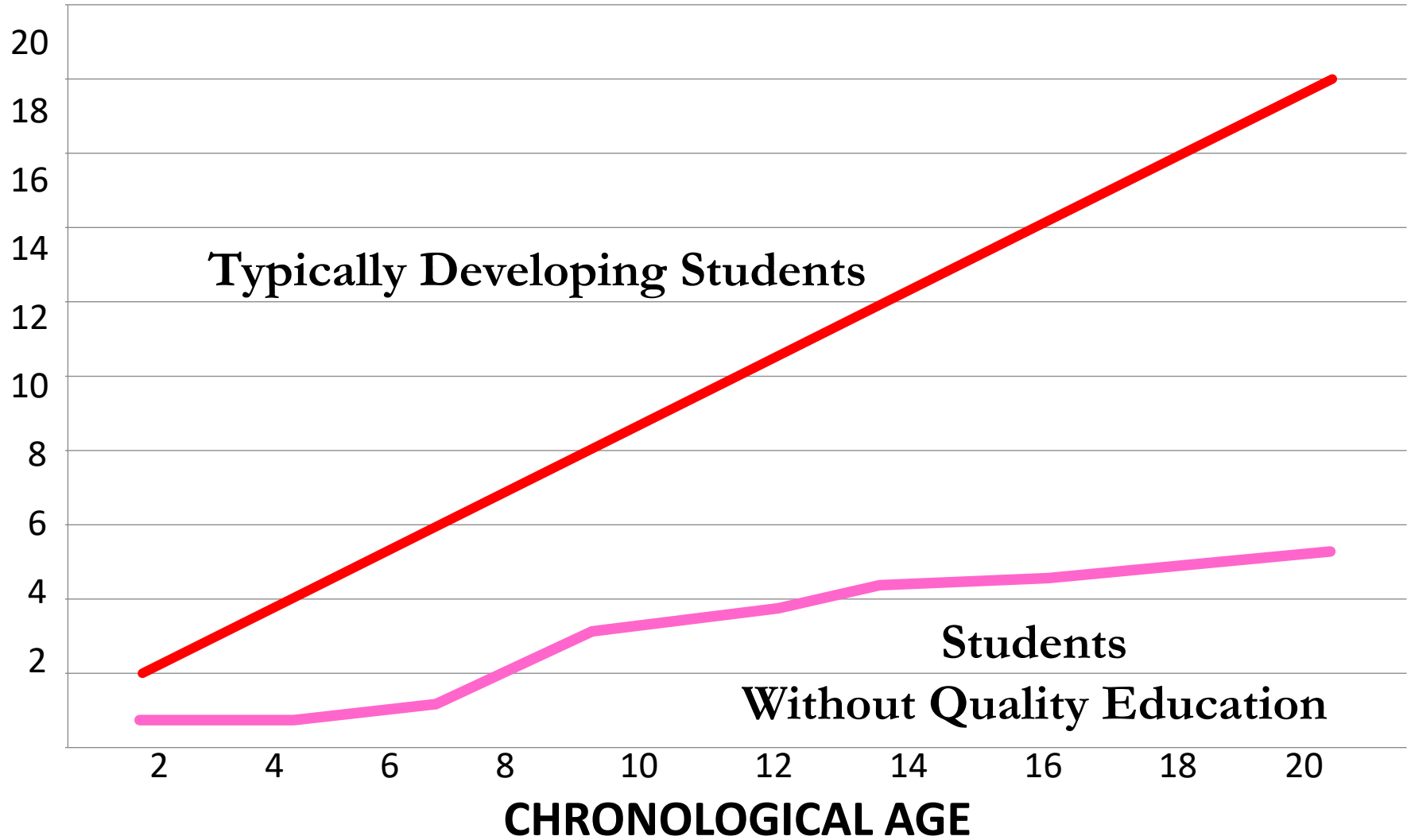




THE GAP

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CRITICAL THINKING

Observed Events:

1. Child is Calm
2. Child Eats Candy
3. Child Becomes “Hyperactive”



CRITICAL THINKING



Possible Interpretations:

- **Sugar Intake Caused “Hyperactivity”**
- **Child Eats Candy during Fun and Unstructured Events (Halloween, Birthday Parties, Sleep Overs)**
- **Child Rarely Eats Candy & Is Excited**
- **Parents React Differently Because of Their Expectations**
- **Child’s Behavior Actually Didn’t Change, But Parent Now Believes There was Change**
- **Coincidence**

CORRELATION



Correlation **DOES NOT** Imply Causation!

Dr. Piffer, 1971

CORRELATION IS:

The
Tool
of the



Devil!



CORRELATION



- **Children Raised in Homes With More Appliances Perform Better in School**
- **Private Schools are Superior to Public Schools**
- **People with Bigger Feet are Better Readers**
- **Cities with More Priests Have More Prostitutes**
- **Students with ASD ... (e.g., Visual Learners, Need Predictability, Prompt Dependent, Robotic Language, Crave Deep Pressure, Don't Generalize, Not Socially Interested, etc.)**



FACTS ABOUT AUTISM

- **Originally Identified in 1943**
- **Ratio of Boys to Girls is 3:1**
- **Rapidly Increasing “Prevalence”**
- **There is a Tremendous Amount of Misinformation About ASD & ABA**

SO YOU MUST BE A CRITICAL THINKER!



WHAT IS ABA?

- **ABA is Based On Learning Theory--Formulated Over 100 Years Ago by the Founding Fathers of Behaviorism (Ivan Pavlov & John B. Watson)**
- **The Foundations of ABA:**
 - ✓ **Behaviors are Learned Through Our Experiences and Interactions with the Environment**
 - ✓ **Therefore, Behaviors can be Unlearned Through Using Systematic and Positive Teaching Methods**
- **ABA is Simply **OUTSTANDING** Teaching**



JOHN B. WATSON PROCLAIMED:

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up and I'll guarantee to take any one at random and train him to become any type of specialist I might select-doctor, lawyer, merchant-chief, and yes, even beggar man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors.

BEHAVIORAL CONSEQUENCES

PAYOFFS

Attention (+/-)

Avoidance/Escape

Requests (Access)

Self Stimulation

Control

Anger Release



COSTS

Reprimands

Instructions

Time Out

Ignoring



WHAT'S ABA???

OUTSTANDING TEACHING



- High Expectations
- Break Skills into Small Parts
- Provide Powerful, Clear and Accurate Feedback
- Provide Assistance **AS NECESSARY**
- **OBSESSIVELY SYSTEMATIC!!!**
- Practice, Practice, Practice
- Adjust Teaching Strategies Based Upon the Learner



HOW EXPECTATIONS EFFECT EDUCATION

LOW

- Meager Objectives
- Accommodations
- Insufficient Intensity
- Easily Satisfied With Progress
- Teachers: Technicians
- Protocol Driven

HIGH

- Ambitious Objectives
- Capability & Competency
- Maximum Intensity
- Striving for Increased Improvement
- Teachers: Specialists
- Adjust to the Learner



BREAKING SKILLS DOWN

Swimming

- Toe in the Water
- Body in Water
- Face in the Water
- Blowing Bubbles
- Breathing
- Floating

Language

- Matching
- Nonverbal Imitation
- Verbal Imitation
- Receptive Instructions
- Receptive Labelling
- Expressive Labelling

Social

- Tolerate Proximity
- Parallel Play
- Peer Interest
- Observational Learning
- Cooperative Play
- Commenting



CHALLENGES

- Behaviors, BEHAVIORS, **BEHAVIORS**
 - They Often Get Worse Before They Get Better
 - Long Lasting Change Requires Systematic and Comprehensive Programs
 - **IT HAS TO BE THE PRIORITY!**
- Initially, One on One Intervention is Necessary
- Without Powerful Reinforcement, You Might as Well Go Home!



