# **Distracted Research Packet**

#### The World of 2006-2007

- Politics (Views on Bush specifically)
- Where the war is at
- Education, No Child Left Behind

#### ADHD

- History
- world views, specifically 2007
- Symptoms
- how to test for it
- in evolution (?)
- suspected causes (widely accepted and otherwise)
- In the DSM IV

#### Treatments tried/ suggested

- Neurophyscologist vs psychologist vs psychiatrist
- Homeopathy
- Visuoperceptia, visuomotor (and ADHD)
- The "link" between autism, ADD, and Vaccines
- Neurofeedback
- Orthomolecular therapy
- Reward theory (behavior modification)
- Tamaya Clinic, New Mexico
- Holistic
- Biomeridian Machine
- Chelating
- Hyperbaric oxygen chamber

# Medications listed (Side effects, purpose, character on it)

- Ritalin (Noah, briefly Jesse, previous Actor) (possibility for addiction)
- Zoloft (Henry)

- Nux Vomica (Briefly Jesse, prescribed by Daniel)
- Prozac (Previously Henry, Sherry, Vera)/SSRI
- Methylphenidate (Ritalin) vs Amphetamines (Adderall)
- Concerta (Jesse, form of Ritalin)
- Adderall (Jesse, Actor)
- Risperdal
- Depakote
- Trileptal (currently Natalie)
- "Brain spray called 'attention' by the scientist that incented Ecstasy"
- Provigil

# Pop culture mentioned (books, tv, music, etc)

- St. Francis prayer
- "The Explosive Child"
- Crash test design job
- Popular rap in 2007 (possible Eminem album with "mockingbird")
- DSM IV
- Peanut butter recall 2006-2008
- Linkin Park
- Curves
- Zappos, com
- Wife swap/Wife Exchange
- Cheaptix.com
- Jackie Kennedy quote "if you blow it with your child your life isn't worth anything."
- "Mockingbird"
- "Low"
- "put on"
- "All Joy and no fun" Nancy rec
- Ken robinson school kill creativity/whiteboard ted talks

# **AMERICA 2006-2007**

#### Bush

- By early 2006, his average rating was near 40%, and in July 2008, a poll indicated a near all-time low of 22%
- The Iran Freedom Support Act
   (2006) is an Act of Congress that
   appropriated \$10 million and
   directed the President of the United
   States to spend that money in
   support of pro-democracy groups
   opposed to the Iranian government.
   Opponents claimed the bill was a
   first step towards a US-led invasion
   of the country
- Bush average approval rating as of 2006 was 39%, highest 44%, lowest 31%
- Bush average approval rating 2007
   33%, highest 38%, lowest 29%
- A poll taken in mid September 2006 indicated that 48 percent of Americans believed the war with Iraq has made the U.S. less safe, while 41 percent believed the war has made the U.S. safer from terrorism.
- A poll by <u>Newsweek</u> on October 19, 2006 revealed that 51% of respondents believed that the impeachment of George W. Bush should be a priority

#### The Wars

 On the eve of the third anniversary of the Iraq invasion, President Bush yesterday promised to "finish the mission" with "complete victory," urging the American public to remain steadfast but offering no indication when victory may be achieved. (2006)

- OCTOBER 4, 2006: Al Qaeda letter says prolonging the Iraq war "is in our interest.": "The most important thing is that you continue in your jihad in Iraq ...Indeed, prolonging the war is in our interest, with God's permission."
- 63 percent of all Iraq and Afghanistan veterans believe the Army and Marine Corps are overextended. 67 percent of Army and Marine veterans believe their forces are overextended.
- DECEMBER 2006: 3rd most deadly month in Iraq. 112 U.S. troops killed.
- "For the first time, more troops disapprove of the president's handling of the war than approve of it. Barely one-third of service members approve of the way the president is handling the war, according to the 2006 Military Times Poll."
- JANUARY 10, 2007: Bush announces escalation. "I've committed more than 20,000 additional American troops to Iraq."
- JANUARY 11, 2007: 70 percent of Americans oppose sending more troops to Iraq.
- NOVEMBER 6, 2007: 2007 is deadliest year for U.S. troops in Iraq.

### **Education system, No Child Left Behind**

 45% of the public, and about the same percentage of parents with children in public schools (43%) say the law [No Child Left Behind] overemphasizes standardized testing, based on those who have heard a lot or a little about No Child Left Behind.

- Three-in-ten of those who believe the law has made things worse cite testing specifically the excessive focus on testing, or the fact that teachers must "teach the test."

  Nearly one-in-five (18%) of those who say the law has made things worse say that standards are being lowered. Another 10% say that the law does not work for all students, including special education students, and 9% say the law provides insufficient funding or, alternatively, costs too much.
- Schools and districts that fail to make [Adequate Yearly Progress] are identified as "in need of improvement," and required to adopt a series of mandated remedies each year during which they do not improve. These remedies include allowing students to attend another public school, offering federally funded after-school tutoring, and "restructuring" persistently low-performing schools.
- Education advocates also claim the law has been underfunded. The original legislation called for major increases in education spending to offset the cost of reaching NCLB's ambitious goals for student achievement, but federal spending never reached the lofty levels outlined in the law.
- Americans express greater support for replacing teachers and principals than for converting failed district schools into charter schools
- groups such as the Teaching
   Commission, and the Progressive
   Policy Institute have proposed that we pay teachers according to how much students are learning in their classrooms (often as measured by

test results), the difficulty of the teachers' classroom environment or how hard it is to recruit quality teachers knowledgeable in a particular subject.

