



STAR Center is the premier clinic for research-based treatment of Sensory Processing Disorder (SPD) and other sensory challenges in children, adolescents, and adults. Among the features that differentiate STAR Center from other programs are:

- Intensive “burst” treatment that research has shown to be most effective in treating sensory issues
- Family-focused education to support and reinforce treatment
- State-of-the-art diagnostic assessment
- Combination of listening therapy with sensory integration therapy to enhance and accelerate therapeutic results
- Sponsorship of the non-profit Sensory Processing Disorder Foundation, the leading center of sensory research and advocacy for 30 years

Please see the following information for more details about our program:

<u>Contents</u>	<u>Page</u>
THE STAR APPROACH	2
SERVICES OVERVIEW	3
SOS FEEDING SOLUTIONS	5
ABOUT STAR CENTER'S FOUNDERS	7
GETTING STARTED: THE STAR PROCESS	9
CLIENT TESTIMONIALS	10

THE STAR CENTER APPROACH

STAR Center is a research-based therapy and training facility dedicated to treatment of Sensory Processing Disorder (SPD, previously termed "sensory integration dysfunction") and other developmental and behavioral disorders or challenges with a sensory component.

At STAR Center, we use only techniques that empirical studies and/or clinical experience have demonstrated are effective. STAR Center director, Dr. Lucy Jane Miller, is a pioneering occupational therapist who has written the definitive parent-focused book about SPD, *Sensational Kids: Help and Hope for Children with Sensory Processing Disorder* (New York: G.P. Putnam's Sons, 2006).

Sensory processing refers to the way the nervous system receives messages from the senses and turns them into responses. Whether you are biting into a hamburger, riding a bicycle, or reading a book, your successful completion of the activity requires accurate and timely processing of sensory input.

Sensory Processing Disorder (SPD, formerly known as "sensory integration dysfunction") is a condition that exists when sensory signals are not organized into appropriate responses. You might think of SPD as a neurological "traffic jam" that prevents certain parts of the brain from receiving the information needed to interpret sensory information correctly and automatically.

Our goal for children who come to STAR Center is to correct underlying physiological processes so that children with sensory issues can participate normally in the activities of daily life (what we occupational therapists call "occupations"), such as playing with friends, enjoying school, and completing daily routines at the same time they experience enhanced self-esteem and self-regulation abilities.

Our goal for adults who come to STAR Center with SPD is to help them understand how their sensory issues impact their quality of life and provide consultation or direct services so that they can live happy and fulfilled lives.

As a client at STAR, you will benefit from studies conducted by the non-profit Sensory Processing Disorder (SPD) Foundation (formerly KID Foundation) located at STAR Center. The SPD Foundation has been the leader in sensory-based research, education, and advocacy since 1980. You may volunteer to participate in research studies if you/your child meet certain criteria.

SPD Foundation runs a prestigious mentoring program to train advanced clinicians who come from across the U.S. and around the world to learn our approach. As a result, your child may be observed and co-treated by clinicians enrolled in SPDF's prestigious Advanced Intensive Mentorship program.

SERVICES OVERVIEW

STAR Center offers comprehensive sensory-based services for clients and families living with Sensory Processing Disorder (SPD), attention deficit disorders (ADD and ADHD), autistic spectrum disorders, sensory-based learning disorders, and other developmental and behavioral issues.

Because therapy is most effective when delivered in “bursts” of treatment, we usually see local clients three times per week and out-of-town clients five times per week. Small “respite” of one to three weeks are built into each person’s program so we can assess how much the intervention is being retained. Treatment programs are tailored to the individual’s needs and family priorities, making each client’s program unique. Most intervention averages 20 to 30 sessions and may entail occupational therapy only, listening therapy only, or a combination of therapies. Standardized evaluation occurs before, throughout, and after intervention to measure progress. After “post treatment” testing, some clients choose to stop therapy while others decide they may benefit from continued therapy. All clients are welcome to return for “boosters” if they experience additional developmental challenges (e.g., starting kindergarten, going on a long vacation, experiencing a traumatic event).

