One of the major threats to successful aging is Alzheimer’s disease. Approximately 5.4 million Americans suffer from this illness, and if current trends continue we can expect that number to triple by 2050. During the last several decades, research activities focusing on better diagnostic strategies and more effective treatments have been steadily progressing.

I attended the 2017 Alzheimer’s Association International Conference in London this July 2017, where the mood among scientists and clinicians was relatively upbeat. This is the annual conference where experts from around the world congregate to present their latest findings and plan strategies for future investigations. In recent years, there has been a more tempered mood at the conference as a result of multiple treatment studies having failed. Many of the studies focused on preventing the accumulation or increasing the elimination of an insoluble protein, amyloid, that is deposited in the brains of Alzheimer’s patients. Despite the efforts of many scientific institutions and the pharmaceutical industry, this approach has not yet yielded a successful innovation. Researchers now seem to be diversifying their strategy and addressing a variety of mechanisms and targets that may be contributing to the disease, which I believe is a more strategic approach.

Currently 36 novel Alzheimer’s drugs are being tested in phase 2 or phase 3 clinical trials. These are studies that go beyond the initial safety testing (phase 1) in small samples of research volunteers. If any of these trials are successful, we can expect to see novel treatments launched within the next five years. Some of these drugs do attack amyloid proteins that accumulate in the Alzheimer’s brain, but several other types of medications and treatments are under development.

I presented our Center’s latest research findings using a bioavailable form of curcumin, which is the Indian herb used in curry powder derived from turmeric. Turmeric gives curry its yellow color and has been used as a food flavoring, preservative, and a herbal remedy for arthritis, cancer, cardiac and other medical conditions. Because of its anti-inflammatory and anti-amyloid properties, we compared its effects to inactive placebo on memory and the accumulation of amyloid in the brain in middle-aged and older people with mild memory complaints over an 18-month period.

Continued on page 3
When choosing a new restaurant to visit, one of my biggest considerations after the quality of the food and location is this: how noisy is it? Having lived since childhood with a significant hearing loss in one ear, I try to avoid loud restaurants where I’ll likely have to struggle to hear and understand what the person across the table is saying. It’s stressful, frustrating, even embarrassing.

I’ve got plenty of company in this regard. About 15 percent, or 37.5 million, U.S. adults report some trouble hearing, according to federal data. And the problem is growing, with an estimated 1.1 billion teenagers and young adults at risk of hearing problems due to exposure from unsafe levels of sound from smartphones, other audio devices and loud entertainment venues, a 2015 report from the World Health Organization found.

Recently, much attention has focused on the issue of “hidden” hearing loss, a type of hearing deficit that often doesn’t show up in standard hearing tests in the doctor’s office, says Alison Grimes, director of audiology and newborn hearing screening at UCLA Health. People with hidden hearing loss may have a “normal” hearing test, yet they are aware that they are having considerable difficulty understanding speech in noisy environments.

“One of the difficult things about hidden hearing loss is that it doesn't show up on those typical hearing tests,” says Grimes. “People with hidden hearing loss will be able to detect soft sounds—that is, pure sounds like the notes on a piano, a fairly simple measure of hearing. But their classic complaint is “I hear but I don't understand.”

Hearing loss is thought to be caused by damage to different types of hair cells in the inner ear that respond to sound. Damage to the fibers in the auditory nerves that connect to hair cells can make it difficult to hear in noisy environments. Often an audiogram, the most common type of hearing test, conducted in a quiet room, does not pick up this type of hearing loss, meaning patients can “pass” the test even if the fibers are damaged.

In the recent past, patients who visited their doctor with concerns about their hearing were often told their hearing was fine, Grimes says. “We have seen these patients forever and we used to tell them, “There’s nothing we can do for you’ “, she says. “Now we really know that their hearing is not completely normal. It’s just that we haven’t had the tools to measure that it’s not normal, but we’re developing those tools.”

If a patient with hearing complaint tests normal on a standard test, audiologists can do a special exam to measure hearing using specialized speech perception tests in a background noise, Grimes says. “Basically, we
have to perform specialized speech tests to discover certain speech sounds that they cannot hear or discriminate. For instance, if we say the word “fat” these patient may interpret the word as “sat.”

