

Silicon Valley Health Institute

Host of the Smart Life Forum

Next Meeting: Thursday, May 19, 2016

Main Speaker: David P. Traver, M.D., FAAP

“Research in Autism Risk and Prevention”

Secondary Speaker: Ben Hirsch-McShane

“Can Tech Keep Boomers in Their Homes?”

Smart Life Forum

Presentation Location

Cubberley Community Center

Room H1

4000 Middlefield Road

Palo Alto, California

Directions on our website:

www.SVHI.com

For those who cannot attend,
you can view livestreaming at

<http://bit.ly/Zpld3o>

See our archived videos at

<http://tinyurl.com/smartlifeforum>



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Announcements & Upcoming Events

Upcoming Speakers:

JUNE 2016

Vince Giuliano, PhD - "Emerging Science Offers Longer Healthy Lifespans"

JULY 2016

Adiel Tel-Oren, MD, DC, CCN - "GI Health"

Upcoming Foundation for Mind Being Research Meeting (FMBR)

Friday, May 27, 2016 @ 7:30pm

Larry Burk, MD, CEHP

Dreams and Intuition As Part of Medical Diagnosis

**Unity Community Church
Y.E.S. Hall**

3391 Middlefield Rd, Palo Alto, CA

Please visit www.FMBR.org for more info.

Volunteer Positions Available!

SVHI is looking for volunteers for:

- *Membership Chair*
- *Video Assistant*

If you have questions please email: susandowns@hotmail.com.

Thank you.

News Alert!

The board has decided to provide transcripts for our speakers' presentations. These transcripts will be provided for members only, and are expected to increase internet traffic to our site. These transcripts are provided by a generous donation by our chair, Dave Asprey. We will be working on these transcripts, so stay tuned!

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Main Presentation Speaker: David P. Traver, M.D., FAAP!



Dr. Traver earned his undergraduate degree graduating with high honors in Biology from Boston University. He was accepted early in his undergraduate years into The Modular Medical Curriculum as a Commonwealth Fund Scholar and, in so doing, gained entrance into Boston University's School of Medicine upon graduation. After receiving his Doctor of Medicine, he completed his internship and residency in pediatrics at Boston City Hospital, now known as Boston Medical Center.

Following this, Dr. Traver served as a physician for various international relief efforts throughout Asia, including The Philippines, Vietnam and Cambodia. It was in Phnom Penh where he and his wife helped start the internationally acclaimed national teaching hospital The Sihanouk Hospital Center of Hope.

After returning to the states, Dr. Traver worked at a large managed care medical group, where he served as Volunteer Clinical Faculty for Stanford University's School of Medicine. It was during this time that he became aware of friends' children who had been diagnosed with autism, and he soon became deeply interested in this set of conditions. Subsequently, Dr. Traver spent two years at Stanford University Medical Center's Division of Child and Adolescent Psychiatry. There, in The Pervasive Developmental Disorder Neuropsychiatry and ADHD Clinics, he became familiar with the treatment and management of individuals with Autistic Spectrum Disorders and ADHD utilizing psychopharmacology as well as performing individualized assessments as part of the clinic team.

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Dr. Traver has been directly involved with autism research, and for the past fifteen years, has continued to stay current by attending numerous conferences, meetings and webinars devoted to autism research and treatment, including, but not limited to, the following:

American Academy of Pediatrics' Meetings on Autism and ADHD

Autism Research Institute

The California Institute of Technology

Defeat Autism Now!

Defeat Autism Now! Physician Training with Dr. Jaquelyn McCandless

Defeat Autism Now! Think Tanks

Gordon Medical Associates Think Tanks on Chronic Disease

The Johnson Center for Child Health and Development

The McGovern Institute for Brain Research at MIT

Medical Academy of Pediatric Special Needs – Member

The University of California Davis MIND Institute

The University of California San Diego

Uniquely, Dr. Traver personally travels to the academic centers performing ongoing research in this field to meet and to talk with the scientists performing ground breaking studies. He is a regular speaker in the community and has delivered lectures at both hospital Grand Rounds and on the media.

