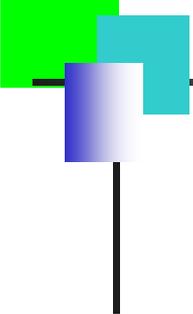


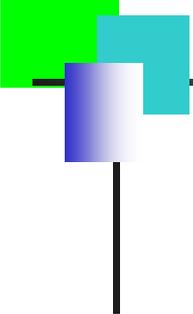
# **Help! What Can I Do to Help This Kid and What Do I Do First?**

**Mershona Parshall LISW-S ATR-BC private practice  
Andrea Hauserman MBA adoptive parent**



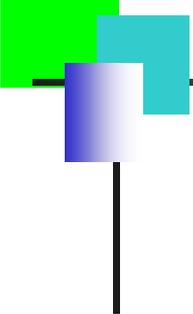
# WHAT YOU WILL LEARN TODAY

1. Understanding Developmental History
2. Symptoms and Diagnoses
3. Interventions
4. How to choose and prioritize treatment.



# RIGHT TO THE POINT

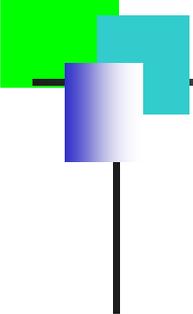
- ❑ Medical
- ❑ Neuro – Developmental
- ❑ Explicit Training



# DEVELOPMENTAL INSULTS

A developmental insult is anything that may interfere with a child reaching his or her full potential.

The most detrimental insults occur in the first three years of an infant/child's life.



# INTENTIONAL AND UNINTENTIONAL DEVELOPMENTAL INSULTS

## ***Prenatal:***

Fetal exposure to neurotoxins.

Maternal stress such as poverty, domestic violence, unstable housing

Poor nutrition

Environmental toxic exposures: mercury, lead, pollution, radioactivity

## ***Postnatal:***

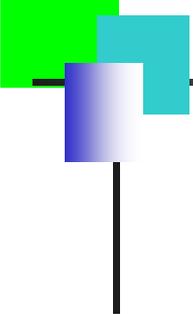
Neglect: Sensory and relational deprivation

Physical, sexual, and emotional abuse

Environmental toxic exposures

Chaotic and violent environments

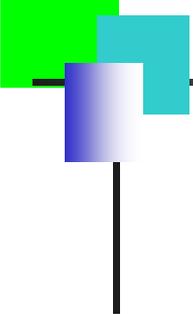
Medical problems



# ADDITIONAL FACTORS

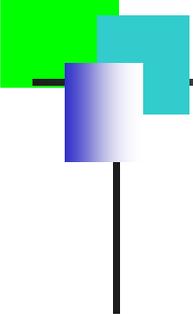
## GENETICS

- ❑ FAMILY HX:
  - ❑ MENTAL ILLNESS
  - ❑ LEARNING DISABILITIES
  - ❑ MEDICAL CONDITIONS
  - ❑ TEMPERAMENT
  - ❑ SOCIAL FUNCTIONING
  - ❑ INTELLIGENCE



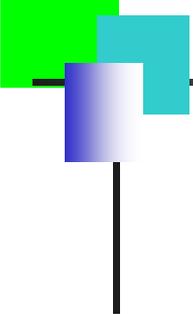
# DEVELOPMENTAL INSULTS AND CHRONIC STRESS STATES

- The immature nervous system of an infant is highly vulnerable to stress states.
- An infant relies on the mother for external regulation before it can regulate itself.
- Social stressors (relational trauma) are the most detrimental to the developing infant/child.
- Chronic stress causes permanent changes to the infant's brain.
- The infant's brain is experience-dependent and chronic stress states become TRAITS.

