Silicon Valley Health Institute

Host of the Smart Life Forum

Next Meeting: Thursday, June 20, 2013

Main Presentation: Dr. Bruce L. Miller, M.D.

"What You Need to Know About Cognitive Decline and Dementia"

Secondary Presentation: Dr. Sergio F. Azzolino, D.C., D.A.C.N.B., D.A.A.P.M., Q.M.E.

"Balancing the Brain"

Presentation Location

Cubberley Community Center

Room H1

4000 Middlefield Road

Palo Alto, California

Directions on our website:

www.SVHL.com

For those who cannot attend can view the live stream and other video archives at:

http://bit.ly/Zpld3o



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Announcements

Upcoming Events:

Wednesday, June 12, 2013

Symposium on Vitamin D

Location: Commonwealth Club

To purchase tickets please visit www.commonwealthclub.org.

Future Speakers:

Mahtab Jafari - "Truth About Anti-Aging Medicine"

Jerry Kartzinel, M.D. - "Autism"

Ari Vojdani - "Immunity Issues"

Short Speakers:

July - Patricia Meyer on Flower Essences

August - Justin Marcheiani

If you have questions or concerns, please contact Susan Downs by email at susanrdowns@hotmail.com or by telephone (650) 704-7710.

Thank you.

Foundation for Mind Being Research (www.FMBR.org)

Wednesday, June 19, 2013 Meeting
Speaker: Dr. Eben Alexander - "An Evening with Eben Alexander"

Main Presentation Speaker: Meet Dr. Bruce L. Miller, M.D.!



Dr. Miller specializes in behavioral neurology, and holds the A.W. and Mary Margaret Clausen Distinguished Professorship in Neurology at the University of California, San Francisco (UCSF). He directs the busy UCSF School of Medicine's Memory and Aging Center (MAC) where patients in the San Francisco Bay Area receive comprehensive clinical evaluations. His goal is the delivery of model care to all of the patients who enter the clinical and research programs at the MAC.

Dr. Miller is a behavioral neurologist focused in dementia with special interests in brain and behavior relationships, as well as the genetic and molecular underpinnings of disease. His work in frontotemporal dementia (FTD) emphasizes both the behavioral and emotional deficits that characterize these patients, while simultaneously noting the visual creativity that can emerge in the setting of FTD. He is the principal investigator of the NIH-sponsored Alzheimer's Disease Research Center and an NIH-funded program project on FTD called Frontotemporal Dementia: Genes, Imaging and Emotions.

He oversees a healthy aging program supported through the Hellman Center, which includes an artist in residence program. In addition, he helps lead two philanthropy-funded research consortia, the Tau Consortium and Consortium for Frontotemporal Research, focused around developing treatments for tau and progranulin disorders respectively. Also, he has worked with the National Football League to help with the education and assessment of players related to brain health. Dr. Miller teaches extensively and runs the Behavioral Neurology Fellowship at UCSF.

Dr. Miller has received many awards including the Potamkin Award from the American Academy of Neurology, the Raymond Adams Lecture at the American Neurological Association, the Elliot Royer Award from the San Francisco Neurological community, the UCSF Annual Faculty Research Lectureship in Clinical Science, the UCSF Academic Senate Distinction in Mentoring Award, and the Gene D. Cohen Research Award in Creativity and Aging from the National Center for Creative Aging. He has authored The Human Frontal Lobe, The Behavioral Neurology of Dementia and extensive publications regarding dementia. He has been featured in Fortune magazine and the New York Times, as well as on Charlie Rose, PBS News Hour and other media. For nearly three decades, Dr. Miller has been the scientific director for the philanthropic organization The John Douglas French Alzheimer's Foundation.

(End of About Dr. Miller)

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.

Main Presentation Dr. Bruce L. Miller, M.D.