AUTISM PARTNERSHIP'S METHOD

- **Develop Student's Motivation**
- **Reduce Interfering Behaviors**
- **Teach Appropriate Alternative Behaviors**
- **Teach "Learning How to Learn" Skills**
- **Emphasis on Developing Communication, Social, Academic & Play Skills**
- **Functional Objectives**
- **Critical Thinking**
- **Group Instruction**



DEVELOPING REINFORCERS

- **Exposure to Potential Reinforcers**
- **Selling the Reinforcer**
- **Novelty and Anticipation**
- **Escape or Avoidance**
- **Associations**
- **Self Stimulation**
- **Sessions Devoted to Reinforcement Development**
- **Social Connections**



REINFORCEMENT GUIDELINES

- **Reinforcers Should Be Reinforcing**
- **Reinforcement Should Be Earned (Contingent)**
- **Pair Tangible Reinforcers with Social**
- **Initially, Reinforcement Should Occur Immediately**
- **Reduce Frequency of Reinforcement ASAP**
- **Label the Behaviors Being Reinforced**
- **Use a Variety of Reinforcers**
- **Utilize Differential Reinforcement**
- **Don't Use as Bribery or "Briberyland"**

“BRIBERY LAND”



- *“What would you like to work for?”*
- *“If, then”*
- *“First, then”*

A visual schedule card with a blue border. At the top, it says "I am working for". Below this, there is a box containing the word "computer" and an illustration of a desktop computer. Underneath the computer box, there are five empty square boxes in a row. The first two boxes contain a yellow star, and the remaining three are empty. To the right of the main card, there are three yellow stars arranged in a small cluster.



WHAT'S THE PROBLEM???

- It Works (**FOR THE SHORT TERM**)!!!
- Student Can Decide If It's Worth It
- Facilitates Negotiation
- Students Won't Work Unless They Know the "Deal"
- Interferes with Thining/Eliminating Reinforcement
 - Reduces Independence
 - Reduces Internalization



WHAT TYPICALLY HAPPENS???

- **Crying, Screaming, Whining, Fussing**
- **Not Responding**
- **Not Paying Attention**
- **Aggression to Self, Others, Property**
- **Not Following Instructions**
- **Falling to the Ground**
- **Running Away**
- **Spitting**
- **Taking Clothes Off**
- **Self-Stimulation**

- **Negative Attention**
 - ❖ **Comments**
 - ❖ **Instructions**
 - ❖ **Anger**
- **Avoidance/Escape**
 - ❖ **Withdraw Demand**
 - ❖ **Removal**
- **Gains Access**
- **Gains Control**
- **Self Gratification**
- **Release of Stress**

WHAT TYPICALLY HAPPENS???



- **Calm**
- **Follows Instructions**
- **Pays Attention**

- **NOTHING**
- **WEAK REINFORCER**

REACTIVE PLAN



- Provide “**C**” Reinforcer Every ____ Minutes for the **Absence** of **Disruptive** Behaviors
- Disruptive Behaviors Should Result in the Least Amount of Attention Necessary
- Disruptive Behaviors Result in the Loss of Opportunity for Reinforcement
- **AFTER PROACTIVE TEACHING:** Provide “**A**” Reinforcer Every ____ Times for the **Presence** of **Appropriate** Behavior



PROACTIVE PLAN

- **Select Replacement Behavior Based Upon Functional Behavior Assessment**
- **Break Skills into Smaller Parts**
- **Concentrated & Systematic Teaching Sessions**
- **Generalize to the Natural Setting**