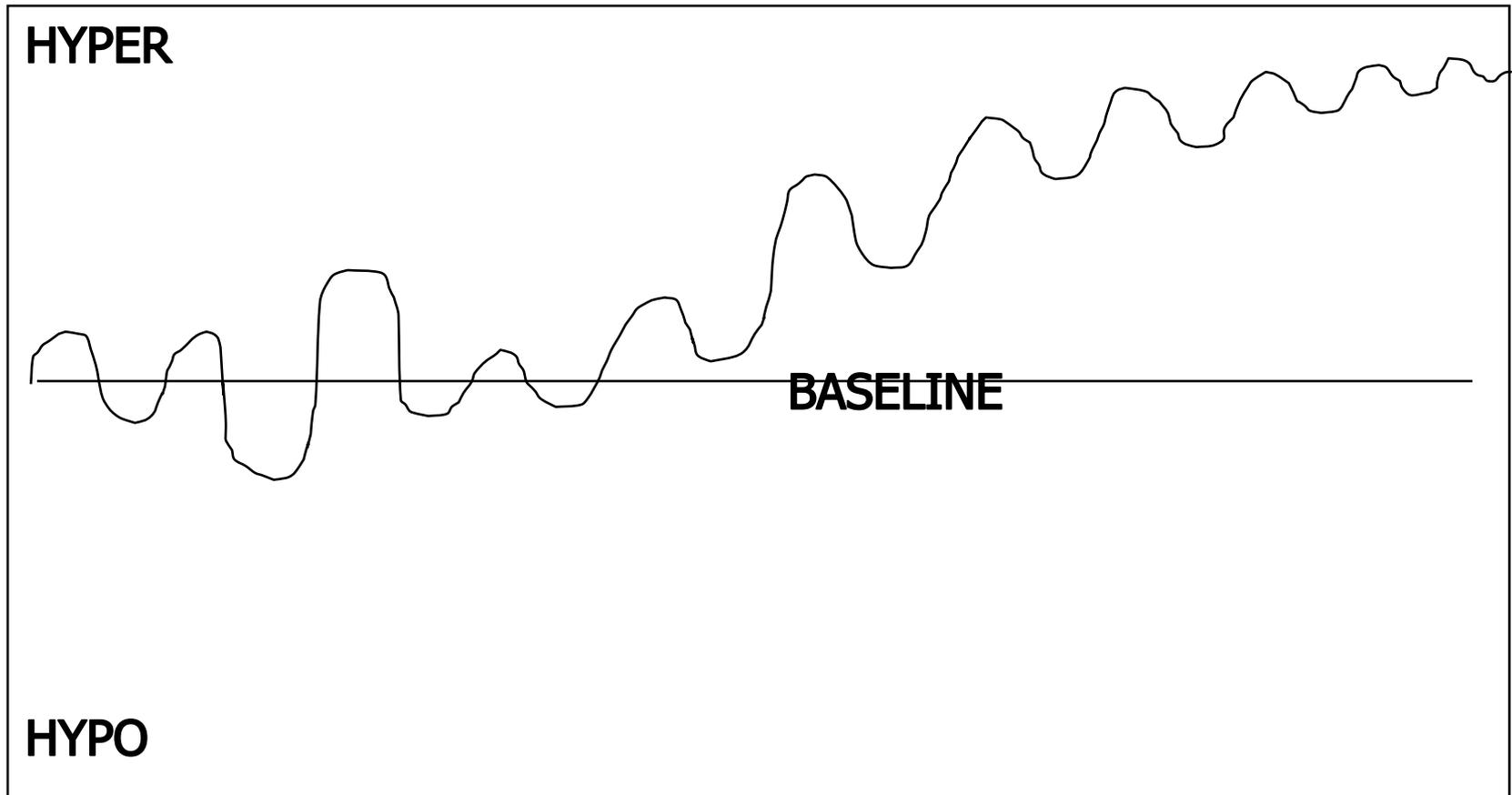


# Stress States

- Two primary responses to overwhelming stress
  - Hyperarousal
    - Fear-terror observed as hypervigilance, anxiety, hyperactivity, impulsivity, sleep problems.
    - Sympathetic overarousal reflects excessive levels of the major stress hormone cortisol. Excessive stress hormones are neurotoxic and cause cell death in the “affective centers” in the limbic system.
    - Fight/flight response, energy expending
  - Dissociation
    - Freezing response, energy conserving
    - Parasympathetic regulatory strategy to cope with helpless, hopeless situation.
    - Ultimate survival strategy to become invisible.
    - Involves numbing, avoidance, compliance, passivity, restricted affect.
- Child unable to adapt, cope, regulate affect, feel secure, attach.



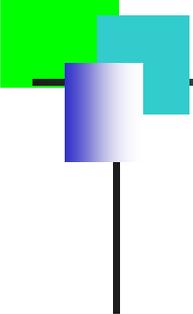
# STRESS AND AROUSAL STATES





# Common symptoms of PTSD and Complex PTSD

- Alterations in Regulation of Affect and Impulses
  - Affect Regulation, anger modulation, self-destructive, suicidal , excessive risk taking.
- Alterations in Attention and Consciousness
  - Amnesia, Transient dissociative episodes and depersonalization
- Somatization
  - Digestive system, chronic pain, conversion symptoms
- Alternations in Self-Perception
  - Ineffectiveness, guilt, shame, nobody can understand, minimizing
- Alterations in Perception of the Perpetrator
  - Distorted beliefs, idealization of the perpetrator
- Alterations in Relations with Others
  - Inability to trust, revictimization, victimizing others
- Alternations in Systems of Meaning
  - Despair and hopelessness, loss of previously sustaining beliefs



# Developmental Trauma

Single catastrophic traumatic event

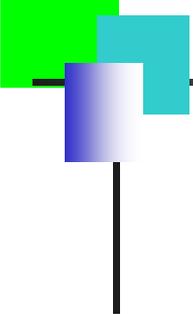
Children here will have the most internal resources to recover from trauma.

Securely attached

Unattached

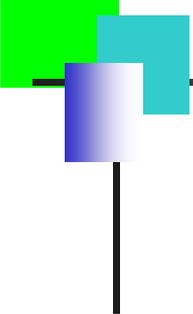
These children are the most severely traumatized children with the least resources to recover from trauma.

Chronic, ongoing abuse



# RIGHT TO THE POINT

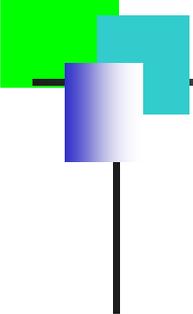
- Medical



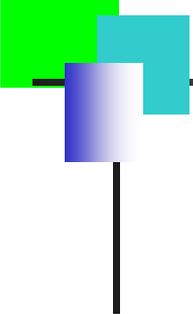
# SYMPTOMS AND DIAGNOSES

- ❑ Diagnoses describe a cluster of symptoms.
- ❑ Symptoms are complex and overlap many diagnoses.
- ❑ Determining etiology may be difficult when history is not known.

REFER TO HANDOUT



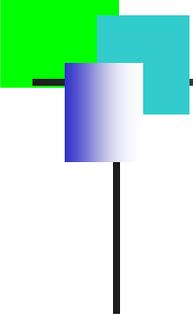
# Matrix



# SYMPTOMS AND DIAGNOSES

## PHYSIOLOGICAL

- ❑ Leaky gut
- ❑ Compromised immune system
- ❑ Allergies
- ❑ Yeast Dysbiosis
- ❑ Sleep disturbance
- ❑ Unable to self-regulate



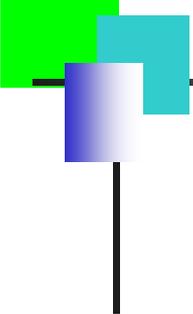
# SYMPTOMS AND DIAGNOSES

## EMOTIONAL

- ❑ Unable to self-regulate affect
- ❑ Unable to cope with normal stress
- ❑ Labile – Unstable moods
- ❑ Unable to trust and form relationships

## TYPICAL DIAGNOSES:

- ❑ BiPolar Disorder
- ❑ PTSD – Post Traumatic Stress Disorder
- ❑ RAD – Reactive Attachment Disorder
- ❑ Depression
- ❑ Anxiety



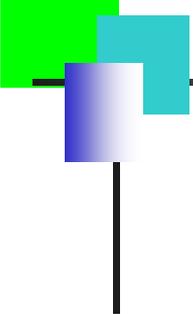
# SYMPTOMS AND DIAGNOSES

## COGNITIVE

- ❑ Mental retardation
- ❑ Learning Disabilities
- ❑ Lower IQ
- ❑ Unable to concentrate and focus

## TYPICAL DIAGNOSES:

- ❑ ADHD
- ❑ PTSD
- ❑ EXPRESSIVE AND RECEPTIVE LANGUAGE DISORDERS



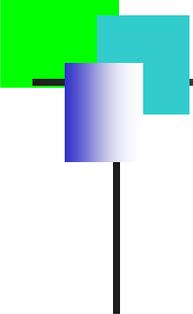
# SYMPTOMS AND DIAGNOSES

## BEHAVIORAL

- ❑ Defiance
- ❑ Acting out
- ❑ Aggression

## TYPICAL DIAGNOSES:

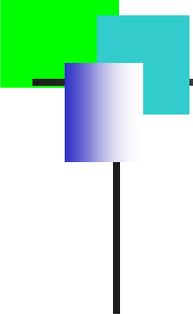
- ❑ ODD
- ❑ CD
- ❑ RAD
- ❑ ADHD
- ❑ BIPOLAR