Special Note

Although from a professional perspective, Dr Traver's credentials stand apart from other practitioners, the strongest weapon which he brings to the battle is his passion to help these children, adults and their families. Every person deserves the best care possible in order to develop to their full potential. He believes that the current medical model is of limited help in improving these children. Every family deserves the very best that medicine and science can offer. Every person should be offered the opportunity to know what may help their loved one, regardless of their age. Although research is growing at an impressive rate, there is still relatively little which translates into clinical practice for these individuals. Dr. Traver has devoted his practice to the timely implementation of interventions which have been demonstrated to afford autistic individuals benefit.

(End of Meet David Traver!)

Concerning Main Presentation

“Autism Prevention”

Article Written By Susan Downs, MD, ABOIM

Autism rates have increased from 3 in 1000 children prior to 1990 (Fombonne E 2006) to one in 45 children (National Health Statistics Report No 87, Nov 13, 2015). The annual direct medical, direct non-medical, plus productivity costs combined are estimated at \$268 billion for 2015 and is projected to be \$461 billion for 2025 (Leigh, Du; 2015). (National Health Statistics Report No 87, Nov 13, 2015)

According to Mark Hyman, MD, autism spectrum disorder (ASD) is a microcosm or hologram of everything that goes wrong across all chronic diseases. ASD is not one disease but is a syndrome with a number of etiologies and different mechanisms that lead to abnormal development. Each of these multiple etiologies is influenced by complex interactions between multiple genes and environmental factors which may act synergistically or in parallel during critical periods of neurodevelopment, to contribute to variable expression of autism-related traits (Rossignol et al. 2014). A young brain is particularly vulnerable to environmental stressors because it is rapidly growing with high energy demands, is subject to oxidative stress and decreasing immunity as the mother's protective immunity decreases and self immunity has not yet matured.

Contributing causes of ASD include inflammation and microglial activation, oxidative stress, impaired methylation, impaired detoxification, autoimmunity/immune dysregulation, mitochondrial dysfunction, toxins and heavy metals, intestinal dysbiosis, insufficient levels of vitamin D, EPA, or DHA, abnormal fatty acid levels.

A universal part of autism is inflammation and neuroimmune activation in the brains of autistic patients. There is ongoing neuroinflammation (Wang et al. 2014) and oxidative stress in cortical brain regions associated with speech, emotion, and social behavior (Frye, Rossignol 2014). Oxidative stress and inflammation are intimately interconnected with mitochondrial dysfunction. All of these putative causes are interconnected with one leading to the others.

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TREATMENT

Autism may entail a slow neurodegenerative destruction and gradual loss of brain cells, hence it is important to apply treatment as early as possible. As there are many underlying medical conditions, the approach will be to address the underlying medical conditions of the individual. There is no one size fits all approach as there is no recognized treatment that targets all the core features of ASD. It is important to inform the families there is no cure. It is important to support families and to connect families with resources.

PREVENTION

Research points to the effects of gestational and perinatal environment on the development of immune and neural systems that can contribute to autism. Therefore optimal health strategies start prenatally, continue during pregnancy, and will continue with the infant after birth. Included in prevention are the following:

- Healthy diet
- Optimizing the microflora and health of the gut
- Minimize toxin exposure
- Mild detox autoimmune conditions
- Exercise
- Space out pregnancies (Cheslack-Postava et al. 2014)

OPTIMIZE GUT HEALTH FOR MOTHER AND INFANT

Optimal gut health is important for the mother's health and in minimizing autoimmune disease. Some mothers actually have antibodies against the fetus' brain which can increase the risk of autism. Toxins produced by abnormal gut bacteria may trigger or worsen autism in some children. GI dysfunction can impair brain mitochondrial function directly through the clostridial (anaerobic bacterial) production of proprionic acid (Mezzelani A et al. 2015).

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The diet for the child and the mother until breast feeding is completed should consist of:

- Organic vegetables and fruits, grass fed meats and wild raised fish
- Eliminate processed foods, preservatives, sugar
- Vitamins (including omega 3 and vitamin D) and probiotics for the mother before birth
- Minimize antibiotics and medications in the mother
- Include fiber

-Vaginal birth is optimal as it exposes the newborn to the mother's microflora and is instrumental in a healthy gut for the baby.

