCBA-D



As an ASAT Board Member, one of my goals involves international dissemination of ASAT and our mission of educating parents, professionals, and consumers by sharing accurate, scientifically-sound information about autism and its treatment. Between January 9 and 12, 2012, I was one of 30 [Invited Speakers](#) who met in Brazil for the São Paulo School of Advanced Science (ESPCA): Autism. The event was fully funded by the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP), chaired by Professor Celso Goyos from the Federal University of São Carlos, co-organized by Professors Caio Miguel from Sacramento State University and Thomas Higbee from Utah State University. The conference aimed at promoting partnerships between Brazilian and international scientists to increase the amount and quality of autism research and treatment in Brazil, by creating interest, expertise, and opportunities for collaboration. FAPESP funds ESPCAs "with the goal of bringing together scientists with excellent qualification and prominence in their research fields." ESPCAs have been held in such areas as Astronomy and Chemistry.

This is a major step toward disseminating science in autism research and treatment in Brazil. Prominent behavior analysts from the US, Canada, and Europe joined Brazilians for a productive week at a nature-filled location in the State of São Paulo.



Autism for Public School Administrators: What You Need To Know

A review by Tara Klein, MS Ed., BCBA, Building Behavior Solutions, LLC

The rate at which individuals diagnosed with autism is growing and, here in New Jersey, we have one of the highest prevalence rates (1 in 94 children diagnosed). With increased incidence, many public school districts are keeping students with autism in their public school district rather than sending them to specialized schools. Individuals with autism are frequently found today in regular education classrooms right alongside their typically developing peers. Students with autism who require greater support are educated in the public school environment in self-contained classrooms. With the influx of learners with autism who remain in the public school environments, it has become increasingly important to inform administration, child study team members, teachers, speech therapists, occupational therapist, paraprofessionals, and other staff members about autism and the specialized education that these learners will need. However, many school administrators, teachers, and other staff members have received little current education on the specific educational needs of individuals with Autism Spectrum Disorders (ASD). Elizabeth Neumann, along with Linda Meyer and Suzanne Buchanan from Autism New Jersey, recognized this issue and moved forth to write a booklet for public school administration containing accurate information about ASD. Ms. Neumann utilized the data collected from her master's thesis to identify the information administrators need to know to create a quality educational environment for these learners within the public school district.

Autism Spectrum Disorders (ASDs) Overview

The booklet begins by providing information about Autism and Autism Spectrum Disorders. The three diagnostic criteria areas are discussed: social skills, communication skills and restrictive/repetitive behaviors. The supports needed for individuals with ASD are further explained by directly indicating that these learners will require direct supports in all three areas, an important clarification given that, much too often, school professionals forget that individuals with ASD have deficits in all three areas and require support within each area. Often, many teachers and administrators look at the overall success of a student by how well they are doing in the areas of academic instruction. While academics and communication are typically addressed and taught, social skills instruction is often left out. The authors openly state the need for direct instruction and role play in the area of social skills and they explain that instruction must be provided to the staff members, students, and classroom peers in order for any activity to be socially meaningful for an individual with autism. The au-

With increasing numbers of students with autism now being serviced in our country's public school settings, the task of educating public school staff has become increasingly important. Though our focus in the field is typically on training the teachers working directly with the students, school administrators are uniquely positioned to support the development of strong, evidence-based programs for children with autism. As such, increased focus on providing administrators the tools they need to navigate the area of autism and autism treatment is warranted. In this issue's installment of the Consumer Corner, Tara Klein reviews a resource booklet on autism for public school administrators authored by Elizabeth Neumann with Linda Meyer and Suzanne Buchanan.

Kate Fiske Massey, PhD., BCBA-D

Consumer Corner Coordinator

thors detail more specific suggestions in each of the three diagnostic areas. In the areas of communication, the authors explain that not only do individuals with ASD have difficulty expressing themselves, but that they also may have difficulty understanding spoken language. Specific strategies to ensure that learners with ASD can understand what is being asked of them are provided in the booklet. The booklet briefly touches upon how repetitive and stereotypic behaviors can impact the learning environment and addresses how motivation and reinforcement can play a vital role in successfully modifying these and other behaviors.

Evidence-based Practices

In this section of the booklet, the authors address the need for administrators to use scientifically validated strategies, utilize data collection procedures, and base educational and financial decisions on accurate, unbiased information. The authors provide detailed descriptions of evidence-based practice to help administrators gain an understanding of the elements of scientific-based research versus "research" that cannot be validated or replicated. The authors also touch upon the importance of ensuring that the research-based strategies be applied according to the protocols outlined within the supporting research literature, ensuring treatment integrity. Additionally, the booklet highlights the significance of collecting accurate data and analyzing the data to determine if the chosen treatment is indeed effective, therefore serving as a guide for instructional decision-making.

Resources for Administrators

Highlighted within this section are resources for administrators that could help identify effective, research-based strategies. The authors list resources about effective treatments such as the [National Standards Project](#)

(Continued on page 7)

(National Autism Center, 2009), the [Association for Science in Autism Treatment](#), [The Road Less Traveled: Charting a Clear Course for Autism Treatment](#) (Celiberti et al., 2004), [Autism New Jersey](#), and Autism New Jersey's [Position Statement on Treatment Recommendations](#). Applied Behavior Analysis (ABA) and Positive Behavior Supports (PBS) are cited in the booklet as the most effective treatment for individuals with ASD based on research to date. A helpful bulleted list is included within, detailing those treatments that are recommended, those that should be used with caution, and those that should be avoided entirely since they have been proven ineffective.

Supporting Your Schools

What to Look for in the Classrooms
In this section, several basics regarding the classroom environment and structure are discussed. The authors highlight possible supports in the physical environment that include increased structure, minimized distractions, and increased visual cues for tasks. The importance of having proper structure among staff is addressed, such as the importance of collaboration and consistency among all team members and the family. The authors also draw attention to the imperative continual cycle of “planning, implementing, analyzing, and revising (p. 10).” These four components are key to an effective learning environment for individuals with autism.

Components of Effective Inclusion/Functional Curriculum

“Ideally, inclusion takes place at the right time, in the right place, and for the right reasons (p. 10).” This statement best summarizes the information presented about inclusion. Furthermore, it is discussed that proper student support and staff accountability for student progress are

major factors to ensure that the inclusion setting is effective. The authors stress the importance of increasing a learner’s independence, teaching functional lifelong skills in all curricular areas (functional academics, daily living, self-help, prevocational, leisure), and ensuring that we prepare them for their next setting and the skills that they will need into their adult life.

Addressing Challenging Behaviors

Often in school environments, staff and administration are faced with challenging behaviors of individuals with ASD, as well as other students. In response, the booklet outlines the importance of gaining an understanding of why the individual is engaging in the behavior and provides a brief overview of the benefits of a Functional Behavior Assessment. The authors stress the importance of providing training in behavior management to all staff members who are involved with the learner, discuss the value of teaching staff to manage a behavioral crisis, and highlight the use of proactive strategies to reduce problem behavior.

Support for Staff who Teach Individuals with ASD

Neumann and her colleagues address the role of administration and its impact on a successful program for learners with ASD. They note the limitations and challenges that the administration will face, but emphasize necessary program components. Staff collaboration, appropriate planning, lesson preparation, data analysis, access to the community and parent/professional collaboration are top factors noted for effective programs. Furthermore, the authors elaborate on the role of the administrative assistance for the staff within the classrooms serving individuals with ASD, adding that even frequently stopping by the classroom and lis-



Autism for Public School Administrators: What You Need to Know
Elizabeth V. Neumann, M.A., BCaBA
with Linda S. Meyer, Ed.D., WPA, BCBA-D, CPT and Suzanne M. Buchanan, Psy.D., BCBA-D

tening to their needs and concerns are simple actions that can bring comfort to the staff members working within a classroom of students with ASD.

Best Practice Resources/Staff Training

Because it is important for administrators to know where to find accurate information, resources, and proper training for educating individuals with autism, the authors list several resources to which administrators can turn. These include Autism New Jersey and their related publications and resources, the National Research Council’s book *Educating Children with Autism* (2001) and the New York State Education Department’s Autism Program Quality Indicators. Ongoing professional development for *all* staff members is highlighted as a key ingredient for a successful program. Also discussed is the need for not only didactic (lecture-style) trainings, but also for hands-on support from professionals such as Board Certified Behavior Analysts (BCBA). The authors emphasize the need for training, support, and supervision of paraprofessional staff members, since they play such a key role in the educational process within the

(Continued on page 8)

Consumer Corner continued...

Science in Autism Treatment

Volume 9,1 Winter 2012

classrooms. Lastly, it is suggested that all programs, classrooms, and staff receive evaluation to enhance effective feedback about the programs.

Summing it Up

In summary, the booklet reminds administrators about the Individuals with Disabilities Education Act and outlines specific guidelines to follow when educating individuals with ASD. Additionally, it offers a bulleted summary specifying the core elements to the education of individuals with ASD based on a recent literature review. *Autism for Public School Administrators: What You Need to Know* provides a summary of important key facts about

the education of individuals with ASD in public school settings within one booklet. It provides an overview of ASD, information on evidence-based practices, support needed within the school for individuals with ASD, and supports needed within the schools for staff teaching individuals with ASD. Overall, the authors openly discuss that staff members and other individuals involved in the instruction of a student with ASD must adapt their own behaviors in order to create a successful learning environment. This booklet is a great resource for public school administrators and it can be a good asset to other school staff and parents of individuals with ASD. It is with great hope that many

of the school administrators in New Jersey have read (or will read) this booklet and that they were able to attend the information sessions presented by Ms. Neumann and Autism New Jersey. If public school administrators utilize this guide as a resource, it can be an invaluable tool!

If you would like a copy of this booklet or if you know a school administrator or someone who could benefit from this booklet, you can request a free hard copy or a free download at Autism New Jersey's website, <http://www.autismnj.org/Publications.aspx>, or by contacting Autism New Jersey at 1-800-4-AUTISM.

We want to provide a special thank you to our Benefactor Sponsors. These are some of the organizations who have donated \$1000 to ASAT in 2011!



Different Roads to Learning, a New York based, certified MWBE company specializes in educational materials for students diagnosed with autism. Our materials are used for Applied Behavior Analysis (ABA) and Verbal Behavior (VB) intervention and assessment.

Our wide range of products include: books, manuals, curriculum, assessment kits, flashcards, timers, puzzles and manipulatives. We carry media products; DVDs, CDs and other educational software. We have served children on the spectrum for 16 years.