# EVALUATING THE CHILD

**Medical:** Use an appropriate healthcare provider to evaluate the child for health and developmental milestones

- Follow American Academy of Pediatrics guidelines for incoming foreign children.
- It is important for healthcare providers to avoid giving "standard" parenting advice to adoptive families as these children may have experienced loss, deprivation, separation, and instability in their countries of origin. The adoptee will require careful developmental, behavioral, and attachment evaluations, and progress-monitoring over time will help ensure positive developmental outcomes in the future. Dr. Stanley Grogg D.O.  
<http://www.jaoa.org/cgi/content/full/107/11/481>



# IA MEDICAL EVAL CHECKLIST

## American Academy of Pediatrics

Anti-HCV – Hepatitis C

Audiological Assessment ✓

Blood Lead Test

Complete Blood Count ✓

Ova and Parasite Exam ✓

Syphilis Detection Test

Thyroid Function Tests ✓

Eye and Vision Examination ✓

Hepatitis B Surface Antibody

Human Immunodeficiency Virus (HIV) Antibody Test

✓ Use for Domestic Adoption

Urinalysis ✓

Stool Culture ✓

Liver Panel ✓

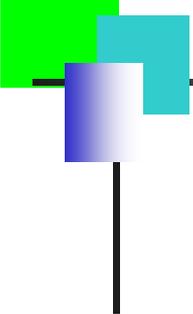
Tuberculin Skin Test

Renal Function Studies

Iodine & Vit D ✓

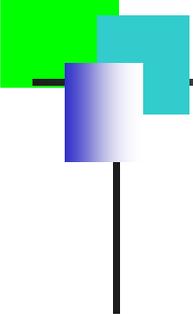
Chemistry Panel ✓

Vaccine Titers ✓



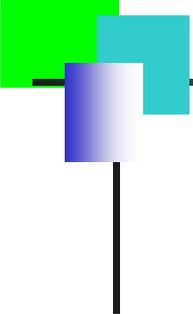
## **EVALUATIONS, cont.**

- ❑ Parents should be familiar with basic attachment parenting techniques and watchful for symptoms of PTSD and RAD which can masquerade as ADHD, OCD, rages, irritability, depression
  - ❑ Occupational Therapist eval for balance, coordination, visual and auditory systems
  - ❑ Speech Pathologist for language eval and screen for auditory processing issues
  - ❑ If there are too many developmental delays, don't wait, go get a full Neuropsychological evaluation
- Early Intervention is Important!**



## ADDITIONAL ASSESSMENTS

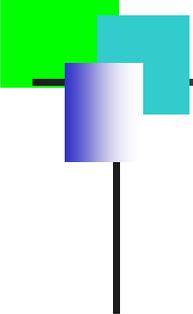
- ❑ CSA Complete Stool Analysis for bacteria, yeast, parasites
- ❑ Red Blood Cell Elements for evidence of heavy metals
- ❑ Trace minerals such as Boron, Vanadium, Chromium, also CA, NA,
- ❑ Iodine, Vit D
- ❑ Developmental Movement Evaluation



# Medical Health – GastroIntestinal

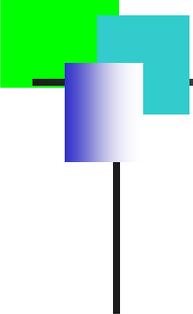
**Many children have compromised GI tracts as result of chronic stress, malnutrition or unbalanced diet, damaged organs, metabolic and hormonal Systems overload, yeast or bacterial overgrowths, genetic conditions such as Celiac Disease and Diverticulitis, overuse of antibiotics, food allergies and sensitivities, gluten sensitivity and over use of processed foods that contain Preservatives**

- ❑ Yeast and bacteria very common problem
- ❑ Create slime barrier that actually grows into the intestinal wall and damages it.
- ❑ Creates Leaky Gut syndrome
- ❑ Yeast and bacteria grow on stagnant substrates and produce foul smelling gas, diarrhea and or constipation, jaundiced looking whites of the eye
- ❑ Yeast can cause constipation, bacteria can cause diarrhea. The behavioral symptoms are hyperactivity, attention deficit, irritability, heightened sensory reactions esp to noise, auditory processing difficulty – looks like APD but prob just attentional, difficulty falling asleep, staying asleep, all the way to screaming and very poor self regulation.



# Biomedical supplements

- ❑ **Zinc**
- ❑ **Digestive Enzymes**
- ❑ **5HTP**
- ❑ **Selenium**
- ❑ **Liver Support**
- ❑ **Essential Fatty Acids**
- ❑ **Calcium**
- ❑ **Probiotics**
- ❑ **Magnesium**
- ❑ **Choline**
- ❑ **multi vitamin**
- ❑ **Water Soluble vitamins**



# Parent Observations

- ❑ Emotional Regulation (for example, anger, aggressiveness, anxiety, tantrums, mood swings, etc)
- ❑ Emotional Attachment
- ❑ Hyperactivity
- ❑ Sleep Issues
- ❑ Auditory Processing
- ❑ Sensory Integration
- ❑ Visual Issues
- ❑ Difficulty in learning to read
- ❑ Difficulty in math
- ❑ Social Skills
- ❑ Low Energy
- ❑ Attention/Distractibility
- ❑ Motor development (balance, ability to participate in sports, etc)
- ❑ Eating Difficulties
- ❑ Low self esteem
- ❑ Sexual Acting Out

## 50 Conditions that Mimic ADHD

ADHD is diagnosed by health professionals who form *their* opinion by observing a child's behavior. There are no brain scans, blood tests, or anything else definite that is used during diagnosis. The problem with this is there are many other problems that have the same symptoms as ADHD. For example, any problem dealing with the fuels of the body: water, food, blood and air can cause behavior problems. Water, food, blood and air to the body are just like gas and oil to a car. If you put bad gas or have old oil in your car, it will act up just like a child acts up when eating foods they are allergic to, drinking or breathing contaminated water or air or having blood disorders.

There are many medical, biological, emotional and mental conditions that mimic ADHD. Here are some possibilities.

### ! Conditions most over looked.

1. ! **Hypoglycemia** (*Low Blood sugar*) can stem from thyroid disorders, liver, pancreatic problems, adrenal gland abnormalities
2. ! **Allergies:** 15 to 20 percent of the world has some type of allergy. A person can be allergic to nearly anything. Food is one of the primary causes of allergic reactions.
3. ! **Learning disabilities:** If the primary place of behavior is at school, learning disabilities(self esteem) may be the cause.
4. ! **Hyper or hypothyroidism:** An imbalance in metabolism that occurs from an over or underproduction of thyroid hormones. This imbalance may cause a variety of behaviors and affects all body functions.
5. ! **Hearing and vision problems including CAPD.** 26. **CAPD** (*Central Auditory processing Disorder*) history of ear infections and/or PE tubes. Symptoms include distractibility, inability to follow a set of verbal instructions, "space out", etc.
6. ! **Mild to high lead levels,** research shows that children with even mildly elevated lead levels suffer from reduced IQs, attention deficits, and poor school performance. Lead is the leading culprit in toxin-caused hyperactivity..
13. ! **Sleep disorders:** Sleep Apnea causes cognitive decline equal to a person with a 0.8 % alcohol level.
49. ! **Candida Albicans infestation** (*Yeast Infection*) : Candida infestations cause hyperactivity in children. Most children who do suffer from Candida infestations have some underlying immune disorder, or a disorder affecting carbohydrate metabolism and thus altering blood sugar levels. Immune disorders can cause same symptoms as ADHD.
7. **Spinal Problems:** Some spinal problems can cause ADHD like symptoms – believed to be due to nerve pressure



8. **Toxin exposures:** Children are more vulnerable to toxins than adults. Pesticides from produce, gasoline fumes, herbicides, food additives like xanthan gum and guar gum, disinfectants, furniture polishes and air fresheners that can affect some children's behaviors. Beds, carpets and paint are sources. Toxins can cause hyperactivity, attention deficits, irritability, and learning problems.