With new research into how hearing is damaged both by aging and exposure to loud sounds, the estimates of nearly 40 million Americans with hearing loss may be too low, says Grimes.

“The actual prevalence of hearing loss is much greater and begins to start at a much younger age,” she says.

Because our environment has become noisier, Grimes recommends that people get their first hearing test when they suspect hearing loss or at age 40. Previously, the common recommendation was for a hearing test at age 50, she says.

While there are no good treatments specifically for hidden hearing loss, Grimes believes that may change with more research.

“Any treatment that would happen would be very delicate unless it could be treated with a drug or an injection,” she says. “Right now we’re more in the discovery phase, not the treatment phase.”

Meantime, people who suspect some hidden hearing loss may want to limit their time in loud places.

“Restaurants consider a noisy atmosphere to be a sign of a successful restaurant,” she says. “But the No. 1 complaint of my patients is hearing in a restaurant.”

Our results suggest that daily oral use of a certain form of curcumin (Theracurmin®) at 90 milligrams twice daily leads to improved memory and attention in non-demented middle-aged and older adults with mild memory issues. The brain PET scan findings raised the possibility that curcumin may also decrease plaque and tangle accumulation in brain regions that control mood and memory.

Other meeting highlights include the report from the Commission on Dementia Prevention, Intervention and Care. The group showed that more than one third of the dementia cases around the world may be preventable by addressing lifestyle factors in people at risk. Modifiable risk factors that were determined to be important include low education, hypertension, diabetes, depression, physical inactivity, smoking, and low social contact.

I am optimistic that in the next 5 to 10 years we will see some major breakthroughs in Alzheimer’s disease research. The new science will lead to more effective treatments that will help the millions of patients afflicted, as well as their family members and friends who suffer along with them.
Escaping jet lag on your vacation getaway

By Roxanne Moster – UCLA Health

More baby-boomers are travelling now than ever before, and for many people as they age, jetlag becomes more challenging.

Your long-awaited vacation is right around the corner. As the calendar days peel away and you compile your to-do checklist, the issue of jet lag looms if your getaway involves crossing multiple time zones. “Anyone who has ever suffered jet lag knows firsthand that our bodies are persistent in how they keep track of time,” says Dr. Alon Avidan, director of the UCLA Sleep Disorders Center. “During jet lag, a rapid shift in the light-dark cycle temporarily disrupts one’s normal sleep-wake pattern, and our bodies become desynchronized.” Imagine that you have just arrived in Athens after a 20-hour flight from Los Angeles via Paris. You are exhausted, your head is pounding, your eyes are shut and your 10-day trip to Greece is about to start. Your guided tour of this legendary city will take place in two hours, but you are craving sleep. Avidan, professor and vice chair of the UCLA Department of Neurology, says you are suffering from jet-lag syndrome, a special type of circadian rhythm abnormality. Circadian rhythms are regular and predictable cycles in sleep and wakefulness that occur during the course of a 24-hour period.

A circadian pacemaker in a special region of the brain — called the suprachiasmatic nucleus — controls circadian rhythms. Light reaches special receptors in the retina of the eye, traveling along the optic nerve to the circadian center, causing it to “turn on” and make us alert, says Avidan. “Darkness, or the absence of light, causes a gland to produce the substance melatonin,” says Avidan. “Melatonin is good to have around when you are trying to fall asleep, as it blocks the alerting effects of the circadian clock. This turning on and off of the circadian clock by light and melatonin, respectfully, allows us to have repetitive and synchronous circadian rhythms that are aligned to light and darkness that ultimately contributes to sleep and wakefulness.” Jet-lag syndrome occurs when a person travels quickly across several time zones, confusing the circadian clock by not letting it adjust to the new timing of light and darkness at the point of destination. Traveling west-to-east and the number of time zones crossed seem to increase the severity of jet lag, explains Avidan, who treats circadian rhythm disorders, among other sleep complaints. Eastward travel generally causes difficulty falling asleep, while westward travel causes difficulty staying asleep.

Treatment for jet-lag syndrome aims to speed up one’s ability to become used to the new time zone, and Avidan notes that the most effective treatments involve the use of timed light and low-dose melatonin. How much and when are critical, but here are some suggestions

• Melatonin: low, short-acting dose (0.5 mg or less) is recommended.

  o Traveling westward: To promote shifting of the body clock to a later time, melatonin may be taken during the second half of the night until you have become adapted to local time.
Traveling eastward: To promote shifting of the body clock to an earlier time, take melatonin at local bedtime nightly until you have become adapted to local time.