Rethink Autism makes research-based educational treatment tools accessible, affordable and easy to use for parents and professionals around the world. Our dynamic web-based platform includes a comprehensive curriculum with over 1,200 video-based exercises, staff/parent training modules, and automated data tracking – all developed by leaders in the field of autism. We also offer a range of technology-enabled remote service options, ranging from short-term consultation to ongoing systems-change initiatives supported by our team of professional educators and clinicians.

Organization for Research and Learning, Inc (ORL) was originally formed in 1998 as Fabrizio/Moors consulting, and reorganized itself as the ORL in 2007. We originally began as a small organization in Seattle with two staff members who served four children during our first year. Since then, we have grown to include ten clinical staff members who serve approximately 65 children and families within our private practice and provide outreach services. Outreach services that ORL staff members have completed have affected hundreds of children from places such as Toronto, Pennsylvania, Texas, California, and British Columbia. Throughout this growth and expansion process, we continue to maintain high levels of quality in the services provided. We continue to contribute to the autism and behavior analysis communities both in the Puget Sound area and across the United States and other countries.



We want to provide a special thank you to our Champion Sponsors. These are organizations who have donated \$2000 to ASAT in 2011!

Central Valley Autism Project (CVAP) is a published research and clinical replication site of the late Dr. Ivar Lovaas, providing early intensive applied behavior analysis intervention for young children with autism spectrum disorder across three intervention components: (1) In-home/Center 1:1 component; (2) Peer Play Training component; and (3) Regular Education Classroom component. The intervention curriculum emphasizes acquisition of verbal behavior, cognitive development, functional and self-help skills, reduction of maladaptive behaviors, play skills and socialization, advanced social and pragmatic language skills, and generalization of skills across multiple environments and conditions.

In addition, CVAP offers an Advanced Social Skills and Theory of Mind program specifically targeting complex social and interactive skills and understanding social and emotional meaning, and responding appropriately in the social context for children with lingering social deficits. CVAP provides center-based programs in Modesto and Stockton and services in the Sacramento area and Mountain Counties.



CENTRAL VALLEY AUTISM PROJECT, INC.
1317 Oakdale Road, Ste. 800, Modesto, CA 95355

Four Points is a private agency established in 1997 that provides IBI (Intensive Behaviour Intervention) therapy, using the principles of Applied Behaviour Analysis (ABA), for children with Autism Spectrum Disorders (ASDs).

Four Points offers centre-based therapy for children with ASD or other developmental disabilities. Our child-therapist ratio is 1:1. Dyads (1:2) and small group instruction is available when suitable for your child's abilities. This allows us to tailor the intervention to your child's specific needs. Within our program we target the following areas: attending skills; behaviour; cognitive skills and visual skills; communication, speech, and language skills; daily living skills; group development skills; gross/fine motor and imitation skills; play and social skills; and, school readiness/academic skills. In addition, our individualized programs include: continuous assessment and program development; collaboration with outside professionals as needed; on-going data collection and graphing; and, regular team meetings.



Little Star Center is a truly unique and special place for children and families living with autism that was established in 2002 as Indiana's first center providing ABA services. Little Star allows families to have the best of both worlds - the intense one-on-one personalized therapy that used to only be available in a home program and the community feel of a center-based program that allows children with autism access to peers, materials and a beautiful facility. Families are an integral part of their child's programming along with Little Star's staff of professionals which is why Little Star prides itself on having a "family first" philosophy.



Autism Partnership was formed in 1994 to meet the tremendous need for effective services to families with autistic children. Based upon the founders' extensive and unique experiences in providing behavioral treatment to children, adolescents and adults, we have developed a comprehensive program that provides a variety of services.

Our current work incorporates the knowledge gained from the directors' intimate involvement with the treatment program developed at the UCLA Young Autism Project during the period of 1975-1987 and combines it with our more recent experience delivering services in community based settings. As knowledge about effective behavioral treatments continues to advance, we have also made innovations to increase accessibility to greater numbers of children in a variety of settings. We have extended the application of this specialized teaching methodology to children who are older. While it is clear that the optimal time to begin intervention is at the preschool age, there are many older children who have greatly benefited from intensive behavioral treatment.



Message from ASAT President, David Cellberti, PhD., BCBA-D

Happy New Year! On behalf of ASAT, I hope 2012 brings you good things. I also hope that this year will bring a deeper appreciation for the relevance of science in guiding autism treatment, greater expectations of accountability from all treatment providers, more accuracy within media portrayals, and heightened awareness of the pitfalls and distractions of pseudoscience.

As you may recall, I shared many of our 2011 accomplishments in the Fall 2011 issue of *Science in Autism Treatment* (SIAT). In late November, we welcomed Dr. Daniela Fazzio to our board. Daniela will be heading up our international dissemination efforts (please see photo above of Daniela hang gliding over Rio de Janeiro).

We are anticipating an even more productive new year. It is with great pride and optimism that I outline an array of goals and initiatives for 2012:

- ⇒ Generate new content for www.asatonline.org and update the treatment summaries for biomedical, behavioral and non-behavioral treatments.
- ⇒ Launch a webpage for journalists (tentatively titled *Autism Guide for the Media*).
- ⇒ Launch a webpage for parents with a newly-diagnosed child with autism.
- ⇒ Increase our global impact by including translation of our content into various languages, including directions on how to automatically translate the whole site. We are beginning this process, please see the upper-right corner of the main [webpage](#).
- ⇒ Continue to identify ways in which ASAT's initiatives can better address interventions for adults with autism and support and guide their caregivers. We also hope to expand coverage of genetics, epidemiology, assessment & biomedical treatment issues.
- ⇒ Increase *Science in Autism Treatment* subscriber base from 7,000 to 10,000, and with subscriber representation from 80 countries to at least 90 countries.
- ⇒ Debut Focus on Science, a new column in our newsletter that highlights the scientific method.



- ⇒ Increase our Facebook "fans" to 5,000, Twitter followers to 1,000, and increase ASAT's presence on quality autism community blogs.
- ⇒ Create a resource booklet for pediatricians and primary care physicians, *Beyond an ASD Diagnosis: Supporting Families Over the Lifespan*. It is hoped that this resource will improve the capacity of pediatricians, primary care physicians, and other health care professionals to help families navigate the various treatment options safely and effectively. Our goal with this resource is to maximize children's outcomes, promote a high quality of life, and empower families to make treatment decisions based on accurate information.
- ⇒ Increase our presence within the medical community, particularly pediatricians and family practice doctors by making information about ASAT and science-based treatment available to them.
- ⇒ Expand ASAT's participation at state, regional, national and international conferences. For example, ASAT was featured on the program of the São Paulo School of Advanced Science: Autism, in [Brazil](#), and will join the Association for Behavior Analysis International (ABAI) Program Exposition in Seattle, Washington and other venues throughout the year.
- ⇒ Provide information regarding ASAT and autism to faculty in special education, psychology, and speech pathology programs nationwide.
- ⇒ More extensively tap into the wealth of experience and expertise of our Advisory Board mem-

(Continued on page 28)



AUTISM CONFERENCE

SAVE *The* DATE

Join Bilinguals Inc. and the Association for Science in Autism Treatment (ASAT) for a full day autism conference. There will be vendors, networking opportunities and more. **We hope to see you there for this great all day event.**

KEYNOTE SPEAKER



Dr. Bridget Taylor

Executive Director of Alpine Learning Group
ASAT Board Member

Improving Observational Learning Skills in Children with Autism

It is commonly recognized that children with autism present with significant deficits in imitation and observational learning. Most contemporary curricula for children with autism incorporate instruction in a variety of imitative response topographies. Less common in applied research and practice, however, are procedures to ensure that children with autism learn to acquire novel responses through observational learning. This presentation will outline instructional programs that move beyond direct imitation to the skills essential for observational learning. Specific procedures to increase observational learning in children with autism across a variety of responses will be reviewed.

OTHER SCHEDULED PRESENTATIONS INCLUDE:

Technology and Learning: Developing Innovative Teaching Methods For Individuals With Autism Spectrum Disorders

Presented By: Mary McDonald, Ph.D., BCBA-D (Vice President of ASAT)

Using the Principles of Science in Everyday Educational Practices with Young Children with Autism

Presented By: Daniel W. Mruzek, Ph.D., BCBA-D (ASAT Board Member)



April 3rd, 2012 - New York City

For More Information Call 212-684-0099 ext.166 • <http://www.bilingualsinc.com>

Focus on Science: Expand Your Science Knowledge...Relate It to Autism Treatment...And Be a Savvy Consumer! By Daniel Mruzek, PhD, BCBA-D

In science, “validity” refers to the degree to which a study proves a “hypothesis” (i.e., a proposed assertion made by a scientist) about how two or more events relate to one another (e.g., “Treatment X” and improved speech in children with autism). When the validity of a study is high, we can interpret the results with guarded confidence. Conversely, if validity is low, study results must be viewed with great caution or thrown out altogether. This is one of the reasons why the scientific method is such a powerful way of solving problems. In science, we are not beholden to the powers of persuasion beyond what we determine to be empirically valid. Expanding one’s science knowledge, therefore, is a very liberating exercise, especially when faced with countless treatment options proposed by practitioners and entrepreneurs. In this series, we will look at common threats to validity so that you can watch for these threats as you make decisions about autism treatments.

Regression to the Mean

Have you ever heard the expression “its darkest right before the dawn”? This expression, which refers to the belief that events are at their worst immediately prior to getting better, is reminiscent of a significant threat to the validity of treatment research: regression to the mean. In treatment research, regression to the mean is a statistical phenomenon in which: 1) a random “blip” in data occurs (e.g., increase in tantrums); 2) a treatment is applied (e.g., a weighted vest); and, 3) subsequently, the “blip” in data randomly returns to baseline (or “regresses to the mean”), as do random occurrences all the time. In these cases, the treatment may look effective, though, in actuality, it was not.

Consider this example: I ask my 2nd grade son to pick a card out of a deck of 52 playing cards without looking, and he pulls out a queen of hearts. I then tell him, “If I say ‘abracadabra’, the next card you pick will be lower than a queen.” I say “abracadabra”, and he picks out a seven of clubs. Should my son be amazed at the power of my “magic”? Of course not! It was not the effectiveness of any magic that led to his selection of a card lower than a queen but, considering that only a king and ace are higher, it was simply the statistical odds working in my favor.

A similar phenomenon can happen when we research potential autism treatments or apply them in “real life.” Researchers conducting studies on autism treatments often recruit participants who demonstrate problems (e.g., classroom inattention, sleep difficulty, self-injurious behaviors) when those problems are at extreme- or at least elevated- levels. Likewise, as parents and practitioners, we often employ new treatments for particular problems when those problems are particularly intense or high rate. But, note that, just like our card example above, when a particular phenomenon is measured as elevated at a point in time, there is an increased probability that it will return to baseline (i.e., the average or the “mean”) in the future. And, if some “treatment” is applied in the meantime, the illusion of effectiveness may result.

