Research on aging has elucidated what contributes to healthy aging. Genetics are important, but non-genetic factors may be even more crucial to living better longer. Mental stimulation, physical condition, stress management, a positive outlook, social engagement, a healthy diet—all have an impact on how long and how well we age. Our UCLA Longevity Center research with Gallup Poll and Healthways, which included 18,552 interviews with U.S. adults, ages 18 to 99 years, showed that individuals with healthier lifestyles are less likely to complain about memory issues. And, the link between lifestyle and memory ability holds true for people of all ages.

Physical conditioning boosts brain health, but mental exercise is critically important as well. Memory training and mental stimulation rapidly activate neural circuits and increase brain efficiency. Going to college, reading books, playing board games, or studying a second language are associated with a lower risk for Alzheimer’s disease. And, lifelong learning can be as effective as a college education in protecting brain health as we age. Our Longevity Center Memory Training classes teach exercises that quickly improve memory performance and compensate for normal age-related cognitive declines. Such methods can maintain higher cognitive performance scores for five or more years.

Senior Scholars, one of our most popular programs, offers older adults the opportunity to attend undergraduate UCLA courses. This is a chance to learn without the worries of tests, papers and grades, and the intergenerational environment provides a rich learning opportunity.

Neuroscientists discuss the concept of cognitive reserve, which refers to the brain’s resilience or ability to function well despite aging or injury. Cognitive reserve is associated with higher IQ, as well as greater educational and occupational achievement. People with greater cognitive reserve experience fewer mental symptoms despite age-related brain pathology, and they use more flexible mental strategies. When challenged, their brains demonstrate superior neural efficiency. Senior Scholars and similar programs offer a second chance to bolster our cognitive reserve.

The brain naturally compensates for underlying problems, and we can train our brains to become more efficient. Even a stimulating conversation can bolster memory performance, mental speed, and overall cognitive health.

For those enrolled, here’s a brain-boosting Senior Scholars tip: When walking to class, chat with another friendly, fellow Scholar to enjoy the additional brain benefits of a lively conversation, lower stress through a social connection, and effects from a brisk walk.
This summer I had the opportunity to attend the Alzheimer’s Association International Conference in Washington, DC, where experts from around the world gathered to present and learn about the latest research in the field. Although we have no cure as yet for this distressing illness, research progress is steady.

Data were presented on new drugs that target proteins that misfold in ways that cause brain damage not only in patients with Alzheimer’s disease, but also Parkinson’s disease and Lewy Body dementia. When proteins misfold, they can trigger a chain reaction of binding to other proteins leading to large, toxic protein aggregates like amyloid plaques and tau tangles, the hallmark brain lesions of Alzheimer’s disease. Fernando Goni, PhD, of New York University School of Medicine, New York, NY, and colleagues presented results on monoclonal antibodies that react to both amyloid and tau in Alzheimer’s disease, and aggregated alpha-synuclein and other structures (known as Lewy Bodies) in the brain cells of people with Parkinson’s disease. The team developed antibodies that recognize the toxic proteins from these diseases, which cause brain cell death and dementia. Richard Fisher, PhD, of NeuroPhage Pharmaceuticals, Cambridge, MA, and colleagues reported on tests with NPT088, a new therapeutic that appears to block misfolded proteins and many types of aggregated proteins, including amyloid beta, tau and alpha-synuclein. The researchers found that this new treatment prevented protein aggregation and increased cell survival in laboratory brain cells. NPT088 also improved memory abilities and reduced brain levels of amyloid, tau and alpha-synuclein in laboratory animals.

Other scientists reported on a healthcare database of more than 490,000 people over 60 years old and found that participants with type 1 diabetes were more likely to get dementia compared with people without diabetes. Diabetes afflicts millions of Americans, and previous research indicates that modifiable risk factors for Alzheimer’s disease, such as physical exercise and healthy diet, can prevent diabetes.