# ATTENTION DEFICIT HYPERACTIVE DISORDER

# **History**

- The APA did not recognize ADHD in the first DSM. A second DSM was published in 1968. This edition included hyperkinetic impulse disorder for the first time.
- 1955. Ritalin (methylphenidate), a stimulant, is approved by the FDA.
- third edition of the DSM (DSM-III) in 1980. They changed the name of the disorder from hyperkinetic impulse disorder to attention deficit disorder (ADD). Scientists believed hyperactivity was not a common symptom of the disorder
- The APA released a revised version of the DSM-III in 1987. They removed the hyperactivity distinction and changed the name to attention deficit hyperactivity disorder (ADHD). The APA combined the three symptoms (inattentiveness, impulsivity, and hyperactivity) into a single type and did not identify subtypes of the disorder.
- ADHD cases began to climb significantly in the 1990s. There may be a few factors behind the rise in diagnoses:
  - doctors are able to diagnose
     ADHD more efficiently
  - more parents are aware of ADHD and are reporting their children's symptoms
  - more children are actually developing ADHD
- 1996. The second drug to treat ADHD symptoms, Adderall (dextroamphetamine and amphetamine) is approved by the FDA.

### ADHD in 2007 (medical)

- First international congress on ADHD held in 2007 during the 39<sup>th</sup> International Danube Symposium
  - o The objective and mission of the World Federation of ADHD is to support and promote worldwide clinical and scientific study projects, including training activities in the field of ADHD (Attention Deficit-Hyperactivity Disorder) and related disorders. To also support the exchange of information between scientists, physicians, health experts, ADHD lay organisations, self-help groups, and the public; to collaborate with other related professional and lay organizations.
- There was a 21.8 percent increase in ADHD diagnosis between 2003 and 2008
- the Texas Children's Medication Project(Pliszka et al., 2006a) have recommended stimulants as the first line of treatment for ADHD, particularly when no comorbidity is present.
- Furthermore, adults with a childhood history of ADHD have higher than expected rates of antisocial and criminal behavior (Barkley et al., 2004), injuries and accidents (Barkley, 2004), employment and marital difficulties, and health problems and are more likely to have teen pregnancies (Barkley et al., 2006) an

- Nongenetic causes of ADHD are also neurobiological in nature (Nigg, 2006), consisting of such factors as perinatal stress and low birth weight (Mick et al., 2002b), traumatic brain injury (Max et al., 1998), maternal smoking during pregnancy (Mick et al., 2002a), and severe early deprivation (Kreppner et al., 2001).
- In March 2006 the Pediatric Advisory Committee also addressed the risk of sudden death occurring with agents used for the treatment of ADHD (Villalaba, 2006). The FDA review of events related to sudden death revealed 20 sudden death cases with amphetamine or dextroamphetamine (14 children, 6 adults), whereas there were 14 pediatric and four adults cases of sudden death with MPH. It is important to note that the rate of sudden death in the general pediatric population has been estimated at 1.3Y8.5/100,000 patient

#### ADHD in 2007 (Social)

- In 1998, the US National Institutes of Health (NIH) released a consensus statement on the diagnosis and treatment of ADHD. The statement, while recognizing that stimulant treatment is controversial, supports the validity of the ADHD diagnosis and the efficacy of stimulant treatment. It found controversy only in the lack of sufficient data on long-term use of medications and in the need for more research in many areas.
- It is argued that over-diagnosis occurs more in well-off or more homogeneous communities, whereas under-diagnosis occurs more frequently in poorer and

- minority communities due to lack of resources and lack of financial access.
- In 2005, 82 percent of teachers in the United States considered ADHD to be over diagnosed while three percent considered it to be under diagnosed.
- More than half [of responders in 2002 study] (64 percent) said they had heard of ADHD, but less than half of those respondents (46 percent) were able to provide an answer that indicated specific knowledge of symptoms, causes or medications used to treat it. IUB Sociology Professor Jane Mcleod, the lead of the ADHD analysis, said the lack of knowledge regarding ADHD, its symptoms and its causes makes it difficult for parents, teachers and other adults to make informed decisions about how to help these children. Men, people of color and people with less education were less likely to recognize ADHD. If children are mislabeled or the problem is over-generalized, it hurts the children who actually have ADHD and the children who are mislabeled, she said.

- The study found that 31 percent of respondents [to the above study] reported believing that children with ADHD would be dangerous to others.
- Detection of false positives has not been a major focus of research or practice (Scuitto & Eisenberg, 2007)

# ADHD in schools (around 2007)

- Boys with ADHD usually display more hyperactive/ impulsive behaviors while girls tend to be more inattentive, have more internalizing symptoms, and more social impairment. Therefore, boys are more likely to be referred by teachers for diagnosis and subsequently diagnosed with ADHD while girls with ADHD, whose inattentive symptoms are less noticeable, are less likely to be noticed by a busy classroom teacher or parent as their behavior is not as disruptive to others (Scuitto & Eisenberg, 2007).
- Teaching strategies suggested by the US Department of Education in 2008: <a href="http://www2.ed.gov/rschstat/research/pubs/adhd/adhd-teaching\_pg3.html">http://www2.ed.gov/rschstat/research/pubs/adhd/adhd-teaching\_pg3.html</a>
- Many children with ADHD do not demonstrate a sufficient level of impairment to meet criteria under IDEA. These children may qualify for services under Section 504, which is a civil rights act that provides for reasonable accommodations to enable individuals with disabilities equal access to programs and opportunities. To be eligible for accommodations under Section 504, the individual must have a physical or mental impairment that substantially impacts a major life activity. Children with ADHD often qualify for accommodations using this criterion. Accommodations under Section 504 are typically provided in