Researchers have a variety of methodological safeguards that they can employ to counter threats to validity like “regression to the mean,” including the use of randomized control groups (i.e., “no treatment” comparison groups) and treatment reversal designs (i.e., studies with planned, temporary discontinuations of the treatment to see if the problem reappears). These kinds of safeguards increase our confidence that the treatment in question is actually effective and not a game of statistical probabilities. Persons with autism- and their families-deserve nothing less.

In the next issue, we will look at the limitations -and the potential for deception- found in the use of customer testimonials in the marketing of autism treatments.

ASAT Advisory Board

F. J. Barrera, PhD, BCBA-D
 Stephen Barrett, MD
 Martha Bridge Denckla, MD
 Curtis Deutsch, PhD
 William V. Dube, PhD
 Deborah Fein, PhD
 Eric Fombonne, MD
 Richard Foss, PhD, BCBA-D
 Gina Green, PhD, BCBA-D
 William Heward, EdD, BCBA-D
 Ronald Kallen, MD
 Alan Leslie, PhD
 Bennett Leventhal, MD
 Johnny L. Matson, PhD
 Joyce E. Mauk, MD
 Catherine Maurice, PhD
 Bobby Newman, PhD, BCBA-D
 John Pomeroy, MD
 Stephen Porges, PhD
 Sharon Reeve, PhD, BCBA-D
 Joyce Rosenfeld, MD, FACEP
 Arthur Toga, PhD
 Paul Touchette, PhD
 Roberto Tuchman, MD
 Paul Yellin, MD

We are proud to announce the newest addition to our newsletter offerings: *Focus on Science*. In each issue, Dr. Daniel Mruzek will be providing us with a brief discussion of a topic related to autism treatment and illustrate how consumers could use science to guide and evaluate treatment selection!

Interview with a Board Member: Daniel W. Mruzek, PhD BCBA-D by Josh Pritchard, MS BCBA

We're so glad to have you on our board – could you tell us a little bit about why/how you got into autism?

My story goes back to my teenage days, when I developed an interest in teaching children with developmental disabilities as a Sunday school volunteer with my church. Later, as an undergraduate at the University of Toledo, I maintained this interest through course work and more volunteering. I majored in Psychology, and I was drawn to the science-grounded school of Behaviorism. As I studied behavior modification, I realized that it offered me a golden opportunity: "This is how I can study human behavior-including the behavior of persons with developmental disabilities- in a way that solves problems and gives people opportunities!"

Now, in the interest of full disclosure, I confess that, as a happy-go-lucky 22 year old, I selected Ohio State for my graduate training because I fell head-over-heels for a beautiful lady who enrolled there to pursue her training in physical therapy! (This worked out well; Maria and I have been married 20 years, and we have 4 sons!) But, from a training standpoint, I could hardly have made a better choice for graduate school. I enrolled in the Psychology of Developmental Disabilities program at the OSU Nisonger Center. I had two advisors there, Henry Leland and Dave Hammer. Henry mentored me as would a great philosopher, embedding my clinical instruction in a rich cultural and historical context. Dave mentored me like a craftsman would an apprentice, teaching me how to build solutions to specific clinical problems. Of course, our "tool chest" was filled with applied behavior analytic (ABA) philosophy and know-how.

In my first semester of graduate training (1988), Dave sent me to an on-campus preschool with the assignment of using discrete trial instruction to teach letter recognition to a boy with autism. Imagine my excitement: amidst an instructional arrangement that (in my ignorance) initially appeared as a "buzzing confusion," my data revealed what soon became evident to all: my student learned his letters! And, I was hooked. Before I got my "letters" (i.e., my doctorate), I had a chance to study ABA with Bill Heward and John Cooper....From a pedagogical standpoint, who could ask for more?

What do you recommend for those people who are embarking upon a career as a consultant to teaching staff and families?

What a question! In the interest of space, I will give you 10 recommendations to "new" consultants in "David Letterman" format.

Number 10: Always eat a good breakfast. Good consultation- like good intervention- takes stamina and concentration. If it were easy, everyone would do it.

Number 9: Buy a good watch and be on time. Engage in other behaviors that show respect for your families and teams (e.g., pronounce names correctly, stow the I-Phone when meeting, avoid rude language).

Number 8: Tell corny jokes... no, you do not have to do that. But, do cultivate a good-natured sense of humor. This is tough work, and we need to laugh with each other along the way.

Number 7: Know thy reinforcement each time out. Ask yourself, "What available consequences will promote my best work in this consultation?" In addition to the progress of the individual with autism, consider team development, mutual appreciation of families, new friendships, problems that are solved (the fruits of science) and, as a scientist, the opportunity to be a scientist (i.e., a polite way of describing this when presented with tough clinical questions: "I'm wrong", "that's not it", "not this either", and, with help and persistence, "I think we've got it!").

Number 6: Do not behave like a seagull (flying in and, well, flying out!). Take time to know your clients and let them know you.

Number 5: Fly with turkeys... but only if you want to gobble. Otherwise, surround yourself with others who have a passion for science-based intervention and continually improving service to persons with autism and their families.

Number 4: Carry a token board everywhere you go. No, just kidding. But do be a source of reinforcement for people whom you serve through your consultation. Develop an expert eye for those behaviors of parents and teachers that build up opportunity and independence for the individual with autism. Immediately compliment the individual as a consequence. "Shape on those behaviors." Use those behaviors as starting point for introducing new skills.

Number 3: Don't offer advice until you have listened to your families and other team members so well that your listening skills catch them by surprise.

Number 2: "Those who read lead." Stay current with new developments in the field by regularly reading quality publications and attending conferences. In many settings, remaining current through reading will put you in a unique position to be of great help to teams.

Number 1: Be a scientist. Use the scientific method as a way of organizing your service to others. Analyze. Synthesize. Hypothesize. Test. Evaluate data. See your work in the context of the efforts of the broader scientific community. This is a very exciting time to be a scientist in the field of autism!

(Continued on page 14)



Interview with Dan Mruzek continued...**What are some of the essentials for students and others first entering the field of autism intervention?**

As mentioned in my “Number 1” recommendation (above), I recommend that people entering clinical and educational service to persons with autism hone their science skills. A great book on the topic of science (but not autism) is the late Carl Sagan’s book “The Demon Haunted World: Science as a Candle in the Dark” (1996). Here, Sagan does at least three things: 1) provides a guided tour of the scientific method; 2) shows how science is not just a “tool box”, but, rather, a framework for organizing our experience (e.g., such as our decision-making in autism intervention); and 3) offers a “baloney detection kit” that highlights several signs of possible “baloney” one can watch for when others make claims- including treatment claims. Just as important, Sagan bursts the stereotype of the “jaded scientist” who reflexively says “No” to new ideas. Rather, he explains that scientists get excited in response to new ideas. They understand that new ideas- including “breakthrough ideas” that dramatically alter our take on the world- occur. But, for a scientist, the excitement over a new idea quickly leads to this question: “How can we test this out?”

One of the most valuable contributions to ASAT is your ability to identify and analyze whether there is “science in that” and help deal with threats to science in the area of autism treatment. Could you tell us more?

We can all look at autism treatment claims made by marketers through the lens of science. For example, I recently ran across a product called the “Miracle Belt” (<http://www.miraclebelt.com/>), described by the marketer as a “therapeutic weighted belt” for children with autism (or any one of 15 other developmental concerns). The cheapest Miracle Belt (the smallest one for infants) costs \$45.95 US dollars. That’s real money, especially for a family budget! Is it possible that this belt “increases body awareness”, “dramatically reduces hyperactivity”, “increases focus and concentration”, “enhances comprehension and learning”, “improves balance and coordination”, “maximizes benefits of therapy sessions,” and “increases therapy carryover”, as claimed by the marketers? The testimonials found on the website certainly endorse effectiveness. But, we know that testimonials are an exceptionally good way to push a product but an exceptionally poor way to discover the truth. From a scientific standpoint, we know that the sensory integration community has by-and-large

failed to demonstrate that any of their treatments are actually helpful for persons with autism, and, to the best of my knowledge, there are no studies specifically on the Miracle Belt.

We can look at the science, or lack thereof, behind the Miracle Belt claims more closely in a future edition of “Science in Autism Treatment”; but, for current purposes, it is suffice to say that a healthy dose of scientific skepticism is in order. In other words, we should test the marketer’s claim that a vest wrapped around the torso of a child with a pervasive developmental disability results in incredible cognitive and adaptive advances. By the way, “skepticism” does not mean “close minded”, “angry” or “rude”. Rather, it means that, as good scientists, we are going to maintain an expectation that treatment claims be evaluated objectively. It is up to the marketer making the treatment claim to provide evidence that it is actually helpful. And, if there is no scientific evidence regarding the effectiveness of the treatment, I think marketers should avoid deceptive practices, like glowing testimonials, contrived blogs, emotional appeals, phony “press releases” and science-like claims. As we regularly say in this newsletter, families deserve nothing less than honest, direct information regarding possible autism treatments. This is what puts them in a position of strength in making decisions about treatments for their children.

Is it reasonable to expect parents who do not know the field of autism treatment to sift through the options with an appreciation for the science? What are our options then?

I can imagine that, for many parents, the task of sifting through all of the available treatment options is a daunting task. I know how bewildered I get outside of my area of expertise. I am regularly at a loss in conversations about many topics, such as computers, car repair and finance. I just avoid these conversations, for the most part. So, I can intuit the anxiety that parents must feel when confronted with the life-changing news of their child’s diagnosis of autism and the unavoidable task of making decisions about treatment!

Parents do not have to be experts in autism treatment, but they can develop the skills to be savvy consumers. First, they can develop a skeptical mindset as described above (e.g., “Does this therapy sound too good to be true?”). They can ask the marketer, “What’s the research evidence behind your intervention?” They can develop a relationship with a trusted

(Continued on page 15)

Interview with Dan Mruzek continued...

practitioner in the field (e.g., physician, psychologist, behavior analyst) who can partner with them in evaluating treatment claims. And they can refer to objective resources in their evaluations. As mentioned on these pages in previous issues, a good resource is a well-written "State of the Evidence" report available through the Maine Department of Education (www.maine.gov/dhhs/ocfs/cbhs/ebpac/asd-report.doc).

Of course, our mission at ASAT is to provide a trusted resource for parents and practitioners (e.g., clinicians, educators). Our section "Research Synopses", available at our website (<http://www.asatonline.org/resources/resources.htm>), is designed as a quick, up-to-date reference site for many of the treatment options that parents regularly encounter. So, we are in this together. No parent should have to wade through treatment options alone!