9. **Carbon Monoxide poisoning :** Sources include gas heaters, gas appliances: fireplaces, dryers, and water heaters.

10. **Seizure disorders:** The most overlooked are absence Seizures. The attack lasts for a few seconds and then is over rapidly. May be confused with daydreaming. Some seizure disorders require a 24 hour EEG to properly diagnose.

11. **Metabolic disorders:** They reduce the brain's supply of glucose, the bodies fuel and can cause ADHD like symptoms.

12. **Genetic condition:** Ex Turner's syndrome, sickle-cell anemia, Fragile X, Klinefelters, Genetic Disorder XYY:

14. **Post-traumatic Stress Disorder:** Emotional triggers cause association with past traumatic events

15. **High mercury levels:** can relate to dental fillings. Children who have mercury amalgam fillings in their mouth and grind their teeth are at risk of high mercury levels. There are also other causes of high mercury levels.

16. **High manganese levels**

17. **Iron deficiency:** Iron is an essential component of hemoglobin, the oxygen carrying pigment in the blood. Iron is normally obtained through the food in the diet and by the recycling of iron from old red blood cells. The causes of iron deficiency are diet, poor absorption, loss of blood, lead poisoning.

18. **B vitamin deficiencies:** Many experts believe that one of the main causes for inattention, hyperactivity, impulsivity, temper tantrums, sleep disorders, forgetfulness, and aggression are caused by faulty neurotransmissions, a problem with the neurotransmitters in the brain. Vitamin B-6 is a necessary vitamin used in the making of neurotransmitters that affect behavior.

19. **Excessive amounts of Vitamins:** Excessive amounts of vitamins can be toxic to the body and may cause the same ADHD like symptoms. Have Dr. check for vitamin deficiencies before taking extra vitamins.

20. **Tourette's syndrome:** Usually involves multiple tics (small, repetitive muscle movements), usually facial tics with grimacing and blinking. This is usually accompanied by vocalizations. The tics are worse during emotional stress and are absent during sleep. This disorder can be mistaken for not being able to sit still or impulsive behavior.



21. **Sensory Integration Dysfunction:** Sensory Integration Dysfunction is the inefficient neurological processing of information received through the senses, causing problems with learning, development, and behavior. These children are over-sensitive or under-sensitive dealing in touch, taste, smell, sound, or sight. For example, some of these children crave fast and spinning movement, such as swinging, rocking, twirling, and riding the merry-go-round- without getting dizzy. These children may move constantly, fidget, enjoy getting into upside down positions and be a daredevil. These children may become overexcited when there is too much to look at words, toys, or other children. They may cover their eyes, have poor eye contact, be inattentive when drawing or doing desk work, or overreact to bright light. These children often act out in an attempt to cope with their inability to process sensory information such as acting out in crowded or loud places.

22. **Early-onset diabetes:** Aggression, depression, and anxiety. If family history of diabetes checking for this is a must.

23. **Heart disease and Cardiac conditions:** Reduce the supply of blood, oxygen and nutrients to the brain.

25. **Early-Onset Bi-Polar disorder:** 85% of children with child-like Bi-polar also meet the criteria for ADHD. The symptoms are extremely close. Early-Onset Bi-polar should be ruled out before ADHD is considered mainly because they are treated with different medications. ADHD is treated with stimulants which will make a Bipolar child worse, possibly psychotic.

27. **Worms / Parasites:** Pinworms lay their eggs in the anal area, causing tickling and itching, which are most bothersome at night. The lack of sleep from this infestation can cause crankiness or bad behavior during the day. When asleep, nightmares may be present. Roundworms, hookworms, and tapeworms are other examples that can make a child display ADHD like symptoms. Worms cause hyperactive behavior, learning problems, depression, or attention deficits.

28. **Viral or bacterial infections:**

29. **Malnutrition or improper diet:** An unbalanced diet can affect a child's behavior.

30. **Head injuries:** Symptoms include Irritability, emotionality, memory problems, depression, and sleep disturbances.

31. **Caffeine:** At doses as low as 250 milligrams a day, a level many American children exceed, caffeine can cause rambling speech, attention and concentration problems, agitation, heart palpitations, insomnia, and hyperactive behavior.

32. **Some disorders such as anemias** reduce oxygen to the brain causing disturbance in the brains chemistry



33. **Fetal alcohol syndrome (FAS)** or Fetal alcohol effects (FAE): FAS is a name that doctors use to describe the damage done to children's brains and bodies when their mother drink heavily during pregnancy. It is the leading form of mental retardation today. Prenatal alcohol impairment, however, also comes in a milder form called fetal alcohol effects (FAE). Children with FAE often don't look disabled, and they tend to score in the low-normal or even normal range of intelligence. But these kids aren't normal. Their mal-developed brains cause them to exhibit a wide range of behavior problems, including hyperactivity, attention problems, learning disorders, and ethical problems such as stealing, lying, and cheating.

34. **Intentionally or unintentionally sniffing materials** such as modeling glue or other house hold products.

35. **Some drugs; (both prescription and illegal)** If your child routinely takes prescription or over-the-counter meds for asthma, hay fever, allergies, headaches, or any other condition, consider that they are causing or contributing to problems.

36. **beta-hemolytic streptococcus:(better known as "strep.")** Left untreated, strep can cause rheumatic fever and a movement disorder called Sydenham's chorea. Recurrent infections can lead to a group of symptoms collectively known as PANDAS (Pediatric autoimmune neuropsychiatric disorders) Some symptoms of PANDAS include obsessive-compulsive behavior, Tourette's syndrome, hyperactivity, cognitive problems, and fidgeting.

37. **Lack of exercise:** Quite a few hyperactive children actually do not get enough sustained, strenuous exercise to stay healthy mentally and physically. One reason is that exercise increases serotonin levels in the brain exactly what Prozac does.