"What You Need to Know About Cognitive Decline and Dementia"

Key points

- We don't definitively know how to protect or maintain your brain yet
- Your genes play an important role in your outcome
- Aerobic exercise is the only proven means to increase brain cells
- What is good for your heart is good for your brain
- Stay engaged socially and intellectually
- Work with your doctor

Dementia

Dementia is a collection of symptoms that can be caused by a number of reasons, one of which includes neurodegenerative diseases like Alzheimer's disease and frontotemporal dementia (FTD). Dementia is defined by a progressive decline in memory or other cognitive functions that interferes in the ability to perform your usual daily activities (driving, shopping, balancing a checkbook, working, communicating, etc.). Although increased age is the largest risk factor for dementia, dementia is not normal aging. In 2010 15% of people aged 70 or older, about 3.8 million people, were estimated to have dementia. By 2040, the number is expected to balloon to 9.1 million people (Hurd et al 2013).

Alzheimer's Disease (AD)

Alois Alzheimer first described his 51-year-old patient Auguste Deter in 1906. She was described as having presenile dementia with amnesia and psychosis. He noted at the microscopic level that her brain had amyloid plaques and neurofibrillary tangles. Today Alzheimer's disease (AD) is described as a progressive, degenerative brain disease that slowly erodes memory and thinking skills, and eventually the ability to carry out simple tasks. It is the most commonly diagnosed cause of dementia, accounting for approximately 50-70% of all cases of dementia. The incidence of AD rises exponentially with advancing age. Estimates vary, but experts suggest that as many as 5.1 million Americans may have Alzheimer's. The greatest risk for Alzheimer's disease is advancing age. The underlying pathology of AD is the accumulation of the proteins beta-amyloid and tau in the brain. The progressive process of brain atrophy (shrinking tissue) seems to begin in the parts of the brain responsible for forming new memories, in particular, the hippocampus and entorhinal cortex before spreading throughout the brain along the line of particular networks.

Frontotemporal Dementia (FTD)

In 1892, Czech neurologist Arnold Pick described a focal neurodegenerative condition that preferentially affects the frontal and temporal lobes. He described two patients with a progressive language deficit that evolved into a behavioral syndrome. These patients would now be described as having primary progressive aphasia, the two language variants of frontotemporal dementia (FTD). The behavioral variant of frontotemporal dementia, versus the two language variants, is the more common variant seen today. Behavioral variant FTD is a progressive, degenerative brain disease that gradually destroys the ability to behave appropriately, empathize with others, learn, reason, make judgments, communicate and carry out daily activities.

In people under age 60, FTD is the most common cause of dementia and affects as many people as Alzheimer's disease in the 45–64 age group. The neuropathological inclusions used to diagnose FTD are made of the proteins tau, TDP-43 and fused-in sarcoma (FUS).

Molecular Medicine

Today, physicians and scientists are characterizing the cellular and molecular natures of neurodegenerative disease in order to understand and cure them. The neuropathological inclusions found in the diseased cells are used to verify the clinical diagnoses. In Alzheimer's disease, the predominant neuropathology is plaques made of amyloid beta and neurofibrillary tangles made of the protein tau. Brains with Parkinson's disease show mostly Lewy body inclusions (abnormal aggregates of protein) made of α -synuclein. Cells affected by frontotemporal dementia show Pick bodies made of tau, ubiquitin stains made of TDP-43 or fused-in sarcoma protein (FUS), or the results of a mutation in chromosome 9 (C9ORF72). People with amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease) also show ubiquitin staining inclusions. And people with the rapidly progressive dementia, Creutzfeldt-Jakob disease have prions, misfolded prion proteins that become infectious. These specific inclusions have become the hallmark of diagnosis and the target of treatment.

Modifiable Risk Factors That Affect Aging

We often tell people "what is good for your heart is good for your brain." Physical exercise is the only treatment shown to grow new neurons and help delay the onset of dementia. Regular aerobic exercise, started at any age, is highly recommended. Obesity and vascular risk factors are large risk factors for dementia that can be greatly reduced by regular exercise. The danger of chronic inflammation is only recently becoming clear, but again, can be greatly assuaged by exercise.

Regular sleep, a healthy diet, social engagement, intellectual activity and reduced stress are all other lifestyle choices we encourage for overall good health.