- Light exposure: Bright outdoor light is suggested.

Traveling westward: Maximize exposure to bright light in the evening.

Traveling eastward: Maximize exposure to bright light in the morning.

“Adjusting the circadian clock to the new timing of the sleep-wake cycle is strongly dependent on the direction of travel and the number of time zones crossed,” says Avidan. “For example, the tourist traveling from Los Angeles to Athens should remain awake during the portion of the flight corresponding to daytime in Athens, but avoid bright lights during nighttime in Athens. A westbound tourist traveling from L.A. to Tokyo should try to stay awake while it is daylight at the destination, and try to sleep when it gets dark.”

There is nothing that eliminates jet lag, but there are ways to minimize its effects, according to Avidan and the National Sleep Foundation:

- Low dose (0.5mg) melatonin supplements may help reduce symptoms of jet lag.
- Sleep medications may be used on arrival for three consecutive nights, starting with the first night’s sleep after travel. Always consult your physician about the type of sleep aid and dose that may be appropriate for you.
- Anticipate the time change for trips by getting up and going to bed earlier several days prior to an eastward trip and later for a westward trip.
- Upon boarding the plane, change your watch to the destination time zone.
- Avoid alcohol or caffeine at least three to four hours before bedtime. Both act as stimulants and prevent sleep.
- Upon arrival at a destination, avoid heavy meals, but eat meals according to local time.
- Avoid alcohol on the flight. Despite its temptation, alcohol magnifies high altitude’s effects; it leads to significant dehydration, depresses your breathing and always worsens jet lag symptoms.
- Bring earplugs and blindfolds to help dampen noise and block out unwanted light while sleeping.
- Try to get outside in the sunlight at the appropriate time. Daylight is the most powerful stimulant for resetting your jet lag for your trip and on your way back home.

After all, Avidan notes, you may only have a week or two of travel and want to make every day count.
On August 2nd, the Longevity Center held a Senior Scholars Program Open House at the UCLA Semel Institute auditorium. To prepare for the upcoming academic year, prospective Senior Scholars were invited to learn about the Center’s popular lifelong learning program. Of the approximately one hundred individuals who had attended, the vast majority had never before participated in the Senior Scholars program. Dr. Gary Small, Director of the Longevity Center, kicked off the event with a presentation on the brain health benefits of lifelong learning, including improved memory. Senior Scholars Coordinator, Melissa Groller spoke about the process of finding and applying for courses, as well as the deadline dates for the upcoming Fall Quarter. Several longtime Senior Scholars in attendance stayed after the formal presentations to speak with potential Scholars, answered their questions, and offered first-hand insights on the program. We are grateful to all who took time out of their day to attend, and we plan to hold these open house meetings each year.

The Longevity Center would like to extend a special thanks to the Senior Scholars Committee members: Andy Galef, Maxine Kardell, Bob Ross, Beverly Tiffany, Joel Saltzbourg, and Mark Windisch.
Research Studies

TAI CHI CHIH OR HEALTH EDUCATION AND WELLNESS FOR OLDER ADULTS

ARE YOU SUFFERING FROM DEPRESSION?

ARE YOU OVER THE AGE OF 60?

The UCLA Late-Life Mood, Stress and Wellness Program in the Geriatric Psychiatry Division is conducting a 6-month research study involving 12 weekly 60 minute session of either a health and education wellness class or a Tai Chi class. Participants will undergo two functional magnetic resonance imaging (fMRI) scans. A complete psychiatric evaluation will be provided. Subjects will not be charged for participation and will be compensated.

You must be at least 60 years old. If you or anyone you know is interested in participating, call for an appointment to see if you qualify or for more information at: (310) 794-9523.

The study will be conducted by Helen Lavretsky, M.D.

OPTIMIZE YOUR TREATMENT FOR DEPRESSION

OPTIMUM is a research study for participants 60 and older with difficult to treat depression.

- Eligible participants are randomized to medication options:
  - STEP 1: (for 10 weeks) Adding aripiprazole or bupropion to current antidepressant; or switch to bupropion
  - STEP 2: (for 10 weeks) Adding lithium to current antidepressant; or switch to nortriptyline

- The study team will assess your side effects and mood for up to 12 months.
- Study psychiatrists will provide medication recommendations to your primary care physician.