38. **Gifted Children:** Behaviors are poor attention, boredom, daydreaming, low tolerance for persistence on tasks that seem irrelevant, their judgment often lags behind their development of intellect, their intensity may lead to power struggles with authorities, and they may have a high activity level. They may need less sleep compared to other children.

39. **Emotional problems:** Bullying may produce behavioral changes and poor concentration.

40. **Poor Parenting:** A number of children labeled hyperactive are merely under-disciplined.

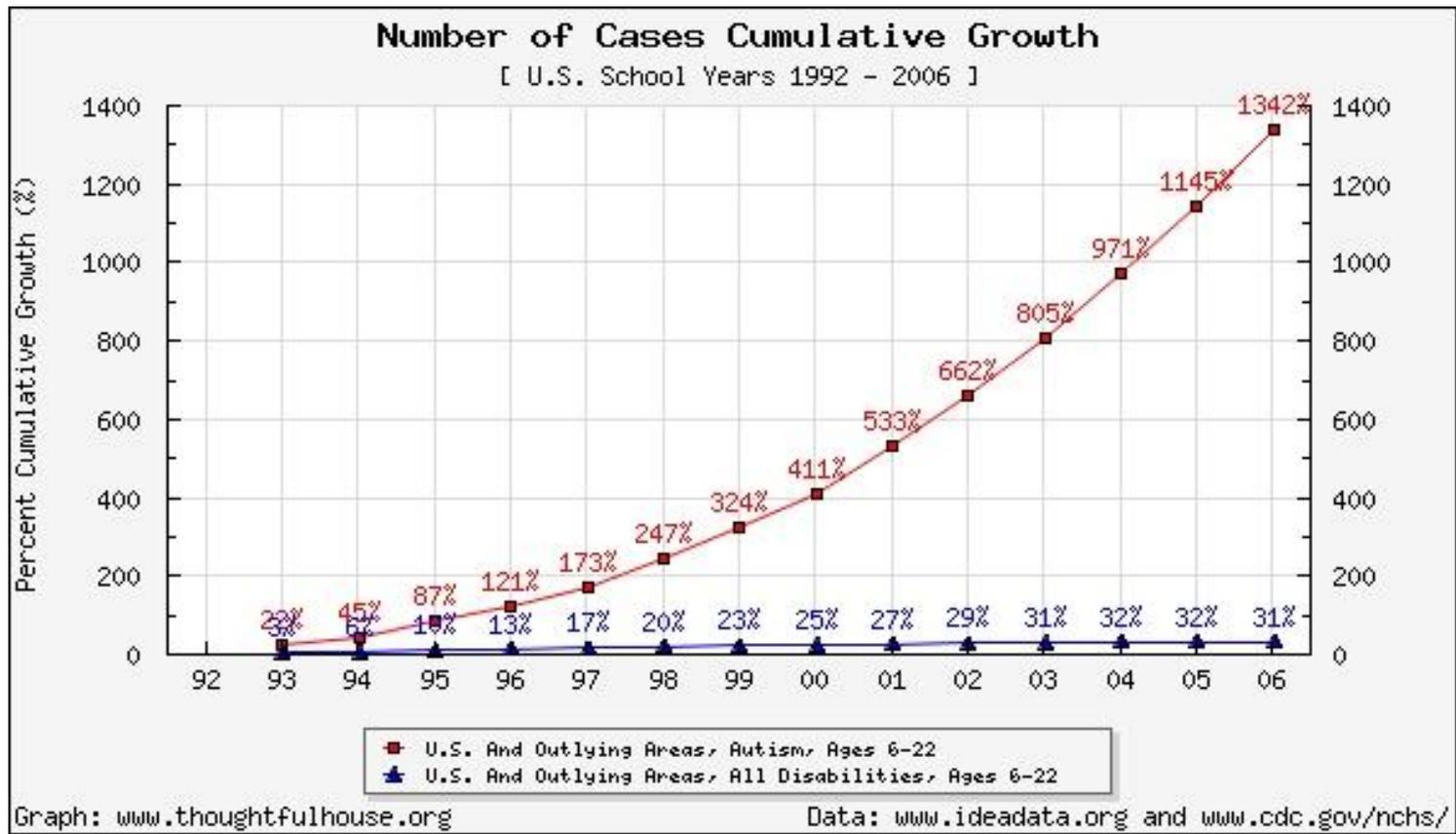
43. **Early stage brain tumors** 44. **Brain cysts:**

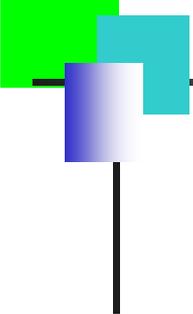
45. **Temporal lobe seizures:** The Temporal lobe is a part of the brain. Any brain malfunction can cause inappropriate behavior. That's why conducting brain scans is a must when trying to figure out behavior problems.

48. **Porphyria:** A hereditary enzyme-deficiency disease.

50. **Intestinal parasites:** Parasites rob the body of needed nutrients which in-turn affects behavior.

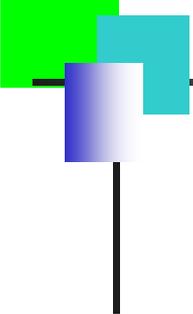
# Rise of Autism vs. other Ped Dx





# RIGHT TO THE POINT

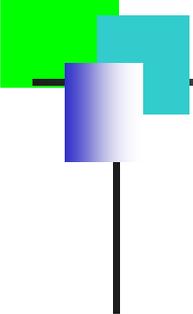
- Medical
- Neuro – Developmental



# INTERVENTIONS

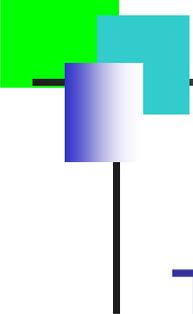
## ATTACHMENT THERAPY

- ❑ Therapy that specifically addresses developmental insults that led to emotional, behavioral, cognitive and psychological impairments through the parent/child relationship.
- ❑ Based on attachment theory and child development.
- ❑ Has had many incarnations since first coined “Rage Reduction Therapy” by Foster Cline.
- ❑ Developmental neurobiology has influenced field.
- ❑ Involvement of primary caregivers critical.
- ❑ Many professionals have branded their work out of the original model and add their own biases.