- general education and are often less resource intensive than those provided under IDEA
- Overall, teachers generally viewed ADHD as a valid diagnosis and a legitimate educational issue (Items 1 and 9). This is also reflected by the response to Items 19, 2, and 25 in which they indicate that children are generally not responsible for their behavior. However, teachers also felt that children with ADHD are disruptive to the class and were best taught by special education teachers This is in sharp contrast to the TT government's stated objectives to promote an inclusive education system and recent data from the United Kingdom in which teachers were very much concerned that children with ADHD be managed within the general school system
- "Teachers Perceptions of Students Diagnosed with ADHD" Patricia Maher, Ph.D, Lynn Chalmers,Ph.D (2007)
  - Seventy-seven percent of the teachers agreed that students with ADHD "talk excessively and interrupt others."
  - 88% believed that they can "identify students with ADHD who have not taken their medication."
  - 19% of the teachers agreed with the statement, "Typically, students diagnosed with ADHD 'outgrow' it."
  - 25% of the teachers believed ADHD is under-diagnosed,
     52% believe it is over-diagnosed.

- 3% of the teachers agreed that girls are more likely than boys to be diagnosed with ADHD.
- 85% of the teachers agreed their classroom is more manageable when students diagnosed with ADHD are medicated.
- 97% believed students diagnosed with ADHD can learn successfully and effectively in the regular classroom.
- 94% agreed with the statement, "Typically, students diagnosed with ADHD have difficulty organizing schoolwork"
- 50 % believed students diagnosed with ADHD have difficulties playing.
- 78% felt comfortable referring students who exhibit symptoms of ADHD.

# ADHD- What's needed to diagnose? To warrant in school Accomodations?

- RTI= Response to Intervention, the methods teachers take to accommodate to students who might need special education help. Three tiers, required by Individuals with Disabilities Education Act (IDEA)
- IEP= Individualized Education Plan for students that qualify for SPED under 13 IDEA categories. ADHD can fall under Other Health Impairments
- Symptoms of ADHD
  - Inattention
    - Often fails to give close attention to

- details or makes careless mistakes in schoolwork, at work, or with other activities.
- Often has trouble holding attention on tasks or play activities.
- Often does not seem to listen when spoken to directly.
- Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., loses focus, side-tracked).
- Often has trouble organizing tasks and activities.
- Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework).
- Often loses things necessary for tasks and activities (e.g. school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
- Is often easily distracted
- Is often forgetful in daily activities.
- Hyperactivity and Impulsivity:

- Often fidgets with or taps hands or feet, or squirms in seat.
- Often leaves seat in situations when remaining seated is expected.
- Often runs about or climbs in situations where it is not appropriate (adolescents or adults may be limited to feeling restless).
- Often unable to play or take part in leisure activities quietly.
- Is often "on the go" acting as if "driven by a motor".
- Often talks excessively.
- Often blurts out an answer before a question has been completed.
- Often has trouble waiting his/her turn.
- Often interrupts or intrudes on others (e.g., butts into conversations or games)

#### Needed to diagnose

Have at least 6 inattentive and/or 6
 hyperactive/impulsive
 symptoms for at least 6
 months to a degree that is
 inconsistent with
 developmental level and that
 negatively impacts directly on
 social and
 academic/occupational
 activities (for people ages 17

- and older, only 5 symptoms must be present)
- Had several symptoms present before age 12
- Have several symptoms in at least 2 settings (such as home, school, or work)
- Have symptoms that clearly interfere with or reduce the quality of social, academic, or occupational functioning
- Have symptoms that are not be better explained by another cause
- Necessary for SPED, IEP, etc.
  - Meet with evaluation team (parents, gen Ed teacher, sped teacher, district representative, counselor/school psychologist, possibly students, possibly specialists)
  - The ADHD must directly affect the student's academic performance in a negative capacity.
  - If your child's ADHD is so severe that he's unable to learn in a regular classroom, he may qualify.
  - If student doesn't qualify under IDEA they can get a 504 plan. The law prohibits schools from discriminating against students because of physical and mental impairments. Just as the school must provide ramps for kids in wheelchairs, it must make modifications (such as preferential seating, extra time on tests, or help with note taking) for kids with

brain-based learning barriers.

#### **ADHD** and evolution

- "From an evolutionary perspective, school is an abnormal environment. Nothing like it ever existed in the long course of evolution during which we acquired our human nature," Gray wrote. "School is a place where children are expected to spend most of their time sitting quietly in chairs, listening to a teacher talk about things that don't particularly interest them, reading what they are told to read, writing what they are told to write, and feeding memorized information back on tests."
- Studies have suggested that when it comes to our ancient ancestors, having a short attention span and the tendency to never stop moving would have translated to higher levels of resources collected, which means greater success in the 'reproducing and passing on your genes' game
- people with ADHD tend to be more creative in both controlled experiments and real-life scenarios, because their brains are more susceptible to random, 'out of the box' thoughts.
- Those with higher working memory capacity reported 'more mind wandering during these simple tasks', but their performance did not suffer.

#### ADHD suspected causes

 Children exposed to tobacco smoke prenatally are 2.4 times as likely to have ADHD as those who are not, research suggests.