Non-Modifiable Risk Factors Include Family History (Genetics)

Your genes influence your brain structure and function, which in turn, influence your behavior and cognition. While there are several genetic mutations that directly lead to neurodegenerative disease, they are probably many more genes that influence people's susceptibility or risk for neurodegenerative disease. Genes can be both early markers of risk and potential targets for therapeutic intervention.

What Do We Suggest Today?

- 1. Protect against vascular disease
- 2. Exercise
- 3. Participate in social networks
- 4. Engage in mental activity
- 5. See your doctor

Aging Strengths

Not everything declines with age. Older people in the community have a profound influence on the young (whether or not the younger ones admit it!). Most people grow to show increased generosity, compassion, creativity and wisdom – the very things that are the heart of being human. Emotional systems are preserved in healthy aging, and positive emotional experiences increase with age (while negative emotions decrease). Older adults tend to be more satisfied with their social relationships and report their highest levels of positive emotions with those close to them.

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Links:

http://memory.ucsf.edu/

Editor's Note on Dementia

There are many causes of dementias. Alzheimer's disease accounts for 50 - 70 % of dementias. Other dementias include fronto temporal dementia or dementias that occur with multiple strokes, traumatic brain injuries, Parkinson's disease, etc.

As we age, the risk for Alzheimer's disease increases. At age 65, the prevalence of Alzheimer's Disease is low – around 2 %. At age 85, it occurs in 40 – 50 % of the population.

The risk for Alzheimer's increases

X 2 with traumatic brain injury

X 2 in depressed women

X 4 in depressed men

X 2 with sleep apnea

X 3 with attention deficit disorder

X 2.5 – 5 with one APOe 4 gene

X 10 with two APOe 4 genes.

One of the first signs Alzheimer's Disease could be a loss of smell. However this is often a premotor symptom of Parkinson's Disease as well.

The hallmark of Alzheimer's disease is a loss of episodic memory. This is a memory deficit of learning (encoding and storage) of information rather than a deficit of retrieval. Old memories can be retrieved, but new information cannot be put into proper storage. At this stage a person might repeat the same question or statement frequently. They also can have difficulties in word finding. As the disease progresses, additional deficits occur.

Preceding Alzheimer's dementia is a condition called mild cognitive impairment (MCI). In this condition, there is primarily a memory impairment with a relative sparing of other cognitive abilities. At this time, people can function in most aspects of their lives. MCI does not meet the criteria for dementia and involves more substantial cognitive and memory decline than normal aging. MCI represents a significant risk factor for dementia. Many view MCI as an early stage of Alzheimer's disease.

Assessment of Alzheimer's Disease

The diagnosis is made combining medical history, clinical examination, standard laboratory tests and imaging techniques of the brain. Lab values include ratios of proteins (p-tau, phosphorylated tau and total tau) in the cerebral spinal fluid.

SPECT or PET scanning are emerging as the most promising predictive tool. These scans can detect decreases in brain metabolism before the degeneration occurs.

Predictive signs of a progression to Alzheimer's is a smaller hippocampal volume and a decreased metabolism in the medial temporal – parietal lobes. Progression can be measured from scans indicating cerebral atrophy.

Steps to delay the onset of Alzheimer's Disease include:

- Hormone balance
- Glucose regulation
- Life style changes such as good diet, good sleep, smoking cessation, exercise, stress reduction.

Supplements that can help are:

DHA to protect the brain from inflammation, vinpocetine to enhance glucose utilization by the brain and to increase brain production of ATP.

CoQ 10, a fat soluble antioxidant.

Acetyl L Carnitine is an antioxidant that can be converted to acetylcholine in the body.

ALA, an antioxidant stimulates sprouting new nerve fibers on nerve cells.

Huperzine is an NMDA receptor antagonist that protects against toxic glutamate and inhibits acetyl cholinesterase.

Susan Downs, M.D., M.P.H., S.M., M.S.

(End of Main Presentation)

Join Us! First Time Visitors May Attend Free Of Charge!