# MODELS of ATTACHMENT THERAPY

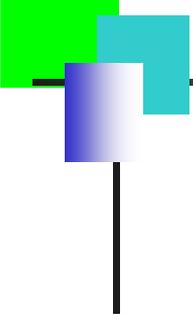
- ❑ Two week intensive model used by various treatment centers.
- ❑ Holding Time
- ❑ Extended treatment model using nurturing holding, neurofeedback, expressive arts, EMDR, somatic psychotherapy.(Parshall)
- ❑ OTHER MODELS THAT RELY ON ATTACHMENT THEORY
- ❑ Floor Time
- ❑ Theraplay
- ❑ Neurosequential Model of Therapeutics (NMT)



# INTERVENTIONS

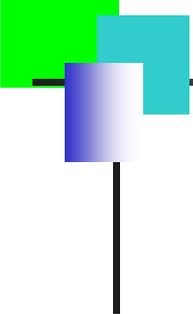
## THERAPEUTIC PARENTING

- ❑ Children with developmental challenges need specialized parenting.
- ❑ First need: Safety in primary relationships and in the environment.
  - ❑ Structure without rigidity
  - ❑ Predictability with spontaneity
  - ❑ Calm with parent directed excitation
  - ❑ Establish trust, respect and love will follow
  - ❑ Selective regression in order to progress
- ❑ Love and Logic Parenting Teaches
  - ❑ Responsibility
  - ❑ Natural Consequences
  - ❑ Choices
  - ❑ How to stay out of power struggles.



# ATTACHMENT ACTIVITIES for PARENTS

- ❑ Dyadic Exercise with Eye Contact
- ❑ Tossing or rolling ball back & forth – Eye Contact
- ❑ Feeding Treats while talking and playing
- ❑ Mealtimes together
- ❑ Cooking or crafting together
- ❑ Creating Shared Novel Experiences such as....
- ❑ Go on camping or survival trips together
- ❑ Stargazing, cloud watching from the hammock



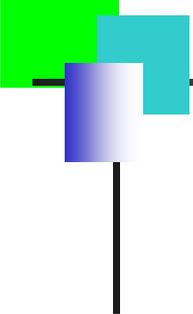
# INTERVENTIONS

## BIOFEEDBACK

### ❑ Peripheral Biofeedback

- ❑ **Electromyography (EMG):** This test measures the health of muscles and the nerves managing them. By using this test, individuals can recognize symptoms before and during muscle tension, injury, and pain.
- ❑ **Thermal Biofeedback:** This test measures skin temperature and can indicate problems with blood flow. Body temperature often drops during stress because arteries constrict causing blood flow to be limited to necessary organs and extremities.
- ❑ **GSR:** (galvanic skin response) This test measures electrical conductivity of the skin. This process can help individuals work with issues related to anxiety.
- ❑ **HRV** (Heart rate variability) Measures heart rate and entrains heart rhythm to be more coherent as a stress reduction and emotional regulation tool.

### ❑ EEG Biofeedback or Neurofeedback



# INTERVENTIONS

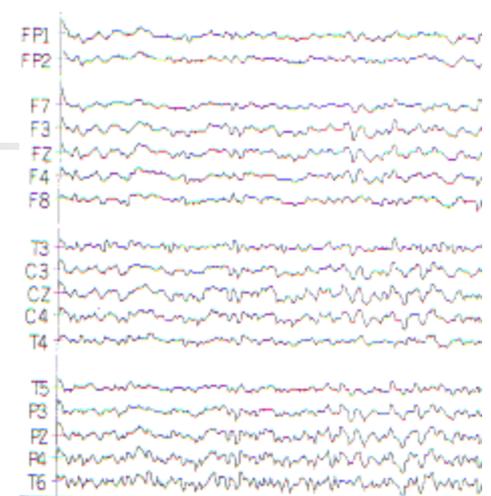
## NEUROFEEDBACK (NFB)

COMPUTER ASSISTED METHOD FOR ALTERING THE EEG (ELECTROENCEPHALOGRAPH) TO IMPROVE NEUROLOGICAL FUNCTIONING.

NFB IS:

- ❑ SAFE – NONE TO MINIMAL TRANSIENT SIDE EFFECTS
- ❑ NON-INVASIVE
- ❑ DRUG FREE – MANY REDUCE OR ELIMINATE MEDICATIONS WITH NFB
- ❑ PERMANENT WITH SUFFICIENT TRAINING

# INTERVENTIONS - NFB



## BRAIN WAVES AND BRAIN STATES

- Brain waves are the visual representation of the electrical activity of the brain.
- Brainwaves are distinguished by their frequency and amplitude.
- The brain generates various brain states to accomplish different tasks.

Delta 0-4 Hz – Detached awareness, healing, sleep

Excessive associated with old emotional trauma

Theta 4-7 Hz – Intuition, creativity, memory

Excessive associated with spacing out, lack of focus

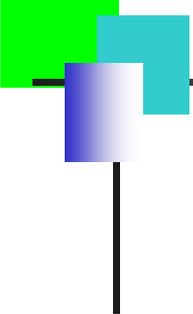
Alpha 8-12 Hz – Relaxation, calm, meditation, bridge

Low Beta 12-15 Hz – External body focus, increasing narrow focus

Mid Beta 15-18 Hz – Conscious, goal oriented, rational thinking

High Beta 22- 35 – Conscious overload, overarousal, hyper vigilant

Gamma 38-70 Hz – Binding frequency, compassion, happiness,  
optimal functioning



# **INTERVENTIONS-NFB**

## **What does NFB help?**

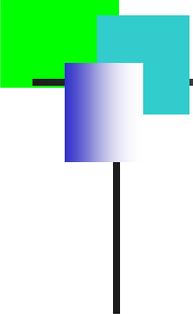
**ADHD ---AUTISM----ANXIETY----ADDICTION----ANGER----**

**---MEDICATION SIDE EFFECTS----ANGER----CEREBRAL PALSY---**

**BRAIN INJURY----CREATIVITY----DEVELOPMENTAL DISORDERS**

**---HEADACHE-----OCD----PTSD----PAIN----PMS----RAD-----**

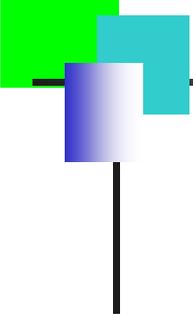
**STROKE----SLEEP----TOURETTE'S----AND MORE.....**



# INTERVENTIONS – NFB

## HOW CAN NFB HELP SO MANY CONDITIONS?

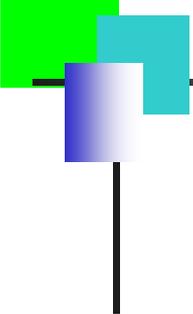
- ❑ NFB improves the functioning of the CNS causing symptoms from a variety of DX to diminish or disappear.
- ❑ NFB is able to renormalize dysregulated nervous systems.
- ❑ NFB will potentiate other treatment interventions, “prime” the brain.