Additional studies indicated the connection between early education and Alzheimer’s risk. Two Swedish investigations suggested a correlation between school performance in children and risk of dementia later in life. In one study, dementia risk increased by 21 percent in participants whose school grades had been in the lowest 20 percent. The second study showed correlations between risk of dementia and school grades. Dementia risk increased by more than 50 percent in participants over 75 who had been in the lowest 20th percentile of early-life school grades.

Other reports focused on the nearly two-thirds of American seniors with Alzheimer’s disease who are women. One investigation of about 400 people with mild cognitive impairment – a risk state for dementia – indicated that women decline twice as fast as men with the condition.

Presenters also described an ongoing clinical trial with an anti-amyloid treatment, Solanezumab, designed to prevent dementia in people with a genetic mutation that causes the disease. Although the predicted effects of the treatment may be modest, if the trial is successful it may be the first approved disease-modifying treatment.

Several companies also are pursuing clinical trials of drugs that improve Alzheimer’s symptoms above and beyond the current medications that are available. The initial findings of these symptomatic treatments indicate potential benefits that would make a real difference for the many patients and families that suffer from the disease. Like many of my colleagues, I am cautiously optimistic that we will have more effective treatments for this devastating condition within the next five years.
Welcome new staff, Christina Domer

The Longevity Center is pleased to welcome Christina Domer as the new Senior Administrator. Christina comes to us with expertise in psychology, gerontology, and research. She previously worked at the VA Greater Los Angeles Healthcare System and the UCLA Jonsson Cancer Center in research roles and is currently an adjunct professor in the Department of Psychology at California State University, Dominguez Hills. She received her Master’s degree in Clinical Psychology in 2011 and was also a former Longevity Center Memory Training licensee. She worked towards establishing a non-profit organization to deliver memory training to individuals and groups throughout Southern California. We are confident that Christina’s enthusiasm and passion for offering meaningful programs to older adults will make her a wonderful addition to the Longevity Center.

The Center provides the opportunity to license the Memory Training, Memory Fitness, and Brain Boot camp programs. To become a licensed trainer, visit www.longevity.ucla.edu or contact Christina at 310-206-1675 or CDomer@mednet.ucla.edu.

“IT is a privilege to be part of the UCLA Longevity Center, and an honor to work with Dr. Gary Small. As a former Longevity Center Memory Training licensee, I witnessed the impact our memory education programs have on health and well-being. I look forward to the opportunity of expanding our programs nationally and internationally.”

Spotlight On Licensee: Dr. Deborah Rothberg

Dr. Deborah Rothberg is a licensed clinical psychologist and received her Ph.D. from UCLA in 1981. She is currently in private practice and specializes in working with older adults with a range of issues, including anxiety, depression, chronic illness, family and relationship matters, and memory concerns. She served as a volunteer in the UCLA Longevity Center’s Memory Care program and is a licensed UCLA Brain Boot Camp provider, trained to teach strategies to improve or maintain memory ability. Dr. Rothberg’s past experience includes working at the Rehabilitation Center of Beverly Hills, and serving as a Staff Psychologist at the UCLA Eating Disorders Clinic and LA County Occupational Health Service. In addition to her primary work in geropsychology, Dr. Rothberg helps individuals who have sustained job-related injuries.

Dr. Rothberg licensed the Longevity Center’s Brain Boot Camp program in the fall of 2014. She teaches Brain Boot Camp both individually and in groups on the Westside. She can be reached at (310) 991-2989 or by e-mail at DROtherberg@aol.com.
In August 2015, the Longevity Center celebrated the 20th anniversary of the Senior Scholars program. Dr. Gary Small spoke about the brain health benefits of lifelong learning and ways to prevent cognitive decline. Guest speakers provided their perspectives on the program. Mr. Bob Ross, a long-time Senior Scholar and Center friend, described his experiences on how being a Senior Scholar has enriched his life. Dr. Marina Belozerskaya, a professor of art history, discussed her experience with having Scholars in her class and the profound impact of intergenerational learning. Erin Der-McLeod, the Senior Scholars program coordinator, provided details on registering for this terrific program.