Occupational Therapy (OT) Programs

The first goal of OT for children with SPD is to enable them to accurately detect, regulate, and interpret sensory information. Secondly, we work on the ability to execute appropriate gross motor, fine motor, and oral-motor responses to sensation. Always, our over-arching goal is developing appropriate behavioral responses and enhancing what we call “occupations” (everyday activities) so these activities can be completed in a functional manner. We start by understanding *your* priorities for your child’s treatment. Whether your goal is improving peer interactions, regulating meltdowns, increasing self-esteem, developing writing skills, increasing variety in foods eaten, or many other options of your choice, your child’s therapist will work to attain those aspects of development most important to you. At the same time, your therapist will explain how your child perceives sensation and how those perceptions affect attention, emotions, motor skills, and learning abilities.

Therapy takes place in a sensory-rich environment (“the OT gym”) in which the therapist and child play with toys, nets, ropes, swings of many kinds, and other equipment that the therapist uses to foster more appropriate responses to sensation in an active, meaningful, and fun way. You can watch all these sessions through our one-way mirrored “view room.” We also have five other therapy rooms: a kitchen, a classroom, a gross-motor room, a “Makoto” room, and a listening-only room, which you will see when you visit us.

The emphasis in treatment sessions is on developing *automatic* and *appropriate* responses to sensation so that daily occupations can be performed successfully and social participation fostered. During each session, the occupational therapist serves as coach, educator, and role model in order for your child to learn to participate actively and develop strategies that will work at home, school, and in the community. Your child's treatment plan also will provide ideas you can use at home and at school to help him or her to become successful at tasks while remaining regulated and organized.

Because the plasticity of the brain diminishes with age, OT for adults focuses on self-awareness of the sensory system and how sensory processing differences affect learning, relationships, and social participation. For some adults we also provide direct treatment. Helping adults overcome limitations caused by their SPD is individualized to the learning style they prefer. For some adults, learning how to make adaptations can make all the difference, enabling them to reduce the negative impact of atypical sensory processing on their daily lives. For adults willing to participate in direct treatment, therapy involves using specific sensory inputs such as tactile stimulation, rotary movement, and/or other sensory experiences to reduce the client's specific symptoms. Adults who have never before experienced heights, touch, or movement with comfort can become much more successful and happy during those activities

Listening Therapy (LT) is available to improve the neurophysiological foundation for auditory processing. LT, like OT, is based on the theory of neuroplasticity, which refers to brain changes that can occur as a result of experience. Listening therapy offered at STAR Center builds upon the techniques developed by Alfred Tomatis, M.D., in Europe and refined by Ron Minson, M.D., in the United States.

The listening program at STAR Center incorporates 20 to 30 sessions each of 50 to 80 minutes in length, depending on whether listening therapy is offered separately or combined with OT. Listening-only sessions take place in a small individual therapy room with pleasant lighting and décor that produce a calm, peaceful environment. All clients receive diagnostic evaluation to determine which specific frequencies and filters to use during their program. During therapy, the specific sound frequencies and patterns needed by the individual are delivered via specially designed headphones that include vibration.

The vibration applied through the earphones stimulates the vestibular system continuously. This can effect change in speech and language functions such as auditory processing and articulation as well as in muscle tone and coordination, and in mood and outlook on life. Clients being treated with listening alone may engage in creative projects supplied by STAR, work on their own projects or activities such as knitting, reading, scrapbooking, or simply relax in a comfortable environment while listening. The process is so pleasant that clients of all ages look forward to coming to listening sessions.