Scientists (especially behavioral scientists) are quite familiar with the "bad rap" we have as being cold or disinterested in the human element. How do you deal with this? Do you think it's true?

Well, to a certain extent, as scientists, we probably bring this upon ourselves. At times, we do get lost in our research questions or get so invested in a clinical problem that we seem to have temporarily lost sight of the person. Like any person immersed in a particular culture, we love to speak the language of science (i.e., the jargon). Like rude tourists, there may be times when we simply expect others to keep up with our particular brand of rhetoric. So, we need to own up to this and fix it when we see it or do it!

When I see good research or clinical work, I inevitably see good partnering with families. That means that, as scientists, we should remain grounded in our science, but, at the same time, relate to our families and other constituents in a way that is accessible- void of unnecessary jargon and pretense. Not only is this partnership good for the family, but it offers the scientist a critical benefit: our partnering families point out to us what we otherwise might not recognize. At the University of Rochester, Steve McLeavey (a UR biomedical engineer) and I, along with the help of UR postdoctoral fellow Suzanne Engel, have been conducting clinical trials of a toilet training procedure for children with autism and other developmental disabilities that uses a wireless moisture sensor that sends a "page" to parents and teachers when a child's trip to bathroom should commence. Imagine the countless ways that this procedure has been improved by virtue of the observations and good advice of participating families!

Also, as suggested in my "Top 10" list above, I recommend to newly minted clinicians that they view their professional efforts as part of the broader efforts of teams in which we each bring something to the table and each have responsibilities (e.g., parents, teachers, and consultants). A "my way or the highway" attitude will not work, even when the alternative view is not science-grounded. So, if a team decides to adopt an intervention for a child that is outside the bounds of science (e.g., auditory integration therapy), the consultant might say, "I understand your interest in trying this out. Let's set up a method of measuring any treatment effects." Single subject research methodology offers relatively simple ways of evaluating treatments for individuals. Using this methodology and bringing the resultant data back to the team- with related interpretation of results- is a great contribution that consultants can make!

Thank you, Josh, for this opportunity to share a few thoughts about science and autism. I wish all the members of ASAT, the readership- and especially families- an enjoyable and fruitful new year!

ASAT Board of Directors

David Celiberti, PhD, BCBA-D
President

Mary E. McDonald, PhD, BCBA-D
Vice President

Barbara Wells
Treasurer

Florence DiGennaro, PhD, BCBA-D
Secretary

Leigh Broughan, MA, BCBA

Preeti Chojar, MCA.

Kathryn Dobel, JD

Ruth Donlin, MS

Elizabeth Dyer, MA, CCC-SLP

Daniela Fazzio, PhD, BCBA

Joseph Forgione, MBA

Sabrina Freeman, PhD

Sara Jane Gershfeld, MA, BCBA

Peggy Halliday, M.Ed., BCBA

Cyndy Hayes, MS, MBA, DBA

Barbara Jamison, BA

Scott Myers, MD, FAAP

Daniel W. Mruzek, PhD, BCBA-D

Joshua K. Pritchard, MS, BCBA

Tristram Smith, PhD

Bridget Taylor, PsyD, BCBA-D

ASAT
P.O. Box 188
Crosswicks, NJ 08515-0188

E-mail: info@asatonline.org

Website: www.asatonline.org

Facebook: www.facebook.com/Asatonline

Twitter: www.twitter.com/asatonline

Treatment Summary: Verbal Behavior/Applied Verbal Behavior

Description: *Verbal behavior* is a term coined by B.F. Skinner to describe a behavioral approach to understanding how typically developing individuals develop and maintain communication skills. The approach emphasizes that communication is a behavior that follows the same laws and principles as other forms of behavior. In his book *Verbal Behavior*, Skinner introduced and described new terms to refer to language processes from a behavioral perspective. For example, a *mand* is a type of verbal behavior that is reinforced by a particular consequence (e.g., making a request and then the request is granted). A *tact* is a type of verbal behavior that occurs in the presence of a particular stimulus (e.g., saying the name of an object in response to being shown the object).

Although Skinner did not discuss interventions to promote language development for children with autism spectrum disorders, many professionals within the field of applied behavior analysis (ABA) have applied Skinner's concepts to develop teaching procedures for these children and have called their procedures *Verbal Behavior* or *Applied Verbal Behavior*. Verbal Behavior programs emphasize teaching children with autism spectrum disorders to use mands to request items that they are highly motivated to obtain. Such programs also provide instruction on other types of verbal behavior as well as nonverbal behavior such as self-help skills. In so doing, they rely on teaching methods developed by other ABA programs independently of Skinner's *Verbal Behavior*. These methods include structured teaching approaches such as [discrete trial training](#) and procedures for motivating learners such as mixing difficult and easy tasks within a session. Verbal Behavior programs strongly recommend teaching children to use sign language before vocal speech or other communication systems such as the Picture Exchange Communication System (PECS).

Research Summary: Teaching procedures based on Skinner's analysis of verbal behavior have been developed to increase vocalizations in previously nonverbal children, but studies on the efficacy of these procedures have yielded inconclusive findings. Several small studies support the use of Verbal Behavior procedures to teach mands (verbally, through sign language, or with picture symbols); however, the preference for sign language over other [augmentative and alternative communication systems](#) such as [PECS](#) is not supported by research (Tincani, 2004). Whether Verbal Behavior procedures are a new development within the broader field of ABA, or simply a new name for tools and strategies that have historically been present in the field, is a matter of some debate and controversy. In any case, although some evidence supports basing teaching procedures on Skinner's conceptual analysis of language, much more research is needed to evaluate overall outcomes that might be achieved from a comprehensive Verbal Behavior curriculum.

Recommendations: Teaching procedures derived from Skinner's analysis of verbal behavior may be effective for teaching some communication skills to children with autism. Additional research is greatly needed to test whether these procedures are effective for teaching complex, flexible, and generalized verbal repertoires to individuals with autism. Additional research is also needed to determine the differences, if any, between teaching procedures based on Skinner's analysis of verbal behavior (e.g., mand training) and already established teaching procedures (e.g., incidental teaching). Research is also needed to test the effectiveness of the comprehensive use of curricula based on Skinner's analysis of verbal behavior.

Selected scientific studies:

- Barbera, M.L., & Kubina, R.M. (2005). Using transfer procedures to teach tacts to a child with autism. *The Analysis of Verbal Behavior*, 21, 155-161.
- Carroll, R. A., & Klatt, K. P. (2008). Using stimulus-stimulus pairing and direct reinforcement to teach vocal verbal behavior to young children with autism. *The Analysis of Verbal Behavior*, 24, 135-146.
- Jennett, H.K., Harris, S.L., & Delmolino, L. (2008). Discrete trial instructions vs. mand training for teaching children with autism to make requests. *The Analysis of Verbal Behavior*, 24, 69-85.
- Hernandez, E., Hanley, G.P., & Ingvarsson, E.T. (2007). A preliminary evaluation of the emergence of novel mand forms. *Journal of Applied Behavior Analysis*, 40, 137-156.
- Stock, R.A., Schulze, K.A., & Mirenda, P. (2008). A comparison of stimulus-stimulus pairing, standard echoic training, and control procedures on the vocal behavior of children with autism. *The Analysis of Verbal Behavior*, 24, 123-133.

- Tincani, M. (2004). Comparing the picture exchange communication system and sign language training for children with autism. *Focus on Autism and Other Developmental Disabilities, 19*, 152-163.
- Systematic reviews of scientific studies:
- Sautter, R.A., & LeBlanc, L.A. (2006). Empirical applications of Skinner’s analysis of verbal behavior with humans. *The Analysis of Verbal Behavior, 22*, 35-48.
 - Carr, J.E., & Firth, A.M. (2005). The verbal behavior approach to early and intensive behavioral intervention for autism: A call for additional empirical support. *Journal of Early and Intensive Behavioral Intervention, 2*, 18-27.
 - Sundberg, M. L., & Michael, J. L. (2001). The benefits of Skinner's analysis of verbal behavior for children with autism. *Behavior Modification, 25*, 698-724.

Clinical Corner: *I am a Special Education Teacher at the high school level. A young man with autism is transitioning to my caseload from our middle school. Although there is much talk about "safety skills" amongst my colleagues, I would like to target this skill area effectively and comprehensively. Any suggestions?*

Answered by: Shannon Wilkinson, MADS, BCaBA, New Haven Learning Centre, Toronto, Ontario

Safety skills are important for learners with autism and should be addressed comprehensively over the course of the learner’s schooling and across the lifespan. The type of safety skills taught at any given time will vary depending on the learner's age and functioning level. For example, younger learners can be taught to walk appropriately with an adult so they do not run into the street while older learners can be taught to cross the street independently. Regardless of age, safety skills should be included on the learner’s Individualized Education Plan (IEP) and reflect the goals of the individual and their families. In addition, data collection on the targeted skills is essential to ensure the learner is acquiring the skill and that the skill maintains over time.

An effective method to teach safety skills is Behavioral Skills Training (BST). BST is a comprehensive teaching method which includes delivering instructions to the learner, modeling the correct response, rehearsing the correct response in both pretend and more naturalistic environments, and delivering feedback to the participant regarding their actions. If the learner is having difficulty acquiring the skill, an additional teaching component known as In Situ Training (IST) can be added. In IST, the trainer provides immediate and direct training in the learner’s environment and allows for additional practice of the skill. Within the literature, BST and IST have been shown to be effective for teaching a wide range of safety skills such as abduction prevention skills (Beck & Miltenberger, 2009; Gunby, Carr & LeBlanc, 2010; Johnson et al., 2006) and how to seek assistance when lost (Pan-Skadden et al., 2009).

There are a number of safety skills that that could be

Teaching safety skills to individuals with autism is a necessity, not only to ensure their personal safety in the home or community but also to promote greater independence and self-sufficiency. In this edition of Clinical Corner, Shannon Wilkinson offers practical teaching strategies to help educators incorporate safety skill instruction into the curriculum. She also highlights how to teach several specific safety skills that every individual with autism should learn and provides a helpful list of potential targets for future programming.

*Nicole Pearson, PsyD
Clinical Corner Coordinator*

targeted for an adolescent with autism. Targeting those that also increase independence should be a priority if appropriate, based on the adolescent’s level of functioning. Teaching him to use a cell phone is one such skill, as it can be used to improve his safety and overall independence (Hoch, Taylor, & Rodriguez, 2009; Taber, Alberto, Seltzer & Hughes, 2003). First, you will want to ensure the learner has the basic skills associated with cell phone use including: answering the phone, following directions on the phone, answering questions on the phone and negotiating all of the mechanisms associated with initiating a call. Once these basic skills are mastered, specific safety skills involving the phone can be taught. For example, a learner can be taught to answer his cell phone and provide a description of his location in the event he is separated from his caregiver or group. He could also be taught to follow instructions to seek assistance from a community member if lost (Hoch, Taylor, & Rodriguez, 2009; Taylor, Hughes, Richard, Hoch & Coello, 2004) or to call a trusted adult.