- the biggest factor by far that determines if you're going to be born with ADHD is your genes.
- a child with ADHD is four times as likely to have had a relative who was also diagnosed with attention deficit disorder. At the moment, researchers are investigating many different genes, particularly ones involved with the brain chemical dopamine. People with ADHD seem to have lower levels of dopamine in the brain.
- A 2010 study in Pediatrics found that children with higher urine levels of organophosphate, a pesticide used on produce, had higher ADHD rates. Another 2010 study showed that women with higher urine levels of organophosphate were more likely to have a child with ADHD. (The studies suggest a possible link, but can't prove that pesticides cause ADHD.)

# TREATMENTS REFERENCED

# Neuropsychologist vs psychologist vs psychiatrists

- Neuropsychologist
  - o studies the structure and function of the brain as they relate to specific psychological processes and behaviors. It is an experimental field of psychology that aims to understand how behavior and cognition are influenced by brain functioning and is concerned with the diagnosis and treatment of behavioral and cognitive effects of neurological disorders.
  - uses methods from experimental psychology to uncover the relationship between the nervous system and cognitive function.
  - involves assessing and diagnosing patients. This can be done by observing specific symptoms and using sophisticated technology, such as brain scans. After successfully diagnosing a neurological problem, neuropsychologists can then often recommend a course of treatment, which can include therapy, medication, or surgery.
- Psychologist
  - trained to administer and interpret a number of tests and assessments that can help diagnose a condition or

tell more about the way a person thinks, feels and behaves. These tests may evaluate intellectual skills, cognitive strengths and weaknesses, vocational aptitude and preference, personality characteristics and neuropsychological functioning.

- Differences between the two
  - Psychologist is someone
    who can assess, diagnose
    and treat psychological and
    mental health problems.
    These can include, but are
    not limited to, anxiety,
    depression, schizophrenia,
    post-traumatic stress
    disorder and so on.
  - A neuropsychologist on the other hand is someone who can assess, diagnose and treat psychological disorders associated with brain-based conditions. For example, they can assess the cognitive, behavioural and emotional deficits resulting from a brain injury, stroke, dementia or a pattern of cognitive strengths and weakness in someone with a learning disorder or a disorder on the Autism Spectrum.
- Psychiatrist
  - A physician who specializes in the prevention, diagnosis, and treatment of mental

illness. A psychiatrist must receive additional training and serve a supervised residency in his or her specialty. He or she may also have additional training in a psychiatric specialty, such as child psychiatry or neuropsychiatry. Psychiatrists can prescribe medication, which psychologists cannot do.

#### Homeopathy

- the practice of medicine that embraces a holistic, natural approach to the treatment of the sick. Homeopathy is holistic because it treats the person as a whole, rather than focusing on a diseased part or a labeled sickness.
- Homeopathy is a pseudoscience a belief that is incorrectly presented as scientific. Homeopathic preparations are not effective for treating any condition;large-scale studies have found homeopathy to be no more effective than a placebo, suggesting that any positive feelings that follow treatment are only due to the placebo effect and normal recovery from illness
- "like cures like"—the notion that a disease can be cured by a substance that produces similar symptoms in healthy people; and "law of minimum dose"—the notion that the lower the dose of the medication, the greater its effectiveness. Many homeopathic remedies are so diluted that no molecules of the original substance remain

#### Visuoperceptual ability

- Visuoperceptual ability is a component of visual perception that enables recognition of objects based on their form, pattern, and color
- Low visual perception and sensory processing disorder can be a common comorbid condition of children with adhd

#### Visuomotor abilities and ADHD

- the control of small muscles in the fingers for grasping and manipulation. Typically, these skills are coordinated with or in response to visual input. In other words, vision and movement work in concert to produce actions.
- ADHD could possibly impact visuomotor skills negatively

#### Vaccines, autism, and ADHD

- Based on a study without a control group, so unknown if vaccines were causal or coincidental
- The statistics are microscopic
- The peptides and gastrointestinal symptoms the doctor described and believed were part of the side effects of the vaccines and cause of the autism actually have never been proven to be linked to each other or the vaccinations
- Thimerosal was the main preservative to cause concern but has been reduced to trace or nonexistent amounts since 1999

#### Neurofeedback

 "The brain emits different types of waves, depending on whether we are in a focused state or day-dreaming," explains Siegfried Othmer, Ph.D., chief scientist at the

- EEG Institute in Woodland Hills, California. The goal of neurofeedback is to teach the patient to produce the brain-wave patterns associated with focus. The result: Some symptoms of ADHD impulsivity, distractibility, and acting out diminish.
- Neurofeedback activity: his goal is to move the characters in a computer or video game (goals vary, depending on the protocol the practitioner uses) by producing short bursts of sustained brain-wave activity in those areas of the brain thought to be under-aroused. The software generating the game monitors and records brain activity. Loss of focus will cause the game to stop.
- a recent trial involving 104 children published in March in the Journal of Pediatrics. Those who received neurofeedback had improvements in attention and impulse control, while those who did not receive the therapy did not. These improvements persisted after six months.