Smart Life Forum, Inc. (SLF) is a California qualified 501(C)(3) nonprofit corporation organized under state law for educational and scientific purposes as a public benefit corporation. Please make your check payable to "Smart Life Forum, Inc." Please send your email address as well.

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Benefits: Access to a community of
experienced scientists and physicians who
share information and similar interests.

Secondary Presentation Speaker: Meet Dr. Sergio F. Azzolino, D.C., D.A.C.N.B., D.A.A.P.M., Q.M.E!



Dr. Sergio F. Azzolino obtained his Doctor of Chiropractic degree from Life Chiropractic College West in 1995 where he graduated Salutatorian and Summa Cum Laude and received the Clinic Excellence Award for his graduating class.

He completed a 3-year postdoctoral neurology course through Logan Chiropractic College and is a certified Diplomate of the American

Chiropractic Neurology Board. He also holds Board Certification/ Diplomate Status in Pain Management through the American Academy of Pain Management. He has blended his background in nutrition with hundreds of hours of advanced post doctorate training in Functional Medicine and Neuroimmunological Studies to provide a very comprehensive and unique approach to one's care. He has also completed advanced studies in the diagnosis and treatment of vestibular disorders, learning disabilities and behavioral disorders from the Carrick Institute for Postdoctoral Education and has expanded Azzolino Chiropractic Neurology Group to assist in the non-pharmaceutical treatment of vertigo and balance disorders in all age groups and children with ADHD, Autistic Spectrum Disorders, and Learning disabilities.

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Wednesday, June 19, 2013 Meeting
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In 1997, Dr. Azzolino received the prestigious appointment of being one of five internationally

appointed examiners to the American Chiropractic Neurology Board, which he currently

serves as the Vice President. He has also recently been appointed as a Board Member of the

American College of Functional Neurology. He was voted the Chiropractic Neurologist of

the Year in 1999 by the American Chiropractic Association Council on Neurology.

He currently is the director of Azzolino Chiropractic Neurology Group and full-time clinician

specializing in the diagnosis, treatment, and rehabilitation of various neurological and

musculoskeletal disorders. He has worked with numerous professional and amateur athletes

in their quest to maximize their neuromusculoskeletal system and assisted in their recover

from injuries. He served as a faculty member at Life Chiropractic College West where he was

a senior instructor in the clinical science department and has written several courses and

lectures on various neurological conditions such as peripheral neuropathies, repetitive stress

injuries, and post-traumatic head injuries.

Dr. Azzolino is also the executive director of Brain Balance Center of San Francisco - a

learning center dedicated to assisting children with learning disability, autism, ADHD,

processing and various neurobehavioral disorders without the use of drugs.

Link: http://www.brainbalancecenters.com/

(End of Meet Dr. Azzolino)

Secondary Presentation: Dr. Sergio F. Azzolino, D.C., D.A.C.N.B., D.A.A.P.M., Q.M.E

"Balancing the Brain"

Inflammation and oxidative stress can shape the immune mechanism and underlie most diseases. An imbalanced gut microbiota can trigger the immune system, and compromise the integrity of the gut lining as well as the layer of cells that protect the brain from toxins (blood brain barrier). Items that trigger gut lining dysfunction (thus impacting blood brain barrier dysfunction) are: diet, probiotics, prebiotics, antibiotics, stress, exposure to magnetic fields, breast feeding, mode of birth, maternal gut flora, environment, etc. The typical Western diet can shift the gut flora within a day. Yet the autoimmune process can be arrested if the interplay between genes and environment is prevented by re-establishing the intestinal barrier.

With the barrier protecting the brain compromised, it is easier for various toxins to enter the brain and start a process of neurodegeneration which starts microglia activation and a possible chain of neurodegeneration. Functional neurology identifies brain tracts that are either underfiring or overfiring. Treatments aim to support the part of the brain that are underfiring to encourage neuroplasticity and regeneration of weakened neurological tracts, and thus to balance the brain as in the work of Robert Melillo in his book, Disconnected Kids.

References available upon request. Contact Susanrdowns@hotmail.com

Join Us! First time Visitors may attend free of charge.

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