A major safety concern for most parents is abduction. Although abduction may be more likely with a young

(Continued on page 18)

Clinical Corner: Safety Skills continued...

child, adolescents with autism should still be taught to identify “safe people” such as police officers, fire fighters and security guards, in the community. Many learners with autism are not able to distinguish safe or familiar people from unsafe or unfamiliar people. As a result, they cannot determine whom they can speak to or make a request for help. Learners can first learn to identify safe people, such as those noted above, in pictures. Once they can reliably do so, they should be taught what to do if a stranger approaches them. Multiple scenarios should be practiced so the learner becomes familiar with potential lures such as a stranger offering candy to get in a car or telling the student that his mom told the stranger to pick him up. Behavioral skills training and in situ training may be beneficial in teaching these skills (Beck & Miltenberger, 2009; Gunby, Carr & Leblanc, 2010; Mechling, 2008). In this scenario, the learner would first be provided instructions on what to do in each stranger situation. The learner should then model the correct response. If he does so successfully, a mock scenario can then be set up whereby a confederate approaches the learner and the learner has the opportunity to demonstrate the skills he has learned (i.e., do not go with the stranger, run away and tell an adult). If the learner performs the correct actions, he receives praise. If the learner does not demonstrate the correct response, the instructor immediately provides him with additional training.

Additional safety skills to target could include:

- ◇ navigating and using community resources appropriately and independently;
- ◇ exiting a car and crossing a parking lot or busy street safely;
- ◇ responding appropriately in emergency situations such as a fire or earthquake;
- ◇ addressing potential household hazards such as responding safely to cleaning chemicals, using appliances properly, or answering the doorbell when it rings;
- ◇ identifying a need to dial 911;
- ◇ using basic first aid procedures;
- ◇ interacting appropriately with pets and other animals;
- ◇ using the internet safely; and
- ◇ managing teasing and bullying

There are many others that can be addressed based on the learner, his individualized goals and his future educational, vocational and residential placements. Involving the learner’s parents in the planning process will help you to identify which safety skills are

most important and relevant for the individual to learn, particularly if the parents have specific concerns or if there has been a history of unsafe behavior. Finally, as you go through this program planning process, it’s helpful to keep in mind that the essential goal in teaching these skills is to promote greater independence by ensuring the learner has the tools he needs to be safe and to protect himself in his environment.

You may also be interested in reading another recent Clinical Corner response related to your question that addresses several safety issues including wandering and making sure the home environment is safe. Please see <http://asatonline.org/resources/clinician/bolting.htm>.

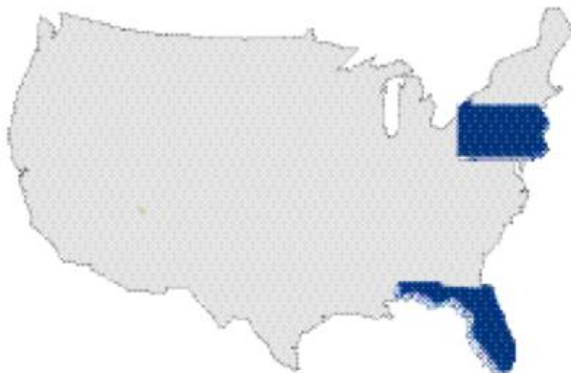
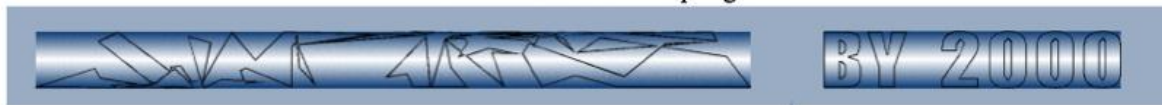
References

- Beck, K. V., & Miltenberger, R. (2009). Evaluation of a commercially available program and in situ training by parents to teach abduction-prevention skills to children. *Journal of Applied Behavior Analysis*, 42, 761-772.
- Gunby, K. V., Carr, J. E., & Leblanc, L. A. (2010). Teaching abduction-prevention skills to children with autism. *Journal of Applied Behavior Analysis*, 43, 107-112.
- Hoch, H., Taylor, B. A., & Rodriguez, A. (2009). Teaching teenagers with autism to answer cell phones and seek assistance when lost. *Behavior Analysis in Practice*, 2, 14-20.
- Mechling, L. C. (2008). Thirty year review of safety skill instruction for persons with intellectual disabilities. *Education and Training in Developmental Disabilities*, 43, 311-323.
- Pan-Skadden, J., Wilder, D. A., Sparling, J., Stevenson, E., Donaldson, J., Postma, N., et al. (2009). The use of behavioral skills training and in-situ training to teach children to solicit help when lost: A preliminary investigation. *Education and Treatment of Children*, 32, 359-370.
- Taber, T. A., Alberto, P. A., Seltzer, A., & Hughes, M. (2003). Obtaining assistance when lost in the community using cell phones. *Research and Practice for Persons with Severe Disabilities*, 28, 105-116.
- Taylor, B. A., Hughes, C. E., Richard, E., Hoch, H., & Rodriguez-Coello, A. (2004). Teaching teenagers with autism to seek assistance when lost. *Journal of Applied Behavior Analysis*, 37, 79-82.

From the Archives by Daniela Fazzio, PhD BCBA-D

We at ASAT express our deep sadness with the passing of Dr. Jerry Shook, founder and CEO of the Behavior Analyst Certification Board, BACB (R). As was conveyed in our A Series of Tributes to Dr. Jerry Shook (SIAT Spring 2011), he was a remarkable person, admired for his vision, kindness, competence, courage, innovation, passionate persistence, and generous mentorship. In honor of his legacy, this issue's "From the Archives" brings back Dr. Shook's piece published in our newsletter's premiere issue in 1999, to celebrate the striking accomplishments since the BACB's inception that same year. We have reason to be proud of how far our professional standards, as well as the whole field of behavioral intervention, have come.

SIAT Premiere Issue Spring 1999



The Behavior Analyst Certification Board, Inc. (Board) has been formed to develop, promote and implement a voluntary certification program for behavior analyst practitioners across the United States and, eventually, other nations. The Board will establish uniform content, standards and criteria for the Behavior

Analyst Certification Board credential. It will also ensure that its program meets the legal standards established through state, federal and case law; the standards of the national Organization for Competency Assurance; and the "best practice" and ethical standards of the behavior analysis profession.

The Board will develop its certification model based upon the successful Behavior Analyst Certification Program operated by the State of Florida. The Florida program has been in operation for 15 years, and helps to ensure the competency of practitioners through stringent requirements for appropriate professional experience; formal education; passing a professionally-developed written examination; and continuing education.

The ABA Council has endorsed the formation of the Behavior Analyst Certification Board, and has provided financial support to aid the development process.

The Board seeks to administer the certification exam to eligible candidates at the Washington, DC ABA Convention in 2000.

-Gerald Shook, PhD

ASAT

Behavior Analyst Certification Board (BACB(R)) certificants now exceed 10,000 worldwide: 7,403 BCBA's, 1,178 BCBA-Ds², 1,597 BCaBA's¹, and 98 FL-CBA's³. Certificants are in the United States and 42 other countries and work across a variety of areas of human service: autism, alcohol/drug abuse, business/industry/government, dependency/foster care, developmental disabilities, regular education, college education, special education, families/couples, health, and mental health. The Task List, organized in three sections: Client Centered Activities, Basic Skills, and Foundational Knowledge, is in its 4th edition⁴, and there are 200 universities with approved course sequences. The hope of Dr. Javna, PhD, then a mother of 2 children with autism, has become reality for thousands of families:

"In the absence of such standards, virtually anyone can claim to be qualified to conduct this treatment. I hope that soon, through training and credentialing efforts such as these, parents of autistic children will not face the sorrow that we have had to face—knowing what is effective for our children, but being unable to find professionals who know how to deliver it." Dr. Carol Javna, SIAT Spring 1999⁵

¹ See description on the BACB [website](#), ² See description on the BACB [website](#), ³ Florida Certified Behavior Analyst™

⁴ Source: BACB Newsletter [May 2011](#)

⁵ Archives: www.asatonline.org/pdf/spring99.pdf

ASAT Advertising Policy and Protocols

The Association for Science in Autism Treatment (ASAT) accepts advertising for the ASAT.org website, newsletter and other ASAT publications to offset its operational expenses. Products or services accepted for advertisement by ASAT will be consistent with our mission to disseminate accurate, scientifically-sound information about autism and its treatment and to improve access to effective, science-based treatments for all people with autism, regardless of age, severity of condition, income or place of residence.

All advertisers must sign the ASAT Advertising Application. ASAT maintains the right to refuse any proposed advertisement that is incompatible with its mission, as determined through a case-by-case review by the ASAT Board of Directors, prior to placement of advertisement in ASAT publications.

In order to be considered for acceptance by the ASAT Board of Directors, the proposed advertisement must **NOT**:

- make unsubstantiated health or treatment claims
- suggest endorsement by ASAT
- contain religious or political content
- contain pop-ups, floating ads or surveys
- collect personal information from an individual visiting www.ASAT.org
- use cookies, applets or other such files that transmit or otherwise collect personally identifiable information

For each possible ASAT advertiser, an authorized person will be required to sign off that his/her organization is in support of the following tenets:

1. All treatments for individuals with autism should be guided by the best available scientific information.
2. Service providers have a responsibility to rely on treatments that have been shown to be safe and effective in scientifically rigorous, peer-reviewed research studies.
3. Service providers should take steps necessary to help consumers differentiate between scientifically-validated treatments and treatments that lack validation.
4. Consumers should be informed that any treatment lacking scientific support should be pursued with great caution.
5. Objective data should be used when making clinical decisions.

Advertisement on www.asatonline.org, newsletter or other publication does not imply endorsement by ASAT of the advertised company, service or product. All advertisements will be clearly labeled as an advertisement. ASAT reserves the right to decline any advertising request if the content of the ad contains reference to treatments that are not established. ASAT may also decline requests if the website or mission statement contains content not consistent with the tenets above.

This policy is intended to provide general guidance and is not inclusive or exhaustive. ASAT may change this policy at any time, at its discretion, by posting a revised policy to the ASAT.org website.

For questions about advertising, contact newsletter@asatonline.org.