# INTERVENTIONS - NFB

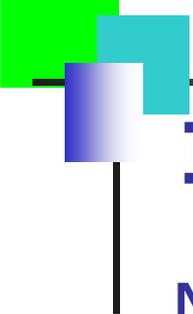
## Approaches

- **QEEG**
  - Trains the brain to perceived imbalances as interpreted by the therapist. Sometimes called training to the Q.
- **PROTOCOL BASED**
  - Linear approach where the therapist decides where and how to push the brain.
  - Filters small bands of frequencies to target in a reward/inhibit model.
- **Z-SCORE TRAINING**
  - Trains to a normative data base to 2 standard deviations.
- **Zengar NeuroOptimal**



# INTERVENTIONS-NFB

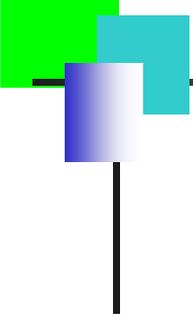
- ZENGAR NEUROOPTIMAL
  - Treats brain as a non-linear dynamical system .
  - Approach is comprehensive and holistic.
  - Gives the brain feedback through a wide spectrum of 2 channel targets about what it has just done from 0 – 42 Hz.
  - Relies on the brains innate ability to optimize and renormalize it's own performance.
  - Shifts between inter-hemispheric and non-hemispheric modes of monitoring.
  - Highly effective and efficient.



# INTERVENTIONS

## NEUROSEQUENTIAL MODEL OF THERAPEUTICS

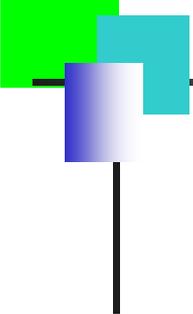
- ❑ Developed by Bruce Perry, MD
- ❑ Brings together traumatology, developmental neuroscience, and attachment theory.
- ❑ Aims to match specific therapeutic techniques to the developmental stage, brain region, and neural networks that would remediate the child's functional problems.
- ❑ Developed the NMT assessment.
- ❑ Treatment: Relationship based, repetition, experiential, sensory, expressive arts therapy (non-verbal interventions such as movement and music), tactile (massage, cuddling)



# I INTERVENTIONS

## EXPRESSIVE ARTS THERAPIES

- ❑ Expressive arts include visual art, music, drama, poetry, storytelling, and movement.
- ❑ All of these modalities offer an outlet to work through trauma.
- ❑ Expressive arts are sensory based and provide experiences for the nervous system to normalize.
- ❑ The arts provide a means for self expression that is non-verbal.



# INTERVENTIONS

## EMDR

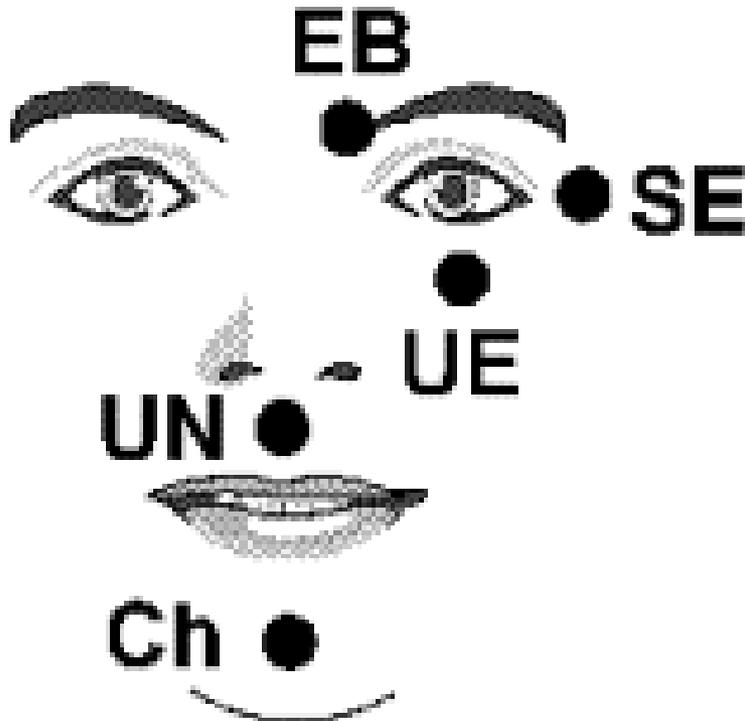
Discovered by Francine Shapiro PhD in 1987

Eye Movement involved while processing traumatic memory or disturbing event.

Desensitization- Memory no longer triggers fear states.

Reprocessing – Memory contributes to greater understanding of one's history.

# EFT Emotional Freedom Technique



**TH = Top of Head**

**EB = Eye Brow**

**SE = Side of the Eye**

**UE = Under the Eye**

**UN = Under the Nose**

**Ch = Chin**

**CB = Collar Bone**

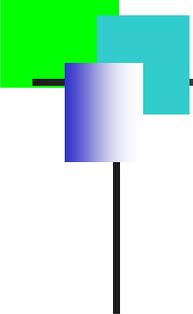
**UA = Under the Arm**

**WR = Wrists**



# Neuro Developmental Movement Therapies

- ❑ **Neuro-Reorganization (Fay, Doman-Delacato)**
- ❑ **HANDLE Program**
- ❑ **Bal-A-Vis-X**
- ❑ **Rhythmic Movement Therapy (Blomberg based)**
- ❑ **Goddard Reflex Inhibition Therapy**
- ❑ **Masgutova Neuro-sensory-motor Reflex Integration Method**

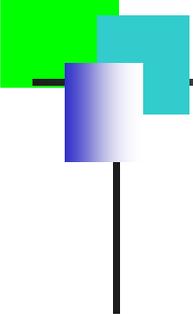


# Moro Reflex

## Moro Reflex—Description and Function

The Moro Reflex, sometimes called the infant startle reflex, is an automatic reaction to a sudden change in sensory stimuli. A sudden change of any kind (bright light, change in body position, temperature, loud noise, intense odor, touch etc.) can trigger the Moro Reflex. The Moro reflex is a combination of movements. The baby's arms and legs open rapidly upward and away from the body. At the same time there is a quick intake of breath, then a momentary freeze of the arms and legs in the outward position. The arms and legs then return to the normal flexed posture of the infant, and the breath is released, often with a cry.

The Moro reflex is a response to a perceived threat and creates instant arousal of the baby's survival systems. In essence the baby responds as if reacting to a threat. The Moro reflex trains the baby's nervous system in developing the "fight or flight" survival response. It is also the baby's instinctual response to summon a caregiver.



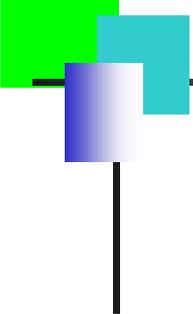
# Moro Reflex – Physiological

The following physiological response occurs with the Moro Reflex:

1. Release of stress hormones, adrenaline and cortisol
2. Increase in breathing rate, shallow breathing
3. Increase heart rate and blood pressure

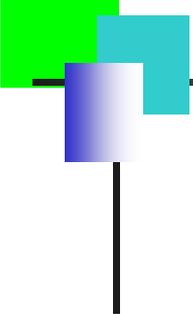
Steady, loving and consistent embraces from the baby's mother/caregiver integrate the Moro reflex when the baby is triggered. When a fearful baby receives protection and comfort, he learns to open up and participate in the world, instead of withdrawing from it.