You may be eligible if you are ....
- 60 years or older
- Depressed
- Taking an antidepressant, but not feeling better.

Ask your doctor if you qualify. More information:
310-206-5240
LateLifeWellness@madnet.ucla.edu

Comparison of Levomilnacipran to Placebo in Older Adults with Depression

The UCLA Geriatric Psychiatry Program is conducting a 12-week study to compare the effects of levomilnacipran (FETZIMA) to placebo for the treatment of depression for adults over the age of 60 years. All participants will be given either levomilnacipran (FETZIMA) or a placebo (an inactive substance). A complete psychiatric evaluation will be provided and you will undergo one MRI scan. You will be compensated up to $200 and parking will be reimbursed.

If you are interested in participating, please contact us to schedule an appointment or to find out more information.
(310) 794-9523 or (310) 794-4619

Participants must be 60 years or older and experiencing symptoms of depression.
The UCLA Longevity Center and The Friends of the Semel Institute for Neuroscience and Human Behavior at UCLA, will co-host a screening of the critically acclaimed prize-winning documentary film, “Monster in the Mind - The Inconvenient Untruth about Alzheimer’s”. “Monster in the Mind” is the first film directed and produced by Jean Carper, a leading authority on health and nutrition and author of 24 books including the New York Times best-sellers, “Food Your Miracle Medicine, “Stop Aging Now”, and “Miracle Cures”.

Dr. Gary Small, Professor of Psychiatry and Director of the UCLA Longevity Center, will join Ms. Carper in discussion following the screening.

This screening is part of The Friends of the Semel Institute’s “Open Mind” community lecture and film series that brings together thought leaders in science and culture to present programs about mental health issues free to the public.

For more information about the “Open Mind” series, please visit www.friendsofthesemelinstitute.org. Reservations for this program will open on Monday, October 9th on this website or to receive an invitation to this and all Open Mind programs, please email Wendy Kelman at WKelman@mednet.ucla.edu.

“Monster in the Mind - The Inconvenient Untruth about Alzheimer’s”
Thursday, November 9, 2017
California NanoSystems Auditorium UCLA
If you’ve been diagnosed with high blood pressure, you know the importance of limiting your salt consumption. Too much sodium can cause excess water build up, causing blood pressure to rise and straining your heart and blood vessels.

But despite this warning, a new study found that patients with high blood pressure, or hypertension, are still consuming too much salt.

Among 13,000 patients, researchers from the Icahn School of Medicine at Mount Sinai in New York found salt consumption rose from about 2,900 milligrams to 3,350 milligrams a day between 1999 and 2012. The ideal upper limit for these patients was 1,500 milligrams per day.

Dr. Gregg Fonarow, the Eliot Corday Chair in Cardiovascular Medicine and Science and director of the Ahmanson–UCLA Cardiomyopathy Center, says that efforts to teach people about the dangers of too much salt and how to cut back are not working. “Part of the reason may be that people are unaware of how much sodium they’re actually consuming,” said Fonarow, who is also co-chief of the UCLA Division of Cardiology. “Putting down the salt shaker is not enough.”

In fact, about 75 percent of the sodium we eat comes not from the salt we add ourselves, but from the highly processed foods we buy from the grocery store and restaurants.

While sodium is important to help maintain the body’s balance of fluids and help preserve foods, most Americans eat too much—on average, about 3,400 milligrams each day. The Centers for Disease Control and Prevention recommends that the general population consume less than 2,300 milligrams of sodium a day—the equivalent of a teaspoon of table salt.

Fonarow suggests three tips for reducing salt consumption: Read food labels for salt content. The 5 percent rule.

The amount of salt in a food is listed as “sodium” on the food packaging label. It also lists the percent of daily value for sodium. Try to select foods listed at 5 percent or lower.

“Anything above 20 percent is considered high,” advises Fonarow. Beware of salt in bread, condiments, dressings, and sauces. Many food items contain more sodium than you think. A serving of ketchup can contain 190 milligrams, a slice of bread 250 milligrams; and microwave popcorn 360 milligrams. Look for low- or no-sodium versions. If your favorite brands don’t carry a reduced sodium version, check the organic food aisle or natural foods store for alternatives. Better Homes and Gardens shows a variety of low sodium food swaps.