Disclaimer- *ASAT has no formal relationship with any of its advertisers. Furthermore, their stated endorsement of the above tenets is not verified or monitored by ASAT. Although ASAT expects that all advertising organizations will act in accordance with the above statements, ASAT does not assume responsibility for ensuring that advertisers engage in behavior that is consistently congruent with the statements above.*

Rates

Sponsor and non-sponsor rates are listed below. For more information about becoming a sponsor, please see http://asatonline.org/about_asat/sponsors.htm#learn.

As you can see below, we are offering additional percentage discounts in addition to a free ad for our 2010 Alliance and Patron sponsors.

Formatting of Newsletter Ads

Please create ad that conforms to dimension ratios specified below.

All ads will need to be sent in TIFF or JPG format.

To allow for highest quality, do not compress ads.

Larger ads are allowed, as long as they are in the appropriate ratio (i.e., – a 9:7 ratio for a full-page ad) – sending larger files may allow for better ad quality.

Please ensure that your ad does not make unsubstantiated health or treatment claims, suggest endorsement by ASAT, or contain religious or political *content*.

2011 Advertising Rates	Non Sponsors	Partners \$5000/yr	Champions \$2000/yr	Benefactor \$1000/yr	Alliance \$500/yr	Patron \$200/yr
	See rates below	Two free ads any size then 50% discount	One free 1/2 page then 50% discount	One free 1/4 page then 40% discount	40% discount	20% discount
Full Page 9" X 7"	\$800/Issue	\$400/Issue	\$400/Issue	\$480/Issue	\$480/Issue	\$640/Issue
Half Page 4.5" X 7" [9"X 3.5"]	\$500/Issue	\$250/Issue	\$250/Issue	\$300/Issue	\$300/Issue	\$400/Issue
Quarter Page 2" X 7" [5"x 3"]	\$300/Issue	\$150/Issue	\$150/Issue	\$180/Issue	\$180/Issue	\$240/Issue

Does your agency share ASAT's values?

ASAT believes that individuals with autism have the right to effective treatments that are scientifically demonstrated to make meaningful, positive change in their lives.

We believe that it should not be so challenging for families to find accurate information about the efficacy of various autism interventions.

ASAT works toward a time...

..... when all families would be empowered with skills in identifying and choosing the most effective, scientifically-validated interventions for their child.

.....when the media would educate and not confuse parents by providing accurate information and asking the right questions.

.....when all providers would be guided by science when selecting and implementing their interventions.

What it means to be a Sponsor.....

ASAT's sponsors have indicated their support of the following tenets:

1. All treatments for individuals with autism should be guided by the best available scientific information.
2. Service providers have a responsibility to rely on science-based treatments.
3. Service providers should take steps necessary to help consumers differentiate between scientifically-validated treatments and treatments that lack validation.
4. Consumers should be informed that any treatment lacking scientific support should be pursued with great caution.
5. Objective data should be used when making clinical decisions.

.....Become a 2012 Sponsor Now!

These sponsorships not only provide financial support used specifically for our dissemination efforts, but also send a clear message that ASAT's vision is shared by others within the professional community.

The tasks of educating the public about scientifically-validated intervention and countering pseudoscience are daunting ones, and ASAT appreciates the support of all of its sponsors.

If you are interested in becoming a 2012 Sponsor, please visit the sponsor page on our website at www.asatonline.org/about_asat/sponsors.htm#learn.

Thank you for your consideration!

2011 Sponsors in Real Science, Real Hope Sponsorship Initiative

CHAMPION \$2,000

- [Autism Partnership](#)
- [Four Points, Inc.](#)
- [Little Star Center](#)
- [Central Valley Autism Project](#)

BENEFACTOR \$1,000

- [Different Roads to Learning](#)
- [Rethink Autism](#)
- [Accelerated Educational Software](#)
- [Stepping Stones](#)
- [Pacific Autism Learning Services](#)
- [Organization for Research and Learning](#)

ALLIANCE \$500

- [Autism Intervention Services](#)
 - [Autism New Jersey](#)
 - [Eden II Programs](#)
 - [ELIJA Foundation](#)
 - [ELIJA School](#)
 - [Providence Service Corporation](#)
 - [Quality Services for the Autism Community \(QSAC\)](#)
 - [Quest Autism Program](#)
 - [Virginia Institute of Autism](#)
- PATRON \$200**
- [Aging with Autism](#)
 - [Alpine Learning Group](#)
 - [Autism Awareness](#)
 - [Asperger Syndrome and High Functioning Autism Association \(AHA\), Inc.](#)

- [Autism Research and Treatment](#)
- [The Bay School](#)
- [Behavioral Intervention Association](#)
- [Brooklyn Autism Center](#)
- [Child Study Center of Fort Worth](#)
- [Connecticut Center for Child Development](#)
- [First Steps for Kids, Inc](#)
- [Gary Mayerson & Associates](#)
- [Institute for Educational Achievement](#)
- [Kansas City Autism Training Center](#)
- [Lizard Children's Learning Centre](#)
- [New England Center for Children](#)
- [New Haven Learning Center](#)
- [NY Center for Autism- Charter School](#)
- [Pyramid Educational Consultants, Inc.](#)
- [Room to Grow](#)
- [SKF Books](#)
- [Somerset Hills](#)

IMPORTANT DISCLAIMER: ASAT has no formal relationship with any of the sponsor organizations. Furthermore, their stated endorsement of the above tenets is not verified or monitored by ASAT. Although ASAT expects that all sponsoring organizations will act in accordance with the above statements, ASAT does not assume responsibility for ensuring that sponsoring organizations engage in behavior that is consistently congruent with the statements above.

In addition to our entire board of directors, we acknowledge the following donors in 2011. Without their support, our important work could not be carried out.

ASAT Donor Wall

Champion \$2000 and above

The Leah and Alain Lebec Foundation, Inc.
Alison & Bernard Webb, *In Honor of Peggy Halliday*

Alliance \$100 - \$1000

Rachel Angelos
Bangor Motorsports, Luke McCannell and Kurt Thomas
Rusdy Budisusetyo
Warren & Judith Carter
Michele Clark-Groff
David Diosi
Tara Donohue
Sharon Q. Fitzgerald
Pamela Gorski
Gina Green
Nea Hanscomb
William Heward
Charla Hutchinson
Tracie Lindblad
Joyce Elizabeth Mauk, M.D.
Dominic Mazzoni
Luke and Kelly McCannell
Beth McKee
Audrey Meissner
Nancy Phillips
Kristine Quinby
Donna Quinn
Howard Rachlin
Sharon Reeve
Carlos Rudge
Deborah Sedberry
Caroline Simard
Tom & Carol Sloan
Roberto Tuchman
Saralyn Walker
Key Bank
Mike & Kelly Windsor,
In Honor of Janice Windsor

Benefactors \$1000 - \$1999

Ethel & Nathan Cohen Foundation
Patrick & Kristen Ramsey
Anonymous

Patron \$1 - \$99

Toli Anastassiou	Daniel Kessler
Linda Bekman,	Kate Lambert
<i>In Memory of James & Ann Celiberti</i>	Debbie Lancette,
Lea Bell	<i>In Honor of Sarah Jack</i>
Gordon Bourland	Toby Martin
Bernard Caputo	Paul McDonnell
Douglas & Josette Celiberti,	John & Marlene McElwee
<i>In Memory of Carol Celiberti</i>	Linda S. Meyer
Maricel Cigales	Ellen Murphy
Marianne Clancy	Elizabeth Neumann
Michael Cohen	Judy Newport
Ed & Marianne Colangelo	Diana Parisy
Panagiota Debery	Wayne Piersel
William Dube	Belinda Robinson
Stephen Eversole	David & Joyce Roll
Wilfried Gehne	Johan Sanne
Megan Halliday,	Mark Stafford
<i>In Honor of Peggy Halliday</i>	David Tornabene
Bethany Halliday	Leanne Tull
Sandra Harris	Jenny Wells
William Horn	Autism Early Intervention Clinics
Joel & Sandra Hornstein	

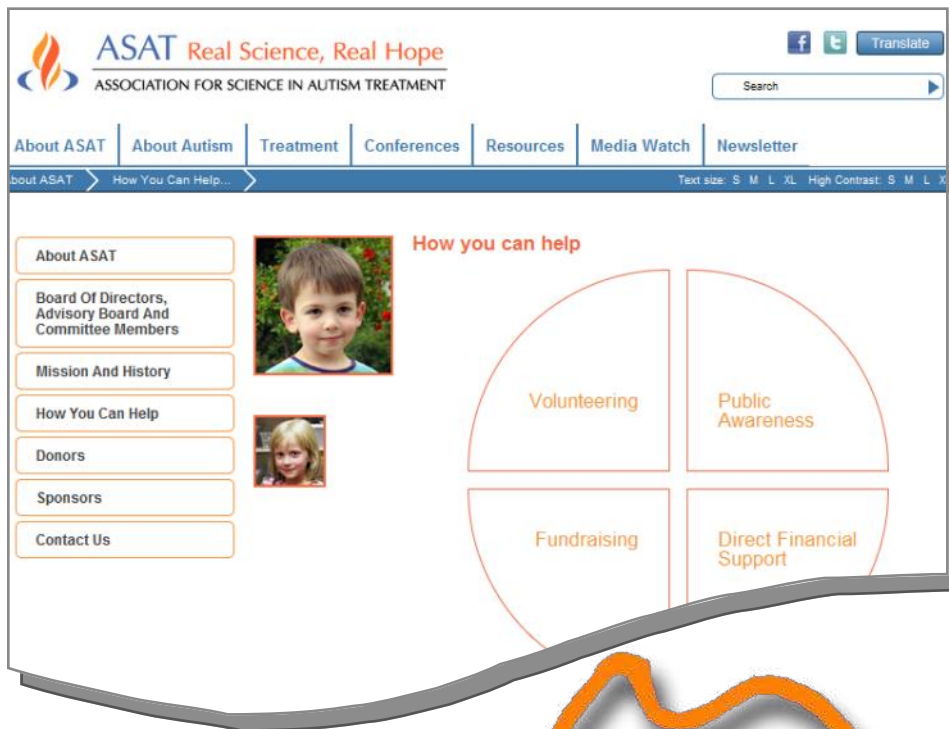
If you were a 2011 donor and we inadvertently left you off this list, please accept our apologies and e-mail us at donate@asatonline.org

ASAT Revamps How You Can Help Section of Website Denise Grosberg, MA, BCBA

ASAT Board Members Ruth Donlin, Sara Gershfeld, and Mary McDonald would like to introduce the new “How You Can Help” section of ASAT’s website, a way for you to explore a wide array of ways to support ASAT’s mission through volunteering, public awareness, fundraising, and direct financial support opportunities. Each of these areas has its own subsection with specific suggestions on how you can help ASAT!