-Breast feeding aids the infant in healthy intestinal flora. A child's own immune system does not kick in until they are about 18 months of age, and breast milk offers the best immune system support available

- Treat parasites, minimize foods that induce food allergies

MINIMIZE TOXIN EXPOSURE (Prenatally, During Pregnancy and for Young Infant)

A 2006 report from the CDC found that Americans, on average, tested positively for 116 of 148 synthetic compounds, including dioxin, polycyclic hydrocarbons and organochlorine pesticides. These same substances were also found in human milk, placental tissue, umbilical cord blood, and the blood and body fat of newborns. The average American home contains 3 to 10 gallons of hazardous materials, and 85 percent of the chemicals that are registered have never been tested for their impact on the human body.

Pesticides, phthalates, polychlorinated biphenyls (PCBs), solvents, toxic waste sites, air pollutants, and heavy metals are all implicated in ASD (Rossignol et al. 2014 Rossignol DA, Frye RE). Heavy metals can uncouple metabolic pathways, inhibit enzymes, trigger autoimmunity and are pro-oxidant. Also correlated with ASD prevalence are methylene chloride, manganese, diesel particulate matter (Roberts et al. 2013), chlorinated solvents (Windham et al. 2006), and proximity to coal fired power plants, pesticide-rich agricultural fields, known toxic chemical sites, and traffic-related air pollution (Faber et al. 2015).

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It is likely that toxins not on this list such as fluoride have a synergistic effect with the toxins listed. What is important rather than the level of a particular toxin is the total allostatic load ("the wear and tear on the body" which grows over time when the individual is exposed to repeated or chronic stress).

- Don't use plastic bottles as they can release phthalates and antimony
- Use green dry cleaners
- EMF: Avoid exposure to cell phones, wi-fi and baby monitors. These should not be in the bedroom during sleep.
- Avoid toxins in cleaning and personal care products
- Limit your mercury intake by minimizing the consumption of large fish. For mercury levels of fish, visit gotmercury.org.
- Minimize medications
- Drink filtered water
- Avoid exposure to toxins such as bedding with flame retardants which contain toxic substances.
- Avoid air pollution

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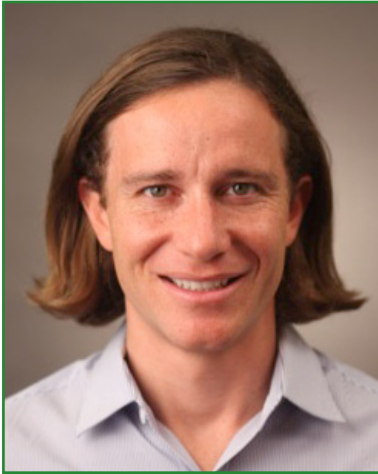
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(End of Main Presentation!)

Secondary Presentation Speaker: Ben Hirsch-McShane!



Ben is the founder and COO of Engage, a business focused on helping older adults discover life enhancing technologies. He and his team spent over a year interacting with thousands of seniors about what is important to them. Then, they created a platform that informs, connects, and supports people with lifestyle enabling products and services. Prior to Engage, Ben worked as a senior analyst in the alternative investment industry for over eight years, most recently at Passport Capital.

(End of Meet Ben Hirsch-McShane!)

Secondary Presentation by Ben Hirsch-McShane

“Can Tech Keep Boomers in Their Homes”

Baby Boomers are ushering in an unprecedented demographic shift that will grow our 65 plus population from 46MM to 76MM by 2030. They are bigger spenders than any other generation, making up 40% of consumer demand, and they are not going anywhere. 90% say they want to Age in Place, which the CDC defines as the ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level.

Aging in Place is a significant challenge for facing the United States and many other countries around the globe. Baby Boomers face significant health issues that challenge their ability to AIP. Chronic disease, depression, medication management, and falls are just a few of the challenges facing this demographic.

Lots of great Silicon Valley minds are betting that smart devices and tech enabled services can keep the Boomer generation happy, healthy and in their homes. But what will Boomers really use and what are they willing to pay for?

(End of Secondary Presentation!)

About Smart Life Forum

Smart Life Forum, Inc. is a 501(c)(3) California nonprofit corporation whose primary mission is to provide credible health education to the public with an emphasis on optimal wellness, anti-aging medicine, and longevity.

Annual memberships in Smart Life Forum, Inc. and charitable donations are tax deductible to the extent allowed by law. For information on how to join or make a donation, please visit our website: www.SVHI.com.

For questions, please contact Susan Downs at susanrdowns@hotmail.com.

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