Combined Occupational Therapy (OT) and Listening Therapy (LT), when appropriate, creates the most effective intervention possible within a relatively short time frame. We call this our “jump start” program as it seems to catapult the change process in the nervous system. For those whose test scores indicate they can benefit from both therapies concurrently, stimulation occurs to many sensory systems simultaneously. These systems (the vestibular, cochlear, tactile, and proprioceptive) play key foundational roles in motor planning, language, learning, and auditory and visual processing, and contribute significantly to cognitive and emotional development. Combination therapy broadens the therapeutic approach and enables STAR Center to help individuals more quickly. *Combined therapy is not always recommended.* The decision to use combined therapy depends on the client’s age, diagnoses, sensitivities, and test outcomes.

Groups, home treatment, and school consultation programs are also available at STAR Center. For more information, please visit us at www.StarCenter.us.

SOS FEEDING SOLUTIONS AT STAR CENTER

SOS Feeding Solutions at STAR Center provides comprehensive, research-based assessment and treatment of problem feeding for infants, toddlers, children, and adolescents. The program features the Sequential Oral Sensory (SOS) Approach to Feeding, a comprehensive program developed by pediatric psychologist Kay A. Toomey, Ph.D., and used worldwide to treat feeding issues.

The interplay between weight gain and a child’s experience of food can be complicated, and there is rarely an easy solution when a feeding problem arises. In the feeding center, we help sort out the pieces of this complex puzzle. In order to identify all possible components of the problem, we use a multidisciplinary or transdisciplinary team approach and assess the “whole child

Children and families in SOS Feeding Solutions benefit from the same unique assessment and treatment philosophy that makes all of STAR Center’s programs so effective:

- Evidence-based: grounded in scientific research
- Family-centered: incorporating the whole family
- Positively reinforced: no more punitive strategies!
- Multidisciplinary: including a pediatrician, registered dietician, speech-language therapist, occupational therapist, pediatric psychologist, and other specialists as needed

Assessment services at SOS Feeding Solutions include:

- Transdisciplinary feeding assessment – 2-hour comprehensive evaluation by an integrated team of 5 specialists; includes 2-3 hours of parent feedback/education
- Condensed evaluation – 2-hour assessment with 1-2 members of the evaluation team; includes a 30-minute discussion with parent

Therapy services at SOS Feeding Solutions include:

- Group therapy – Food School for groups of 4-6 children and their parents. Children in group therapy have a chance to learn from their peers as well as from the therapists. Parents are provided with the opportunity to observe their child’s feeding skills through a one-way mirror in order to learn the reasons why their child won’t eat and to discover strategies for improving feeding at home.
- Individual therapy – Food School for a single child and his/her parent(s). Children in individual therapy have a therapy meal with their parent(s) and the feeding specialist. This allows the treatment to be tailored specifically to the family’s needs and/or schedules.

A feeding team is assembled for each client based upon the individual’s challenges and the family’s resources. The team for a transdisciplinary assessment is typically comprised of the following health-care professionals:

- Developmental pediatrician
- Speech pathologist
- Occupational therapist
- Pediatric psychologist
- Registered dietitian

The child, parents, and primary care physician are also critical members of this team.

Criteria for referral to SOS Feeding Solutions include:

- Poor weight or height gain
- Food refusal
- Choking/coughing during meals
- Vomiting/reflux
- Restricted variety of food
- Low volumes of food
- “Picky eating”

FOUNDERS

Lucy Jane Miller, Ph.D., OTR, directs the STAR Center. She is also founder and executive director of the Sensory Processing Disorder (SPD) Foundation (formerly KID Foundation) and author of groundbreaking *Sensational Kids: Hope and Help for Children with Sensory Processing Disorder (SPD)*. Dr. Miller was trained and mentored by sensory integration pioneer Dr. A. Jean Ayres in 1973. Since then she has been a leader in research, education, and advocacy of SPD.

Dr. Miller is in wide demand as a speaker to scientists, professionals, and parents, teaching over a dozen workshops nationally and internationally on SPD every year. The SPD Foundation also sponsors an annual SPD Conference in Colorado and an annual out-of-state SPD Conference. Ongoing research by Dr. Miller and colleagues has brought SPD widespread recognition, and her unique strength in working with families has improved countless lives.