- the body and that diseases reflect deficiencies in this environment.
- The author defines orthomolecular psychiatry as the achievement and preservation of good mental health by the provision of the optimum molecular environment for the mind, especially the optimum concentrations of substances normally present in the human body, such as the vitamins.
- Makes use of vitamins, minerals, fiber, amino acid, hydrotherapy, acupuncture, massage, biofeedback, and more

# **Reward Theory**

- Key aspects of the reward system are interactive in ADHD brains. The result is a biochemical inability to derive a reinforcing reward from ordinary scarcities. ADHD brains struggle t sustain the motivation to learn when the reward is mild Ir linked to long-term gratification. As a result, stimuli need to be more salient- larger, faster, more intenseto gain the brain's attention



1. Choose a negative behavior that you want to change and a positive behavior that you would like to see start or continue. Start by choosing a behavior that your child can begin to work on immediately and that he or she realistically will be able to change. It is not very motivating for children to fail in their initial attempts. Your child will want to give up right away.

# **Orthomolecular Therapy**

 aimed at maintaining health through nutritional supplementation and based on the idea that there is an optimum nutritional environment in Make sure you set specific goals. For example, you would like to see your child make the bed each day, unload the dishwasher, come to dinner on time, or get an A in math. You would like to see your child stop refusing to get out of bed in the morning, interrupting when others are speaking, refusing to complete homework, or talking back

2. Set up a Home Token Economy to implement your behavior management plan. A token economy is simply a contract between the child and parents. It states that if a child acts or behaves in a certain way, the parents will agree to trade tokens for a particular reward or privilege. Focus on only a few goals at a time.

Allow your child to be involved in setting up the behavior plan but don't let yourself be manipulated. When a child becomes part of the plan and is able to pick the rewards and the consequences he or she usually will work harder to achieve it.

For the plan to work, token values need to be high enough to be motivational. Assign each behavior a value between 1 and 25. The behaviors you really want to see changed are those that have a higher token value—and also are those that are more difficult to change. For example, you might assign a value of 5 to making the bed each morning, 10 to unloading the dishwasher, and 20 to getting out of bed on time. You would subtract tokens for negative behaviors such as interrupting others,

refusing to do homework and getting poor grades.

Keep a running tab on the total number of tokens and how many have been "cashed in" for privileges or rewards.

After you set up a token economy program, explain the program to your child. Be positive and tell them that you have developed a program where he or she can earn rewards or privileges for behaving in a positive way. They will probably balk at this at first—after all, they have been receiving rewards all along that they really did not have to earn.

Go over with your child the number of tokens to be given or lost for positive and negative behaviors and tell them it will be tallied each day. Explain that the tokens can be "cashed in" for privileges and explain the "cost" of each privilege and when and where the rewards or privileges can be used. Give frequent opportunities to exchange the tokens for rewards or privileges.

Rewards or privileges that I have found to be effective with children and adolescents when I have set up a behavioral plan with them and their parents are:

- seeing a movie
- going for ice cream
- going to McDonald's
- getting to buy a new outfit
- having friends come over
- going out with friends
- more time to watch television
- more time playing video games.

The number of tokens required to receive a particular reward should vary with the reward's importance. For example, sleeping over at a friend's house might cost 35 tokens, whereas going to McDonald's might cost 10 tokens. Keep the costs of the

rewards low so that the child can use a reward each day.

Make sure you reinforce positive behaviors immediately. Don't give second or third chances. Negative behaviors should result in the loss of tokens. If you give second or third chances you are weakening the behavior plan and are sabotaging yourself.

#### **Tamaya Clinic, New Mexico**

- Nonexistent.
- HOWEVER Desert Hills clinic in New Mexico doles treat autism, ADHD, PTSD, depression, and more
- "We train facility wide on the Nurtured Heart Approach in order to provide our patients and their families with inner wealth and opportunities to grow. We are dedicated to using evidence-based treatment modalities on every unit to ensure that patients and their families have the highest likelihood of obtaining long-term, successful outcomes."

#### **Holistic Treatment**

- The art and science of healing that addresses the whole person – body, mind, and spirit. The practice of holistic medicine integrates conventional and alternative therapies to prevent and treat disease, and most importantly, to promote optimal health. This condition of holistic health is defined as the unlimited and unimpeded free flow of life force energy through body, mind, and spirit.
- Holistic medicine encompasses all safe and appropriate modalities of diagnosis and treatment. It includes analysis of physical, nutritional,

environmental, emotional, spiritual and lifestyle elements. Holistic medicine focuses upon patient education and participation in the healing process.

#### - Principles include

- All people have innate healing powers.
- The patient is a person, not a disease.
- Healing takes a team approach involving the patient and doctor, and addresses all aspects of a person's life using a variety of health care practices.
- Treatment involves fixing the cause of the condition, not just alleviating the symptoms.

### **Biomeridian Machine**

- This machine measures the electrical impedance corresponding to 14 organs/systems in the body.
- over 40 000 potential sensitivities including but not limited to environmental, food and chemical sensitivities Using the BioMeridian we can compare the frequency of these sensitivities to our clients.