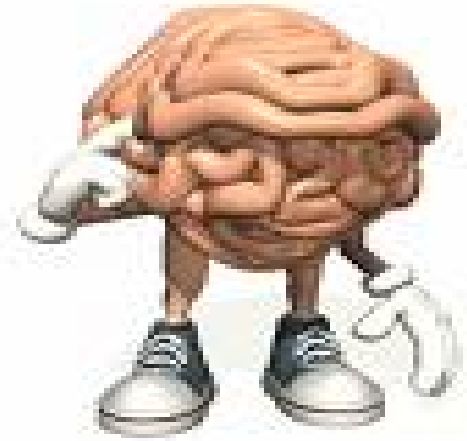
LEARNING

HOW TO LEARN

- **Sitting**
- **Giving Back Reinforcers**
- **Not Fidgeting or Grabbing**
- **Remaining Calm**
- **Paying Attention**
- **Joint Attention**
- **Following Directions**
- **Effort**
- **Learning From Feedback**
- **Learning From Prompts**
- **Deductive/Inductive Reasoning**
- **Observational Learning**
- **Waiting**
- **Memory**
- **Social Engagement**



THE CAUSES OF AUTISM



- **“Refrigerator Moms”**
- **Being Jewish**
- **Serotonin Levels**
- **Abnormal Genes**
- **Leaky Gut**
- **Food Allergies**
- **Cosmic Rays**
- **Chinese Power Stations**



THE CAUSES OF AUTISM



- **Lead Poisoning**
- **Television Watching**
- **Wireless Technology**
- **iPod Batteries**
- **Rain**
- **Vinyl Floors**
- **Valproic Acid (Mood Stabilizer)**
- **MMR Vaccine (Thimerosal)**



Research Showing No Relationship Between ASD & MMR Vaccine

- 2008: Baird
- 2006: Fombonne et al
- 2005: Yasuo Shimizu et al
- 2004: Institute of Medicine's Immunization
- 2004: **Authors Retracted Link of Vaccine to ASD**
- 2003: Taylor et al
- 2003: Madsen et al
- 2001: Centers for Disease Control
- 2001: Halsey et al
- 2000: Immunization Safety Review
Committee
- 1999: Taylor et al
- 1999: Medicines Commission Agency
- 1998: Petola
- 1998: Gillber & Heijbel
- 1997: Miller et al