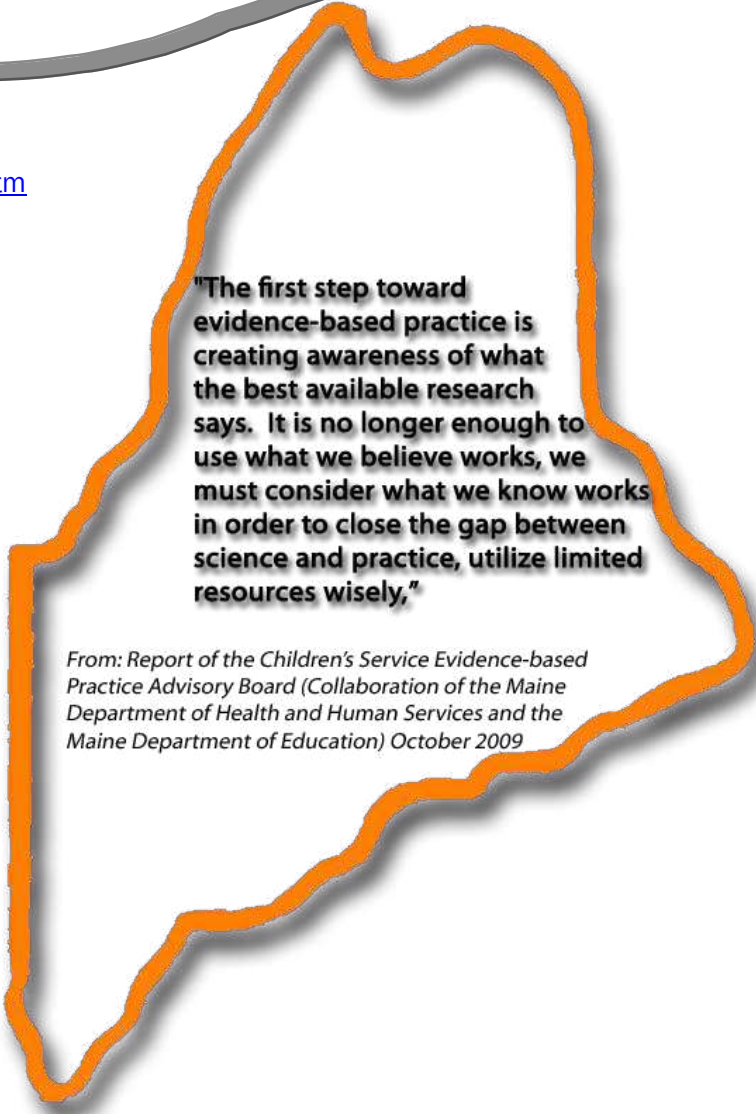
We encourage you to use this new section as a means to help ensure that ASAT can continue to provide families of individuals with autism with standards of accountability for the care, education, and treatment for many years to come. It takes a village to change the conversation about autism treatment. We can’t do it without you!

Check it out here: http://asatonline.org/about_asat/hych.htm



**“As Maine goes, so goes the nation”
- Unknown**

**Some words of wisdom from the
great state of Maine!**



Research Review: Randomized Controlled Trial of Hanen's 'More Than Words' in Toddlers with Early Autism Symptoms

Carter, A.S., Messinger, D.S., Stone, W.L., Celimli, S., Nahmias, A.S., & Yoder, P. (2011). A randomized controlled trial of Hanen's 'More Than Words' in toddlers with early autism symptoms. *Journal of Child Psychology and Psychiatry*, 52, 741-752.

Reviewed by: Kathleen Moran, Caldwell College

Why this topic?

There is increasing evidence that early intervention (EI) programs that are implemented by service providers and that occur in a child's natural environment improve outcomes for children with autism. However, there is little research on parent facilitated EI programs, in which parents are taught strategies to take advantage of naturally occurring opportunities to help their children learn language. One such program is known as 'Hanen's More Than Words' (HMTW), which is designed to increase parent-child interactions and child communication skills by encouraging the child to initiate or respond during everyday routines. The goal of the current study was to see if participation in a HMTW program would enhance a parent's responsivity to the child or the parent's teaching of communication skills, and thereby increase the child's communication skills. Another goal was to see if these skills would be maintained.

What did the researcher do?

Participants included 62 children meeting criteria for autism and their parents. Parents and children were randomly assigned to either an intervention (HMTW training) or a control group (no HMTW training). HMTW intervention was provided for three and a half months. Parents attended eight weekly group sessions and three individual family sessions. A speech and language therapist certified by a Hanen Centre administered all sessions. Children's communication and parental responsivity were assessed at the beginning and at five- and nine-month follow up periods. To increase a parent's responsivity, the therapist taught parents to respond to child's

communi-
cative
attempts,
follow the
child's
lead,
build and
partici-
pate in
joint
action
routines
in play,

enhance interaction during caring routines, and use books and play as content for communication. Parents were also taught to evoke language using visual supports and to support peer interactions. The authors defined the control group as parents continuing with "business as usual."

What did the researchers find?

The researchers found that parents' exhibited responsivity increased between the initial and five-month follow up evaluations but decreased to pre-treatment levels at the nine-month follow up. No major effects on children's communication outcomes were observed immediately after parent-implemented treatment, but an increase was found between the initial evaluation and nine-month follow up. Researchers also looked at each child's interest in objects during an initial play assessment. Results showed that children with limited interest in objects as indicated by this play assessment showed a greater increase in communication than a child with an initial greater interest in objects. Parents of children with greater interest in objects may require more support or different strategies to implement the HMTW.

This edition's article summaries are in the area of treatment evaluation on various aspects of autism. Granpeesheh, Tarbox, Dixon, Wilke, Allen and Bradstreet evaluated the effectiveness of hyperbaric oxygen therapy on all characteristics of autism (i.e., social reciprocity, communicative approach, repetitive behaviors). Laugeson, Frankel, Mogil, and Dillon looked at the Program for Education and Enrichment of Relational Skills on increasing social skills in adolescents with autism. Carter, Messinger, Stone, Celimli, Nahmias and Yoder investigated the effectiveness of the Hanen's More Than Words programs on parental involvement and communication skills in young children with autism.

Sharon A. Reeve, Ph.D., BCBA-D, SIAT Research Corner Coordinator

What were the strengths and limitations of the study? What do the results mean?

Overall, researchers expressed concern about the general use of this intervention with very young children, given that parents' and children's gains were quite limited. The study also showed that there were different effects on a child's communication based on the child's interest in objects, as determined by the play assessment. Limitations of the study include a greater focus on parents' group experience than individual family sessions, little feedback support, and some assessments used were not based on children of typical development. Strengths include the use of multiple evaluations of the child's communication skills and parent's responsivity, which allowed the researcher to detect an increase in initiating joint attention and requests, as well as consumer satisfaction, in the intervention group compared to the control group. Future research should include an increase in family session training, analysis of mechanisms associated with the decrease in communication for children with greater interest in objects, and comparison to another active intervention.

Research Review: Parent-Assisted Social Skills Training to Improve Friendships in Teens with Autism Spectrum Disorders

Laugeson, E.A., Frankel, F., Mogil, C., Dillon, A.R. (2009). Parent-assisted social skills training to improve friendships in teens with autism spectrum disorders. *Journal of Autism and Developmental Disabilities*, 39, 596-606.

Reviewed by: Jessica Rothschild, Caldwell College

Why research this topic?

Research focusing on children of typical development has shown that it is important to build friendships throughout social development. Based on these findings, parents, teachers, and other providers often emphasize teaching children with autism the social skills needed to create personal relationships. However, there is limited research on the efficacy of teaching social skills to adolescents with autism. The research that has been conducted focuses on individual skills such as increasing the number of times a child makes conversational statements. A gap in research still remains in testing whether such increases lead to clinically important outcomes such as improving social competence, developing friendships, and engaging in social interactions outside of the intervention setting. This study evaluated the effects of a short-term social skills program called the Program for the Education and Enrichment of Relational Skills (PEERS). This program consisted of three components which included the use of evidence based strategies when teaching social skills to adolescents with autism, parental involvement, and the implementation of an adapted Children’s Friendship Training (CFT) social skills curriculum used for teaching.

What did the researchers do?

Thirty-three adolescents between the age of 13 and 17 and their parents participated in the study. The

participants were divided into a Treatment Group or a Delayed Treatment Group. The treatment Group received the PEERS program for 12 weeks. The Delayed Treatment Group served as a control group (a group against which to compare the results of the treatment group) and received treatment at the end of the 12 weeks. The PEERS treatment focused on five social skill areas. First, reciprocal language was taught to help develop friendships. Second, parents were taught to aide their children in expanding social relationships with peers. Third, appropriate peer etiquette was taught to diminish any preconceived opinions already established about the participant’s social skills. Fourth, both the parents and participants were instructed on initiating and maintaining appropriate hosted get-togethers. Lastly, the participants were taught the use of appropriate social skills and social strategies when presented with a scenario involving peer rejection. These skills were modeled by the group leader and coaches, followed by role-playing exercises, and performance feedback. At the conclusion of each session each participant was assigned homework that provided them an opportunity to practice the new social skills learned during the week. Parents were also instructed on different strategies to use if the participant experienced difficulty with the assignment.

What did the researchers find?

Parent ratings revealed that the participants in PEERS significantly improved in the area of social skills including following social rules and social etiquette when compared to the control group. Specifically, the results demonstrated an increase in the frequency of hosted get-togethers, though not an increase in invited get-togethers. In addition, the participant’s parents reported an improvement in their child’s social skills.

What are the strengths and limitations of the study? What do the results mean?

Although the results demonstrate an increase in hosted get-togethers, the participants did not report a significant increase in invited get-togethers. Future research should focus on conducting follow-up sessions to ensure that these social skills are generalized to other settings and maintained over time. Another limitation to this study was the possibility of parent bias when reports were completed due to their participation in the PEERS treatment. Additional future research may assess reports from teachers or other individuals not directly participating in the study. Lastly, research may investigate the components of the PEERS individually with a smaller population, thus providing a more accurate measurement of each strategy and whether or not it is effective when teaching adolescents with autism social skills.

Research Review: Randomized Trial of Hyperbaric Oxygen Therapy for Children with Autism

Granpeesheh, D., Tarbox, J., Dixon, D.D., Wilke, A.E., Allen, M.S., & Bradstreet, J.J. (2010). Randomized trial of hyperbaric oxygen therapy for children with autism. *Research in Autism Spectrum Disorders*, 4, 268-275.

Reviewed by: ToniAnne Giunta, Caldwell College

Why study this topic?