Dr. Miller has spearheaded the SPD Scientific Work Group, a group of 20 well-known researchers from Harvard, Yale, Duke, University of Wisconsin Madison, and 10 other institutions who are studying various aspects of SPD including etiology, neuropathology, treatment effectiveness, developmental course, and others. A combination of human, primate, and rat studies led to mobilization of the research community so that SPD now appears in two diagnostic manuals: *Diagnostic Manual for Infancy and Early Childhood* by the Interdisciplinary Council on Developmental and Learning Disabilities and *The Diagnostic Classification: Zero to Three*. In January 2007, Dr. Miller sent an application summarizing work by the SPD Scientific Work Group to the *Diagnostic and Statistical Manual (DSM-V)*. Acceptance of SPD in the DSM-V will have widespread implications for research funding opportunities and insurance coverage.

Dr. Miller is renowned as the developer of eight nationally standardized tests for use worldwide to assess SPD and other developmental disorders and delays:

- The Miller Assessment for Preschoolers and the Japanese MAP
- The Leiter International Performance Scale--Revised
- The First STEP and its Spanish counterpart, *Primer Paso*
- The Toddler and Infant Motor Evaluation
- The Short Sensory Profile, and
- The Miller Function and Participation Scale (M-FUN).

Currently, Dr. Miller is working on the Goal-Oriented Assessment of Life-Skills (ages 5-19) with Drs. Tom Oakland and Dave Herzberg and the Sensory Processing Scale with Dr. Sarah Schoen.

Dr. Miller's widespread recognition as an expert in differential diagnosis and her enormous credibility within the research professional community are among the

reasons that advanced clinicians travel from across the United States and around the world to be mentored by Dr. Miller and her team at the SPD Foundation.

The prominence of Dr. Miller's research, her compassion and connection with sensational families, and her ability to explain the science of SPD clearly and empathetically make her a natural media interview subject. She has been featured on NBC's Today Show and ABC's 20/20, in *The New York Times*, in TIME Magazine and in numerous other popular and professional publications. She is the author of more than sixty articles and/or chapters in scientific and professional journals, magazines, and textbooks and has received more than 30 funded awards and grants to further research on SPD and other childhood disabilities. Dr. Miller is a recipient of the American Occupational Therapy Association's highest honor, the Award of Merit, and of the State of Colorado's Martin Luther King Jr. Humanitarian award.

Ron B. Minson, M.D., was co-founder of the STAR Center and now serves as a psychiatric consultant to the team. Dr. Minson received his medical degree from UCLA School of Medicine and is board-certified in psychiatry and neurology. He was chief of psychiatry for Presbyterian Medical Center and previously directed Behavioral Sciences at Mercy Hospital in Denver. In 1990, Dr. Minson studied listening therapy with Dr. Alfred Tomatis in France and returned to the States to start a Tomatis-based practice.

GETTING STARTED: THE STAR PROCESS

The **STAR Process** includes the **Developmental History Form, Intake Evaluation, Client Assessment, Feedback Session, and Individualized Treatment Plan.**

The **Developmental History Form** is filled out and sent to STAR Center prior to scheduling the Intake Evaluation. The History Form is available on the web site www.StarCenter.us. If you prefer to have the form mailed or faxed, contact us at 303-221- (STAR) 7827.

The **Intake Evaluation** is a review of the client's developmental history and presenting problems. During Intake, we also review tests that may have been done elsewhere. The Intake Evaluation lasts approximately 90 minutes and is performed in person at STAR Center. (For clients coming from out of state, this step may be completed by telephone.) Following Intake, a determination is made regarding the assessment measures appropriate for the child or adult who is applying to our program. Intakes are conducted by Program Coordinator Andrea Stoker after the Developmental History Form is received.