THE CAUSES OF AUTISM



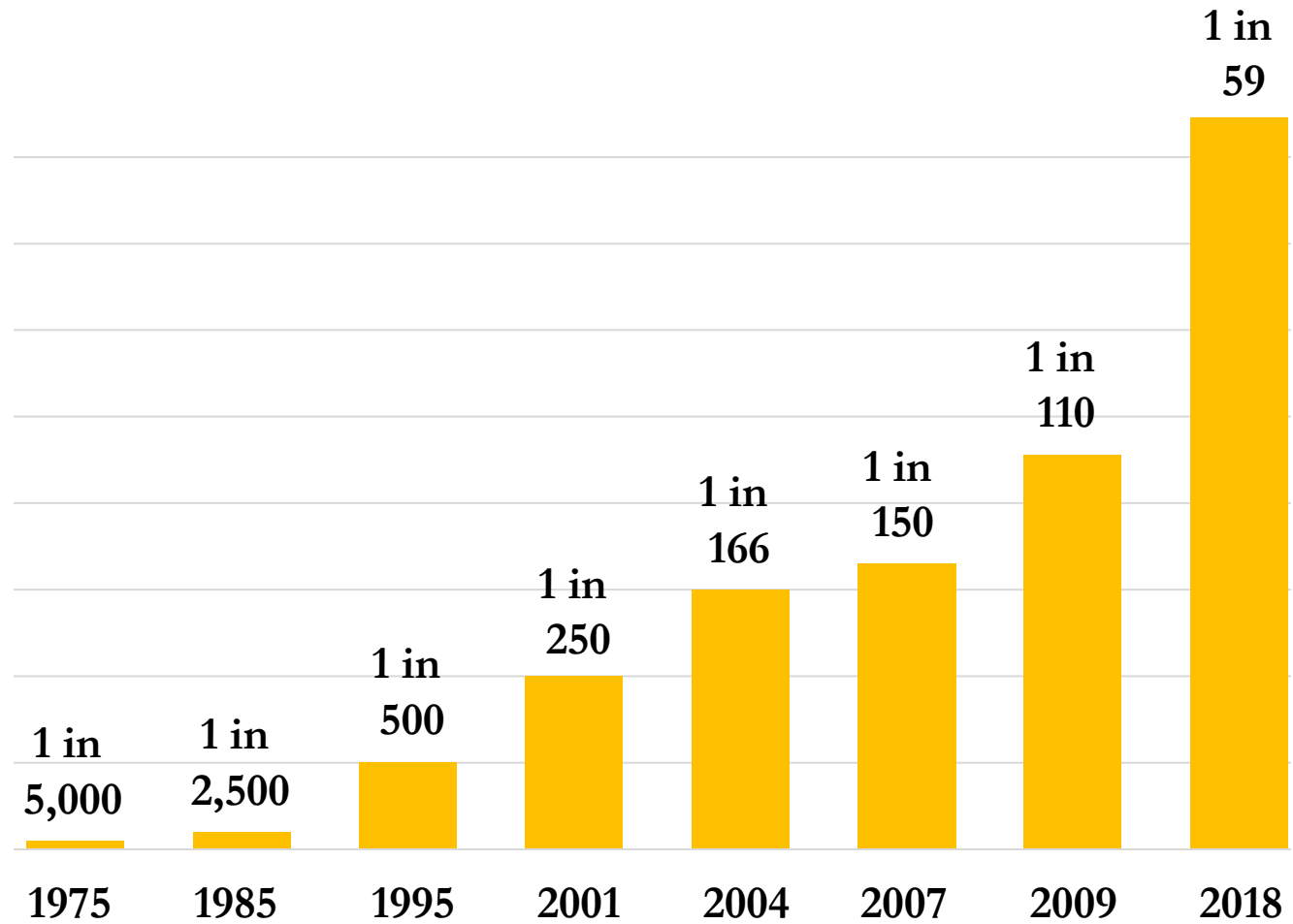
- **Misoprostol (Ulcer Medication)**
- **Viruses**
- **Bacteria**
- **Mom's Not Taking Prenatal Vitamins**
- **Conception in Winter**
- **Living Closer to Freeways**
- **Older Parents**
- **Eating Meat**



A Senate subcommittee hearing brought together researchers from federal health organizations and institutes to highlight the state of scientific findings regarding environmental contributions to autism and other neurodevelopmental disorders. According to these experts, emerging scientific findings suggest that a combination of genetic and environmental factors could affect neurological development, but additional research is needed. Expert witnesses also said that autism likely has a number of causes.



PREVALENCE RATES





WHY THE INCREASE IN PREVALENCE?

- **Broadening of Diagnostic Criteria**
- **Elimination of Categories**
- **Recognizing Differential Diagnosis with ID**
- **More & Better Trained Diagnosticians**
- **Pediatricians**
- **Lawyers**
- **Insurance**
- **Earlier Detection**
- **Media & Internet**
- **More Effective Intervention**

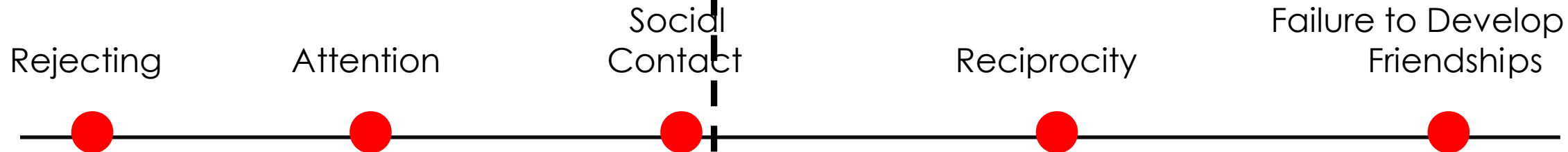


DIAGNOSTIC FEATURES DSMIV

Qualitative Impairment in Communication



Qualitative Impairment in Social



Restrictive, Repetitive & Stereotyped Patterns of Behaviors, Interests & Activities