The Longevity Center would like to thank our speakers and guests for making the event a meaningful celebration of life-long learning. We would also like to extend our gratitude to the many participants of the program and its event coordinator, Erin Der-McLeod. Her commitment to improving the experience for all involved has been instrumental to its success.

Marina Belozerskaya is a writer and lecturer whose interests range broadly from art and history to exotic animals. After receiving her Ph.D. in Art History from the University of Chicago in 1997, she taught at Harvard, Tufts, and Boston Universities before turning to writing full time. She has published seven books, including Luxury Arts of the Renaissance; The Medici Giraffe and Other Tales of Exotic Animals and Power; The Arts of Tuscany: From the Etruscans to Ferragamo; To Wake the Dead: A Renaissance Merchant and the Birth of Archaeology; and Medusa’s Gaze: The Extraordinary Journey of the Tazza Farnese. In 2013, she returned to teaching at UCLA and lecturing at museums in Los Angeles and elsewhere. She is currently a Senior Writer for UCLA Health Sciences Development.

Bob Ross graduated with a degree in business administration from Pennsylvania State University, and worked as a retail executive in New York City. Now retired, Mr. Ross takes courses with UCLA undergraduates through the Senior Scholars program. Since 2006, he has taken over 34 classes.
A Senior Scholar Adventure

Art enthusiast Walter Meyer has taken over 10 UCLA classes as a Senior Scholar, primarily in the art history department. This summer, he used his knowledge and interest in street art to facilitate a unique cross-continent artistic exchange. Having lived in Istanbul from 2008 to 2010, Meyer returned to Turkey in November/December 2014. During this visit, he took a Street Art walking tour and “was amazed by the veritable explosion in street art that has occurred” since last there in 2010.

Inspired by the growing appreciation of street art, Meyer wrote a proposal to the sponsors of the Mural Istanbul Festival (Kadikoy Municipality) for an artist exchange between Istanbul and Los Angeles. After receiving approval from the Municipality, and the Turkish Consul General in Los Angeles, his idea came to fruition. Two Los Angeles street artists, Levi Ponce and Kristy Sandoval, traveled to Istanbul in July to collaborate on a 52’ x 16’ wall for the 2015 Mural Istanbul Festival. In the festival’s four-year history, they were the first Americans to participate, with Sandoval being the first female artist to participate.

Ponce and Sandoval’s mural is located in the Kadikoy district (on the Asian side of Istanbul), and will be on display until fall 2016. Levi Ponce has a degree in Animation from California State University Northridge, and has been featured on CNN and BBC segments. Kristy Sandoval has a fine arts degree from San Francisco’s Academy of Art University. While in Istanbul, Meyer also helped arrange for Sandoval to paint a second mural at Child Friendly Space, a center for Syrian refugee children. With the help of half a dozen Syrian girls, Sandoval painted Malala, a Pakistani activist for female education, who was shot by a Taliban gunman for wanting an education but survived.

To complete the exchange, Istanbul street artists and students at Mimar Sinan University of Fine Arts, Esk Reyn (Mete Cam) and Wicx (Can Berk El), came to Los Angeles in August 2015. They painted a 45’ by 15’ mural on “Mural Mile” on Van Nuys Boulevard in Pacoima. Their mural is the first by foreign artists on this stretch and can be seen on mural tours led by the Museum of the San Fernando Valley.