The **Assessment** is an extensive (2 to 5 hour) evaluation consisting of standardized testing, observations in the clinical setting, parent-report measures, and, if indicated, an auditory battery. (Children must be at least 5 years old and have symptoms of auditory processing difficulties to receive auditory testing.) Assessment provides information for designing treatment. A written report explaining the results is provided during the **Feedback Session**, which follows Assessment and provides a complete review of its findings. Parents are asked to attend without their children so that results and a potential treatment plan can be discussed in detail.

Treatment needs vary for clients based on their age, stage of development, diagnosis, and parents' priorities for change. Typically we start with our "jump start" program of 20 to 30 sessions in intense bursts (3 times a week for local clients; 5 times a week for out-of-town clients). The jump start program consists of occupational therapy, listening therapy, or a combination of the two therapies. All programs involve parent education and post-testing. Some clients return for later "boosters" when new developmental challenges take place.

Price varies depending on assessment and treatment recommendations. Estimates are provided via telephone or e-mail. STAR Center does not accept insurance payments, but we do provide paperwork necessary for you to submit to your insurance company and otherwise assist you. All reimbursement goes directly to families from their insurance companies.

TESTIMONIALS

The following letters are samples of the client results achieved at STAR Center.

I am pleased write to you about our son, Spencer, who has benefited greatly from his treatment at the Star Center.

Spencer had recently changed schools and was unable to adjust to the classroom format. He would become distracted, would be unable to remain focused and seated and hence, would wander about the classroom or fidget and play footsies with other classmates, in a manner that was disruptive. He was unable to sit in the circle with the class because it was overwhelming to him; he was given his own "satellite desk." He also was provided "fidgets" to occupy his hands and wore headphones to reduce distractions. His posture was poor and he had trouble writing legibly. He was very sensitive to noise and said he had trouble "connecting my brain to my hands". His problems made it hard for Spencer to participate in class, although he is very bright and thoughtful. It also made it difficult for him to develop friendships at school. At home he would have difficulty following through with things and tended to be uncomfortable with physical displays of affection.

Spencer enjoyed his treatments at STAR Center and liked his therapist Lee; he looked forward to his visits, especially "the part where I got to swing and crash." He also liked listening to the recordings of his mother's voice. In a short time we have noticed dramatic improvements in several areas. He no longer needs a "satellite desk" at school and can participate in the circle activities or sit at a desk with other students quietly. He is much less distracted by things around him; his sensitivity to noise has improved. His writing is so much more legible that it looks like the handwriting of another person. His academic performance improved noticeably in almost all areas, according to his teacher, and he finished the school year on a very good note. As Spencer puts it: "It is a lot funner not having headphones and a satellite desk." He is very pleased with his progress and proud of himself. At home, we have noticed that his posture is better, and he is more interested in cuddling and being held. I have also noticed that Spencer shows greater interest and improvement in physical activities such as bicycling and basketball.

We are very happy with the progress Spencer has shown as well as the evaluation and recommendations from Dr. Miller regarding natural activities, which will help Spencer to continue his progress. I would recommend the program at the STAR Center without reservation.

Sincerely,

Roger Cambor, M.D.

5420 S. Quebec Street 103, Greenwood Village, CO 80111
Tel: 303.221.7827 Fax: 303.322.5550 www.starcenter.us

I was desperate. My child with SPD (Sensory Processing Disorder) had poor interactions with his peers, he was uncomfortable at home, and I could not see a happy outcome for him. He was so difficult at school that the Principal alerted me that I might have to take him home when he was too disruptive.

The STAR intervention (OT and listening therapy) was like a miracle. He found an inner peace that had been lacking before. The world was no longer a hostile environment. He used to spend hours under a heavy quilt when he was stressed; now he can stay calm and talk about what bothers him. He talks quite clearly about how the therapy affected him, and he now uses the techniques he learned there to maintain his own comfort levels.

I am flabbergasted that it took so many years to find this for him. I do not understand why doctors and educators are not jumping at a chance to use this to help other children who are having social or emotional difficulties. In an era when parents are accused of pushing to medicate in lieu of therapy, this should be one of the first tools used to reach out to these children.

S. Bauman