Old Criteria

New Criteria



“In spite of overwhelming scientific evidence that the etiology of ASD remains unknown, many theories designed to treat the cause have arisen. These treatments have often been widely publicized as “miracle cures.”

(Dr. BJ Freeman, 2007)



“PANACEAS OF THE WEEK”

✓ = Research in Peer Reviewed Journals

Myers, S.M. & Johnson, C.P. *Management of Children with Autism Spectrum Disorders*. American Academy of Pediatrics

Peer Reviewed Journal

Reputable Journal

Independent Evaluation

Standardized & Valid Tests

Research Design

Statistically Significant

Generalizable to Others



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **ABA** ✓
- **Acupuncture**
- **ADAM (Autistic Internet Interface)**
- **Allergy Treatments**
- **Aquatherapy**
- **Art Therapy**
- **Assisted Pig Therapy**
- **Auditory Integration Training**



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **Big Ear**
- **Bleach**
- **Blood Transfusions**
- **Blue Green Algae**
- **Bonding**
- **Brain Gym**
- **Broccoli**



"Autism is curable, I believe the missing piece of the puzzle to autism recovery is chlorine dioxide (bleach). I like to convince people they can cure their kids " Rivera stated.

Rivera tells desperate parents that parasites and other pathogens are to blame. According to Rivera, when the full moon rises every 29 days, that's when parasites wreak havoc inside the guts of children with autism. Rivera claims bleach can heal the symptoms of autism by killing parasites with a protocol that's timed to the lunar calendar.



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **Brushing**
- **Chelation**
- **Chiropractic Manipulations**
- **Cow Protein Injections**
- **Discrete Trial Trainer**
- **DMG/B-6**
- **Dolphin Therapy**
- **Ear Earobics**



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **Electric Shock**
- **Entergy Treatment**
- **Equestrian Therapy**
- **Facilitated Communication**
- **Fast Forward (Halo)**
- **Feingold Diet**
- **Fenfluramine**
- **Flash Light Therapy**



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- Floor Time
- Gluten/Casein Free Diets
- Google Glass Therapy
- Hippotherapy
- Hyperbolic
- Incidental Teaching (ABA) ✓
- Inclusion
- Ingestion of Worm Eggs



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **Leucovorin**
- **Left/Right Brain**
- **Linda Mood Bell**
- **Links to Language**
- **LSD**
- **Miller Method**
- **Music Therapy**
- **Nambudripad’s Allegry Elimination Treatment**



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **Natural Language Paradigm (ABA) ✓**
- **Neurobiologix**
- **Neuro-Fit**
- **Omega Therapy**
- **Options**
- **Organic Fish Oil**
- **Patterning**
- **Peanut Butter Therapy**



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- PECS (ABA) ✓
- Pivotal Response Training (ABA) ✓
- Play Therapy
- Prism Glasses
- Prozac
- Qi Therapy
- Rapid Prompting Method



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **RDI**
- **Reflexology**
- **Remote Healing**
- **Sacro-Cranial Massage**
- **Sauna Treatment**
- **Sensory Integration**
- **Signing**
- **Social Stories**



“PANACEAS OF THE WEEK”



✓ = Research in Peer Reviewed Journals

- **Social Thinking**
- **Stem Cell Therapy**
- **Supplement Brain Water**
- **Squeeze Box**
- **TEACCH**
- **Verbal Behavior (ABA) ✓**
- **Visual Therapy**
- **Womb Room**



**Not all
ABA
is Alike!**