# Chelating

- Chelation is useful in applications such as providing nutritional supplements, in chelation therapy to remove toxic metals from the body, as contrast agents in MRI scanning, in manufacturing using homogeneous catalysts, and in fertilizers.
- chelation was used as a treatment for autism. This practice has largely ended due to the absence of scientific plausibility, its potentially deadly side-effects, and the lack of approval by the U.S. Food and Drug Administration



# **Hyperbaric Oxygen Chamber**

- Hyperbaric oxygen therapy (HBOT) is a medical treatment which enhances the body's natural healing process by inhalation of 100% oxygen in a total body chamber, where atmospheric pressure is increased and controlled
- The most common side effect is barotrauma to the ears and sinuses caused by the change in pressure.
- The evidence is insufficient to support claims that hyperbaric oxygen therapy can effectively treat Autism

# **MEDICATION REFERENCED**

#### Ritalin

- Generic Name: methylphenidate
- Between 2007 and 2012
   methylphenidate prescriptions
   increased by 50% in the United
   Kingdom and in 2013 global
   methylphenidate consumption
   increased to 2.4 billion doses, a 66%
   increase from the year before.
   The United States continues to
   account for more than 80% of global
   consumption
- commonly
   prescribed <u>psychostimulant</u> and
   works by increasing the activity of
   the <u>central nervous system</u>. 
   It
   produces such effects as increasing
   or maintaining alertness, combating
   fatigue, and improving attention
- All stimulants work by increasing dopamine levels in the brain—dopamine is a neurotransmitter associated with pleasure, movement, and attention. The therapeutic effect of stimulants is achieved by slow and steady increases of dopamine, which are similar to the way dopamine is naturally produced in the brain. The doses prescribed by physicians start low and increase gradually until a therapeutic effect is reached.
- Approximately 70% of those who use these stimulants see improvements in ADHD symptoms. [31][32] Children with ADHD who use stimulant medications generally have better relationships with peers and family members, [22][31] generally perform better in school, are less distractible and impulsive, and have longer

- attention spans. [22][31] People with ADHD have an increased risk of substance use disorders, and stimulant medications reduce this risk
- Stop taking and call your doctor if you have a side effect like
  - aggression, restlessness, hallucinations, unusual behavior, or motor tics (muscle twitches)
  - dangerously high blood pressure (severe headache, blurred vision, buzzing in your ears, anxiety, confusion, chest pain, shortness of breath, uneven heartbeats, seizure)
  - nervous feeling, sleep problems (insomnia); or
- Tell your doctor if
  - mental/mood conditions (especially anxiety, tension, agitation)
  - personal/family history of mental/mood disorders (such as bipolar disorder, depression, psychosis, suicidal thoughts)
- Ritalin is a "Schedule II Substance" which means it has a "high potential for abuse" and "may lead to severe psychological or physical dependence," and so the federal government sets limits on the amount that may be manufactured each year.

#### Adderall

- An amphetamine
- Changes the amounts of certain natural substances in the brain.
   Amphetamine/dextroamphetamine

belongs to a class of drugs known as stimulants. It can help increase your ability to pay attention, stay focused on an activity, and control behavior problems. It may also help you to organize your tasks and improve listening skills.

- Children may be more sensitive to the side effects of this drug, especially weight loss. This medication may slow down a child's growth. The doctor may recommend temporarily stopping the medication from time to time to reduce this risk. Monitor your child's weight and height. Consult your doctor or pharmacist for more details.
- it should not be used by patients with a history of glaucoma, severe anxiety or agitation, a personal or family history of tics, or Tourette syndrome.

#### Adderal vs Ritalin

- Amphetamine vs methylphenidate
- Adderal more widely prescribed for ages 10-19 compared to Ritalin
- Side effects
  - Adderall: Weight loss, insomnia, headaches, irritability, increased muscle tension, anxiety, increased heart rate, increased blood pressure, dry mouth, reduced efficacy over time.
  - Ritalin: Nervousness, drowsiness, insomnia. Can cause psychosis with long-term use
- Withdrawal
  - Adderall: Extreme fatigue, <u>insomnia</u>, irritability and mental depression
  - Ritalin: Psychosis, depression, irritability,

temporary worsening of ADHD symptoms

#### Zoloft

- Approved to treat Major Depressive Disorder (MDD),
   Obsessive-Compulsive Disorder (OCD), Panic Disorder,
   Posttraumatic Stress Disorder (PTSD), Social Anxiety Disorder,
   Premenstrual Dysphoric Disorder (PMDD) IN ADULTS
- Approved to treat
   Obsessive-Compulsive disorder in children
- Side Effects
  - nausea, loss of appetite, diarrhea, or indigestion
  - change in sleep habits including increased sleepiness or insomnia
  - increased sweating
  - tremor or shaking
  - o feeling tired or fatigued
  - agitation
- Other side effects in children and adolescents include:
  - abnormal increase in muscle movement or agitation
  - nose bleed
  - urinating more often
  - aggressive reaction
  - possible slowed growth rate and weight change.

#### **Nux Vomica**

- Used for treating
  - digestive problems such as constipation, bloating, heartburn, and nausea
  - male infertility and impotence
  - colds and flus, particularly in the early stages of the virus
  - allergies
  - o back pain

- irritability, impatience, and high sensitivity to stimuli, caused by stress or mental strain
- headaches and migraines symptoms such as a sore scalp, frontal pain, light sensitivity, or stomach problems
- hangovers
- o menstrual problems
- o insomnia
- The raw seeds are nicknamed "poison nut" because of their toxic nature
- In manufacturing, nux vomica is used as rat poison. That's because it contains strychnine and brucine, two deadly chemicals
- Nux vomica is UNSAFE. Taking nux vomica for more than a week, or in high amounts of 30 mg or more, can cause severe side effects. Some of these side effects include restlessness, anxiety, dizziness, neck and back stiffness, spasms of jaw and neck muscles, convulsions, seizures, breathing problems, liver failure, and death.