Pass on fast food and processed food when possible. Fast food is convenient but sodium levels can be off the charts. A cheeseburger with onion and some French fries at In-N-Out Burger packs a total of 1,245 milligrams of salt—more than half the recommended daily limit. When you do eat fast food, check the nutrition values on the restaurant’s menu and opt for lower-sodium choices. Or, eat less of the meal so that you consume less salt.

Processed foods like frozen pizza, soups and cold cuts can also be high in sodium.

“It’s hard to limit the amount of salt you get when eating prepared foods,” said Fonarow. “Try to cook your own food as much as possible so that you have more control.”
Uncovering the fountain of youth has been a lifelong quest for many individuals. Adults and older adults are increasingly becoming more knowledgeable about the protective factors against cognitive decline and “dementia.” They are engaging in daily walks, Zumba or Tai Chi classes at their local YMCA, consulting with their providers about their nutrition and medication management, and even auditing college courses and learning a second language.

In our Lifespan Human Connectome Project Aging (HCP-A) at UCLA, we call upon those who have found the key to the fountain of youth! If you are a healthy adult from 36-100+ years old, we invite you to become part of one of the largest and cutting edge studies exploring the key factors leading to healthy aging. Our synergetic collaborations with experts in aging currently allows for the unprecedented opportunity to advance our understanding on how our brain continuously changes throughout adulthood leading to healthy aging and longevity.

Call us today at 310-797-0077 and/or email us at HCP@UCLA.edu and allow us to share your knowledge about remaining youthful throughout time!

To learn more about our study, please visit http://www.humanconnectome.org
Welcome New Board Member Dean Ambrose

Dean Ambrose holds a Juris Doctorate Degree. He started his law practice in 1965 specializing in private and public syndications. He was also the owner of several real estate development and management companies. Mr. Ambrose also is a member of the Board of the UCLA Geffen School of Medicine, Board of Governors of the UCLA Foundation, Emeritus Trustee of NPR Foundation, and sponsor of the Annual UCLA Research Conference on Aging. He previously served for a number of years on the National Board of the City of Hope and was past chairman of the Partnership and Unincorporated Associations of the California State Bar.

Interpersonal Neurobiology Conference

SAVE THE DATE
March 16 – 18, 2018

The Longevity Center will be partnering with the Lifespan Learning Institute in hosting the Institute’s Annual Interpersonal Neurobiology Conference. This year the conference titled “Relationships and the Health-Promoting Power of Connection” will include a unique gathering of speakers including, Harville Hendrix, Helen Hunt, Stan Tatkin, Ruby Wax, Ed Bye, Marion Solomon, Ellen Bader, Peter Pearson, Esther Perel, Lou Cozolino, Diane Ackerman, Bonnie Goldstein, Pat Ogden, Gary Small, Linda Ercoli, Rhonda Magee, John Foreyt, Lee Hausner, Dan Siegel, and Antonio Damasio.
Brain Boot Camp
An intensive, three-hour course that includes individualized healthy lifestyle programs, tips for a healthy heart and brain diet, and advanced memory techniques for learning and recalling names and faces.
Cost: $300. To register, call (310) 794-4055

Senior Scholars
A program for adults age 50 and older who wish to attend UCLA undergraduate courses on campus.
Cost: $150 per class.
Registration Opens: July 31, 2017
Application Deadline: August 25, 2017
Instruction Begins: Week of September 25, 2017
For more information, contact (310) 794-0679.

Memory Care
Memory Care is a weekly, 3-hour program for memory-challenged, middle-aged people (age 65 and younger) and their loved ones. It teaches memory techniques and strategies to lower stress and stimulate the mind and the body and offers support for people with memory challenges and their caregivers.
For more information, contact (310) 794-0680.

Please follow us on Facebook (www.facebook.com/UCLALongevityCenter) or Twitter @LongevityCtr.

The UCLA Longevity Center Newsletter
Phone: (310) 794-0676  www.longevity.ucla.edu
Director: Gary Small, MD
Executive Editors: Christina Domer and Ira Israel
Design: Wildhirt Fowlkes Graphics, Inc.
© 2017 by the Regents of the University of California