Because the cause of autism spectrum disorders (ASD) is unknown, numerous treatments exist. Only few, however, have been deemed effective via controlled, scientific research. A common, yet scientifically unproven, treatment for ASD is hyperbaric oxygen therapy (HBOT). HBOT involves delivering a mixture of gases from 21% oxygen (room air) to 100% oxygen at atmospheric pressures above ambient pressure, usually via a chamber or gas mask. Although HBOT is an evidence-based treatment for decompression sickness, studies have yet to demonstrate it as one that improves ASD symptoms. The goal is to reduce inflammation in the brain, but it remains unclear whether or not individuals with ASD have such inflammation. The few studies that have analyzed the effects of HBOT in individuals with ASD have done so in 40 sessions and have (a) been uncontrolled, (b) found inconsistent responses to treatment, or (c) found only minimal (not clinically or statistically significant) differences between experimental and placebo groups. The findings thus far show that HBOT does not produce meaningful treatment effects for individuals with ASD. Other questions, however, have yet to be answered. The present study attempted to analyze the effects of HBOT on ASD symptoms using the most commonly prescribed dose (24% oxygen at 1.3 atm) over a relatively longer duration (80 sessions).

What did the researchers do?

The researchers randomly assigned individuals with ASD, ages 2-14, to either a treatment group (receives HBOT) or control group

(does not receive HBOT). The researchers then compared these groups in regards to (a) performance on a variety of standardized assessments (Aberrant Behavior Checklist, Autism Diagnostic Observation Schedule (ADOS), Behavior Rating Inventory of Executive Functioning, Clinical Global Impression Scale, Parent Stress Index, Peabody Picture Vocabulary Test, Repetitive Behavior Scale, Social Responsiveness Scale (SRS), Vineland Adaptive Behavior Scales, Beery-Buktenica Developmental Test of Visual-Motor Integration) and (b) behaviors observed during direct observation of toy play (hyperactivity, appropriate vocalizations, vocal stereotypy, physical stereotypy, aggression, self-injury, property destruction, toy play). Both groups received 80, 1-h sessions in an HBOT chamber. The 18 participants in the experimental (HBOT) group received compression to 1.3 times normal atmospheric pressure with 24-28% oxygen. The 16 participants in the control group received free airflow at ambient pressure.

What did the researchers find?

In regards to outcome measures that are symptomatic of ASD (i.e., social reciprocity, communicative approach, repetitive behaviors), improvements occurred in both groups as per results of two standardized assessments (ADOS and SRS), with differences not reaching high enough levels to be called significant. Performance between the groups on the remaining standardized assessments also did not yield significant differences. Furthermore, data obtained during direct observations failed to yield

significant differences between the groups. In summary, although improvements were found in both groups, performance was not superior in one group versus the other.

What are the strengths and limitations of the study? What do the results mean?

Compared to previous studies analyzing the therapeutic effects of HBOT on ASD symptoms, the present experimental design was of a higher rigor and the outcome measures were more comprehensive. Therefore, it is unlikely that an effect was present but not detected. That is, one can interpret the findings with confidence. The present study adds to the limited body of scientific research on this topic. Some clinicians prescribe biomedical treatments with trial-and-error systems that pose high costs and unknown risks, and base their recommendations on unvalidated anecdotal evidence. Although the study failed to show evidence for treatment efficacy, more such studies on biomedical approaches to ASD treatment are needed to determine whether or not these approaches are safe and effective. Several limitations, however, are pointed out. The sample size (34 individuals) was relatively small. Also, both groups were receiving intensive applied behavior analysis (ABA) interventions throughout the study, making it unclear whether HBOT produced additive effects to the ABA effects. Nonetheless, minimal differences were observed between the groups, and the study indicates that HBOT should continue not being recommended for addressing ASD symptoms.

ASAT is proud to announce the 2nd Annual Rock'n 4 Autism Awareness Concert to be held in Hoboken, NJ Denise Grosberg, MA, BCBA, ASAT Event Writer

It's that time again! Get ready for the 2nd Annual Rock'n 4 Autism Awareness Saturday, April 28th from 2:00-6:00 pm. This event is co-hosted by ASAT and Hoboken-based HOPES CAP, Inc., a Community Action Agency committed to providing services to the underserved.

Last year, the concert featured Hoboken's very own Fuzzy Lemons, a popular and family-friendly rock band who wowed the crowd. We were fortunate to have Jessie DeVito and her husband, Mike DeVito from the New York Jets, assist us and volunteer their time to this important event. Mike not only attended the event, but solicited sponsorships, donated a signed



football and jersey for the silent auction, and generously agreed to take photographs with fans. The State Farm Good Neigh-bear was on hand to mingle with the children and pass out helium balloons and prizes. Another highlight from the event included a visit by Larry and Kathy Hannon, a family who raised over \$5000 in the last two years at their Dairy Queen stores in Maine. Larry, Kathy, and their daughter Karina drove down to attend this event. Over 80 businesses donated merchandise and services to make this concert a complete success and helped us raise over \$16,000!

It was such a tremendous success that we are bringing everyone back to do it again! This year, be ready to enjoy two sets from the Fuzzy Lemons, as

well as another guest appearance by NY Jets Player, Mike DeVito, who will be signing autographs and pictures for fans! You'll also get the chance to talk with a number of knowledgeable parents and professionals from the Association for Science in Autism Treatment and Autism New Jersey, who will be providing information and take-away materials about awareness, education, and best practices in the field of autism. We look forward to seeing you there!



For more details about Rock'n 4 Autism Awareness, please visit our Facebook page at www.facebook.com/R4AA.Hoboken. You can also find out more information about HOPES CAP Inc. by visiting their [website](#).

If you would like to volunteer to help with this event or donate an item for our silent auction, please contact Ruth Donlin at asatevents@aol.com.



Letter from David continued...

Science in Autism Treatment

Volume 9,1 Winter 2012

- bers and better inform and engage them with respect to ASAT's activities and initiatives.
- ⇒ Continue to forge collaborative relationships with like-minded organizations. To this end, we will be offering a collaborative conference with Bilinguals to be held in New York City on April 4th. See announcement on page 11.
 - ⇒ Host the 2nd annual Rock'n 4 Autism Awareness benefit concert on April 28th in Hoboken, New Jersey. Please see page 27.
 - ⇒ Continue biweekly Media Watch responses to accurate and inaccurate portrayals of autism treatment, and increase emphasis on topics related to the adult population.

I hope you are excited about the array of goals outlined above and believe that ASAT has an important place within the autism community. We cannot carry out our important work without the support of generous sponsors and donors. In fact, the ongoing success of ASAT is predicated on your support. If you are affiliated with an organization that shares ASAT's commitment to science in the treatment of autism, please consider becoming a 2012 Real Science Real

Hope Sponsor. We are pleased to report that 40 organizations participated last year. Please see page 21 for more information.

Please see page 22 for our 2011 Donor Wall. As we move into 2012, we also welcome the support of individual donors. If you recognize the need for accurate information about autism treatment, believe in the relevance of science, and want to support our efforts to change the conversation about autism treatment, please complete the donor panel on page 29 or donate online through [Pay Pal](#). Any amount will be deeply appreciated.

I wish you all a happy and healthy new year!

Best,

David Celiberti



ASAT Committee Members

In addition to our Advisory Board, a number of individuals lend their time and talents to support ASAT's mission and initiatives. As you can see, we have individuals who support each aspect of our organization. If you want to assist, please email us at info@asatonline.org

ASAT Public Relations

Jennifer Hieminga, MEd, BCBA
Lewis Mazzone, MA
Audrey Meissner, MEd, BCBA
Sage Rose, PhD
Nancy Philips, BA
Jessica Zilski-Pineno, MEd

ASAT Finance Committee

Dena Buonarota Russell, MA
Marianne Clancy
Denise Grosberg, MA, BCBA
Germaine Ibrahim, MEd
Jessie DeVito, BA

ASAT's Newsletter,

Science in Autism Treatment

Laurie Brophy, LCSW
Kerry Ann Conde, MS, BCBA
Justin DiScalfani, MA
Lynn Faerber, BA
Kate Fiske, PhD, BCBA-D
Denise Grosberg, MA, BCBA
Amy Hansford, MS
Elizabeth Neumann, MA, BCaBA
Renita Paranjape, MEd, BCBA
Nicole Pearson, PsyD
Sage Rose, PhD
Caroline Simard-Nicolas, MS, BCBA
Leanne Tull, MADS

Media Watch

Toli Anastassiou, MA, BCBA
Geoffrey Debery, MA, BCBA
Justin DiScalfani, MA
Mary Goward-Philips, BA
Hannah Hoch, PhD, BCBA-D
Sharon Reeve, PhD, BCBA-D
Anya K. Silver, MA, BCBA
Shannon Wilkinson, MADS, BCaBA

Pediatrician and Physician Awareness Project

Zachary Houston, MS, BCBA
Elisabeth Kinney, MS, BCBA

ASAT's Website, www.ASATonline.org

Kerry Ann Conde, MS, BCBA
Caroline Simard-Nicolas, MS, BCBA
Amanda Wadsworth, MEd

Join our [Facebook Fan Page](#)! Please invite your Facebook friends to join as well.

With your help, we are reaching out to more and more people every day united in their commitment to accountability and respect a science that should guide autism treatment. Individuals with autism deserve nothing less!

Posts on our fan page include:

- Information about our newsletter, [Science in Autism Treatment](#)
- Media Watch announcements and alerts
- Open letters from ASAT about matters of importance
- Information about upcoming ASAT conferences and events
- Other ASAT news and highlights

We now have almost 3800 fans on ASAT's Facebook! But are you one of them?
 If not, become one now;
 click on the logo to the right



Find us on Facebook



www.asatonline.org



ASAT Real Science, Real Hope
 ASSOCIATION FOR SCIENCE IN AUTISM TREATMENT

Over 10 Years of
 Education
 Advocacy
 Information

To support ASAT's mission and make a significant difference in the lives of children with autism and their families, please complete this form and remit it to:

The Association for Science in Autism Treatment
 P.O. Box 188 Crosswicks, NJ 08515-0188

Amount of my Gift: \$25 \$50 \$100 \$250 \$500 \$1000 _____
(Please make check payable to ASAT)

Name _____ Phone (____) _____

Address _____

Email _____

Yes, I give permission to publically acknowledge my donation by including the following information on ASAT printed material or website.

- Donor Name
- In Honor of / In Memory Of _____
circle one

 No, I prefer that my donation is not listed in ASAT material.

ASAT offers a Free Newsletter
[Science in Autism Treatment](#)

 I have already subscribed at www.asatonline.org/signup

 Please add me as a subscriber