Ideally, the Moro reflex emerges in the womb at 9-12 weeks gestation and is integrated by 4 months of age. Moro integration is complete when the baby learns a more mature startle reflex (Sometimes called Straus reflex or adult startle reflex). In response to a sudden change or perceived danger, the baby's shoulders raise and the baby seeks to find the source of the stimulus. If the baby has the means to cope with the event, it will either pay attention to it, or ignore it. This ignoring response is important because it is the basis of a more mature nervous system skill to filter out unwanted stimulus and selectively attend.



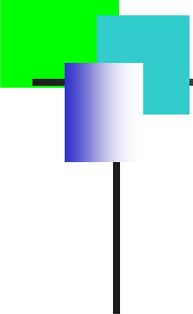
## Reported Long Term Effects of an Active Moro Reflex:

- ❑ Sleep disturbances, difficulty settling down to sleep
- ❑ Easily triggered, reacts in anger or emotional outburst
- ❑ Shyness
- ❑ Poor balance and coordination
- ❑ Poor stamina
- ❑ Motion sickness
- ❑ Poor digestion, tendency towards hypoglycemia
- ❑ Weak immune system, asthma, allergies and infections
- ❑ Hypersensitivity to light, movement, sound, touch & smell
- ❑ Vision/reading/ writing difficulties
- ❑ Difficulty adapting to change
- ❑ Cycles of hyperactivity and extreme fatigue
- ❑ Easily distracted, difficulty filtering out extraneous stimuli
- ❑ Difficulty catching a ball
- ❑ Difficulty with visual perception
- ❑ Tires easily or is irritable under fluorescent lighting



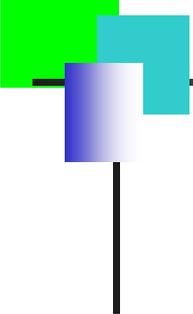
# Occupational Therapy

- ❑ **Brushing and Joint Compression**
- ❑ **Sensory Integration Therapy**
- ❑ **Bal – A – Visx**
- ❑ **Brain Gym**
- ❑ **PACE**
- ❑ **NeuroNet – for cognitive skill building**



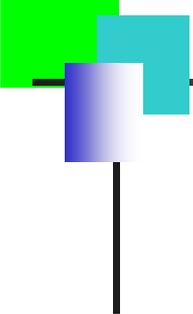
# RIGHT TO THE POINT

- ❑ Medical
- ❑ Neuro – Developmental
- ❑ Explicit Training



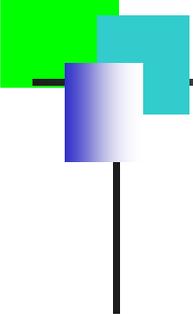
# **Sports to Promote Neuro-Organization**

- ❑ **Equestrian Therapy**
- ❑ **Swimming**
- ❑ **Gymnastics**
- ❑ **Yoga**
- ❑ **Martial Arts**
- ❑ **Building and Construction Sets**
  
- ❑ **Doing it by yourself while connected to others**
- ❑ **Sense of Belonging, Individual Achievement**



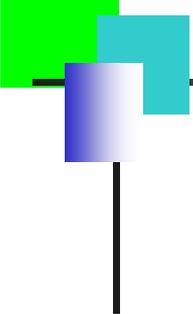
# Visual / Auditory / Language

- ❑ **Speech Therapy**
- ❑ **The Listening Program**
- ❑ **Therapeutic Listening**
- ❑ **Auditory Processing/Integration Therapy**
- ❑ **Tomatis Therapy**
- ❑ **Samonas Sound Therapy**
- ❑ **Lindamood Bell** – Orton Gillingham reading
- ❑ **PATH (Dr. Teri Lawton)**
- ❑ **Vision Therapy**
- ❑ **Fast Forward**
- ❑ **Interactive Metronome**



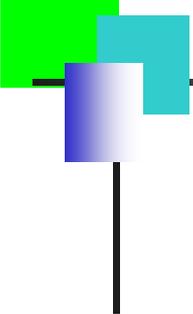
# Holistic Healing Therapies

- ❑ **Acupuncture (other than Acuset)**
- ❑ **Naturopathy**
- ❑ **Homeopathy**
- ❑ **Chiropractic**
- ❑ **Acupressure**
- ❑ **Neuromodulation Technique (Feinberg Method)**
- ❑ **Interactive Metronome**
- ❑ **Cranial Sacral Therapy**
- ❑ **HBOT**
- ❑ **Far Infra-Red Sauna**
- ❑ **Aromatherapy**
- ❑ **Bowen Technique**



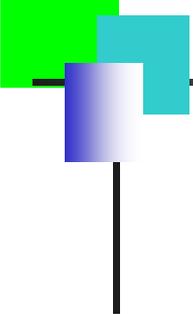
# Additional Approaches

- ❑ **Nutritional Testing and Counseling**
- ❑ **Working with DAN (Defeat Autism Now) doctor**
- ❑ **Feingold Diet**
- ❑ **Gluten/Casein Free Diet**
- ❑ **Specific Carbohydrate (SCD) Diet**
- ❑ **Additive Free Diet**
- ❑ **Elimination Diet**
- ❑ **Refine Sugar Free Diet**
- ❑ **Genetic Testing**
- ❑ **Pfeiffer Program**
- ❑ **Neurotransmitter testing**
- ❑ **Pyroluria testing**
- ❑ **Blood test for zinc/copper ratios**
- ❑ **Testing for heavy metals and minerals**
- ❑ **Acuset Protocol**
- ❑ **NAET**
- ❑ **Chelation**
- ❑ **Intravenous Secretin**
- ❑ **Low Dose Naltrexone**
- ❑ **IVIG Intravenous immune globulin**



# REDISCOVERING THE OBVIOUS

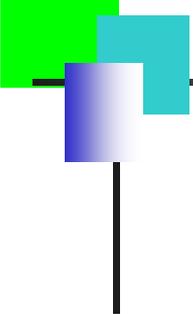
- ❑ Eat Right – Limit the junk food
- ❑ Exercise every day
- ❑ Get enough sleep
- ❑ Don't go to bed angry
- ❑ Get your emotional house in order
- ❑ Select your friends carefully



# Help!

## What Can I Do to Help This Kid and What Do I Do First?

- ❑ Medical
- ❑ Neuro – Developmental
- ❑ Explicit Training



# Contact Info

- [AndreaHausermanNACAC@gmail.com](mailto:AndreaHausermanNACAC@gmail.com)
- [Mershona@mershona.com](mailto:Mershona@mershona.com)