One of the goals of UCLA Longevity Center’s Senior Scholars Program is to encourage life-long learning and mental stimulation to help people live better and longer. Walter Meyer’s transnational art exchange project is one of many examples of the energy, knowledge and talent of Senior Scholars. As the program enters its 20th year, the Longevity Center is excited by the rich life experiences that more and more Scholars are bringing to campus.
Tai-Chi or Health Education and Wellness for Older Adults

For those who are suffering from depressive symptoms, lack of energy, and on stable medications for depression, UCLA is conducting a 6-month research study involving 12 weekly 60 minute sessions of either a health and education wellness two functional magnetic resonance imaging (fMRI) scans. A complete psychiatric evaluation will be provided. If you are 60 years of age or older, you may qualify. A complete psychiatric evaluation will be provided. Participants will be compensated. For more information, call (310) 794-4619 or (310) 794-9523.class or a Tai Chi class. Participants will undergo

Depression in Older Adults

For those who are suffering from feelings of depression, sadness, hopelessness, memory loss, concentration difficulties, lack of energy, or loss of interest and pleasure in activities, UCLA is conducting a 12-month research study comparing levomilnacipran (FETZIMA) to placebo for treatment of geriatric depression. If you are 60 years of age or older, you may qualify. A complete psychiatric evaluation, physical exam, and one MRI scan are provided as a part of the study. All participants will be given either levomilnacipran (FETZIMA) or a placebo (an inactive substance). You will be compensated up to $200 and parking will be reimbursed. For more information, call (310) 794-9523 or (310) 794-4619.
1st UCLA CONFERENCE ON INTEGRATIVE MEDICINE AND MENTAL HEALTH

Information

This inaugural two day conference will review scientific advances in Complementary and Integrative medicine. All lectures and experiential workshops will be presented by UCLA faculty and invited experts and focused on the use of integrative medicine for treatment and prevention of physical and mental disorders.

Review will include: Acupuncture and Chinese medicine; Mind–Body techniques; the use of supplements, etc. Accreditation will be provided by the Semel Institute for Neuroscience and Human Behavior (CME approval pending)

Conference Chair
Helen Lavretsky, M.D., M.S.

When and Where

Saturday, April 30, 2016 & Sunday, May 1, 2016

9:00AM ~ 5:00PM
UCLA Carnesale Commons
251 Charles E. Young Dr., West
Los Angeles, CA 90024

To register, please go to: http://www.semel.ucla.edu/integrativementalhealth
For questions, E-mail: Latelifewellness@mednet.ucla.edu
Phone: (310) 794-4619

Media Highlights

• August 25, 2015
How Google Is Changing the Way We Think
A Huffington Post article about the effect of internet use on brain circuitry featured Dr. Gary Small’s research on memory and attention.

• August 15, 2015
Sounds Baths Move From Metaphysical to Mainstream
Dr. Helen Lavretsky, a professor in the Division of Geriatric Psychiatry at the Semel Institute, was quoted in a New York Times article about the increasing mainstream acceptance of ‘sound baths’ to relieve stress, reduce anxiety and address other illnesses.

• August 3, 2015
Unplug: A Case for Ditching Technology on Vacation
Dr. Gary Small was quoted in Healthy Travel blog about the importance of remaining unplugged – or ditching such communication technology as email, mobile phones and social media – during vacations.

• July 1, 2015
Intelligent Questions to Ask Your Doctor
Dr. Gary Small discussed the connection between exercise and mental performance in Robb Report’s Health & Wellness July issue, which explored 15 age-defying and rejuvenating treatments for men and women.
Recurrent Depression and Brain’s Memory Center

People who experience repeated depressions often complain about their memory. Researchers from the University of Sydney in Australia recently reported in the journal *Molecular Psychiatry* that the size of a key memory-forming brain region, the hippocampus, is notably smaller in people who have experienced recurrent depression compared to those who have not been depressed or have experienced only occasional depressive episodes. For the study, the scientists assessed the brain scan and clinical data of approximately 1,700 depressed patients and about 7,200 controls who had not been depressed. The average size of the hippocampus in patients with repeated depression was significantly smaller compared to that in the controls, as well as in the subjects with a history of only one depressive episode. Even though this investigation did not confirm that depression actually caused brain shrinkage, it is consistent with other studies indicating the importance of early diagnosis and treatment of depression as a way to maintain and protect cognitive health.