#### Prozac

- used medically in the treatment of depression, obsessive-compulsive disorder, eating disorders such as bulimia nervosa, premenstrual dysphoric disorder, panic disorder, and Attention-Deficit Hyperactivity Disorder
- Compared to other popular SSRIs, fluoxetine has a strong energizing effect. This makes fluoxetine highly effective in treatment of clinical depression cases where symptoms like depressed mood and lack of energy prevail.

## Risperdal

- RISPERDAL® CONSTA® is a long-acting injectable medication that's proven to help control symptoms of Bipolar I Disorder and significantly delayed time to relapse.
- Issued through injections
- Side effects include:
   Drowsiness, dizziness,
   lightheadedness,
   drooling,nausea, weight gain, or tiredness mental/mood changes (such as anxiety, restlessness)

#### **Depakote**

- used to treat acute manic episodes associated with bipolar disorder.
- Side effects:
  - Headache
  - Sick feeling in the stomach
  - Feeling dizzy
  - Feeling extremely tired
  - Tremor
  - Vomiting
  - Diarrhea
  - Hair loss
  - Weakness
  - Double vision
  - Problems with walking or coordination
  - Weight gain
  - Loss of appetite
  - Stomach pain
  - increased risk of suicidal thoughts and actions.
  - Serious liver damage that can cause death, especially in children younger than 2 years old. The risk of having serious liver damage is more likely within the first 6 months of treatment

# Trileptal

- an antiepileptic drug
- to make sure Trileptal is safe for you, tell your doctor if you have:
  - liver disease;
  - kidney disease;
  - depression, or a mood disorder;
  - a history of suicidal thoughts or actions;
  - if you are allergic to carbamazepine (Carbatrol, Tegretol).

# Provigil

- improve wakefulness in adults who are very sleepy due to one of the following diagnosed sleep disorders: narcolepsy, obstructive sleep apnea (OSA), or shift work disorder (SWD)
- PROVIGIL is not approved for use in children for any medical condition. It is not known if PROVIGIL is safe or effective in children under 17 years of age.
- PROVIGIL may cause serious side effects:
  - a serious rash or serious allergic reaction
  - mental (psychiatric)
    symptoms, including:
    depression; feeling anxious;
    hearing, seeing, feeling, or
    sensing things that are not
    really there (hallucinations);
    an extreme increase in
    activity and talking (mania);
    thoughts of suicide;
    aggressive behavior, and
    other mental problems
  - symptoms of a heart problem, including chest pain, abnormal heartbeat, and trouble breathing.

 Common side effects headache, back pain, nausea, feeling nervous, stuffy nose, diarrhea, feeling anxious, trouble sleeping, dizziness, and upset stomach.

# "Attention" brain spray

Nonexistent.

# POP CULTURE/ LITERARY REFERENCES

### St. Francis Prayer

 Prayer associated with Alcoholic's Anonymous, step eleven calls for members to "take in deep meaning of each phrase and idea"

# "The Explosive Child" Ross W. Greene, Ph.D.

"Screaming, swearing, crying, hitting, kicking, spitting, biting...these are some of the challenging behaviors we see in kids who are having difficulty meeting our expectations. These behaviors often leave parents feeling frustrated, angry, overwhelmed, and desperate for answers. Dr. Ross Greene helps you understand why and when your child does these things and how to respond in ways that are nonpunitive, nonadversarial, humane, and effective.

#### Dr. Greene describes how best to:

- Understand the factors that contribute to challenging episodes.
- Identify the specific situations in which challenging episodes are likely to occur.
- Reduce or eliminate challenging episodes by solving the problems that cause them.
- Solve problems collaboratively (rather than unilaterally) and proactively (rather than reactively).

- Help your child develop the skills to be more flexible, solve problems, and handle frustration more adaptively.
- Reduce hostility and antagonism between you and your child.

With Dr. Greene's practical, expert guidance, you and your child will forge a new relationship based on communication and mutual respect."

- Ross W. Greene, Ph.D., is the originator of the Collaborative & Proactive Solutions (CPS) model described in this book, an approach he has researched extensively, along with colleagues throughout the world. Dr. Greene served on the faculty at Harvard Medical School for over 20 years, and is currently Founding Director of the non-profit Lives in the Balance and adjunct Associate Professor in the Department of Psychology at Virginia Tech. He consults extensively to families, schools, and therapeutic facilities and lectures widely internationally.
- The CPS model provides a compassionate, accurate understanding of behavioral challenges and an empirically supported, proactive, non-punitive, non-adversarial approach for reducing challenging episodes, solving problems, improving communication, and repairing relationships.
- "5 stars, Finally, peace in our household"

- "After years of reading books on "strong-willed" or "difficult" children... and years of psychotherapy, Dr. Greene's fresh approach to what seemed an unsolvable problem has brought peace to our household for the first time in 8 years.... it truly, truly works. Dr. Greene put into words what I had always known about my child, but couldn't express cohesively."
- "Applying Dr. Greene's "basket" principles, we haven't had a melt-down in 3 weeks, and my son's cooperation with our "basket A" and "basket B" requests is fantastic. No more melt-downs, no more frustrated adults. We actually have hope for a brighter future. Even school is going really, really well. Many thanks to Dr. Greene for giving us an alternative to manage our "inflexible, explosive" (but lovable) children!"