Long Work Hours Increase Stroke Risk

Recent research suggests that spending less time on the job may be good for your brain. Dr. Mika Kivimaki of University College London and colleagues performed a study including data from more than 600,000 individuals from Europe, the U.S., and Australia in order to understand the relationship between how much time people spend at work and their overall health. The findings indicated working 55 hours or more per week increased the risk for a stroke by 33 percent. The researchers did not determine how long hours might increase stroke risk, but several hypotheses have been proposed. For example, working long hours could increase the likelihood of after-work cocktails that could lead to heavier drinking, a known risk factor for stroke. The additional stress of longer hours could elevate stress hormone levels that could contribute to stroke risk. Long work hours is a real issue for U.S. workers, where a recent Gallup poll indicated that about 40 percent of workers spend 50 hours or more on the job each week.

Side-Sleeping May Protect Brain Health

The Centers for Disease Control and Prevention estimate that approximately 70 million Americans have various forms of sleep disorders, yet the scientific evidence clearly shows that our brain's benefit from a good night’s sleep. People who get a good night’s sleep on a regular basis have a lower risk for Alzheimer’s disease, while those who experience chronically fretful sleep have greater accumulation of the abnormal amyloid proteins that characterize the Alzheimer's brain. As a result of such findings, scientists decided to evaluate sleep position in laboratory animals and how that might affect the build-up of amyloid in the brain. Their results indicated that the lab animals that slept on their sides showed lower levels of brain amyloid compared to the other animals. It may be too early to draw conclusions on whether these findings hold for humans, but we know that it is possible for people to change their sleep position. For example, those suffering from back pain or digestive problems often change positions for improved comfort at night.
Dear Friends,

As we approach the end of 2015, I want to once again thank all of you who have supported the UCLA Longevity Center. Thanks to your ongoing support of our work, we have enjoyed another successful year.

The Center continues to offer innovative programs for older adults who experience memory challenges. In August 2015, the Memory Care program expanded to a second group that meets weekly on Tuesday mornings. The program helps Alzheimer’s patients and their caregivers deal with the emotional and practical challenges of the illness. Our Senior Scholars program, which provides adults age 50 and older the opportunity to audit undergraduate UCLA classes, continues to increase enrollment each quarter. This year for the first time, our team provided the opportunity to take Senior Scholars courses online. We’ve also developed new community partnerships that focus on healthy aging and life-long learning at the Motion Picture Television Fund in Woodland Hills and many other organizations throughout Southern California.

Our scientists are performing novel research that focuses on several important areas. The UCLA Alzheimer’s Prevention Project is an innovative study that will determine if increasing mental and physical activity and reducing stress and cardiovascular risks will improve cognitive abilities. The project shows tremendous potential as a model for health systems nationwide to address modifiable risks for Alzheimer’s disease, which could have an important preventive medicine impact on public health. We are also continuing our studies on the effects of anti-inflammatory curcumin and anti-oxidant pomegranates on memory and brain health, as well as the role of nutrition and exercise on healthy aging.

Support from Center friends is crucial to helping us maintain our educational, research, and service infrastructure. Private philanthropy has been vital to sustaining and growing Longevity Center programs year after year. I ask you to consider renewing your support for the Center by making a year-end, tax-deductible contribution to help us continue to offer important programs and to expand our research efforts. A return envelope with our mailing address is enclosed for your convenience.

I am deeply grateful for your support.

Gary Small, M.D.
Director, UCLA Longevity Center
Welcome New Board Member

Susan Lerner

Susan Lerner is a retired registered nurse who was educated at UCLA. She has worked at San Bernardino County Hospital, Harvard University-Massachusetts General Hospital in Boston, and Huntington Hospital in Pasadena. During her forties, she and her family moved to London for six years where she studied fine arts. Upon returning to the states, she took a one-year course at Christie’s Auction House where she worked for 12 years in various departments. She has four adult children and 12 grandchildren. Besides her family, her interests are in medical research, fine arts, dance class, Pilates and yoga. She currently serves on several boards, including the Trustees of National Jewish Health in Denver; the Women’s Guild Board of Cedar Sinai; Friends of the Semel Institute; and the American Friends of the Technion.

Senior Scholars Program Scholarship Fund

We would like to thank Dr. Linda Ercoli for a generous donation to sponsor one Senior Scholar to participate in a course during the winter quarter. Contributions from Center friends allow us to provide opportunities to those in need.

If you are interested in sponsoring a Senior Scholar or supporting any of our programs, please contact the Longevity Center at 310-794-0676 or longevity@mednet.ucla.edu.

Donors & Tributes May 2015 – August 2015

Donations

Director’s Circle Level ($2,000 and above)
Emily Gold-Mears
Beverly Tiffany
Mr. and Mrs. Addison Kermath
Mr. and Mrs. Timothy J. Noonan
Gerald and Gail Oppenheimer
Billie Milam Weisman

Benefactor Level ($1000-1999)
Roslyn Holt-Swartz

Supporter Level ($50-99)
Mr. and Mrs. Mel Guthman
Joan & Sheldon Steier

Tributes

In Memory of Earl and Anita Baker
Linda Ercoli

In Memory of Hedi
The Gelber Family

In Memory of Dr. Yoshio Akiyama
Natsuko Akiyama

Happy Birthday to Neil Freedman
Tom and Barbara Card

Happy Birthday to Ruth Epstein
David and Suzanne Michels

Happy Anniversary to Rhoda and Dwight Makoff
Ed and Eileen Kramer

In Honor of Senior Scholars Program
Arlene Hurwitz
The typical situation involves a grandparent receiving a phone call or an e-mail from an individual who claims to be a grandchild who has been arrested in another country. The grandchild needs money for bail or some other legal expense, but requests that the grandparent not inform his or her parents so they won't get upset.

Sometimes the caller portrays himself as the arresting officer, an embassy worker, lawyer, or someone else trying to be of help. Other times the fake grandchild may say he or she is too upset to talk and hands the phone off to an accomplice. Often the criminals won't let the grandchild get back on the phone lest the grandparent discover the subterfuge. The grandparent is asked to wire money and the financial losses for the individual often approaches several thousand dollars.

The growth of the Internet has facilitated such criminal activity because personal information is often easy to access, making the ruse more believable. For example, a grandson might post on his Facebook page his spring break vacation in Mexico making his grandparent a target for one of these scammers.

According to the FBI Internet Crime Complaint Center, these kinds of scams have been reported since 2008. The hucksters are clearly exploiting grandparents’ wishes to protect their grandchildren and adult children.

Some strategies that may thwart this kind of scam include:

- Asking the individual on the phone to describe the grandchild.
- Avoid acting impulsively on any phone or email request.
- Attempt to reach the grandchild on his or her cell phone.
- Attempt to contact the grandchild’s parents or another family member to verify the claims.
- Never wire money requested from an email or phone call.
- If you do discover that the call or email is a scam, contact your local police department immediately.
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

Memory Training
A course for people with mild memory concerns. Memory Training presents effective memory-enhancing techniques and is taught by certified volunteer trainers.
For more information, contact (310) 794-0680.

Memory Care
A weekly program for patients experiencing memory loss and their caregivers. Memory Care teaches evidence-based memory exercises and methods, as well as strategies to lower stress. There is still space available for the morning session that meets every Tuesday for 3 hours.
Contact (310) 794-0680 to reserve your spot and for pricing details.

Senior Scholars
A program for adults age 50 and older who wish to attend UCLA undergraduate courses on campus.
Cost: $150 per class.
The registration deadline is December 2, 2015.
For more information, contact (310) 794-0679.

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