# Crash test design as a profession

- Job Description
   The Vehicle Systems Engineer
   (Crash) will be responsible for performing crash tests, developing planning specifications for safety systems, analyzing test results and improving performance of safety systems. Communication of test results and analysis will be communicated through reports, summaries and small group meetings.
- Responsibilities:
  - Perform crash tests associated with safety systems;
  - Track a program schedule for each safety components and safety systems;

- Develop the test plans based on the program schedule;
- Communicate other module groups and test facilities to prepare for the tests;
- Analyze the test results along with simulation or physical tests outputs;
- Recommend design approaches and solution to technical problems directly to other teams on technical matters relating to safety systems.

#### DSM-IV

- Diagnostic criteria
  - For each disorder included in DSM, a set of diagnostic criteria indicates symptoms that must be present (and for how long) as well as a list of other symptoms, disorders, and conditions that must first be ruled out to qualify for a particular diagnosis. While these criteria help increase diagnostic reliability (i.e., the likelihood that two doctors would come up with the same diagnosis when using *DSM* to assess a patient), it is important to remember that these criteria are meant to be used by trained professionals using clinical judgment; they are not meant to be used by the general public in a cookbook fashion.
- Critiques of DSM-IV
  - The medical model underlying the empirical orientation of DSM-IV reduces human beings to one-dimensional

- sources of data; it does not encourage practitioners to treat the whole person.
- The medical model perpetuates the social <u>stigma</u> attached to mental disorders.
- The symptom-based criteria sets of DSM-IV have led to an endless multiplication of mental conditions The unwieldy size of DSM-IV is a common complaint of doctors in clinical practice— a volume that was only 119 pages long in its second (1968) edition has swelled to 886 pages in less than thirty years

#### **Peanut Butter Recall**

- ConAgra peanut butter (Peter pan, Great Value) recalled in 2007 due to salmonella outbreak
- Linked to a Georgia plant, at least 300 people in 39 states were affected

#### **Curves**

Curves is a franchised exercise program designed exclusively for women. The Curves program has spread across the nation like wildfire due to claims such as: "No experience necessary, only 30 minutes for a full-body workout, no class times, no appointments to keep, you can't be late for your workout because the circuit is always on!" In fact, the Curves franchise is listed by Entrepreneur Magazine as one of the top franchises to own. Curves caters to a very large group of women seeking positive physical change in a supportive environment. Most

commercial gyms and fitness centers do not come close to offering a friendly and supportive environment for beginning exercisers be it female or male.

## Zappos.com (P)

- "Zappos.com offers free shipping and free return shipping with a 365-day return policy. Choose from over 1000 brands, over 100,000 styles, and over 3 million items from our warehouse full of shoes, clothing, handbags, and accessories!"
- #31 Fortune Magazine 100 Best Companies to Work For
- Zappos doubled their annual revenues, hitting \$840 million in gross sales by 2007 and expanded to include handbags, eyewear, clothing, watches, and kids' merchandise



#### Wife Swap/ Wife Exchange

 During the first week, the new wife must adhere to exactly the same rules and lifestyle of the wife she is replacing. Each wife leaves a house manual which explains her role in the family and the duties she holds. This helps to determine what rules the wives will apply at the "rules change ceremony". During the second week, the new wives are allowed to establish their own rules, and their new families must adhere to these new household rules. It usually takes a while for the families to adjust to this policy, meanwhile the wives disburse a sum of money to the family they have become involved with, to do what the wives see fit to spend it on.

 2007 Wife Swap Promo: <a href="https://www.youtube.com/watch?v=">https://www.youtube.com/watch?v=</a> MyrSTLsTbjE

#### Cheaptix.com

- A site that sells event tickets (Sports, concerts, shows, etc)
- Cheaptickets.com sells plane tickets as well as event tickets
- Parent company for cheaptickets.com is expedia
- The company was acquired in 2000 by <u>Cendant</u>. In July 2006, it was included with the sale of <u>Travelport</u> to the <u>Blackstone</u> <u>Group</u>, part of their Travel Distribution Services Division that later became <u>Orbitz Worldwide</u>, Inc. [5][6]

"If you bungle raising your children, I don't think whatever else you do well matters very much" – Jackie Kennedy

- Interview on NBC 1960
  - Mr. VANOCUR: If you do become the First Lady will you travel a great deal for your husband? Will you go out and do things that he asks you to do, speak to various groups, or will you try and stay at home more? Mrs. KENNEDY: I'll always do anything my

husband asks me to do if he wants me to do that. Of course, I'd be delighted. I am an old-fashioned wife. I also think I have very young children, so I want to be with them. If you bungle raising your children I don't think whatever else you do well matters very much. But I'll try and do half of each.

## "Mockingbird", Eminem

- Song: https://www.youtube.com/watch?v=S9 bCLPwzSC0
- On albums "Encore" (2004) and "Curtain Call: The Hits" (2005)
- Addressed to his daughter, Hailie Jade Mathers

#### "Low", Flo Rida ft T-Pain

- Song: https://www.youtube.com/watch?v=dq 6Q uaJF4k
- On albums "Mail on Sunday" (2007) and the soundtrack to "Step Up 2: The Streets" (2008)

#### "Put On", Young Jeezy Ft Kane West

- Song: <a href="https://www.youtube.com/watch?v=1">https://www.youtube.com/watch?v=1</a> <a href="mailto:aEImx74gLA">aEImx74gLA</a>
- On album "The Recession" (2008)
- Performed at 2008 BET awards

#### Linkin Park in 2007

- Third album, "Minutes to Midnight" released in 2007 after a 4 year gap
- Lead single is "What I've Done"
   (https://www.youtube.com/watch?v=
   8sgycukafqQ) also featured in
   Transformers movie